

**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, 2023**

**OR**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission file number 1-1070**



**OLIN CORPORATION**

**(Exact name of registrant as specified in its charter)**

**Virginia**

**13-1872319**

(State or other jurisdiction of incorporation or organization)

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

**190 Carondelet Plaza, Suite 1530, Clayton, MO**

**63105**

(Address of principal executive offices)

(Zip code)

**Registrant's telephone number, including area code: (314) 480-1400**

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

Title of each class:	Trading symbol:	Name of each exchange on which registered:
Common Stock, \$1.00 par value per share	OLN	New York Stock Exchange

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer ☒ 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 Act). Yes ☐ No ☒

As of June 30, 2023, the aggregate market value of registrant's common stock, \$1.00 par value per share, held by non-affiliates of registrant was approximately \$6,447,684,308 based on the closing sale price as reported on the New York Stock Exchange.

As of January 31, 2024, 120,200,964 shares of the registrant's common stock were outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

**Portions of the following document are incorporated by reference in this Form 10-K as indicated herein:**

Document	Part of 10-K into which incorporated
Proxy Statement relating to Olin's Annual Meeting of Shareholders to be held in 2024	Part III



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## PART I

### Item 1. BUSINESS

#### GENERAL

Olin Corporation (Olin) is a Virginia corporation, incorporated in 1892, having its principal executive offices in Clayton, MO. We are a leading vertically integrated global manufacturer and distributor of chemical products and a leading U.S. manufacturer of ammunition. Our operations are concentrated in three business segments: Chlor Alkali Products and Vinyls, Epoxy and Winchester. All of our business segments are capital-intensive manufacturing businesses. The Chlor Alkali Products and Vinyls segment manufactures and sells chlorine and caustic soda, ethylene dichloride and vinyl chloride monomer, methyl chloride, methylene chloride, chloroform, carbon tetrachloride, perchloroethylene, hydrochloric acid, hydrogen, bleach products and potassium hydroxide, which represented 58% of 2023 sales. The Epoxy segment produces and sells a full range of epoxy materials and precursors, including aromatics (acetone and phenol), allyl chloride, epichlorohydrin, liquid epoxy resins, solid epoxy resins and systems and growth products such as converted epoxy resins and additives, which represented 20% of 2023 sales. The Winchester segment produces and sells sporting ammunition, reloading components, small caliber military ammunition and components, industrial cartridges and clay targets, which represented 22% of 2023 sales. See our discussion of our segment disclosures contained in Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations."

#### GOVERNANCE

We maintain a website at [www.olin.com](http://www.olin.com). Our reports on Form 10-K, Form 10-Q and Form 8-K, as well as amendments to those reports, are available free of charge on our website, as soon as reasonably practicable after we file the reports with the Securities and Exchange Commission (SEC). Also, a copy of our electronically filed materials can be obtained at [www.sec.gov](http://www.sec.gov). Our Principles of Corporate Governance, Committee Charters and Code of Conduct are available on our website at [www.olin.com](http://www.olin.com) in the Leadership & Governance Section under Governance Documents and Committees.

In May 2023, our Chief Executive Officer (CEO) executed the annual Section 303A.12(a) CEO Certification required by the New York Stock Exchange (NYSE), certifying that he was not aware of any violation of the NYSE's corporate governance listing standards by us. Additionally, our Chief Executive Officer and Chief Financial Officer (CFO) executed the required Sarbanes-Oxley Act of 2002 Sections 302 and 906 certifications relating to this Annual Report on Form 10-K, which are filed with the SEC as exhibits to this Annual Report on Form 10-K.

#### PRODUCTS, SERVICES AND STRATEGIES

##### Chlor Alkali Products and Vinyls

###### *Products and Services*

We have been involved in the chlor alkali industry for approximately 130 years and consider ourselves the leading global chlor alkali and derivatives producer. Chlorine, caustic soda and hydrogen are co-produced commercially by the electrolysis of salt at a fixed ratio of 1.0 ton of chlorine to 1.1 tons of caustic soda and 0.03 tons of hydrogen. The industry refers to this as an Electrochemical Unit or ECU.

Chlorine is used as a raw material in the production of thousands of products, including vinyls, urethanes, epoxy, water treatment chemicals and a variety of other organic and inorganic chemicals. A significant portion of chlorine production is consumed in the manufacturing of vinyls intermediates, ethylene dichloride (EDC) and vinyl chloride monomer (VCM), both of which our Chlor Alkali Products and Vinyls segment produces. A large portion of our EDC production is utilized in the production of VCM, but we are also one of the largest global participants in merchant EDC sales. In addition to marketing Olin produced EDC, we also purchase EDC for re-sale on a global basis. EDC and VCM are precursors for polyvinyl chloride (PVC), a material used in applications such as vinyl siding, pipe, pipe fittings and automotive parts.

Our Chlor Alkali Products and Vinyls segment is one of the largest global marketers of caustic soda, including caustic soda produced by Olin, and globally produced material purchased by Olin for re-sale. The diversity of caustic soda sourcing allows us to cost effectively supply customers worldwide. Caustic soda has a wide variety of end-use applications, the largest of which includes water treatment, alumina, pulp and paper, urethanes, detergents and soaps and a variety of other organic and inorganic chemicals.

Our Chlor Alkali Products and Vinyls segment also includes our chlorinated organics business, which is a significant global producer of chlorinated organic products that include chloromethanes (methyl chloride, methylene chloride, chloroform and carbon tetrachloride) and chloroethanes (perchloroethylene). Our chlorinated organics business participates in both the solvent segment and the intermediate segment of the global chlorocarbon industry with a focus on sustainable applications and



in applications where we can benefit from our cost advantages. Intermediate products are used as feedstocks in the production of fluoropolymers, fluorocarbon refrigerants and blowing agents, silicones, cellulose and agricultural chemicals. Solvent products are sold into end uses such as surface preparation, dry cleaning, pharmaceuticals and regeneration of refining catalysts. This business's unique technology allows us to utilize both hydrogen chloride, the gaseous form of hydrochloric acid, and chlorinated hydrocarbon byproducts (RCl's), produced by our other production processes, as raw materials in an integrated system.

We also manufacture and sell other chlor alkali-related products, including hydrochloric acid, sodium hypochlorite (bleach) and potassium hydroxide. These products, along with chlorinated organics products and epoxy resins, generally consume chlorine as a raw material creating downstream applications that upgrade the value of the ECU. Our industry leadership in the production of chlorinated organics and epoxy resins, as well as other products, offers us multiple outlets for our captive chlorine.

Our products are delivered by pipeline, marine vessel, deep-water and coastal barge, railcar and truck. We own, operate, and lease a geographically dispersed terminal infrastructure at our production sites and other locations that expand our geographic coverage and enhance our service capabilities. At our largest integrated product sites, our deep-water access allows us to reach global markets.

Blue Water Alliance (BWA), our joint venture with Mitsui & Co., Ltd. (Mitsui), began operations during 2023. BWA is an independent global trader of ECU-based derivatives, focused on globally traded caustic soda and ethylene dichloride. Olin holds 51% interest and exercises control in BWA, and the joint venture is consolidated in our financial statements with Mitsui's 49% interest in BWA classified as noncontrolling interest. All intercompany accounts and transactions are eliminated in consolidation. BWA brings together Mitsui's industry-leading global logistics, long-established supplier and customer relationships, and breadth of product portfolio with Olin's scale, North American export capability, extensive global terminal network, and production flexibility across the ECU portfolio.

Our Chlor Alkali Products and Vinyls segment currently maintains a reliable supply of key raw materials. Electricity, salt, ethylene and methanol are the primary raw materials for our products. Electricity is the single largest raw material component in the production of Chlor Alkali Products and Vinyls products. Approximately 72% of our electricity is generated from natural gas or hydroelectric sources. We satisfy our electricity needs through a combination of market power, long-term contracts and the operation of our own power assets, which allow for cost differentiation at specific U.S. manufacturing sites. Approximately 74% of our salt requirements are met by internal supply. Ethylene is primarily supplied for the vinyls business under a long-term supply arrangement whereby we receive ethylene at integrated producer economics. Methanol is primarily sourced from large domestic and international producers. The high-volume nature of the chlor alkali industry places emphasis on cost management, and we believe that our scale, integration and raw material positions make us one of the low-cost producers in the industry.

The following table lists the principal products and services of our Chlor Alkali Products and Vinyls segment.

<i><b>Products &amp; Services</b></i>	<i><b>Major End Uses</b></i>	<i><b>Plants &amp; Facilities</b></i>	<i><b>Major Raw Materials &amp; Components for Products/Services</b></i>
Chlorine/caustic soda	Pulp & paper processing, chemical manufacturing, water purification, vinyl chloride manufacturing, bleach, swimming pool chemicals and urethane chemicals	Becancour, Canada Charleston, TN Freeport, TX McIntosh, AL Niagara Falls, NY Plaquemine, LA St. Gabriel, LA	Salt, electricity
Ethylene dichloride/vinyl chloride monomer	Precursor to polyvinyl chloride used in vinyl siding, plumbing and automotive parts	Freeport, TX Plaquemine, LA	Chlorine, ethylene, ethylene dichloride
Chlorinated organics intermediates	Used as feedstocks in the production of fluoropolymers, fluorocarbon refrigerants and blowing agents, silicones, cellulose and agricultural chemicals	Freeport, TX Plaquemine, LA Stade, Germany	Chlorine, ethylene dichloride, hydrogen chloride, methanol, RCl's
Chlorinated organic solvents	Surface preparation, dry cleaning and pharmaceuticals	Freeport, TX Plaquemine, LA Stade, Germany	Chlorine, ethylene dichloride, hydrogen chloride, methanol, RCl's

<i><b>Products &amp; Services</b></i>	<i><b>Major End Uses</b></i>	<i><b>Plants &amp; Facilities</b></i>	<i><b>Major Raw Materials &amp; Components for Products/Services</b></i>
Sodium hypochlorite (bleach)	Household cleaners, laundry bleaching, swimming pool sanitizers, semiconductors, water treatment, textiles, pulp & paper and food processing	Augusta, GA Becancour, Canada Charleston, TN Freeport, TX Henderson, NV Lemont, IL McIntosh, AL* Niagara Falls, NY* Santa Fe Springs, CA	Caustic soda, chlorine
Hydrochloric acid	Steel, oil & gas, plastics, organic chemical synthesis, water & wastewater treatment, brine treatment, artificial sweeteners, pharmaceuticals, food processing and ore & mineral processing	Becancour, Canada Charleston, TN Freeport, TX McIntosh, AL Niagara Falls, NY	Chlorine, hydrogen
Potassium hydroxide	Fertilizer manufacturing, soaps, detergents & cleaners, battery manufacturing, food processing chemicals and deicers	Charleston, TN	Electricity, potassium chloride
Hydrogen	Fuel source, hydrogen fuel cells, hydrogen peroxide and hydrochloric acid	Becancour, Canada Charleston, TN Freeport, TX McIntosh, AL Niagara Falls, NY Plaquemine, LA St. Gabriel, LA	Electricity, salt

\* Includes low salt, high strength bleach manufacturing.

### Strategies

*Maximize Returns to the ECU.* Leverage our diverse and flexible chlor alkali derivatives portfolio via our strategic operating model to continually mitigate exposure and maximize value from the entire ECU by managing our production rates to the prevailing weaker side of the ECU.

*Participate in Global Trade Flow of the Products we Market.* Access excess products available from global trade, complementing our internally produced products to serve our growing customer demand at the highest value.

*Continually Drive Down Costs through Productivity.* Our advantaged cost position is derived from low-cost energy, scale, integration, and deep water ports. Maintaining a strong discipline in areas such as cost management, capital outlays, and asset maintenance is key to creating greater operating flexibility to maximize returns to the ECU.

## **Epoxy**

### Products and Services

The Epoxy business was one of the first major manufacturers of epoxy products, and has continued to build on more than half a century of history through product innovation and technical excellence. We believe the Epoxy segment is one of the largest fully integrated global producers of epoxy resins, curing agents and intermediates. The Epoxy segment's cost position benefits from integration into low-cost feedstocks (including chlorine, caustic soda, allylics and aromatics). The Epoxy segment produces and sells a full range of epoxy materials and precursors, including aromatics (acetone and phenol), allylics, such as allyl chloride (Allyl) and epichlorohydrin (EPI), resins such as liquid epoxy resins (LER) and solid epoxy resins (SER) and systems and growth platform products such as converted epoxy resins (CER) and additives.

The Epoxy segment serves a diverse array of applications, many of which are focused on improving sustainability and lowering greenhouse emissions, including wind energy, electrical laminates, consumer goods and composites, as well as numerous applications in civil engineering and protective coatings. The Epoxy segment has important relationships with established customers, some of which span decades. The segment sells primarily in North America and Western Europe. The segment products are delivered primarily by marine vessel, deep-water and coastal barge, railcar and truck.

Allyl is used not only as a feedstock in the production of EPI, but also as a chemical intermediate in multiple industries and applications, including water purification chemicals. EPI is primarily produced as a feedstock for use in the business's epoxy resins and is also sold in the merchant market. LER is manufactured in liquid form and cures with the addition of a hardener into a three-dimensional thermoset solid material, offering a distinct combination of structural strength, adhesion,

electrical insulation, thermal or chemical resistance and corrosion protection that is well-suited to coatings and composites applications. SER is processed further with bisphenol, which is produced internally to meet specific end-market applications. While LER and SER are sold externally, a significant portion of LER production is further converted through our systems and growth platform into CER and other additive products where value-added modifications produce higher margin resins for specific customer applications.

The Epoxy segment's principal raw materials are chlorine, caustic soda, benzene, propylene and aromatics, which consist of phenol and acetone. Our Epoxy segment maintains a reliable supply of certain key raw materials, such as benzene and propylene. The Epoxy segment's production economics benefit from its integration into chlor alkali and aromatics which are key inputs in epoxy production. This fully integrated structure provides both access to low-cost materials and significant operational flexibility. The Epoxy segment operates an integrated aromatics production chain producing phenol and acetone for internal consumption and external sale. The Epoxy segment's consumption of chlorine enables the Chlor Alkali Products and Vinyls segment to generate caustic soda production and sales. Chlorine and caustic soda used in our Epoxy segment are transferred at cost from the Chlor Alkali Products and Vinyls segment.

The following table lists the principal products and services of our Epoxy segment.

<i><b>Products &amp; Services</b></i>	<i><b>Major End Uses</b></i>	<i><b>Plants &amp; Facilities</b></i>	<i><b>Major Raw Materials &amp; Components for Products/Services</b></i>
Allylics (allyl chloride, epichlorohydrin and glycerin) & aromatics (acetone and phenol)	Manufacturers of polymers, resins and other plastic materials and water purification	Freeport, TX Stade, Germany Terneuzen, Netherlands <sup>(1)</sup>	Benzene, caustic soda, chlorine, propylene
Resins: liquid epoxy resin/solid epoxy resin	Adhesives, marine and protective coatings, composites and flooring	Freeport, TX Guaruja, Brazil Stade, Germany	Bisphenol, caustic soda, epichlorohydrin
Systems and Growth Platforms: Converted epoxy resins and additives	Electrical laminates, paint and coatings, wind blades, electronics and construction	Baltringen, Germany Freeport, TX Guaruja, Brazil Gumi, South Korea <sup>(1)</sup> Pisticci, Italy Rheinmunster, Germany Roberta, GA Stade, Germany Zhangjiagang, China	Liquid epoxy resins, solid epoxy resins

<sup>(1)</sup> As part of our restructuring activities, these facilities ceased manufacturing operations during 2023.

### Strategies

*Focus on Return to the ECU.* The Epoxy segment is focused on maximizing return to the ECU by targeting participation and improving margins in EPI, LER, and derivative applications with the highest return to the ECU.

*Continually Drive Down Costs through Productivity.* The Epoxy segment continues to drive productivity cost improvements through the entire supply chain to optimize our EPI and LER cost position in the Americas and Europe.

*Focus on Systems and Growth Platforms.* The Epoxy segment is focused on expanding our market participation in higher value add platform products to align with growing end-use markets.

## **Winchester**

### Products and Services

In 2024, Winchester is in its 158<sup>th</sup> year of operation and its 94<sup>th</sup> year as part of Olin. Winchester is a premier developer and manufacturer of small caliber ammunition for sale to domestic and international retailers (commercial customers), law enforcement agencies and domestic and international militaries. We believe we are a leading U.S. producer of ammunition for recreational shooters, hunters, law enforcement agencies and the U.S. Armed Forces. Winchester also manufactures industrial products that have various applications in the construction industry and, beginning October 2023, additionally manufactures clay targets for recreational and competitive shooters.

On October 1, 2023, Olin acquired the assets of White Flyer Targets, LLC (White Flyer) from Reagent Diversified Holdings, Inc. (Reagent) for \$63.9 million. White Flyer is North America's preeminent leader in recreational trap, skeet, and sporting clay targets. White Flyer was combined with the Winchester Ammunition business.

On October 1, 2020, Winchester assumed full management and operational control of the Lake City Army Ammunition Plant (Lake City) in Independence, MO. The U.S. Army selected Winchester to operate and manage Lake City in September 2019. The contract is for the production of small caliber military ammunition, including 5.56mm, 7.62mm, and .50 caliber rounds, as well as certain cartridges and casings. The contract also allows for the production of certain ammunition for commercial customers. The contract has an initial term of seven years and may be extended by the U.S. Army for up to three additional years.

Our legendary Winchester® product line includes all major gauges and calibers of shotgun shells, rimfire and centerfire ammunition for pistols and rifles, reloading components and industrial cartridges. We believe we are a leading U.S. supplier of small caliber commercial ammunition.

Winchester has strong relationships throughout the sales and distribution chain and strong ties to traditional dealers, distributors, and gun clubs. Winchester has also built its business with key high-volume mass merchants and specialty sporting goods and outdoor merchandise retailers. Winchester has consistently developed industry-leading ammunition, which is recognized in the industry for manufacturing excellence, design innovation and consumer value.

During 2022 and 2023, the U.S. Army awarded Winchester the second and third years of a five-year contract to manufacture 5.56 mm, 7.62 mm and .50 caliber rifle ammunition under the third consecutive “Second Source” ammunition contract Winchester has received from the U.S. Army.

During 2022, the U.S. Army awarded Winchester a new five-year pistol contract for .38 caliber, .45 caliber and 9mm handgun ammunition, maintaining Winchester’s longstanding position as the leading supplier of pistol ammunition to the U.S. military.

During 2022, the U.S. Army awarded Winchester contracts to support the 6.8mm Next Generation Squad Weapons (NGSW) program at Lake City, including the design of the NGSW ammunition manufacturing facility. During 2023, the U.S. Army awarded Winchester a contract to manufacture, test and deliver five million rounds of 6.8mm ammunition.

During 2023, the U.S. Army awarded Winchester contracts to develop and manufacture multiple high-performance cartridges at Lake City, including nearly two million rounds of .50 Caliber Saboted Light Armor Penetrator (SLAP) ammunition.

Winchester’s new ammunition products continue to receive awards from major industry publications and organizations, with recent awards including *American Rifleman* magazine’s Golden Bullseye Award as “Ammunition Product of the Year” in 2022 and *Guns & Ammo* magazine’s “Ammunition of the Year” award in 2021. The National Wild Turkey Federation chose Winchester to receive its 2024 Corporate Achievement Award in recognition of Winchester’s support of wild turkey conservation and the preservation of hunting heritage.

Winchester purchases raw materials such as copper-based strip and ammunition cartridge case cups and lead from vendors, pursuant to multi-year contracts, based on a conversion charge or premium. These conversion charges or premiums are in addition to the market prices for metal as posted on exchanges such as the Commodity Exchange, or COMEX, and London Metals Exchange, or LME. Winchester’s other main raw material is propellant, which is purchased predominantly from one of the U.S.’s largest propellant suppliers.

The following table lists the principal products and services of our Winchester segment.

<i><b>Products &amp; Services</b></i>	<i><b>Major End Uses</b></i>	<i><b>Plants &amp; Facilities</b></i>	<i><b>Major Raw Materials &amp; Components for Products/Services</b></i>
Winchester® sporting ammunition (shotshells, small caliber centerfire & rimfire ammunition)	Hunters, competitive and recreational shooters, law enforcement agencies	East Alton, IL Independence, MO* Oxford, MS	Brass, lead, steel, plastic, propellant and explosives
Small caliber military ammunition	Infantry and mounted weapons	East Alton, IL Independence, MO* Oxford, MS	Brass, lead, propellant, explosives
Industrial products (8-gauge loads & powder-actuated tool loads)	Maintenance applications in power & concrete industries, powder-actuated tools in construction industry	East Alton, IL Oxford, MS	Brass, lead, plastic, propellant, explosives
White Flyer clay targets	Competitive and recreational shooters	Webb City, MO Dalton, GA Knox, IN San Bernardino, CA Coal Township, PA	Limestone, pitch, sulfur, calcium stearate

\*Government-owned, contractor-operated (GOCO) facility

## Strategies

*Maximize Existing Strengths.* Winchester will increase our value by strengthening our leadership position in small caliber ammunition through all of the customer segments that we serve – Commercial, Military, Law Enforcement, and Industrial. Through our Shoot United™ strategic initiative, Winchester will focus on promoting shooting sports and drive increased participation. With one of the world’s largest small caliber ammunition manufacturing footprints, we will leverage employee engagement, engineering, and process excellence across our three production sites.

*Innovative Solutions.* Winchester will continue building on our strong reputation as an industry innovator with a long record of meeting the needs of recreational shooters, first responders, and the modern warfighter. We will drive value for our business through developing market driven products and delivering engineered solutions for our customers.

*Productivity Improvement.* Winchester will leverage our continuous improvement process to increase productivity by optimizing our people, processes, and equipment. We will continue to modernize our facilities and equipment for productivity, improved safety and environmental impact.

## **INTERNATIONAL OPERATIONS**

Olin has an international presence, including the geographic regions of Europe, Asia Pacific and Latin America. Approximately 33% of Olin’s 2023 sales were generated outside of the U.S., including 32% of our Chlor Alkali Products and Vinyls 2023 segment sales, 57% of our Epoxy 2023 segment sales and 11% of our Winchester 2023 segment sales. See Note 20 “Segment Information” of the notes to consolidated financial statements contained in Item 8, for geographic segment data. We are incorporating our segment information from that Note into this section of our Form 10-K.

## **CUSTOMERS AND DISTRIBUTION**

Products we sell to industrial or commercial users or distributors for use in the production of other products constitute a major part of our total sales. We sell some of our products, such as epoxy resins, caustic soda and sporting ammunition, to a large number of users or distributors, while we sell other products, such as chlorine and chlorinated organics, in substantial quantities to a relatively small number of industrial users. During 2023, no single customer accounted for more than 10% of sales.

We market most of our products and services primarily through our sales force and sell directly to various industrial customers, mass merchants, retailers, wholesalers, gun clubs, other distributors and the U.S. Government and its prime contractors.

Sales to all U.S. government agencies and sales under U.S. government contracting activities in total accounted for approximately 9% of sales in 2023. Because we engage in some government contracting activities and make sales to the U.S. government, we are subject to extensive and complex U.S. government procurement laws and regulations. These laws and regulations provide for ongoing government audits and reviews of contract procurement, performance and administration. Failure to comply, even inadvertently, with these laws and regulations and with laws governing the export of munitions and other controlled products and commodities could subject us or one or more of our businesses to civil and criminal penalties, and under certain circumstances, suspension and debarment from future government contracts and the exporting of products for a specified period of time.

## **BACKLOG**

The total amount of estimated backlog was approximately \$914 million and \$838 million as of January 31, 2024 and 2023, respectively. The backlog orders are associated with contractual orders in our Winchester business. Backlogs in our other businesses are not significant. Backlog is comprised of all open customer orders which have been received, but not yet shipped. The backlog was estimated based on expected volume to be shipped from firm contractual orders, which are subject to customary terms and conditions, including cancellation and modification provisions. Approximately 90% of the contracted backlog as of January 31, 2024, is expected to be fulfilled during 2024, with the remainder expected to be fulfilled during 2025.

## **COMPETITION**

We are in active competition with businesses producing or distributing the same or similar products, as well as, in some instances, with businesses producing or distributing different products designed for the same uses.

Chlor alkali manufacturers in North America, with approximately 16 million tons of chlorine and 17 million tons of caustic soda capacity, account for approximately 15% of worldwide chlor alkali production capacity. In 2023, we have the largest chlor alkali capacity in North America and globally. While the technologies to manufacture and transport chlorine and caustic soda are widely available, the production facilities require large capital investments, and are subject to significant regulatory and permitting requirements. There is a worldwide market for caustic soda, which attracts imports and allows exports depending on market conditions. This industry includes large diversified producers in North America and abroad,

including multiple producers located in China. Other large chlor alkali producers in North America include The Occidental Petroleum Corporation (Oxy), Westlake Chemical Corporation (Westlake), Formosa USA, and Shintech Inc., a subsidiary of Shin-Etsu Chemical Co., Ltd (Shintech). We are also a leading integrated global producer of chlorinated organic products with a strong cost position due to our scale and access to chlor alkali feedstocks. This industry also includes large diversified producers such as Oxy, Westlake, Nobian Industrial Chemicals B.V. (Nobian), Inovyn (an Ineos company), and KEM ONE Group SAS, as well as multiple producers located in China and India.

We are a major global fully integrated epoxy producer, with access to key low-cost feedstocks and a cost advantaged infrastructure. The markets in which our Epoxy segment operates are highly competitive and are dependent on significant capital investment, the development of proprietary technology and the maintenance of product research and development. Among our competitors are Huntsman Corporation (Huntsman), Westlake, Kukdo Chemical Co. Ltd. (Kukdo) and Kumho P&B Chemicals (Kumho) as well as multiple other producers located in Asia. We remain exposed to competition from low-priced imports across our full range of epoxy materials and precursors.

We believe our Winchester business is one of the largest global manufacturers of commercial small caliber ammunition. Our Winchester business and Vista Outdoor Inc. (Vista) are among the largest commercial ammunition manufacturers in the U.S. The ammunition industry is highly competitive with Olin, Vista and numerous smaller domestic manufacturers and foreign producers competing for sales to the commercial ammunition customers. Many factors influence our ability to compete successfully, including price, delivery, service, performance, product innovation and product recognition and quality, depending on the product involved.

## **HUMAN CAPITAL**

### Overview

At Olin, we believe that our employees are critical to successfully achieving our mission. Our established Lifting Olin People core principles fuel the actions that our Lifting People pillars - Opportunity & Fulfillment, Communication & Connection, and Trust - take throughout the year to enhance the purposeful engagement of our employees. Lifting People is about creating work environments for our global workforce that are inclusive, supportive, and empowering while encouraging and incentivizing the highest level of performance. We support our global workforce by providing competitive benefits and compensation, robust recognition and rewards, an unwavering commitment to diversity and inclusion, a variety of workplace flexibility options, support and resources for community engagement and volunteerism, and professional development programs and opportunities, all of which constitute a strong Olin employee value proposition. In 2023, Olin employees increased their volunteerism hours by more than 500% over 2022, committing more than 55,000 hours toward volunteerism for organizations in our communities. We commit to providing our employees with a safe and supportive environment and maintain a steadfast commitment to safely producing and distributing our products, which is fundamental to the achievement of our goals. Our global workforce is committed to the We Care and Me Principles which focus on each individual's responsibility for their own safety and that of others, on leading by example, on reinforcing positive behaviors and on elevating concerns.

Olin senior management provides oversight for the benefits programs and compensation of our workforce. This includes conducting periodic compensation benchmarking, implementing health and other employee benefit programs and reviewing certain employee post-retirement benefits and accessibility of employee assistance programs. Our human resources department manages and administers these programs to ensure our total rewards programs are competitive. We have both salaried and hourly employee structures in place to compensate employees. Our recognition and rewards program allows people leaders across our organization to recognize the contributions of employees during the year, and in 2023 our leaders provided more than 5,000 recognition awards. We also provide a mechanism for employees to provide non-monetary peer-to-peer recognition in the form of Impressions, which increased by 93% in 2023. Our benefits and compensation structures allow Olin to attract and retain a talented workforce which fosters achievement of Olin's goals and objectives. Separately, our Board of Directors maintains a Compensation Committee which sets policies, develops and monitors strategies for and administers the programs that are used to compensate our CEO and other senior executives.

### Diversity, Equity and Inclusion

Olin is committed to lifting people through diversity and inclusion and maintaining work environments where all employees are comfortable bringing their authentic selves to work each day. We believe the insights provided by our workforce through their unique skills, backgrounds and experiences will lead us to future innovations that will reduce costs, reduce our environmental footprint, improve our ability to serve the world and keep our employees healthy and safe. To facilitate the sharing of those insights, we implemented a Voice of the Employee mechanism across multiple sites. We encourage our employees to be creative and participate in the dialogue across the company to help develop innovative solutions that lead to lasting, positive impacts for our customers, employees, communities, and shareholders. In 2023, we doubled our Olin People Network chapters, with 100% of our sites represented. Our U.S. college recruiting program, a key component of our talent pipeline, welcomed our most diverse class yet with 32% of our recruits being women and 37% of our recruits being minorities.

Olin employees are our best recruiters with 45% of our hires in 2023 attributable to employee referrals. Our employees are primarily located in the U.S., of which 29% are minorities. In our support of diversity and inclusion objectives, approximately 25% of our global workforce is comprised of women, and approximately 27% of our management roles are held by women and 12% by minority employees in the U.S. Our goal is to expand women in leadership positions to approximately 30% by 2025, an increase of approximately 10% against a 2018 baseline.

### Training and Development

We also invest in the continued professional development of our workforce. We never stop learning, and Olin provides a wide range of employee development and productivity programs, including assignment-based opportunities, job shadowing, mentoring, and foundational programs for new Olin employees. These programs help our employees improve, grow, and reinforce our values, in particular of Lifting Olin People. Our learning platform focuses on providing a variety of educational opportunities that support career and professional development for our employees, including undergraduate and graduate tuition assistance to eligible employees up to a maximum of \$10,000 per year. We regularly review talent development and succession plans to identify and develop a pipeline of talent to maintain and continuously improve business operations. We make purposeful moves to accelerate the development of high potential employees. We also have a well-established performance management process, which encourages ongoing feedback throughout the year and includes annual year-end reviews and regular development discussions.

### Workforce

As of December 31, 2023, we had 7,326 employees broken out as follows:

<b><u>Country or Region</u></b>	<b><u>Number of Employees</u></b>	<b><u>Percent of Total</u></b>
United States <sup>(1)</sup>	6,206	85 %
Foreign:		
Europe, the Middle East, Africa, and India	655	9 %
Asia Pacific	184	2 %
Canada <sup>(1)</sup>	163	2 %
Latin America	118	2 %
Total foreign	1,120	15 %
Total employees	7,326	

<sup>(1)</sup> Various labor unions represent a significant number of our hourly-paid employees for collective bargaining purposes. In the U.S., bargaining unit employees comprise 35% of the total workforce. In 2024, we have no labor agreements that are due to expire in the U.S., and one labor agreement expiring in Canada, representing approximately 1% of our global workforce.

<b><u>Segment</u></b>	<b><u>Number of Employees</u></b>	<b><u>Percent of Total</u></b>
Chemicals <sup>(1)</sup>	3,423	47 %
Winchester <sup>(2)</sup>	3,639	50 %
Corporate	264	3 %
Total employees	7,326	

<sup>(1)</sup> Includes approximately 1,835 employees from Chlor Alkali Products and Vinyls, approximately 1,072 employees from Epoxy and approximately 516 employees for common services within Chemicals.

<sup>(2)</sup> Includes approximately 1,456 employees at Lake City in Independence, MO, which is a GOCO facility.

## **RESEARCH ACTIVITIES; PATENTS**

Our research activities are conducted on a product-group basis at a number of facilities. Company-sponsored research expenditures were \$20.0 million, \$18.3 million and \$20.4 million in 2023, 2022 and 2021, respectively.

We own or license a number of patents, patent applications and trade secrets covering our products and processes. We believe that, in the aggregate, the rights under our patents and licenses are important to our operations, but we do not consider any individual patent, license or group of patents and licenses related to a specific process or product to be of material importance to our total business.

## SEASONALITY

Our sales are affected by economic downturns and the seasonality of several industries we serve, including building and construction, coatings, oil and gas, infrastructure, electronics, automotive, water treatment, refrigerants and ammunition. The seasonality of the ammunition business is typically driven by the U.S. fall hunting season. Our chlor alkali businesses generally experience their highest level of activity during the spring and summer months, particularly when construction, refrigerants, coatings and infrastructure activity is higher. Our Epoxy segment also serves a number of applications which experience their highest level of activity during the spring and summer months, particularly civil engineering and protective coatings and other construction materials, including composites and flooring.

## RAW MATERIALS

Basic raw materials are processed through an integrated manufacturing process to produce a number of products that are sold at various points throughout the process. We purchase a portion of our raw material requirements and also utilize internal resources and finished goods as raw materials for downstream products. We believe we have reliable sources of supply for our raw materials under normal market conditions. However, we cannot predict the likelihood or impact of any future raw material shortages. We provide additional information with respect to specific raw materials in the tables set forth under “Products and Services.”

## ENVIRONMENTAL AND TOXIC SUBSTANCES CONTROLS

As is common in our industry, we are subject to environmental laws and regulations related to the use, storage, handling, generation, transportation, emission, discharge, disposal and remediation of, and exposure to, hazardous and non-hazardous substances and wastes in all of the countries in which we do business.

The establishment and implementation of national, state or provincial and local standards to regulate air, water and land quality affect substantially all of our manufacturing locations around the world. Laws providing for regulation of the manufacture, transportation, use and disposal of hazardous and toxic substances, and remediation of contaminated sites have imposed additional regulatory requirements on industry, particularly the chemicals industry. In addition, implementation of environmental laws has required and will continue to require new capital expenditures and will increase operating costs.

We are a party to various government and private environmental actions associated with former waste disposal sites and past manufacturing facilities. Charges to income for investigatory and remedial efforts were \$30.1 million, \$24.2 million and \$16.2 million for the years ended December 31, 2023, 2022 and 2021, respectively. These charges may be material to operating results in future years. These charges do not include insurance recoveries for costs incurred and expensed in prior periods.

See our discussion on environmental matters contained in Note 21 “Environmental” of the notes to consolidated financial statements contained in Item 8 and under the heading “Environmental Matters” in Item 7—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

## CORPORATE RESPONSIBILITY

At Olin, we are committed to corporate responsibility to ensure the long-term success of our business, our collective global society and the well-being of our environment. We focus our corporate responsibility efforts on the areas of: (1) environment, health, safety and security stewardship, (2) sustainability and governance and (3) product stewardship. We value collaboration and commit to working with other organizations to encourage collective action for improving corporate responsibility. Additional information related to our corporate responsibility initiatives, practices, activities, goals and related information, as well as future updates, can be found in the Corporate Responsibility section of our website at [www.olin.com](http://www.olin.com), including our Sustainability Report under the section Sustainability Success. Our progress against environmental, social and governance (ESG) targets is included within our ESG Scorecard, found in the Sustainability section of our website. The contents of our website referenced in this section are not, and should not be considered to be, part of this report.

### Environment, Health, Safety and Security Stewardship

Olin is strongly committed to excellence in protecting the environment, health, safety and security of our employees and those who live and work around our plants. Our operations worldwide comply with all local requirements and implement additional standards as required to protect the environment, health, safety and security of our operations. We use our management system to drive continuous improvement and achieve excellence in environmental, health, safety, process safety and security performance. Our safety, health and environmental strategy and goals are designed to sustain our drive to zero incidents. Relentlessly and responsibly, we constantly emphasize the importance of monitoring the safety, security and



environmental impact of our plants and processes. Through our daily vigilance, Olin strives to continue to be recognized as one of the industry's best performers.

Our corporate values — Act with Integrity, Drive Innovation and Improvement and Lift Olin People — are part of our culture. These values are also reflected in our Environment, Health, Safety and Security (EHS&S) policy and practice. Olin leadership visibly performs and guides the organization to conduct business in a manner that protects and increasingly benefits our employees, business partners and the communities in which we live. All employees have responsibilities within our management systems necessary to sustain our drive to zero incidents. Olin continues its downward trend in personnel and process safety incidents.

### Sustainability and Governance

We strongly believe in meeting the needs of the present without compromising the needs of future generations. We recognize our Company's impact on our natural resources and our responsibility to stewardship of people and the planet. This means striving for a company culture responsible to the ongoing ESG ideals of our employees and shareholders.

At Olin, we integrate sustainability into everything we do as a responsible corporate citizen. We value and respect our people, the communities in which we operate, our customers and the environment. We commit to making a contribution to protecting the world and its future condition through the safety and efficiency of our business practices - from supply to manufacturing to delivery and ultimately the end-use of our products. Executing on our sustainability strategy, we believe Olin will increase value for our investors, employees, and customers by enhancing our strategic operating model through focused ESG actions. These actions include:

- Protecting our employees and communities through our industry-leading occupational and process safety programs
- Proudly strengthening United States defense, international defense, law enforcement, and conservation through our Winchester ammunition brand
- Significantly reducing our environmental impact by taking concrete steps through technology and commercial innovation to lower our carbon footprint, net water usage, and resource consumption
- Developing and enabling sustainable solutions within the value chain through our product and service offerings
- Consistently upholding our values and governance standards as we amplify our culture of inclusion and cultivate our diverse workforce

We believe Olin's industry leadership, focused ESG actions, and our engaged workforce will create a positive, long-lasting impact on our communities and the environment.

### Product Responsibility

We take pride in safely distributing and handling our products and enabling our customers to do the same. Our product stewardship and quality practices are aligned with our core values and other globally recognized standards. We apply these standards to our chemical business segments and relevant subsidiaries to ensure compliance with applicable global regulations, evaluation, continuous improvement and transparency of relevant production and product or formulation information. Additionally, Winchester ammunition is designed and manufactured in accordance with the voluntary industry standards published by the Sporting Arms and Ammunition Manufacturers' Institute. Our goal is to meet or exceed guidelines in every instance. Olin leadership demonstrates its commitment to these standards through active participation and communication concerning product safety, within our organization and to external stakeholders. We are deeply committed to ammunition education and advocate strongly for owners and participants to take the necessary steps to be trained and educated when handling, storing or using a firearm for recreational purposes, both for experienced and novice participants. Winchester dedicates an increasing share of its online content to safety education materials for all to responsibly and confidently own and use Winchester products.

## **Item 1A. RISK FACTORS**

In addition to the other information in this Form 10-K, the following factors should be considered in evaluating Olin and our business. All of our forward-looking statements should be considered in light of these factors. The following summarizes the risks and uncertainties that we consider to be material and that may adversely affect our business, financial condition, results of operations, cash flows and/or reputation. Additional risks and uncertainties that we are unaware of or that we currently deem immaterial also may become important factors that affect us.

***Sensitivity to Global Economic Conditions—Our operating results could be negatively affected during economic and industry downturns.***

Our industries and the businesses of most of our customers have historically experienced periodic downturns. These economic, seasonal and industry downturns have been characterized by diminished product demand, excess manufacturing capacity and, in some cases, lower average selling prices. Therefore, any significant downturn in our customers' businesses, industry conditions, or in global economic conditions could result in a reduction in demand for our products.

Although a majority of our sales are within North America, a large part of our financial performance is dependent upon a healthy economy beyond North America because we have a significant amount of sales abroad and our customers sell their products abroad. As a result, our business is and will continue to be affected by general economic conditions and other factors in Europe, Asia Pacific, particularly China, and Latin America, including fluctuations in interest rates, customer demand, labor and energy costs, currency changes and other factors beyond our control, such as public health epidemics. The demand for our products and our customers' products is directly affected by such fluctuations. In addition, our customers could decide to move some or all of their production to locations that are more remote from our facilities, and this could reduce demand for our products. We cannot assure you that events having an adverse effect on the industries in which we operate will not occur or continue, such as a downturn in the European, Asian Pacific, particularly Chinese, Latin American, or other world economies, increases in interest rates, unfavorable currency fluctuations or prolonged effects of global public health crises, including pandemics. Economic conditions in other regions of the world, predominantly Asia and Europe, can adversely affect the balance between global supply and demand for our chemical products and increase the amount of products produced and made available for export to North America and other jurisdictions in which we sell. Any significant increased product supply could put downward pressure on our product pricing, negatively affecting our profitability.

***Pricing Pressure—Our profitability could be reduced by declines in average selling prices of our products.***

Our industries and each of our business segments experience fluctuating supply and demand, particularly in our Chlor Alkali Products and Vinyls segment, which can result in changes in selling prices. Periods of high demand, tight supply and increasing operating margins tend to result in increases in capacity and production until supply exceeds demand, generally followed by periods of oversupply and declining prices. We believe our strategic operating model can mitigate pricing pressure historically experienced during periods of supply exceeding demand. Nevertheless, we cannot assure you that increased pricing pressure will not affect our operating results in the future during these periods. Another factor influencing demand and pricing for chemical products is the price of energy. Higher natural gas prices increase our customers' and competitors' manufacturing costs and depending on the ratio of crude oil to natural gas prices, could make our customers less competitive in world markets, negatively affecting the demand and pricing for our chemical products.

In the chemical industries in which we operate, price is one of the major supplier selection criteria. Pricing is subject to a variety of factors, some of which are outside of our control. Decreases in the average selling prices of our products could have a material adverse effect on our profitability. While we strive to maintain or increase our profitability by executing our strategic operating model and by reducing costs through improving production efficiency, emphasizing higher margin products and by controlling transportation, selling and administrative expenses, we cannot assure you that these efforts will be sufficient to fully offset the effect of possible decreases in pricing on operating results.

Chlorine and caustic soda are produced simultaneously and in a fixed ratio of 1.0 ton of chlorine to 1.1 tons of caustic soda. An imbalance in customer demand may require Olin to reduce production of both chlorine and caustic soda or take other steps to correct the imbalance. Since we cannot store large quantities of chlorine, we may not be able to respond to an imbalance in customer demand for these products quickly or efficiently. To mitigate exposure and maximize value from the entire ECU, we continually take a number of actions, including, managing our production rates to the prevailing weaker side of the ECU, leveraging our portfolio of chlorine and chlorine derivatives outlets and entering into purchase for re-sale transactions. If our efforts are not successful and a substantial imbalance occurred, we might need to take actions that could have a material adverse effect on our business.

Our Epoxy segment is also subject to changes in operating results as a result of pricing pressures. Selling prices of epoxy materials are affected by changes in raw material costs, including energy, propylene and benzene, customer demand, and global fluctuations in supply and demand. Periods of supply/demand imbalances, particularly changes in trade flows within Asia Pacific markets, particularly China, can result in increased pricing pressure on our epoxy products. Declines in average selling prices of products of our Epoxy segment could have a material adverse effect on our business.

Our Winchester segment is also subject to pricing pressures. Selling prices of ammunition are affected by changes in raw material costs and availability, customer demand and industry production capacity. Declines in average selling prices of products of our Winchester segment could have a material adverse effect on our business.

We cannot assure you that pricing or profitability in the future will be comparable to any particular historical period, including the most recent period shown in our operating results. We cannot assure you that the chemical industry or ammunition industry will not experience adverse trends in the future.

***Strategic Operating Model—Our operating results could be negatively affected if we do not successfully execute our operating model in our chemicals businesses.***

Our strategic operating model in our chemicals businesses prioritizes ECU margins over sales volume. Adopted in late 2020, this model represents a change to how our Chlor Alkali Products and Vinyls and Epoxy businesses traditionally operated over the years. To mitigate exposure and maximize value from the entire ECU, the model necessitates managing production rates to the weaker side of the ECU. The execution of the model may not be successful over time. For example, we may not be able to consistently achieve higher margins, or the margin improvement achieved might be more than offset by the impact from lower sales volumes, either of which could have a material adverse effect on our business. In addition, we take actions from time to time designed to complement our operating model, such as purchase for re-sale transactions (which we sometimes refer to as “parlaying activities”) that may not improve our operating results and could adversely affect our business if these activities are not successfully implemented.

Some of our assets were designed to operate at consistently high operating rates. If we operate at lower operating rates for extended periods or make frequent changes to operating rates, our assets may become less reliable or may require additional maintenance or capital investment, which could have a material adverse effect on our business. Additionally, we may not be able to attract, develop, or retain the skills necessary to effectively execute the strategic operating model. Our model is dependent on implementing changes to the way we transact business with customers and other third parties. Customers or third parties may not be willing to transact with us on terms acceptable to us or at all. If we fail to effectively execute our strategic operating model, our operating results may fail to achieve the level of profitability that we forecast, and our business could be adversely affected.

***Ability to Manage Executive Officer Transition—We must attract, retain and motivate key executive officers and the failure to do so or to effectively manage the transition of executive officers could have a material adverse effect on our business.***

On February 19, 2024, we announced that our Board of Directors appointed Kenneth Lane, as President and Chief Executive Officer of Olin, effective as of March 18, 2024. Mr. Lane will succeed Scott Sutton, who will be stepping down as President and Chief Executive Officer and Director of Olin on March 18, 2024. Our success depends in large part on our ability to recruit and retain a qualified successor to Mr. Sutton and the continued availability and service of our other executive officers and senior management. The market for executive officers and senior management in our industry is competitive and we may not be able to retain our executive officers and senior management. We must continue to recruit, retain, and motivate management and other team members sufficiently, both to maintain our current business and to execute our long-term strategic initiatives. The loss of any of our executive officers or other key senior management without sufficient advance notice could prevent or delay the implementation and completion of our strategic initiatives, divert management’s attention to seeking qualified replacements, be disruptive to our daily operations or impact public or market perception. Any failure by us to manage a successful leadership transition of an executive officer and to timely identify a qualified permanent replacement could have a material adverse effect on our business.

***Cost Control—Our profitability could be reduced if we experience increasing raw material, utility, transportation or logistics costs, or if we fail to achieve targeted cost reductions.***

Our operating results and profitability are dependent upon our continued ability to control, and in some cases reduce, our costs. If we are unable to do so, or if costs outside of our control, particularly our costs of raw materials, utilities, transportation and similar costs, increase beyond anticipated levels, our profitability will decline. In addition, an increase in costs generally as a result of rising inflation, or in a particular sector such as the energy or transportation sector, could result in rising costs which we cannot fully mitigate through product price increases or cost reductions, which could also adversely affect our profitability.

For example, if our feedstock and energy costs increase, and we are unable to pass the increased costs on to customers, our profitability in our Chlor Alkali Products and Vinyls and Epoxy segments would be negatively affected. Similarly, costs of commodity metals and other materials used in our Winchester business, such as copper, propellant and lead, can vary. If we experience significant increases in these costs and are unable to raise our prices to offset the higher costs, the profitability in our Winchester business would be negatively affected.

***Suppliers—We rely on a limited number of third-party suppliers for specified feedstocks and services.***

We obtain a significant portion of our raw materials from a few key suppliers. If any of these suppliers fail to meet their obligations under present or any future supply agreements, we may be forced to pay higher prices or incur higher costs to obtain the necessary raw materials. Any interruption of supply or any price increase of raw materials could have a material adverse

effect on our business. Certain of our facilities are dependent on feedstocks, services, and related infrastructure provided by third parties, which are provided pursuant to long-term contracts. Any failure of those third parties to perform their obligations under those agreements or disagreements regarding the performance under those agreements or inability to renew such agreements at acceptable terms could adversely affect the operation of the affected facilities and our business, or result in diversion of management's attention or our resources from other business matters. If we are required to obtain an alternate source for these feedstocks or services, we may not be able to obtain equally favorable pricing and terms. Additionally, we may be forced to pay additional transportation costs or to invest in capital projects for pipelines or alternate facilities to accommodate railcar or other delivery methods or to replace other services.

Subject to existing contracts, a vendor may choose to modify its relationship with us due to general economic concerns or concerns relating to the vendor or us, at any time. Any significant change in the terms that we have with our key suppliers could have a material adverse effect on our business, as could significant additional requirements from suppliers that we provide them additional security in the form of prepayments or posting letters of credit.

***Production Hazards—Our facilities are subject to operating hazards, which may disrupt our business.***

We are dependent upon the continued safe and reliable operation of our production facilities. Our production facilities are subject to hazards associated with the manufacture, handling, storage and transportation of chemical materials and products and ammunition, including leaks and ruptures, explosions, fires, inclement weather and natural disasters, unexpected utility disruptions or outages, unscheduled downtime, equipment failure, information technology systems interruptions or failures, terrorism, transportation interruptions, transportation incidents involving our chemical products, chemical spills and other discharges or releases of toxic or hazardous substances or gases and environmental hazards. Due to the integrated nature of our large chemical sites, an event at one plant could affect production across multiple plants at a facility. In the past, we have had incidents that have temporarily shut down or otherwise disrupted our manufacturing, causing production delays and resulting in liability for workplace injuries and fatalities. Some of our operations involve manufacturing and/or handling various explosive and flammable materials. Use of our products by our customers could also result in liability if an explosion, fire, spill or other accident were to occur. We cannot assure you that we will not experience these types of incidents in the future or that these incidents will not result in production delays or otherwise have a material adverse effect on our business.

We maintain risk management strategies, including but not limited to levels of insurance associated with property, casualty and business interruption. Such insurance may not cover all of the risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies. We may also be unable to continue to maintain our existing insurance or obtain comparable insurance at a reasonable cost.

***Physical Risk of Climate-Related Events—Our facilities are subject to physical risks associated with climate-related events or increased severity and frequency of severe weather events.***

We are exposed to climate-related risks and uncertainties, many of which are outside of our control. We have a substantial presence near the U.S. Gulf Coast and a significant portion of our manufacturing facilities, similar to our competitors and customers, are structured near major bodies of water. Major hurricanes, or other weather-related events, have caused significant disruption in our operations on the U.S. Gulf Coast, logistics across the region and the supply of certain raw materials, which have had an adverse effect on volume and cost for some of our products. Climate change could result in more frequent severe weather events, potential changes in precipitation patterns and extreme variability in weather patterns, which could disrupt our operations as well as those of our customers and suppliers. Severe weather conditions or other natural phenomena in the future, including those resulting from climate change, could have a material adverse effect on our business.

***Third-Party Transportation—We rely heavily on third-party transportation, which subjects us to risks and costs that we cannot control.***

We rely heavily on railroad, truck, marine vessel, barge and other shipping companies to transport finished products to customers and to transport raw materials to the manufacturing facilities used by each of our businesses. These transport operations are subject to various hazards and risks, including extreme weather conditions, work stoppages and operating hazards, as well as domestic and international transportation and maritime regulations. In addition, the methods of transportation we utilize, including shipping chlorine and other chemicals by railroad and by barge, may be subject to additional, more stringent and more costly regulations in the future. If we are delayed or unable to ship finished products or unable to obtain raw materials as a result of any such new or modified regulations or public policy changes related to transportation safety, or these transportation companies' failure to operate properly, or if there are significant changes in the cost of these services due to new additional regulations, or otherwise, we may not be able to arrange efficient alternatives and timely means to obtain raw materials or ship goods, which could result in a material adverse effect on our business. If any third-party railroad that we utilize to transport chlorine and other chemicals ceases to transport certain hazardous materials, or if there

are significant changes in the cost of shipping hazardous materials by rail or otherwise, we may not be able to arrange efficient alternatives and timely means to deliver our products or at all, which could result in a material adverse effect on our business.

***Raw Materials—Availability of purchased feedstocks and energy, and the volatility of these costs, affect our operating costs and add variability to earnings.***

Purchased feedstock, including propylene and benzene, and energy costs account for a substantial portion of our total production costs and operating expenses. We purchase certain raw materials as feedstocks.

Feedstock and energy costs generally follow price trends in crude oil and natural gas, which are sometimes volatile. Ultimately, the ability to pass on underlying cost increases in a timely manner or at all is partially dependent on market conditions. Conversely, when feedstock and energy costs decline, selling prices generally decline as well. As a result, volatility in these costs could have a material adverse effect on our business.

If the availability of any of our principal feedstocks is limited or we are unable to obtain natural gas or energy from any of our energy sources, we may be unable to produce some of our products in the quantities demanded by our customers, which could have a material adverse effect on plant utilization and our sales of products requiring such raw materials. We have long-term supply contracts with various third parties for certain raw materials, including ethylene, electricity, propylene and benzene. As these contracts expire, we may be unable to renew these contracts or obtain new long-term supply agreements on terms comparable or as favorable to us, depending on market conditions, which may have a material adverse effect on our business. In addition, many of our long-term contracts contain provisions that allow our suppliers to limit the amount of raw materials shipped to us below the contracted amount in force majeure or similar circumstances. If we are required to obtain alternate sources for raw materials because our suppliers are unwilling or unable to perform under raw material supply agreements or if a supplier terminates or is unwilling to renew its agreements with us, we may not be able to obtain these raw materials from alternative suppliers or obtain new long-term supply agreements on terms comparable or as favorable to us.

***Information Security—A failure of our information technology systems, or an interruption in their operation due to internal or external factors, including cyber-attacks, could have a material adverse effect on our business.***

Our operations depend on our ability to protect our information systems, computer equipment and information databases from systems failures. We rely on both internal information technology systems and certain external service providers to assist in the management of the day-to-day operation of our business, operate elements of our manufacturing facilities, manage relationships with our employees, customers and suppliers, fulfill customer orders and maintain our financial, accounting or other business records. Failure of any one or more than one of our information technology systems could be caused by internal or external events or parties, such as incursions by intruders or hackers, computer viruses, cyber-attacks, failures in hardware or software, or power or telecommunication fluctuations or failures. The failure of our information technology systems to perform as anticipated for any reason or any significant breach of security could disrupt our business and result in numerous adverse consequences, including reduced effectiveness and efficiency of operations, increased costs or loss of important information, or loss of sales, any of which could have a material adverse effect on our business. We have technology and information security processes, periodic external service and service provider reviews, insurance policies and disaster recovery plans in place to mitigate our risk to these vulnerabilities. However, these measures may not be adequate to ensure that our operations will not be disrupted or our financial impact minimized, should such an event occur.

***Ability to Attract and Retain Qualified Employees—We must attract, retain and motivate key employees, and the failure to do so may materially adversely affect our business.***

We believe our success depends on hiring, retaining and motivating key employees, including executive officers. Our future success depends in part on our ability to identify and develop talent throughout the organization who adopt and successfully execute our strategic operating model. The development and retention of key personnel and appropriate senior management succession planning will continue to be important to the successful execution of our strategies. We may have difficulty locating and hiring qualified personnel. In addition, we may have difficulty retaining such personnel once hired, and key people may leave and compete against us. The loss of key personnel or our failure to attract and retain other qualified and experienced personnel could disrupt or materially adversely affect our business. In addition, our operating results could be adversely affected by increased costs due to increased competition for employees or higher employee turnover, which may result in the loss of significant customer business or increased costs.

***Acquisitions and Joint Ventures—We may not be able to complete future acquisitions or joint venture transactions or successfully integrate them into our business, which could materially adversely affect our business.***

As part of our growth strategy, we intend to pursue acquisitions and joint venture opportunities consistent with or complementary to our existing business strategies. Successful accomplishment of this objective may be limited by the availability and suitability of acquisition candidates, the ability to obtain regulatory approvals necessary to complete a planned transaction, and by our financial resources. Acquisitions and joint venture transactions involve numerous risks, including

difficulty determining appropriate valuation, integrating operations, technologies, services and products of the acquired businesses, personnel turnover and the diversion of management's attention from other business matters. The nature of a joint venture requires us to work cooperatively with unaffiliated third parties. Differences in views among joint venture participants may result in delayed decisions or failure to agree on major decisions. If these differences cause the joint ventures to deviate from their business plans or fail to achieve their desired operating performance, our results of operations could be adversely affected. In addition, we may be unable to achieve anticipated benefits from these transactions in the time frame that we anticipate, or at all, which could have a materially adverse effect on our business.

***International Sales and Operations—We are subject to risks associated with our international sales and operations that could have a material adverse effect on our business.***

Olin has an international presence, including the geographic regions of Europe, Asia Pacific, Latin America and Canada. In 2023, approximately 33% of our sales were generated outside of the United States. These international sales and operations expose us to risks, including:

- difficulties and costs associated with complying with complex and varied laws, treaties, and regulations;
- tariffs and trade barriers;
- outbreaks of serious disease, such as pandemics, which could cause us and our suppliers and/or customers to temporarily suspend operations in affected areas, restrict the ability of Olin to distribute our products or cause economic downturns that could affect demand for our products;
- geopolitical or regional conflicts which can disrupt trade flows, supply/demand fundamentals, or the ability to sell certain products within countries or regions;
- changes in laws and regulations, including the imposition of economic or trade sanctions affecting international commercial transactions;
- risk of non-compliance with anti-bribery laws and regulations, such as the U.S. Foreign Corrupt Practices Act;
- restrictions on, or difficulties and costs associated with, the repatriation of cash from foreign countries to the United States;
- unfavorable currency fluctuations;
- changes in local economic conditions, including inflation levels exceeding that of the U.S.;
- unexpected changes in political or regulatory environments;
- labor compliance and costs associated with a global workforce;
- data privacy regulations;
- difficulties in maintaining overseas subsidiaries and international operations; and
- challenges in protecting intellectual property rights.

Any one or more of the above factors could have a material adverse effect on our business.

***Indebtedness—Our indebtedness could materially adversely affect our business.***

As of December 31, 2023, we had \$2,670.1 million of indebtedness outstanding. Outstanding indebtedness does not include amounts that could be borrowed under our Senior Revolving Credit Facility with aggregate commitments of \$1,200.0 million (Senior Revolving Credit Facility). As of December 31, 2023, our indebtedness represented 54.1% of our total capitalization and \$78.8 million of our indebtedness was due within one year. Despite our level of indebtedness, we expect to continue to have the ability to borrow additional debt, but we cannot be certain that additional debt will be available on terms acceptable to us or at all.

Our indebtedness could have important consequences, including but not limited to:

- limiting our ability to fund working capital, capital expenditures, and other general corporate purposes;
- limiting our ability to accommodate growth by reducing funds otherwise available for other corporate purposes, which in turn could prevent us from fulfilling our obligations under our indebtedness;
- limiting our operational flexibility due to the covenants contained in our debt agreements;
- to the extent that our debt is subject to floating interest rates, increasing our vulnerability to fluctuations in market interest rates;
- limiting our ability to pay cash dividends;
- limiting our ability to approve or execute share repurchase programs;
- limiting our flexibility for, or reacting to, changes in our business or industry or economic conditions, thereby limiting our ability to compete with companies that are not as highly leveraged; and
- increasing our vulnerability to economic downturns.

Our ability to generate sufficient cash flow from operations to make scheduled payments on our debt will depend on a range of economic, competitive and business factors, many of which are outside our control. There can be no assurance that our business will generate sufficient cash flow from operations to make these payments. If we are unable to meet our expenses and debt obligations, we may need to refinance all or a portion of our indebtedness before maturity, sell assets or issue additional equity. We may not be able to refinance any of our indebtedness, sell assets or issue additional equity on commercially reasonable terms or at all, which could cause us to default on our obligations and impair our liquidity. Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our debt obligations on commercially reasonable terms, would have a material adverse effect on our business, as well as on our ability to satisfy our debt obligations.

***Credit Facility—Weak industry conditions could affect our ability to comply with the financial maintenance covenants in our senior credit facility.***

Our senior credit facility includes certain financial maintenance covenants requiring us to not exceed a maximum leverage ratio and to maintain a minimum coverage ratio.

Depending on the magnitude and duration of economic or industry downturns affecting our businesses, including deterioration in prices and volumes, there can be no assurance that we will continue to be in compliance with these ratios. If we fail to comply with either of these covenants in a future period and are not able to obtain waivers from the lenders, we would need to refinance our current senior credit facility or our ability to borrow under this facility may be limited. However, there can be no assurance that such refinancing would be available to us on terms that would be acceptable to us or at all.

***Credit and Capital Market Conditions—Adverse conditions in the credit and capital markets may limit or prevent our ability to borrow or raise capital.***

While we believe we have facilities in place that should allow us to borrow funds as needed to meet our ordinary course business activities, adverse conditions in the credit and financial markets could prevent us from obtaining financing, if the need arises, or result in our creditors terminating their funding commitments. Our ability to invest in our businesses and refinance or repay maturing debt obligations could require access to the credit and capital markets and sufficient bank credit lines to support cash requirements. Our ability to access credit and capital markets can also depend on our credit rating as determined by reputable credit rating agencies. A significant downgrade in our credit rating could affect our ability to refinance or repay maturing debt obligations, result in increased borrowing costs, decrease the availability of capital from financial institutions or require our subsidiaries to post letters of credit, cash or other assets as collateral with certain counterparties. If we are unable to access the credit and capital markets on commercially reasonable terms, we could experience a material adverse effect on our business.

***Pension Plans—The impact of declines in global equity and fixed income markets on asset values and any declines in interest rates and/or improvements in mortality assumptions used to value the liabilities in our pension plans may result in higher pension costs and the need to fund the pension plans in future years in material amounts.***

We sponsor domestic and foreign defined benefit pension plans for eligible employees and retirees. Substantially all domestic defined benefit pension plan participants are no longer accruing benefits. However, a portion of our bargaining hourly employees continue to participate in our domestic qualified defined benefit pension plans under a flat-benefit formula. Our funding policy for the qualified defined benefit pension plans is consistent with the requirements of federal laws and regulations. Our foreign subsidiaries maintain pension and other benefit plans, which are consistent with local statutory practices. The determinations of pension expense and pension funding are based on a variety of rules and regulations along with economic factors which are outside of our control. These factors include returns on invested assets, the level of certain market interest rates, the discount rates used to determine pension obligations and mortality assumptions used to value liabilities in our pension plans. Changes in these rules and regulations or unfavorable changes to the factors which are used to value the assets and liabilities in our pension plans could impact the calculation of funded status of our pension plans. They may also result in higher pension costs and the need for additional pension plan funding. See “Pension and Postretirement Benefits” contained in Item 7—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

***Asset Impairment—If our goodwill, other intangible assets or property, plant and equipment become impaired in the future, we may be required to record non-cash charges to earnings, which could be significant.***

The process of impairment testing for our goodwill involves a number of judgments and estimates made by management including future cash flows, discount rates, profitability assumptions and terminal growth rates with regards to our reporting units. Our internally generated long-range plan includes assumptions regarding pricing and operating forecasts for the chlor alkali industry. If the judgments and estimates used in our analysis are not realized or are affected by external factors, then actual results may not be consistent with these judgments and estimates, and we may be required to record a goodwill impairment charge in the future, which could be significant and have a material adverse effect on our business.

We review long-lived assets, including property, plant and equipment and identifiable amortizing intangible assets, for impairment whenever changes in circumstances or events may indicate that the carrying amounts are not recoverable. If the fair value is less than the carrying amount of the asset, an impairment is recognized for the difference. Factors which may cause an impairment of long-lived assets include significant changes in the manner of use of these assets, negative industry or market trends, a significant underperformance relative to historical or projected future operating results, extended period of idleness or a likely sale or disposal of the asset before the end of its estimated useful life. If our property, plant and equipment and identifiable amortizing intangible assets are determined to be impaired in the future, we may be required to record non-cash charges to earnings during the period in which the impairment is determined, which could be significant and have a material adverse effect on our business.

#### Legal, Environmental and Regulatory Risks

##### ***Effects of Regulation—Changes in or failure to comply with applicable laws or government regulations or policies could have a material adverse effect on our business.***

Legislation or regulations that may be adopted or modified by U.S. or foreign governments that affect products we produce could significantly affect the sales, costs and profitability of our business, including legislation or regulations intended to address antitrust and competition, the environment, climate change, taxes, international trade matters through import and export duties and quotas and anti-dumping measures and related tariffs.

The chemical and ammunition industries are subject to extensive legislative and regulatory actions, which could have a material adverse effect on our business. Many of our products and operations are subject to chemical control laws of the countries in which they are located. These laws include regulation of chemical substances and inventories under the U.S. Toxic Substances Control Act of 1976 (TSCA) in the U.S. and the Registration, Evaluation and Authorization of Chemicals (REACH) regulation in Europe. Likewise, Congress and government agencies also periodically consider legislation and other regulations related to the ammunition business, and legislative or regulatory actions could affect our ability to manufacture and sell certain types of ammunition, including restrictions on exports to certain countries.

TSCA was amended in 2016, and the U.S. Environmental Protection Agency (EPA) is currently evaluating several of our products and manufacturing processes for additional regulation under the amended law. Certain of our products, or inputs into our manufacturing process, are subject to regulation under current TSCA regulations, and other chemicals or ingredients may be regulated under the law in the future. In 2022, the EPA proposed a regulation that would ban the use of asbestos, a principal material used in diaphragm-based chlorine manufacturing in as soon as two years following publication of a final rule. Diaphragm technology-based chlorine production makes up a significant part of Olin's capacity and this proposed government regulation could significantly increase the cost of production or cause us to close production capacity that would have negative consequences on our business. The EPA has found "unreasonable risk" associated with several of Olin's chlorinated organic products under the new TSCA law and we anticipate proposed rules from the EPA on these products also present risk to these businesses. Olin also anticipates future regulatory action related to EDC under the amended TSCA law that could significantly affect the sales, costs and profitability of that product line.

Under REACH, additional testing requirements, documentation, risk assessments and registrations are occurring and will continue to occur and may adversely affect our costs of products produced in or imported into the European Union. The European Union is currently considering regulations related to the use of bisphenol, or BPA, in chemical manufacturing, which is a critical component of the epoxy resins we manufacture and sell in the region.

Compliance with current or future TSCA, REACH, or other regulations may limit or hinder our ability to manufacture our products and/or cause us to incur expenditures that are material to our business. Additionally, changes to government regulations and laws, including TSCA and REACH, or changes in their interpretation may reduce the demand for our products, impact our ability to use or manufacture certain products, or limit our ability to implement our strategies, any of which could have a material adverse effect on our business. A material change in tax laws, treaties or regulations in the jurisdictions in which we operate or a change in their interpretation or application could have a material adverse effect on our business.

##### ***Security and Chemicals Transportation—New regulations on the transportation of hazardous chemicals and/or the security of chemical manufacturing facilities and public policy changes related to transportation safety could result in significantly higher operating costs.***

The transportation of our products and feedstocks, including transportation by pipeline, and the security of our chemical manufacturing facilities are subject to extensive regulation. Government authorities at the local, state and federal levels could implement new or stricter regulations, or change their interpretations of existing regulations, that would impact the security of chemical plant locations and the transportation of hazardous chemicals. Our Chlor Alkali Products and Vinyls and Epoxy segments could be adversely affected by the cost of complying with any new regulations. Our business also could be adversely



affected if an incident were to occur at one of our facilities or while transporting products. The extent of the impact would depend on the requirements of future regulations and the nature of an incident, which are unknown at this time.

***Legal and Regulatory Claims and Proceedings—We are subject to legal and regulatory claims and proceedings, which could cause us to incur significant expenses.***

We are subject to legal and regulatory claims and proceedings relating to our present and former operations and could become subject to additional claims in the future, some of which could be material. These proceedings may be brought by the government or private parties and may arise out of a number of matters, including, antitrust claims, contract disputes, product liability claims, including ammunition and firearms, and proceedings alleging injurious exposure of plaintiffs to various chemicals and other substances (including proceedings based on alleged exposures to asbestos). Frequently, the proceedings alleging injurious exposure involve claims made by numerous plaintiffs against many defendants. Defense of these claims can be costly and time-consuming even if ultimately successful. Because of the inherent uncertainties of legal proceedings, we are unable to predict their outcome and therefore cannot determine whether the financial effect, if any, will be material to our business. We have included additional information with respect to pending legal and regulatory proceedings in Part II, Item 8, under the heading of “Legal Matters” within Note 23, “Commitments and Contingencies,” of our Notes to Consolidated Financial Statements.

***Environmental Costs—We have ongoing environmental costs, which could have a material adverse effect on our business.***

Our operations and assets are subject to extensive environmental, health and safety regulations, including laws and regulations related to air emissions, water discharges, waste disposal and remediation of contaminated sites. The nature of our operations and products, including the raw materials we handle, exposes us to the risk of liabilities, obligations or claims under these laws and regulations due to the production, storage, use, transportation and sale of materials that can adversely impact the environment or cause personal injury, including, in the case of chemicals, unintentional releases into the environment. Environmental laws may have a significant effect on the costs of use, transportation, handling and storage of raw materials and finished products, as well as the costs of storage, handling, treatment, transportation and disposal of wastes. In addition, we are party to various government and private environmental actions associated with past manufacturing facilities and former waste disposal sites. We have incurred, and expect to incur, significant costs and capital expenditures in complying with environmental laws and regulations.

The ultimate costs and timing of environmental liabilities are difficult to predict. Liabilities under environmental laws relating to contaminated sites can be imposed retroactively and on a joint and several basis. One liable party could be held responsible for all costs at a site, regardless of fault, percentage of contribution to the site or the legality of the original disposal. We could incur significant costs, including clean-up costs, natural resource damages, civil or criminal fines and sanctions and third-party lawsuits claiming, for example, personal injury and/or property damage, as a result of past or future violations of, or liabilities under, environmental or other laws.

In addition, future events, such as changes to environmental laws, changes in the interpretation or implementation of current environmental laws or new information about the extent of remediation required, could require us to make additional expenditures, modify or curtail our operations and/or install additional pollution control equipment. It is possible that regulatory agencies may identify new chemicals of concern or enact new or more stringent clean-up standards for existing chemicals of concern. This could lead to expenditures for environmental remediation in the future that are additional to existing estimates.

Accordingly, it is possible that some of the matters in which we are involved or may become involved may be resolved unfavorably to us, which could have a material adverse effect on our business. See “Environmental Matters” contained in Item 7—“Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

***Governmental Contract Compliance and Deliverables—Various risks associated with our Lake City contract and performance under other government contracts could materially adversely affect our business.***

Our Winchester business currently operates and manages the Lake City Army Ammunition Plant in Independence, MO under a multi-year contract with the U. S. Army. The contract has an initial term of seven years, starting on October 1, 2020, and may be extended for up to three additional years. Additionally, our Winchester business is engaged to perform various deliverables under other government contract arrangements. The Lake City facility also allows, under certain conditions, for Winchester to utilize the facility to produce commercial ammunition. The operation of the Lake City facility and our other U.S. government contracts require compliance with numerous contract provisions and government regulations. U.S. government contracts often reserve the right to audit our contract costs and conduct inquiries and investigations of our business practices and compliance with government contract requirements. In some cases, audits may result in delayed payments or contractor costs not being reimbursed or subject to repayment. Our failure to comply with any one of these contract provisions and regulations could have a material adverse effect on our business.

A large portion of our government contracts contain fixed-price deliverables while a smaller portion are performed under cost-plus arrangements. While certain of these contracts contain price escalation and other price adjustment provisions, if we are unable to control costs related to these contracts or if our assumptions regarding the fixed pricing on one or multiple of these contracts is incorrect, we may experience lower profitability, materially adversely affecting our business.

***Labor Matters—We cannot assure that we can conclude future labor contracts or any other labor agreements without work stoppages.***

Various labor unions represent a significant number of our hourly paid employees for collective bargaining purposes. In 2024, we have no labor agreements that are due to expire in the U.S., and one labor agreement expiring in Canada, representing approximately 1% of our global workforce.

In addition, a large number of our employees are located in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the U.S. Such employment rights require us to work collaboratively with the legal representatives of those employees to effect any changes to labor arrangements. For example, most of our employees in Europe are represented by works councils that must approve any changes in conditions of employment, including salaries and benefits and staff changes, and may impede efforts to restructure our workforce. While we believe our relations with our employees and their various representatives are generally satisfactory, we cannot assure that we can conclude any labor agreements without work stoppages and cannot assure that any work stoppages will not have a material adverse effect on our business.

***Environmental, Social and Governance (ESG)—ESG issues and related regulations, including those related to climate change and sustainability, may have a materially adverse effect on our business.***

Companies across all industries are facing increased scrutiny related to their ESG policies and practices. Increased focus and activism related to ESG may hinder our access to credit and capital markets, as investors may reconsider their investment as a result of their assessment of our ESG policies and practices. In particular, customers, consumers, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, energy and water use, greenhouse gas (GHG) emissions and other sustainability concerns. Change in public sentiment may result in changing demands for our customers' products and the products which we produce in light of their perceived environmental impacts or other related issues. These demand changes could cause changes in the market dynamics of our existing products, impacting pricing, or we may incur additional costs to make changes to our operations to comply with such demand changes.

Concern over climate change, GHG emissions in particular, may result in new or increased legal and regulatory requirements to reduce or mitigate impacts to the environment. Increased regulatory requirements or demands for enhanced mitigation of environmental impacts may result in increased compliance costs, including capital expenditures, higher energy and raw materials input costs or compliance with more stringent emissions standards, which may cause disruptions in the manufacture of our products or an increase in operating costs. Any failure to achieve our ESG goals, or a perception of our failure to act responsibly with respect to the environment or to effectively respond to new, or updated, legal or regulatory requirements concerning environmental or other ESG matters, or increased operating or manufacturing costs due to increased regulation or efforts to mitigate environmental impacts could have a material adverse effect on our business.

#### **Item 1B. UNRESOLVED STAFF COMMENTS**

Not applicable.

#### **Item 1C. CYBERSECURITY**

##### **Cybersecurity Risk Management and Strategy**

We have an enterprise-wide cybersecurity risk management approach designed to identify, protect, detect, respond to and manage cybersecurity and information technology risks and threats. This program is integrated into our enterprise risk management (ERM) framework, and the underlying controls leverage recognized best practices and standards for cybersecurity and information technology, including the National Institute of Standards and Technology Cybersecurity Framework.

Our Company's Chief Information Officer (CIO) is responsible for developing and maintaining our global cybersecurity and information technology program and directs our Information Security team. The Information Security team is primarily responsible for identifying and protecting against cybersecurity threats and maintains a comprehensive set of policies and standards applicable to our global organization. We consult with multiple third-party firms to assess and review these policies and standards and regularly update them for contemporary best practices. Our CIO has over fifteen years of experience leading cybersecurity oversight for global organizations, and our Information Security team leaders have extensive cybersecurity and information technology industry experience with Olin or other large public companies and hold industry certifications, including the Certified Information Systems Security Professional certification.

Our Information Security team monitors alerts and meets to discuss threat levels, trends and remediation tactics. Every identified cyber event is evaluated, ranked by severity and prioritized for response and remediation in compliance with our global Security Incident Management Procedure. Significant events are evaluated for both quantitative and qualitative factors to determine materiality on a case-by-case basis, including, among other factors, potential privacy, operational, financial, or reputational impacts for the Company, and our customers, vendors, shareholders, or other external stakeholders. The Information Security team prepares a monthly scorecard for senior management, summarizing cyber events for the month and reporting on our remedial actions. While we have experienced cybersecurity attacks, such attacks to date have not materially affected the Company or our business strategy, results of operations, or financial condition.

The Company regularly conducts penetration testing, both internally and by third parties, and conducts automated attacks simulating real-world cyber incidents. These tests and assessments are useful tools for maintaining a comprehensive cybersecurity program to protect our investors, customers, employees, vendors, and intellectual property. We continue to expand our cybersecurity risk mitigation strategies, which includes around-the-clock monitoring of our global network, using layered defenses and identifying and protecting critical assets, including our manufacturing facilities. The Information Security team conducts annual cybersecurity awareness training and quarterly email phishing tests and training for all employees.

We rely on certain external service providers to assist in the management of the day-to-day operation of our business, operate elements of our manufacturing facilities, manage relationships with our employees, customers, and suppliers, fulfill customer orders, and maintain our financial, accounting, or other business records. The Information Security team maintains a third-party security program to identify, prioritize, assess, mitigate, and remediate our third-party risks; however, we also rely on our third-party vendors, suppliers, and other business partners to implement security programs commensurate with their risk, and we cannot ensure in all circumstances that their efforts will be successful. Cybersecurity risks are assessed when selecting our third-party service providers and reassessed periodically.

We face a number of cybersecurity risks in connection with our business. Failure of any one or more than one of our information technology systems could be caused by internal or external events or parties, such as incursions by intruders or hackers, computer viruses, cyber-attacks, failures in hardware or software, or power or telecommunication fluctuations or failures. For more information about the cybersecurity risks we face, see Item 1A - Risk Factors.

#### Cybersecurity Governance

Cybersecurity is an important component of our ERM framework and an area of focus for both our Board of Directors (Board) and management team. While management holds primary responsibility for our Company's risk management strategy, our Board, with the support of its committees, oversees the process to ensure that the framework designed, implemented and maintained by management is functioning as intended and adapts, when necessary, to our evolving strategy and emerging risks. The Board's Audit Committee is delegated responsibility for oversight of our ERM process, including our strategies to identify, detect and respond to cybersecurity and information technology risks and threats. Our Audit Committee's process includes an annual review of our ERM program to ensure appropriate practices are in place to monitor and mitigate identified risks on an ongoing basis. Additionally, our CIO meets with the Audit Committee or Board each quarter to discuss cyber hygiene, incidents (as needed), and provide updates on our enterprise-wide cybersecurity risks and strategies, including steps taken to mitigate and manage the same. To aid the Board with its cybersecurity and data privacy oversight responsibilities, the Board periodically hosts experts for presentations on current cyber topics, trends and best practices. We have established protocols by which certain cybersecurity incidents are reported to the Audit Committee and Board.

## **Item 2. PROPERTIES**

Information concerning our principal locations from which our products and services are manufactured, distributed or marketed are included in the tables set forth under the caption "Products and Services" contained in Item 1—"Business." Generally, these facilities are well maintained, in good operating condition, and suitable and adequate for their use. Our two largest facilities are co-located with a site partner. The land on which these facilities are located is leased with a 99-year initial term that commenced in 2015. Additionally, we lease warehouses, terminals and distribution offices and space for executive and branch sales offices and service departments. We believe our current facilities are adequate to meet the requirements of our present operations.

On October 1, 2020, Winchester assumed full management and operational control of the Lake City Army Ammunition Plant in Independence, MO, which is a government-owned, contractor-operated facility. The contract is for the production of small caliber military ammunition, including 5.56mm, 7.62mm, and .50 caliber rounds, as well as certain cartridges and casings. The contract also allows for the production of certain ammunition for commercial customers. The contract has an initial term of seven years and may be extended by the U.S. Army for up to three additional years.

**Item 3. LEGAL PROCEEDINGS**

Discussion of legal matters is incorporated by reference from Part II, Item 8, under the heading of “Legal Matters” within Note 23, “Commitments and Contingencies,” and should be considered an integral part of Part I, Item 3, “Legal Proceedings.”

**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

As of January 31, 2024, we had 2,805 record holders of our common stock.

Our common stock is traded on the NYSE under the “OLN” ticker symbol.

A dividend of \$0.20 per common share was paid during each of the four quarters in 2023 and 2022.

#### Issuer Purchases of Equity Securities

<i>Period</i>	<i>Total Number of Shares (or Units) Purchased<sup>(1)</sup></i>	<i>Average Price Paid per Share (or Unit)<sup>(2)</sup></i>	<i>Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs</i>	<i>Maximum Dollar Value of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs</i>
October 1-31, 2023	1,254,572	\$ 47.84	1,254,572	
November 1-30, 2023	1,232,117	44.66	1,232,117	
December 1-31, 2023	—	—	—	
Total				\$ 997,042,178 (1)

<sup>(1)</sup> On July 28, 2022, our Board of Directors authorized a share repurchase program for the purchase of shares of common stock at an aggregate price of up to \$2.0 billion (the 2022 Repurchase Authorization). This program will terminate upon the purchase of \$2.0 billion of common stock. Through December 31, 2023, 19,234,991 shares of common stock had been repurchased and retired at a total value of \$1,003.0 million and \$997.0 million of common stock remained available for purchase under the 2022 Repurchase Authorization program.

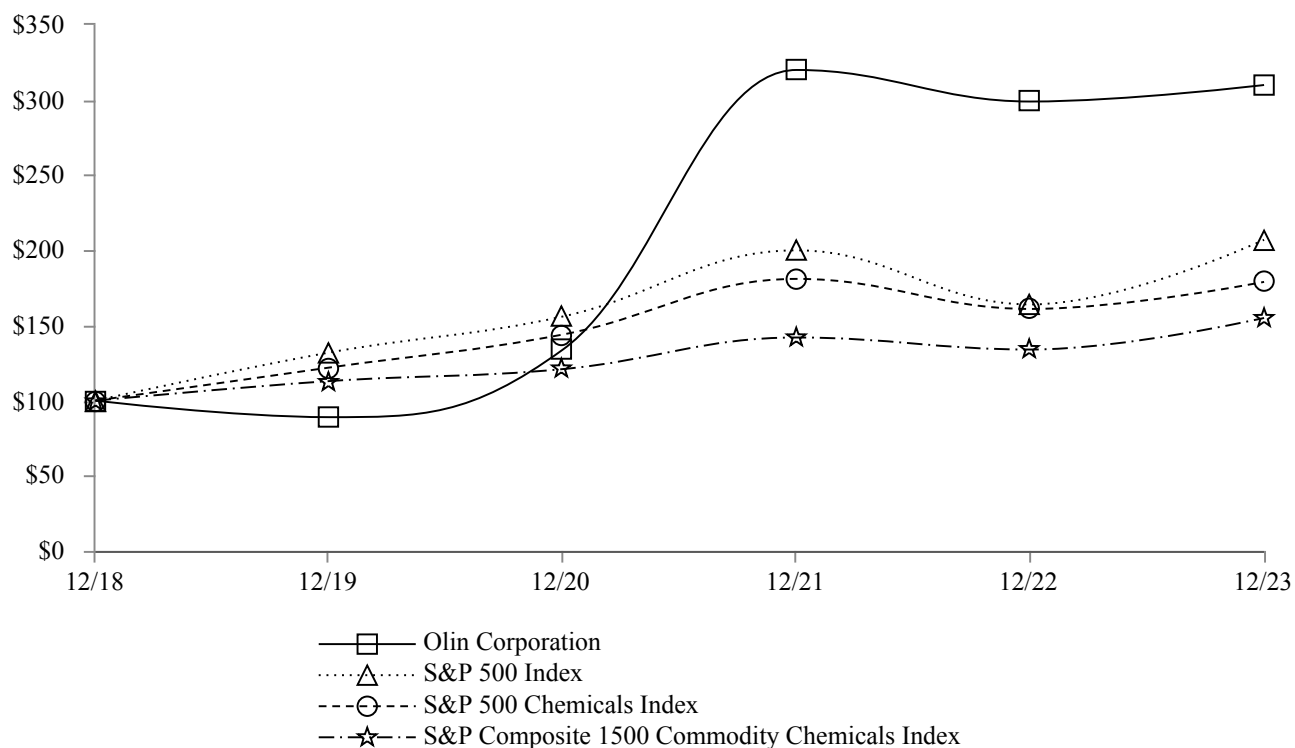
<sup>(2)</sup> Average price paid per share includes transaction costs including commissions and fees paid to acquire the shares and excludes costs associated with 1% excise tax on the fair market value of stock repurchases.

### Performance Graph

This graph compares the total shareholder return on our common stock with the cumulative total return of the Standard & Poor's (S&P) 500 Index, S&P 500 Chemicals Index and S&P Composite 1500 Commodity Chemicals Index.

### **COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN**

Among Olin Corporation, the S&P 500 Index,  
S&P 500 Chemicals Index and the S&P Composite 1500 Commodity Chemicals Index



	<i>December 31,</i>					
	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>
Olin Corporation	100	89	134	320	299	310
S&P 500 Index	100	132	156	200	164	207
S&P 500 Chemicals Index	100	122	144	181	161	179
S&P Composite 1500 Commodity Chemicals Index	100	113	121	142	134	155

Data is for the five-year period from December 31, 2018, through December 31, 2023. The cumulative return includes reinvestment of dividends. The performance graph assumes an investment of \$100 on December 31, 2018.

## FIVE-YEAR SUMMARY OF SELECTED FINANCIAL DATA

	2023	2022	2021	2020	2019
<b><i>Operations</i></b>	<i>(\$ and shares in millions, except per share data)</i>				
Sales	\$ 6,833	\$ 9,376	\$ 8,911	\$ 5,758	\$ 6,110
Cost of goods sold	5,667	7,194	6,616	5,375	5,439
Selling and administrative	407	394	417	422	417
Restructuring charges	90	25	28	9	76
Goodwill impairment	—	—	—	700	—
Other operating income	43	16	1	1	—
Interest expense	181	144	348	293	243
Interest income and other income	4	2	—	1	12
Non-operating pension income	24	39	36	19	16
Income (loss) before taxes	559	1,676	1,539	(1,020)	(37)
Income tax provision (benefit)	107	349	242	(50)	(26)
Net income (loss)	452	1,327	1,297	(970)	(11)
Net loss attributable to noncontrolling interests	(8)	—	—	—	—
Net income (loss) attributable to Olin Corporation	<u>\$ 460</u>	<u>\$ 1,327</u>	<u>\$ 1,297</u>	<u>\$ (970)</u>	<u>\$ (11)</u>
<b><i>Financial Position</i></b>					
Cash and cash equivalents	\$ 170	\$ 194	\$ 181	\$ 190	\$ 221
Working capital, excluding cash and cash equivalents	275	401	386	329	411
Property, plant and equipment, net	2,520	2,674	2,914	3,171	3,324
Total assets	7,713	8,044	8,518	8,271	9,188
Capitalization:					
Short-term debt	79	10	201	26	2
Long-term debt	2,591	2,571	2,578	3,838	3,339
Shareholders' equity	2,268	2,544	2,652	1,451	2,418
Total capitalization	<u>\$ 4,938</u>	<u>\$ 5,125</u>	<u>\$ 5,431</u>	<u>\$ 5,315</u>	<u>\$ 5,759</u>
Total debt to total capitalization	54.1 %	50.4 %	51.2 %	72.7 %	58.0 %
<b><i>Per Share Data</i></b>					
Net income (loss) attributable to Olin Corporation:					
Basic	<u>\$ 3.66</u>	<u>\$ 9.16</u>	<u>\$ 8.15</u>	<u>\$ (6.14)</u>	<u>\$ (0.07)</u>
Diluted	<u>\$ 3.57</u>	<u>\$ 8.94</u>	<u>\$ 7.96</u>	<u>\$ (6.14)</u>	<u>\$ (0.07)</u>
Cash dividends paid per common share	\$ 0.80	\$ 0.80	\$ 0.80	\$ 0.80	\$ 0.80
<b><i>Other</i></b>					
Capital expenditures	\$ 236	\$ 237	\$ 201	\$ 299	\$ 386
Depreciation and amortization	533	599	583	568	597
Common stock dividends paid	101	116	128	126	129
Repurchases of common stock	711	1,351	252	—	146
Current ratio	1.3	1.4	1.3	1.4	1.6
Effective tax rate	19.2 %	20.8 %	15.7 %	4.9 %	69.4 %
Average common shares outstanding - diluted	128.8	148.5	163.0	157.9	162.3
Employees <sup>(1)</sup>	7,326	7,780	7,750	8,000	6,500

<sup>(1)</sup> Beginning October 1, 2020, total employees include employees at Lake City which is a government-owned, contractor-operated facility.

## Item 6. [RESERVED]

## **Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

### **BUSINESS BACKGROUND**

Olin Corporation (Olin) is a Virginia corporation, incorporated in 1892, having its principal executive offices in Clayton, MO. We are a leading vertically integrated global manufacturer and distributor of chemical products and a leading U.S. manufacturer of ammunition. Our operations are concentrated in three business segments: Chlor Alkali Products and Vinyls, Epoxy and Winchester. All of our business segments are capital-intensive manufacturing businesses. The Chlor Alkali Products and Vinyls segment manufactures and sells chlorine and caustic soda, ethylene dichloride and vinyl chloride monomer, methyl chloride, methylene chloride, chloroform, carbon tetrachloride, perchloroethylene, hydrochloric acid, hydrogen, bleach products and potassium hydroxide. The Epoxy segment produces and sells a full range of epoxy materials and precursors, including aromatics (acetone and phenol), allyl chloride, epichlorohydrin, liquid epoxy resins, solid epoxy resins and systems and growth products such as converted epoxy resins and additives. The Winchester segment produces and sells sporting ammunition, reloading components, small caliber military ammunition and components, industrial cartridges and clay targets.

### **RECENT DEVELOPMENTS AND HIGHLIGHTS**

#### 2023 Overview

Net income was \$460.2 million for 2023 compared to \$1,326.9 million for 2022, a decrease of \$866.7 million, or 65%. The decrease in net income from the prior year was primarily due to lower operating results across all of our business segments. Net income for 2023 also reflects a pretax gain of \$27.0 million from the sale of our domestic private trucking fleet and operations. Diluted net income per share was \$3.57 for 2023 compared to \$8.94 for 2022, a decrease of \$5.37 per share, or 60%. The decrease in diluted net income per share was positively impacted by share repurchases throughout 2023.

On October 1, 2023, Olin acquired the assets of White Flyer from Reagent for \$63.9 million. White Flyer designs, manufactures and sells recreational trap, skeet, international and sporting clay targets and has been included in our Winchester segment.

On January 10, 2023, BWA, our joint venture with Mitsui, began operations. BWA is an independent global trader of ECU-based derivatives, focused on globally traded caustic soda and EDC. Olin holds 51% interest and exercises control in BWA, and the joint venture is consolidated in our financial statements in our Chlor Alkali Products and Vinyls segment, with Mitsui's 49% interest in BWA classified as noncontrolling interest. All intercompany accounts and transactions are eliminated in consolidation.

Chlor Alkali Products and Vinyls reported segment income of \$664.2 million for 2023 compared to \$1,181.3 million for 2022. Chlor Alkali Products and Vinyls segment results were lower than in the prior year due to lower volumes and lower pricing, partially offset by lower raw material and operating costs. The Chlor Alkali Products and Vinyls 2023 segment results were also negatively impacted by the second quarter's maintenance turnaround and related operating issues at our vinyl chloride monomer plant at the Freeport, TX facility, which resulted in higher costs and reduced profit from lost sales of \$104.2 million. The vinyl chloride monomer plant resumed normal operations in the latter half of the third quarter.

Epoxy reported segment loss of \$31.0 million for 2023 compared to segment income of \$388.5 million for 2022. Epoxy segment results were lower than in the prior year primarily due to lower volumes and lower product pricing. Epoxy segment results in 2023 have been impacted by significant exports out of Asia into the European and North American markets, negatively impacting pricing and volumes. Partially offsetting the lower volumes and pricing were lower raw material and operating costs.

Winchester reported segment income of \$255.6 million for 2023 compared to \$372.9 million for 2022. Winchester segment results were lower than in the prior year primarily due to lower commercial volumes and pricing, partially offset by higher domestic and international military sales.

#### Liquidity and Share Repurchases

During 2023, we repurchased and retired 13.3 million shares of common stock at a total value of \$711.3 million. As of December 31, 2023, we have \$997.0 million of remaining authorized common stock to be repurchased under the 2022 Repurchase Authorization program.

During 2023, we had net borrowings of \$85.9 million with \$68.0 million borrowed under our Senior Revolving Credit Facility and \$28.5 million borrowed under our Receivables Financing Agreement.



## CONSOLIDATED RESULTS OF OPERATIONS

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
	<i>(\$ in millions, except per share data)</i>		
Sales	\$ 6,833.0	\$ 9,376.2	\$ 8,910.6
Cost of goods sold	5,667.5	7,194.3	6,616.4
Gross margin	1,165.5	2,181.9	2,294.2
Selling and administrative	406.7	393.9	416.9
Restructuring charges	89.6	25.3	27.9
Other operating income	42.9	16.3	1.4
Operating income	712.1	1,779.0	1,850.8
Interest expense	181.1	143.9	348.0
Interest income	4.3	2.2	0.2
Non-operating pension income	24.0	38.7	35.7
Income before taxes	559.3	1,676.0	1,538.7
Income tax provision	107.3	349.1	242.0
Net income	452.0	1,326.9	1,296.7
Net loss attributable to noncontrolling interests	(8.2)	—	—
Net income attributable to Olin Corporation	\$ 460.2	\$ 1,326.9	\$ 1,296.7
Net income attributable to Olin Corporation per common share:			
Basic	\$ 3.66	\$ 9.16	\$ 8.15
Diluted	\$ 3.57	\$ 8.94	\$ 7.96

### 2023 Compared to 2022

Sales for 2023 were \$6,833.0 million compared to \$9,376.2 million in 2022, a decrease of \$2,543.2 million, or 27%. Epoxy sales decreased by \$1,361.3 million, primarily due to lower volumes, including the closure of our cumene facility and one of our bisphenol production lines, and lower product pricing. Chlor Alkali Products and Vinyls sales decreased by \$1,089.9 million, primarily due to lower volumes, partially offset by products sold by BWA. Winchester sales decreased by \$92.0 million, primarily due to lower commercial sales volumes, partially offset by higher domestic and international military sales.

Gross margin in 2023 decreased \$1,016.4 million from 2022. Chlor Alkali Products and Vinyls gross margin decreased by \$483.0 million primarily due to lower volumes. Epoxy gross margin decreased by \$425.4 million primarily due to lower volumes and lower product pricing. Winchester gross margin decreased by \$112.5 million, primarily due to lower commercial volumes. Gross margin as a percentage of sales decreased to 17% in 2023 from 23% in 2022.

Selling and administrative expenses in 2023 increased \$12.8 million, or 3%, from 2022. The increase was primarily due to higher costs associated with BWA of \$23.9 million, partially offset by lower legal and legal-related settlement expenses of \$7.4 million and a favorable foreign currency impact of \$5.5 million. Selling and administrative expenses as a percentage of sales increased to 6% in 2023 from 4% in 2022.

Restructuring charges for 2023 were \$89.6 million compared to \$25.3 million in 2022. The increase in charges was primarily due to our actions to reconfigure our global Epoxy asset footprint to optimize the most productive and cost-effective assets to support our strategic operating model, which resulted in restructuring charges of \$73.4 million for 2023.

Other operating income for 2023 included a gain of \$27.0 million from the sale of our domestic private trucking fleet and operations and an insurance recovery of \$15.6 million associated with a second quarter 2022 business interruption at our Plaquemine, LA Chlor Alkali Products and Vinyls facility. Other operating income for 2022 included \$13.0 million of gains from the sale of two former manufacturing facilities.

Interest expense in 2023 increased \$37.2 million from 2022, primarily due to higher average interest rates. Interest expense for 2023 and 2022 was reduced by capitalized interest of \$2.8 million and \$3.1 million, respectively.

Non-operating pension income includes all components of pension and other postretirement income (costs) other than service costs. Non-operating pension income was lower in 2023 from the prior year primarily due to an increase in the discount rate used to determine interest costs, partially offset by lower actuarial losses recognized to income.

The effective tax rate for 2023 included benefits associated with a legal entity liquidation, prior year tax positions, stock-based compensation, remeasurement of deferred taxes due to a decrease in our state effective tax rates and foreign rate changes, and from a change in tax contingencies, and an expense from a net increase in the valuation allowance related to deferred tax assets in foreign jurisdictions. These factors resulted in a net \$29.4 million tax benefit. Excluding these items, the effective tax rate for 2023 of 24.4% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, an increase in the valuation allowance related to losses in foreign jurisdictions and foreign income inclusions, partially offset by foreign rate differential and favorable permanent salt depletion deductions. The effective tax rate for 2022 included benefits associated with a legal entity liquidation, prior year tax positions, stock-based compensation, and remeasurement of deferred taxes due to a decrease in our state effective tax rates, and expenses associated with a net increase in the valuation allowance related to state tax credits and a change in tax contingencies. These factors resulted in a net \$60.2 million tax benefit. Excluding these items, the effective tax rate for 2022 of 24.4% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, an increase in the valuation allowance related to losses in foreign jurisdictions and foreign income taxes, partially offset by foreign income exclusions and favorable permanent salt depletion deductions.

### 2022 Compared to 2021

Sales for 2022 were \$9,376.2 million compared to \$8,910.6 million in 2021, an increase of \$465.6 million, or 5%. Chlor Alkali Products and Vinyls sales increased by \$944.2 million, primarily due to higher pricing across all products, except vinyls intermediates, partially offset by lower volumes. Winchester sales increased by \$16.9 million, primarily due to increased commercial ammunition pricing partially offset by lower volumes. Epoxy sales decreased by \$495.5 million, primarily due to lower volumes partially offset by higher product prices.

Gross margin in 2022 decreased \$112.3 million from 2021. Epoxy gross margin decreased by \$238.4 million, and Winchester gross margin decreased by \$36.2 million, primarily due to lower volumes and higher raw material and operating costs, partially offset by higher product pricing. Chlor Alkali Products and Vinyls gross margin increased by \$185.2 million, primarily due to higher pricing, partially offset by higher raw material and operating costs and lower volumes. Gross margin as a percentage of sales decreased to 23% in 2022 from 26% in 2021.

Selling and administrative expenses in 2022 decreased \$23.0 million, or 6%, from 2021. The decrease was primarily due to the lower variable incentive compensation expense of \$35.4 million, which includes mark-to-market adjustments on stock-based compensation expense, partially offset by higher legal and legal-related settlement expense of \$7.1 million and an unfavorable foreign currency impact of \$7.5 million. Selling and administrative expenses as a percentage of sales decreased to 4% in 2022 from 5% in 2021.

Restructuring charges for 2022 were \$25.3 million compared to \$27.9 million in 2021. The decrease in charges was primarily due to a productivity initiative to align the organization with our new operating model and improve efficiencies, which was completed during the second quarter of 2021, which resulted in pretax restructuring charges of \$10.1 million for 2021. Partially offsetting this action, during the fourth quarter 2022, we committed and completed a plan to close down one of our bisphenol production lines at our Stade, Germany site. This action resulted in pretax restructuring charges of \$8.0 million for 2022.

Other operating income for 2022 included \$13.0 million of gains from the sale of two former manufacturing facilities.

Interest expense in 2022 decreased by \$204.1 million from 2021. Interest expense for 2021 included \$137.7 million of bond redemption premiums and \$14.5 million for write-off of deferred debt issuance costs, write-off of bond original issue discount, and recognition of deferred fair value interest rate swap losses. Interest expense for 2022 and 2021 was reduced by capitalized interest of \$3.1 million and \$3.2 million, respectively. Without these items, interest expense decreased by \$52.0 million, primarily due to a lower level of debt outstanding and lower average interest rates.

Non-operating pension income includes all components of pension and other postretirement income (costs) other than service costs.

The effective tax rate for 2022 included benefits associated with a legal entity liquidation, prior year tax positions, stock-based compensation, and remeasurement of deferred taxes due to a decrease in our state effective tax rates, and expenses associated with a net increase in the valuation allowance related to state tax credits and a change in tax contingencies. These factors resulted in a net \$60.2 million tax benefit. Excluding these items, the effective tax rate for 2022 of 24.4% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, an increase in the valuation allowance related to losses in foreign jurisdictions and foreign income taxes, partially offset by foreign income exclusions and favorable permanent salt depletion deductions. The effective tax rate for 2021 included benefits from a net decrease in the valuation allowance related to

deferred tax assets in foreign jurisdictions, domestic tax credits, prior year tax positions, stock-based compensation, and expenses from remeasurement of deferred taxes due to an increase in our state effective tax rates and a change in tax contingencies. These factors resulted in a net \$103.6 million tax benefit. Excluding these items, the effective tax rate for 2021 of 22.5% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, foreign income inclusions and foreign rate differential, partially offset by a net decrease in the valuation allowance related to utilization of losses in foreign jurisdictions and favorable permanent salt depletion deductions.

## SEGMENT RESULTS

We define segment results as income (loss) before interest expense, interest income, other operating income (expense), non-operating pension income, other income and income taxes. We have three operating segments: Chlor Alkali Products and Vinyls, Epoxy and Winchester. The three operating segments reflect the organization used by our management for purposes of allocating resources and assessing performance. Chlorine and caustic soda used in our Epoxy segment is transferred at cost from the Chlor Alkali Products and Vinyls segment.

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
	<i>(\$ in millions)</i>		
<b><u>Sales:</u></b>			
Chlor Alkali Products and Vinyls	\$ 3,995.1	\$ 5,085.0	\$ 4,140.8
Epoxy	1,329.2	2,690.5	3,186.0
Winchester	1,508.7	1,600.7	1,583.8
Total sales	<u>\$ 6,833.0</u>	<u>\$ 9,376.2</u>	<u>\$ 8,910.6</u>
<b><u>Income before taxes:</u></b>			
Chlor Alkali Products and Vinyls	\$ 664.2	\$ 1,181.3	\$ 997.8
Epoxy	(31.0)	388.5	616.5
Winchester	255.6	372.9	412.1
Corporate/Other:			
Environmental expense <sup>(1)</sup>	(23.7)	(23.2)	(14.0)
Other corporate and unallocated costs	(106.3)	(131.5)	(135.1)
Restructuring charges	(89.6)	(25.3)	(27.9)
Other operating income <sup>(2)</sup>	42.9	16.3	1.4
Interest expense <sup>(3)</sup>	(181.1)	(143.9)	(348.0)
Interest income	4.3	2.2	0.2
Non-operating pension income	24.0	38.7	35.7
Income before taxes	<u>\$ 559.3</u>	<u>\$ 1,676.0</u>	<u>\$ 1,538.7</u>

<sup>(1)</sup> Environmental expense for the years ended December 31, 2023, 2022 and 2021, included \$6.4 million, \$1.0 million and \$2.2 million, respectively, of insurance recoveries for environmental costs incurred and expensed in prior periods. Environmental expense is included in cost of goods sold in the consolidated statements of operations.

<sup>(2)</sup> Other operating income for the year ended December 31, 2023, included a gain of \$27.0 million from the sale of our domestic private trucking fleet and operations and an insurance recovery of \$15.6 million associated with a second quarter 2022 business interruption at our Plaquemine, LA, Chlor Alkali Products and Vinyls facility. Other operating income for the year ended December 31, 2022, included \$13.0 million of gains from the sale of two former manufacturing facilities. Other operating income for the year ended December 31, 2021, included a \$1.4 million gain from the sale of a terminal facility.

<sup>(3)</sup> Interest expense for the year ended December 31, 2021, included a loss on extinguishment of debt of \$152.2 million which includes bond redemption premiums, write-off of deferred debt issuance costs, bond original issue discount, and recognition of deferred fair value interest rate swap losses associated with the optional prepayment of existing debt. Interest expense was reduced by capitalized interest of \$2.8 million, \$3.1 million and \$3.2 million for the years ended December 31, 2023, 2022 and 2021, respectively.

## Chlor Alkali Products and Vinyls

### 2023 Compared to 2022

Chlor Alkali Products and Vinyls sales for 2023 were \$3,995.1 million compared to \$5,085.0 million in 2022, a decrease of \$1,089.9 million, or 21%. The sales decrease was primarily due to lower volumes across all products and lower prices, primarily caustic soda and EDC, partially offset by products sold by BWA.

Chlor Alkali Products and Vinyls reported segment income of \$664.2 million for 2023 compared to \$1,181.3 million for 2022, a decrease of \$517.1 million. Chlor Alkali Products and Vinyls operating results were negatively impacted by lower volumes across all products (\$846.4 million) and lower prices, primarily caustic soda and EDC (\$51.4 million), partially offset by lower raw material and operating costs (\$341.0 million), primarily lower natural gas and electrical power costs, and decreased costs associated with product purchased from other parties (\$39.7 million). The Chlor Alkali Products and Vinyls segment results were also negatively impacted by higher costs and reduced profit from lost sales associated with operating issues related to the second quarter's maintenance turnaround at our vinyl chloride monomer plant at the Freeport, TX facility. Chlor Alkali Products and Vinyls segment results included depreciation and amortization expense of \$440.7 million and \$482.2 million in 2023 and 2022, respectively.

#### 2022 Compared to 2021

Chlor Alkali Products and Vinyls sales for 2022 were \$5,085.0 million compared to \$4,140.8 million in 2021, an increase of \$944.2 million, or 23%. The sales increase was primarily due to higher pricing across all products except vinyls intermediates, partially offset by lower volumes.

Chlor Alkali Products and Vinyls reported segment income of \$1,181.3 million for 2022 compared to \$997.8 million for 2021, an increase of \$183.5 million. Chlor Alkali Products and Vinyls 2021 operating results were favorably impacted by Winter Storm Uri (\$121.4 million), which includes a net one-time benefit associated with Olin's customary financial hedges and contracts maintained to provide protection from rapid and dramatic changes in energy costs, partially offset by unabsorbed fixed manufacturing costs and storm-related maintenance costs. Without the impact of Winter Storm Uri, the increase in segment results of \$304.9 million was due to higher prices across all products, except vinyls intermediates (\$1,495.9 million), partially offset by higher raw material and operating costs (\$491.4 million), primarily increased natural gas and electrical power costs, lower volumes across all products (\$479.2 million) and increased costs associated with product purchased from other parties (\$220.4 million). Chlor Alkali Products and Vinyls segment results included depreciation and amortization expense of \$482.2 million and \$466.4 million in 2022 and 2021, respectively.

### **Epoxy**

#### 2023 Compared to 2022

Epoxy sales were \$1,329.2 million for 2023 compared to \$2,690.5 million in 2022, a decrease of \$1,361.3 million, or 51%. The sales decrease was primarily due to the closure of our cumene facility and one of our bisphenol production lines (\$649.4 million), lower product prices (\$419.6 million), lower volumes (\$291.9 million) and an unfavorable effect of foreign currency translation (\$0.4 million).

Epoxy reported segment loss of \$31.0 million for 2023 compared to segment income of \$388.5 million for 2022, a decrease of \$419.5 million. The decrease in segment results was due to lower product prices (\$419.6 million) and lower volumes (\$138.6 million), which were both impacted by significant exports out of Asia into the European and North American markets, partially offset by lower raw material costs and operating costs (\$138.7 million). A significant percentage of our Euro denominated sales are of products manufactured within Europe. As a result, the impact of foreign currency translation on revenue is primarily offset by the impact of foreign currency translation on raw materials and manufacturing costs also denominated in Euros. Epoxy segment results included depreciation and amortization expense of \$57.4 million and \$83.3 million in 2023 and 2022, respectively.

#### 2022 Compared to 2021

Epoxy sales were \$2,690.5 million for 2022 compared to \$3,186.0 million for 2021, a decrease of \$495.5 million, or 16%. The sales decrease was due to lower volumes (\$942.1 million) and an unfavorable effect of foreign currency translation (\$144.1 million), partially offset by higher product prices (\$590.7 million).

Epoxy reported segment income of \$388.5 million for 2022 compared to \$616.5 million for 2021, a decrease of \$228.0 million. Epoxy 2021 operating results were unfavorably impacted by Winter Storm Uri (\$21.5 million), which included unabsorbed fixed manufacturing costs and storm-related maintenance costs. Without the impact of Winter Storm Uri, the decrease in segment results of \$249.5 million was due to lower volumes (\$460.5 million), higher raw material costs (\$260.3 million), primarily benzene and propylene, higher operating costs (\$106.5 million), primarily increased natural gas and electrical power costs, and a net unfavorable foreign currency impact (\$12.9 million). These decreases were partially offset by higher product prices (\$590.7 million). A significant percentage of our Euro denominated sales are of products manufactured within Europe. As a result, the impact of foreign currency translation on revenue is primarily offset by the impact of foreign currency translation on raw materials and manufacturing costs also denominated in Euros. Epoxy segment results included depreciation and amortization expense of \$83.3 million and \$86.1 million in 2022 and 2021, respectively.

## **Winchester**

### 2023 Compared to 2022

Winchester sales were \$1,508.7 million for 2023 compared to \$1,600.7 million in 2022, a decrease of \$92.0 million, or 6%. The decrease was due to lower ammunition sales to commercial customers (\$272.6 million) and law enforcement agencies (\$7.5 million), partially offset by higher sales to domestic and international military customers (\$188.1 million). The lower commercial sales were primarily due to lower volumes, partially offset by fourth quarter 2023 sales from White Flyer.

Winchester reported segment income of \$255.6 million for 2023 compared to \$372.9 million for 2022, a decrease of \$117.3 million. The decrease in segment results was due to lower volumes and an unfavorable product mix (\$61.4 million), lower product pricing (\$40.0 million), and higher commodity and operating costs (\$15.9 million). Winchester segment results included depreciation and amortization expense of \$27.2 million and \$24.6 million in 2023 and 2022, respectively.

### 2022 Compared to 2021

Winchester sales were \$1,600.7 million for 2022 compared to \$1,583.8 million for 2021, an increase of \$16.9 million, or 1%. The increase was due to higher sales to military customers (\$23.7 million) and law enforcement agencies (\$18.2 million) partially offset by lower commercial sales (\$25.0 million). The lower commercial sales were primarily due to lower volumes, partially offset by higher pricing. During 2022, Winchester experienced a transition in its commercial ammunition business from refilling depleted supply chains to filling inventories at the rate of its customers' sales. In some cases, customers inventories became too high, so Winchester chose to preserve value by manufacturing and selling less commercial ammunition.

Winchester reported segment income of \$372.9 million for 2022 compared to \$412.1 million for 2021, a decrease of \$39.2 million. The decrease in segment results was due to higher commodity and operating costs (\$86.9 million) and lower volumes (\$80.8 million), partially offset by higher product pricing (\$128.4 million). Winchester segment results included depreciation and amortization expense of \$24.6 million and \$23.3 million in 2022 and 2021, respectively.

## **Corporate/Other**

### 2023 Compared to 2022

For the years ended December 31, 2023 and 2022, environmental expense included \$6.4 million and \$1.0 million, respectively, of insurance recoveries for environmental costs incurred and expensed in prior periods. Without these recoveries, charges to income for environmental investigatory and remedial activities for the year ended December 31, 2023, would have been \$30.1 million, compared to \$24.2 million for the year ended December 31, 2022. These charges related primarily to expected future investigatory and remedial activities associated with past manufacturing operations and former waste disposal sites.

For 2023, other corporate and unallocated costs were \$106.3 million compared to \$131.5 million for 2022, a decrease of \$25.2 million, or 19%. The decrease was primarily due to lower legal and legal-related settlement expenses (\$13.8 million), a favorable foreign currency impact (\$5.5 million) and lower variable incentive compensation costs (\$4.2 million), which includes mark-to-market adjustments on stock-based compensation expense.

### 2022 Compared to 2021

For the years ended December 2022 and 2021, environmental expense included \$1.0 million and \$2.2 million, respectively, of insurance recoveries for environmental costs incurred and expensed in prior periods. Without these recoveries, charges to income for environmental investigatory and remedial activities for the year ended December 31, 2022, would have been \$24.2 million, compared to \$16.2 million for the year ended December 31, 2021. These charges related primarily to expected future investigatory and remedial activities associated with past manufacturing operations and former waste disposal sites.

For 2022, other corporate and unallocated costs were \$131.5 million compared to \$135.1 million for 2021, a decrease of \$3.6 million, or 3%. The decrease was primarily due to lower variable incentive compensation costs (\$27.9 million), which includes mark-to-market adjustments on stock-based compensation expense, partially offset by higher legal and legal-related settlement expenses (\$7.6 million) and an unfavorable foreign currency impact (\$7.1 million).

## **Restructurings**

As a result of weak global resin demand and higher cost structures within the European region, we began a review of our global Epoxy asset footprint to optimize the most productive and cost-effective assets to support our strategic operating model. As part of this review, we announced operational cessations in the fourth quarter of 2022 and the first half of 2023 (collectively, Epoxy Optimization Plan).

On June 20, 2023, we announced we had made the decision to cease all remaining operations at our Gumi, South Korea facility, reduce epoxy resin capacity at our Freeport, TX facility, and reduce our sales and support staffing across Asia. These actions were substantially completed by December 31, 2023. On March 21, 2023, we announced we had made the decision to cease operations at our cumene facility in Terneuzen, Netherlands and solid epoxy resin production at our facilities in Gumi, South Korea and Guarujá, Brazil. The closures were completed in the first quarter 2023. During the fourth quarter of 2022, we committed to and completed a plan to close down one of our bisphenol production lines at our Stade, Germany site. For the year ended December 31, 2023 and 2022, we recorded pretax restructuring charges of \$73.4 million and \$8.0 million, respectively, for the write-off of equipment and facility costs, employee severance and related benefit costs, contract termination costs and facility exit costs related to these actions. We expect to incur additional restructuring charges through 2025 of approximately \$25 million related to these actions.

In 2023 and 2022, Olin incurred charges of \$16.2 million and \$17.3 million, respectively, associated with other previously disclosed restructuring plans. We expect to incur additional restructuring charges through 2027 of approximately \$45 million related to these actions.

## **2024 OUTLOOK**

In the fourth quarter of 2023, we executed an initiative which lowered our participation in ECU markets and adjusted our operating rates to mitigate the declining pricing environment we experienced during the second half of 2023. We expect this initiative will continue through most of the first quarter 2024. Our fourth quarter Chlor Alkali Products and Vinyls operating results were negatively impacted by this initiative. We expect the first quarter 2024 operating results from our Chemicals business to be slightly higher than the fourth quarter 2023. We also expect our Winchester business first quarter 2024 results to increase sequentially from fourth quarter 2023. Overall, we expect Olin's first quarter 2024 operating results to be slightly higher than the fourth quarter 2023 levels.

Other corporate and unallocated costs in 2024 are expected to be higher than the \$106.3 million in 2023.

During 2024, we anticipate environmental expenses in the \$25 million to \$35 million range, compared to \$23.7 million in 2023.

We expect non-operating pension income in 2024 to be similar to the \$24.0 million in 2023. Based on our plan assumptions and estimates, we will not be required to make any cash contributions to our domestic qualified defined benefit pension plan in 2024. We have several international qualified defined benefit pension plans for which we anticipate cash contributions of less than \$5 million in 2024.

In 2024, we currently expect our capital spending to be in the \$225 million to \$250 million range and we expect to make payments under other long-term supply contracts in the \$25 million to \$50 million range for energy modernization on the U.S. Gulf Coast. We expect 2024 depreciation and amortization expense to be in the \$500 million to \$525 million range.

We currently believe the 2024 effective tax rate will be in the 25% to 30% range and our cash tax rate to be in the 35% to 40% range as a result of previously deferred international tax payments expected to be made in 2024.

## **PENSION AND POSTRETIREMENT BENEFITS**

We recorded an after-tax charge of \$13.2 million (\$18.1 million pretax) to shareholders' equity as of December 31, 2023, for our pension and other postretirement plans. This charge primarily reflected a 30-basis point decrease in the domestic pension plans' discount rate and a 50-basis point decrease in the international defined benefit pension plans' discount rate, partially offset by a favorable performance on plan assets during 2023. In 2022, we recorded an after-tax benefit of \$46.8 million (\$72.1 million pretax) to shareholders' equity as of December 31, 2022, for our pension and other postretirement plans. This benefit primarily reflected a 260-basis point increase in the domestic pension plans' discount rate and a 230-basis point increase in the international defined benefit pension plans' discount rate, partially offset by unfavorable performance on plan assets during 2022. In 2021, we recorded an after-tax benefit of \$188.5 million (\$249.7 million pretax) to shareholders' equity as of December 31, 2021, for our pension and other postretirement plans. This benefit primarily reflected a 50-basis point increase in the domestic pension plans' discount rate and favorable performance on plan assets during 2021.

Based on our plan assumptions and estimates, we will not be required to make any cash contributions to the domestic qualified defined benefit pension plan at least through 2024.

In connection with international qualified defined benefit pension plans, we made cash contributions of \$1.0 million, \$1.3 million and \$1.1 million in 2023, 2022 and 2021, respectively, and we anticipate less than \$5 million of cash contributions to international qualified defined benefit pension plans in 2024.

At December 31, 2023, the projected benefit obligation of \$2,144.5 million exceeded the market value of assets in our qualified defined benefit pension plans by \$226.5 million, as calculated under Accounting Standards Codification (ASC) 715 "Compensation—Retirement Benefits".

Components of net periodic benefit (income) costs were:

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Net Periodic Benefit (Income) Costs</u></b>	<i>(\$ in millions)</i>		
Pension benefits	\$ (20.7)	\$ (33.0)	\$ (27.5)
Other postretirement benefit costs	3.1	3.8	4.5

The service cost component of net periodic benefit (income) costs related to employees of the operating segments are allocated to the operating segments based on their respective estimated census data.

We have included additional information with respect our defined benefit pension plans and other postretirement benefit plans within Note 13 “Pension Plans” and Note 14 “Postretirement Benefits” of our Notes to Consolidated Financial Statements.

## ENVIRONMENTAL MATTERS

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Cash Outlays</u></b>	<i>(\$ in millions)</i>		
Remedial and investigatory spending (charged to reserve)	\$ 25.9	\$ 24.6	\$ 16.4
Capital spending	1.3	1.5	4.1
Plant operations (charged to cost of goods sold)	176.2	178.8	194.9
Total cash outlays	<u>\$ 203.4</u>	<u>\$ 204.9</u>	<u>\$ 215.4</u>

Cash outlays for remedial and investigatory activities associated with former waste sites and past operations were not charged to income but instead were charged to reserves established for such costs identified and expensed to income in prior years. Cash outlays for normal plant operations for the disposal of waste and the operation and maintenance of pollution control equipment and facilities to ensure compliance with mandated and voluntarily imposed environmental quality standards were charged to income.

Total environmental-related cash outlays for 2024 are estimated to be approximately \$210 million, of which approximately \$25 million to \$35 million is expected to be spent on investigatory and remedial efforts, approximately \$5 million on capital projects and approximately \$175 million on normal plant operations. Historically, we have funded our environmental capital expenditures through cash flow from operations and expect to do so in the future.

Annual environmental-related cash outlays for site investigation and remediation, capital projects and normal plant operations are expected to range between \$200 million to \$220 million over the next several years, \$25 million to \$35 million of which is for investigatory and remedial efforts, which are expected to be charged against reserves recorded on our consolidated balance sheet. While we do not anticipate a material increase in the projected annual level of our environmental-related cash outlays for site investigation and remediation, there is always the possibility that such an increase may occur in the future in view of the uncertainties associated with environmental exposures.

Our liabilities for future environmental expenditures were as follows:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><u>Environmental Liabilities</u></b>	<i>(\$ in millions)</i>	
Beginning balance	\$ 146.6	\$ 147.3
Charges to income	30.1	24.2
Remedial and investigatory spending	(25.9)	(24.6)
Other	2.8	(0.3)
Ending balance	<u>\$ 153.6</u>	<u>\$ 146.6</u>

As is common in our industry, we are subject to environmental laws and regulations related to the use, storage, handling, generation, transportation, emission, discharge, disposal and remediation of, and exposure to, hazardous and non-hazardous substances and wastes in all of the countries in which we do business.

The establishment and implementation of national, state or provincial and local standards to regulate air, water and land quality affect substantially all of our manufacturing locations around the world. Laws providing for regulation of the

manufacture, transportation, use and disposal of hazardous and toxic substances, and remediation of contaminated sites, have imposed additional regulatory requirements on industry, particularly the chemicals industry. In addition, implementation of environmental laws has required and will continue to require new capital expenditures and will increase plant operating costs. We employ waste minimization and pollution prevention programs at our manufacturing sites.

We are party to various government and private environmental actions associated with past manufacturing facilities and former waste disposal sites. Associated costs of investigatory and remedial activities are provided for in accordance with generally accepted accounting principles governing probability and the ability to reasonably estimate future costs. Our ability to estimate future costs depends on whether our investigatory and remedial activities are in preliminary or advanced stages. With respect to unasserted claims, we accrue liabilities for costs that, in our experience, we expect to incur to protect our interests against those unasserted claims. Our accrued liabilities for unasserted claims amounted to \$11.6 million at December 31, 2023. With respect to asserted claims, we accrue liabilities based on remedial investigation, feasibility study, remedial action and operation, maintenance and monitoring (OM&M) expenses that, in our experience, we expect to incur in connection with the asserted claims. Required site OM&M expenses are estimated and accrued in their entirety for required periods not exceeding 30 years, which reasonably approximates the typical duration of long-term site OM&M.

Environmental provisions charged to income, which are included in cost of goods sold, were as follows:

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Environmental Expense</u></b>	<i>(\$ in millions)</i>		
Provisions charged to income	\$ 30.1	\$ 24.2	\$ 16.2
Insurance recoveries <sup>(1)</sup>	(6.4)	(1.0)	(2.2)
Environmental expense	<u>\$ 23.7</u>	<u>\$ 23.2</u>	<u>\$ 14.0</u>

<sup>(1)</sup> Insurance recoveries for costs incurred and expensed in prior periods.

These charges relate primarily to remedial and investigatory activities associated with past manufacturing operations and former waste disposal sites and may be material to operating results in future years.

We have included additional information with respect to environmental matters within Note 21, “Environmental,” of our Notes to Consolidated Financial Statements.

## LEGAL MATTERS AND CONTINGENCIES

Please see the discussion of legal matters and contingencies within Item 8, under the heading of “Legal Matters” within Note 23 “Commitments and Contingencies.”

## LIQUIDITY AND CAPITAL RESOURCES

### Cash Flow Data

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Provided by (Used for)</u></b>	<i>(\$ in millions)</i>		
Net operating activities	\$ 974.3	\$ 1,921.9	\$ 1,741.0
Capital expenditures	(236.0)	(236.9)	(200.6)
Business acquired in purchase transaction, net of cash acquired	(63.9)	—	—
Payments under other long-term supply contracts	(64.5)	(37.7)	—
Proceeds from disposition of property, plant and equipment	28.8	14.9	3.2
Net investing activities	(340.8)	(259.7)	(197.4)
Long-term debt borrowings (repayments), net	85.9	(201.1)	(1,103.1)
Debt early redemption premiums	—	—	(137.7)
Common stock repurchased and retired	(711.3)	(1,350.7)	(251.9)
Stock options exercised	25.4	25.7	72.4
Dividends paid	(101.0)	(116.2)	(127.8)
Contributions received from noncontrolling interests	44.1	—	—
Net financing activities	(656.9)	(1,646.7)	(1,552.0)



### Operating Activities

For 2023, cash provided by operating activities decreased by \$947.6 million from 2022, primarily due to a decrease in operating results compared with the prior year. For 2023, working capital decreased \$68.6 million, compared to a decrease of \$65.2 million in 2022. Inventories decreased by \$94.4 million from December 31, 2022, primarily due to inventory destocking efforts. A portion of the working capital decrease in 2023 was offset by incremental working capital associated with BWA.

For 2022, cash provided by operating activities increased by \$180.9 million from 2021, primarily due to a decrease in working capital compared with the prior year. For 2022, working capital decreased \$65.2 million, compared to an increase of \$243.1 million in 2021. Receivables decreased by \$160.8 million from December 31, 2021, primarily as a result of lower sales in the fourth quarter of 2022 compared to fourth quarter of 2021. Inventories increased by \$86.3 million from December 31, 2021, primarily as a result of increased raw material costs and increased inventory quantities within our Winchester and Epoxy businesses.

### Investing Activities

Capital spending was \$236.0 million and \$236.9 million in 2023 and 2022, respectively. In 2024, we expect our capital spending to be in the \$225 million to \$250 million range. Our capital spending forecast represents normal capital spending to maintain our current operating facilities.

On October 1, 2023, Olin acquired the assets of White Flyer from Reagent for \$63.9 million. The acquisition was financed with cash on hand.

For the year ended December 31, 2023 and 2022, payments of \$64.5 million and \$37.7 million, respectively, were made under other long-term supply contracts for energy modernization projects on the U.S. Gulf Coast and we expect to make payments in the \$25.0 million to \$50.0 million range in 2024.

For the year ended December 31, 2023, we received \$28.5 million of cash proceeds from the sale of our domestic private trucking fleet and operations. For the year ended December 31, 2022, we received proceeds of \$14.9 million from the sale of two former manufacturing facilities.

### Financing Activities

During 2023 and 2022, activity of our outstanding debt included:

	<b>Long-term Debt Borrowings (Repayments) for the Year Ended December 31,</b>	
	<b>2023</b>	<b>2022</b>
	(\$ in millions)	
<b><u>Debt Instrument</u></b>		
<b>Borrowings</b>		
Senior Revolving Credit Facility	\$ 375.0	\$ 320.0
Receivables Financing Agreement	332.7	95.0
Total borrowings	707.7	415.0
<b>Repayments</b>		
5.50% senior notes, due 2022 (2022 Notes)	—	(200.0)
Senior Revolving Credit Facility	(307.0)	(320.0)
Term Loan Facility	(8.7)	—
Receivables Financing Agreement	(304.2)	(95.0)
Finance leases	(1.9)	(1.1)
Total repayments	(621.8)	(616.1)
Long-term debt borrowings (repayments), net	\$ 85.9	\$ (201.1)

In 2022, we paid debt issuance costs of \$4.4 million, primarily for the refinancing of our senior credit facilities.

In 2023 and 2022, we repurchased and retired 13.3 million and 25.7 million shares, respectively, of common stock with a total value of \$711.3 million and \$1,350.7 million, respectively.

In 2023 and 2022, we issued 1.0 million and 1.1 million shares, respectively, with a total value of \$25.4 million and \$25.7 million, respectively, representing stock options exercised.

The percent of total debt to total capitalization increased to 54.1% as of December 31, 2023, from 50.4% as of December 31, 2022, primarily as a result of a higher level of debt outstanding and lower shareholders' equity, primarily due to common stock repurchases partially offset by our operating results.

For the year ended December 31, 2023, we received \$44.1 million of cash contributions from noncontrolling interests for BWA.

Dividends per common share were \$0.80 in 2023 and 2022. Total dividends paid on common stock amounted to \$101.0 million and \$116.2 million in 2023 and 2022, respectively. On February 21, 2024, our Board of Directors declared a dividend of \$0.20 per share on our common stock, payable on March 15, 2024, to shareholders of record on March 7, 2024.

The payment of cash dividends is subject to the discretion of our Board of Directors and will be determined in light of then-current conditions, including our earnings, our operations, our financial condition, our capital requirements and other factors deemed relevant by our Board of Directors. In the future, our Board of Directors may change our dividend policy, including the frequency or amount of any dividend, in light of then-existing conditions.

#### Liquidity and Other Financing Arrangements

Our principal sources of liquidity are from cash and cash equivalents, cash flow from operations and borrowings under our Senior Revolving Credit Facility, Receivables Financing Agreement (as defined below) and AR Facilities (as defined below). Additionally, we believe that we have access to the high yield debt and equity markets.

On October 11, 2022, we entered into a \$1,550.0 million senior credit facility (Senior Credit Facility) that replaced our 2021 Senior Credit Facility. The Senior Credit Facility includes a senior term loan facility with aggregate commitments of \$350.0 million (Term Loan Facility) and a senior revolving credit facility with aggregate commitments of \$1,200.0 million (Senior Revolving Credit Facility). The Term Loan Facility was fully drawn on the closing date with the proceeds of the Term Loan Facility used to refinance the loans and commitments outstanding under the 2021 Senior Credit Facility. The Term Loan Facility requires principal amortization payments which began on March 31, 2023, at a rate of 0.625% per quarter through the end of 2024, increasing to 1.250% per quarter thereafter until maturity. The maturity date for the Senior Credit Facility is October 11, 2027.

The Senior Revolving Credit Facility includes a \$100.0 million letter of credit subfacility. At December 31, 2023, we had \$1,131.6 million available under our \$1,200.0 million Senior Revolving Credit Facility because we had \$68.0 million borrowed under the facility and issued \$0.4 million of letters of credit.

We were in compliance with all covenants and restrictions under all our outstanding credit agreements as of December 31, 2023, and no event of default had occurred that would permit the lenders under our outstanding credit agreements to accelerate the debt if not cured. In the future, our ability to generate sufficient operating cash flows, among other factors, will determine the amounts available to be borrowed under these facilities. As a result of our restrictive covenant related to the net leverage ratio, the maximum additional borrowings available to us could be limited in the future. The limitation, if an amendment or waiver from our lenders is not obtained, could restrict our ability to borrow the maximum amounts available under the Senior Revolving Credit Facility and the Receivables Financing Agreement. As of December 31, 2023, there were no covenants or other restrictions that limited our ability to borrow.

We believe, based on current and projected levels of cash flow from our operations, together with our cash and cash equivalents on hand and the availability to borrow under our Senior Revolving Credit Facility, Receivables Financing Agreement and AR Facilities, we have sufficient liquidity to meet our short-term and long-term needs to make required payments of interest on our debt, fund our operating needs, working capital, and capital expenditure requirements and comply with the financial ratios in our debt agreements.

On July 28, 2022, our Board of Directors authorized a share repurchase program for the purchase of shares of common stock at an aggregate price of up to \$2.0 billion. This program will terminate upon the purchase of \$2.0 billion of common stock.

For the years ended December 31, 2023 and 2022, 13.3 million and 25.7 million shares, respectively, of common stock have been repurchased and retired at a total value of \$711.3 million and \$1,350.7 million, respectively. As of December 31, 2023, a cumulative total of 19.2 million shares were repurchased and retired at a total value of \$1,003.0 million and \$997.0 million of common stock remained authorized to be repurchased under the 2022 Repurchase Authorization program.

We maintain a \$425.0 million Receivables Financing Agreement (Receivables Financing Agreement) that is scheduled to mature on October 14, 2025. Under the Receivables Financing Agreement, our eligible trade receivables are used for collateralized borrowings and continue to be serviced by us. In addition, the Receivables Financing Agreement incorporates the net leverage ratio covenant that is contained in the Senior Credit Facility. As of December 31, 2023 and 2022, we had \$328.5 million and \$300.0 million drawn under the agreement. As of December 31, 2023, \$456.6 million of our trade receivables were

pledged as collateral and we had \$33.3 million of additional borrowing capacity under the Receivables Financing Agreement, which was limited by our borrowing base.

Olin also has trade accounts receivable factoring arrangements (AR Facilities) and pursuant to the terms of the AR Facilities, certain of our domestic subsidiaries may sell their accounts receivable up to a maximum of \$175.5 million and certain of our foreign subsidiaries may sell their accounts receivable up to a maximum of €22.0 million. We will continue to service the outstanding accounts sold. These receivables qualify for sales treatment under ASC 860 “Transfers and Servicing” and, accordingly, the proceeds are included in net cash provided by operating activities in the consolidated statements of cash flows.

The following table summarizes the AR Facilities activity:

<i><b>AR Facilities</b></i>	<i><b>December 31,</b></i>	
	<i><b>2023</b></i>	<i><b>2022</b></i>
	<i><b>(\$ in millions)</b></i>	
Beginning balance	\$ 111.8	\$ 83.3
Gross receivables sold	899.0	1,049.7
Payments received from customers on sold accounts	(947.5)	(1,021.2)
Ending balance	<u>\$ 63.3</u>	<u>\$ 111.8</u>

The factoring discount paid under the AR Facilities is recorded as interest expense on the consolidated statements of operations. The factoring discount for the years ended December 31, 2023 and 2022 was \$4.7 million and \$3.1 million, respectively. The agreements are without recourse and therefore no recourse liability has been recorded as of December 31, 2023.

We have registered an undetermined amount of securities with the SEC, so that, from time-to-time, we may issue debt securities, preferred stock and/or common stock and associated warrants in the public market under that registration statement.

#### *Credit Ratings*

We receive ratings from three independent credit rating agencies: Fitch Ratings (Fitch), Moody's Investor Service (Moody's) and Standard & Poor's (S&P). The following table summarizes our credit ratings as of January 31, 2024:

<i><b>Credit Ratings</b></i>	<i><b>Long-term Rating</b></i>	<i><b>Outlook</b></i>
Fitch Ratings	BBB-	Stable
Moody's Investors Service	Ba1	Stable
Standard & Poor's	BB+	Positive

On January 12, 2023, Fitch assigned a first-time inaugural rating of BBB- and a stable outlook. On June 30, 2023, Moody's affirmed Olin's Ba1 rating and stable outlook. On April 4, 2023, S&P affirmed Olin's BB+ rating and positive outlook.

#### *Contractual Obligations*

Our current debt structure is used to fund our business operations. As of December 31, 2023, we had long-term borrowings, including the current installment, of \$2,670.1 million, of which \$893.7 million was at variable rates. We expect to meet our contractual obligations through our normal sources of liquidity and believe we have the financial resources to satisfy these contractual obligations.

We have several defined benefit pension and defined contribution plans, as described in Note 13 “Pension Plans” and Note 17 “Contributing Employee Ownership Plan” in the notes to consolidated financial statements contained in Item 8. We fund the defined benefit pension plans based on the minimum amounts required by law plus such amounts we deem appropriate. Given the inherent uncertainty as to actual minimum funding requirements for qualified defined benefit pension plans, no amounts are included in this table for any period beyond one year for the domestic qualified defined benefit plan. Based on the current funding requirements, we will not be required to make any cash contributions to the domestic qualified defined benefit pension plan at least through 2024. We also have postretirement healthcare plans that provide health and life insurance benefits to certain retired employees and their beneficiaries, as described in Note 14 “Postretirement Benefits” in the notes to consolidated financial statements contained in Item 8. The defined contribution and other postretirement plans are not pre-funded, and expenses are paid by us as incurred.

Our long-term contractual commitments associated with debt, contingent tax liabilities, pension and other postretirement benefits consisted of the following:

	<i>Payments Due by Period</i>				
	<i>Less than 1 Year</i>	<i>1-3 Years</i>	<i>3-5 Years</i>	<i>More than 5 Years</i>	<i>Total</i>
<b><u>Contractual Commitments</u></b>	<i>(\$ in millions)</i>				
Debt obligations <sup>(1)</sup>	\$ 78.8	\$ 475.0	\$ 865.5	\$ 1,267.6	\$ 2,686.9
Interest payments under debt obligations <sup>(2)</sup>	158.3	264.8	174.8	81.5	679.4
Contingent tax liability	34.6	9.3	3.5	2.9	50.3
International qualified pension plan payments <sup>(3)</sup>	10.8	17.2	20.0	166.6	214.6
Non-qualified pension plan payments	0.6	0.8	0.5	1.8	3.7
Postretirement benefit payments	2.7	5.1	4.7	22.7	35.2
<b>Total</b>	<b>\$ 285.8</b>	<b>\$ 772.2</b>	<b>\$ 1,069.0</b>	<b>\$ 1,543.1</b>	<b>\$ 3,670.1</b>

- (1) Excludes unamortized debt issuance costs and unamortized bond original issue discount of \$16.8 million at December 31, 2023. All debt obligations are assumed to be held until maturity.
- (2) For the purposes of this table, we have assumed for all periods presented that there are no changes in the interest rates from those in effect at December 31, 2023, which ranged from 5.0% to 9.5%.
- (3) These amounts are only estimated payments for our foreign qualified pension plans, assuming a weighted average annual expected rate of return on pension plan assets of 4.4% and a discount rate on pension plan obligations of 3.2%. These estimated payments are subject to significant variation and the actual payments may be more than the amounts estimated. In connection with international qualified defined benefit pension plans we made cash contributions of \$1.0 million, \$1.3 million and \$1.1 million in 2023, 2022 and 2021, respectively, and we anticipate less than \$5 million of cash contributions to international qualified defined benefit pension plans in 2024.

Non-cancelable operating leases and purchasing commitments are utilized in our normal course of business for our projected needs. Our operating lease commitments as described in Note 22 “Leases” are primarily for railcars, but also include logistics, manufacturing, storage, real estate, and information technology assets. Virtually none of our lease agreements contain escalation clauses or step rent provisions. We also have supply contracts with various third parties for certain raw materials, including ethylene, electricity, propylene and benzene. These contracts have initial terms ranging from several to 20 years. Our long-term contractual commitments associated with operating leases and purchasing commitments consisted of the following:

	<i>Payments Due by Period</i>				
	<i>Less than 1 Year</i>	<i>1-3 Years</i>	<i>3-5 Years</i>	<i>More than 5 Years</i>	<i>Total</i>
<b><u>Lease and Purchase Commitments</u></b>	<i>(\$ in millions)</i>				
<b>Lease Commitments</b>					
Operating leases	\$ 80.9	\$ 125.8	\$ 81.1	\$ 132.6	\$ 420.4
<b>Purchase Commitments</b>					
Raw materials / utilities	516.3	864.7	738.4	2,842.5	4,961.9
Capital expenditures	10.6	0.8	—	—	11.4
Other long-term supply contracts	37.5	80.4	—	—	117.9
<b>Total purchase commitments</b>	<b>\$ 564.4</b>	<b>\$ 945.9</b>	<b>\$ 738.4</b>	<b>\$ 2,842.5</b>	<b>\$ 5,091.2</b>

#### Other Guarantees

We also have standby letters of credit outstanding of \$120.7 million of which \$0.4 million have been issued under our Senior Revolving Credit Facility. The letters of credit were used to support certain long-term debt, workers compensation insurance policies, plant closure and post-closure obligations, international payment obligations and international pension funding requirements.

## **CRITICAL ACCOUNTING ESTIMATES**

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, sales and expenses, and related disclosure of contingent assets and liabilities. Significant estimates in our consolidated financial statements include goodwill recoverability, environmental, restructuring and other unusual items, litigation, income tax reserves including deferred tax asset valuation allowances, pension, postretirement and other benefits and

allowance for doubtful accounts. We base our estimates on prior experience, current facts and circumstances and other assumptions. Actual results may differ from these estimates.

We believe the following critical accounting estimates are the more significant judgments used in the preparation of the consolidated financial statements.

### Goodwill

Goodwill is not amortized, but is reviewed for impairment annually in the fourth quarter and/or when circumstances or other events indicate that impairment may have occurred. ASC 350 “Intangibles—Goodwill and Other” permits entities to make a qualitative assessment of whether it is more likely than not that a reporting unit’s fair value is less than its carrying amount before applying a quantitative goodwill impairment test. Circumstances that are considered as part of the qualitative assessment and could trigger a quantitative impairment test include, but are not limited to: a significant adverse change in the business climate; a significant adverse legal judgment; adverse cash flow trends; an adverse action or assessment by a government agency; unanticipated competition; sustained decline in our stock price; and a significant restructuring charge within a reporting unit. We define reporting units at the business segment level or one level below the business segment level. For purposes of testing goodwill for impairment, goodwill has been allocated to our reporting units to the extent it relates to each reporting unit.

It is our practice, at a minimum, to perform a quantitative goodwill impairment test in the fourth quarter every three years. In the fourth quarter of 2023, we performed our triennial quantitative goodwill impairment test for our reporting units. We use a discounted cash flow approach to develop the estimated fair value of a reporting unit when a quantitative review is performed. Management judgment is required in developing the assumptions for the discounted cash flow model. We also corroborate our discounted cash flow analysis by evaluating a market-based approach that considers earnings before interest, taxes, depreciation and amortization (EBITDA) multiples from a representative sample of comparable public companies. As a further indicator that each reporting unit has been valued appropriately using a discounted cash flow model, the aggregate fair value of all reporting units is reconciled to the total market value of Olin. An impairment would be recorded if the carrying amount of a reporting unit exceeded the estimated fair value. Based on the aforementioned analysis, the estimated fair value of our reporting units exceeded the carrying value of the reporting units.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions, estimates and market factors. The discount rate, profitability assumptions and terminal growth rate of our reporting units and the supply and demand fundamentals of the chlor alkali industry are material assumptions utilized in the discounted cash flow model used to estimate the fair value of each reporting unit. The discount rate reflects a weighted-average cost of capital, which is calculated, in part based on observable market data. Some of this data (such as the risk free or treasury rate and the pretax cost of debt) are based on the market data at a point in time. Other data (such as the equity risk premium) are based upon market data over time for a peer group of companies in the chemical manufacturing or distribution industries with a market capitalization premium added, as applicable. Also factoring into the discount rate is a market participant’s perceived risk (such as the company specific risk premium) in the valuation implied by the sustained reduction in our stock price.

The discounted cash flow analysis requires estimates, assumptions and judgments about future events. Our analysis uses our internally generated long-range plan. Specifically, the assumptions in our long-range plan about terminal growth rates, forecasted capital expenditures and changes in future working capital requirements are used to determine the estimated fair value of each reporting unit. The long-range plan reflects management judgment, supplemented by independent chemical industry analyses which provide multi-year chlor alkali industry operating and pricing forecasts.

As a further indicator that each reporting unit has been valued appropriately using a discounted cash flow model, the aggregate fair value of all reporting units is reconciled to the total market value of Olin. We believe the assumptions used in our goodwill impairment analysis are appropriate and result in reasonable estimates of the implied fair value of each reporting unit. However, given the economic environment and the uncertainties regarding the impact on our business, there can be no assurance that our estimates and assumptions, made for purposes of our goodwill impairment testing, will prove to be an accurate prediction of the future.

### Environmental

Accruals (charges to income) for environmental matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. These amounts, which are not discounted and are exclusive of claims against third parties, are adjusted periodically as assessments and remediation efforts progress or additional technical or legal information becomes available. Environmental costs are capitalized if the costs increase the value of the property and/or mitigate or prevent contamination from future operations. Environmental costs and recoveries are included in costs of goods sold.

Environmental exposures are difficult to assess for numerous reasons, including the identification of new sites, developments at sites resulting from investigatory studies, advances in technology, changes in environmental laws and

regulations and their application, changes in regulatory authorities, the scarcity of reliable data pertaining to identified sites, the difficulty in assessing the involvement and financial capability of other potentially responsible parties (PRPs) and our ability to obtain contributions from other parties and the lengthy time periods over which site remediation occurs. It is possible that some of these matters (the outcomes of which are subject to various uncertainties) may be resolved unfavorably to us, which could materially adversely affect our financial position, cash flows or results of operations.

## **NEW ACCOUNTING PRONOUNCEMENTS**

Discussion of new accounting pronouncements can be referred to under Item 8, within Note 3, “Recent Accounting Pronouncements.”

## **DERIVATIVE FINANCIAL INSTRUMENTS**

We are exposed to market risk in the normal course of our business operations due to our purchases of certain commodities, our ongoing investing and financing activities and our operations that use foreign currencies. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. We have established policies and procedures governing our management of market risks and the use of financial instruments to manage exposure to such risks. ASC 815 “Derivatives and Hedging” (ASC 815) requires an entity to recognize all derivatives as either assets or liabilities in the consolidated balance sheets and measure those instruments at fair value. In accordance with ASC 815, we designate derivative contracts as cash flow hedges of forecasted purchases of commodities and forecasted interest payments related to variable-rate borrowings and designate certain interest rate swaps as fair value hedges of fixed-rate borrowings. We do not enter into any derivative instruments for trading or speculative purposes.

Energy costs, including electricity and natural gas, and certain raw materials used in our production processes are subject to price volatility. Depending on market conditions, we may enter into futures contracts, forward contracts, commodity swaps and put and call option contracts in order to reduce the impact of commodity price fluctuations. The majority of our commodity derivatives expire within one year.

For derivative instruments that are designated and qualify as a cash flow hedge, the change in fair value of the derivative is recognized as a component of other comprehensive income (loss) until the hedged item is recognized in earnings.

We use cash flow hedges for certain raw material and energy costs such as copper, zinc, lead, ethane, electricity and natural gas to provide a measure of stability in managing our exposure to price fluctuations associated with forecasted purchases of raw materials and energy used in our manufacturing process. Settlements on commodity derivative contracts resulted in (losses) gains of \$(72.5) million, \$58.2 million, and \$180.1 million in 2023, 2022, and 2021, respectively, which were included in cost of goods sold. At December 31, 2023, we had open derivative notional contract positions through 2028 totaling \$191.0 million. If all open futures contracts had been settled on December 31, 2023, we would have recognized a pretax loss of \$24.6 million.

If commodity prices were to remain at December 31, 2023 levels, approximately \$20.8 million of deferred losses, net of tax, would be reclassified into earnings during the next twelve months. The actual effect on earnings will be dependent on actual commodity prices when the forecasted transactions occur.

We use interest rate swaps as a means of minimizing cash flow fluctuations that may arise from volatility in interest rates of our variable-rate borrowings. We also use interest rate swaps as a means of managing interest expense and floating interest rate exposure to optimal levels. For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in current earnings. We include the gain or loss on the hedged items (fixed-rate borrowings) in the same line item, interest expense, as the offsetting loss or gain on the related interest rate swaps. There were no outstanding interest rate swaps at December 31, 2023 and 2022.

We actively manage currency exposures that are associated with net monetary asset positions, currency purchases and sales commitments denominated in foreign currencies and foreign currency denominated assets and liabilities created in the normal course of business. We enter into forward sales and purchase contracts to manage currency risk to offset our net exposures, by currency, related to the foreign currency denominated monetary assets and liabilities of our operations. All of the currency derivatives expire within one year and are for USD equivalents. The counterparties to the forward contracts are large financial institutions; however, the risk of loss to us in the event of nonperformance by a counterparty could impact our financial position or results of operations.

We had the following notional amounts of outstanding forward contracts to buy and sell foreign currency:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Foreign Currency</i></b>	<i>(\$ in millions)</i>	
Buy	21.0	275.8
Sell	140.2	110.7

Our foreign currency forward contracts and certain commodity derivatives did not meet the criteria to qualify for hedge accounting. The effect on operating results of items not qualifying for hedge accounting was a loss of \$15.7 million, \$27.3 million and \$22.0 million in 2023, 2022 and 2021, respectively.

The fair value of our derivative asset and liability balances were:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Derivative Assets and Liabilities</i></b>	<i>(\$ in millions)</i>	
Other current assets	\$ 2.1	\$ 1.8
Other assets	3.2	4.0
Total derivative asset	\$ 5.3	\$ 5.8
Accrued liabilities	\$ 31.9	\$ 42.5
Other liabilities	0.5	7.4
Total derivative liability	\$ 32.4	\$ 49.9

#### **Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to market risk in the normal course of our business operations due to our purchases of certain commodities, our ongoing investing and financing activities and our operations that use foreign currencies. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. We have established policies and procedures governing our management of market risks and the use of financial instruments to manage exposure to such risks.

Energy costs, including electricity and natural gas, and certain raw materials used in our production processes are subject to price volatility. Depending on market conditions, we may enter into futures contracts, forward contracts, commodity swaps and put and call option contracts in order to reduce the impact of commodity price fluctuations. As of December 31, 2023, we maintained open positions on commodity contracts with a notional value totaling \$191.0 million (\$261.2 million at December 31, 2022). Assuming a hypothetical 10% increase in commodity prices, which are currently hedged, as of December 31, 2023, we would experience a \$19.1 million (\$26.1 million at December 31, 2022) increase in our cost of inventory purchased, which would be substantially offset by a corresponding increase in the value of related hedging instruments.

We transact business in various foreign currencies other than the USD which exposes us to movements in exchange rates which may impact revenue and expenses, assets and liabilities and cash flows. Our significant foreign currency exposure is denominated with European currencies, primarily the Euro, although exposures also exist in other currencies of Asia Pacific, Latin America, Middle East and Africa. For all derivative positions, we evaluated the effects of a 10% shift in exchange rates between those currencies and the USD, holding all other assumptions constant. Unfavorable currency movements of 10% would negatively affect the fair values of the derivatives held to hedge currency exposures by \$16.1 million (\$38.6 million at December 31, 2022). These unfavorable changes would generally have been offset by favorable changes in the values of the underlying exposures.

We are exposed to changes in interest rates primarily as a result of our investing and financing activities. Our current debt structure is used to fund business operations, and commitments from banks under our Senior Revolving Credit Facility, Receivables Financing Agreement and AR Facilities are sources of liquidity. As of December 31, 2023, we had long-term borrowings, including current installments of long-term debt and finance lease obligations, of \$2,670.1 million (\$2,580.7 million at December 31, 2022) of which \$893.7 million (\$805.9 million at December 31, 2022) was issued at variable rates. Included within long-term borrowings on the consolidated balance sheets were deferred debt issuance costs and unamortized bond original issue discount.

Assuming no changes in the \$893.7 million of variable-rate debt levels from December 31, 2023, we estimate that a hypothetical change of 100-basis points in the secured overnight financing rate (SOFR) from 2023 would impact annual interest expense by \$8.9 million.

If the actual changes in commodities, foreign currency or interest pricing is substantially different than expected, the net impact of commodity risk, foreign currency risk or interest rate risk on our cash flow may be materially different than that disclosed above.

We do not enter into any derivative financial instruments for speculative purposes.

#### **CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS**

This report includes forward-looking statements. These statements relate to analyses and other information that are based on management's beliefs, certain assumptions made by management, forecasts of future results and current expectations, estimates and projections about the markets and economy in which we and our various segments operate. The statements contained in this report that are not statements of historical fact may include forward-looking statements that involve a number of risks and uncertainties.

We have used the words "anticipate," "intend," "may," "expect," "believe," "should," "plan," "outlook," "project," "estimate," "forecast," "optimistic," "target," and variations of such words and similar expressions in this annual report to identify such forward-looking statements. These forward-looking statements include, but are not limited to, statements regarding the Company's intent to repurchase, from time to time, the Company's common stock. These statements are not guarantees of future performance and involve certain risks, uncertainties, and assumptions, which are difficult to predict and many of which are beyond our control. Therefore, actual outcomes and results may differ materially from those matters expressed or implied in such forward-looking statements. We undertake no obligation to update publicly any forward-looking statements, whether as a result of future events, new information or otherwise. The payment of cash dividends is subject to the discretion of our Board of Directors and will be determined in light of then-current conditions, including our earnings, our operations, our financial conditions, our capital requirements and other factors deemed relevant by our Board of Directors. In the future, our Board of Directors may change our dividend policy, including the frequency or amount of any dividend, in light of then-existing conditions.

The risks, uncertainties and assumptions involved in our forward-looking statements include those discussed under Item 1A—"Risk Factors." You should consider all of our forward-looking statements in light of these factors. In addition, other risks and uncertainties not presently known to us or that we consider immaterial could affect the accuracy of our forward-looking statements.



## Item 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### MANAGEMENT REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Olin Corporation is responsible for establishing and maintaining adequate internal control over financial reporting. Olin's internal control system was designed to provide reasonable assurance to the company's management and Board of Directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation, and may not prevent or detect all misstatements.

The management of Olin Corporation has assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2023. 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)* to guide our analysis and assessment. Based on our assessment as of December 31, 2023, the company's internal control over financial reporting was effective based on those criteria.

Our independent registered public accountants, KPMG LLP, have audited and issued a report on our internal control over financial reporting, which appears in this Form 10-K.



Scott Sutton

President and Chief Executive Officer



Todd A. Slater

Senior Vice President and Chief Financial Officer

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors  
Olin Corporation:

### Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Olin Corporation and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023 based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

### 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 Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

### Critical Audit Matter

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

#### *Evaluation of Environmental Obligations*

As discussed in Notes 2 and 21 to the consolidated financial statements, the Company has recorded liabilities for future environmental expenditures of \$153.6 million as of December 31, 2023. The Company accrues a liability for environmental matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based upon current law and existing technologies. The liability is adjusted periodically as assessment and remediation efforts progress or as additional technical or legal information becomes available.

We identified the evaluation of environmental liabilities as a critical audit matter. This required challenging auditor judgment due to the nature of the estimate and assumptions, including judgments in determining required remediation activities designed to consider future events and uncertainties and the time period over which remediation activities will occur.

The following are the primary procedures that we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's process to estimate environmental obligations, including controls related to the monitoring of the liability as compared to remedial activities required by regulatory authorities. We involved an environmental professional with specialized skills and knowledge who assisted in evaluating the Company's planned remediation activities for certain sites, the time period over which remediation will occur, and changes in the liability and assumptions from those used in the prior period, including comparing the Company's planned remediation activities to those communicated to regulatory authorities and to those commonly observed in conducting remediation.

**KPMG LLP**

We have served as the Company's auditor since 1954.

St. Louis, Missouri

February 22, 2024

**OLIN CORPORATION AND CONSOLIDATED SUBSIDIARIES**

**Consolidated Balance Sheets**

*(In millions, except per share data)*

<b>Assets</b>	<b>December 31,</b>	
	<b>2023</b>	<b>2022</b>
Current assets:		
Cash and cash equivalents	\$ 170.3	\$ 194.0
Receivables, net	874.7	924.6
Income taxes receivable	15.3	43.2
Inventories, net	858.8	941.9
Other current assets	54.1	52.7
Total current assets	1,973.2	2,156.4
Property, plant and equipment, net	2,519.6	2,674.1
Operating lease assets, net	344.7	356.0
Deferred income taxes	87.4	60.5
Other assets	1,118.5	1,102.5
Intangible assets, net	245.8	273.8
Goodwill	1,424.0	1,420.9
Total assets	\$ 7,713.2	\$ 8,044.2
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Current installments of long-term debt	\$ 78.8	\$ 9.7
Accounts payable	775.4	837.7
Income taxes payable	154.7	133.4
Current operating lease liabilities	69.3	71.8
Accrued liabilities	450.0	508.8
Total current liabilities	1,528.2	1,561.4
Long-term debt	2,591.3	2,571.0
Operating lease liabilities	283.1	292.5
Accrued pension liability	225.8	234.5
Deferred income taxes	476.2	507.3
Other liabilities	340.3	333.9
Total liabilities	5,444.9	5,500.6
Commitments and contingencies		
Shareholders' equity:		
Common stock, \$1.00 par value per share:		
Authorized, 240.0 shares; issued and outstanding, 120.2 and 132.3 shares	120.2	132.3
Additional paid-in capital	24.8	682.7
Accumulated other comprehensive loss	(496.3)	(495.9)
Retained earnings	2,583.7	2,224.5
Olin Corporation's shareholders' equity	2,232.4	2,543.6
Noncontrolling interests	35.9	—
Total equity	2,268.3	2,543.6
Total liabilities and equity	\$ 7,713.2	\$ 8,044.2

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

**OLIN CORPORATION AND CONSOLIDATED SUBSIDIARIES**  
**Consolidated Statements of Operations**  
*(In millions, except per share data)*

	<i>Year Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
Sales	\$ 6,833.0	\$ 9,376.2	\$ 8,910.6
Operating expenses:			
Cost of goods sold	5,667.5	7,194.3	6,616.4
Selling and administrative	406.7	393.9	416.9
Restructuring charges	89.6	25.3	27.9
Other operating income	42.9	16.3	1.4
Operating income	712.1	1,779.0	1,850.8
Interest expense	181.1	143.9	348.0
Interest income	4.3	2.2	0.2
Non-operating pension income	24.0	38.7	35.7
Income before taxes	559.3	1,676.0	1,538.7
Income tax provision	107.3	349.1	242.0
Net income	452.0	1,326.9	1,296.7
Net loss attributable to noncontrolling interests	(8.2)	—	—
Net income attributable to Olin Corporation	\$ 460.2	\$ 1,326.9	\$ 1,296.7
Net income attributable to Olin Corporation per common share:			
Basic	\$ 3.66	\$ 9.16	\$ 8.15
Diluted	\$ 3.57	\$ 8.94	\$ 7.96
Average common shares outstanding:			
Basic	125.9	144.9	159.1
Diluted	128.8	148.5	163.0

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

**OLIN CORPORATION AND CONSOLIDATED SUBSIDIARIES**  
**Consolidated Statements of Comprehensive Income**  
*(In millions)*

	<i>Year Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
Net income	\$ 452.0	\$ 1,326.9	\$ 1,296.7
Other comprehensive (loss) income, net of tax:			
Foreign currency translation	(1.1)	(27.7)	(30.3)
Cash flow hedges	14.1	(55.3)	1.4
Pension and postretirement benefits	(13.4)	75.1	230.8
Total other comprehensive (loss) income, net of tax	(0.4)	(7.9)	201.9
Comprehensive income	451.6	1,319.0	1,498.6
Comprehensive loss attributable to noncontrolling interests	(8.2)	—	—
Comprehensive income attributable to Olin Corporation	\$ 459.8	\$ 1,319.0	\$ 1,498.6

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

**OLIN CORPORATION AND CONSOLIDATED SUBSIDIARIES**  
**Consolidated Statements of Shareholders' Equity**  
*(In millions, except per share data)*

	<i>Year Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b>Common Stock</b>			
Balance at beginning of year	\$ 132.3	\$ 156.8	\$ 158.0
Common stock repurchased and retired	(13.3)	(25.7)	(4.7)
Common stock issued for:			
Stock options exercised	1.0	1.1	3.4
Other transactions	0.2	0.1	0.1
Balance at end of year	120.2	132.3	156.8
<b>Additional Paid-In Capital</b>			
Balance at beginning of year	682.7	1,969.6	2,137.8
Common stock repurchased and retired	(698.0)	(1,325.0)	(247.2)
Common stock issued for:			
Stock options exercised	24.4	24.6	69.0
Other transactions	1.6	3.0	3.3
Stock-based compensation	14.1	10.5	6.7
Balance at end of year	24.8	682.7	1,969.6
<b>Accumulated Other Comprehensive Loss</b>			
Balance at beginning of year	(495.9)	(488.0)	(689.9)
Other comprehensive (loss) income	(0.4)	(7.9)	201.9
Balance at end of year	(496.3)	(495.9)	(488.0)
<b>Retained Earnings</b>			
Balance at beginning of year	2,224.5	1,013.8	(155.1)
Net income	460.2	1,326.9	1,296.7
Common stock dividends paid	(101.0)	(116.2)	(127.8)
Balance at end of year	2,583.7	2,224.5	1,013.8
<b>Olin Corporation's Shareholders' Equity</b>	<u>2,232.4</u>	<u>2,543.6</u>	<u>2,652.2</u>
<b>Noncontrolling Interests</b>			
Balance at beginning of year	—	—	—
Net loss	(8.2)	—	—
Contributions from noncontrolling interests	44.1	—	—
Balance at end of year	35.9	—	—
<b>Total Equity</b>	<u>\$ 2,268.3</u>	<u>\$ 2,543.6</u>	<u>\$ 2,652.2</u>
Dividends declared per share of common stock	\$ 0.80	\$ 0.80	\$ 0.80

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

**OLIN CORPORATION AND CONSOLIDATED SUBSIDIARIES**  
**Consolidated Statements of Cash Flows**  
*(In millions)*

	<i>Years Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b>Operating Activities</b>			
Net income	\$ 452.0	\$ 1,326.9	\$ 1,296.7
Adjustments to reconcile net income to net cash and cash equivalents provided by (used for) operating activities:			
Depreciation and amortization	533.4	598.8	582.5
Gains on disposition of property, plant and equipment	(27.0)	(13.0)	(1.4)
Stock-based compensation	18.6	14.1	8.3
Loss on debt extinguishment	—	—	152.2
Write-off of equipment and facility included in restructuring charges	17.7	—	—
Deferred income taxes	(55.6)	(32.4)	(42.7)
Qualified pension plan contributions	(1.1)	(1.3)	(1.1)
Qualified pension plan income	(21.0)	(33.1)	(27.8)
Change in assets and liabilities:			
Receivables	65.4	160.8	(360.0)
Income taxes receivable/payable	45.8	(2.9)	105.1
Inventories	94.4	(86.3)	(206.0)
Other current assets	(3.1)	15.9	(22.3)
Accounts payable and accrued liabilities	(133.9)	(22.3)	240.1
Other assets	(23.4)	(2.6)	(13.3)
Other noncurrent liabilities	15.8	(0.7)	26.2
Other operating activities	(3.7)	—	4.5
Net operating activities	974.3	1,921.9	1,741.0
<b>Investing Activities</b>			
Capital expenditures	(236.0)	(236.9)	(200.6)
Business acquired in purchase transaction, net of cash acquired	(63.9)	—	—
Payments under other long-term supply contracts	(64.5)	(37.7)	—
Proceeds from disposition of property, plant and equipment	28.8	14.9	3.2
Other investing activities	(5.2)	—	—
Net investing activities	(340.8)	(259.7)	(197.4)
<b>Financing Activities</b>			
Long-term debt:			
Borrowings	707.7	415.0	540.0
Repayments	(621.8)	(616.1)	(1,643.1)
Debt early redemption premiums	—	—	(137.7)
Common stock repurchased and retired	(711.3)	(1,350.7)	(251.9)
Stock options exercised	25.4	25.7	72.4
Dividends paid	(101.0)	(116.2)	(127.8)
Debt issuance costs	—	(4.4)	(3.9)
Contributions received from noncontrolling interests	44.1	—	—
Net financing activities	(656.9)	(1,646.7)	(1,552.0)
Effect of exchange rate changes on cash and cash equivalents	(0.3)	(2.0)	(0.8)
Net (decrease) increase in cash and cash equivalents	(23.7)	13.5	(9.2)
Cash and cash equivalents, beginning of year	194.0	180.5	189.7
Cash and cash equivalents, end of year	\$ 170.3	\$ 194.0	\$ 180.5
Cash paid for interest and income taxes:			
Interest, net	\$ 176.8	\$ 141.7	\$ 345.2
Income taxes, net of refunds	111.7	356.6	169.6

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



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### NOTE 1. DESCRIPTION OF BUSINESS

Olin Corporation (Olin) is a Virginia corporation, incorporated in 1892, having its principal executive offices in Clayton, MO. We are a leading vertically integrated global manufacturer and distributor of chemical products and a leading U.S. manufacturer of ammunition. Our operations are concentrated in three business segments: Chlor Alkali Products and Vinyls, Epoxy and Winchester. All of our business segments are capital-intensive manufacturing businesses. The Chlor Alkali Products and Vinyls segment manufactures and sells chlorine and caustic soda, ethylene dichloride and vinyl chloride monomer, methyl chloride, methylene chloride, chloroform, carbon tetrachloride, perchloroethylene, hydrochloric acid, hydrogen, bleach products and potassium hydroxide. The Epoxy segment produces and sells a full range of epoxy materials and precursors, including aromatics (acetone and phenol), allyl chloride, epichlorohydrin, liquid epoxy resins, solid epoxy resins and systems and growth products such as converted epoxy resins and additives. The Winchester segment produces and sells sporting ammunition, reloading components, small caliber military ammunition and components, industrial cartridges, and clay targets.

On January 10, 2023, Blue Water Alliance (BWA), our joint venture with Mitsui & Co., Ltd. (Mitsui), began operations. BWA is an independent global trader of ECU-based derivatives, focused on globally traded caustic soda and ethylene dichloride. Olin holds 51% interest and exercises control in BWA, and the joint venture is consolidated in our financial statements in our Chlor Alkali Products and Vinyls segment, with Mitsui's 49% interest in BWA classified as noncontrolling interest. All intercompany accounts and transactions are eliminated in consolidation.

### NOTE 2. ACCOUNTING POLICIES

The preparation of the consolidated financial statements requires estimates and assumptions that affect amounts reported and disclosed in the financial statements and related notes. Actual results could differ from those estimates.

#### Basis of Presentation

The consolidated financial statements include the accounts of Olin and all majority-owned subsidiaries. Investments in our affiliates are accounted for using the equity method. Accordingly, we include only our share of earnings or losses of these affiliates in consolidated net income (loss).

#### Revenue Recognition

We derive our revenues primarily from the manufacturing and delivery of goods to customers. Revenues are recognized on sales of goods at the time when control of those goods is transferred to our customers at an amount that reflects the consideration to which we expect to be entitled in exchange for those goods. We primarily sell our goods directly to customers, and to a lesser extent, through distributors. Payment terms are typically 30 to 90 days from date of invoice. Our contracts do not typically have a significant financing component. Right to payment is determined at the point in time in which control has transferred to the customer.

A performance obligation is a promise in a contract to transfer a distinct good to the customer. At contract inception, we assess the goods promised in our contracts with customers and identify a performance obligation for each promise to transfer to the customer a good (or bundle of goods) that is distinct. A contract's transaction price is based on the price stated in the contract and allocated to each distinct performance obligation and revenue is recognized when the performance obligation is satisfied. Substantially all of our contracts have a single distinct performance obligation or multiple performance obligations which are distinct and represent individual promises within the contract. Substantially all of our performance obligations are satisfied at a single point in time, when control is transferred, which is generally upon shipment or delivery as stated in the contract terms. In some instances, primarily related to governmental contracts within our Winchester business, we recognize revenue over-time as control of the promised goods or services is being transferred to the customer using the cost-to-cost method of accounting. We believe this is an appropriate measure of progress toward satisfaction of performance obligations as this measure most accurately depicts the progress of our work and transfer of control to our customers. For the years ended December 31, 2023, 2022 and 2021, revenue recognized over time represented \$104.8 million, \$57.8 million and \$22.8 million, respectively.

All taxes assessed by governmental authorities that are both imposed on and concurrent with our revenue-producing transactions and collected from our customers are excluded from the measurement of the transaction price. Shipping and handling fees billed to customers are included in revenue and are considered activities to fulfill the promise to transfer the good. Allowances for estimated returns, discounts and rebates are considered variable consideration, which may be constrained, and are estimated and recognized when sales are recorded. The estimates are based on various market data, historical trends and information from customers. Actual returns, discounts and rebates have not been materially different from estimates. For all contracts that have a duration of one year or less at contract inception, we do not adjust the promised amount of consideration for the effects of a significant financing component.

Substantially all of our revenue is derived from contracts with an original expected length of time of one year or less and for which we recognize revenue for the amount in which we have the right to invoice at the point in time in which control has transferred to the customer. However, a portion of our revenue is derived from long-term contracts which have contract periods that vary between one to multi-year. Certain of these contracts represent contracts with minimum purchase obligations, which can be substantially different than the actual revenue recognized. Such contracts consist of varying types of products across our chemical businesses. Certain contracts include variable volumes and/or variable pricing with pricing provisions tied to commodity, consumer price or other indices. The transaction price allocated to the remaining performance obligations related to our contracts was excluded from the disclosure of our remaining performance obligations based on the following practical expedients that we elected to apply: (i) contracts with index-based pricing or variable volume attributes in which such variable consideration is allocated entirely to a wholly unsatisfied performance obligation; and (ii) contracts with an original expected duration of one year or less.

The timing of our customer billings does not always match the timing of our revenue recognition. When the Company is entitled to bill a customer in advance of the recognition of revenue, a contract liability is recognized. When the Company is not entitled to bill a customer until a period after the related recognition of revenue, a contract asset is recognized. Contract liabilities were \$34.8 million and \$43.4 million as of December 31, 2023 and 2022, respectively, and are included as a component of accrued liabilities and other liabilities in our consolidated balance sheets. Contract assets were \$20.1 million and \$16.2 million as of December 31, 2023 and 2022, respectively, and are included as a component of other current assets and other assets in our consolidated balance sheets. Substantially all our contract liabilities, net of contract assets, are expected to be realized within one year, when the related performance obligations are satisfied.

#### Cost of Goods Sold and Selling and Administrative Expenses

Cost of goods sold includes the costs of inventory sold, related purchasing, distribution and warehousing costs, costs incurred for shipping and handling, depreciation and amortization expense related to these activities and environmental remediation costs and recoveries. Selling and administrative expenses include personnel costs associated with sales, marketing and administrative, research and development, legal and legal-related costs, consulting and professional services fees, advertising expenses, depreciation expense related to these activities, foreign currency translation and other similar costs.

#### Acquisition-related Costs

Acquisition-related costs include advisory, legal, accounting and other professional fees incurred in connection with the purchase and integration of our acquisitions. Acquisition-related costs also may include costs which arise as a result of acquisitions, including contractual change in control provisions, contract termination costs, compensation payments related to the acquisition or pension and other postretirement benefit plan settlements.

#### Other Operating Income (Expense)

Other operating income (expense) consists of miscellaneous operating income items, which are related to our business activities, and gains (losses) on disposition of property, plant and equipment. Other operating income for the year ended December 31, 2023, included a gain of \$27.0 million from the sale of our domestic private trucking fleet and operations and a gain of \$15.6 million for insurance recoveries associated with a second quarter 2022 business interruption at our Plaquemine, LA, Chlor Alkali Products and Vinyls facility. Other operating income for the year ended December 31, 2022, included \$13.0 million of gains from the sale of two former manufacturing facilities. Other operating income for the year ended December 31, 2021, included a \$1.4 million gain from the sale of a terminal facility.

#### Other Income (Expense)

Other income (expense) consists of non-operating income and expense items which are not related to our primary business activities.

#### Foreign Currency Translation

Our worldwide operations utilize the U.S. dollar (USD) or local currency as the functional currency, where applicable. For foreign entities where the USD is the functional currency, gains and losses resulting from balance sheet remeasurement are included in selling and administrative. For foreign entities where the local currency is the functional currency, assets and liabilities denominated in local currencies are translated into USD at end-of-period exchange rates and the resultant translation adjustments are included in accumulated other comprehensive loss. Assets and liabilities denominated in other than the local currency are remeasured into the local currency prior to translation into USD and the resultant exchange gains or losses are included in income in the period in which they occur. Income and expenses are translated into USD using an approximation of the average rate prevailing during the period. We change the functional currency of our separate and distinct foreign entities only when significant changes in economic facts and circumstances indicate clearly that the functional currency has changed.

### Cash and Cash Equivalents

All highly liquid investments, with a maturity of three months or less at the date of purchase, are considered cash equivalents.

### Short-Term Investments

We classify our marketable securities as available-for-sale, which are reported at fair market value with unrealized gains and losses included in accumulated other comprehensive loss, net of applicable taxes. The fair value of marketable securities is determined by quoted market prices. Realized gains and losses on sales of investments, as determined on the specific identification method, and declines in value of securities judged to be other-than-temporary are included in other income (expense) in the consolidated statements of operations. Interest and dividends on all securities are included in interest income and other income (expense), respectively. As of December 31, 2023 and 2022, no short-term investments were recorded on our consolidated balance sheets.

### Allowance for Doubtful Accounts Receivable

We evaluate the collectibility of financial instruments based on our current estimate of credit losses expected to be incurred over the life of the financial instrument. The only significant financial instrument which creates exposure to credit losses are customer accounts receivables. We measure credit losses on uncollected accounts receivable through an allowance for doubtful accounts receivable which is based on a combination of factors including both historical collection experience and reasonable estimates that affect the expected collectibility of the receivable. These factors include historical bad debt experience, industry conditions of the customer or group of customers, geographical region, credit ratings and general market conditions. We group receivables together for purposes of estimating credit losses when customers have similar risk characteristics; otherwise, the estimation is performed on the individual receivable.

This estimate is periodically adjusted when we become aware of a specific customer's inability to meet its financial obligations (e.g., bankruptcy filing) or as a result of changes in the overall aging of accounts receivable. While we have a large number of customers that operate in diverse businesses and are geographically dispersed, a general economic downturn in any of the industry segments in which we operate could result in higher-than-expected defaults, and, therefore, the need to revise estimates for the provision for doubtful accounts could occur.

### Inventories

Inventories are valued at the lower of cost and net realizable value. For U.S. inventories, inventory costs are determined principally by the last-in, first-out (LIFO) method of inventory accounting while for international inventories, inventory costs are determined principally by the first-in, first-out (FIFO) method of inventory accounting. Costs for other inventories have been determined principally by the average-cost method (primarily operating supplies, spare parts and maintenance parts). Elements of costs in inventories include raw materials, direct labor and manufacturing overhead. See Note 8 "Inventories" for additional information.

### Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets. Interest costs incurred to finance expenditures for major long-term construction projects are capitalized as part of the historical cost and included in property, plant and equipment and are depreciated over the useful lives of the related assets. Leasehold improvements are amortized over the term of the lease or the estimated useful life of the improvement, whichever is shorter. Start-up costs are expensed as incurred. Expenditures for maintenance and repairs are charged to expense when incurred while the costs of significant improvements, which extend the useful life of the underlying asset, are capitalized.

Property, plant and equipment are reviewed for impairment when conditions indicate that the carrying values of the asset group may not be recoverable. Such impairment conditions include an extended period of idleness or a plan of disposal. If such impairment indicators are present or other factors exist that indicate that the carrying amount of an asset group may not be recoverable, we determine whether impairment has occurred through the use of an undiscounted cash flow analysis at the lowest level for which identifiable cash flows exist. For our Chlor Alkali Products and Vinyls, Epoxy and Winchester segments, the lowest level for which identifiable cash flows exist is the operating facility level or an appropriate grouping of operating facilities level, which represents the asset group. The amount of impairment loss, if any, is measured by the difference between the net book value of the assets and the estimated fair value of the related asset group. See Note 9 "Property, Plant and Equipment" for additional information.

### Leases

We determine if an arrangement is a lease at inception of the contract. Operating lease assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease assets and liabilities are recognized at commencement date based on the present value of fixed lease payments over the lease term. Our lease commitments are primarily for railcars, but also include logistics, manufacturing, storage, real estate and information technology assets. Leases with an initial term of 12 months or less are not recorded on the balance sheet; instead, we recognize lease expense for these leases on a straight-line basis over the lease term. We do not account for lease components (e.g., fixed payments to use the underlying lease asset) separately from the non-lease components (e.g., fixed payments for common-area maintenance costs and other items that transfer a good or service). Some of our leases include variable lease payments, which primarily result from changes in consumer price and other market-based indices, which are generally updated annually, and maintenance and usage charges. These variable payments are excluded from the calculation of our lease assets and liabilities.

Most leases include one or more options to renew, with renewal terms that can extend the lease term from one-to-many years. The exercise of lease renewal options is typically at our sole discretion. Certain leases also include options to purchase the leased asset. We do not include options to renew or purchase leased assets in the measurement of lease liabilities unless those options are highly certain of exercise. The depreciable life of assets and leasehold improvements are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise. We have operating leases with terms that require us to guarantee a portion of the residual value of the leased assets upon termination of the lease as well as other guarantees. These residual value guarantees consist primarily of leases for railcars. Residual value guarantee payments that become probable and estimable are accrued as part of the lease liability and recognized over the remaining life of the applicable lease. Our current expectation is that the likelihood of material residual guarantee payments is remote. We utilize the interest rate implicit in the lease to determine the lease liability when the interest rate can be determined. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. We estimate the incremental borrowing rate based on the geographic region for which we would borrow, on a secured basis of the lease asset, at an amount equal to the lease payments over a similar time period as the lease term. We have no additional restrictions or covenants imposed by our lease contracts. See Note 22 “Leases” for additional information.

### Asset Retirement Obligations

We record the fair value of an asset retirement obligation associated with the retirement of a tangible long-lived asset as a liability in the period incurred. The liability is measured at discounted fair value and is adjusted to its present value in subsequent periods as accretion expense is recorded. The corresponding asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset and depreciated over the asset’s useful life. Asset retirement obligations are reviewed annually in the fourth quarter and/or when circumstances or other events indicate that changes underlying retirement assumptions may have occurred.

The activities of our asset retirement obligations were as follows:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<i>Asset Retirement Obligation Activity</i>	<i>(\$ in millions)</i>	
Beginning balance	\$ 66.3	\$ 70.2
Accretion	3.3	3.8
Spending	(5.0)	(8.7)
Adjustments	8.2	1.0
Ending balance	<u>\$ 72.8</u>	<u>\$ 66.3</u>

At December 31, 2023 and 2022, our consolidated balance sheets included an asset retirement obligation of \$63.3 million and \$52.6 million, respectively, which were classified as other noncurrent liabilities.

In 2023 and 2022, we had net adjustments that increased the asset retirement obligation by \$8.2 million and \$1.0 million, respectively, which were primarily comprised of increases in estimated costs for certain assets.

### Comprehensive Income (Loss)

Accumulated other comprehensive loss consists of foreign currency translation adjustments, pension and postretirement liability adjustments, pension and postretirement amortization of prior service costs and actuarial losses and net unrealized gains (losses) on derivative contracts.

## Purchase Accounting

In accordance with Accounting Standards Codification (ASC) 805, “Business Combinations,” we record the fair value of purchase consideration for the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values on the acquisition date. The excess of purchase price over the aggregate fair value is recorded as goodwill. Intangible assets are valued using the relief from royalty and multi-period excess earnings methodologies, considered Level 3 measurements. Key assumptions in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired customers, useful lives, royalty rates, and discount rates. Our fair value estimates are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, may differ from actual results. Changes in the estimated fair values of net assets recorded for acquisitions before the finalization of more detailed analysis, but not over one year from the acquisition date, will adjust the purchase price allocatable to goodwill. Any adjustments after the one-year measurement period are recorded in earnings.

## Goodwill

Goodwill is not amortized, but is reviewed for impairment annually in the fourth quarter and/or when circumstances or other events indicate that impairment may have occurred. ASC 350 “Intangibles—Goodwill and Other” permits entities to make a qualitative assessment of whether it is more likely than not that a reporting unit’s fair value is less than its carrying amount before applying the goodwill impairment test. Circumstances that are considered as part of the qualitative assessment and could trigger a quantitative impairment test include, but are not limited to: a significant adverse change in the business climate; a significant adverse legal judgment; adverse cash flow trends; an adverse action or assessment by a government agency; unanticipated competition; sustained decline in our stock price; and a significant restructuring charge within a reporting unit. We define reporting units at the business segment level or one level below the business segment level. For purposes of testing goodwill for impairment, goodwill has been allocated to our reporting units to the extent it relates to each reporting unit.

It is our practice, at a minimum, to perform a quantitative goodwill impairment test in the fourth quarter every three years. In the fourth quarter of 2023, we performed our triennial quantitative goodwill impairment test for our reporting units. We use a discounted cash flow approach to develop the estimated fair value of a reporting unit when a quantitative test is performed. Management judgment is required in developing the assumptions for the discounted cash flow model. We also corroborate our discounted cash flow analysis by evaluating a market-based approach that considers earnings before interest, taxes, depreciation and amortization (EBITDA) multiples from a representative sample of comparable public companies. As a further indicator that each reporting unit has been valued appropriately using a discounted cash flow model, the aggregate fair value of all reporting units is reconciled to the total market value of Olin. An impairment would be recorded if the carrying amount of a reporting unit exceeded the estimated fair value. Based on the aforementioned analysis, the estimated fair value of our reporting units substantially exceeded the carrying value of the reporting units.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions, estimates and market factors. The discount rate, profitability assumptions and terminal growth rate of our reporting units and the cyclical nature of the chlor alkali industry were the material assumptions utilized in the discounted cash flow model used to estimate the fair value of each reporting unit. The discount rate reflects a weighted-average cost of capital, which is calculated based on observable market data. Some of this data (such as the risk free or treasury rate and the pretax cost of debt) are based on the market data at a point in time. Other data (such as the equity risk premium) are based upon market data over time for a peer group of companies in the chemical manufacturing or distribution industries with a market capitalization premium added, as applicable.

The discounted cash flow analysis requires estimates, assumptions and judgments about future events. Our analysis uses our internally generated long-range plan. Our discounted cash flow analysis uses the assumptions in our long-range plan about terminal growth rates, forecasted capital expenditures and changes in future working capital requirements to determine the implied fair value of each reporting unit. The long-range plan reflects management judgment, supplemented by independent chemical industry analyses which provide multi-year industry operating and pricing forecasts.

We believe the assumptions used in our goodwill impairment analysis are appropriate and result in reasonable estimates of the implied fair value of each reporting unit. However, given the economic environment and the uncertainties regarding the impact on our business, there can be no assurance that our estimates and assumptions, made for purposes of our goodwill impairment testing, will prove to be an accurate prediction of the future. In order to evaluate the sensitivity of the fair value calculation on the goodwill impairment test, we applied a hypothetical 10% decrease to the fair value of each reporting unit. We also applied a hypothetical decrease of 100-basis points in our terminal growth rate or an increase of 100-basis points in our weighted-average cost of capital to test the fair value calculation. In all cases, the estimated fair value of our reporting units derived in these sensitivity calculations exceeded the carrying value in excess of 10%. If our assumptions regarding future performance are not achieved, we may be required to record goodwill impairment charges in future periods. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material. See Note 11 “Goodwill and Intangible Assets” for additional information.

### Intangible Assets

In conjunction with our acquisitions, we have obtained access to the customer contracts and relationships, trade names, acquired technology and other intellectual property of the acquired companies. These relationships are expected to provide economic benefit for future periods. Amortization expense is recognized on a straight-line basis over the estimated lives of the related assets. The amortization period of customer contracts and relationships, trade names, acquired technology and other intellectual property represents our best estimate of the expected usage or consumption of the economic benefits of the acquired assets, which is based on the company's historical experience.

Intangible assets with finite lives are reviewed for impairment when conditions indicate that the carrying values of the assets may not be recoverable. Circumstances that are considered as part of the qualitative assessment and could trigger a quantitative impairment test include, but are not limited to: a significant adverse change in the business climate; a significant adverse legal judgment including asset specific factors; adverse cash flow trends; an adverse action or assessment by a government agency; unanticipated competition; sustained decline in our stock price; and a significant restructuring charge within a reporting unit. See Note 11 "Goodwill and Intangible Assets" for additional information.

### Environmental Liabilities and Expenditures

Accruals (charges to income) for environmental matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based upon current law and existing technologies. These amounts, which are not discounted and are exclusive of claims against third parties, are adjusted periodically as assessment and remediation efforts progress or additional technical or legal information becomes available. Environmental costs are capitalized if the costs increase the value of the property and/or mitigate or prevent contamination from future operations. See Note 21 "Environmental" for additional information.

### Income Taxes

Deferred taxes are provided for differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided to offset deferred tax assets if, based on the available evidence, it is more likely than not that some or all of the value of the deferred tax assets will not be realized. See Note 15 "Income Taxes" for additional information.

### Derivative Financial Instruments

We are exposed to market risk in the normal course of our business operations due to our purchases of certain commodities, our ongoing investing and financing activities and our operations that use foreign currencies. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. We have established policies and procedures governing our management of market risks and the use of financial instruments to manage exposure to such risks. We use hedge accounting treatment for a significant amount of our business transactions whose risks are covered using derivative instruments. The hedge accounting treatment provides for the deferral of gains or losses on derivative instruments until such time as the related transactions occur. See Note 24 "Derivative Financial Instruments" for additional information.

### Concentration of Credit Risk

Accounts receivable is the principal financial instrument which subjects us to a concentration of credit risk. Credit is extended based upon the evaluation of a customer's financial condition and, generally, collateral is not required. Concentrations of credit risk with respect to receivables are somewhat limited due to our large number of customers, the diversity of these customers' businesses and the geographic dispersion of such customers. Our accounts receivable are predominantly derived from sales denominated in USD or the Euro. We maintain an allowance for doubtful accounts based upon the expected collectibility of all trade receivables.

### Fair Value

Fair value is defined as the price at which an asset could be exchanged in a current transaction between knowledgeable, willing parties or the amount that would be paid to transfer a liability to a new obligor, not the amount that would be paid to settle the liability with the creditor. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Assets and liabilities recorded at fair value in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels, defined by ASC 820 “Fair Value Measurement” (ASC 820), and directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

*Level 1* — Inputs were unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

*Level 2* — Inputs (other than quoted prices included in Level 1) were either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument’s anticipated life.

*Level 3* — Inputs reflected management’s best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration was given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

The carrying values of cash and cash equivalents, accounts receivable and accounts payable approximated fair values due to the short-term maturities of these instruments. Since our long-term debt instruments may not be actively traded, the inputs used to measure the fair value of our long-term debt are based on current market rates for debt of similar risk and maturities and is classified as Level 2 in the fair value measurement hierarchy. As of December 31, 2023 and 2022, the fair value measurements of debt were \$2,626.2 million and \$2,517.7 million, respectively.

In addition to assets and liabilities that are recorded at fair value on a recurring basis, we record assets and liabilities at fair value on a nonrecurring basis as required by ASC 820. There were no assets measured at fair value on a nonrecurring basis as of December 31, 2023 and 2022.

#### Retirement-Related Benefits

We account for our defined benefit pension plans and non-pension postretirement benefit plans using actuarial models required by ASC 715 “Compensation—Retirement Benefits”. These models use an attribution approach that generally spreads the financial impact of changes to the plan and actuarial assumptions over the average remaining service lives of the employees in the plan. Changes in liability due to changes in actuarial assumptions such as discount rate, rate of compensation increases and mortality, as well as annual deviations between what was assumed and what was experienced by the plan are treated as actuarial gains or losses. The principle underlying the required attribution approach is that employees render service over their average remaining service lives on a relatively smooth basis and, therefore, the accounting for benefits earned under the pension or non-pension postretirement benefits plans should follow the same relatively smooth pattern. Substantially all domestic defined benefit pension plan participants are no longer accruing benefits; therefore, actuarial gains and losses are amortized based upon the remaining life expectancy of the inactive plan participants. For both the years ended December 31, 2023 and 2022, the average remaining life expectancy of the inactive participants in the domestic defined benefit pension plan were 17 years.

One of the key assumptions for the net periodic pension calculation is the expected long-term rate of return on plan assets, used to determine the “market-related value of assets.” The “market-related value of assets” recognizes differences between the plan’s actual return and expected return over a five-year period. The required use of an expected long-term rate of return on the market-related value of plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns and, therefore, result in a pattern of income and expense recognition that more closely matches the pattern of the services provided by the employees. As differences between actual and expected returns are recognized over five years, they subsequently generate gains and losses that are subject to amortization over the average remaining life expectancy of the inactive plan participants, as described in the preceding paragraph.

We use long-term historical actual return information, the mix of investments that comprise plan assets, and future estimates of long-term investment returns and inflation by reference to external sources to develop the expected long-term rate of return on plan assets as of December 31.

The discount rate assumptions used for pension and non-pension postretirement benefit plan accounting reflect the rates available on high-quality fixed-income debt instruments on December 31 of each year. The rate of compensation increase is based upon our long-term plans for such increases. For retiree medical plan accounting, we review external data and our own historical trends for healthcare costs to determine the healthcare cost trend rates.

For our defined benefit pension and other postretirement benefit plans, we measure service and interest costs by applying the specific spot rates along the yield curve to the plans’ estimated cash flows. We believe this approach provides a more precise measurement of service and interest costs by aligning the timing of the plans’ liability cash flows to the corresponding spot rates on the yield curve.

### Stock-Based Compensation

We measure the cost of employee services received in exchange for an award of equity instruments, such as stock options, performance shares and restricted stock, based on the grant-date fair value of the award. This cost is recognized over the period during which an employee is required to provide service in exchange for the award, the requisite service period (usually the vesting period). An initial measurement is made of the cost of employee services received in exchange for an award of liability instruments based on its current fair value and the value of that award is subsequently remeasured at each reporting date through the settlement date. Changes in fair value of liability awards during the requisite service period are recognized as compensation cost over that period. See Note 18 “Stock-based Compensation” for additional information.

### Share Repurchases

Under our share repurchase programs, we may pursue various share repurchase strategies, which include open market transactions or through privately negotiated transactions, including under an accelerated share repurchase (ASR) agreement, or by other means, including through the use of trading plans intended to qualify under Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Under an ASR agreement, which is typically with a third-party financial institution to repurchase shares of Olin’s common stock, Olin pays a specified amount to the financial institution and receives an initial delivery of shares. This initial delivery of shares represents the minimum number of shares that Olin may receive under the agreement. Upon settlement of the ASR agreement, the financial institution delivers additional shares, with the final number of shares delivered determined with reference to the volume weighted-average price of Olin’s common stock over the term of the agreement, less an agreed-upon discount. The transactions are accounted for as liability or equity transactions and also as share retirements, similar to our other share repurchase activity, when the shares are received, at which time there is an immediate reduction in the weighted-average common shares calculation for basic and diluted earnings per share.

The Inflation Reduction Act (IRA) was enacted in the United States on August 16, 2022. The IRA imposes a 1% excise tax on the fair market value of stock repurchases made by covered corporations after December 31, 2022. The total taxable value of shares repurchased is reduced by the fair market value of any newly issued shares during the taxable year. As a result, we record a tax liability as a cost associated with our share repurchases.

## **NOTE 3. RECENT ACCOUNTING PRONOUNCEMENTS**

In December 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which includes amendments that further enhance income tax disclosures, primarily through standardization and disaggregation of rate reconciliation categories and income taxes paid by jurisdiction. The amendments are effective for the Company’s annual periods beginning after December 15, 2024, with the option to early adopt at any time before the effective date. ASU 2023-09 allows for adoption on a prospective or retrospective basis. We are currently evaluating the impact of the standard on our consolidated financial statements and disclosures.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280) Improvements to Reportable Segment Disclosures*. ASU 2023-07 will improve reportable segment disclosure requirements, primarily through enhanced segment expense disclosures on an interim and annual basis. The update is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with the option to early adopt at any time before the effective date. ASU 2023-07 requires adoption on a retrospective basis. We are currently evaluating the impact of the standard on our consolidated financial statements and disclosures.

In July 2023, the SEC adopted the final rule under SEC Release No. 33-11216, *Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure*, requiring disclosure of material cybersecurity incidents on Form 8-K and periodic disclosure of a registrant’s cybersecurity risk management, strategy and governance in annual reports. We adopted the Regulation S-K Item 6 disclosure requirements during the fourth quarter of 2023 and the Form 8-K incident disclosure requirements went into effect for us on December 18, 2023. The adoption of this final rule did not have a material impact on our consolidated financial statements and the additional disclosure requirements were included within Item 1C. *Cybersecurity*.

## **NOTE 4. ACQUISITIONS**

On October 1, 2023, Olin acquired the assets of White Flyer Targets, LLC (“White Flyer”) from Reagent Diversified Holdings, Inc. for \$63.9 million, subject to normal post-closing adjustments. The acquisition was financed with cash on hand. White Flyer designs, manufactures and sells recreational trap, skeet, international and sporting clay targets and has been included in Olin’s Winchester segment. We recorded the preliminary aggregate excess purchase price over identifiable net tangible and intangible assets acquired and liabilities assumed, which included a preliminary allocation of \$2.7 million of goodwill allocated to our Winchester segment and \$4.5 million of intangible assets subject to amortization. The preliminary total assets acquired, excluding goodwill and intangibles, and liabilities assumed amounted to \$66.9 million and \$10.2 million, respectively. The acquisition is not material, and therefore, supplemental pro forma financial information is not provided.



## NOTE 5. RESTRUCTURING CHARGES

As a result of weak global resin demand and higher cost structures within the European region, we began a review of our global Epoxy asset footprint to optimize the most productive and cost-effective assets to support our strategic operating model. As part of this review, we announced operational cessations in the fourth quarter of 2022 and the first half of 2023 (collectively, Epoxy Optimization Plan).

On June 20, 2023, we announced we had made the decision to cease all remaining operations at our Gumi, South Korea facility, reduce epoxy resin capacity at our Freeport, TX facility, and reduce our sales and support staffing across Asia. These actions were substantially completed by December 31, 2023. On March 21, 2023, we announced we had made the decision to cease operations at our cumene facility in Terneuzen, Netherlands and solid epoxy resin production at our facilities in Gumi, South Korea and Guaruja, Brazil. The closures were completed in the first quarter 2023. During the fourth quarter of 2022, we committed to and completed a plan to close down one of our bisphenol production lines at our Stade, Germany site. For the year ended December 31, 2023 and 2022, we recorded pretax restructuring charges of \$73.4 million and \$8.0 million, respectively, for the write-off of equipment and facility costs, employee severance and related benefit costs, contract termination costs and facility exit costs related to these actions. We expect to incur additional restructuring charges through 2025 of approximately \$25 million related to these actions.

During 2021, we announced that we had made the decision to permanently close our diaphragm-grade chlor alkali capacity, representing 400,000 tons, at our McIntosh, AL facility (McIntosh Plan). The closure was completed during the third quarter of 2022. For the years ended December 31, 2023, 2022 and 2021, we recorded pretax restructuring charges of \$4.7 million, \$8.3 million and \$5.6 million, respectively, for write-off of equipment and facility costs, lease and other contract termination costs and for facility exit costs related to this action. We expect to incur additional restructuring charges through 2027 of approximately \$20 million related to these actions.

Olin committed to a productivity initiative to align the organization with our strategic operating model and improve efficiencies (collectively, Productivity Plan). These actions and related activities were completed during the second quarter of 2021. For the year ended December 31, 2021, we recorded pretax restructuring charges of \$10.3 million for employee severance and related benefit costs related to these actions. We do not expect to incur additional restructuring charges related to these actions.

On January 18, 2021, we announced we had made the decision to permanently close our trichloroethylene and anhydrous hydrogen chloride liquefaction facilities in Freeport, TX (collectively, Freeport 2021 Plan), which were completed in the fourth quarter of 2021. For the years ended December 31, 2023, 2022 and 2021, we recorded pretax restructuring charges of \$4.0 million, \$2.6 million and \$6.5 million, respectively, for facility exit costs related to these actions. We expect to incur additional restructuring charges through 2025 of approximately \$10 million related to these actions.

On December 11, 2019, we announced that we had made the decision to permanently close a chlor alkali plant with a capacity of 230,000 tons and our vinylidene chloride (VDC) production facility, both in Freeport, TX (collectively, Freeport 2019 Plan). The VDC facility and related chlor alkali plant were closed during the fourth quarter of 2020 and second quarter of 2021, respectively. For the years ended December 31, 2023, 2022 and 2021, we recorded pretax restructuring charges of \$7.5 million, \$6.0 million and \$3.9 million, respectively, for facility exit costs related to these actions. We expect to incur additional restructuring charges through 2026 of approximately \$15 million related to these actions.

On March 21, 2016, we announced that we had made the decision to close a combined total of 433,000 tons of chlor alkali capacity across three separate locations (collectively, Chlor Alkali 2016 Plan). For the years ended December 31, 2022 and 2021, we recorded pretax restructuring charges of \$0.4 million and \$1.6 million, respectively, for the lease and other contract termination costs and facility exit costs related to these actions. We do not expect to incur additional restructuring charges related to these capacity reductions.

The following table summarizes the 2023, 2022 and 2021 activities by major component of these restructuring actions and the remaining balances of accrued restructuring costs as of December 31, 2023, 2022 and 2021:

	<i>Employee Severance and Related Benefit Costs</i>	<i>Lease and Other Contract Termination Costs</i>	<i>Facility Exit Costs</i>	<i>Write-off of Equipment and Facility</i>	<i>Total</i>
	(\$ in millions)				
Balance at January 1, 2021	\$ 1.8	\$ 1.7	\$ —	\$ —	\$ 3.5
Restructuring charges	10.3	6.0	11.6	—	27.9
Amounts utilized	(5.2)	(2.3)	(11.6)	—	(19.1)
Balance at December 31, 2021	6.9	5.4	—	—	12.3
Restructuring charges	7.4	1.1	13.5	3.3	25.3
Amounts utilized	(4.9)	(2.3)	(13.5)	(3.3)	(24.0)
Balance at December 31, 2022	9.4	4.2	—	—	13.6
Restructuring charges	8.4	29.1	34.4	17.7	89.6
Amounts utilized	(7.0)	(16.6)	(34.4)	(17.7)	(75.7)
Balance at December 31, 2023	<u>\$ 10.8</u>	<u>\$ 16.7</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 27.5</u>

The following table summarizes the cumulative restructuring charges of these restructuring actions by major component through December 31, 2023:

	<i>Chlor Alkali Products and Vinyls</i>				<i>Epoxy</i>	<i>Corporate/ Other</i>	
	<i>McIntosh Plan</i>	<i>Freeport 2021 Plan</i>	<i>Freeport 2019 Plan</i>	<i>Chlor Alkali 2016 Plan</i>	<i>Epoxy Optimization Plan</i>	<i>Productivity Plan</i>	<i>Total</i>
	(\$ in millions)						
Write-off of equipment and facility	\$ 2.7	\$ —	\$ 58.9	\$ 78.1	\$ 18.3	\$ —	\$ 158.0
Employee severance and related benefit costs	—	—	2.1	6.7	15.8	10.3	34.9
Facility exit costs	9.5	13.1	19.1	53.2	18.2	—	113.1
Employee relocation costs	—	—	—	1.7	—	—	1.7
Lease and other contract termination costs	6.4	—	—	43.0	29.1	—	78.5
Total cumulative restructuring charges	<u>\$ 18.6</u>	<u>\$ 13.1</u>	<u>\$ 80.1</u>	<u>\$ 182.7</u>	<u>\$ 81.4</u>	<u>\$ 10.3</u>	<u>\$ 386.2</u>

As of December 31, 2023, we have incurred cash expenditures of \$200.7 million and non-cash charges of \$158.0 million related to these restructuring actions. The remaining balance of \$27.5 million is expected to be paid out through 2028.

#### NOTE 6. EARNINGS PER SHARE

Basic and diluted net income (loss) per share are computed by dividing net income (loss) by the weighted-average number of common shares outstanding. Diluted net income (loss) per share reflects the dilutive effect of stock-based compensation.

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
	<i>(In millions, except per share data)</i>		
<b><i>Computation of Net Income per Share</i></b>			
Net income	\$ 452.0	\$ 1,326.9	\$ 1,296.7
Net loss attributable to noncontrolling interests	(8.2)	—	—
Net income attributable to Olin Corporation	460.2	1,326.9	1,296.7
Basic shares	125.9	144.9	159.1
Basic net income attributable to Olin Corporation per share	\$ 3.66	\$ 9.16	\$ 8.15
Diluted shares:			
Basic shares	125.9	144.9	159.1
Stock-based compensation	2.9	3.6	3.9
Diluted shares	128.8	148.5	163.0
Diluted net income attributable to Olin Corporation per share	\$ 3.57	\$ 8.94	\$ 7.96

The computation of dilutive shares from stock-based compensation does not include 1.2 million, 0.8 million and 0.1 million shares in 2023, 2022 and 2021, respectively, as their effect would have been anti-dilutive.

#### **NOTE 7. ACCOUNTS RECEIVABLES**

We maintain a \$425.0 million Receivables Financing Agreement (Receivables Financing Agreement) that is scheduled to mature on October 14, 2025. Under the Receivables Financing Agreement, our eligible trade receivables are used for collateralized borrowings and continue to be serviced by us. In addition, the Receivables Financing Agreement incorporates the net leverage ratio covenant that is contained in the \$1,550.0 million Senior Credit Facility. As of December 31, 2023 and 2022, we had \$328.5 million and \$300.0 million drawn under the agreement. As of December 31, 2023, \$456.6 million of our trade receivables were pledged as collateral and we had \$33.3 million of additional borrowing capacity under the Receivables Financing Agreement, which was limited by our borrowing base.

Olin also has trade accounts receivable factoring arrangements (AR Facilities) and pursuant to the terms of the AR Facilities, certain of our domestic subsidiaries may sell their accounts receivable up to a maximum of \$175.5 million and certain of our foreign subsidiaries may sell their accounts receivable up to a maximum of €22.0 million. We will continue to service the outstanding accounts sold. These receivables qualify for sales treatment under ASC 860 “Transfers and Servicing” and, accordingly, the proceeds are included in net cash provided by operating activities in the consolidated statements of cash flows. The following table summarizes the AR Facilities activity:

<b><i>AR Facilities</i></b>	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
	<i>(\$ in millions)</i>	
Beginning balance	\$ 111.8	\$ 83.3
Gross receivables sold	899.0	1,049.7
Payments received from customers on sold accounts	(947.5)	(1,021.2)
Ending balance	\$ 63.3	\$ 111.8

The factoring discount paid under the AR Facilities is recorded as interest expense on the consolidated statements of operations. The factoring discount for the years ended December 31, 2023 and 2022 was \$4.7 million and \$3.1 million, respectively. The agreements are without recourse, and therefore, no recourse liability has been recorded as of December 31, 2023.

Our consolidated balance sheets included an allowance for doubtful accounts receivables of \$13.1 million and \$12.6 million and other receivables of \$85.3 million and \$71.6 million at December 31, 2023 and 2022, respectively, which were included in receivables, net.

## NOTE 8. INVENTORIES

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><u>Inventories</u></b>	<i>(\$ in millions)</i>	
Supplies	\$ 160.3	\$ 137.6
Raw materials	171.1	201.2
Work in process	153.5	199.6
Finished goods	507.6	559.3
Inventories excluding LIFO reserve	992.5	1,097.7
LIFO reserve	(133.7)	(155.8)
Inventories, net	<u>\$ 858.8</u>	<u>\$ 941.9</u>

Inventories valued using the LIFO method comprised 56% and 59% of the total inventories at December 31, 2023 and 2022, respectively. The replacement cost of our inventories would have been approximately \$133.7 million and \$155.8 million higher than that reported at December 31, 2023 and 2022, respectively.

## NOTE 9. PROPERTY, PLANT AND EQUIPMENT

	<i>Useful Lives</i>	<i>December 31,</i>	
		<i>2023</i>	<i>2022</i>
<b><u>Property Plant and Equipment</u></b>		<i>(\$ in millions)</i>	
Land and improvements to land	10-20 Years <sup>(1)</sup>	\$ 283.1	\$ 283.5
Buildings and building equipment	10-30 Years	442.7	412.0
Machinery and equipment	3-20 Years	6,410.5	6,181.1
Leasehold improvements	3-11 Years	8.5	8.5
Construction in progress		201.2	202.1
Property, plant and equipment		7,346.0	7,087.2
Accumulated depreciation		(4,826.4)	(4,413.1)
Property, plant and equipment, net		<u>\$ 2,519.6</u>	<u>\$ 2,674.1</u>

<sup>(1)</sup> Useful life is exclusive to land improvements.

The weighted-average useful life of machinery and equipment at December 31, 2023, was 11 years. Depreciation expense was \$421.8 million, \$469.9 million and \$443.3 million for 2023, 2022 and 2021, respectively. Interest capitalized was \$2.8 million, \$3.1 million and \$3.2 million for 2023, 2022 and 2021, respectively.

The consolidated statements of cash flows for the years ended December 31, 2023, 2022 and 2021, included an increase (decrease) of \$5.3 million, \$(4.2) million and \$6.4 million, respectively, to capital expenditures, with the corresponding change to accounts payable and accrued liabilities, related to purchases of property, plant and equipment included in accounts payable and accrued liabilities at December 31, 2023, 2022 and 2021.

## NOTE 10. OTHER ASSETS

Included in other assets were the following:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><u>Other Assets</u></b>	<i>(\$ in millions)</i>	
Supply contracts	\$ 1,061.8	\$ 1,048.0
Other	56.7	54.5
Other assets	<u>\$ 1,118.5</u>	<u>\$ 1,102.5</u>

For the year ended December 31, 2023 and 2022, payments of \$64.5 million and \$37.7 million, respectively, were made under other long-term supply contracts for energy modernization projects on the U.S. Gulf Coast. The weighted-average useful life of long-term supply contracts at December 31, 2023, was 20 years. For the years ended December 31, 2023, 2022 and 2021, amortization expense of \$71.2 million, \$70.4 million and \$69.4 million, respectively, was recognized within cost of goods sold related to our supply contracts and is reflected in depreciation and amortization on the consolidated statements of cash flows.

We estimate that amortization expense will be approximately \$71.4 million in 2024, 2025 and 2026, \$69.8 million in 2027 and \$66.5 million in 2028 related to our long-term supply contracts. The long-term supply contracts are monitored for impairment each reporting period.

#### NOTE 11. GOODWILL AND INTANGIBLE ASSETS

Changes in the carrying value of goodwill were as follows:

	<i>Chlor Alkali Products and Vinyls</i>	<i>Epoxy</i>	<i>Winchester</i>	<i>Total</i>
<b><u>Goodwill</u></b>	<i>(\$ in millions)</i>			
Balance at January 1, 2022 <sup>(1)</sup>	\$ 1,275.6	\$ 145.0	\$ —	\$ 1,420.6
Foreign currency translation adjustment	0.2	0.1	—	0.3
Balance at December 31, 2022 <sup>(1)</sup>	1,275.8	145.1	—	1,420.9
Goodwill acquired during the year	—	—	2.7	2.7
Foreign currency translation adjustment	0.3	0.1	—	0.4
Balance at December 31, 2023 <sup>(1)</sup>	<u>\$ 1,276.1</u>	<u>\$ 145.2</u>	<u>\$ 2.7</u>	<u>\$ 1,424.0</u>

<sup>(1)</sup> Includes cumulative goodwill impairment of \$557.6 million and \$142.2 million in Chlor Alkali Products and Vinyls and Epoxy, respectively.

Intangible assets consisted of the following:

		<i>December 31,</i>					
		<i>2023</i>			<i>2022</i>		
<i>Useful Lives</i>		<i>Gross Amount</i>	<i>Accumulated Amortization</i>	<i>Net</i>	<i>Gross Amount</i>	<i>Accumulated Amortization</i>	<i>Net</i>
<b><u>Intangible Assets</u></b>		<i>(\$ in millions)</i>					
Customers, customer contracts and relationships	10-15 Years	\$ 671.7	\$ (437.5)	\$ 234.2	\$ 669.1	\$ (401.2)	\$ 267.9
Trade names	7 Years	3.6	(0.2)	3.4	—	—	—
Acquired technology	4-7 Years	94.4	(90.4)	4.0	93.1	(88.3)	4.8
Other	10 Years	4.9	(0.7)	4.2	1.8	(0.7)	1.1
Total intangible assets		<u>\$ 774.6</u>	<u>\$ (528.8)</u>	<u>\$ 245.8</u>	<u>\$ 764.0</u>	<u>\$ (490.2)</u>	<u>\$ 273.8</u>

Amortization expense relating to intangible assets was \$37.0 million, \$55.3 million and \$63.1 million in 2023, 2022 and 2021, respectively.

Estimated amortization expense relating to intangible assets for the subsequent five-year periods are as follows:

<b><u>Estimated Amortization Expense</u></b>	<i>(\$ in millions)</i>
2024	\$ 37.6
2025	37.2
2026	35.5
2027	35.4
2028	35.2

During the fourth quarter of 2023, we performed our qualitative assessment of our intangible assets. Based on our qualitative impairment assessment, it is more likely than not that the fair value of our intangible assets is greater than the carrying amount as of December 31, 2023. No impairment on our intangible assets was recorded in 2023, 2022 or 2021.

## NOTE 12. DEBT

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Financing Obligations</i></b>	<i>(\$ in millions)</i>	
Variable-rate Term Loan Facility, due 2027 (6.955% and 5.923% at December 31, 2023 and 2022, respectively)	\$ 341.3	\$ 350.0
Variable-rate Senior Revolving Credit Facility, due 2027 (6.955% at December 31, 2023)	68.0	—
Variable-rate Recovery Zone bonds, due 2024-2035 (6.420% and 5.198% at December 31, 2023 and 2022, respectively)	103.0	103.0
Variable-rate Go Zone bonds, due 2024 (6.420% and 5.198% at December 31, 2023 and 2022, respectively)	50.0	50.0
Variable-rate industrial development and environmental improvement obligations, due 2025 (6.45% and 4.55% at December 31, 2023 and 2022, respectively)	2.9	2.9
9.50% senior notes, due 2025	108.6	108.6
5.625% senior notes, due 2029	669.3	669.3
5.125% senior notes, due 2027	500.0	500.0
5.00% senior notes, due 2030	515.3	515.3
Receivables Financing Agreement (See Note 7)	328.5	300.0
Finance lease obligations	—	1.9
Other:		
Deferred debt issuance costs	(16.6)	(20.1)
Unamortized bond original issue discount	(0.2)	(0.2)
<b>Total debt</b>	<b>2,670.1</b>	<b>2,580.7</b>
Amounts due within one year	78.8	9.7
<b>Total long-term debt</b>	<b>\$ 2,591.3</b>	<b>\$ 2,571.0</b>

### Senior Credit Facility

On October 11, 2022, we entered into a \$1,550.0 million senior credit facility (Senior Credit Facility) that replaced our 2021 Senior Credit Facility. The Senior Credit Facility includes a senior term loan facility with aggregate commitments of \$350.0 million (Term Loan Facility) and a senior revolving credit facility with aggregate commitments of \$1,200.0 million (Senior Revolving Credit Facility). The Term Loan Facility was fully drawn on the closing date with the proceeds of the Term Loan Facility used to refinance the loans and commitments outstanding under the 2021 Senior Credit Facility. The Term Loan Facility requires principal amortization payments which began on March 31, 2023, at a rate of 0.625% per quarter through the end of 2024, increasing to 1.250% per quarter thereafter until maturity. The maturity date for the Senior Credit Facility is October 11, 2027.

The Senior Revolving Credit Facility includes a \$100.0 million letter of credit subfacility. At December 31, 2023, we had \$1,131.6 million available under our \$1,200.0 million Senior Revolving Credit Facility because we had \$68.0 million borrowed under the facility and issued \$0.4 million of letters of credit.

We were in compliance with all covenants and restrictions under all our outstanding credit agreements as of December 31, 2023, and no event of default had occurred that would permit the lenders under our outstanding credit agreements to accelerate the debt if not cured. In the future, our ability to generate sufficient operating cash flows, among other factors, will determine the amounts available to be borrowed under these facilities. As a result of our restrictive covenant related to the net leverage ratio, the maximum additional borrowings available to us could be limited in the future. The limitation, if an amendment or waiver from our lenders is not obtained, could restrict our ability to borrow the maximum amounts available under the Senior Revolving Credit Facility and the Receivables Financing Agreement. As of December 31, 2023, there were no covenants or other restrictions that limited our ability to borrow.

## Senior Notes and Other Financing

During 2023 and 2022, activity of our outstanding debt included:

	<b><i>Long-term Debt Borrowings (Repayments) for the Year Ended December 31,</i></b>	
	<b>2023</b>	<b>2022</b>
	<i>(\$ in millions)</i>	
<b><u>Debt Instruments</u></b>		
<b>Borrowings</b>		
Senior Revolving Credit Facility	\$ 375.0	\$ 320.0
Receivables Financing Agreement	332.7	95.0
Total borrowings	707.7	415.0
<b>Repayments</b>		
5.50% senior notes, due 2022 (2022 Notes)	—	(200.0)
Senior Revolving Credit Facility	(307.0)	(320.0)
Term Loan Facility	(8.7)	—
Receivables Financing Agreement	(304.2)	(95.0)
Finance leases	(1.9)	(1.1)
Total repayments	(621.8)	(616.1)
Long-term debt borrowings (repayments), net	\$ 85.9	\$ (201.1)

We incurred a loss on debt extinguishment of \$152.2 million during the year ended December 31, 2021, which is included as interest expense in the consolidated statements of operations. The loss includes the payment of bond redemption premiums of \$137.7 million for the year ended December 31, 2021, as well as the write-off of deferred debt issuance costs, write-off of bond original issue discount and recognition of deferred fair value interest rate swap losses of \$14.5 million for the year ended December 31, 2021, associated with the optional prepayment of existing debt. The cash payments related to the early redemption premiums for the debt extinguishments are classified as cash outflows from financing activities on the consolidated statements of cash flows for year ended December 31, 2021.

During the year ended December 31, 2022, Olin redeemed the full aggregate principal amount \$200.0 million of the outstanding 2022 Notes which became due utilizing cash on hand.

For the years ended December 31, 2022 and 2021, we paid debt issuance costs of \$4.4 million and \$3.9 million, respectively, related to financing transactions.

At December 31, 2023, we had \$120.7 million in letters of credit outstanding, of which \$0.4 million were issued under our Senior Revolving Credit Facility. The letters of credit are used to support certain long-term debt, workers compensation insurance policies, plant closure and post-closure obligations, international payment obligations and international pension funding requirements.

Annual maturities of long-term debt are as follows:

<b><u>Expected Annual Maturities</u></b>	<b><i>(\$ in millions)</i></b>
2024	\$ 78.8
2025	457.5
2026	17.5
2027	865.5
2028	—
Thereafter	1,267.6
Total	\$ 2,686.9

## **NOTE 13. PENSION PLANS**

We sponsor domestic and foreign defined benefit pension plans for eligible employees and retirees. Most of our domestic employees participate in defined contribution plans. However, a portion of our bargaining hourly employees continue to participate in our domestic qualified defined benefit pension plans under a flat-benefit formula. Our funding policy for the

qualified defined benefit pension plans is consistent with the requirements of federal laws and regulations. Our foreign subsidiaries maintain pension and other benefit plans, which are consistent with local statutory practices.

Our domestic qualified defined benefit pension plan provides that if, within three years following a change of control of Olin, any corporate action is taken or filing made in contemplation of, among other things, a plan termination or merger or other transfer of assets or liabilities of the plan, and such termination, merger or transfer thereafter takes place, plan benefits would automatically be increased for affected participants (and retired participants) to absorb any plan surplus (subject to applicable collective bargaining requirements).

Based on our plan assumptions and estimates, we will not be required to make any cash contributions to the domestic qualified defined benefit pension plan at least through 2024.

We have international qualified defined benefit pension plans to which we made cash contributions of \$1.0 million, \$1.3 million and \$1.1 million in 2023, 2022 and 2021, respectively, and we anticipate less than \$5 million of cash contributions to international qualified defined benefit pension plans in 2024.

#### Pension Obligations and Funded Status

Changes in the benefit obligation and plan assets were as follows:

	<b>December 31, 2023</b>			<b>December 31, 2022</b>		
	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>
<b><u>Change in Benefit Obligation</u></b>	<i>(\$ in millions)</i>					
Benefit obligation - beginning of year	\$ 1,868.4	\$ 251.1	\$ 2,119.5	\$ 2,506.0	\$ 382.3	\$ 2,888.3
Service cost	0.3	5.4	5.7	0.5	7.9	8.4
Interest cost	96.3	9.1	105.4	57.3	4.1	61.4
Actuarial loss (gain)	47.1	14.9	62.0	(556.1)	(113.7)	(669.8)
Benefits paid	(141.0)	(5.9)	(146.9)	(139.3)	(6.1)	(145.4)
Plan participant's contributions	—	0.2	0.2	—	0.3	0.3
Settlements	—	(7.5)	(7.5)	—	—	—
Foreign currency translation adjustments	—	9.8	9.8	—	(23.7)	(23.7)
Benefit obligation - end of year	<u>\$ 1,871.1</u>	<u>\$ 277.1</u>	<u>\$ 2,148.2</u>	<u>\$ 1,868.4</u>	<u>\$ 251.1</u>	<u>\$ 2,119.5</u>

	<b>December 31, 2023</b>			<b>December 31, 2022</b>		
	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>
<b><u>Change in Plan Assets</u></b>	<i>(\$ in millions)</i>					
Fair value of plan assets - beginning of year	\$ 1,824.9	\$ 63.3	\$ 1,888.2	\$ 2,429.6	\$ 76.1	\$ 2,505.7
Actual return on plans' assets	173.1	4.0	177.1	(465.6)	(7.6)	(473.2)
Employer contributions	0.2	1.0	1.2	0.2	1.4	1.6
Benefits paid	(141.0)	(2.8)	(143.8)	(139.3)	(3.1)	(142.4)
Settlements	—	(7.1)	(7.1)	—	—	—
Foreign currency translation adjustments	—	2.4	2.4	—	(3.5)	(3.5)
Fair value of plan assets - end of year	<u>\$ 1,857.2</u>	<u>\$ 60.8</u>	<u>\$ 1,918.0</u>	<u>\$ 1,824.9</u>	<u>\$ 63.3</u>	<u>\$ 1,888.2</u>

	<b>December 31, 2023</b>			<b>December 31, 2022</b>		
	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>	<b>U.S.</b>	<b>Foreign</b>	<b>Total</b>
<b><u>Funded Status</u></b>	<i>(\$ in millions)</i>					
Qualified plans	\$ (11.9)	\$ (214.6)	\$ (226.5)	\$ (41.4)	\$ (185.7)	\$ (227.1)
Non-qualified plans	(2.0)	(1.7)	(3.7)	(2.1)	(2.1)	(4.2)
Total funded status	<u>\$ (13.9)</u>	<u>\$ (216.3)</u>	<u>\$ (230.2)</u>	<u>\$ (43.5)</u>	<u>\$ (187.8)</u>	<u>\$ (231.3)</u>

We recorded a \$11.9 million after-tax charge (\$16.4 million pretax) to shareholders' equity as of December 31, 2023, for our pension plans. This charge primarily reflected a 30-basis point decrease in the domestic pension plans' discount rate and a 50-basis point decrease in the international defined benefit pension plans' discount rate, partially offset by a favorable performance on plan assets during 2023. In 2022, we recorded a \$37.2 million after-tax benefit (\$59.9 million pretax) to shareholders' equity as of December 31, 2022, for our pension plans. This benefit primarily reflected a 260-basis point increase



in the domestic pension plans' discount rate and a 230-basis point increase in the international defined benefit pension plans' discount rate, partially offset by unfavorable performance on plan assets during 2022.

The \$62.0 million actuarial loss for 2023 was primarily due to a 30-basis point decrease in the domestic pension plans' discount rate and a 50-basis point decrease in the international defined benefit pension plans' discount rate. The \$669.8 million actuarial gain for 2022 was primarily due to a 260-basis point increase in the domestic pension plans' discount rate and a 230-basis point increase in the international defined benefit pension plans' discount rate.

Amounts recognized in the consolidated balance sheets consisted of:

	<b>December 31, 2023</b>			<b>December 31, 2022</b>		
	<b><u>U.S.</u></b>	<b><u>Foreign</u></b>	<b><u>Total</u></b>	<b><u>U.S.</u></b>	<b><u>Foreign</u></b>	<b><u>Total</u></b>
	<i>(\$ in millions)</i>					
Prepaid benefit cost in noncurrent assets	\$ —	\$ 1.8	\$ 1.8	\$ —	\$ 3.9	\$ 3.9
Accrued benefit in current liabilities	(0.6)	(5.6)	(6.2)	(0.5)	(0.2)	(0.7)
Accrued benefit in noncurrent liabilities	(13.3)	(212.5)	(225.8)	(43.0)	(191.5)	(234.5)
Accumulated other comprehensive loss	558.3	(5.4)	552.9	558.1	(21.4)	536.7
Net balance sheet impact	<u>\$ 544.4</u>	<u>\$ (221.7)</u>	<u>\$ 322.7</u>	<u>\$ 514.6</u>	<u>\$ (209.2)</u>	<u>\$ 305.4</u>

At December 31, 2023 and 2022, the benefit obligation of non-qualified pension plans was \$3.7 million and \$4.2 million, respectively, and was included in the above pension benefit obligation. There were no plan assets for these non-qualified pension plans.

At December 31, 2023, future benefit payments for qualified and non-qualified plans were as follows:

	<i>Non-qualified Plans</i>		<i>Qualified Plans</i>	
<i><u>Expected Benefit Payments</u></i>	<i>(\$ in millions)</i>			
2024	\$	0.6	\$	152.2
2025		0.4		143.6
2026		0.4		137.8
2027		0.3		132.3
2028		0.2		126.0

	<i>December 31,</i>	
	<i><u>2023</u></i>	<i><u>2022</u></i>
	<i>(\$ in millions)</i>	
Projected benefit obligation	\$ 2,148.2	\$ 2,119.5
Accumulated benefit obligation	2,131.7	2,107.5
Fair value of plans' assets	1,918.0	1,888.2

<i><b>Components of Net Periodic Benefit Income</b></i>	<i><b>Years Ended December 31,</b></i>		
	<i><b>2023</b></i>	<i><b>2022</b></i>	<i><b>2021</b></i>
	<i><b>(\$ in millions)</b></i>		
Service cost	\$ 5.7	\$ 8.4	\$ 11.4
Interest cost	105.4	61.4	51.3
Expected return on plans' assets	(131.4)	(136.7)	(142.3)
Amortization of prior service cost	(0.4)	(0.7)	(0.6)
Recognized actuarial loss	—	34.6	52.7
Net periodic benefit income	<u>\$ (20.7)</u>	<u>\$ (33.0)</u>	<u>\$ (27.5)</u>

<i><b>Included in Pretax Other Comprehensive Income (Loss)</b></i>	<i><b>Years Ended December 31,</b></i>		
	<i><b>2023</b></i>	<i><b>2022</b></i>	<i><b>2021</b></i>
	<i><b>(\$ in millions)</b></i>		
Liability adjustment	\$ 16.4	\$ (59.9)	\$ (245.9)
Amortization of prior service costs and actuarial losses	0.4	(33.9)	(52.1)

The service cost component of net periodic benefit (income) cost related to the employees of the operating segments are allocated to the operating segments based on their respective estimated census data.

#### *Pension Plan Assumptions*

Certain actuarial assumptions, such as discount rate and long-term rate of return on plan assets, have a significant effect on the amounts reported for net periodic benefit cost and accrued benefit obligation amounts. We use a measurement date of December 31 for our pension plans.

<i><b>Weighted-average Assumptions</b></i>	<i><b>U.S. Pension Benefits</b></i>			<i><b>Foreign Pension Benefits</b></i>		
	<i><b>2023</b></i>	<i><b>2022</b></i>	<i><b>2021</b></i>	<i><b>2023</b></i>	<i><b>2022</b></i>	<i><b>2021</b></i>
Discount rate—periodic benefit cost	5.50 % <sup>(1)</sup>	2.90 %	2.40 %	3.70 %	1.40 %	0.80 %
Expected return on plans' assets	6.75 %	6.75 %	7.25 %	4.40 %	3.80 %	4.20 %
Rate of compensation increase	3.00 %	3.00 %	3.00 %	3.40 %	3.00 %	3.00 %
Discount rate—benefit obligation	5.20 %	5.50 %	2.90 %	3.20 %	3.70 %	1.40 %

<sup>(1)</sup> The discount rate—periodic benefit cost for our domestic qualified pension plan is comprised of the discount rate used to determine interest costs of 5.3% and the discount rate used to determine service costs of 5.5%.

The discount rate is based on a hypothetical yield curve represented by a series of annualized individual zero-coupon bond spot rates for maturities ranging from one-half to thirty years. The bonds used in the yield curve must have a rating of AA or better per Standard & Poor's, be non-callable, and have at least \$250 million par outstanding. The yield curve is then applied to the projected benefit payments from the plan. Based on these bonds and the projected benefit payment streams, the single rate that produces the same yield as the matching bond portfolio is used as the discount rate.

The long-term expected rate of return on plan assets represents an estimate of the long-term rate of returns on the investment portfolio consisting of equities, fixed income and alternative investments. We use long-term historical actual return information, the allocation mix of investments that comprise plan assets and forecast estimates of long-term investment returns, including inflation rates, by reference to external sources. The historical rates of return on plan assets have been 6.7% for the last 5 years, 6.7% for the last 10 years and 7.8% for the last 15 years. The following rates of return by asset class were considered in setting the long-term rate of return assumption:

<i><b>Asset Class</b></i>	<i><b>Rate of Return</b></i>		
U.S. equities	7%	to	11%
Non-U.S. equities	8%	to	12%
Fixed income/cash	3%	to	7%
Alternative investments	5%	to	15%

## Plan Assets

Our pension plan asset allocations at December 31, 2023 and 2022 by asset class were as follows:

<u>Asset Class</u>	<u>Percentage of Plan Assets</u>	
	<u>2023</u>	<u>2022</u>
U.S. equities	3 %	4 %
Non-U.S. equities	4 %	11 %
Fixed income/cash	50 %	38 %
Alternative investments	43 %	47 %

The Alternative Investments asset class includes hedge funds, real estate and private equity investments. The Alternative Investments class is intended to help diversify risk and increase returns by utilizing a broader group of assets.

A master trust was established by our pension plan to accumulate funds required to meet benefit payments of our plan and is administered solely in the interest of our plan's participants and their beneficiaries. The master trust's investment horizon is long term. Its assets are managed by professional investment managers or invested in professionally managed investment vehicles.

Our pension plan maintains a portfolio of assets designed to achieve an appropriate risk adjusted return. The portfolio of assets is also structured to manage risk by diversifying assets across asset classes whose return patterns are not highly correlated, investing in passively and actively managed strategies and in value and growth styles, and by periodic rebalancing of asset classes, strategies and investment styles to objectively set targets.

As of December 31, 2023, the following target allocation and ranges have been set for each asset class:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Target Range</u>
U.S. equities <sup>(1)</sup>	15 %	5-25
Non-U.S. equities <sup>(1)</sup>	10 %	0-30
Fixed income/cash <sup>(1)</sup>	75 %	30-95
Alternative investments	— %	0-30

<sup>(1)</sup> The target allocation for these asset classes includes alternative investments, primarily hedge funds, based on the underlying investments in each hedge fund.

Determining which hierarchical level an asset or liability falls within requires significant judgment. The following table summarizes our domestic and foreign defined benefit pension plans assets measured at fair value as of December 31, 2023:

<u>Asset Class</u>	<u>Investments Measured at Net Asset Value</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Significant Unobservable Inputs (Level 3)</u>	<u>Total</u>
<b>Equity Securities</b>					
(\$ in millions)					
U.S. equities	\$ 12.2	\$ 36.6	\$ —	\$ —	\$ 48.8
Non-U.S. equities	85.4	0.1	0.5	—	86.0
<b>Fixed Income/Cash</b>					
Cash	—	227.7	—	—	227.7
Government treasuries	—	—	244.9	—	244.9
Corporate debt instruments	286.3	—	0.5	—	286.8
Asset-backed securities	192.7	—	14.8	—	207.5
<b>Alternative Investments</b>					
Hedge fund of funds	599.5	—	—	—	599.5
Real estate funds	20.1	—	—	—	20.1
Private equity funds	196.7	—	—	—	196.7
Total assets	\$ 1,392.9	\$ 264.4	\$ 260.7	\$ —	\$ 1,918.0

The following table summarizes our domestic and foreign defined benefit pension plans assets measured at fair value as of December 31, 2022:

<i><b>Asset Class</b></i>	<i><b>Investments Measured at Net Asset Value</b></i>	<i><b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b></i>	<i><b>Significant Other Observable Inputs (Level 2)</b></i>	<i><b>Significant Unobservable Inputs (Level 3)</b></i>	<i><b>Total</b></i>
<b>Equity Securities</b>			(\$ in millions)		
U.S. equities	\$ 19.2	\$ 54.4	\$ —	\$ —	\$ 73.6
Non-U.S. equities	206.4	0.2	0.1	—	206.7
<b>Fixed Income/Cash</b>					
Cash	—	102.2	—	—	102.2
Government treasuries	—	—	171.2	—	171.2
Corporate debt instruments	345.2	—	0.5	—	345.7
Asset-backed securities	90.1	—	19.0	—	109.1
<b>Alternative Investments</b>					
Hedge fund of funds	685.1	—	—	—	685.1
Real estate funds	25.2	—	—	—	25.2
Private equity funds	169.4	—	—	—	169.4
Total assets	\$ 1,540.6	\$ 156.8	\$ 190.8	\$ —	\$ 1,888.2

*U.S. equities*—This class included actively and passively managed equity investments in common stock and commingled funds comprised primarily of large-capitalization stocks with value, core and growth strategies.

*Non-U.S. equities*—This class included actively managed equity investments in commingled funds comprised primarily of international large-capitalization stocks from both developed and emerging markets.

*Fixed income and cash*—This class included commingled funds comprised of debt instruments issued by the U.S. and Canadian Treasuries, U.S. Agencies, corporate debt instruments, asset- and mortgage-backed securities and cash.

*Hedge fund of funds*—This class included a hedge fund which invests in the following types of hedge funds:

*Event driven hedge funds*—This class included hedge funds that invest in securities to capture excess returns that are driven by market or specific company events including activist investment philosophies and the arbitrage of equity and private and public debt securities.

*Market neutral hedge funds*—This class included investments in U.S. and international equities and fixed income securities while maintaining a market neutral position in those markets.

*Other hedge funds*—This class primarily included long-short equity strategies and a global macro fund which invested in fixed income, equity, currency, commodity and related derivative markets.

*Real estate funds*—This class included several funds that invest primarily in U.S. commercial real estate.

*Private equity funds*—This class included several private equity funds that invest primarily in infrastructure and U.S. power generation and transmission assets.

U.S. equities and non-U.S. equities are primarily valued at the net asset value provided by the independent administrator or custodian of the commingled fund. The net asset value is based on the value of the underlying equities, which are traded on an active market. U.S. equities are also valued at the closing price reported in an active market on which the individual securities are traded. A portion of our fixed income investments are valued at the net asset value provided by the independent administrator or custodian of the fund. The net asset value is based on the underlying assets, which are valued using inputs such as the closing price reported, if traded on an active market, values derived from comparable securities of issuers with similar credit ratings, or under a discounted cash flow approach that utilizes observable inputs, such as current yields of similar instruments, but includes adjustments for risks that may not be observable such as certain credit and liquidity risks. Alternative investments are valued at the net asset value as determined by the independent administrator or custodian of the fund. The net asset value is based on the underlying investments, which are valued using inputs such as quoted market prices of identical instruments, discounted future cash flows, independent appraisals and market-based comparable data.

## NOTE 14. POSTRETIREMENT BENEFITS

We provide certain postretirement healthcare (medical) and life insurance benefits for eligible active and retired domestic employees. The healthcare plans are contributory with participants' contributions adjusted annually based on medical rates of inflation and plan experience. We use a measurement date of December 31 for our postretirement plans.

### Other Postretirement Benefits Obligations and Funded Status

Changes in the benefit obligation were as follows:

	<i>December 31, 2023</i>			<i>December 31, 2022</i>		
	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>
<b><i>Change in Benefit Obligation</i></b>	<i>(\$ in millions)</i>					
Benefit obligation - beginning of year	\$ 28.5	\$ 6.4	\$ 34.9	\$ 39.3	\$ 11.2	\$ 50.5
Service cost	0.6	0.1	0.7	0.8	0.3	1.1
Interest cost	1.4	0.4	1.8	0.8	0.3	1.1
Actuarial loss (gain)	1.5	0.2	1.7	(8.0)	(4.2)	(12.2)
Benefits paid	(3.8)	(0.3)	(4.1)	(4.4)	(0.4)	(4.8)
Foreign currency translation adjustments	—	0.2	0.2	—	(0.8)	(0.8)
Benefit obligation - end of year	<u>\$ 28.2</u>	<u>\$ 7.0</u>	<u>\$ 35.2</u>	<u>\$ 28.5</u>	<u>\$ 6.4</u>	<u>\$ 34.9</u>

	<i>December 31, 2023</i>			<i>December 31, 2022</i>		
	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>
	<i>(\$ in millions)</i>					
Funded status	<u>\$ (28.2)</u>	<u>\$ (7.0)</u>	<u>\$ (35.2)</u>	<u>\$ (28.5)</u>	<u>\$ (6.4)</u>	<u>\$ (34.9)</u>

We recorded a \$1.3 million after-tax charge (\$1.7 million pretax) to shareholders' equity as of December 31, 2023, for our other postretirement plans. In 2022, we recorded an after-tax benefit of \$9.6 million (\$12.2 million pretax) to shareholders' equity as of December 31, 2022, for our other postretirement plans.

Amounts recognized in the consolidated balance sheets consisted of:

	<i>December 31, 2023</i>			<i>December 31, 2022</i>		
	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>	<i>U.S.</i>	<i>Foreign</i>	<i>Total</i>
	<i>(\$ in millions)</i>					
Accrued benefit in current liabilities	\$ (2.4)	\$ (0.3)	\$ (2.7)	\$ (2.6)	\$ (0.3)	\$ (2.9)
Accrued benefit in noncurrent liabilities	(25.8)	(6.7)	(32.5)	(25.9)	(6.1)	(32.0)
Accumulated other comprehensive loss	11.0	(2.7)	8.3	10.3	(3.1)	7.2
Net balance sheet impact	<u>\$ (17.2)</u>	<u>\$ (9.7)</u>	<u>\$ (26.9)</u>	<u>\$ (18.2)</u>	<u>\$ (9.5)</u>	<u>\$ (27.7)</u>

	<i>Years Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><i>Components of Net Periodic Benefit Cost</i></b>	<i>(\$ in millions)</i>		
Service cost	\$ 0.7	\$ 1.1	\$ 1.3
Interest cost	1.8	1.1	1.0
Amortization of prior service cost	0.1	0.1	0.1
Recognized actuarial loss	0.5	1.5	2.1
Net periodic benefit cost	<u>\$ 3.1</u>	<u>\$ 3.8</u>	<u>\$ 4.5</u>

	<i>Years Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><i>Included in Pretax Other Comprehensive Income (Loss)</i></b>	<i>(\$ in millions)</i>		
Liability adjustment	\$ 1.7	\$ (12.2)	\$ (3.8)
Amortization of prior service costs and actuarial losses	(0.6)	(1.6)	(2.2)

The service cost component of net periodic postretirement benefit cost related to the employees of the operating segments are allocated to the operating segments based on their respective estimated census data.

Other Postretirement Benefits Plan Assumptions

Certain actuarial assumptions, such as discount rate, have a significant effect on the amounts reported for net periodic benefit cost and accrued benefit obligation amounts.

<b>Weighted-Average Assumptions</b>	<b>December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Discount rate—periodic benefit cost	5.5 %	2.8 %	2.3 %
Discount rate—benefit obligation	5.2 %	5.5 %	2.8 %

The discount rate is based on a hypothetical yield curve represented by a series of annualized individual zero-coupon bond spot rates for maturities ranging from one-half to thirty years. The bonds used in the yield curve must have a rating of AA or better per Standard & Poor's, be non-callable, and have at least \$250 million par outstanding. The yield curve is then applied to the projected benefit payments from the plan. Based on these bonds and the projected benefit payment streams, the single rate that produces the same yield as the matching bond portfolio is used as the discount rate.

We review external data and our own internal trends for healthcare costs to determine the healthcare cost for the postretirement benefit obligation. The assumed healthcare cost trend rates for pre-65 retirees were as follows:

	<b>December 31,</b>	
	<b>2023</b>	<b>2022</b>
Healthcare cost trend rate assumed for next year	7.0 %	7.0 %
Rate that the cost trend rate gradually declines to	4.5 %	4.5 %
Year that the rate reaches the ultimate rate	2033	2032

For post-65 retirees, we provide a fixed dollar benefit, which is not subject to escalation.

We expect to make payments of approximately \$3 million for each of the next five years under the provisions of our other postretirement benefit plans.

**NOTE 15. INCOME TAXES**

	<b>Years ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
<b><u>Components of Income (Loss) Before Taxes</u></b>	<b><u>(\$ in millions)</u></b>		
U.S.	\$ 456.7	\$ 1,231.2	\$ 977.3
Foreign	102.6	444.8	561.4
Income before taxes	<u>\$ 559.3</u>	<u>\$ 1,676.0</u>	<u>\$ 1,538.7</u>
<b><u>Components of Income Tax Provision (Benefit)</u></b>			
Current:			
Federal	\$ 96.2	\$ 225.0	\$ 139.6
State	19.4	31.1	24.5
Foreign	48.0	121.7	131.3
Total current	<u>163.6</u>	<u>377.8</u>	<u>295.4</u>
Deferred:			
Federal	(25.3)	(32.1)	39.1
State	(7.9)	(4.3)	6.2
Foreign	(23.1)	7.7	(98.7)
Total deferred	<u>(56.3)</u>	<u>(28.7)</u>	<u>(53.4)</u>
Income tax provision	<u>\$ 107.3</u>	<u>\$ 349.1</u>	<u>\$ 242.0</u>

The following table accounts for the difference between the actual tax provision and the amounts obtained by applying the statutory U.S. federal income tax rate to the income (loss) before taxes.

<b><i>Effective Tax Rate Reconciliation (Percent)</i></b>	<b><i>Years ended December 31,</i></b>		
	<b><i>2023</i></b>	<b><i>2022</i></b>	<b><i>2021</i></b>
Statutory federal tax rate	21.0 %	21.0 %	21.0 %
State income taxes, net	2.7	2.3	1.9
Foreign rate differential	(1.8)	1.5	2.9
U.S. tax on foreign earnings	1.7	(0.8)	0.3
Salt depletion	(1.7)	(0.5)	(0.6)
Change in valuation allowance	2.0	0.4	(10.4)
Remeasurement of U.S. state deferred taxes	(0.2)	(0.8)	0.1
Change in tax contingencies	(0.5)	0.5	1.5
Share-based payments	(1.0)	(0.3)	(0.7)
Return to provision	(3.1)	(0.6)	(0.5)
U.S. federal tax credits	—	(0.1)	—
Legal entity liquidation	(0.5)	(2.0)	—
Other, net	0.6	0.2	0.2
Effective tax rate	<u>19.2 %</u>	<u>20.8 %</u>	<u>15.7 %</u>

The effective tax rate for 2023 included benefits associated with a legal entity liquidation, prior year tax positions, stock-based compensation, remeasurement of deferred taxes due to a decrease in our state effective tax rates and foreign rate changes, and from a change in tax contingencies, and an expense from a net increase in the valuation allowance related to deferred tax assets in foreign jurisdictions. These factors resulted in a net \$29.4 million tax benefit. Excluding these items, the effective tax rate for 2023 of 24.4% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, an increase in the valuation allowance related to losses in foreign jurisdictions and foreign income inclusions, partially offset by foreign rate differential and favorable permanent salt depletion deductions.

The effective tax rate for 2022 included benefits associated with a legal entity liquidation, prior year tax positions, stock-based compensation, and remeasurement of deferred taxes due to a decrease in our state effective tax rates, and expenses associated with a net increase in the valuation allowance related to state tax credits and a change in tax contingencies. These factors resulted in a net \$60.2 million tax benefit. Excluding these items, the effective tax rate for 2022 of 24.4% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, an increase in the valuation allowance related to losses in foreign jurisdictions and foreign income taxes, partially offset by foreign income exclusions and favorable permanent salt depletion deductions.

The effective tax rate for 2021 included benefits from a net decrease in the valuation allowance related to deferred tax assets in foreign jurisdictions, domestic tax credits, prior year tax positions, stock-based compensation, and expenses from remeasurement of deferred taxes due to an increase in our state effective tax rates and a change in tax contingencies. These factors resulted in a net \$103.6 million tax benefit. Excluding these items, the effective tax rate for 2021 of 22.5% was higher than the 21.0% U.S. federal statutory rate primarily due to state taxes, foreign income inclusions and foreign rate differential, partially offset by a net decrease in the valuation allowance related to utilization of losses in foreign jurisdictions and favorable permanent salt depletion deductions.

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<i>Components of Deferred Tax Assets and Liabilities</i>	<i>(\$ in millions)</i>	
<b>Deferred Tax Assets</b>		
Pension and postretirement benefits	\$ 42.4	\$ 42.9
Environmental reserves	38.3	37.4
Asset retirement obligations	16.6	13.9
Accrued liabilities	46.1	47.4
Lease liabilities	88.1	91.4
Tax credits	47.3	37.4
Net operating losses (NOL)	54.1	23.2
Other miscellaneous items	3.0	2.7
Total deferred tax assets	335.9	296.3
Valuation allowance	(99.5)	(76.4)
Net deferred tax assets	236.4	219.9
<b>Deferred Tax Liabilities</b>		
Property, plant and equipment	439.5	481.7
Right-of-use lease assets	86.5	89.8
Intangible amortization	76.9	68.7
Inventory and prepaids	5.5	12.1
Taxes on unremitted earnings	16.8	12.0
Other miscellaneous items	—	2.4
Total deferred tax liabilities	625.2	666.7
Net deferred income tax liability	\$ (388.8)	\$ (446.8)

Realization of the net deferred tax assets, irrespective of indefinite-lived deferred tax liabilities, is dependent on future reversals of existing taxable temporary differences and adequate future taxable income, exclusive of reversing temporary differences and carryforwards. Although realization is not assured, we believe that it is more likely than not that the net deferred tax assets will be realized.

At December 31, 2023, we had deferred state tax assets of \$14.9 million relating to state NOLs, which will expire in years 2024 through 2042, if not utilized.

At December 31, 2023, we had deferred state tax assets of \$19.3 million relating to state tax credits, which will expire in years 2024 through 2038, if not utilized.

At December 31, 2023, we had foreign tax credits of \$23.1 million, that will expire in years 2027 through 2032, if not utilized.

At December 31, 2023, we had NOLs of approximately \$141.4 million (representing \$39.1 million of deferred tax assets) in various foreign jurisdictions. Of these, \$67.9 million (representing \$16.9 million of deferred tax assets) expire in various years from 2024 to 2033. The remaining \$73.5 million (representing \$22.2 million of deferred tax assets) do not expire.

As of December 31, 2023, we had recorded a valuation allowance of \$99.5 million, compared to \$76.4 million as of December 31, 2022, and \$70.1 million as of December 31, 2021. The increase of \$23.1 million in 2023 is primarily due to increases in valuation allowances on foreign tax credits and foreign NOLs.

We continue to have net deferred tax assets in several jurisdictions which we expect to realize, assuming sufficient taxable income can be generated to utilize these deferred tax benefits, which is based on certain estimates and assumptions. If these estimates and related assumptions change in the future, we may be required to reduce the value of the deferred tax assets resulting in additional tax expense.



The activity of our deferred income tax valuation allowance was as follows:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Deferred Income Tax Valuation Allowance</i></b>	<i>(\$ in millions)</i>	
Beginning balance	\$ 76.4	\$ 70.1
Increases to valuation allowances	23.6	14.6
Decreases to valuation allowances	(0.1)	(6.6)
Foreign currency translation adjustments	(0.4)	(1.7)
Ending balance	<u>\$ 99.5</u>	<u>\$ 76.4</u>

As of December 31, 2023, we had \$50.3 million of gross unrecognized tax benefits, which would have a net \$49.9 million impact on the effective tax rate, if recognized. As of December 31, 2022, we had \$51.6 million of gross unrecognized tax benefits, which would have a net \$50.6 million impact on the effective tax rate, if recognized. The change for both 2023 and 2022 primarily relates to additional gross unrecognized benefits for current and prior year tax positions, as well as decreases for prior year tax positions. The amounts of unrecognized tax benefits were as follows:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Unrecognized Tax Benefits</i></b>	<i>(\$ in millions)</i>	
Beginning balance	\$ 51.6	\$ 43.4
Increase for current year tax positions	1.7	10.3
Increase for prior year tax positions	1.3	0.3
Decrease for prior year tax positions	(0.5)	(0.8)
Reduction due to lapse in statute of limitations	(5.1)	—
Foreign currency translation adjustments	1.3	(1.6)
Ending balance	<u>\$ 50.3</u>	<u>\$ 51.6</u>

We recognize interest and penalty expense related to unrecognized tax positions as a component of the income tax provision. As of December 31, 2023 and 2022, interest and penalties accrued were \$1.9 million and \$1.2 million, respectively. For 2023, 2022 and 2021, we recorded expense related to interest and penalties of \$0.7 million, \$0.7 million and \$0.5 million, respectively.

As of December 31, 2023, we believe it is reasonably possible that our total amount of unrecognized tax benefits will decrease by approximately \$36.9 million over the next twelve months. The anticipated reduction primarily relates to expected settlements with tax authorities and the expiration of federal, state and foreign statutes of limitation.

We operate globally and file income tax returns in numerous jurisdictions. Our tax returns are subject to examination by various federal, state and local tax authorities. Additionally, examinations are ongoing in various states and foreign jurisdictions. We believe we have adequately provided for all tax positions; however, amounts asserted by taxing authorities could be greater than our accrued position.

For our primary tax jurisdictions, the tax years that remain subject to examination are as follows:

	<i>Tax Years</i>
U.S. federal income tax	2020 - 2022
U.S. state income tax	2012 - 2022
Canadian federal income tax	2015 - 2022
Brazil	2015 - 2022
Germany	2015 - 2022
China	2014 - 2022
The Netherlands	2015 - 2022

**NOTE 16. ACCRUED LIABILITIES**

Included in accrued liabilities were the following:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><u>Accrued Liabilities</u></b>	<i>(\$ in millions)</i>	
Accrued compensation and payroll taxes	\$ 72.0	\$ 111.9
Non-income tax-related accruals	52.5	51.4
Accrued interest	35.8	35.6
Legal and professional costs	27.0	41.6
Accrued employee benefits	63.5	64.6
Contract liabilities (current portion only)	34.5	41.1
Environmental (current portion only)	32.0	25.0
Asset retirement obligation (current portion only)	9.5	13.7
Restructuring reserves (current portion only)	22.6	13.6
Derivative contracts	31.9	42.5
Other	68.7	67.8
Accrued liabilities	<u>\$ 450.0</u>	<u>\$ 508.8</u>

**NOTE 17. CONTRIBUTING EMPLOYEE OWNERSHIP PLAN**

The Contributing Employee Ownership Plan (CEOP) is a defined contribution plan available to essentially all domestic employees. We provide a contribution to an individual retirement contribution account (Company Contribution) maintained with the CEOP equal to an amount between 5.0% and 7.5% of the employee's eligible compensation. Employees generally vest in the value of the Company Contribution according to a schedule based on service. Prior to February 2023, participants vested 25% after 2 years of service, and 25% each year thereafter, through year 5 of service. After February 2023, participants vest 50% after 2 years of service and 100% after 3 years of service.

We also match a percentage of our employee's CEOP contributions (Company Match), which are invested in the same investment allocation as the employee's contribution. Prior to February 2023, participants vested 25% after 2 years of service, and 25% each year thereafter, through year 5 of service. After February 2023, employees immediately vest in matching contributions.

Our contributions to the CEOP for 2023, 2022 and 2021, were as follows:

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
	<i>(\$ in millions)</i>		
Company contribution	\$ 36.8	\$ 37.4	\$ 35.4
Company match	14.5	14.4	14.2

**NOTE 18. STOCK-BASED COMPENSATION**

Stock-based compensation expense was allocated to the operating segments for the portion related to employees whose compensation would be included in cost of goods sold with the remainder recognized in corporate/other. There were no significant capitalized stock-based compensation costs. Stock-based compensation granted includes stock options, performance share awards, restricted stock awards and deferred directors' compensation. Stock-based compensation expense was as follows:

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Stock Compensation Expense</u></b>	<i>(\$ in millions)</i>		
Stock-based compensation	\$ 26.7	\$ 25.6	\$ 28.4
Mark-to-market adjustments	1.1	(2.5)	24.7
Total expense	<u>\$ 27.8</u>	<u>\$ 23.1</u>	<u>\$ 53.1</u>

## Stock Plans

Under the stock option and long-term incentive plans, options may be granted to purchase shares of our common stock at an exercise price not less than fair market value at the date of grant, and are exercisable for a period not exceeding ten years from that date. Stock options, restricted stock and performance shares typically vest over three years. We issue shares to settle stock options, restricted stock and share-based performance awards. In 2023, 2022 and 2021, long-term incentive awards included stock options, performance share awards and restricted stock. The stock option exercise price was set at the fair market value of common stock on the date of the grant, and the options have a ten-year term.

The fair value of each stock option granted, which typically vests ratably over three years, but not less than one year, was estimated on the date of grant, using the Black-Scholes option-pricing model with the following assumptions:

<b><u>Grant Date Assumptions</u></b>	<b>2023</b>	<b>2022</b>	<b>2021</b>
Dividend yield	1.32%	1.60%	2.76%
Risk-free interest rate	4.07%	1.93%	0.94%
Expected volatility	47%	48%	44%
Expected life (years)	7.0	7.0	6.0
Weighted-average grant fair value (per option)	\$ 28.74	\$ 21.18	\$ 9.91
Weighted-average exercise price	\$ 60.43	\$ 49.71	\$ 28.99
Stock options granted	564,124	752,100	1,154,700

Dividend yield was based on our current dividend yield as of the option grant date. Risk-free interest rate was based on zero coupon U.S. Treasury securities rates for the expected life of the options. Expected volatility was based on our historical stock price movements, as we believe that historical experience is the best available indicator of the expected volatility. Expected life of the option grant was based on historical exercise and cancellation patterns, as we believe that historical experience is the best estimate for future exercise patterns.

Stock option transactions were as follows:

<b><u>Stock Option Transactions</u></b>	<b><u>Shares</u></b>	<b><u>Option Price</u></b>	<b><u>Weighted-Average Option Price</u></b>	<b><u>Exercisable</u></b>	
				<b><u>Options</u></b>	<b><u>Weighted-Average Exercise Price</u></b>
Outstanding at January 1, 2023	5,438,720	13.14-65.77	\$ 29.36	3,740,936	\$ 26.50
Granted	564,124	49.42-60.55	60.43		
Exercised	(972,080)	13.14-50.08	26.06		
Canceled	(107,191)	23.28-60.55	44.79		
Outstanding at December 31, 2023	4,923,573	13.14-65.77	\$ 33.23	3,654,274	\$ 27.33

At December 31, 2023, the average exercise period for all outstanding and exercisable options was 70 months and 59 months, respectively. At December 31, 2023, the aggregate intrinsic value (the difference between the exercise price and market value) for outstanding options was \$105.9 million, which includes exercisable options of \$97.5 million. The total intrinsic value of options exercised during the years ended December 31, 2023, 2022 and 2021, was \$29.7 million, \$36.9 million and \$73.1 million, respectively.

The total unrecognized compensation cost related to unvested stock options at December 31, 2023, was \$15.5 million and was expected to be recognized over a weighted-average period of 1.3 years.

The following table provides certain information with respect to stock options exercisable at December 31, 2023:

<b><u>Range of Exercise Prices</u></b>	<b><u>Options Exercisable</u></b>	<b><u>Weighted-Average Exercise Price</u></b>	<b><u>Options Outstanding</u></b>	<b><u>Weighted-Average Exercise Price</u></b>
Under \$27.00	1,586,954	\$ 20.52	1,586,954	\$ 20.52
\$27.00 - \$45.00	1,843,786	30.26	2,107,064	30.12
Over \$45.00	223,534	51.53	1,229,555	54.98
	<u>3,654,274</u>		<u>4,923,573</u>	

At December 31, 2023, common shares reserved for issuance and available for grant or purchase under the following plans consisted of:

<b><i>Incentive Plans</i></b>	<b><i>Number of Shares</i></b>	
	<b><i>Reserved for Issuance</i></b>	<b><i>Available for Grant or Purchase<sup>(1)</sup></i></b>
2003 Long Term Incentive Plan	29,834	—
2006 Long Term Incentive Plan	18,698	—
2009 Long Term Incentive Plan	94,984	—
2014 Long Term Incentive Plan	355,082	—
2016 Long Term Incentive Plan	1,066,818	—
2018 Long Term Incentive Plan	8,054,619	3,765,408
2021 Long Term Incentive Plan	2,750,000	2,582,262
Total under stock option plans	12,370,035	6,347,670

(1) All available to be issued as stock options, but includes a sub-limit for all types of stock awards of 2,595,246 shares.

<b><i>Director Plans</i></b>	<b><i>Number of Shares</i></b>	
	<b><i>Reserved for Issuance</i></b>	<b><i>Available for Grant or Purchase</i></b>
1997 Stock Plan for Non-employee Directors	368,778	106,697

Under the stock purchase plans, our non-employee directors may defer certain elements of their compensation into shares of our common stock based on fair market value of the shares at the time of deferral. Non-employee directors annually receive stock grants as a portion of their director compensation. Of the shares reserved under the stock purchase plans at December 31, 2023, 262,081 shares were committed.

Performance share awards are denominated in shares of our stock and are paid half in cash and half in stock. Payouts for performance share awards are based on two criteria: (1) 50% of the award is based on Olin's total shareholder returns (TSR) over the applicable three-year performance cycle in relation to the TSR over the same period among a portfolio of public companies which are selected in concert with outside compensation consultants and (2) 50% of the award is based on Olin's net income over the applicable three-year performance cycle in relation to the net income goal for such period as set by the Compensation Committee of Olin's Board of Directors. The expense associated with performance shares is recorded based on our estimate of our performance relative to the respective target. If an employee leaves the company before the end of the performance cycle, the performance shares may be prorated based on the number of months of the performance cycle worked and are settled in cash instead of half in cash and half in stock when the three-year performance cycle is completed. Granted shares reflects changes in assumptions associated with the expected achievement of the aforementioned criteria.

The fair value of each performance share award based on net income was estimated on the date of grant, using the current stock price. The fair value of each performance share award based on TSR was estimated on the date of grant, using a Monte Carlo simulation model with the following weighted average assumptions:

<b><i>Grant Date Assumptions</i></b>	<b><i>2023</i></b>	<b><i>2022</i></b>	<b><i>2021</i></b>
Risk-free interest rate	4.46%	1.74%	0.23%
Expected volatility of Olin common stock	52%	59%	55%
Expected average volatility of peer companies	42%	47%	50%
Average correlation coefficient of peer companies	0.51	0.51	0.50
Expected life (years)	3.0	3.0	3.0
Grant date fair value (TSR-based award)	\$ 86.98	\$ 64.13	\$ 39.96
Grant date fair value (net income-based award)	\$ 60.55	\$ 49.71	\$ 28.99
Performance share awards granted	161,474	184,000	248,700

Risk-free interest rate was based on zero coupon U.S. Treasury securities rates for the expected life of the performance share awards. Expected volatility of Olin common stock and peer companies was based on historical stock price movements, as we believe that historical experience is the best available indicator of the expected volatility. The average correlation coefficient of peer companies was determined based on historical trends of Olin's common stock price compared to the peer companies.

Expected life of the performance share award grant was based on historical exercise and cancellation patterns, as we believe that historical experience is the best estimate of future exercise patterns.

Performance share transactions were as follows:

<i><b>Performance Share Transactions</b></i>	<i><b>To Settle in Cash</b></i>		<i><b>To Settle in Shares</b></i>	
	<i><b>Shares</b></i>	<i><b>Weighted-Average Fair Value per Share</b></i>	<i><b>Shares</b></i>	<i><b>Weighted-Average Fair Value per Share</b></i>
Outstanding at January 1, 2023	675,016	\$ 52.90	388,808	\$ 29.94
Granted	76,455	63.08	91,950	63.56
Paid/issued	(357,601)	52.90	(131,633)	17.33
Converted from shares to cash	5,397	37.49	(5,397)	37.49
Canceled	(3,605)	54.17	(3,876)	42.61
Outstanding at December 31, 2023	395,662	\$ 54.18	339,852	\$ 43.65
Total vested at December 31, 2023	309,835	\$ 54.18	249,753	\$ 40.37

The summary of the status of our unvested performance shares to be settled in cash were as follows:

<i><b>Unvested Performance Shares</b></i>	<i><b>Shares</b></i>	<i><b>Weighted-Average Fair Value per Share</b></i>
Unvested at January 1, 2023	125,750	\$ 52.90
Granted	76,455	63.08
Vested	(112,773)	54.18
Canceled	(3,605)	54.17
Unvested at December 31, 2023	85,827	\$ 54.18

At December 31, 2023, the liability recorded for performance shares to be settled in cash totaled \$17.0 million. The total unrecognized compensation cost related to unvested performance shares at December 31, 2023, was \$9.8 million and was expected to be recognized over a weighted-average period of 1.7 years.

## NOTE 19. SHAREHOLDERS' EQUITY

On July 28, 2022, our Board of Directors authorized a share repurchase program for the purchase of shares of common stock at an aggregate price of up to \$2.0 billion (the 2022 Repurchase Authorization). This program will terminate upon the purchase of \$2.0 billion of common stock. On November 1, 2021, our Board of Directors authorized a share repurchase program for the purchase of shares of common stock at an aggregate price of up to \$1.0 billion. This program terminated upon the purchase of \$1.0 billion of our common stock during the third quarter of 2022. On April 26, 2018, our Board of Directors authorized a share repurchase program for the purchase of shares of common stock at an aggregate price of up to \$500.0 million. This program terminated upon the purchase of \$500.0 million of our common stock during the first quarter of 2022.

For the years ended December 31, 2023, 2022 and 2021, 13.3 million, 25.7 million and 4.7 million shares, respectively, of common stock have been repurchased and retired at a total value of \$711.3 million, \$1,350.7 million and \$251.9 million, respectively. As of December 31, 2023, a cumulative total of 19.2 million shares were repurchased and retired at a total value of \$1,003.0 million and \$997.0 million of common stock remained authorized to be repurchased under the 2022 Repurchase Authorization program.

During 2023, 2022 and 2021, we issued 1.0 million, 1.1 million and 3.4 million shares, respectively, with a total value of \$25.4 million, \$25.7 million and \$72.4 million, respectively, representing stock options exercised.

We have registered an undetermined amount of securities with the SEC, so that, from time-to-time, we may issue debt securities, preferred stock and/or common stock and associated warrants in the public market under that registration statement.

The following table represents the activity included in accumulated other comprehensive loss:

	<i>Foreign Currency Translation</i>	<i>Cash Flow Hedges</i>	<i>Pension and Postretirement Benefits</i>	<i>Total</i>
<b><i>Accumulated Other Comprehensive Loss</i></b>	<i>(\$ in millions)</i>			
Balance at January 1, 2021	\$ 19.4	\$ 21.4	\$ (730.7)	\$ (689.9)
Unrealized (losses) gains	(30.3)	182.0	249.7	401.4
Reclassification adjustments of (gains) losses into income	—	(180.1)	54.3	(125.8)
Tax provision	—	(0.5)	(73.2)	(73.7)
Net change	(30.3)	1.4	230.8	201.9
Balance at December 31, 2021	(10.9)	22.8	(499.9)	(488.0)
Unrealized (losses) gains	(27.7)	(15.6)	72.1	28.8
Reclassification adjustments of (gains) losses into income	—	(58.2)	35.5	(22.7)
Tax benefit (provision)	—	18.5	(32.5)	(14.0)
Net change	(27.7)	(55.3)	75.1	(7.9)
Balance at December 31, 2022	(38.6)	(32.5)	(424.8)	(495.9)
Unrealized losses	(1.1)	(53.6)	(18.1)	(72.8)
Reclassification adjustments of losses into income	—	72.5	0.2	72.7
Tax (provision) benefit	—	(4.8)	4.5	(0.3)
Net change	(1.1)	14.1	(13.4)	(0.4)
Balance at December 31, 2023	\$ (39.7)	\$ (18.4)	\$ (438.2)	\$ (496.3)

Net income (loss), interest expense and cost of goods sold included reclassification adjustments for realized gains and losses on derivative contracts from accumulated other comprehensive loss.

Net income (loss) and non-operating pension income included the amortization of prior service costs and actuarial losses from accumulated other comprehensive loss.

## NOTE 20. SEGMENT INFORMATION

We define segment results as income (loss) before interest expense, interest income, other operating income (expense), non-operating pension income, other income and income taxes. We have three operating segments: Chlor Alkali Products and Vinyls, Epoxy and Winchester. The three operating segments reflect the organization used by our management for purposes of allocating resources and assessing performance. Chlorine and caustic soda used in our Epoxy segment is transferred at cost from the Chlor Alkali Products and Vinyls segment. Sales are attributed to geographic areas based on customer location.

<i>Segment Detail</i>	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
	<i>(\$ in millions)</i>		
<b>Sales</b>			
Chlor Alkali Products and Vinyls	\$ 3,995.1	\$ 5,085.0	\$ 4,140.8
Epoxy	1,329.2	2,690.5	3,186.0
Winchester	1,508.7	1,600.7	1,583.8
Total sales	<u>\$ 6,833.0</u>	<u>\$ 9,376.2</u>	<u>\$ 8,910.6</u>
<b>Income before Taxes</b>			
Chlor Alkali Products and Vinyls	\$ 664.2	\$ 1,181.3	\$ 997.8
Epoxy	(31.0)	388.5	616.5
Winchester	255.6	372.9	412.1
Corporate/Other:			
Environmental expense	(23.7)	(23.2)	(14.0)
Other corporate and unallocated costs	(106.3)	(131.5)	(135.1)
Restructuring charges	(89.6)	(25.3)	(27.9)
Other operating income	42.9	16.3	1.4
Interest expense	(181.1)	(143.9)	(348.0)
Interest income	4.3	2.2	0.2
Non-operating pension income	24.0	38.7	35.7
Income before taxes	<u>\$ 559.3</u>	<u>\$ 1,676.0</u>	<u>\$ 1,538.7</u>
<b>Depreciation and Amortization Expense</b>			
Chlor Alkali Products and Vinyls	\$ 440.7	\$ 482.2	\$ 466.4
Epoxy	57.4	83.3	86.1
Winchester	27.2	24.6	23.3
Corporate/Other	8.1	8.7	6.7
Total depreciation and amortization expense	<u>\$ 533.4</u>	<u>\$ 598.8</u>	<u>\$ 582.5</u>
<b>Capital Spending</b>			
Chlor Alkali Products and Vinyls	\$ 161.1	\$ 151.4	\$ 130.2
Epoxy	15.2	27.2	31.0
Winchester	33.3	31.0	28.5
Corporate/Other	26.4	27.3	10.9
Total capital spending	<u>\$ 236.0</u>	<u>\$ 236.9</u>	<u>\$ 200.6</u>

Segment assets include only those assets which are directly identifiable to an operating segment. Assets of the corporate/ other segment include primarily such items as cash and cash equivalents, deferred taxes and other assets.

<b><u>Assets by Segment</u></b>	<b><i>December 31,</i></b>	
	<b><i>2023</i></b>	<b><i>2022</i></b>
	<b><i>(\$ in millions)</i></b>	
Chlor Alkali Products and Vinyls	\$ 5,650.2	\$ 5,782.2
Epoxy	979.3	1,201.9
Winchester	683.6	595.0
Corporate/Other	400.1	465.1
Total assets	<u>\$ 7,713.2</u>	<u>\$ 8,044.2</u>

Property, plant and equipment is attributed to geographic areas based on the asset location, and sales are attributed to geographic areas based on the customer location.

<b><u>Property, Plant and Equipment by Geography</u></b>	<b><i>December 31,</i></b>	
	<b><i>2023</i></b>	<b><i>2022</i></b>
	<b><i>(\$ in millions)</i></b>	
United States	\$ 2,302.7	\$ 2,434.4
Foreign	216.9	239.7
Total property, plant and equipment	<u>\$ 2,519.6</u>	<u>\$ 2,674.1</u>

Sales by Geography	Years ended December 31,		
	2023	2022	2021
	(\$ in millions)		
Chlor Alkali Products and Vinyls			
United States	\$ 2,700.0	\$ 3,400.0	\$ 2,839.1
Europe	207.9	331.9	203.5
Other foreign	1,087.2	1,353.1	1,098.2
Total Chlor Alkali Products and Vinyls	3,995.1	5,085.0	4,140.8
Epoxy			
United States	562.8	855.1	926.7
Europe	338.5	1,181.8	1,457.9
Other foreign	427.9	653.6	801.4
Total Epoxy	1,329.2	2,690.5	3,186.0
Winchester			
United States	1,336.6	1,467.0	1,502.2
Europe	57.3	34.1	19.4
Other foreign	114.8	99.6	62.2
Total Winchester	1,508.7	1,600.7	1,583.8
Total			
United States	4,599.4	5,722.1	5,268.0
Europe	603.7	1,547.8	1,680.8
Other foreign	1,629.9	2,106.3	1,961.8
Total sales	\$ 6,833.0	\$ 9,376.2	\$ 8,910.6



	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><i>Sales by Product Line</i></b>	<i>(\$ in millions)</i>		
<b>Chlor Alkali Products and Vinyls</b>			
Caustic soda	\$ 1,790.0	\$ 2,389.1	\$ 1,869.3
Chlorine, chlorine derivatives and other products	2,205.1	2,695.9	2,271.5
Total Chlor Alkali Products and Vinyls	3,995.1	5,085.0	4,140.8
<b>Epoxy</b>			
Aromatics and allylics	525.1	1,338.6	1,450.5
Epoxy resins	804.1	1,351.9	1,735.5
Total Epoxy	1,329.2	2,690.5	3,186.0
<b>Winchester</b>			
Commercial	806.5	1,079.1	1,104.1
Military and law enforcement	702.2	521.6	479.7
Total Winchester	1,508.7	1,600.7	1,583.8
Total sales	<u>\$ 6,833.0</u>	<u>\$ 9,376.2</u>	<u>\$ 8,910.6</u>

## NOTE 21. ENVIRONMENTAL

As is common in our industry, we are subject to environmental laws and regulations related to the use, storage, handling, generation, transportation, emission, discharge, disposal and remediation of, and exposure to, hazardous and non-hazardous substances and wastes in all of the countries in which we do business.

The establishment and implementation of national, state or provincial and local standards to regulate air, water and land quality affect substantially all of our manufacturing locations around the world. Laws providing for regulation of the manufacture, transportation, use and disposal of hazardous and toxic substances, and remediation of contaminated sites, have imposed additional regulatory requirements on industry, particularly the chemicals industry. In addition, implementation of environmental laws has required and will continue to require new capital expenditures and will increase plant operating costs. We employ waste minimization and pollution prevention programs at our manufacturing sites.

We are party to various government and private environmental actions associated with past manufacturing facilities and former waste disposal sites. Associated costs of investigatory and remedial activities are provided for in accordance with generally accepted accounting principles governing probability and the ability to reasonably estimate future costs. Our ability to estimate future costs depends on whether our investigatory and remedial activities are in preliminary or advanced stages. With respect to unasserted claims, we accrue liabilities for costs that, in our experience, we expect to incur to protect our interests against those unasserted claims. Our accrued liabilities for unasserted claims amounted to \$11.6 million at December 31, 2023. With respect to asserted claims, we accrue liabilities based on remedial investigation, feasibility study, remedial action and operation, maintenance and monitoring (OM&M) expenses that, in our experience, we expect to incur in connection with the asserted claims. Required site OM&M expenses are estimated and accrued in their entirety for required periods not exceeding 30 years, which reasonably approximates the typical duration of long-term site OM&M.

Our liabilities for future environmental expenditures were as follows:

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b><i>Environmental Liabilities</i></b>	<i>(\$ in millions)</i>	
Beginning balance	\$ 146.6	\$ 147.3
Charges to income	30.1	24.2
Remedial and investigatory spending	(25.9)	(24.6)
Other	2.8	(0.3)
Ending balance	<u>\$ 153.6</u>	<u>\$ 146.6</u>

At both December 31, 2023 and 2022, our consolidated balance sheets included environmental liabilities of \$121.6 million, which were classified as other noncurrent liabilities. Our environmental liability amounts do not take into account any discounting of future expenditures or any consideration of insurance recoveries or advances in technology. These liabilities are reassessed periodically to determine if environmental circumstances have changed and/or remediation efforts and our estimate of related costs have changed. As a result of these reassessments, future charges to income may be made for additional liabilities. Of the \$153.6 million included on our consolidated balance sheet at December 31, 2023, for future environmental expenditures, we currently expect to utilize \$59.8 million of the reserve for future environmental expenditures over the next 5 years, \$51.2 million for expenditures 6 to 10 years in the future, and \$42.6 million for expenditures beyond 10 years in the future.

Our total estimated environmental liability at December 31, 2023, was attributable to 58 sites, 14 of which were United States Environmental Protection Agency National Priority List sites. Nine sites accounted for 83% of our environmental liability and, of the remaining 49 sites, no one site accounted for more than 2% of our environmental liability. At seven of the nine sites, part of the site is in the long-term OM&M stage. At seven of the nine sites, a remedial action plan is being developed for part of the site. At six of the nine sites, a remedial design is being developed at part of the site and at four of the nine sites, part of the site is subject to a remedial investigation. All nine sites are either associated with past manufacturing operations or former waste disposal sites. None of the nine largest sites represents more than 25% of the liabilities reserved on our consolidated balance sheet at December 31, 2023, for future environmental expenditures.

Environmental provisions charged to income, which are included in cost of goods sold, were as follows:

	<i>Years ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Environmental Expense</u></b>	<i>(\$ in millions)</i>		
Provisions charged to income	\$ 30.1	\$ 24.2	\$ 16.2
Insurance recoveries <sup>(1)</sup>	(6.4)	(1.0)	(2.2)
Environmental expense	<u>\$ 23.7</u>	<u>\$ 23.2</u>	<u>\$ 14.0</u>

<sup>(1)</sup> Insurance recoveries for costs incurred and expensed in prior periods.

These charges relate primarily to remedial and investigatory activities associated with past manufacturing operations and former waste disposal sites and may be material to operating results in future years.

Annual environmental-related cash outlays for site investigation and remediation are expected to range between approximately \$25 million to \$35 million over the next several years, which are expected to be charged against reserves recorded on our consolidated balance sheet. While we do not anticipate a material increase in the projected annual level of our environmental-related cash outlays for site investigation and remediation, there is always the possibility that such an increase may occur in the future in view of the uncertainties associated with environmental exposures. Environmental exposures are difficult to assess for numerous reasons, including the identification of new sites, developments at sites resulting from investigatory studies, advances in technology, changes in environmental laws and regulations and their application, changes in regulatory authorities, the scarcity of reliable data pertaining to identified sites, the difficulty in assessing the involvement and financial capability of other Potentially Responsible Parties (PRPs), our ability to obtain contributions from other parties and the lengthy time periods over which site remediation occurs. It is possible that some of these matters (the outcomes of which are subject to various uncertainties) may be resolved unfavorably to us, which could materially adversely affect our financial position or results of operations. At December 31, 2023, we estimate that it is reasonably possible that we may have additional contingent environmental liabilities of \$80 million in addition to the amounts for which we have already recorded as a reserve.

## **NOTE 22. LEASES**

Our lease commitments are primarily for railcars, but also include logistics, manufacturing, storage, real estate and information technology assets. Our leases have remaining lease terms of up to 91 years (14 years excluding land leases), some of which may include options to extend the leases for up to five years, and some of which may include options to terminate the leases within one year.

The amounts for leases included in our consolidated balance sheets include:

		<i>December 31,</i>	
		<i>2023</i>	<i>2022</i>
<i><b>Balance Sheet Location:</b></i>		<i>(\$ in millions)</i>	
<b>Lease Assets</b>			
Operating	Operating lease assets, net	\$ 344.7	\$ 356.0
Finance	Property, plant and equipment, net <sup>(1)</sup>	—	2.4
Total lease assets		<u>\$ 344.7</u>	<u>\$ 358.4</u>
<b>Lease Liabilities</b>			
Current			
Operating	Current operating lease liabilities	\$ 69.3	\$ 71.8
Finance	Current installments of long-term debt	—	1.0
Long-term			
Operating	Operating lease liabilities	283.1	292.5
Finance	Long-term debt	—	0.9
Total lease liabilities		<u>\$ 352.4</u>	<u>\$ 366.2</u>

<sup>(1)</sup> As of December 31, 2022, assets recorded under finance leases were \$7.6 million and accumulated depreciation associated with finance leases was \$5.2 million.

The components of lease expense are recorded to cost of goods sold and selling and administrative expenses in the consolidated statement of operations, excluding interest on finance lease liabilities which is recorded to interest expense. The components of lease expense were as follows:

		<i>Years Ended December 31,</i>		
		<i>2023</i>	<i>2022</i>	<i>2021</i>
<i>Lease Expense</i>		<i>(\$ in millions)</i>		
Operating lease expense	\$	88.4	\$ 93.4	\$ 97.1
Variable and short-term lease expense		24.6	32.5	28.7
Finance lease expense:				
Depreciation of leased assets		0.5	1.0	1.1
Interest on lease liabilities		—	0.1	0.1
Total lease expense	<u>\$</u>	<u>113.5</u>	<u>\$ 127.0</u>	<u>\$ 127.0</u>

Future maturities of operating lease liabilities as of December 31, 2023, are summarized below:

		<i>Operating Leases</i>
<i>Future Lease Maturities</i>		<i>(\$ in millions)</i>
2024	\$	80.9
2025		70.8
2026		55.0
2027		44.0
2028		37.1
Thereafter		132.6
Total lease payments		<u>420.4</u>
Less: Imputed interest <sup>(1)</sup>		<u>(68.0)</u>
Present value of lease liabilities	<u>\$</u>	<u>352.4</u>

<sup>(1)</sup> Calculated using the discount rate for each lease.

Other information related to leases was as follows:

	<i>Years Ended December 31,</i>		
	<i>2023</i>	<i>2022</i>	<i>2021</i>
<b><u>Supplemental Cash Flows Information</u></b>	<i>(\$ in millions)</i>		
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 88.8	\$ 93.1	\$ 97.4
Operating cash flows from finance leases	—	0.1	0.1
Financing cash flows from finance leases	1.9	1.1	1.1
Non-cash increase in lease assets and lease liabilities:			
Operating leases	\$ 71.1	\$ 71.8	\$ 56.7
Finance leases	—	—	0.1

	<i>December 31,</i>	
	<i>2023</i>	<i>2022</i>
<b>Weighted-Average Remaining Lease Term</b>		
Operating leases	8.9 years	9.1 years
Finance leases	—	1.6 years
<b>Weighted-Average Discount Rate</b>		
Operating leases	4.0 %	3.4 %
Finance leases	— %	3.6 %

As of December 31, 2023, we have additional operating leases that have not yet commenced of approximately \$1.5 million which are expected to commence during 2024 with lease terms between 2 years and 3 years.

#### **NOTE 23. COMMITMENTS AND CONTINGENCIES**

The following table summarizes our contractual commitments under purchase contracts as of December 31, 2023:

	<i>Purchase Commitments</i>
<b><u>Future Contractual Purchase Commitments</u></b>	<i>(\$ in millions)</i>
2024	\$ 564.4
2025	564.8
2026	381.1
2027	370.8
2028	367.6
Thereafter	2,842.5
Total purchase commitments	<u>\$ 5,091.2</u>

The above purchase commitments include raw material, capital expenditure, long-term energy supply contracts and utility purchasing commitments utilized in our normal course of business for our projected needs.

#### **Legal Matters**

Olin, K.A. Steel Chemicals (a wholly owned subsidiary of Olin) and other caustic soda producers were named as defendants in six purported class action civil lawsuits filed March 22, 25 and 26, 2019 and April 12, 2019, in the U.S. District Court for the Western District of New York. Those cases were consolidated on May 22, 2019; the claims in the consolidated “Direct Purchaser” lawsuit, as modified, are on behalf of the respective named plaintiffs and a putative class comprised of all persons and entities who purchased certain types of caustic soda in the U.S. directly from one or more of the defendants, their parents, predecessors, subsidiaries or affiliates at any time on or after October 1, 2015 through December 31, 2018. Olin, K.A. Steel Chemicals and other caustic soda producers were also named as defendants in two purported class action civil lawsuits filed July 25 and 29, 2019 in the U.S. District Court for the Western District of New York on behalf of the respective named plaintiffs and a putative class comprised of all persons and entities who purchased caustic soda in the U.S. indirectly from distributors at any time on or after October 1, 2015. Those cases were consolidated and a consolidated, amended complaint in the “Indirect Purchaser” lawsuit was filed on August 23, 2021. The other current defendants in the Direct Purchaser and

Indirect Purchaser lawsuits are Occidental Chemical Corporation d/b/a OxyChem, Westlake Chemical Corporation, Shin-Etsu Chemical Co., Ltd., and Formosa Plastics Corporation, U.S.A. The Direct Purchaser and Indirect Purchaser lawsuits allege the defendants conspired to fix, raise, maintain and stabilize the price of caustic soda, restrict domestic (U.S.) supply of caustic soda and allocate caustic soda customers. Plaintiffs seek damages and injunctive relief. Westlake Chemical Corporation, Shin-Etsu Chemical Co., Ltd., and Formosa Plastics Corporation, U.S.A. all entered settlement agreements in the Direct Purchaser lawsuit, and Shin-Etsu Chemical Co., Ltd also entered a settlement agreement in the Indirect Purchaser lawsuit. All of the settlements are pending court approval. On December 28, 2023, the court denied the plaintiffs' motion for class certification in the Direct Purchaser lawsuit, and the plaintiffs are seeking an interlocutory appeal of the court's ruling.

Olin, K.A. Steel Chemical, Olin Canada ULC, 3229897 Nova Scotia Co. (wholly owned subsidiaries of Olin) and other alleged caustic soda producers were named as defendants in a proposed class action civil lawsuit filed on October 7, 2020 in the Quebec Superior Court (Province of Quebec) on behalf of the respective named plaintiff and a putative class comprised of all Canadian persons and entities who, between October 1, 2015 and the date of the eventual class action certification, directly or indirectly purchased caustic soda or products containing caustic soda, produced by one or more of the defendants. Olin, K.A. Steel Chemical, Olin Canada ULC, 3229897 Nova Scotia Co. and other alleged caustic soda producers were also named as defendants in a proposed class action civil lawsuit filed November 13, 2020 in the Federal Court of Canada on behalf of the respective named plaintiff and a putative class comprised of all legal persons in Canada who, at any time on or after October 1, 2015 to the present, directly or indirectly purchased caustic soda. The other defendants named in the two Canadian lawsuits are Occidental Petroleum Corporation, Occidental Chemical Corporation, Oxy Canada Sales, Inc., Westlake Chemical Corporation, Axiall Canada, Inc., Shin-Etsu Chemical Co., Ltd., Shintech Incorporated, Formosa Plastics Corporation, and Formosa Plastics Corporation, U.S.A. The lawsuits allege the defendants conspired to fix, raise, maintain control, and stabilize the price of caustic soda, divide and allocate markets, sales, customers and territories, fix, maintain, control, prevent, restrict, lessen or eliminate production and supply of caustic soda, and agree to idle capacity of production and/or refrain from increasing their production capacity. Plaintiffs seek damages, including punitive damages.

We believe we have meritorious legal positions and will continue to represent our interests vigorously in the above matters. Any losses related to these matters are not currently estimable because of unresolved questions of fact and law, but if resolved unfavorably to Olin, could have a material adverse effect on our financial position, cash flows or results of operations.

We, and our subsidiaries, are defendants in various other legal actions (including proceedings based on alleged exposures to asbestos) incidental to our past and current business activities. At December 31, 2023 and 2022, our consolidated balance sheets included accrued liabilities for these other legal actions of \$14.2 million and \$14.4 million, respectively. These liabilities do not include costs associated with legal representation. Based on our analysis, and considering the inherent uncertainties associated with litigation, we do not believe that it is reasonably possible that these other legal actions will materially adversely affect our financial position, cash flows or results of operations.

During the ordinary course of our business, contingencies arise resulting from an existing condition, situation or set of circumstances involving an uncertainty as to the realization of a possible gain contingency. In certain instances, such as environmental projects, we are responsible for managing the cleanup and remediation of an environmental site. There exists the possibility of recovering a portion of these costs from other parties. We account for gain contingencies in accordance with the provisions of ASC 450 "Contingencies" and, therefore, do not record gain contingencies and recognize income until it is earned and realizable.

#### **NOTE 24. DERIVATIVE FINANCIAL INSTRUMENTS**

We are exposed to market risk in the normal course of our business operations due to our purchases of certain commodities, our ongoing investing and financing activities and our operations that use foreign currencies. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. We have established policies and procedures governing our management of market risks and the use of financial instruments to manage exposure to such risks. ASC 815 "Derivatives and Hedging" (ASC 815) requires an entity to recognize all derivatives as either assets or liabilities in the consolidated balance sheets and measure those instruments at fair value. In accordance with ASC 815, we designate derivative contracts as cash flow hedges of forecasted purchases of commodities and forecasted interest payments related to variable-rate borrowings and designate certain interest rate swaps as fair value hedges of fixed-rate borrowings. We do not enter into any derivative instruments for trading or speculative purposes.

Energy costs, including electricity and natural gas, and certain raw materials used in our production processes are subject to price volatility. Depending on market conditions, we may enter into futures contracts, forward contracts, commodity swaps and put and call option contracts in order to reduce the impact of commodity price fluctuations. The majority of our commodity derivatives expire within one year.

We actively manage currency exposures that are associated with net monetary asset positions, currency purchases and sales commitments denominated in foreign currencies and foreign currency denominated assets and liabilities created in the

normal course of business. We enter into forward sales and purchase contracts to manage currency risk to offset our net exposures, by currency, related to the foreign currency denominated monetary assets and liabilities of our operations. All of the currency derivatives expire within one year and are for USD equivalents. The counterparties to the forward contracts are large financial institutions; however, the risk of loss to us in the event of nonperformance by a counterparty could impact our financial position or results of operations. We had the following notional amounts of outstanding forward contracts to buy and sell foreign currency:

<u><b>Notional Value - Foreign Currency</b></u>	<u><b>December 31,</b></u>	
	<u><b>2023</b></u>	<u><b>2022</b></u>
	<i>(\$ in millions)</i>	
Buy	\$ 21.0	\$ 275.8
Sell	140.2	110.7

#### **Cash Flow Hedges**

For derivative instruments that are designated and qualify as a cash flow hedge, the change in fair value of the derivative is recognized as a component of other comprehensive income (loss) until the hedged item is recognized in earnings.

We had the following notional amounts of outstanding commodity contracts that were entered into to hedge forecasted purchases:

<u><b>Notional Value - Commodity</b></u>	<u><b>December 31,</b></u>	
	<u><b>2023</b></u>	<u><b>2022</b></u>
	<i>(\$ in millions)</i>	
Natural gas	\$ 63.2	\$ 107.6
Ethane	26.4	46.0
Metals	101.4	107.6
Total notional	<u>\$ 191.0</u>	<u>\$ 261.2</u>

As of December 31, 2023, the counterparties to these commodity contracts were Wells Fargo Bank, N.A., Citibank, N.A., JPMorgan Chase Bank, National Association, Toronto Dominion Bank and Bank of America Corporation, all of which are major financial institutions.

We use cash flow hedges for certain raw material and energy costs such as copper, zinc, lead, ethane, electricity and natural gas to provide a measure of stability in managing our exposure to price fluctuations associated with forecasted purchases of raw materials and energy used in our manufacturing process. At December 31, 2023, we had open derivative contract positions through 2028. If all open futures contracts had been settled on December 31, 2023, we would have recognized a pretax loss of \$24.6 million.

If commodity prices were to remain at December 31, 2023 levels, approximately \$20.8 million of deferred losses, net of tax, would be reclassified into earnings during the next twelve months. The actual effect on earnings will be dependent on actual commodity prices when the forecasted transactions occur.

#### **Fair Value Hedges**

We use interest rate swaps as a means of managing interest expense and floating interest rate exposure to optimal levels. For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in current earnings. We include the gain or loss on the hedged items (fixed-rate borrowings) in the same line item, interest expense, as the offsetting loss or gain on the related interest rate swaps. There were no outstanding interest rate swaps at December 31, 2023 and 2022.

In 2021, we redeemed the 2025 Notes which resulted in recognition of the outstanding deferred swap loss. For the year ended December 31, 2021, \$1.8 million was recorded to interest expense on the accompanying consolidated statements of operations related to these swap agreements.

#### **Financial Statement Impacts**

We present our derivative assets and liabilities in our consolidated balance sheets on a net basis whenever we have a legally enforceable master netting agreement with the counterparty to our derivative contracts. We use these agreements to manage and substantially reduce our potential counterparty credit risk.

The following table summarizes the location and fair value of the derivative instruments on our consolidated balance sheets:

<i><b>Balance Sheet Location</b></i>		<i><b>December 31,</b></i>	
		<i><b>2023</b></i>	<i><b>2022</b></i>
		<i>(\$ in millions)</i>	
<b>Current Assets</b>			
Commodity contracts	Other current assets	\$ 2.1	\$ 1.5
Foreign currency contracts	Other current assets	—	0.3
<b>Noncurrent Assets</b>			
Commodity contracts	Other assets	3.2	4.0
Total derivative assets <sup>(1)</sup>		<u>\$ 5.3</u>	<u>\$ 5.8</u>
<b>Current Liabilities</b>			
Commodity contracts	Accrued liabilities	\$ 29.4	\$ 41.6
Foreign currency contracts	Accrued liabilities	2.5	0.9
<b>Noncurrent Liabilities</b>			
Commodity contracts	Other liabilities	0.5	7.4
Total derivative liabilities <sup>(1)</sup>		<u>\$ 32.4</u>	<u>\$ 49.9</u>

<sup>(1)</sup> Does not include the impact of cash collateral received from or provided to counterparties.

The following table summarizes the effects of derivative instruments on our consolidated statements of operations:

<i><u>Location of Gain (Loss)</u></i>		<i><u>Amount of Gain (Loss) for the</u></i>		
		<i><u>Years Ended December 31,</u></i>		
		<i><u>2023</u></i>	<i><u>2022</u></i>	<i><u>2021</u></i>
		<i>(\$ in millions)</i>		
<b>Cash Flow Hedges</b>				
Commodity contracts	Other comprehensive (loss) income	\$ (53.6)	\$ (15.6)	\$ 182.0
Commodity contracts	Cost of goods sold	(72.5)	58.2	180.1
<b>Fair Value Hedges</b>				
Interest rate contracts	Interest expense	—	—	(1.8)
<b>Not Designated as Hedging Instruments</b>				
Commodity contracts	Cost of goods sold	(0.6)	0.5	—
Foreign exchange contracts	Selling and administrative	(15.1)	(27.8)	(22.0)

#### Fair Value Measurements

Commodity contract financial instruments were valued primarily based on prices and other relevant information observable in market transactions involving identical or comparable assets or liabilities including both forward and spot prices for commodities. All commodity financial instruments were valued as a Level 2 under the fair value measurements hierarchy.

Foreign currency contract financial instruments were valued primarily based on relevant information observable in market transactions involving identical or comparable assets or liabilities including both forward and spot prices for currencies. All foreign currency contract financial instruments were valued as a Level 2 under the fair value measurements hierarchy.

#### Credit Risk and Collateral

By using derivative instruments, we are exposed to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, our credit risk will equal the fair value gain in a derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes us, thus creating a repayment risk for us. When the fair value of a derivative contract is negative, we owe the counterparty and, therefore, assume no repayment risk. We minimize the credit (or repayment) risk in derivative instruments by entering into transactions with high-quality

counterparties. We monitor our positions and the credit ratings of our counterparties, and we do not anticipate non-performance by the counterparties.

Based on the agreements with our various counterparties, cash collateral is required to be provided when the net fair value of the derivatives, with the counterparty, exceeds a specific threshold. If the threshold is exceeded, cash is either provided by the counterparty to us if the value of the derivatives is our asset, or cash is provided by us to the counterparty if the value of the derivatives is our liability. As of December 31, 2023 and 2022, this threshold was not exceeded. In all instances where we are party to a master netting agreement, we offset the receivable or payable recognized upon payment of cash collateral against the fair value amounts recognized for derivative instruments that have also been offset under such master netting agreements.

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

Not applicable.

#### **Item 9A. CONTROLS AND PROCEDURES**

Our chief executive officer and our chief financial officer evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2023. Based on that evaluation, our chief executive officer and chief financial officer have concluded that, as of such date, our disclosure controls and procedures were effective to ensure that information Olin is required to disclose in the reports that it files or submits with the SEC under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, and to ensure that information we are required to disclose in such reports is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

There have been no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's report on internal control over financial reporting and the related report of Olin's independent registered public accounting firm, KPMG LLP, are included in Item 8—"Consolidated Financial Statements and Supplementary Data."

#### **Item 9B. OTHER INFORMATION**

During the three months ended December 31, 2023, no director or officer of Olin adopted, terminated or modified a 'Rule 10b5-1 trading arrangement' or 'non-Rule 10b5-1 trading arrangement,' as each term is defined in Item 408(a) of Regulation S-K.

#### **Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS**

Not applicable.

### **PART III**

#### **Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

We incorporate the biographical information relating to our Directors under the heading ITEM 1—"PROPOSAL FOR THE ELECTION OF DIRECTORS" in our Proxy Statement relating to our 2024 Annual Meeting of Shareholders (the "Proxy Statement") by reference in this Report. We incorporate the biographical information regarding executive officers under the heading "EXECUTIVE OFFICERS" in our Proxy Statement by reference in this report.

The information with respect to our audit committee, including the audit committee financial expert, is incorporated by reference in this Report to the information contained in the paragraph entitled "CORPORATE GOVERNANCE MATTERS—What Are our Board Committees?" in our Proxy Statement. We incorporate by reference in this Report information regarding procedures for shareholders to nominate a director for election, in the Proxy Statement under the headings "MISCELLANEOUS—How can I directly nominate a director for election to the board at the 2025 annual meeting?" and "CORPORATE GOVERNANCE MATTERS—What Is Olin's Director Nomination Process?"

We have adopted a code of business conduct and ethics for directors, officers and employees, known as the Code of Conduct. The Code of Conduct is available in the About, Our Values section of our website at [www.olin.com](http://www.olin.com). Olin intends to satisfy disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, any provision of the Code of Conduct with respect to its executive officers or directors by posting such amendment or waiver on its website.



## Item 11. EXECUTIVE COMPENSATION

The information in the Proxy Statement under the heading “CORPORATE GOVERNANCE MATTERS—Compensation Committee Interlocks and Insider Participation,” and the information under the heading “COMPENSATION DISCUSSION AND ANALYSIS” through the information under the heading “COMPENSATION COMMITTEE REPORT,” are incorporated by reference in this Report.

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

We incorporate the information concerning holdings of our common stock by certain beneficial owners contained under the heading “CERTAIN BENEFICIAL OWNERS” in our Proxy Statement, and the information concerning beneficial ownership of our common stock by our directors and officers under the heading “SECURITY OWNERSHIP OF DIRECTORS AND OFFICERS” in our Proxy Statement by reference in this Report.

<i>Plan Category</i>	<i>Equity Compensation Plan Information</i>		
	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>
	<i>Number of securities to be issued upon exercise of outstanding options, warrants and rights <sup>(1)</sup></i>	<i>Weighted-average exercise price of outstanding options, warrants and rights</i>	<i>Number of securities remaining available for future issuance under equity compensation plans excluding securities reflected in column (a) <sup>(1)</sup></i>
Equity compensation plans approved by security holders <sup>(2)</sup>	6,284,447 (3)	\$ 32.52 (3)	6,454,367
Equity compensation plans not approved by security holders	N/A	N/A	N/A
<b>Total</b>	<b>6,284,447</b>	<b>\$ 32.52 (3)</b>	<b>6,454,367</b>

<sup>(1)</sup> Number of shares is subject to adjustment for changes in capitalization for stock splits and stock dividends and similar events.

<sup>(2)</sup> Consists of the 2003 Long Term Incentive Plan, the 2006 Long Term Incentive Plan, the 2009 Long Term Incentive Plan, the 2014 Long Term Incentive Plan, the 2016 Long Term Incentive Plan, the 2018 Long Term Incentive Plan, the 2021 Long Term Incentive Plan and the 1997 Stock Plan for Non-employee Directors.

<sup>(3)</sup> Includes:

- 4,923,573 shares issuable upon exercise of options with a weighted-average exercise price of \$33.23, and a weighted-average remaining term of 5.8 years,
- 29,800 shares issuable under restricted stock unit grants, with a weighted-average remaining term of 1.1 years,
- 1,068,992 shares issuable in connection with outstanding performance share awards, with a weighted-average term of 1.0 years remaining in the performance measurement period, and
- 262,082 shares under the 1997 Stock Plan for Non-employee Directors which represent stock grants for retainers, other board and committee fees and dividends on deferred stock under the plan.

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

We incorporate the information under the headings “CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS” and “CORPORATE GOVERNANCE MATTERS—Which Board Members Are Independent?” in our Proxy Statement by reference in this Report.

## Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Our independent registered public accounting firm is KPMG LLP, St. Louis, MO, Auditor Firm ID: 185.

We incorporate the information concerning the accounting fees and services of our independent registered public accounting firm, KPMG LLP, under the heading ITEM 3—“PROPOSAL TO RATIFY APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM” in our Proxy Statement by reference in this Report.

## PART IV

### Item 15. EXHIBITS AND CONSOLIDATED FINANCIAL STATEMENT SCHEDULES

#### (a) 1. Consolidated Financial Statements

Consolidated financial statements of the registrant are included in Item 8 above.

#### 2. Financial Statement Schedules

Schedules not included herein are omitted because they are inapplicable or not required or because the required information is given in the consolidated financial statements and notes thereto.

#### 3. Exhibits

The following exhibits are filed with this Annual Report on Form 10-K, unless incorporated by reference. We are party to a number of other instruments defining the rights of holders of long-term debt. No such instrument authorizes an amount of securities in excess of 10% of the total assets of Olin and its subsidiaries on a consolidated basis. Olin agrees to furnish a copy of each instrument to the Commission upon request.

<b>Exhibit</b>	<b>Exhibit Description</b>
2	Merger Agreement dated as of March 26, 2015, among The Dow Chemical Company, Blue Cube Spinco Inc., Olin Corporation and Blue Cube Acquisition Corp.—Exhibit 2.1 to Olin’s Form 8-K filed March 27, 2015*
3.1	Amended and Restated Articles of Incorporation of Olin Corporation as amended effective April 24, 2020—Exhibit 3.1 to Olin’s Form 8-K filed April 28, 2020*
3.2	Bylaws of Olin Corporation as amended effective June 5, 2023—Exhibit 3.1 to Olin’s Form 8-K filed June 5, 2023*
4.1	Description of Olin Corporation Securities registered under Section 12 of the Exchange Act
4.2	Trust Indenture effective October 1, 2010 between The Industrial Development Authority of Washington County and U.S. Bank National Association, as trustee—Exhibit 4.1 to Olin’s Form 8-K filed October 20, 2010*
4.3	Loan Agreement effective October 1, 2010 between The Industrial Development Authority of Washington County and Olin Corporation—Exhibit 4.2 to Olin’s Form 8-K filed October 20, 2010*
4.4	Bond Purchase Agreement dated October 14, 2010 between The Industrial Development Authority of Washington County, Olin Corporation and PNC Bank, National Association, as administrative agent—Exhibit 4.3 to Olin’s Form 8-K filed October 20, 2010*
4.5	Trust Indenture effective December 1, 2010 between Mississippi Business Finance Corporation and U.S. Bank National Association—Exhibit 4.1 to Olin’s Form 8-K filed December 10, 2010*
4.6	Third Supplemental Indenture dated as of August 22, 2012 between Olin Corporation and U.S. Bank National Association—Exhibit 4.1 to Olin’s Form 8-K filed August 22, 2012*
4.7	Fourth Supplemental Indenture dated as of March 9, 2017 between Olin Corporation and U.S. Bank National Association—Exhibit 4.3 to Olin’s Form 8-K filed March 9, 2017*
4.8	Fifth Supplemental Indenture dated January 16, 2018 between Olin Corporation and U.S. Bank National Association, as trustee, governing the Senior Notes—Exhibit 4.1 to Olin’s Form 8-K filed January 19, 2018*
4.9	Sixth Supplemental Indenture dated July 16, 2019 between Olin Corporation and U.S. Bank National Association, as trustee, governing the Senior Notes—Exhibit 4.1 to Olin’s Form 8-K filed July 16, 2019*
4.10	Seventh Supplemental Indenture dated September 30, 2020 between Olin Corporation and U. S. Bank National Association, as trustee, governing the Senior Notes—Exhibit 4.1 to Olin’s Form 10-Q filed November 5, 2020*
4.11	Loan Agreement effective December 1, 2010 between Mississippi Business Finance Corporation and Olin Corporation—Exhibit 4.2 to Olin’s Form 8-K filed December 10, 2010*
4.12	Bond Purchase Agreement dated December 9, 2010 between Mississippi Business Finance Corporation, Olin Corporation and PNC Bank, National Association, as administrative agent—Exhibit 4.3 to Olin’s Form 8-K filed December 10, 2010*
4.13	Amended and Restated Credit and Funding Agreement dated December 9, 2010 between Olin Corporation, as borrower; PNC Bank, National Association, as administrative agent; PNC Capital Markets LLC, as lead arranger; and the Lenders party thereto—Exhibit 4.4 to Olin’s Form 8-K filed December 10, 2010*
4.14	First Amendment dated December 27, 2010 to the Amended and Restated Credit and Funding Agreement dated December 9, 2010 between Olin Corporation, as borrower; PNC Bank, National Association, as administrative agent; PNC Capital Markets LLC, as lead arranger; and the Lenders party thereto—Exhibit 4.4 to Olin’s Form 8-K filed December 30, 2010*
4.15	Second Amendment dated April 27, 2012 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.2 to Olin’s Form 8-K filed May 3, 2012*

4.16	Third Amendment dated June 23, 2014 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.2 to Olin’s Form 8-K filed June 25, 2014*
4.17	Amendment No. 4 dated June 23, 2015 to the Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent—Exhibit 10.3 to Olin’s Form 8-K filed June 29, 2015*
4.18	Fifth Amendment dated September 29, 2016 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.1 to Olin’s Form 10-Q filed May 3, 2017*
4.19	Sixth Amendment dated March 9, 2017 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.2 to Olin’s Form 8-K filed March 9, 2017*
4.20	Seventh Amendment dated July 16, 2019 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.3 to Olin’s Form 8-K filed July 16, 2019*
4.21	Eighth Amendment dated December 20, 2019 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.1 to Olin’s Form 8-K filed December 20, 2019*
4.22	Ninth Amendment dated May 8, 2020 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.1 to Olin’s Form 8-K filed May 11, 2020*
4.23	Tenth Amendment to Amended and Restated Credit and Funding Agreement, dated as of February 24, 2021, among Olin Corporation, the Lenders (as defined therein), and PNC Bank, National Association, as Administrative Agent—Exhibit 4.1 to Olin’s Form 8-K filed March 1, 2021*
4.24	Eleventh Amendment dated August 30, 2021 to Amended and Restated Credit and Funding Agreement dated December 9, 2010 among Olin Corporation, Olin Winchester, LLC, the Lenders as named therein, and PNC Bank, National Association, as administrative agent for the Lenders—Exhibit 4.1 to Olin’s Form 10-Q filed October 22, 2021*
4.25	Twelfth Amendment to Amended and Restated Credit and Funding Agreement, dated as of October 11, 2022, among Olin Corporation, the Lenders (as defined therein), and PNC Bank, National Association, as administrative agent - Exhibit 4.1 to Olin’s Form 8-K filed October 12, 2022*
4.26	Forward Purchase Agreement dated as of March 9, 2017, among Olin Corporation, the Lenders as named therein, and PNC Bank, National Association, as administrative agent—Exhibit 4.1 to Olin’s Form 8-K filed March 9, 2017*
4.27	First Amendment dated August 30, 2021 to Forward Purchase Agreement dated March 9, 2017, among Olin Corporation, Olin Winchester, LLC, the Lenders as named therein, and PNC Bank, National Association, as administrative agent—Exhibit 4.2 to Olin’s Form 10-Q filed October 22, 2021*
4.28	Senior Notes Indenture dated May 19, 2020 among Olin Corporation, as issuer, and U.S. Bank National Association, as trustee, governing the Senior Notes—Exhibit 4.1 to Olin’s Form 8-K filed May 20, 2020*
4.29	First Supplemental Indenture dated September 30, 2020 between Olin Corporation, as issuer, as issuer, and U.S. Bank National Association, as trustee, governing the 9.500% Senior Notes due 2025—Exhibit 4.4 to Olin’s Form 10-Q filed November 5, 2020*
4.30	Second Supplemental Indenture dated September 30, 2020 between Olin Corporation, as issuer, as issuer, and U.S. Bank National Association, as trustee, governing the 9.500% Senior Notes due 2025—Exhibit 4.1 to Olin’s Form 8-K filed November 16, 2021*
4.31	Form of 5.125% Senior Notes due 2027—Exhibit 4.4 (included in Exhibit 4.3) to Olin’s Form 8-K filed March 9, 2017*
4.32	Form of 5.000% Senior Notes due 2030—Exhibit 4.1 to Olin’s Form 8-K filed January 19, 2018*
4.33	Form of 5.625% Senior Notes due 2029—Exhibit 4.2 (included in Exhibit 4.1) to Olin’s Form 8-K filed July 16, 2019*
4.34	Form of 9.500% Senior Notes due 2025—Exhibit 4.2 (included in Exhibit 4.1) to Olin’s Form 8-K filed May 20, 2020*
4.35	Receivables Financing Arrangement dated December 20, 2016 by and among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 4(x) to Olin’s Form 10-K filed February 28, 2017*
4.36	Amendment No. 1 dated July 16, 2019 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 10.2 to Olin’s Form 8-K filed July 16, 2019*

4.37	Amendment No. 2 dated March 27, 2020 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 10.1 to Olin’s Form 8-K filed March 27, 2020*
4.38	Amendment No. 3 dated April 23, 2020 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 10.1 to Olin’s Form 8-K filed April 23, 2020*
4.39	Amendment No. 4 dated May 8, 2020 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 10.2 to Olin’s Form 8-K filed May 11, 2020*
4.40	Amendment No. 5 dated December 28, 2020 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 4.46 to Olin’s Form 10-K filed February 22, 2021*
4.41	Amendment No. 6 dated February 24, 2021 to Receivables Financing Arrangement and Reaffirmation of Performance Guaranty dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 4.1 to Olin’s Form 10-Q filed April 28, 2021*
4.42	Amendment No. 7 dated September 28, 2021 to Receivables Financing Agreement dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 10.1 to Olin’s Form 8-K filed September 29, 2021*
4.43	Amendment No. 8 dated January 20, 2022 to Receivables Financing Agreement dated December 20, 2016 among Olin Corporation, Olin Finance Company, LLC, PNC Bank, National Association, PNC Capital Markets LLC and the Lender parties thereto—Exhibit 4.53 to Olin’s Form 10-K filed February 24, 2022*
4.44	Amendment No. 9 to Receivables Financing Agreement and Reaffirmation of Performance Guaranty, dated as of October 11, 2022, among Olin Corporation, as servicer, Olin Finance Company, LLC, as borrower, PNC Bank, National Association, as administrative agent, PNC Capital Markets LLC, as structuring agent, and the Lender parties thereto — Exhibit 10.2 to Olin’s Form 10Q filed October 27, 2022*
10.1	Senior Executive Pension Plan amended and restated effective October 24, 2008—Exhibit 10.1 to Olin’s Form 10-Q filed October 27, 2008*†
10.2	Supplemental Contributing Employee Ownership Plan as amended and restated effective January 1, 2018—Exhibit 99.1 to Olin’s Form 8-K filed December 12, 2017*†
10.3	Olin Corporation Change in Control Severance Plan for Section 16(b) Officers effective January 27, 2019—Exhibit 10.1 to Olin’s Form 8-K filed December 14, 2018*†
10.4	Olin Corporation Severance Plan for Section 16(b) Officers effective January 27, 2019—Exhibit 10.2 to Olin’s Form 8-K filed December 14, 2018*†
10.5	Amended and Restated 1997 Stock Plan for Non-employee Directors codified to reflect amendments adopted through December 6, 2023
10.6	Description of Restricted Stock Unit Awards granted under one of Olin’s Long Term Incentive Plans—Exhibit 10.6 to Olin’s Form 10-K filed February 23, 2023*†
10.7	Supplementary and Deferral Benefit Pension Plan as amended and restated effective October 24, 2008—Exhibit 10.2 to Olin’s Form 10-Q filed October 27, 2008*†
10.8	Amended and Restated Olin Corporation 2003 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.2 to Olin’s Form 8-K filed January 30, 2019*†
10.9	Amended and Restated Olin Corporation 2006 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.3 to Olin’s Form 8-K filed January 30, 2019*†
10.10	Amended and Restated Olin Corporation 2009 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.4 to Olin’s Form 8-K filed January 30, 2019*†
10.11	Amended and Restated Olin Corporation 2014 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.5 to Olin’s Form 8-K filed January 30, 2019*†
10.12	Amended and Restated Olin Corporation 2016 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.6 to Olin’s Form 8-K filed January 30, 2019*†
10.13	Amended and Restated Olin Corporation 2018 Long Term Incentive Plan codified as of January 27, 2019—Exhibit 10.7 to Olin’s Form 8-K filed January 30, 2019*†
10.14	Amended and Restated Olin Corporation 2021 Long Term Incentive Plan codified as of April 22, 2021—Exhibit 10.1 to Olin’s Form 8-K/A filed April 26, 2021*†
10.15	Olin Corporation Section 16 Short-Term Incentive Plan—Exhibit 10.1 to Olin’s Form 8-K filed December 13, 2023*†

10.16	Performance Share Program adopted February 22, 2023—Exhibit 10.17 to Olin's Form 10-K filed February 23, 2023*†
10.17	Offer Letter dated July 14, 2020 by and between Scott M. Sutton and Olin Corporation—Exhibit 10.1 to Olin's Form 8-K filed July 15, 2020*†
10.18	Form of Non-Qualified Stock Option Award Certificate—Exhibit 10.19 to Olin's Form 10-K filed February 23, 2023*†
10.19	Form of Restricted Stock Unit Award Certificate—Exhibit 10.20 to Olin's Form 10-K filed February 23, 2023*†
10.20	Form of Performance Award Certificate—Exhibit 10.21 to Olin's Form 10-K filed February 23, 2023*†
10.21	Restricted Stock Award to Damian Gumpel dated December 10, 2021 and related Description—Exhibit 10.2 to Olin's Form 8-K filed December 10, 2021*†
10.22	Summary of Stock Option/Performance Share Continuation Provisions for Olin Employees as amended effective September 1, 2021—Exhibit 10.24 to Olin's Form 10-K filed February 23, 2023*†
10.23	Olin Corporation Contributing Employee Ownership Plan Amended and Restated effective as of January 1, 2018
10.24	Distribution Agreement between Olin Corporation and Arch Chemicals, Inc., dated as of February 1, 1999—Exhibit 2.1 to Olin's Form 8-K filed February 23, 1999*
10.25	Note Purchase Agreement dated December 22, 1997 between the SunBelt Chlor Alkali Partnership and the Purchasers named therein—Exhibit 99.5 to Olin's Form 8-K filed December 3, 2001*
10.26	Guarantee Agreement dated December 22, 1997 between Olin Corporation and the Purchasers named therein—Exhibit 99.6 to Olin's Form 8-K filed December 3, 2001*
10.27	Subordination Agreement dated December 22, 1997 between Olin Corporation and the Subordinated Parties named therein—Exhibit 99.7 to Olin's Form 8-K filed December 3, 2001*
10.28	Credit Agreement dated June 23, 2015 among Olin Corporation, Olin Canada ULC, the Lenders named therein and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.1 to Olin's Form 8-K filed June 29, 2015*
10.29	Credit Agreement dated June 23, 2015 among Blue Cube Spinco Inc., the Lenders as named therein and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.2 to Olin's Form 8-K filed June 29, 2015*
10.30	Amendment Agreement dated June 23, 2015 among Olin, Olin Canada ULC, Blue Cube Spinco Inc., the Lenders as named therein, and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.5 to Olin's Form 8-K filed October 5, 2015*
10.31	Second Amendment Agreement, dated as of March 9, 2017 among Olin Corporation, Olin Canada ULC and Blue Cube Spinco Inc., the Lenders named therein and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.1 to Olin's Form 8-K filed March 9, 2017*
10.32	Third Amendment Agreement, dated as of June 28, 2018, among Olin Corporation, Olin Canada ULC and Blue Cube Spinco LLC, the Lenders named therein and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.2 to Olin's Form 10-Q filed August 1, 2018*
10.33	Separation Agreement dated March 26, 2015 between The Dow Chemical Company and Blue Cube Spinco Inc.—Exhibit 10.1 to Olin's Form 8-K filed March 27, 2015*
10.34	Credit Agreement dated August 25, 2015 among Olin Corporation, Olin subsidiaries, the Lenders as named therein and Sumitomo Mitsui Banking Corporation, as administrative agent—Exhibit 10.1 to Olin's Form 8-K filed August 25, 2015*
10.35	Amended and Restated Credit Agreement, dated as of October 5, 2015 as Amended and Restated by the Second Amendment Agreement dated as of March 9, 2017 among Olin Corporation, Olin Canada ULC and Blue Cube Spinco Inc., the Lenders named therein and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.2 to Olin's Form 8-K filed March 9, 2017*
10.36	Credit Agreement dated July 16, 2019 among Olin Corporation, Blue Cube Spinco, LLC, the Lenders and Issuing Banks as named therein and Wells Fargo Bank, National Association—Exhibit 10.1 to Olin's Form 8-K filed July 16, 2019*
10.37	First Amendment dated December 20, 2019 to Credit Agreement dated July 16, 2019 among Olin Corporation, Blue Cube Spinco, LLC, the Lenders and Issuing Banks as named therein and Wells Fargo Bank, National Association—Exhibit 10.1 to Olin's Form 8-K filed December 20, 2019*
10.38	Second Amendment dated May 8, 2020 to Credit Agreement dated July 16, 2019 among Olin Corporation, Blue Cube Spinco, LLC, the Lenders and Issuing Banks as named therein and Wells Fargo Bank, National Association—Exhibit 10.1 to Olin's Form 8-K filed May 11, 2020*
10.39	Third Amendment to Credit Agreement, dated as of February 24, 2021, among Olin Corporation, the guarantors party thereto, the Lenders and Issuing Banks (as defined therein) and Bank of America, N.A., as Administrative Agent—Exhibit 10.1 to Olin's Form 8-K filed March 1, 2021*
10.40	Guaranty Agreement dated October 5, 2015 among Blue Cube Spinco Inc., Olin Corporation and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.2 to Olin's Form 8-K filed October 5, 2015*
10.41	Borrowing Subsidiary Agreement dated October 5, 2015 among Olin Corporation, Blue Cube Spinco Inc. and Wells Fargo Bank, National Association, as administrative agent—Exhibit 10.3 to Olin's Form 8-K filed October 5, 2015*

10.42	Guaranty Joinder dated October 5, 2015 among Olin subsidiaries, Blue Cube Spinco Inc. and Sumitomo Mitsui Banking Corporation, as administrative agent—Exhibit 10.4 to Olin’s Form 8-K filed October 5, 2015*
10.43	Transition Agreement between Olin Corporation and Scott Sutton, Dated October 30, 2023 - Exhibit 10.1 to Olin’s Form 8-K filed November 2, 2023*†
10.44	Form of Olin Corporation Retention Agreement—Exhibit 10.1 to Olin’s Form 8-K filed December 20, 2023*†
10.45	Offer Letter dated February 15, 2024 by and between Kenneth Lane and Olin Corporation—Exhibit 10.1 to Olin’s Form 8-K filed February 20, 2024*†
21	Subsidiaries of Olin Corporation
23	Consent of KPMG LLP
31.1	Section 302 Certification Statement of Chief Executive Officer
31.2	Section 302 Certification Statement of Chief Financial Officer
32	Section 906 Certification Statement of Chief Executive Officer and Chief Financial Officer
97	Olin Corporation Executive Officer Clawback Policy
101.INS	XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the XBRL document)
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded in the Exhibit 101 Interactive Data Files)

\*Previously filed as indicated and incorporated herein by reference. Exhibits incorporated by reference are located in SEC file No. 1-1070 unless otherwise indicated.

†Indicated management contract or compensatory arrangement.

Any exhibit is available from Olin by writing to the Secretary, Olin Corporation, 190 Carondelet Plaza, Suite 1530, Clayton, MO 63105 USA.

Shareholders may obtain information from EQ Shareowner Services, our registrar and transfer agent, who also manages our Automatic Dividend Reinvestment Plan by writing to: EQ Shareowner Services, 1110 Centre Pointe Curve, Suite 101, Mendota Heights, MN 55120 USA, by telephone from the United States at 800-401-1957 or outside the United States at 651-450-4064 or via their website under “Contact Us” at [www.shareowneronline.com](http://www.shareowneronline.com).

#### Item 16. FORM 10-K SUMMARY

None.

## SIGNATURES

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

### OLIN CORPORATION

By: /s/ Scott Sutton  
 Scott Sutton  
 President and Chief Executive Officer

Date: February 22, 2024

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 date indicated.

<i>Signature</i>	<i>Title</i>	<i>Date</i>
<u>/s/ SCOTT SUTTON</u> Scott Sutton	President and Chief Executive Officer (Principal Executive Officer) and Director	February 22, 2024
<u>/s/ BEVERLEY A. BABCOCK</u> Beverley A. Babcock	Director	February 22, 2024
<u>/s/ C. ROBERT BUNCH</u> C. Robert Bunch	Director	February 22, 2024
<u>/s/ MATTHEW S. DARNALL</u> Matthew S. Darnall	Director	February 22, 2024
<u>/s/ JULIE A. PIGGOTT</u> Julie A. Piggott	Director	February 22, 2024
<u>/s/ EARL L. SHIPP</u> Earl L. Shipp	Director	February 22, 2024
<u>/s/ WILLIAM H. WEIDEMAN</u> William H. Weideman	Chairman and Director	February 22, 2024
<u>/s/ W. ANTHONY WILL</u> W. Anthony Will	Director	February 22, 2024
<u>/s/ CAROL A. WILLIAMS</u> Carol A. Williams	Director	February 22, 2024
<u>/s/ TODD A. SLATER</u> Todd A. Slater	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 22, 2024
<u>/s/ RANDEE N. SUMNER</u> Randee N. Sumner	Vice President and Controller (Principal Accounting Officer)	February 22, 2024

