Making Healthy Taste Better

2023 ANNUAL REPORT





A Record Year. A Bright Future.



James P. Zallie
PRESIDENT & CEO

A Message to our Shareholders:

Ingredion performed exceptionally well and once again displayed resilience in 2023, delivering more than 20% operating income growth while expanding gross margins for six consecutive quarters. We achieved strong financial results in the face of challenging market conditions, generating record net sales, profitability, and cash flow while advancing our safety and sustainability agendas and improving service deliveries to customers.

Ingredion's net sales reached an all-time high of \$8.2 billion, up 3% from the prior year. We posted record operating and adjusted operating income of \$957 million, up 26%, and \$969 million, up 23%, respectively, as our teams managed the impacts of raw material price fluctuations and customer inventory destocking. Reported and adjusted earnings per share grew by 31% to \$9.60 and by 26% to \$9.42, respectively. Additionally, cash from operations exceeded \$1 billion, and we returned \$295 million to shareholders.

EXECUTING OUR STRATEGY

Throughout the year, our teams focused on executing against the four strategic pillars of our Driving Growth Roadmap designed to deliver shareholder value by accelerating customer co-creation and enabling consumer-preferred innovation to advance **specialties growth**. Driven by double-

digit growth in starch-based texturizers, specialty ingredient net sales rose by 4% and represent 34% of 2023 consolidated net sales. Among the standout segments were Food Systems, driven by strong private-label demand, as well as Pharma and Personal Care, reflecting economically resilient, high-value wellness offerings.

We made notable progress in **commercial excellence** as our technical service teams engaged with customers to provide the right ingredient solutions to meet rapidly evolving consumer demand worldwide. Customer engagements both in person at Ingredion Idea Labs® and through our virtual innovation studios grew by 26% in 2023, demonstrating the breadth and relevance of Ingredion's diverse portfolio of ingredients and solutions.

In addition, we enhanced our go-to-market capabilities in line with our strategy to become a more comprehensive solutions provider by investing in solutions and consultative selling. Additionally, our investment in supply chain systems improved forecast accuracy and on-time delivery as we fulfilled customer orders while carefully managing inventories. The cumulative effect of these commercial initiatives led to improvements across all regions in our Net Promoter Scores.

The progress against our growth agenda was complemented by the progress we made in

66

Ingredion has
thrived for more
than a century by
continuously adapting
to changing market
conditions to pursue
growth opportunities
most effectively."



cost competitiveness through operational excellence. We strengthened our global procurement team, increased the spend under corporate procurement management, and invested significantly in category management training. These investments are providing early paybacks, delivering meaningful year-over-year savings, reducing risk, and improving supplier collaborations.

Our operations teams responded with agility to softer demand, mostly during the first part of 2023, by adjusting production schedules. As customers rebalanced inventories and destocking lessened in the second half of the year, our ability to adjust production enabled us to end the year with balanced inventory positions.

In 2023, several third parties validated our commitment to cultivate a **purpose-driven** and **people-centric growth culture**. We earned a perfect score in the Human Rights Campaign Foundation's Equity 100 Award, and we were pleased to once again be included on the Bloomberg Gender-Equality Index and named one of the world's most ethical companies by Ethisphere.

We notched gains against other important metrics as well. The safety of our employees and contractors has always been a foundational element of our culture. In 2023, we reduced our recordable and lost time incidents to record lows, and we continued to operate at world-class levels of safety performance. And with approximately 66% of our five priority crops now sustainably sourced, we are on track to meet our 2025 commitment of 100% sustainable sourcing.

THE NEXT STAGE IN OUR EVOLUTION

Ingredion has thrived for more than a century by continuously adapting to changing market conditions to pursue growth opportunities most effectively. As part of this ongoing pursuit, we announced plans to reorganize our business operations and redefine our reportable business segments.

Going forward, Texture and Healthful Solutions will have a global mandate, while the two Food and Industrial Ingredients segments will have a regional focus, reflecting the unique business environments for each of their regions. The new structure makes our product capabilities more transparent, better aligns our commercial teams with customer needs, provides greater insight for shareholders, and creates more efficient pathways to growth.

2023's results would not have been possible without the commitment and support of many stakeholders. I am grateful to our board of directors for their guidance and encouragement and to our employees for their initiative, resourcefulness, and dedication. As we enter 2024, we are confident in our ability to achieve our long-term growth targets and create value for our shareholders.

Sincerely,

James P. Zallie

2023 HIGHLIGHTS

Net Sales

\$8.2B

Cash from Operations

\$1B

Adjusted Operating Income

Up 23%

Adjusted Earnings Per Share

Up 26%

Total Shareholder Return

15%



Growing a Resilient Portfolio

By diversifying our solutions, geographies, and customer base, we are positioning Ingredion for consistent success in a rapidly changing world.

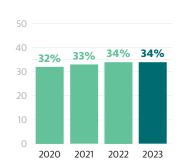
INGREDION HAS A
DIVERSIFIED CUSTOMER
BASE WITH

18,000 CUSTOMERS IN NEARLY

120

COUNTRIES.

Net Sales Specialty Ingredients



SNACKING CENTER OF EXCELLENCE

The snacking category is an ideal fit for Ingredion because it leverages our broad range of solutions, from specialty starches and plant-based proteins to sugar reduction and sweeteners. Working closely with our customers, the experts at our Snacking Center of Excellence draw on their technical proficiency and vast experience to deliver proprietary insights and market-ready prototypes. We are pleased to have secured new snack projects with large food companies, and we have created a multimillion-dollar pipeline with high growth potential.



SUGAR REDUCTION AND SPECIALTY SWEETENERS

Ingredion is the global leader in natural high-intensity sweeteners for sugar reduction due to our acquisition of PureCircle in 2020. PureCircle's advanced technology in stevia leaf breeding and enzyme chemistry is critical for large consumer packaged goods companies looking to meet consumer demand for reduced-sugar products. In 2023, we increased our ownership of PureCircle to 88% and continued to expand our pipeline of projects by developing new solutions. We also began a significant expansion of our stevia bioconversion facility in Kuala Lumpur, Malaysia.

Since 2020, we have added approximately 185 new customers for high-intensity natural sweeteners, which has helped remove an estimated 4.7 trillion calories from consumer diets.

CLEAN AND SIMPLE INGREDIENTS

Consumers want products that are closest to nature — made from ingredients that are understood, and authentic. Our comprehensive range of clean-label solutions includes functional native starches, multibenefit citrus fibers, and naturally derived emulsifiers. These ingredients enable manufacturers to replace undesirable additives and develop new products with shorter ingredient lists that feature consumer-preferred labels.

Ingredion's clean and simple platform benefited from capacity expansion completed in 2022, which allowed us to exceed our 2023 growth expectations and meet customer demand in both the U.S. and Europe. We expanded our portfolio of functional, clean-label ingredient solutions to include texturizers made from the peels of citrus fruits with the U.S. launch of FIBERTEX™ CF 502 and FIBERTEX™ CF 102. We also introduced NOVATION® Indulge 2940, the first non-GMO functional native corn starch and clean-label ingredient that provides a unique gelled texture for popular dairy and alternative dairy products.

PHARMACEUTICAL AND PERSONAL CARE INGREDIENTS

In 2023, Ingredion's pharmaceutical and personal care ingredients achieved double-digit growth against the previous year's strong performance. We set the stage for future growth by expanding our investments in India, one of the fastestgrowing pharmaceutical markets in the world. In 2022, we acquired Amishi Drugs & Chemicals in Ahmedabad and secured a majority position in Mannitab Pharma Specialties in Malegaon. Thanks to these strategic investments, Ingredion has an even broader portfolio of functional excipients, better positioning us to partner with pharma and nutraceutical formulators to help them meet regulatory challenges, advance drug development, and pursue emerging trends.

4.7
TRILLION

ESTIMATED CALORIES
REMOVED FROM CONSUMER
DIETS GLOBALLY USING STEVIABASED PRODUCTS SOLD BY
INGREDION SINCE 2020.



Targeting Even Better Execution

We are constantly looking for ways to deliver superior service to customers, improve our productivity, and increase our margins.



INGREDION HAS

32

IDEA LABS® INNOVATION
CENTERS THAT LEVERAGE THE
TALENTS OF MORE THAN 500
FOOD TECHNOLOGISTS
AND SCIENTISTS.

COMMERCIAL EXCELLENCE

In 2023, Ingredion took commercial excellence to new levels, including expanding our Pricing Centers of Excellence in response to sharply rising inflation. This allowed us to maintain our ability to price and pass through higher raw material costs. Throughout the year, our teams around the world leveraged regional pricing centers to continuously assess the value that individual ingredients bring to a recipe and price accordingly.

At the same time, Ingredion's sales teams secured multiyear contracts at current market pricing with some of our larger global customers. These contracts, which cover sizable volumes, should support margin expansion in 2024.

In addition, we increased the visibility of global order tracking for customers and improved warehousing logistics, which reduced customer pickup times while lowering freight costs. These initiatives have generated higher Net Promoter Scores and positive customer feedback.

COLLABORATIONS WITH CUSTOMERS

To reduce formulation and production costs, our customers turn to Ingredion to leverage the functionality of our solutions and the insights of our experts. We engage with customers to co-create new products through our Ingredion Idea Labs® innovation centers and virtual creative culinary studios.

To facilitate these efforts, we rely on ATLAS, the largest proprietary consumer research program in the food and beverage industry. ATLAS contains more than 10 years of data from over 100,000 consumer interviews in 33 global markets, providing context to pinpoint emerging trends in ingredients and changes in consumer expectations. In addition, our proprietary ATLAS product simulator uses digital prototyping to accelerate innovation, helping our customers reduce R&D expenses and increase the efficiency of new product development.

Purpose-driven and People-centric Growth Culture

- Recognized as one of the World's Most Ethical Companies by Ethisphere for the ninth time
- Included in the Bloomberg Gender-Equality Index for the sixth consecutive year
- Named among the "U.S. News & World Report" 2023-2024 Best Companies To Work For
- Recognized as one of the 2023
 Top Regional Companies in the U.S. by DiversityInc

- Earned the Equality 100 Award: Leader in LGBTQ+ Workplace Inclusion from the Human Rights Campaign Foundation
- Received an Ethics and Values in the Industry Award from the Mexican Confederation of Industrial Chambers for the ninth consecutive year
- Achieved Great Place To Work certification in Brazil, Peru, and Colombia for the second consecutive year

- Recognized as a Top Employer in Malaysia, South Korea, Thailand, Singapore, China, Germany, and the United Kingdom
- Achieved an employee engagement score of 79 points across the organization, a four-point increase over the Microsoft Viva Glint global engagement benchmark of 75

COST COMPETITIVENESS THROUGH OPERATIONAL EXCELLENCE

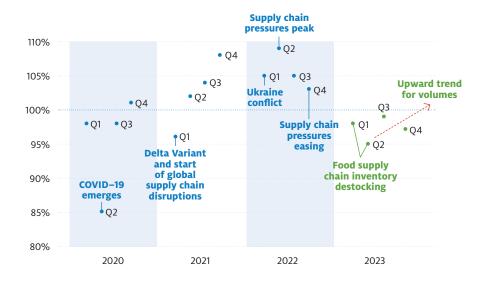
A major challenge in 2023 was adjusting production to changing customer demand. During the first half of the year, customers reduced excess inventory that they accumulated post-pandemic to buffer supply chain disruptions, but as the year progressed, destocking slowed. Our supply chain experts worked closely with the commercial organization and operations to ensure we met the ebbs and flows in customer demand while maintaining sufficient, yet not excessive, finished goods inventory.

Throughout the year, we pursued operational excellence on several fronts. Our operations team continued to manage production inputs to help compensate for inflation and absorb fixed costs, offsetting more than \$50 million of increased allocated costs by achieving higher productivity.

Ingredion also launched a connected factory strategy to further increase productivity. As part of this initiative, our team in Hamburg, Germany, is using artificial intelligence (AI) to optimize batch cycle times, delivering up to a 5% increase in asset utilization. Lessons learned will guide us as we roll out AI to our other facilities.

Sequential Quarterly Volume Improvement

(indexed against 2019 quarterly average of shipped volume*)



^{*}Shipped head product volume excludes global HFCS shipped volume, as well as impact of Argentina JV (2021) and Cedar ethanol (2020)

Journeying Toward a Sustainable Future

We are committed to growing responsibly, using the ESG framework we developed as part of our 2030 All Life sustainability plan.

SAFEGUARDING OUR PLANET

It has never been more imperative that our responses to an ever-evolving world remain thoughtful, considerate, measured, and collaborative.

- We are well on our way to meeting our goal of having 100% of our Tier 1 crops (i.e., corn, tapioca, potato, stevia, and pulses) sustainably sourced by 2025, having reached 66%* by the end of 2023.
- Our commitment to reducing Scope 1 and Scope
 2 emissions progressed meaningfully last year.
- We continued our transition in Brazil to renewable energy with the installation of two biomass boilers and contracting renewable electricity, reducing our Brazilian CO₂ emissions by 7% annually. In 2023, our four Brazilian plants purchased 95+% renewable electricity.
- We installed floating and land-based solar panels in Thailand and land-based panels in Pakistan.

- As a founding member of the Sustainable Agriculture Initiative (SAI) Platform regenerative agriculture program, we are helping to develop a regenerative framework for the food and beverage industry.
- The collaborative regenerative agricultural projects with customers are generating incremental value across the supply chain for Ingredion as well as for farmers and customers. We expanded projects with growers by 56,000 acres, putting 70,000 acres under regenerative projects.
- In partnership with the Kenyan government and other entities, we helped feed 50,000 school children in 2023, with the goal of serving 100,000 in 2024 and 2.4 million in 2025.

ACHIEVING RECORD SAFETY LEVELS

Our operations team made great strides in driving employee and contractor safety in 2023. Historically, Ingredion has operated at world-class safety levels, but this year, we saw a particularly dramatic reduction in recordable and lost-time case rates.

INGREDION
ACHIEVED AN
EMPLOYER TOTAL
CASE INCIDENT
RATE OF

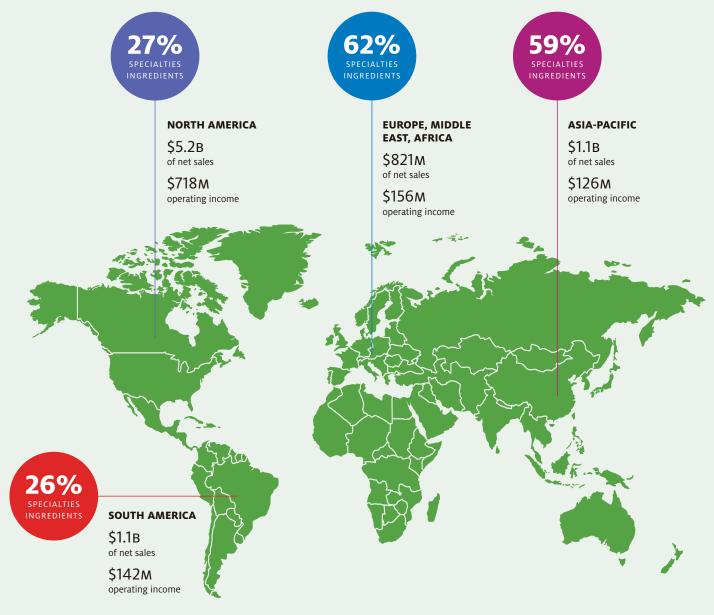
0.19IN 2023.



*Estimate as of December 2023

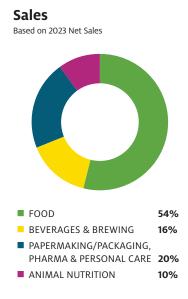
Growth Across the Globe

Ingredion's ability to deliver consistent performance and steady growth reflects the geographic diversity of our markets and the breadth of our solutions.



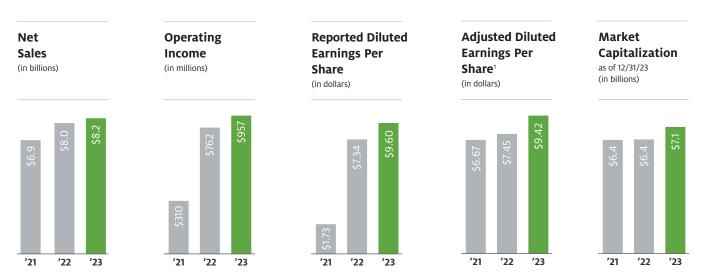
Financial Highlights

Dollars in millions, except per share amounts; years ended December 31	2023	% CHANGE	2022	% CHANGE	2021
Reported Income Statement Data					
Net sales	\$8,160	3%	\$7,946	15%	\$6,894
Operating income	957	26%	762	146%	310
Diluted earnings per share	9.60	31%	7.34	324%	1.73
Balance Sheet and Other Data					
Cash and cash equivalents	401		236		328
Total assets	7,642		7,561		6,999
Total debt	2,188		2,483		2,046
Total equity (including redeemable equity)	3,650		3,262		3,225
Annual dividends declared per common share	2.98		2.72		2.58
Net debt to adjusted EBITDA ratio ¹	1.5		2.2		1.9
Cash provided by operations	1,057		152		392
Mechanical stores expense	62		55		55
Depreciation and amortization	219		215		220
Capital expenditures and mechanical stores purchases	316		300		300



Adjusted Return on Invested Capital





'See Financial Performance Metrics beginning on page 61 of the Annual Report for a reconciliation of these metrics, which are not calculated in accordance with Generally Accepted Accounting Principles (GAAP), to the most comparable GAAP measures

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

FORM 10-K

	I OIGH IO IC	
	(Mark One)	
	ECTION 13 OR 15(d) OF THI scal year ended Decembe	E SECURITIES EXCHANGE ACT OF 1934 er 31, 2023
	or	
	SECTION 13 OR 15(d) OF T he transition period from	HE SECURITIES EXCHANGE ACT OF 1934 1 to
Cor	nmission file number 1-13	397
	Ingredion GREDION INCORPORATE of registrant as specified i	
Delaware		22-3514823
(State or other jurisdiction of incorporation or organization	on)	(I.R.S. Employer Identification No.)
	porate Center, Westchest principal executive offices	
Registrant's telephor	ne number, including area	code (708) 551-2600
Securities regis	tered pursuant to Section	12(b) of the Act:
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	INGR	New York Stock Exchange
Securities registered pursuant to Section 12(g) of the Act: Nor	ie	
Indicate by check mark if the registrant is a well-known seaso	ned issuer, as defined in Ri	ule 405 of the Securities Act. Yes 🛚 No 🖵
Indicate by check mark if the registrant is not required to file	reports pursuant to Sectior	n 13 or Section 15(d) of the Act. Yes 🖵 No 🛭
Indicate by check mark whether the registrant: (1) has filed all during the preceding 12 months (or for such shorter period th filing requirements for the past 90 days. Yes $\mathbf M$ No $\mathbf Q$		
Indicate by check mark whether the registrant has submitted of Regulation S-T (\S 232.405 of this chapter) during the precede such files). Yes Σ No \Box	, ,	·
Indicate by check mark whether the registrant is a large accel- an emerging growth company. See the definitions of "large ac company" in Rule 12b-2 of the Exchange Act.		
Large accelerated filer \(\mathbb{\text{M}} \) Accelerated filer \(\mathbb{\text{J}} \) Non-accelerated filer \(\mathbb{\text{J}} \) Non-accelerated filer are mark if the new or revised financial accounting standards provided pursuant by check mark whether the registrant has filed a report.	e registrant has elected not ant to Section 13(a) of the	Exchange Act. 🗖

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

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

the filing reflect the correction of an error to previously issued financial statements.

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

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

prepared or issued its audit report Yes X No 🖵

The aggregate market value of the registrant's voting stock held by non-affiliates of the registrant on the last day of the most recently completed second fiscal quarter (based upon the per share closing price of \$105.95 as reported on the New York Stock Exchange on June 30, 2023, and, for the purpose of this calculation only, the assumption that all of the registrant's directors and executive officers are affiliates) was approximately \$6,990,000,000.

The number of shares outstanding of the registrant's common stock, par value \$0.01 per share, as of February 15, 2024 was 65,563,650. Documents Incorporated by Reference:

Information required by Part III (Items 10, 11, 12, 13 and 14) of this document is incorporated by reference to certain portions of the registrant's definitive Proxy Statement to be distributed in connection with its 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after December 31, 2023.

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FORWARD-LOOKING STATEMENTS

This Form 10-K contains or may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Ingredion Incorporated intends these forward-looking statements to be covered by the safe harbor provisions for such statements.

Forward-looking statements include, among others, any statements regarding our prospects, future operations, or future financial condition, earnings, net sales, tax rates, capital expenditures, cash flows, expenses or other financial items, including management's plans or strategies and objectives for any of the foregoing and any assumptions, expectations or beliefs underlying any of the foregoing.

These statements can sometimes be identified by the use of forward-looking words such as "may," "will," "should," "anticipate," "assume," "believe," "plan," "project," "estimate," "expect," "intend," "continue," "pro forma," "forecast," "outlook," "propels," "opportunities," "potential," "provisional," or other similar expressions or the negative thereof. All statements other than statements of historical facts therein are "forward-looking statements."

These statements are based on current circumstances or expectations, but are subject to certain inherent risks and uncertainties, many of which are difficult to predict and beyond our control. Although we believe our expectations reflected in these forward-looking statements are based on reasonable assumptions, investors are cautioned that no assurance can be given that our expectations will prove correct.

Actual results and developments may differ materially from the expectations expressed in or implied by these statements, based on various risks and uncertainties, including geopolitical conflicts and actions arising from them, including the impacts on the availability and prices of raw materials and energy supplies, supply chain interruptions, and volatility in foreign exchange and interest rates; changing consumer consumption preferences that may lessen demand for products we make; the effects of global economic conditions and the general political, economic, business, and market conditions that affect customers and consumers in the various geographic regions and countries in which we buy our raw materials or manufacture or sell our products, and the impact these factors may have on our sales volumes, the pricing of our products and our ability to collect our receivables from customers; future purchases of our products by major industries which we serve and from which we derive a significant portion of our sales, including, without limitation, the food, animal nutrition, beverage and brewing industries; the risks associated with pandemics; the uncertainty of acceptance of products developed through genetic modification and

biotechnology; our ability to develop or acquire new products and services at rates or of qualities sufficient to gain market acceptance; increased competitive and/or customer pressure in the corn-refining industry and related industries, including with respect to the markets and prices for our primary products and our co-products, particularly corn oil; price fluctuations, supply chain disruptions, and shortages affecting inputs to our production processes and delivery channels, including raw materials, energy costs and availability and cost of freight and logistics; our ability to contain costs, achieve budgets and realize expected synergies, including our ability to complete planned maintenance and investment projects on time and on budget as well as with respect to freight and shipping costs and hedging activities; operating difficulties at our manufacturing facilities and liabilities relating to product safety and quality; the effects of climate change and legal, regulatory, and market measures to address climate change; our ability to successfully identify and complete acquisitions, divestitures, or strategic alliances on favorable terms as well as our ability to successfully conduct due diligence, integrate acquired businesses or implement and maintain strategic alliances and achieve anticipated synergies with respect to all of the foregoing; economic, political and other risks inherent in conducting operations in foreign countries and in foreign currencies; the failure to maintain satisfactory labor relations; our ability to attract, develop, motivate, and maintain good relationships with our workforce; the impact on our business of natural disasters, war, threats or acts of terrorism, or the occurrence of other significant events beyond our control; the impact of impairment charges on our goodwill or long-lived assets; changes in government policy, law, or regulation and costs of legal compliance, including compliance with environmental regulation; changes in our tax rates or exposure to additional income tax liability; increases in our borrowing costs that could result from increased interest rates; our ability to raise funds at reasonable rates and other factors affecting our access to sufficient funds for future growth and expansion; interruptions, security incidents, or failures with respect to information technology systems, processes, and sites; volatility in the stock market and other factors that could adversely affect our stock price; risks affecting the continuation of our dividend policy; and our ability to maintain effective internal control over financial reporting.

Our forward-looking statements speak only as of the date on which they are made, and we do not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date of the statement as a result of new information or future events or developments. If we do update or correct one or more of these statements, investors and others should not conclude that we will make additional updates or corrections. For a further description of these and other risks, see *Item 1A. Risk Factors* below and our subsequent reports on Form 10-Q and Form 8-K.

ITEM 1. Business

OUR COMPANY

Ingredion Incorporated (together with its consolidated subsidiaries, the "Company," "Ingredion," "we," "us," and "our") is a leading global ingredients solutions provider that transforms grains, fruits, vegetables and other plant-based materials into value-added ingredient solutions for the food, beverage, animal nutrition, brewing and industrial markets. Our innovative ingredient solutions help customers stay on trend with simple ingredients and other indemand ingredients.

Our Purpose is to bring the potential of people, nature and technology together to make life better. We develop, produce and sell a variety of food and beverage ingredients, primarily starches and sweeteners, for a wide range of industries. Currently, we manage our operations geographically on a regional basis, with our businesses and investments classified into the following reportable business segments:

- North America U.S., Mexico and Canada
- South America Brazil, Colombia, Peru, Ecuador and Argentina
- Asia-Pacific Thailand, China, Japan, Australia, Indonesia, India, the Philippines, Malaysia, Singapore, New Zealand, Vietnam and previously South Korea, in which we sold our business on February 1, 2024
- Europe, Middle East and Africa ("EMEA") Germany, Pakistan, the United Kingdom, South Africa and Poland

In November 2023, we announced plans to reorganize our business operations, which will result in a change to our reportable business segments. Once the reorganization is complete, which we expect will occur in 2024, we anticipate that our production assets and commercial efforts will align with a global focus on Texture and Healthful Solutions, a local focus on Food and Industrial Ingredients, and other businesses. We will continue to report our results using the existing reportable segment structure until the reorganization is complete, the new segments are operational and discrete financial information consistent with the new segments is being provided to our Chief Executive Officer.

Our products are derived primarily from the processing of corn and other starch-based materials, such as tapioca, potato and rice. Our product lines include starches and sweeteners, animal feed products and edible corn oil. Our starch-based products include both foodgrade and industrial starches, as well as biomaterials. Our sweetener products include glucose syrups, high maltose syrups, high fructose corn syrup, caramel color, dextrose, polyols, maltodextrins, and glucose and syrup solids.

GEOGRAPHIC SCOPE AND OPERATIONS

As of December 31, 2023, we utilized our global network of 47 manufacturing facilities and joint venture partnerships to support key global product lines. Our manufacturing process is based on a capital-intensive, two-step process that involves the wet-milling and processing of starch-based materials, primarily corn. During the front-end process, the starch-based materials are steeped in

a water-based solution and separated into starch and co-products such as protein, fiber and germ used to produce corn oil. The starch is then either dried for sale or further processed to make starches, sweeteners and other ingredients that serve the particular needs of various industries.

Our North America region includes 22 manufacturing facilities that produce a wide range of starches, sweeteners, gum acacia, pea protein, and fruit and vegetable concentrates.

Our South America region includes seven manufacturing facilities that produce regular, modified, waxy, tapioca starches, high fructose and high maltose syrups and syrup solids, dextrins and maltodextrins, dextrose, specialty starches, caramel color and sorbitol. We also own 49 percent of Ingrear Holding S.A., which operates five manufacturing facilities in Argentina to produce value-added ingredients for sale to customers in the food, beverage, pharmaceutical and other industries in Argentina, Chile and Uruguay (the "Argentina joint venture"). Ingredion and Grupo Arcor, an Argentine food company, jointly appoint a team of executives to manage the Argentina joint venture.

Our Asia-Pacific region manufactures corn-based products in China and Thailand, tapioca- and rice-based products in Thailand, stevia sweetener products in Malaysia and China, chemically modified starch-based pharmaceutical excipients in India, and spray dried and fine grade mannitol in India. On February 1, 2024, we completed the divestiture of our business in South Korea, which manufactured corn-based products, to an affiliate of the Sajo Group, a food company headquartered in Seoul, South Korea. We supply products manufactured in the Asia-Pacific region to our global network. As of December 31, 2023, the region's operations include twelve manufacturing facilities that produce modified, specialty and regular waxy tapioca and rice starches, dextrins, glucose, high maltose syrup, stevia sweeteners, dextrose, high fructose corn syrup, caramel color and pharmaceutical-grade polyols.

Our Asia-Pacific region includes 88 percent ownership of PureCircle Limited ("PureCircle"), one of the leading producers and innovators of stevia sweeteners and flavors for the food and beverage industry. We also agreed to acquire the remaining 35 percent of shares from our current 65 percent ownership of Mannitab Pharma Specialties Private Limited ("Mannitab"), an Indian manufacturer of spray dried mannitol and fine grade mannitol, by March 2026.

Our EMEA region includes six manufacturing facilities that produce modified and specialty starches, glucose and dextrose in Pakistan, Germany and the United Kingdom. Through our Germanheadquartered subsidiary KaTech, we offer advanced texture and stabilization solutions to the food and beverage industry.

We utilize a network of tolling manufacturers in various regions in the production cycle of certain specialty starches. In general, these tolling manufacturers produce certain basic starches for us and we in turn complete the manufacturing process of starches through our finishing channels.

Our approach to production and service, which focuses on local management and production improvements of our worldwide operations, provides us with a unique understanding of the cultures and product requirements in each of the geographic markets in which we operate. This allows us to bring added value to our customers through tailored, innovative solutions. Our centralized production planning, distribution and financial functions similarly give us the ability to serve global customers, leverage digital solutions, ration production capacity, identify synergies, and maximize the benefits of our global presence.

PRODUCTS

Our portfolio of products is generally classified into the following categories: Starch Products, Sweetener Products, and Co-products and others. Within these categories, we identify a portion of our products as specialty ingredients and the remainder of our products as core ingredients.

Starch products

Our starch products represented approximately 47 percent, 46 percent and 45 percent of our net sales for 2023, 2022 and 2021, respectively. Starches are an important component in a wide range of processed foods, where they are used for adhesion, clouding, dusting, expansion, fat replacement, freshness, gelling, glazing, mouthfeel, stabilization and texture. Cornstarch is sold to cornstarch packers for sale to consumers. Starches are also used in paper production to create a smooth surface for printed communications and to improve strength in recycled papers. Specialty paper starches are used for enhanced drainage, fiber retention, oil and grease resistance, improved printability and biochemical oxygen demand control. The textile industry uses starches and specialty starches for sizing (abrasion resistance) to provide size and finishes for manufactured products. Industrial starches are used in the production of construction materials, textiles, adhesives, pharmaceuticals and cosmetics, as well as in mining and water filtration. Specialty industrial starches are used for biomaterial applications, including biodegradable plastics, fabric softeners and detergents, hair and skin care applications, dusting powders for surgical gloves, and in the production of glass fiber and insulation.

Sweetener products

Our sweetener products represented approximately 34 percent, 33 percent and 33 percent of our net sales for 2023, 2022 and 2021, respectively. Sweeteners include products such as glucose syrups, high maltose syrup, high fructose corn syrup, dextrose, polyols, maltodextrin, glucose syrup solids and non-GMO (genetically modified organism) syrups. Our sweeteners are used in a wide variety of food and beverage products, such as baked goods, snack foods, canned fruits, condiments, candy and other sweets, dairy products, ice cream, jams and jellies, prepared mixes, table syrups, and beverages. These sweetener products offer functionality in addition to sweetness, such as texture, body and viscosity; help control freezing points, crystallization and browning; add humectancy (ability to add moisture) and flavor; and act as binders. Our high maltose syrups speed the fermentation process, allowing brewers to increase capacity without adding capital. Dextrose has a wide range of applications in the food and confection industries, in solutions for intravenous ("IV") and other pharmaceutical applications, and in numerous industrial applications like wallboard, biodegradable surface agents and moisture control agents. Our specialty sweeteners provide affordable and natural, reduced calorie and sugar-free solutions for our customers.

Co-products and others

Co-products and others represented approximately 19 percent, 21 percent and 22 percent of our net sales for 2023, 2022 and 2021, respectively. We sell refined corn oil (from germ) to packers of cooking oil and to producers of margarine, salad dressings, shortening, mayonnaise and other foods. We also sell corn gluten feed as animal feed and corn gluten meal as high-protein feed for chickens, pet food and aquaculture. Our other products include fruit and vegetable products, such as concentrates, purees and essences, as well as pulse proteins and hydrocolloids systems and blends.

Specialty ingredients within the product portfolio

Within our three product portfolios, we consider certain of our products to be specialty ingredients. Specialty ingredients represented approximately 34 percent, 34 percent and 33 percent of our net sales for 2023, 2022 and 2021, respectively. These ingredients deliver more functionality than our other products and add additional customer value. Our specialty ingredients are aligned with growing market and consumer trends such as health and wellness, clean-label, simple ingredients, affordability, indulgence and sustainability.

We drive growth for our specialty ingredients portfolio by leveraging the following growth platforms:

Starch-based Texturizers: These ingredients support the structure and texture behind great eating experiences. Products are made from corn, potato, rice and tapioca, and offer a multitude of textures, functionalities and stability during processing and shelf life to a broad range of food products.

Clean and Simple Ingredients: These functional ingredients address the clean label trend for finished products made with shorter lists of food ingredients that have achieved broad consumer acceptance. From food and beverages to pet food and personal care, consumers are looking for clean, simple, natural and authentic products that they can identify and trust. The broad portfolio of clean label ingredients includes starches, sweeteners, flours, nutrition ingredients, emulsifiers, and fruit and vegetable concentrates.

Sugar Reduction and Specialty Sweeteners: These solutions provide sweetness or functional replacement for sugar in reduced-calorie and sugar-free foods and beverages without sacrificing quality and consistency. These specialty ingredients are made from a variety of GMO and non-GMO raw material bases and include such ingredients as stevia sweeteners, polyols, dextrose and allulose, which is a rare sugar.

Food Systems: These systems deliver ingredient combinations that simplify a customer's production cycle. A food system can address an array of functional challenges, including mouthfeel/texture for dairy and alternative dairy products, thickening of sauces, stabilization in high-protein drinks, gelling for fruit fillings, film formers for candy shells, foaming and frothing, adding soluble fibers and nutritional ingredients, adhering particles to breads, and emulsification of flavors.

Plant-based Proteins: These specialty pulse-based protein ingredients bring solutions made from fava beans and peas. They add protein, dietary fiber, micronutrients and texture to food and beverages.

Core ingredients within the product portfolio

We refer to the remainder of our starch products, sweetener products and co-products that do not fall into specialty ingredients, as defined above, as core ingredients. Core ingredients represented approximately 66 percent, 66 percent and 67 percent of our net sales for 2023, 2022 and 2021, respectively.

COMPETITION

The starch and sweetener industry is highly competitive. Competition within our markets is largely based on product functionality, price and quality. The U.S. is a highly competitive market with operations by other starch processors, several of which are divisions of larger enterprises. Some of these competitors, unlike us, have vertically integrated their starch processing and other operations. Our competitors include, among others, Archer-Daniels-Midland Company ("ADM"), Cargill, Inc., Tate & Lyle PLC, and Primient. Our operations in Mexico and Canada face competition from U.S. imports and local producers including ALMEX, a Mexican joint venture between ADM and Primient. In South America, Cargill maintains starch processing operations in Brazil and Argentina. We also face competition from Roquette Frères S.A., primarily in our EMEA, North America and Asia-Pacific regions. Smaller local corn and tapioca processors also operate in some of our markets.

Some of our products also compete with products made from raw materials other than corn. High fructose corn syrup and monohydrate dextrose compete principally with cane and beet sugar products. Co-products such as corn oil and gluten meal compete with products of the corn dry milling industry and with soybean oil, soybean meal and other products. Fluctuations in prices of these competing products may affect prices of, and profits derived from, our products.

CUSTOMERS

We supply a broad range of customers in over 60 industries worldwide. The following table shows the approximate portion of total net sales by industry for each of the industries we served in 2023:

INDUSTRIES SERVED	TOTAL INGREDION	NORTH AMERICA	SOUTH AMERICA	ASIA- PACIFIC	EMEA
Food	54%	50%	52%	66%	71%
Beverage	9	12	1	6	1
Brewing	7	7	16	3	_
Food and Beverage Ingredients	70	69	69	75	72
Animal Nutrition	10	11	13	4	6
Other	20	20	18	21	22
Total Net Sales	100%	100%	100%	100%	100%

No customer accounted for 10 percent or more of our net sales in 2023, 2022 or 2021.

RAW MATERIALS

Corn (primarily yellow dent) is the primary basic raw material we use to produce starches and sweeteners. The price of corn, which is determined by reference to prices on the Chicago Board of Trade, fluctuates as a result of various factors, including farmers' planting

decisions, climate, domestic and foreign government policies (including those related to the production of ethanol), livestock feeding, shortages or surpluses of world grain supplies, and trade agreements. We use chips and slices from potato processors as the primary raw material to manufacture potato-based starches. We also use tapioca, particularly in certain of our production processes in the Asia-Pacific region. In addition to corn, potatoes, and tapioca, we use pulses, gums, rice, stevia, yellow peas and sugar as raw materials, among others.

Corn is also grown in other areas of the world, including China, Brazil, Europe, Argentina, Mexico, South Africa, Canada and Pakistan. Our subsidiaries outside the U.S. utilize both local supplies of corn and corn imported from other geographic areas, including the U.S., and we generally expect the supply of corn for these subsidiaries to be adequate for our needs. Corn prices for our non-U.S. subsidiaries fluctuate as a result of the same factors that affect U.S. corn prices.

We also utilize specialty grains such as waxy and high amylose corn, as well as proprietary seed varietals in our operations. In general, the planning cycle for our specialty grain sourcing begins three years in advance of the anticipated delivery of the specialty corn, since the necessary seed must be grown in the season before we contract to buy the grain. To secure these specialty grains at the time of our anticipated needs, we contract with certain farmers to grow the specialty corn approximately two years in advance of delivery. These specialty grains have a higher cost due to their more limited supply and require longer planning cycles to mitigate the risk of supply shortages.

Due to the competitive nature of our industry and the availability of substitute products not produced from corn, such as sugar from cane or beets, end-product prices in any period may not fluctuate in a manner that correlates to raw material costs of corn during that period.

We use derivative hedging contracts to protect the gross margin of our fixed ("firm") priced business, primarily in North America, and we follow a policy of hedging our exposure to commodity price fluctuations with commodities futures and options contracts, primarily for certain North American corn purchases. Other operations may be hedged based on our management's judgment as to the need to fix the costs of our raw materials to protect our profitability. Outside North America and Europe, we generally enter into short-term commercial sales contracts and adjust our selling prices based upon the local raw material costs. See Item 7A. Quantitative and Qualitative Disclosures about Market Risk for additional information.

RESEARCH AND DEVELOPMENT

Our global network of approximately 500 scientists creates innovative food solutions in 32 Ingredion Idea Labs® with headquarters in Bridgewater, New Jersey. Activities at Bridgewater include plant science and physical, chemical and biochemical modifications to food formulations, food sensory evaluation, and development of non-food applications such as starch-based biopolymers. In addition, we have product application technology centers that direct our product development teams globally to

create product application solutions to better serve the ingredient needs of our customers. Product development activity is focused on developing product applications for identified customer and market needs. Through this approach, we have developed value-added products for use by customers in various industries. We usually collaborate with customers to develop the desired product application either in the customers' facilities, our technical service laboratories, or on a contract basis.

Research and development ("R&D") is supported by our marketing, product technology, and technology support employees, as well as technical support services, to assist our customers with application development and co-creation. We invest in R&D and digital transformation solutions to support new product development and innovation, to enable greater value delivery to our customers, to reduce waste and lower our costs, and to drive operational excellence.

SALES AND DISTRIBUTION

Our salaried sales workforce, who are generally dedicated to customers in a geographic region, sell our products directly to manufacturers and distributors. In addition, we have employees that provide technical support to our sales personnel on an industry basis. We generally contract with trucking companies to deliver our bulk products to customer destinations. In North America, we generally use trucks to ship to nearby customers. For those customers located considerable distances from our manufacturing facilities, we primarily use either rail transport or a combination of rail transport and trucks to deliver our products.

PATENTS AND TRADEMARKS

As of December 31, 2023, we owned more than 1,900 patents and patents pending, which relate to a variety of products and processes, as well as a number of established trademarks under which we market our products. We also have the right to use other patents and trademarks pursuant to patent and trademark licenses. We do not believe that any individual patent or group of related patents or any trademark is material to our business.

HUMAN CAPITAL

We believe the strength of our workforce is one of the significant contributors to our success as a global company. Attracting, developing and retaining global talent with the right skills to drive our business is central to our values and long-term growth strategy. All of our employees contribute to our success and help us drive financial performance.

Workforce profile

As of December 31, 2023, Ingredion employed approximately 11,600 people, of whom approximately 3,200 were located in the U.S. and Canada. Approximately 32 percent of our U.S. and Canadian employees are members of labor unions. Our collective bargaining agreement at our Bedford Park, Illinois manufacturing facility, which covers approximately 250 employees, expires in 2024.

The following table provides additional information about our employees as of December 31, 2023:

REGION	APPROXIMATE NUMBER OF EMPLOYEES
North America	5,200
South America	2,250
Asia-Pacific	2,650
EMEA	1,500
Total Ingredion	11,600

Workplace safety

The overall well-being and safety of our employees and customers is one of our top priorities. We continue our strong focus on maintaining an injury-free workplace and invest in training, workplace resources and continuous improvement methodologies to improve safety results and ensure responsible management of all our facilities, particularly in our manufacturing plants, which continue to represent the greatest safety and health risks. A workplace safety goal represents a part of each employee's personal performance objectives each year as we strive to achieve an injury-free work environment.

Culture and employee engagement

We conduct confidential engagement surveys of our global workforce. Executive officers and leaders throughout the organization review aggregate survey results and create action plans at global, regional, functional and managerial levels. Furthermore, we employ a flexible approach for our office-based employees on how and where we work. We focus on agile ways of working that enable colleagues to work remotely when appropriate and organize our offices to foster connection and collaboration.

Inclusion and belonging

Our Executive Leadership Team and Board of Directors lead our Purpose and drive inclusion and belonging throughout the organization. Our program structure includes regional councils and global councils, which are collectively composed of regional and functional business leaders, human resource partners and select Business Resource Group ("BRG") leaders.

We leverage the diverse experience and skills of our BRGs to help inform our business strategy. Our nine BRGs, which we have implemented across our global operations, play a role in connecting employees across geographies and business areas, by providing colleagues with opportunities to enhance cultural awareness, enable collaboration, and inform our strategies for a broad consumer marketplace.

We also participate in the Paradigm for Parity® coalition, aspiring to achieve gender parity at manager level and above. As of December 31, 2023, employees who self-identify as women accounted for more than 30 percent of our Executive Leadership Team and 40 percent of our independent members of our Board of Directors. Additionally, the Bloomberg Gender-Equality Index ("GEI"), a modified market capitalization-weighted index that aims to track the performance of public companies committed to transparency in gender-data reporting, has included Ingredion in the GEI for seven years. We use the GEI as a benchmark to measure our performance and evaluate opportunities for improvement.

In December 2023, the Human Rights Campaign Foundation designated Ingredion as a top scorer in its 2023-2024 Corporate Equality Index with the Equality 100 Award: Leader in LGBTQ+ Workplace Inclusion.

GOVERNMENT REGULATION

As a manufacturer and marketer of food items and items for use in the pharmaceutical industry, our operations and the use of many of our products are subject to federal, state, foreign and local statutes and regulations, including the Federal Food, Drug and Cosmetic Act and the Occupational Safety and Health Act. We and many of our products are also subject to regulation by the U.S. Food and Drug Administration and other government agencies. Among other things, applicable regulations of these agencies prescribe requirements and establish standards for product quality, purity and labeling. Failure to comply with one or more regulatory requirements can result in a variety of sanctions, including monetary fines. No material fines were imposed on us in 2023. We may also be required to comply with federal, state, foreign and local laws regulating food handling and storage. We believe these laws and regulations have not negatively affected our competitive position.

Our operations are also subject to federal, state, foreign and local laws and regulations for environmental matters, including air and water quality, as well as other regulations intended to protect public health and the environment. We operate industrial boilers that fire natural gas, coal, or biofuels to operate our manufacturing facilities. Those boilers, along with product dryers, are our primary source of greenhouse gas emissions. During 2023, we spent \$36 million for environmental control and wastewater treatment equipment to be incorporated into existing facilities and in planned construction projects. We currently anticipate that we will invest approximately \$36 million for environmental facilities and programs in 2024.

Based on current laws and regulations and their enforcement and interpretation, we do not expect that the costs of future environmental compliance will be a material expense, although there can be no assurance that we will remain in compliance or that the costs of remaining in compliance will not have a material adverse effect on our future financial condition and results of operations.

ADDITIONAL INFORMATION

Our website address is www.ingredion.com and our investor website is www.ir.ingredionincorporated.com. We make available, free of charge through our investor website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended. We make these reports available as soon as reasonably practicable after we electronically file them with or furnish them to the Securities and Exchange Commission. Our corporate governance guidelines, board committee charters and code of ethics are posted on our investor website, and will be made available in print without charge to any stockholder upon request in writing to our principal executive offices at Ingredion Incorporated, 5 Westbrook Corporate Center, Westchester, Illinois 60154, Attention: Corporate Secretary. The information on, or accessible through, our website is not a part of, and is not incorporated by reference into, this report.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Following the November 2023 announcement of our plans to reorganize our operations, some of our executive officers were identified for new roles beginning in 2024. Our executive officers and their roles as of February 21, 2024 are as follows:

NAME	AGE	POSITIONS, OFFICES AND BUSINESS EXPERIENCE
James P. Zallie	62	President and Chief Executive Officer since January 2018. Executive Vice President, Global Specialties and President, Americas from January 2016 to December 2017. Director of Sylvamo Corporation, a global producer of uncoated papers.
Valdirene Evans	56	Senior Vice President and President, Global Texture Solutions as of January 2024. Senior Vice President and President, Asia-Pacific and Global Head of Pharma, Home and Beauty from October 2020 to December 2023. Senior Vice President and President, Asia-Pacific from March 2018 to September 2020.
Larry Fernandes	59	Senior Vice President and Chief Commercial and Sustainability Officer since July 2018. Senior Vice President and Chief Commercial Officer from March 2018 to July 2018.
Davida M. Gable	57	Vice President, Corporate Controller since joining Ingredion in October 2021. Head of Global Accounting and External Reporting at Wayfair Inc., an e-commerce company, from August 2020 to September 2021, and Assistant Controller at AK Steel Holdings Corporation, an integrated steel manufacturer, from May 2013 to July 2020.
James D. Gray	57	Executive Vice President and Chief Financial Officer since March 2017.
Tanya Jaeger de Foras	53	Senior Vice President, Chief Legal Officer, Corporate Secretary and Chief Compliance Officer since joining Ingredion in November 2021. Deputy General Counsel and Chief Compliance Officer for Whirlpool Corporation, a global home appliance manufacturer, from September 2019 to September 2021. EMEA Regional General Counsel for Whirlpool from June 2015 to August 2019.
Michael O'Riordan	54	Senior Vice President, Texture & Healthful Solutions, EMEA and Asia-Pacific, as of January 2024. Board Chairman, Rafhan Maize Ltd., a Company affiliate in Pakistan, since March 2023. Regional President, EMEA, from October 2020 to December 2023. Global Vice President, Marketing and Springboards, from July 2016 to September 2020.
Rob Ritchie	54	Senior Vice President, Food & Industrial Ingredients, LATAM and U.S./Canada, as of January 2024. Senior Vice President, Food & Industrial Ingredients, Americas, from May 2023 to December 2023. Regional President, Mexico, U.S./Canada Sweetener Solutions, Industrial Solutions and Kerr Concentrates from January 2021 to April 2023. President and General Director, Mexico, from March 2018 to December 2020.

NAME	AGE	POSITIONS, OFFICES AND BUSINESS EXPERIENCE
Eric Seip	56	Senior Vice President, Global Operations and Chief Supply Chain Officer since joining Ingredion in January 2021. Senior Vice President, Global Supply Chain at ChampionX Holding Inc. (formerly Ecolab), an oil and gas equipment and services company, from January 2020 to January 2021. Senior Vice President, Global Supply Chain at Ecolab from December 2011 to December 2019.
Nancy Wolfe	54	Senior Vice President and Chief Human Resources Officer since joining Ingredion in January 2022. Senior Vice President, Human Resources at Bayer Crop Science (formerly Monsanto), an agriculture, chemical and biochemical solutions company, from June 2018 to January 2022.
Jeremy Xu	56	Senior Vice President, Chief Innovation Officer and President, Global Healthful Solutions, as of January 2024. Senior Vice President and Chief Innovation Officer from October 2020 to December 2023. President, Human Nutrition and Health, at Royal DSM, a multinational corporation active in fields of health, nutrition and materials, from May 2016 to September 2020.

ITEM 1A. Risk Factors

There are many factors that could adversely affect our business, results of operations and cash flows, some of which are beyond our control. The following is a description of some important factors that may cause our business, results of operations, financial condition and cash flows in future periods to differ materially from those currently expected or desired. Factors not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business, results of operations, financial condition and cash flows.

RISKS RELATED TO OUR BUSINESS AND OUR INDUSTRY

Geopolitical conflicts and actions arising from them may have an adverse effect on the availability and prices of raw materials and energy supplies, cause supply chain disruptions, or contribute to volatility in foreign exchange and interest rates.

Our business may be adversely affected by new geopolitical conflicts, including impacts from conflicts that affect shipping through the Suez Canal, as well as the ongoing conflict between Russia and Ukraine. Our operations in Russia and Ukraine accounted for less than one half of one percent of our net sales in 2023, but these locations are in regions that provide sources of raw material and energy supplies for both us and certain companies whose products we distribute. Economic sanctions and export control measures imposed on Russia and designated Russian enterprises, Belarus and certain regions of Ukraine have resulted in increased volatility in the availability and prices of such raw materials and energy supplies. In addition, sanctions and macroeconomic effects of geopolitical conflicts have contributed to greater volatility in foreign exchange and interest rates that affect our financial results. Developments relating to geopolitical conflicts might result in a continuation of these impacts and in other impacts that could adversely affect our business or results of operations.

Changes in consumer practices, preferences and perceptions may lessen the demand for our products, which could reduce our sales and profitability and harm our business.

Food products are often affected by changes in consumer practices and tastes, national, regional and local economic conditions and demographic trends. For instance, changes in prevailing health or dietary preferences causing consumers to avoid food products that contain sweetener products, including high fructose corn

syrup, in favor of foods that are perceived as being healthier, have negatively affected our sales and profitability. Increasing concern among consumers, public health professionals and government agencies about the potential health concerns associated with obesity and inactive lifestyles represent a significant cost to some of our customers, including those engaged in the food and soft drink industries, and continue to materially affect demand for our products. Similarly, the increasing availability, use and acceptance of weight loss medications, including the expanded use of medications designed for weight loss in people without diabetes, may reduce sales of food and beverage products that contain our ingredients since the medications regulate appetite and may reduce the overall amount of food and beverages consumed.

Economic conditions may adversely impact demand for our products, reduce access to credit, affect investment returns and cause our customers and others with whom we do business to suffer financial hardship, all of which could adversely impact our business, results of operations, financial condition and cash flows.

General business and economic conditions that could affect us include barriers to trade (including as a result of tariffs, duties and border taxes, among other factors), the strength of the economies in which we operate, unemployment, inflation and fluctuations in debt and equity markets. While currently these conditions have not impaired our ability to access credit and equity markets to finance our operations, we are subject to the risk of a further deterioration in the financial markets.

These economic developments could negatively affect our operations through reduced consumer demand for our products, pressure to extend our customers' payment terms, insolvency of our customers and increased provisions for credit losses, product order delays or cancellations, less attractive supplier finance terms and conditions, and counterparty failures.

In connection with our defined benefit pension plans, adverse changes in investment returns earned on pension assets and discount rates used to calculate pension and related liabilities or changes in required pension funding levels may have an unfavorable impact on future pension expenses and cash flows.

Volatile worldwide economic conditions and market instability may make it difficult for us, our customers and our suppliers to accurately forecast future product demand trends, which could cause us to produce products in excess of demand, increase our inventory carrying costs, and incur additional charges for aged, obsolete or spoiled inventory. Alternatively, this forecasting difficulty may cause a shortage of products that could affect our ability to satisfy the demand for our products.

Our reliance on certain industries for a significant portion of our sales could have a material adverse effect on our business.

Of our 2023 net sales, approximately 54 percent were generated by sales to the food industry, approximately 10 percent by sales to the animal nutrition industry, approximately 9 percent by sales to the beverage industry, and approximately 7 percent by sales to the brewing industry. If our customers in any of these industries were to substantially decrease their purchases, our business might be materially adversely affected.

Pandemics could have a material adverse effect on our business.

Pandemics, such as the recent coronavirus pandemic, have had, and could continue to have, negative impacts on our business, including by causing significant volatility in the commodity and currency markets, changes in consumer demand, behavior or preference, disruptions in our supply chain and manufacturing capacity, limitations on our employees' ability to work and changes in the economic or political conditions in markets we serve, which could constrain or halt shipments to customers. These risks individually and in the aggregate could have a material effect on our operating results, financial condition, cash flows and prospects.

The uncertainty of acceptance of products developed through biotechnology could affect our profitability.

The commercial success of agricultural products developed through biotechnology, including genetically modified corn, depends in part on public acceptance of their development, cultivation, distribution and consumption. Public attitudes can be influenced by claims that genetically modified products are unsafe for consumption or that they pose unknown risks to the environment, even if such claims are not based on scientific studies. These public attitudes can influence regulatory and legislative decisions about biotechnology. The sale of our products, which may contain genetically modified corn, could be delayed or impeded because of adverse public perception regarding the safety of our products and the potential effects of these products on human health, the environment and animals.

Our future growth could be negatively impacted if we fail to continue introducing innovative new products and services or if competitors or customers independently identify or develop new solutions that could compete with our products and services.

A significant portion of our growth depends on innovation in products, processes and services. Our R&D efforts may not result in new products and services at a rate or of a quality sufficient to gain market acceptance. Increasing capabilities from generative artificial intelligence may increase the ability of competitors or customers to identify or develop new solutions that could compete with or reduce demand for our products and services.

It may be difficult to preserve operating margins and maintain market share in the highly competitive environment in which we operate.

We operate in a highly competitive environment. Competition in markets in which we compete is largely based on price, quality and product availability. Many of our products compete with virtually identical or similar products manufactured by other companies in the starch and sweetener industry. In the U.S., our competitors include divisions of larger enterprises that have greater financial resources than we do. Some of these competitors, unlike us, have vertically integrated their corn refining and other operations. Many of our products also compete with products made from raw materials other than corn, including cane and beet sugar. Fluctuation in prices of these competing products may affect prices of, and profits derived from, our products. In addition, government programs supporting sugar prices indirectly impact the price of corn sweeteners, especially high fructose corn syrup. Furthermore, co-products such as corn oil and gluten meal compete with products of the corn dry milling industry and with soybean oil, soybean meal and other products, the price of some of which may be affected by government programs such as tariffs or quotas.

Due to market volatility, we may be unable to pass potential increases in the cost of corn and other raw materials on to customers through product price increases, to purchase quantities of corn and other raw materials at prices sufficient to sustain or increase our profitability, or to supply product quantities and meet shipment delivery requirements that our customers demand.

The price and availability of corn and other raw materials are subject to volatility as a result of economic and industry conditions, including supply and demand factors such as supply chain disruptions, crop disease and severe weather conditions that include drought, floods, frost and ocean currents. These conditions are difficult to anticipate, are beyond our control and could adversely impact our profitability by affecting the prices we pay for raw materials.

Inputs to our procurement, production processes and delivery channels, such as raw material, energy, and freight and logistics, may experience price fluctuations, supply chain interruptions, and shortages that could adversely affect our results of operations.

Our finished products are made primarily from corn. Purchased corn and other raw material costs generally account for between 40 percent and 60 percent of our finished product costs. Some of our products are based upon specific varieties of corn that are produced in significantly smaller volumes than yellow dent corn. These specialty grains cost more due to their more limited availability and require planning cycles of up to three years to ensure we receive an adequate supply. We also manufacture certain starch-based products from potatoes. Our current potato starch requirements constitute a material portion of the total available North American supply. It is possible that, in the long term, continued growth in demand for potato starch-based ingredients and new product development could result in capacity constraints. Also, we utilize tapioca in the manufacturing of starch products primarily in

Thailand, as well as pulses, gum, rice, stevia and other raw materials around the world. A significant supply disruption or sharp increase in prices of any of these raw materials that we are unable to recover through pricing increases to our customers could have an adverse impact on our growth and profitability, especially if such an event disproportionately affects us as compared to our competitors.

Our business in the past has been adversely affected by fluctuations in our energy costs, which represented approximately 8 percent of our finished product costs in 2023; and could be negatively affected by such fluctuations in future periods. We use energy primarily to create steam required for our production processes and to dry products. We consume natural gas, electricity, coal, fuel oil, wood and other biomass sources to generate energy.

Because we ship products worldwide, our business in the past and has been, and in future periods could be, adversely affected by fluctuations in freight and logistics costs, and disruptions in supply channels between parties and locations that include our suppliers, production and storage facilities, tolling and packaging partners, distributors and customers. Risks to our business include impacts from labor strikes or weather-related events that affect transportation by rail, air, shipping or ground.

The market prices for our raw materials, supply chain freight and logistics, and energy may vary considerably depending on supply and demand, world economies, trade agreements and tariffs and other factors. We purchase these commodities and services based on our anticipated usage and future outlook for these costs. We may not be able to purchase these commodities and services at prices that we can adequately pass on to customers, which could have an adverse impact on our growth and profitability.

An inability to contain costs and working capital could adversely affect our future profitability, cash flows, and growth.

Our future profitability and growth depend on our ability to contain operating costs and per unit product costs and to maintain and implement effective cost control programs, while also maintaining competitive pricing and superior quality products, customer service and support. Our ability to maintain a competitive cost structure depends on continued containment of manufacturing, delivery and administrative costs, as well as the implementation of cost-effective purchasing programs for raw materials, energy and related manufacturing requirements. Our working capital requirements, including margin requirements on open positions on futures exchanges, are directly affected by the price of corn and other agricultural commodities, which may fluctuate significantly and change quickly.

In North America, we sell a large portion of our finished products derived from corn at firm prices established in supply contracts typically lasting for a period of one year. To minimize the effect of volatility in the cost of corn related to these firm-priced supply contracts, we enter into corn futures and options contracts, or take other hedging positions in the corn and soy futures market. These derivative contracts typically mature within one year. At expiration, we settle the derivative contracts at a net amount equal to the change in the price of the commodity from the date we entered the derivative contract, with the intention of offsetting the change in commodity prices from the time we entered the

firm-priced supply contracts. The fluctuations in the fair value of these hedging instruments may adversely affect our cash flow. We fund any unrealized losses or receive cash for any unrealized gains on futures contracts on a daily basis. While the corn and soy futures contracts or hedging positions are intended to minimize the effect of volatility of corn costs on operating profits, the hedging activity can result in losses, some of which may be material. In addition, our hedging activities may not be fully successful in limiting the effect of volatility in the cost of corn.

If we are unable to contain our operating costs and maintain the productivity and reliability of our production facilities, our profitability and growth could be adversely affected.

Operating difficulties at our manufacturing facilities and liabilities relating to product safety and quality could adversely affect our operating results.

Producing starches and sweeteners through corn refining is a capital-intensive industry. We conduct preventive maintenance and de-bottlenecking programs at our manufacturing facilities designed to maintain and improve grind capacity and facility reliability. If we encounter operating difficulties at a facility for an extended period of time or start-up problems with any capital improvement projects, we may not be able to meet a portion of our sales order commitments and could incur significantly higher operating expenses, both of which could adversely affect our operating results. Furthermore, we use boilers to generate steam required in our production processes. An event that impaired the operation of a boiler for an extended period of time could have a significant adverse effect on the operations of any manufacturing facility in which such event occurred.

In addition, we are subject to risks related to such matters as product safety and quality issues, product recalls, and customer claims, including product liability claims. The liabilities that could result from these risks may not always be covered by, or could exceed the limits of, our insurance coverage related to product liability and the other applicable forms of insurance that we carry. In addition, negative publicity caused by these types of risks may damage our reputation. The occurrence of any of the matters described above could adversely affect our revenues and operating results.

Global climate change and legal, regulatory, or market measures to address climate change, may negatively affect our business, operations and financial results.

We are subject to risks associated with the long-term effects of climate change on the global economy and on our industry in particular. Extreme weather and natural disasters that occur around the globe, such as drought, wildfires, storms, changes in ocean currents and flooding, could make it more difficult and costly for us to manufacture and deliver our products to our customers, obtain raw materials from our suppliers, or perform other critical corporate functions. In particular, if such climate change impacts negatively affect agricultural productivity, we may be subject to decreased availability or less favorable pricing from certain commodities that are necessary for our products, such as corn, specialty grains, rice, stevia, peas and sugar. Adverse weather conditions and natural

disasters could reduce crop size and crop quality, which could reduce our supplies of raw materials, lower recoveries of usable raw materials, increase the prices of our raw materials, increase our costs of storing and transporting raw materials, or disrupt production schedules. Our manufacturing operations also could be adversely affected by reduced water availability resulting from droughts.

There is a growing societal concern that carbon dioxide and other greenhouse gases in the atmosphere may have an adverse effect on global temperatures, weather patterns and the frequency and severity of natural disasters. The increasing concern over climate change could result in new domestic or international legal requirements for us to reduce greenhouse gas emissions and other environmental impacts of our operations, improve our energy efficiency, or undertake sustainability measures that exceed those we currently pursue. Furthermore, such measures may result in the taxation of greenhouse gas emissions. Any such regulatory requirements could cause disruptions in the manufacture of our products and result in increased capital, procurement, manufacturing and distribution costs. Our reputation and brand could be harmed if we fail, or are seen as having failed, to respond responsibly and effectively to changes in legal and regulatory measures adopted to address climate change.

In addition, changing customer preferences may result in increased demands regarding packaging materials and other components in our products and their environmental impact on sustainability. Moreover, customers may place increasing importance on purchasing products that are sustainably grown and made, requiring us to incur additional costs for increased due diligence and reporting. These demands may cause us to incur additional costs or make other changes to other operations to respond to such demands, which could adversely affect our financial results.

We are or soon will be obligated to comply with new climate-related reporting requirements under SEC rules, California climate-related reporting statutes, laws of member states of the European Union implementing the EU Corporate Sustainability Reporting Directive, and other laws and regulations. These sustainability reporting frameworks will require us to provide, at least annually, detailed public disclosures about the greenhouse gas emissions and other climate-related effects our activities produce, the climate-related operating and financial risks we face, and the strategies we pursue to reduce and adapt to the impacts of climate change. We expect to incur substantial costs to prepare these disclosures. If we fail to compile, assess and report the required operating and accounting information in a timely manner and in accordance with mandatory reporting standards, we could be exposed to fines and other sanctions and sustain harm to our reputation.

We may not successfully identify and complete acquisitions, divestitures, or strategic alliances on favorable terms or achieve anticipated synergies relating to any acquisitions or alliances, and such transactions could result in unforeseen operating difficulties and expenditures and require significant management resources.

We regularly review potential acquisitions of complementary businesses, technologies, services, or products, as well as potential divestitures or strategic alliances. We have completed several such acquisitions and strategic alliances in recent years, and divested our business in South Korea on February 1, 2024. We may be unable to find suitable acquisition candidates, divestiture investors, or appropriate partners with which to form partnerships, sell operations or assets, or form strategic alliances. Even if we identify appropriate acquisition, divestiture or alliance candidates, we may be unable to complete such acquisitions, divestitures or alliances on favorable terms, on time, on budget, or at all.

The failure to consummate proposed transactions may result in the diversion of substantial resources, including management time and cash used for transaction-related expenses, that otherwise would be available for developing our ongoing business. Due diligence performed prior to an acquisition may fail to identify a material liability or an issue that could have an adverse impact on the Company's reputation or reduce or delay the anticipated benefits resulting from the acquisition. In addition, the process of integrating an acquired business, technology, service, or product into our existing business and operations, or of divesting certain operations or businesses, may result in unforeseen operating difficulties and expenditures, including with respect to the retention of strategic talent, systems integration, and internal control effectiveness. Integration of an acquired company or transitioning a divested business or operations may also require significant management resources that otherwise would be available for developing our ongoing business. Moreover, we may not realize the anticipated benefits of any acquisition, divestiture or strategic alliance and such transactions may not generate anticipated financial results. Future acquisitions or divestitures could also require us to issue equity securities, incur debt, assume contingent liabilities, impair assets, or amortize expenses related to intangible assets, any of which could harm our business.

Additionally, we participate in several joint ventures, some of which are intended to be long-term investments, in which we have limited control over governance, financial reporting, and operations. As a result, we face operating, financial, legal and other risks relating to these investments, including risks related to the financial strength of our joint venture partners or their willingness to provide adequate funding for the joint venture, differences in objectives between us and our partners, legal and compliance risks relating to actions or omissions of the joint venture or our partners, and the risk that we will be unable to resolve disputes with the joint venture partner. As a result, these investments may contribute significantly less than we anticipate to our earnings and cash flows.

We operate a multinational business subject to the economic, political and other risks inherent in conducting operations in foreign countries and with foreign currencies.

We have operated in foreign countries and with foreign currencies for many years, and our results are subject to foreign currency exchange fluctuations. We primarily sell products derived from world commodities. Historically, we have been able to adjust local prices relatively quickly to offset the effect of local currency depreciation versus the U.S. dollar, although we cannot guarantee our ability to do this in the future. The anticipated strength in the U.S. dollar may continue to involve risks, as it could take us an extended period of time to fully recapture the impact of a loss of foreign currency value versus the U.S. dollar. We may hedge transactions that are

denominated in a currency other than the currency of the operating unit entering into the underlying transaction. Our hedging activities may not be fully successful in limiting the adverse impacts of our currency risks.

Our operations are subject to political, economic and other risks. There has been and continues to be significant political instability in some countries in which we operate. Economic changes, terrorist activity and political unrest may result in business interruption or decreased demand for our products. Country capital controls, such as those in Pakistan and Argentina, may prevent the repatriation of dividends or payments due to us from our subsidiaries in the country. Protectionist trade measures and import and export licensing requirements could also adversely affect our results of operations.

Our profitability could be negatively impacted if we fail to maintain satisfactory labor relations.

We have employees domiciled in the U.S. as well as worldwide who belong to labor unions. Strikes, lockouts or other work stoppages or slowdowns involving our unionized employees, or attempts to organize for collective bargaining purposes among non-unionized employees, could have a material adverse effect on our business. For example, from September 2022 to January 2023, we experienced a strike involving approximately 103 employees at our production facility in Cedar Rapids, Iowa, although this incident did not have a material impact on our business.

The inability for us to attract, develop, retain, motivate and maintain good relationships with our workforce, including key personnel, could negatively impact our business and our profitability.

Our future success depends on our ability to attract, develop, retain, motivate and maintain good relationships with qualified personnel, particularly those who have extensive expertise in the ingredients solutions industry and who may also have long service with our company. Such personnel are members of our senior executive leadership and work in key areas throughout our U.S. and international operations such as manufacturing, sales, and innovation, all of which are critical to our future growth and profitability. We face intensive competition in retaining and hiring individuals with the requisite expertise, both within and outside the ingredients solutions industry, including from companies that have greater resources than we do.

Changes in labor markets as a result of the recent coronavirus pandemic and other socioeconomic and demographic changes have increased the competition for hiring and retaining talent. As a result of this competition, we may be unable to continue to attract, develop, retain, motivate and maintain good relationships with suitably qualified individuals at acceptable compensation levels who have the managerial, operational, and technical knowledge and experience to meet our needs. Furthermore, any failure by us to manage internal succession or to effectively transfer knowledge from departing employees to others in the organization could adversely affect our business and results of operations. Even if we succeed in hiring new personnel to fill vacancies, lengthy training and orientation periods might be required before new employees

are able to achieve acceptable productivity levels. Any failure by us to attract, develop, retain, motivate and maintain good relationships with qualified individuals could adversely affect our business and results of operations.

Natural disasters, war, acts and threats of terrorism, and other significant events could negatively impact our business.

The economies of any countries in which we sell or manufacture products or purchase raw materials could be affected by natural disasters. Such natural disasters could include, among others, earthquakes, floods, or severe weather conditions; war, acts of war or terrorism. Any such event could result in disruptions to operations, asset write-offs, decreased sales and a negative impact on our cash position.

The recognition of impairment charges on goodwill or longlived assets could adversely impact our future financial position and results of operations.

We have \$1.3 billion of total net intangible assets as of December 31, 2023, consisting of \$918 million of goodwill and \$385 million of other net intangible assets, which constitute 12 percent and 5 percent, respectively, of our total assets as of such date. Additionally, we have \$2.9 billion of long-lived assets, or 38 percent of our total assets, as of December 31, 2023.

We perform an annual impairment assessment for goodwill and our indefinite-lived intangible assets and as necessary for other long-lived assets. If the results of such assessments were to show that the fair value of these assets were less than the carrying values, we could be required to recognize a charge for impairment of goodwill or long-lived assets, which could be material.

The future occurrence of a potential indicator of impairment, such as a significant adverse change in the business climate that would require a change in our assumptions or strategic decisions made in response to economic or competitive conditions, could require us to perform an assessment prior to the next required assessment date of July 1, 2024.

RISKS RELATED TO OUR REGULATORY COMPLIANCE

Government policies and regulations could adversely affect our operating results.

Our operating results could be affected by changes in trade, monetary and fiscal policies, laws and regulations, and other activities of the U.S. and foreign governments, agencies and similar organizations. These conditions include, among others, changes in a country's or region's economic or political conditions, modification or termination of trade agreements or treaties promoting free trade, creation of new trade agreements or treaties, trade regulations affecting production, pricing and marketing of products, local labor conditions and regulations, including regulations regarding child labor, reduced protection of intellectual property rights, changes in the regulatory or legal environment, restrictions on currency exchange activities, currency exchange rate fluctuations, burdensome taxes and tariffs, and other trade disputes or trade barriers. International risks and uncertainties, including changing social and economic conditions as well as terrorism, political hostilities and war, could limit our ability to transact business

in these markets and could adversely affect our revenues and operating results. Furthermore, the national and global regulation or taxation of greenhouse gas emissions could negatively affect our business, operations and financial results.

Our operations could be adversely affected by actions taken in connection with cross-border disputes by the governments of countries in which we conduct business.

Changes in our tax rates or exposure to additional income tax liabilities could impact our profitability.

We are subject to income taxes in the U.S. and in foreign jurisdictions. Our effective tax rates could be adversely affected by changes in the mix of earnings by jurisdiction, changes in tax laws, tax rates changes in the valuation of deferred tax assets and liabilities and material adjustments from tax audits.

The recoverability of our deferred tax assets is dependent upon our ability to generate future taxable income. In addition, we are subject to ongoing audits in various jurisdictions and final determinations of prior-year tax liabilities are dependent upon many factors, including negotiations and dispute resolutions with tax or other governmental authorities. The outcome of these final determinations could have a material effect on our profitability and cash flows.

On October 8, 2021, the Organization for Economic Co-operation and Development ("OECD") members approved a framework for reform of the international tax rule ("Inclusive Framework Statement"). The Inclusive Framework Statement sets forth key terms for a two-pillar solution designed to address the tax challenges arising from the digitalization of the economy. Pillar One focuses on nexus and profit allocation and would apply to multinational enterprises with annual global revenue above 20 billion euros and profitability above 10 percent. Based on these thresholds, we would currently be outside the scope of Pillar One. The Pillar Two rules, which would apply to us, are designed to ensure certain multinational enterprises, with consolidated revenues of at least 750 million euros in at least two out of the last four years, pay a global minimum effective corporate tax rate of 15 percent in each jurisdiction in which they operate.

On February 1, 2023, the U.S. Financial Accounting Standards Board indicated that it believes the minimum tax imposed under Pillar Two is an alternative minimum tax. Therefore, deferred tax assets and liabilities associated with the minimum tax will not be recognized or adjusted for the estimate future effects of the minimum tax but instead will be recognized in the period incurred.

Pillar Two legislation has been enacted in certain jurisdictions in which we operate. The legislation will be effective for the financial year beginning January 1, 2024. We have performed an assessment of our potential exposure to Pillar Two income taxes. This assessment is based on the most recent tax information available regarding the financial performance of the constituent entities in our group. Based on the assessment performed, we do not expect Pillar Two, as currently enacted, to have a material impact on our effective tax rate.

The OECD continues to release additional guidance on Pillar Two, and additional countries are expected to enact legislation. Although it is difficult at this stage to determine with precision the impact future Pillar Two proposals would have, their implementation could adversely impact our effective tax rate.

During 2023, the Brazilian Government published Law 14.789, effective January 1, 2024, that eliminated the exclusion of certain tax incentives provided by federal, state, and municipal authorities from taxable income and modified the interest on net equity instrument. This law will adversely impact our provision for income taxes.

RISKS RELATED TO OUR FINANCING ACTIVITIES

We may not have access to the funds required for future growth and expansion.

We may not have access to additional funds we need to grow and expand our operations. We expect to fund our capital expenditures from operating cash flow to the extent we are able to do so. If our operating cash flow is insufficient to fund our capital expenditures, we may either reduce our capital expenditures or utilize borrowings under our revolving credit facility, which also provides liquidity support for our commercial paper program. For further strategic growth through mergers or acquisitions, we may also seek to generate additional liquidity through the sale of debt or equity securities in private or public markets, through the sale of assets, or through the sale or divestiture of certain businesses or operations. Our cash flows from operations may not be sufficient to fund anticipated capital expenditures and, in such an event, we may not be able to obtain additional funds from financial markets, from the sale of assets, or from the sale or divestiture of certain businesses or operations at terms favorable to us. If we are unable to generate sufficient cash flows or raise sufficient additional funds to cover our capital expenditures or to finance strategic growth opportunities, we may not be able to achieve our desired operating efficiencies and expansion plans, which may adversely impact our competitiveness and, therefore, our results of operations.

Increased interest rates could increase our borrowing costs.

We continue to issue debt securities to finance capital expenditures, working capital and acquisitions, and for other general corporate purposes. An increase in interest rates in the general economy could result in an increase in our borrowing costs for these financings, as well as under our revolving credit facility, which bears interest at an unhedged floating rate.

RISKS RELATED TO OUR INFORMATION TECHNOLOGY SYSTEMS

Our information technology systems, processes and sites may suffer interruptions, security incidents, or failures which may affect our ability to conduct our business and cause significant damage to our reputation.

Our operations rely on certain key information technology systems, which are dependent on services provided by third parties and provide critical data connectivity, information and services for internal and external users. These interactions include, among others, ordering and managing materials from suppliers, risk management activities, converting raw materials to finished products, inventory management, shipping products to customers, processing transactions, summarizing and reporting results of operations, human resources benefits and payroll management, complying with regulatory, legal and tax requirements, and other processes necessary to manage our business. Increased information technology security and social engineering threats

and more sophisticated computer crime, including advanced persistent threats, pose potential risks to the security of our information technology systems, networks and services, as well as the confidentiality, availability and integrity of our third-party and employee data.

The frequency, sophistication and unpredictability of cybersecurity events globally have increased, and can be acute during times of geopolitical tension or instability between countries or when we make changes to our information technology systems or implement new ones. We have been subjected in the past, and may be subjected in the future, to incidents including phishing, e-mails purporting to come from vendors making payment requests, malware, and communications from look-alike corporate domains, as well as security-related risks resulting from our use of third-party software and services. The use of generative artificial intelligence is increasing the sophistication and effectiveness of these types of social engineering attacks. Future data security incidents could compromise or lead to the loss of material confidential, proprietary or otherwise protected information, seize, destroy or corrupt data, or otherwise disrupt our operations or affect our customers or other stakeholders.

Insider or employee cyber and security threats are also a significant concern for all companies, including ours. Despite our substantial investment in physical and technological security measures, employee training and contractual precautions, our information technology networks and infrastructure (or those of our third-party vendors and other service providers) are potentially vulnerable to unauthorized access to data, loss of access to systems or breaches of confidential information due to criminal conduct, attacks by hackers, employee or insider malfeasance or human error.

Although we have put in place security measures to protect ourselves against cyber-based attacks and disaster recovery plans for our critical systems that are designed to protect our data and customer data and to prevent data loss and other security incidents, these security measures cannot provide absolute security. In some cases, it is difficult to anticipate, detect or identify indicators of such incidents and assess the damage caused by the incidents. In addition, a failure to promptly disclose such material incidents as required by law may result in additional financial or regulatory consequences.

If our information technology systems are breached, damaged, or cease to function properly due to any number of causes, such as catastrophic events, power outages, security incidents, or cyber-based attacks, and if our cyber security response plans and disaster recovery and our cyber incident response plans do not effectively mitigate the risks on a timely basis, we may encounter significant disruptions that could interrupt our ability to manage our operations, cause loss of valuable data, and damage our reputation. Any such incidents also could subject us to government investigations or private litigation. These factors may adversely impact our revenues, operating results and financial condition. We could also experience delays in reporting our financial results.

The third-party data management providers and other vendors that we rely upon may have or develop security problems or security vulnerabilities which may also affect our systems or data. We cannot

guarantee that a data security or privacy breach of their systems or other form of cyber-based attack will not occur in the future. In addition, we use external vendors to perform security assessments on a periodic basis to review and assess our information security. We utilize this information to audit ourselves, monitor the security of our technology infrastructure, and assess whether and how to prioritize the allocation of scarce resources to protect data and systems. However, we cannot ensure that these security assessments and audits will identify or appropriately categorize relevant and contemporary risks or result in the protection of our computer networks against security intrusions. Although we require our third-party vendors contractually to maintain a level of security that is acceptable to us and work closely with key vendors to address potential and actual security concerns and attacks, we cannot ensure that all confidential, proprietary, or personal information will be protected on their systems.

Regardless of whether incidents result from an attack on us directly or on third-party vendors upon which we rely, the costs to address the foregoing security problems and security vulnerabilities before or after a cybersecurity incident could be significant. Remediation efforts may not be successful or timely and could result in interruptions, delays or cessation of service and loss of existing or potential customers that may impede our sales, manufacturing or other critical functions. Breaches of our security measures and the unapproved dissemination of proprietary information or sensitive or confidential data about us, our employees, our customers or other third parties could expose us, our employees, our customers or other affected third parties to a risk of loss or misuse of this information.

RISKS RELATED TO INVESTMENT IN OUR COMMON STOCK

Volatility in the stock market, fluctuations in quarterly operating results and other factors could adversely affect the market price of our common stock.

The market price for our common stock in the past has been, and in the future may continue to be, significantly affected by factors such as our announcement of new products or services or such announcements by our competitors; technological innovation by us, our competitors or other vendors; quarterly variations in our operating results or the operating results of our competitors; general conditions in our or our customers' markets; and changes in earnings estimates by analysts or reported results that vary materially from such estimates. In addition, the stock market has experienced significant price fluctuations that have affected the market prices of equity securities of many companies that have been unrelated to the operating performance of any individual company.

We may not continue to pay dividends or to pay dividends at the same rate we have paid in our most recent fiscal quarters.

Our payment of dividends, as well as the amount of any dividends, is solely at the discretion of our Board of Directors. Future dividend payments, if any, also will be subject to our financial results and the availability of statutory surplus funds to pay dividends. These factors could result in a change to our current policy of paying dividends.

Any failure by us to maintain effective control over financial reporting could result in loss of investor confidence and adversely impact our stock price.

If we experience material weaknesses in our internal control over financial reporting and are unable to remediate such material weaknesses, or are otherwise unable to maintain effective internal control over financial reporting or our disclosure controls and procedures, our ability to record, process and report financial information accurately and to prepare financial statements within required time periods, could be adversely affected, which could subject us to litigation or investigations requiring management resources and payment of legal and other expenses, negatively affect investor confidence in our financial statements, and adversely impact our stock price. For example, we previously reported a material weakness in our internal control over financial reporting, which we fully remediated in fiscal 2021, related to ineffective information technology controls related to user access over certain information technology systems.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 1C. Cybersecurity

We face numerous cybersecurity risks that include cyber-based attacks and other security threats to our systems. We also could be adversely affected by cybersecurity incidents affecting our suppliers and other third-party service providers. To meet these threats, we expend considerable resources on cybersecurity risk management, strategy and governance.

The Board of Directors, directly and through its Audit Committee, oversees our cybersecurity risk management. The Board of Directors reviews material cybersecurity risks we face, approves strategic priorities, and monitors progress made towards those priorities. The Audit Committee is responsible under its charter for reviewing with our management our policies and procedures with respect to cybersecurity risks and the processes management has implemented to monitor and mitigate those risk exposures. On a regular basis, the Audit Committee considers management's reports on significant changes to our cybersecurity policies and standards, as well as risk mitigation and remediation efforts being undertaken with respect to cybersecurity incidents and under the program generally. The Audit Committee regularly reports to the Board of Directors on its activities with respect to cybersecurity matters.

In general, our incident and crisis management plans are aligned with the National Institute of Standards and Technology (NIST) framework for cybersecurity. These plans are intended to provide a framework and processes that allow us to take a consistent approach to cybersecurity before, during and after a cybersecurity incident. Our plans are reviewed and updated periodically. In addition, we conduct cybersecurity tabletop exercises to simulate an actual incident and increase our team's awareness and preparedness. Based upon these activities, we maintain a risk register to track identified vulnerabilities and associated mitigation plans. We also regularly conduct security awareness training and phishing exercises for our employees around the world to help them identify and report suspicious activity.

We have implemented a number of cybersecurity risk management processes to assess, identify and manage material risks from cybersecurity threats. We conduct real-time monitoring of our environment for suspicious cyber activity using a variety of security tools and centralized logging systems. In addition, we leverage threat intelligence monitoring to stay updated on emerging cyber threats and vulnerabilities and, utilizing this information, conduct regular vulnerability assessments. Furthermore, we conduct regular penetration tests to simulate real-world attacks and identify weaknesses.

To supplement our internal resources, we engage external consultants to conduct independent assessments, perform penetration testing, and provide other cybersecurity-related services as needed. We also utilize external consultants and legal counsel to facilitate cybersecurity tabletop simulations. In addition, we engage external vendors to review and test key controls within our cybersecurity program.

We regularly assess cybersecurity risks associated with our use of suppliers and other third-party service providers. In this process, we classify by level of risk our principal suppliers and other key service providers and evaluate their data security controls and changes in potential cybersecurity risk levels. In addition, our contracts with these service providers require them to promptly report security incidents to us and to provide us with access to relevant information and resources to allow us to conduct related investigations.

Our cybersecurity risk management processes are integrated as part of our overall enterprise risk management (ERM) processes. Our Audit Committee conducts its oversight of our cybersecurity risk management as part of its oversight of our enterprise risk management policies and procedures. In addition, we conduct an annual survey of over 150 Ingredion business leaders across multiple functions and geographic locations that asks them to evaluate the potential severity and likelihood of cybersecurity matters, among other enterprise and information technology risks. We solicit their views on information and data security protection against cyber and internal threats, reliability of systems including disaster recovery related to malware or other cyber threats, and system implementation failures, and use the responses to modify our risk mitigation strategies accordingly.

Subject to oversight by our Board of Directors and Audit Committee, as described above, our Chief Digital and Information Officer is responsible for developing and guiding our global information technology and digital strategy, which includes overseeing cybersecurity risk management. The Chief Digital and Information Officer provides guidance on cybersecurity strategy initiatives and risk mitigation activities to the Senior Director, Global Information Security and the associated function. Our Chief Digital and Information Officer and our Senior Director, Global Information Security provide regular reports on security incident activity, including containment and remediation measures as relevant, and other cybersecurity risk management matters to the Board of Directors and the Audit Committee.

Our Chief Digital and Information Officer has over 30 years of experience at multinational companies, including six years of service at our company in his current position as a digital leader and executive, including experience managing and responding

to cybersecurity risks. He holds a bachelor's degree in computer science. Our Senior Director, Global Information Security has over two decades of service at multinational companies and a federal government agency, including over one year of service at our company in his current position dedicated to information technology and cybersecurity, and possesses significant experience in protecting critical data and building cybersecurity-resilient organizations. He holds a bachelor's degree in telecommunications management and a master's degree in cybersecurity, as well as a current Certified Information Systems Security Professional (CISSP) certification.

To date, the risks from cybersecurity threats have not materially affected us. Notwithstanding our investment in cybersecurity, however, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on our business, results of operations, or financial condition.

For a discussion of cybersecurity risks affecting our business, see Item 1A - Risk Factors - Risks Related to Our Information Technology Systems.

ITEM 2. Properties

As of December 31, 2023, we owned or leased, directly and through our consolidated subsidiaries, 47 manufacturing facilities. In addition, we lease our corporate headquarters in Westchester, Illinois; our R&D facility in Bridgewater, New Jersey; and shared service centers in Tulsa, Oklahoma; Guadalajara, Mexico; and Kuala Lumpur, Malaysia.

As of February 21, 2024, after the February 1, 2024 divestiture of our South Korea operations, our four reportable business segments include the following 45 manufacturing facilities:

NORTH AMERICA

Cardinal, Ontario, Canada	Owned
London, Ontario, Canada	Owned
Vanscoy, Saskatchewan, Canada	Owned
San Juan del Rio, Queretaro, Mexico	Owned
Guadalajara, Jalisco, Mexico	Owned
Mexico City, CDMX, Mexico	Owned
Oxnard, California, U.S.	Leased
Idaho Falls, Idaho, U.S.	Owned
Bedford Park, Illinois, U.S.	Owned
Mapleton, Illinois, U.S.	Owned
Indianapolis, Indiana, U.S.	Owned
Cedar Rapids, Iowa, U.S.	Owned
Fort Fairfield, Maine, U.S.	Owned
Belcamp, Maryland, U.S.	Owned
North Kansas City, Missouri, U.S.	Owned
South Sioux City, Nebraska, U.S.	Owned
Winston-Salem, North Carolina, U.S.	Owned
Salem, Oregon, U.S.	Owned
Charleston, South Carolina, U.S.	Owned
Richland, Washington, U.S.	Owned
Moses Lake, Washington, U.S.	Owned
Plover, Wisconsin, U.S.	Owned

SOUTH AMERICA

Alcantara, Brazil	Owned
Balsa Nova, Brazil	Owned
Cabo, Brazil	Owned
Mogi-Guacu, Brazil	Owned
Barranquilla, Colombia	Owned
Cali, Colombia	Owned
Lima, Peru	Owned

ASIA-PACIFIC

Ganzhou, China	Owned
Shandong Province, China	Owned
Shanghai, China	Owned
Ahmedabad, Gujarat, India	Owned
Malegaon, Nashik, Maharashtra, India	Owned
Enstek, Malaysia	Owned
Ban Kao Dien, Thailand	Owned
Kalasin, Thailand	Owned
Sikhiu, Thailand	Owned
Banglen, Thailand	Leased

EMEA

Hamburg, Germany	Owned
Wesenberg, Germany	Owned
Cornwala, Jaranwala, Pakistan	Owned
Mehran, Jamshoro, Pakistan	Owned
Rakh Canal, Faisalabad, Pakistan	Owned
Goole, United Kingdom	Partially leased

We believe our manufacturing facilities are sufficient to meet our current production commitments, and we conduct preventive maintenance and de-bottlenecking programs designed to improve grind capacity and facility reliability. Furthermore, we intend to continue capital investments to support updates, modifications, improvements and efficient operations of our facilities for the foreseeable future.

We have electricity or biomass co-generation facilities at our manufacturing facilities in London, Ontario, Canada; Cardinal, Ontario, Canada; Bedford Park, Illinois; Winston-Salem, North Carolina; San Juan del Rio, Queretaro and Mexico City, CDMX, Mexico; Cali, Colombia; Cornwala, Jaranwala, Pakistan; and Balsa Nova and Mogi-Guacu, Brazil. These facilities provide electricity at a lower cost than is available from third parties. We generally own and operate the co-generation facilities, except for the facilities at our Mexico City and Brazil locations, which are owned by and operated pursuant to co-generation agreements with third parties.

ITEM 3. Legal Proceedings

In September 2022, following certain air emissions testing Ingredion performed at our Bedford Park, Illinois manufacturing facility, we reported to the Illinois Environmental Protection Agency (the "Illinois EPA") that certain emissions had exceeded applicable limits under an air emissions permit. On February 8, 2023, the Illinois EPA issued to us a Notice of Violation with respect to the matter addressed in our report. Violations of the Illinois environmental statute could result in the imposition of civil or criminal monetary penalties. We are engaged in discussions with the Illinois EPA regarding this matter.

In 2015 and 2016, we self-reported certain monitoring and recordkeeping issues relating to environmental regulatory matters involving our Indianapolis, Indiana manufacturing facility. In September 2017, following inspections and our provision of requested information to the U.S. Environmental Protection Agency (the "EPA"), the EPA issued to us a Notice of Violation, which included additional alleged violations beyond those we self-reported. These additional alleged violations primarily related to the results of stack testing at the facility. The EPA referred the overall matter to the U.S. Department of Justice, Environment and Natural Resources Division (the "DOJ"). In November 2023, in the final resolution of this matter, we entered into a consent decree to settle claims that we violated the Clean Air Act. The consent decree required us to pay a civil penalty of \$1.1 million, contribute

\$0.6 million to the State of Indiana to support Brownfields redevelopment in and around Marion County, Indiana, and undertake projects at the Indianapolis facility to reduce and offset unpermitted emissions of particulate matter and to comply with lower future particulate matter limits.

In addition to the foregoing matters, we are currently subject to claims and suits arising in the ordinary course of business, including those relating to labor matters, certain environmental proceedings and commercial claims. We also routinely receive inquiries from regulators and other government authorities relating to various aspects of our business, including with respect to compliance with laws and regulations relating to the environment, and at any given time we have matters at various stages of resolution with the applicable governmental authorities. The outcomes of these matters are not within our complete control and may not be known for prolonged periods of time. We do not believe that the results of currently known legal proceedings and inquires will be material to us. There can be no assurance, however, that such claims, suits or investigations or those arising in the future, whether taken individually or in the aggregate, will not have a material adverse effect on our financial condition or results of operations.

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

Market information

Our common stock is listed on the New York Stock Exchange under the symbol "INGR."

Holders

At February 15, 2024, there were 2,979 holders of record of our common stock.

Dividends

We have a history of paying quarterly dividends. The amount and timing of the dividend payment, if any, is based on a number of factors, including our future estimated earnings, financial position and cash flow. The payment of a dividend, as well as the amount of any dividend, is solely at the discretion of our Board of Directors. Future dividend payments will be subject to our financial results and the availability of funds and statutory surplus to pay dividends.

Issuer purchases of equity securities

The following provides information about our stock repurchase program during the fourth quarter of 2023:

(shares in thousands)	TOTAL NUMBER OF SHARES PURCHASED	AVERAGE PRICE PAID PER SHARE	TOTAL NUMBER OF SHARES PURCHASED AS PART OF PUBLICLY ANNOUNCED PLANS OR PROGRAMS	MAXIMUM NUMBER (OR APPROXIMATE DOLLAR VALUE) OF SHARES THAT MAY YET BE PURCHASED UNDER THE 2022 STOCK REPURCHASE PROGRAM
October 1 – October 31, 2023	_	_	_	5,000
November 1 – November 30, 2023	_	_	_	5,000
December 1 – December 31, 2023	_	_	_	5,000
TOTAL	_	_	_	

On September 26, 2022, the Board of Directors approved a stock repurchase program authorizing us to purchase up to 6.0 million shares of our outstanding common stock until December 31, 2025. At December 31, 2023, we had 5.0 million shares available for repurchase under the stock repurchase program.

ITEM 6. [RESERVED]

Not applicable.

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

Unless otherwise indicated or the context otherwise requires, as used in this "Management's Discussion and Analysis of Financial Condition and Results of Operations," the terms "the Company," "Ingredion," "we," "us," and "our" and similar terms refer to Ingredion Incorporated and its consolidated subsidiaries. "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the Consolidated Financial Statements and related notes included elsewhere in this report. This discussion contains forward-looking statements that are subject to numerous risks and uncertainties. Actual results may differ materially from those contained in any forward-looking statements. See "Forward-Looking Statements" above.

OVERVIEW

We are a major supplier of high-quality food and industrial ingredient solutions to customers around the world. As of December 31, 2023, we had 47 manufacturing facilities located in North America, South America, Asia-Pacific and EMEA, and we manage and operate our businesses at a regional level. This approach provides us with a unique understanding of the cultures and product requirements in each of the geographic markets in which we operate, bringing added value to our customers. Our ingredients are used by customers in the food, beverage, brewing and animal feed industries, among others.

We acquired a 65 percent controlling interest in Mannitab Pharma Specialties Private Limited ("Mannitab"), an Indian manufacturer of spray dried mannitol and fine grade mannitol, on December 1, 2022; 100 percent of Amishi Drugs and Chemicals Private Limited ("Amishi"), an Indian manufacturer of chemically modified starch-based pharmaceutical excipients, on August 1, 2022; and 100 percent of KaTech, a German-headquartered provider of advanced texture and stabilization solutions to the food and beverage industry, on April 1, 2021. The results of the acquired businesses are included in our consolidated financial results beginning on the respective acquisition dates, which affects the comparability of results between years.

In addition, our share of results in joint ventures are classified in our Consolidated Statements of Income in Other operating (income) expense, and comparability between years and between financial statement line items is affected by the timing of and consideration provided to the investments.

While we identify the impacts of acquisitions and investments on our results, our discussion below also addresses results of operations excluding those impacts, where appropriate, to provide a more comparable and meaningful analysis.

RESULTS OF OPERATIONS

We have operations in four reportable business segments: North America, South America, Asia-Pacific and EMEA. Fluctuations in foreign currency exchange rates affect the U.S. dollar amounts of our foreign subsidiaries' revenues and expenses. For most of our foreign subsidiaries, the local foreign currency is the functional currency. Accordingly, revenues and expenses denominated in the functional currencies of these subsidiaries are translated into U.S. dollars at the applicable average exchange rates for the period.

Our business performed well and remained resilient throughout fiscal year 2023. Our targeted pricing actions and proactive cost savings initiatives helped overcome inflation and raw material volatility, leading to growth in net sales, operating income, net income and diluted earnings per share in 2023. The increase in our net sales and operating income was driven by price and customer mix, partially offset by lower volumes and impacts of foreign exchange rates. The increase in net income was driven by the above factors in addition to a more favorable effective tax rate primarily due to recent action by the Internal Revenue Service increasing our ability to claim certain foreign tax credits against U.S. taxes.

For 2023, net sales increased 3 percent to \$8.2 billion from \$7.9 billion for 2022. Our operating income of \$957 million for 2023 increased by 26 percent from operating income of \$762 million for 2022. Net income attributable to Ingredion for 2023 was \$643 million, or \$9.60 diluted earnings per share, which represented an increase of 31 percent from \$492 million, or \$7.34 diluted earnings per share, for 2022. The increases in net sales and operating income were primarily due to favorable price mix, partially offset by volume declines and foreign exchange impacts. The increase in net income was driven by these factors in addition to a more favorable effective tax rate.

For the Year Ended December 31, 2023 With Comparatives for the Year Ended December 31, 2022

Net sales

Net sales increased 3 percent to \$8.2 billion for 2023 compared to \$7.9 billion for 2022. The increase in net sales was driven by price and customer mix, partially offset by lower volumes and unfavorable foreign exchange impacts.

Cost of sales

Cost of sales decreased 1 percent to \$6.4 billion for 2023 compared to \$6.5 billion for 2022. The decrease in cost of sales primarily reflected lower volumes, partially offset by higher input costs. Our gross profit margin increased to 21 percent in 2023 compared to 19 percent in 2022. The increase in gross profit margin was driven by higher net sales in addition to a decrease in cost of sales.

Operating expenses

Operating expenses increased 10 percent to \$789 million for 2023 compared to \$715 million for 2022. The increase in operating expenses during 2023 was primarily attributable to higher compensation costs and spending to build long-term capabilities. Operating expenses as a percentage of net sales was 10 percent in 2023 and 9 percent in 2022.

Other operating (income) expense

Other operating (income) expense was \$8 million of income for 2023 compared to \$13 million of expense for 2022. The 2023 income was primarily attributable to income in our Argentina joint venture. The 2022 expense was primarily attributable to charges resulting from a U.S.-based work stoppage.

Restructuring/impairment charges

Restructuring and impairment charges increased to \$11 million for 2023 from \$4 million for 2022, which primarily reflected an other-than-temporary-impairment to our equity method investments. The 2022 charges were the result of the completion of our Cost Smart restructuring program.

Financing costs

Financing costs increased 15 percent to \$114 million for 2023 compared to \$99 million for 2022. The increase was primarily due to higher interest rates in 2023 as compared to 2022.

Provision for income taxes

Our effective income tax rates for 2023 and 2022 were 22.4 percent and 24.9 percent, respectively. The decrease in the effective tax rate was primarily driven by the value of the Mexican peso against the U.S. dollar, IRS Notice 2023-55, which increased our ability to claim certain foreign tax credits against U.S. taxes, a favorable country earnings mix primarily due to Brazil tax law developments, and a related increase in our foreign-derived intangible income deduction. The effects of these factors were partially offset by the impact of a change in Brazilian law that became effective in the fourth quarter of 2022 related to non-taxable Brazilian ICMS incentives granted during fiscal years 2018 to 2022.

Net income attributable to non-controlling interests

Net income attributable to non-controlling interests decreased to \$8 million for 2023 from \$10 million for 2022.

Net Income attributable to Ingredion

Net income attributable to Ingredion for 2023 increased to \$643 million from \$492 million for 2022. The increase in net income was primarily due to price and customer mix and a more favorable effective tax rate, which was partially offset by lower volumes.

North America

Net sales

North America's net sales increased 5 percent to \$5,188 million for 2023 from \$4,934 million for 2022. The increase was primarily driven by price mix, partially offset by volume and unfavorable foreign exchange impacts.

Operating income

North America's operating income increased 27 percent to \$718 million for 2023 from \$565 million for 2022. The increase was driven by favorable price mix, partially offset by lower volumes and higher fixed costs.

South America

Net sales

South America's net sales decreased 6 percent to \$1,062 million for 2023 from \$1,124 million for 2022. The decrease was primarily driven by volume and price mix, partially offset by favorable foreign exchange impacts.

Operating income

South America's operating income decreased 16 percent to \$142 million for 2023 from \$169 million for 2022. The decrease was driven by lower volumes and higher energy costs. On December 13, 2023, the new Argentine government allowed the Argentine peso to devalue from the exchange rate of approximately 366 pesos to one

U.S. dollar, to 800 pesos to one U.S.dollar. Because our accounting policy is to recognize our share of income from the Argentina joint venture one month in arrears, our 2023 results do not reflect the impact of this devaluation.

Asia-Pacific

Net sales

Asia-Pacific's net sales decreased 2 percent to \$1,089 million for 2023 from \$1,107 million for 2022. The decrease was driven by volume and unfavorable foreign exchange impacts, partially offset by price mix.

Operating income

Asia-Pacific's operating income increased 35 percent to \$126 million for 2023 from \$93 million for 2022. The increase was primarily driven by lower input costs, partially offset by lower volumes.

EMEA

Net sales

EMEA's net sales increased 5 percent to \$821 million for 2023 from \$781 million for 2022. The increase was driven by favorable price mix, partially offset by lower volumes and unfavorable foreign exchange impacts.

Operating income

EMEA's operating income increased 42 percent to \$156 million for 2023 compared to \$110 million for 2022. The increase was primarily driven by favorable price mix, partially offset by lower volumes and foreign exchange impacts.

For the Year Ended December 31, 2022 With Comparatives for the Year Ended December 31, 2021

A discussion of the year-over-year comparison of results for 2022 and 2021 is not included in this report and can be found in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in Ingredion's annual report on Form 10-K for the fiscal year ended December 31, 2022.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2023, we had total available liquidity of \$1.7 billion. Domestic liquidity of \$705 million consisted of \$32 million in cash and cash equivalents and \$673 million available through our \$1.0 billion commercial paper program that had \$327 million of outstanding borrowings. The commercial paper program is backed by \$1.0 billion of borrowing availability under a five-year revolving credit agreement that we entered on June 30, 2021 as described below

As of December 31, 2023, we had international liquidity of \$1.0 billion, consisting of \$369 million of cash and cash equivalents and \$8 million of short-term investments held by our operations outside the U.S., as well as \$652 million of unused operating lines of credit in foreign countries where we operate. As the parent company, we guarantee certain obligations of our consolidated subsidiaries. As of December 31, 2023, our guarantees aggregated \$49 million. We believe that those consolidated subsidiaries will be able to meet their financial obligations as they become due.

Our revolving credit agreement, which is for an unsecured revolving credit facility in an aggregate principal amount of \$1.0 billion outstanding at any time, will mature on June 30, 2026. Loans under the facility accrue interest at a per annum rate equal, at our option, to either a specified Secured Overnight Financing Rate ("SOFR") plus an applicable margin, or a base rate (generally determined according to the highest of the prime rate, the federal funds rate or the specified SOFR plus 1.00 percent) plus an applicable margin. The revolving credit agreement contains customary affirmative and negative covenants that, among other matters, specify customary reporting obligations, and that, subject to exceptions, restrict the incurrence of additional indebtedness by our subsidiaries, the incurrence of liens and the consummation of certain mergers, consolidations and sales of assets. We are subject to compliance, as of the end of each quarter, with a maximum leverage ratio of 3.5 to 1.0 and a minimum ratio of consolidated EBITDA (as defined for purposes of the revolving credit agreement) to consolidated net interest expense of 3.5 to 1.0, with each financial covenant calculated for the most recently completed four-quarter period. As of December 31, 2023, we were in compliance with these financial covenants.

Our commercial paper program allows us to issue senior unsecured notes of short maturities up to a maximum aggregate principal amount of \$1.0 billion outstanding at any time. The notes may be sold from time to time on customary terms in the U.S. commercial paper market. We use and intend to continue using the note proceeds for general corporate purposes. During 2023, the average amount of commercial paper outstanding was \$397 million with a weighted average interest rate of 5.30 percent over a weighted average maturity of 11 days. As of December 31, 2023, we had \$327 million of commercial paper outstanding with a weighted average interest rate of 5.50 percent over a weighted average maturity of 11 days. The amount of commercial paper outstanding under this program in 2024 is expected to fluctuate.

As of December 31, 2023, we had total debt outstanding of \$2.2 billion, or \$1.7 billion excluding the outstanding commercial paper and other short-term borrowings. Our outstanding debt consists of senior notes where repayment will occur commencing in 2026 through 2050. In December 2023, we paid in full without penalty the \$200 million principal outstanding on our term loan that was due on December 16, 2024 ("Term Loan"). The weighted average interest rate on our total indebtedness was 4.5 percent for 2023 and 3.5 percent for 2022.

The principal source of our liquidity is our internally generated cash flow, which we supplement as necessary with our ability to borrow under our credit facilities and to raise funds in the capital markets. We currently expect that our available cash balances, future cash flow from operations, proceeds from divestitures, access to debt markets and borrowing capacity under our revolving credit facility and commercial paper program will provide us with sufficient liquidity to fund our anticipated capital expenditures, dividends and other operating, investing and financing activities for at least the next twelve months and for the foreseeable future thereafter. Our future cash flow needs will depend on many factors, including our rate of revenue growth, cost of raw materials, changing working capital requirements, the timing and extent of our expansion into new markets, the timing of introductions of new products,

potential or agreed acquisitions of or investments in complementary businesses and technologies, continuing market acceptance of our new products, and general economic and market conditions. We may need to raise additional capital or incur indebtedness to fund our needs for less predictable strategic initiatives, such as acquisitions.

NET CASH FLOWS

Our cash provided by operating activities increased to \$1,057 million in 2023 from \$152 million in 2022. The increase in cash provided by operating activities was primarily attributable to changes in working capital and current period net income, which excluded net assets and net liabilities we classified as held for sale for the February 1, 2024 sale of our South Korea business. Cash provided by working capital increased to \$77 million in 2023, as compared to cash used for working capital of \$664 million in 2022. This increase in cash provided by working capital was primarily due to decreases in inventory and trade accounts receivable, which was partially offset by decreases in accounts payable and accrued liabilities during 2023.

Our cash used for investing activities increased to \$329 million in 2023 from \$320 million in 2022, primarily due to increased capital expenditures in 2023. In 2023, we used \$316 million of cash for capital expenditures and mechanical stores purchases to update, expand and improve our facilities, compared to \$300 million we paid in 2022 for the same purposes. Capital investment commitments for 2024 are anticipated to be approximately \$340 million.

We used \$569 million of cash for financing activities in 2023 compared to cash provided by financing activities of \$103 million in 2022. The difference was primarily attributable to increased payments on debt, including the \$200 million principal payment on our unsecured Term Loan in December 2023, and a net \$203 million reduction of our commercial paper borrowings during 2023.

Also included in cash for financing activities are cash dividends we pay to our common stockholders of record on a quarterly basis. Dividends paid, including those to non-controlling interests, increased 7 percent to \$194 million during 2023 from \$181 million during 2022. The increase was due to an increase in our quarterly dividend rate per share of common stock, which typically occurs during the third quarter of each fiscal year. During 2023, we also repurchased 1.0 million outstanding shares of our common stock in open market transactions at a net cost of \$101 million.

We have not provided foreign withholding taxes, state income taxes and federal and state taxes on foreign currency gains/losses on accumulated undistributed earnings of certain foreign subsidiaries because these earnings are considered to be permanently reinvested. It is not practicable to determine the amount of the unrecognized deferred tax liability related to the undistributed earnings. We do not anticipate the need to repatriate funds to the U.S. to satisfy domestic liquidity needs arising in the ordinary course of business, including liquidity needs associated with our domestic debt service requirements.

KEY FINANCIAL PERFORMANCE METRICS

We use certain key financial performance metrics to monitor our progress towards achieving our long-term strategic business objectives. These metrics relate to our ability to drive profitability, create value for stockholders and monitor our financial leverage. We assess whether we are achieving our profitability and value creation objectives by measuring our Adjusted Return on Invested Capital ("ROIC"). We monitor our financial leverage by regularly reviewing our ratio of net debt to adjusted earnings before interest, taxes, depreciation and amortization ("Net Debt to Adjusted EBITDA"). We believe these metrics provide valuable information to help us run our business and are useful to investors.

The metrics Adjusted ROIC and Net Debt to Adjusted EBITDA include certain financial measures (Adjusted operating income, net of tax, and Adjusted EBITDA, respectively) that are not calculated in accordance with U.S. generally accepted accounting principles ("GAAP"). We also have presented below the most comparable financial measures calculated using components determined in accordance with GAAP. Management uses these non-GAAP financial measures internally for strategic decision-making, forecasting future results and evaluating current performance. Management believes that the non-GAAP financial measures provide a more consistent comparison of our operating results and trends for the periods presented. These non-GAAP financial measures are used in addition to and in conjunction with results presented in accordance with GAAP and reflect an additional way of viewing aspects of our operations that, when viewed with our GAAP results, provides a more complete understanding of factors and trends affecting our business. The non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the corresponding measures calculated in accordance with GAAP.

In accordance with our long-term strategy, we set certain objectives relating to these key financial performance metrics that we strive to meet. However, no assurance can be given that we will continue to meet our financial performance metric targets. See Item 1A. Risk Factors and Item 7A. Quantitative and Qualitative Disclosures About Market Risk for a discussion of factors that could affect our ability to meet those targets. The objectives reflect our current aspirations in light of our present plans and existing circumstances. We may change these objectives from time to time to address new opportunities or changing circumstances as appropriate to meet our long-term needs and those of our stockholders.

A reconciliation of non-GAAP historical financial measures to the most comparable GAAP measure is below.

Adjusted ROIC

Adjusted ROIC is a financial performance ratio not defined under GAAP, and it should be considered in addition to, and not as a substitute for, GAAP financial measures. Ingredion defines Adjusted ROIC as Adjusted operating income, net of tax, divided by average end-of-year balances for current year and prior year Total net debt and equity. Similarly named measures may not be defined and calculated by other companies in the same manner. Ingredion believes Adjusted ROIC is meaningful to investors as it focuses on profitability and value-creating potential, taking into account the amount of capital invested. The most comparable measure calculated using components determined in accordance with GAAP is Return on Invested Capital, which Ingredion defines as Net income, divided by average end-of-year balances for current year and prior year Total net debt and equity, as shown in the table below.

	YEAR ENDED DECEMBER 31,		
RETURN ON INVESTED CAPITAL RATIO (dollars in millions)	2023	2022	
Net income (a)	\$651	\$502	
Adjusted for:			
Provision for income taxes	188	166	
Other non-operating expense (income)	4	(5)	
Financing costs	114	99	
Restructuring/impairment charges ⁽ⁱ⁾	11	4	
Acquisition/integration costs ⁽ⁱⁱ⁾	_	1	
Other matters(iii)	1	20	
Income taxes (at effective rates of 24.9% and 27.0%, respectively) ^(iv)	(241)	(212)	
Adjusted operating income, net of tax (b)	728	575	
Short-term debt	448	543	
Long-term debt	1,740	1,940	
Less: Cash and cash equivalents	(401)	(236)	
Short-term investments	(8)	(3)	
Total net debt	1,779	2,244	
Share-based payments subject to redemption	55	48	
Total redeemable non-controlling interests	43	51	
Total equity	3,552	3,163	
Total net debt and equity	\$5,429	\$5,506	
Average current and prior year Total net debt and equity (c)	\$5,468	\$ 5,223	
Return on Invested Capital (a ÷ c)	11.9%	9.6%	
Adjusted Return on Invested Capital (b ÷ c)	13.3%	11.0%	

In 2023, we recorded \$11 million of pre-tax restructuring/impairment charges primarily related to an other-than-temporary impairment on our equity method investments. In 2022, we recorded \$4 million of pre-tax restructuring charges primarily related to the Cost Smart programs.

 $^{^{\}mbox{\scriptsize (iv)}}$ The effective income tax rate was 24.9 percent for 2023 and 27.0 percent for 2022.

(dollars in millions)	YEAR ENDED DECEMBER 31, 2023			YEAR ENDE DECEMBER 31, 202		
	INCOME BEFORE INCOME TAXES	PROVISION FOR INCOME TAXES	EFFECTIVE INCOME TAX RATE	INCOME BEFORE INCOME TAXES	PROVISION FOR INCOME TAXES	EFFECTIVE INCOME TAX RATE
As reported	\$839	\$188	22.4%	\$668	\$166	24.9%
Add back:						
Acquisition/ integration costs	_	_		5	_	
Restructuring/ impairment charges	11	3		4	1	
Other matters	1	_		20	5	
Other tax matters	_	6		_	12	
Tax item-Mexico	_	15		_	4	
Adjusted non-GAAP	\$851	\$212	24.9%	\$697	\$188	27.0%

⁽ii) In 2022, acquisition/integration costs were reduced by \$4 million as they were included in financing costs.

⁽iii) In 2023, we recorded pre-tax charges of \$5 million primarily related to the impacts of a U.S.-based work stoppage. This was partially offset by \$4 million of insurance recoveries. In 2022, we recorded pre-tax charges of \$20 million primarily related to the impacts of a U.S.-based work stoppage.

Our long-term objective is to maintain an Adjusted ROIC in excess of 10.0 percent. For 2023, we achieved an Adjusted ROIC of 13.3 percent as compared to 11.0 percent for 2022.

Net debt to adjusted EBITDA

Net Debt to Adjusted EBITDA is a financial performance ratio that is not defined under GAAP, and should be considered in addition to, and not as a substitute for, GAAP financial measures. Ingredion defines this measure as Short-term and Long-term debt less Cash and cash equivalents and Short-term investments, divided by Adjusted EBITDA. Similarly named measures may not be defined and calculated by other companies in the same manner. Ingredion believes Total net debt to Adjusted EBITDA is meaningful to investors as it focuses on Ingredion's leverage on a comparable Adjusted EBITDA basis and helps investors better understand the time required to pay back Ingredion's outstanding debt. The most comparable ratio calculated using components determined in accordance with GAAP is Total net debt to Income before income taxes, calculated as Short-term and Long-term debt less Cash and cash equivalents and Short-term investments, divided by Income before income taxes, as shown in the table below.

	AS OF DECEMBER 31,		
NET DEBT TO ADJUSTED EBITDA RATIO (dollars in millions)	2023	2022	
Short-term debt	\$448	\$543	
Long-term debt	1,740	1,940	
Less: Cash and cash equivalents	(401)	(236)	
Short-term investments	(8)	(3)	
Total net debt (a)	1,779	2,244	
Income before income taxes (b)	839	668	
Adjusted for:			
Depreciation and amortization	219	215	
Financing costs	114	99	
Other non-operating expense (income)	4	(5)	
Restructuring/impairment charges ⁽ⁱ⁾	12	4	
Acquisition/integration costs(ii)	_	1	
Other matters ⁽ⁱⁱⁱ⁾	1	20	
Adjusted EBITDA (c)	\$1,189	\$1,002	
Net Debt to Income before income tax ratio (a ÷ b)	2.1	3.4	
Net Debt to Adjusted EBITDA ratio (a ÷ c)	1.5	2.2	

O During 2023, we recorded \$11 million of pre-tax net restructuring/impairment charges primarily related to an other-than-temporary impairment on our equity method investments. This was increased by \$1 million as it included a depreciation benefit that was already included in depreciation and amortization line. In 2022, we recorded \$4 million of pre-tax restructuring charges primarily related to the Cost Smart programs.

Our long-term objective is to target a ratio of Net Debt to Adjusted EBITDA of 2.5 or less. As of December 31, 2023 and 2022, the ratio was 1.5 and 2.2, respectively.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our Consolidated Financial Statements have been prepared in accordance with GAAP. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates under different assumptions and conditions.

We have identified below the most critical accounting policies upon which the financial statements are based and that involve our most complex and subjective decisions and assessments. Our senior management has discussed the development, selection and disclosure of these policies with members of the Audit Committee of our Board of Directors. These accounting policies are described in the Notes to the Consolidated Financial Statements. The discussion that follows should be read in conjunction with the Consolidated Financial Statements and related notes included elsewhere in this annual report on Form 10-K.

Business combinations

Our acquisitions of Amishi in 2022, the majority of shares of Mannitab in 2022, and KaTech in 2021 were accounted for in accordance with Accounting Standards Codification ("ASC") Topic 805, Business Combinations. In purchase accounting, identifiable assets acquired and liabilities assumed are recognized at their estimated fair values on the date of acquisition and any remaining purchase price is recorded as goodwill. In determining the fair values of assets acquired and liabilities assumed, we make significant estimates and assumptions, particularly for long-lived tangible and intangible assets. Critical estimates used in valuing tangible and intangible assets include, but are not limited to, future expected cash flows, discount rates, market prices and asset lives. Although our estimates of fair value are based upon assumptions believed to be reasonable, actual results may differ. See Note 2 of the Notes to the Consolidated Financial Statements for additional information.

Property, plant and equipment and definite-lived intangible assets We have substantial investments in property, plant and equipment ("PP&E") and definite-lived intangible assets. For PP&E, we recognize the cost of depreciable assets in operations over the estimated useful life of the assets and evaluate the recoverability of these assets whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. For definite-lived intangible assets, we recognize the cost of these amortizable assets in operations over their estimated useful life and evaluate the recoverability of the assets whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. The carrying values of PP&E and definite-lived intangible assets at December 31, 2023 were \$2.4 billion and \$242 million, respectively.

In assessing the recoverability of the carrying value of PP&E and definite-lived intangible assets, we may have to make projections regarding future cash flows. In developing these projections, we make a variety of important assumptions and estimates that have a significant impact on our assessments of whether the carrying values of PP&E and definite-lived intangible assets should be adjusted to reflect impairment. Among these are assumptions and

⁽ii) In 2022, acquisition/integration costs were reduced by \$4 million as they were included in financing costs.

⁽iii) In 2023, we recorded pre-tax charges of \$5 million primarily related to the impacts of a U.S.-based work stoppage. This was partially offset by \$4 million of insurance recoveries. In 2022, we recorded pre-tax charges of \$20 million primarily related to the impacts of a U.S.-based work stoppage.

estimates about the future growth and profitability of the related asset group, anticipated future economic, regulatory and political conditions in the asset group's market, and estimates of terminal or disposal values.

To optimize our operations, we continually review whether to further consolidate our manufacturing facilities or redeploy assets for other uses when we believe we can achieve a higher return on our investment. This review may result in closing or sale of certain manufacturing facilities, which could have a significant negative impact on our results of operations in the period we decide to close or sell the facility.

The future occurrence of a potential indicator of impairment, such as a significant adverse change in the business climate that would require a change in our assumptions or strategic decisions made in response to economic or competitive conditions, could require us to perform tests of recoverability in the future.

Indefinite-lived intangible assets and goodwill

We have certain indefinite-lived intangible assets in the form of tradenames and trademarks. Our methodology for allocating the purchase price of acquisitions is based on established valuation techniques that reflect the consideration of a number of factors, including valuations performed by third-party appraisers when appropriate. Goodwill is measured as the excess of the cost of an acquired business over the fair value assigned to identifiable assets acquired and liabilities assumed. We have identified several reporting units for which cash flows are determinable and to which goodwill may be allocated. Goodwill is either assigned to a specific reporting unit or allocated between reporting units based on the relative excess fair value of each reporting unit. The carrying value of indefinite-lived intangible assets and goodwill at December 31, 2023 was \$143 million and \$918 million, respectively, compared to \$143 million and \$900 million, respectively, at December 31, 2022.

We assess indefinite-lived intangible assets and goodwill for impairment as of July 1 each year (or more frequently if impairment indicators arise). We first assess qualitative factors to determine whether it is more-likely-than-not that the fair value of an indefinitelived intangible asset is impaired, which include net sales derived from these intangibles and certain market and industry conditions. After assessing the qualitative factors, if we determine that it is morelikely-than-not that the fair value of an indefinite-lived intangible asset is greater than its carrying amount, then we are not required to compute the fair value of the indefinite-lived intangible asset. If the qualitative assessment leads us to conclude otherwise, then we are required to determine the fair value of the indefinite-lived intangible assets and perform a quantitative impairment test in accordance with ASC subtopic 350-30, Intangibles—Goodwill and Other. Based on our assessment's results, we concluded that as of July 1, 2023, there were no impairments in our indefinite-lived intangible assets.

In testing goodwill for impairment, we first assess qualitative factors in determining whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. After assessing the qualitative factors, if we determine that it is more-likely-than-not that the fair value of a reporting unit is greater than its carrying amount, then we do not perform an impairment test. If we conclude otherwise, then we perform the impairment test. Under

this impairment test, the fair value of the reporting unit is compared to its carrying value. If the fair value of the reporting unit exceeds the carrying value of its net assets, goodwill is not considered impaired, and no further testing is required. If the carrying value of the net assets exceeds the fair value of the reporting unit, then an impairment exists for the difference between the fair value and carrying value of the reporting unit. This difference may not exceed the goodwill recorded at the reporting unit.

When we test goodwill for impairment, we make certain estimates and judgments, which include identifying reporting units and determining the reporting units' fair values based on both discounted cash flow analyses and an analysis of market multiples. To determine the fair value of reporting units, we use significant assumptions and estimates for discount and long-term net sales growth rates, in addition to operating and capital expenditure requirements. We consider changes in discount rates for the reporting units based on current market interest rates and specific risk factors within each geographic region. We also evaluate qualitative factors, such as legal, regulatory or competitive forces, in estimating the impact to the fair value of the reporting units, noting no significant changes that would result in any reporting unit failing the impairment test. Changes in assumptions concerning projected results or other underlying assumptions could have a significant impact on the fair value of the reporting units in the future. Based on the results of the annual assessment, we concluded that as of July 1, 2023, there were no impairments in our reporting units.

Retirement benefits

We and our subsidiaries sponsor noncontributory defined benefit pension plans (qualified and non-qualified) covering a substantial portion of employees in the U.S. and Canada, and certain employees in other countries. We also provide healthcare and life insurance benefits for retired employees in the U.S., Canada and Brazil. In order to measure the expense and obligations associated with these benefits, our management must make a variety of estimates and assumptions, including discount rates, expected long-term rates of return, rate of compensation increases, employee turnover rates, retirement rates, mortality rates and other factors. We review our actuarial assumptions on an annual basis as of December 31 (or more frequently if a significant event requiring remeasurement occurs) and modify our assumptions based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the Consolidated Balance Sheets but are generally amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive loss ("AOCL"). We believe the assumptions utilized in recording our obligations under our plans, which are based on our experience, market conditions and input from our actuaries, are reasonable. We use third-party specialists to assist management in evaluating our assumptions and estimates, as well as to appropriately measure the costs and obligations associated with our retirement benefit plans. Had we used different estimates and assumptions for these plans, our retirement benefit obligations and related expense could vary from the actual amounts recorded and such differences could be material. Additionally, adverse changes in investment returns earned on pension assets and discount rates used to calculate pension and postretirement benefit

related liabilities or changes in required funding levels may have an unfavorable impact on future expense and cash flow. Net periodic pension and postretirement benefit cost for all of our plans was \$12 million in 2023 and \$6 million in 2022.

We determine our assumption for the discount rate used to measure year-end pension and postretirement obligations based on highquality fixed-income investments that match the duration of the expected benefit payments, which has been benchmarked using a long-term, high-quality AA corporate bond index. We use a full yield curve approach in the estimation of the service and interest cost components of benefit cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. The weighted average discount rate used to determine our obligations under U.S. pension plans as of December 31, 2023 and 2022, was 5.00 percent and 5.19 percent, respectively. The weighted average discount rate used to determine our obligations under non-U.S. pension plans as of 2023 and 2022, was 5.24 percent and 5.66 percent, respectively. The weighted average discount rate used to determine our obligations under our postretirement plans as of December 31, 2023 and 2022, was 7.37 percent and 7.30 percent, respectively.

A one percentage point decrease in the discount rates at 2023, would have increased the accumulated benefit obligation and projected benefit obligation by the following amounts (millions):

U.S. PENSION PLANS

\$27
27
\$19
22
\$ 9

Our investment approach and related asset allocation for the U.S. and Canadian plans is a liability-driven investment approach by which a higher proportion of investments will be in interest-rate sensitive investments (fixed income) under an active-management approach. The approach seeks to protect the current funded status of the plans from market volatility with a greater asset allocation to interest-rate sensitive assets. The greater allocation to interest-rate sensitive assets is expected to reduce volatility in plan-funded status by more closely matching movements in asset values to changes in liabilities.

Our current investment policy for our pension plans is to balance risk and return through diversified portfolios of actively managed equity index instruments, fixed income index securities and short-term investments. Maturities for fixed income securities are managed so that sufficient liquidity exists to meet near-term benefit payment obligations. The asset allocation is reviewed regularly, and portfolio investments are rebalanced to the targeted allocation when considered appropriate or to raise sufficient liquidity when necessary to meet near-term benefit payment obligations. For 2023, net periodic pension cost, we assumed an expected long-term rate

of return on assets, which is based on the fair value of plan assets, of 5.50 percent for U.S. plans and approximately 4.66 percent for Canadian plans. In developing the expected long-term rate of return assumption on plan assets, which consist mainly of U.S. and Canadian debt and equity securities, management evaluated historical rates of return achieved on plan assets and the asset allocation of the plans, input from our independent actuaries and investment consultants, and historical trends in long-term inflation rates. Projected return estimates made by such consultants are based upon broad equity and bond indices. We also maintain several funded pension plans in other international locations. The expected returns on plan assets for these plans are determined based on each plan's investment approach and asset allocations. A hypothetical 25 basis point decrease in the expected long-term rate of return assumption would increase 2024 net periodic pension cost for the U.S. and Canadian plans by approximately \$1 million each.

Healthcare cost trend rates are used in valuing our postretirement benefit obligations and are established based on actual health care cost trends and consultation with actuaries and benefit providers. At December 31, 2023, the health care cost trend rate assumptions for the next year for the U.S., Canadian and Brazilian plans were 7.80 percent, 5.04 percent and 8.94 percent, respectively.

For information related to our benefit plans, see Note 11 of the Notes to the Consolidated Financial Statements

NEW ACCOUNTING STANDARDS

For information related to our new accounting standards, see Note 1 of the Notes to the Consolidated Financial Statements.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

Hedging

We are exposed to market risk stemming from changes in commodity prices (primarily corn and natural gas), foreign-currency exchange rates and interest rates. In the normal course of business, we actively manage our exposure to these market risks by entering various hedging transactions, authorized under established policies that place controls on these activities. These transactions utilize exchange-traded derivatives or over-the-counter derivatives with investment grade counterparties. Our hedging transactions may include, but are not limited to, a variety of derivative financial instruments such as commodity-related futures, options and swap contracts, forward currency-related contracts and options, interest rate swap agreements and Treasury lock agreements ("T-Locks"). We plan to continue to use derivative instruments to hedge such price risk and, accordingly, we will be required to make cash deposits to or be entitled to receive cash from our margin accounts depending on the movement in the market price of the underlying commodities. See Note 6 of the Notes to the Consolidated Financial Statements for additional information.

Raw material, energy and other commodity exposure

Our principal use of derivative financial instruments is to manage commodity price risk primarily in North America relating to anticipated purchases of corn and natural gas to be used in our manufacturing process. Our finished products are made primarily from corn. Primarily in North America, we sell a large portion of finished products at firm prices established in supply contracts typically lasting for periods of up to one year. In order to minimize the volatility in the cost of corn related to these firm-priced supply contracts, we enter into corn futures contracts or take other hedging positions in the corn futures market. These contracts typically mature within one year. At expiration, we settle the derivative contracts at a net amount equal to the difference between the thencurrent price of corn and the futures contract price. Although these hedging instruments are subject to fluctuations in value, changes in the value of the underlying exposures we are hedging generally offset such fluctuations. While the corn futures contracts or other hedging positions are intended to minimize the volatility of corn costs on operating profits, occasionally the hedging contracts can incur losses, some of which may be material.

Energy costs represent approximately 8 percent of our cost of sales. The primary use of energy is to create steam in the production process and to dry product. We consume natural gas, electricity, coal, fuel oil, wood and other biomass sources to generate energy. The market prices for these commodities vary depending on supply and demand, world economies and other factors. We purchase these commodities based on our anticipated usage and the future outlook for these costs. We cannot assure that we will be able to purchase these commodities at prices that we can adequately pass through to customers to sustain or increase profitability. We use derivative financial instruments, such as over-the-counter natural gas swaps, to hedge portions of our natural gas costs generally over the following 12 to 24 months, primarily in our North America operations.

At December 31, 2023, we had outstanding futures and option contracts that hedged the forecasted purchase of approximately 109 million bushels of corn, as well as outstanding swap contracts that hedged the forecasted purchase of approximately 28 million mmbtus of natural gas. Based on our overall commodity hedge position at December 31, 2023, a hypothetical 10 percent decline in market prices applied to the fair value of the instruments would result in a charge to other comprehensive loss ("OCL") of approximately \$48 million, net of income tax benefit of \$18 million. Any change in the fair value of the contracts, real or hypothetical, would be substantially offset by an inverse change in the value of the underlying hedged item.

Unrealized gains and losses associated with marking our commodities-based cash flow hedge derivative instruments to market are recorded as a component of OCL. As of December 31, 2023, our Accumulated other comprehensive loss ("AOCL") balance included \$46 million of net losses (net of income tax benefit of \$17 million) related to these derivative instruments. We anticipate that \$45 million of net losses (net of income tax benefit of \$16 million) will be reclassified into earnings over the next 12 months. We expect the net losses to be offset by changes in the underlying commodities costs.

Interest rate exposure

We are exposed to interest rate risk on our variable rate debt and price risk on our fixed rate debt. As of December 31, 2023, approximately 80 percent, or \$1.7 billion principal amount, of our total debt is fixed rate debt and 20 percent, or approximately \$450 million principal amount, of our total debt is variable rate debt subject to changes in short-term rates, which could affect our interest costs. We assess market risk based on changes in interest rates utilizing a sensitivity analysis that measures the potential change in earnings, fair values and cash flows based on a hypothetical 1 percentage point change in interest rates at December 31, 2023. A hypothetical increase of 1 percentage point in the weighted average floating interest rate would increase our annual interest expense by approximately \$4 million and would change the fair value of our fixed rate debt at December 31, 2023 by approximately \$105 million. See Note 8 of the Notes to the Consolidated Financial Statements for additional information.

Since we have no current plans to repurchase our outstanding fixed rate instruments before their maturities, the impact of market interest rate fluctuations on our long-term debt is not expected to have a material effect on our Consolidated Financial Statements.

We occasionally use T-Locks to hedge our exposure to interest rate changes based on current and projected market conditions. We did not have any T-Locks outstanding as of December 31, 2023. As of December 31, 2023, our AOCL account included \$2 million of net losses (net of \$1 million tax benefit) related to settled T-Locks. These deferred losses are being amortized to financing costs over the term of the senior notes with which they are associated. The net losses reclassified into earnings over the next 12 months are not anticipated to be material.

Foreign currencies

Due to our global operations, we are exposed to fluctuations in foreign currency exchange rates. As a result, we have exposure to translational foreign exchange risk when our foreign operation results are translated to U.S. dollars and to transactional foreign exchange risk when transactions not denominated in the functional currency of the operating unit are revalued.

We selectively use derivative instruments such as forward contracts, currency swaps and options to manage transactional foreign exchange risk. Based on our overall foreign currency transactional exposure at December 31, 2023, we estimate that a hypothetical 10 percent decline in the value of the U.S. dollar would have resulted in a transactional foreign exchange loss of approximately \$21 million. At December 31, 2023, our AOCL account included in the equity section of our Consolidated Balance Sheets includes a cumulative translation loss of approximately \$1.0 billion. The aggregate net assets of our foreign subsidiaries where the local currency is the functional currency approximated \$2.2 billion at December 31, 2023. A hypothetical 10 percent decline in the value of the U.S. dollar relative to foreign currencies would have resulted in a reduction to our cumulative translation loss and a credit to OCL of approximately \$250 million.

We primarily use derivative financial instruments such as foreigncurrency forward contracts, swaps and options to manage our foreign currency transactional exchange risk. We enter foreigncurrency derivative instruments that are designated as both cash flow hedging instruments and instruments not designated as hedging instruments for accounting purposes. As of December 31, 2023, we had foreign currency forward sales contracts with an aggregate notional amount of \$694 million and foreign currency forward purchase contracts with an aggregate notional amount of \$182 million not designated as hedging instruments for accounting purposes. As of December 31, 2023, we also had foreign currency forward sales contracts with an aggregate notional amount of \$449 million and foreign currency forward purchase contracts with an aggregate notional amount of \$621 million that are classified as cash flow hedges. The amount included in AOCL relating to these hedges at December 31, 2023 was an insignificant amount (net of \$1 million income tax expense). We expect \$1 million of net losses (net of an insignificant amount of income tax benefit) will be reclassified to earnings over the next 12 months.

Some of the countries in which we operate may experience high inflation. We elect hyperinflation accounting for our affiliate in Argentina, which has high cumulative inflation, determined its functional currency to be the U.S. dollar, and measure its income statement and balance sheet in U.S. dollars using both current and historical exchange rates. The effect of changes in exchange rates on its local currency denominated monetary assets and liabilities is reflected in earnings in financing costs in the Consolidated Statements of Income.

ITEM 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

TO THE STOCKHOLDERS AND BOARD OF DIRECTORS INGREDION INCORPORATED:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Ingredion Incorporated and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, equity and redeemable 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). In our opinion, the consolidated financial statements 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.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 21, 2024 expressed an unqualified opinion

on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Evaluation of the Pension Benefit Obligations

As discussed in Note 11 to the consolidated financial statements, the Company's pension benefit obligations totaled \$505 million as of December 31, 2023. The pension benefit obligations are measured at the actuarial present value of the benefits to which employees are entitled based on employee service rendered and the benefits attributed by the pension benefit formula and the employee's expected date of separation or retirement. The determination of the Company's pension benefit obligations is dependent, in part, on certain estimates and the selection of assumptions, including discount rates.

We identified the evaluation of certain pension benefit obligations as a critical audit matter. Subjective auditor judgment was required to evaluate the actuarial models and methodology used by the Company to determine the obligations and to evaluate the discount rates used. Changes in the discount rates could have a significant impact to the measurement of the pension benefit obligations.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's pension benefit obligations process, including controls related to the assessment of the actuarial models and methodology and the development of the discount rates. For certain plans, we involved an actuarial professional with specialized skill and knowledge, who assisted in:

- understanding and assessing the appropriateness of the actuarial models and methodology used by the Company to determine the obligations;
- the evaluation of the Company's discount rates, by assessing changes in the discount rates from the prior year and comparing it to the change in published indices, and by evaluating the discount rates based on the pattern of cash flows; and
- the evaluation of the selected yield curve, the consistency of the yield curve with the prior year, and the spot rates, to further assess the discount rates.

/s/ KPMG LLP

We have served as the Company's auditor since 1997.

Chicago, Illinois February 21, 2024

CONSOLIDATED STATEMENTS OF INCOME

		AR ENDED DE	NDED DECEMBER 31,	
(dollars and shares in millions, except per share amounts)	2023	2022	2021	
Net sales	\$8,160	\$7,946	\$6,894	
Cost of sales	6,411	6,452	5,563	
Gross profit	1,749	1,494	1,331	
Operating expenses	789	715	668	
Other operating (income) expense	(8)	13	(34)	
Restructuring/impairment charges	11	4	387	
Operating income	957	762	310	
Financing costs	114	99	74	
Other non-operating expense (income)	4	(5)	(12)	
Income before income taxes	839	668	248	
Provision for income taxes	188	166	123	
Net income	651	502	125	
Less: Net income attributable to non-controlling interests	8	10	8	
Net income attributable to Ingredion	\$643	\$492	\$117	
Weighted average common shares outstanding:				
Basic	66.0	66.2	67.1	
Diluted	67.0	67.0	67.8	
Earnings per common share of Ingredion:				
Basic	\$9.74	\$7.43	\$1.74	
Diluted	\$9.60	\$7.34	\$1.73	

See the Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	YE	AR ENDED DEC	EMBER 31,
(in millions)	2023	2022	2021
Net income	\$651	\$502	\$125
Other comprehensive income:			
(Losses) gains on cash flow hedges, net of income tax effect of \$40, \$53 and \$58, respectively	(111)	157	160
Losses (gains) on cash flow hedges reclassified to earnings, net of income tax effect of \$21, \$69 and \$55, respectively	57	(199)	(154)
Actuarial (losses) gains on pension and other postretirement obligations, settlements and plan amendments, net of income tax effect of \$—, \$1 and \$9, respectively	(2)	(4)	19
Losses on pension and other postretirement obligations reclassified to earnings, net of income tax effect of \$—	1	_	_
Currency translation adjustment	47	(105)	211
Comprehensive income	643	351	361
Less: Comprehensive income attributable to non-controlling interests	2	_	9
Comprehensive income attributable to Ingredion	\$641	\$ 351	\$352

CONSOLIDATED BALANCE SHEETS

	AS OF DE	CEMBER 31,
(dollars and shares in millions, except per share amounts)	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$401	\$236
Short-term investments	8	3
Accounts receivable, net	1,279	1,411
Inventories	1,450	1,597
Prepaid expenses and assets held for sale	261	62
Total current assets	3,399	3,309
Property, plant and equipment, net	2,370	2,407
Intangible assets, net	1,303	1,301
Other assets	570	544
Total assets	\$7,642	\$7,561
Liabilities and stockholders' equity		
Current liabilities:		
Short-term borrowings	\$448	\$543
Accounts payable	778	873
Accrued liabilities and liabilities held for sale	546	466
Total current liabilities	1,772	1,882
Long-term debt	1,740	1,940
Other non-current liabilities	480	477
Total liabilities	3,992	4,299
Share-based payments subject to redemption	55	48
Redeemable non-controlling interests	43	51
Ingredion stockholders' equity:		
Preferred stock — authorized 25.0 shares — \$0.01 par value, none issued	_	_
Common stock — authorized 200.0 shares — \$0.01 par value, 77.8 issued at December 31, 2023 and 2022	1	1
Additional paid-in capital	1,146	1,132
Less: Treasury stock (common stock: 12.6 and 12.1 shares at December 31, 2023 and 2022, respectively) at cost	(1,207)	(1,148)
Accumulated other comprehensive loss	(1,056)	(1,048)
Retained earnings	4,654	4,210
Total Ingredion stockholders' equity	3,538	3,147
Non-redeemable non-controlling interests	14	16
Total stockholders' equity	3,552	3,163
Total liabilities and stockholders' equity	\$7,642	\$7,561

CONSOLIDATED STATEMENTS OF EQUITY AND REDEEMABLE EQUITY

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	TOTAL EQUITY								
(in millions)	PREFERRED STOCK	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	TREASURY STOCK	ACCUMULATED OTHER COMPREHENSIVE LOSS	RETAINED EARNINGS	NON- REDEEMABLE NON- CONTROLLING INTERESTS	SHARE- BASED PAYMENTS SUBJECT TO REDEMPTION	REDEEMABLE NON- CONTROLLING INTERESTS
Balance, December 31, 2020	\$ —	\$1	\$1,150	\$(1,024)	\$(1,133)	\$3,957	\$21	\$30	\$70
Net income attributable to Ingredion	_	_	_	_	_	117	_	_	_
Net income (loss) attributable to non-controlling interests	_	_	_	_	_	_	11	_	(3)
Dividends declared	_	_	_	_	_	(175)	(11)	_	_
Repurchases of common stock, net	_	_	_	(68)	_	_	_	_	_
Share-based compensation, net of issuance	_	_	8	31	_	_	_	6	_
Other comprehensive income (loss)	_	_	-	-	236	-	(3)	-	4
Balance, December 31, 2021	_	1	1,158	(1,061)	(897)	3,899	18	36	71
Net income attributable to Ingredion	_	_	_	_	_	492	_	_	_
Net income attributable to non-controlling interests	_	_	_	_	_	_	9	_	1
Dividends declared	_	_	_	_	_	(181)	(5)	_	_
Repurchases of common stock, net	_	_	_	(112)	_	_	_	_	_
Share-based compensation, net of issuance	_	_	3	25	_	_	_	12	_
Fair market value adjustment to non-controlling interests	_	_	(29)	_	_	_	_	_	29
Non-controlling interest purchases	_	_	_	_	_	_	_	_	(46)
Other comprehensive (loss)			_	_	(151)	_	(6)	_	(4)
Balance, December 31, 2022		1	1,132	(1,148)	(1,048)	4,210	16	48	51
Net income attributable to Ingredion	_	_	_	_	_	643	_	_	_
Net income attributable to non-controlling interests	_	_	_	_	_	_	7	_	1
Dividends declared	_		_	_		(199)	(3)	_	
Repurchases of common stock, net	_	_	_	(101)		_	_	_	_
Share-based compensation, net of issuance	_	_	7	42	_	_	_	7	_
Fair market value adjustment to non-controlling interests	_	_	7	_	_	_	_	_	(7)
Non-controlling interest purchases	_	_	_	_	_	_	_	_	(2)
Other comprehensive (loss)			_	_	(8)	_	(6)	_	_
Balance, December 31, 2023	\$ —	\$1	\$1,146	\$(1,207)	\$(1,056)	\$4,654	\$14	\$55	\$43

CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEA	YEAR ENDED DECEMBER 3			
(in millions)	2023	2022	2021		
Cash from operating activities					
Net income	\$651	\$502	\$125		
Non-cash charges to net income:					
Depreciation and amortization	219	215	220		
Mechanical stores expense	62	55	55		
Impairment on disposition of assets	_	_	340		
Deferred income taxes	(6)	(3)	(61)		
Other non-cash charges	69	57	8		
Changes in working capital:					
Accounts receivable and prepaid expenses	77	(310)	(162)		
Inventories	69	(468)	(312)		
Accounts payable and accrued liabilities	(79)	158	226		
Margin accounts	10	(44)	(32)		
Other	(15)	(10)	(15)		
Cash provided by operating activities	1,057	152	392		
Cash from investing activities					
Capital expenditures and mechanical stores purchases	(316)	(300)	(300)		
Proceeds from disposal of manufacturing facilities and properties	2	7	18		
Payments for acquisitions, net of cash acquired	_	(29)	(40)		
Other	(15)	2	(13)		
Cash used for investing activities	(329)	(320)	(335)		
Cash from financing activities					
Proceeds from borrowings	720	825	1,300		
Payments on debt	(949)	(532)	(1,690)		
Commercial paper (repayments) borrowings, net	(63)	140	250		
Repurchases of common stock, net	(101)	(112)	(68)		
Issuances of common stock for share-based compensation, net	20	9	19		
Purchases of non-controlling interests	(2)	(46)	_		
Dividends paid, including to non-controlling interests	(194)	(181)	(184)		
Cash (used for) provided by financing activities	(569)	103	(373)		
Effects of foreign exchange rate changes on cash	6	(27)	(21)		
Increase (decrease) in cash and cash equivalents	165	(92)	(337)		
Cash and cash equivalents, beginning of period	236	328	665		
Cash and cash equivalents, end of period	\$401	\$236	\$328		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (DOLLARS IN MILLIONS, EXCEPT PER SHARE, UNLESS OTHERWISE NOTED)

1. Description of the Business and Summary of Significant Accounting Policies

Unless the context otherwise requires, all references herein to the "Company," "Ingredion," "we," "us," and "our" shall mean Ingredion Incorporated and its consolidated subsidiaries.

Description of the business

We primarily manufacture and sell sweeteners, starches, nutrition ingredients and biomaterial solutions derived from wet milling and processing corn and other starch-based materials to a wide range of industries, both domestically and internationally.

Basis of presentation

The Consolidated Financial Statements consist of the accounts of Ingredion, including all subsidiaries. Intercompany accounts and transactions are eliminated in consolidation.

Use of estimates

The preparation of the accompanying Consolidated Financial Statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities, and reported amounts of revenues and expenses. Such estimates and assumptions impact the value of purchase consideration, accounts receivable, inventories, certain investments, goodwill, intangible assets and other long-lived assets, legal contingencies, income taxes, and pension and other postretirement benefits, among others. These estimates and assumptions are based on our best estimates and judgment. We evaluate our estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment, which we believe to be reasonable under the circumstances. We will adjust such estimates and assumptions when facts and circumstances dictate. Corn price volatility, adverse changes in the global economic environment, foreign currency devaluations versus the U.S. dollar, and access to credit markets increase the uncertainty inherent in such estimates and assumptions. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Changes in these estimates will be reflected in the financial statements in future periods.

Foreign currency translation

Assets and liabilities of foreign subsidiaries, other than those whose functional currency is the U.S. dollar, are translated at current exchange rates with the related translation adjustments reported in equity as a component of Accumulated other comprehensive loss ("AOCL"), and income statement accounts are translated at the average exchange rate during the period. The U.S. dollar is the functional currency for our subsidiaries in Mexico and Argentina, and we translate their monetary assets and liabilities at current exchange rates with the related adjustment included in financing costs in our Consolidated Statements of Income. Non-monetary assets and liabilities are translated at historical exchange rates with the related translation adjustments included in AOCL in our Consolidated Balance Sheets.

Revenue recognition

Ingredion recognizes revenue under the core principle to depict our transfer of products and solutions to customers in amounts that reflect the consideration we expect to receive. To achieve that core principle, we apply the following five-step approach: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when a performance obligation is satisfied.

We identify customer purchase orders, which in some cases are governed by a master sales agreement, as the contracts with our customers. For each contract, we consider the transfer of products, each of which is distinct, to be the identified performance obligation. The pricing model can be fixed or variable within the contract. The variable pricing model is based on historical commodity pricing and is determinable before we complete the performance obligation. To determine the transaction price for the contract performance obligations, we also evaluate whether the price could be adjusted, and we may reduce the transaction price for certain sales adjustments such as volume incentive discounts and other discount arrangements. We estimate transaction price adjustments using the expected value method based on our analysis of historical volume incentives or discounts over a period considered adequate to account for current pricing and business trends. Historically, actual volume incentives and discounts relative to those estimated and included when determining the transaction price have not materially differed. We accrue volume incentives and discounts in Accrued liabilities and liabilities held for sale in the Consolidated Balance Sheets when we satisfy the performance obligation. We consider the product price as specified in the contract, net of any discounts, as the standalone selling price as it is an observable input that represents the price if we sold the product to a similar customer in similar circumstances. We do not recognize any significant financing components since payment is due shortly after we satisfy our performance obligation.

We recognize revenue when we satisfy our performance obligation and control is transferred to the customer, which occurs at a point in time, either upon delivery to an agreed upon location or to the customer. Further, in determining whether control has transferred, we consider if there is a present right to payment and legal title, along with risks and rewards of ownership having transferred to the customer.

Shipping and handling activities related to contracts with customers represent fulfillment costs and are recorded in Cost of sales in the Consolidated Statements of Income. Taxes assessed by governmental authorities and collected from customers are accounted for on a net basis and excluded from net sales. We expense costs to obtain a contract when we incur the costs since most contracts are one year or less. These costs primarily include our internal sales force compensation. Under the terms of these programs, the compensation is generally earned, and the costs are recognized when we recognize the revenue.

From time to time, we may enter into long-term contracts with our customers. Historically, such contracts do not result in significant contract assets or liabilities. Any such arrangements are accounted for in Other assets or Accrued liabilities and liabilities held for sale in the Consolidated Balance Sheets.

Cash and cash equivalents

Cash equivalents consist of all instruments purchased with an original maturity of three months or less and that have virtually no risk of loss in value.

Accounts receivable

Accounts receivable consists of trade and other receivables carried at approximate fair value, net of an allowance for credit losses. The allowance for credit losses is determined using our best estimate of expected credit losses based on historical experience and current forecasts of future economic conditions, and we adjust this estimate over the life of the receivable as needed.

Inventories

Inventories are stated at the lower of cost or net realizable value. Costs are predominantly determined using the weighted average method.

Long-term investments

We hold marketable securities and equity investments, which we include in Other assets in the Consolidated Balance Sheets. Marketable securities are carried at fair value and we record changes in fair value to Other operating (income) expense in the Consolidated Statements of Income if we maintain the securities for processing transactions that directly support operating activities; otherwise, we record changes in fair value to Other non-operating (income) expense in the Consolidated Statements of Income.

Equity investments in companies for which we do not have the ability to exercise significant influence are accounted for at fair value, with changes in fair value recorded in Other non-operating expense (income) in the Consolidated Statements of Income. Equity securities without readily determinable fair values are carried at cost, less impairments, if any, and adjusted for observable price changes for the identical or a similar investment of the same issuer. We perform a qualitative impairment assessment to determine if such investments are impaired, which considers all available information, including declines in the financial performance of the issuing entity, the issuing entity's operating environment and general market conditions. Impairments of equity securities without readily determinable fair value are recorded in Other non-operating expense (income) in the Consolidated Statements of Income.

Equity investments in companies for which we have the ability to exercise significant influence, but not control, are accounted for using the equity method of accounting. Our share of the earnings or losses reported by equity method investees is recognized in Other operating (income) expense in the Consolidated Statements of Income. Each reporting period, we evaluate declines in the fair value of equity method investments below carrying value to determine if any are other-than-temporary and if so, we write down the investment to its estimated fair value. Impairments are recognized in Restructuring/impairment charges in the Consolidated Statements of Income.

Leases

We determine if an arrangement contains a lease, as well as its classification as an operating lease or finance lease, at the inception of the agreement. 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. Lease assets and liabilities are recognized at the lease commencement

date based on the present value of future lease payments over the lease term. The commencement date used for the calculation of the lease obligations recorded is the latter of the lease start date or January 1, 2019, which is when we adopted Accounting Standards Codification ("ASC") 842. As most of our leases do not provide an implicit rate, we use an incremental borrowing rate based on the information available at the commencement date to determine the present value of lease payments. The lease asset value includes in our calculation any prepaid lease payments made and any lease incentives received from the arrangement as a reduction of the asset. Certain leases have options to terminate or extend the life of the lease, which we include in the lease asset and lease liability calculation when we have sole discretion to exercise the option and it is reasonably certain we will. We do not separate lease and non-lease components for our leases when it is impracticable to separate them, such as leases with variable payment arrangements. We have certain leases that have variable payments based solely on output or usage of the leased asset, which we do not record in our Consolidated Balance Sheets, but expense as incurred. Lease expense is recognized on a straight-line basis over the lease term. Leases with an initial term of twelve months or less are not recorded on the Consolidated Balance Sheets.

Property, plant and equipment and definite-lived intangible assets Property, plant and equipment ("PP&E") is stated at cost less accumulated depreciation and definite-lived intangible assets are stated at cost less accumulated amortization. For PP&E, depreciation is generally computed on the straight-line basis over the estimated useful lives of depreciable assets, which range from 25 to 50 years for buildings and from two to 25 years for machinery and equipment. Costs for mechanical stores represent costs for spare parts used in the production process that are capitalized in PP&E as part of machinery and equipment until they are utilized in the manufacturing process and expensed as a period cost. Where permitted by law, accelerated depreciation methods are used for tax purposes. For definite-lived intangible assets, we recognize the cost of these amortizable assets in operations over their estimated useful life, which range from two to 30 years. We review the recoverability of the net book value of PP&E and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset group may not be recoverable. If this review indicates that the carrying values of the asset group will not be recovered, we reduce the carrying values to fair value and recognize an impairment charge. The impairment analysis for long-lived assets occurs before the goodwill impairment assessment described below.

Assets held for sale

We classify long-lived assets or disposal groups as held for sale in the period when all of the following conditions have been met:

- We have approved and committed to a plan to sell the assets or disposal group,
- The asset or disposal group is available for immediate sale in its present condition,
- An active program to locate a buyer and other actions required to complete the sale have been initiated,
- The sale of the asset or disposal group is probable and expected to be completed within one year,

- The asset or disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value, and
- It is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

When all the held for sale criteria are met, we initially measure a long-lived asset or disposal group that is classified as held for sale at the lower of its carrying value or the fair value less any costs to sell, recognize any resulting losses, and cease depreciation and amortization of the long-lived asset or assets within a disposal group. Until the date of sale or until the asset or disposal group are no longer classified as held for sale, we assess fair value less any costs to sell and recognize any resulting losses at each reporting period. Gains are not recognized until the date of the sale.

Indefinite-lived intangible assets and goodwill

We have certain indefinite-lived intangible assets in the form of tradenames and trademarks. Our methodology for allocating the purchase price of acquisitions is based on established valuation techniques that reflect the consideration of a number of factors, including valuations performed by third-party appraisers when appropriate. Goodwill represents the excess of the cost of an acquired entity over the fair value assigned to identifiable assets acquired and liabilities assumed. We assess indefinite-lived intangible assets and goodwill for impairment annually (or other circumstances requiring assessment), which we perform as of July 1 of each year.

In testing indefinite-lived intangible assets for impairment, we first assess qualitative factors to determine whether it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is greater than its carrying amount. If not, then we determine the fair value of the indefinite-lived intangible assets by performing a quantitative impairment analysis that considers various factors, including net sales derived from these intangibles and certain market and industry conditions.

In testing goodwill for impairment, we first assess qualitative factors to determine whether it is more-likely-than-not that the fair value of a reporting unit is greater than its carrying amount. If not, then an impairment exists for the difference between the fair value and carrying value of the reporting unit. This difference is not to exceed the goodwill recorded at the reporting unit.

Hedging instruments

We use derivative financial instruments consisting primarily of commodity futures, swaps and option contracts, forward currency contracts and options, interest rate swaps, and Treasury lock agreements ("T-Locks").

When we enter a derivative contract, we designate the derivative as a hedge of variable cash flows to be paid related to certain forecasted transactions ("a cash flow hedge"), as a hedge of the fair value of certain fixed ("firm") commitments ("a fair value hedge"), or as a non-designated hedging instrument. This process includes linking all derivatives that are designated as cash flow or fair value hedges to specific assets and liabilities on the Consolidated Balance Sheets, or to specific firm commitments or forecasted transactions. For all hedging relationships, we document the hedging relationships and our risk-management objective and strategy for undertaking the hedge transactions, the hedging

instrument, the hedged item, the nature of the risk being hedged, how we will assess the hedging instrument's effectiveness in offsetting the hedged risk, and a description of the method to measure ineffectiveness. We also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivative that is used in a hedging transaction is highly effective in offsetting changes in cash flows or fair values of hedged items.

For hedging instruments designated as cash flow hedges, unrealized gains and losses associated with marking cash flow hedging contracts to market (fair value) are recorded as a component of other comprehensive loss ("OCL") and included in the equity section of the Consolidated Balance sheets as part of AOCL. These amounts, as well as their related tax effects, are subsequently reclassified into earnings in the same line item affected by the hedged transaction and in the same period or periods during which the hedged transaction affects earnings, or in the period a hedge is determined to be ineffective. Gains and losses from cash flow hedging instruments reclassified from AOCL to earnings are reported as Cash provided by operating activities on the Consolidated Statements of Cash Flows.

For hedging instruments designated as fair value hedges, unrealized gains and losses associated with marking fair value hedging contracts to market (fair value) are recorded in earnings each period. Unrealized gains and losses on hedged items in designated and highly effective fair value hedges are also recorded in earnings each period.

For hedging instruments not designated as hedging instruments for accounting purposes, all realized and unrealized gains and losses from these instruments are recognized in earnings during each accounting period.

We assess the effectiveness of hedging contracts based on changes in the contract's fair value. The changes in the market value of our hedging contracts have historically been, and are expected to be, highly effective at offsetting changes in the price of hedged items. We discontinue hedge accounting prospectively when it is unlikely or not probable that a forecasted transaction will occur or when we determine that the designation of the derivative as a hedging instrument is no longer appropriate, since the derivative is no longer effective in offsetting changes in the cash flows or fair value of the originally intended hedged transaction. When we discontinue hedge accounting, we continue to carry the derivative on the Consolidated Balance Sheets at its fair value and freeze the deferred gains or losses into AOCL. Changes in the fair value of the derivative are recognized in earnings in the same line item as the original hedged transaction instead of AOCL. Any accumulated gains and losses that were included in AOCL in the period we determined the hedge to be ineffective are also released to earnings.

Pension and other postretirement benefits

All U.S. pension and postretirement benefit plans and most non-U.S. pension and postretirement benefit plans value the vested benefit obligation based on the actuarial present value of the vested benefits to which employees are currently entitled based on their expected date of separation or retirement.

For defined benefit plans, the service cost component of net periodic benefit cost is presented within either Cost of sales or Operating expenses on the Consolidated Statements of Income. The interest cost, expected return on plan assets, amortization of actuarial loss, amortization of prior service credit and settlement loss components of net periodic benefit cost are presented as Other non-operating expense (income) on the Consolidated Statements of Income.

Actuarial gains and losses in excess of 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets are classified in AOCL, along with the related tax impact, and recognized as a component of net periodic benefit cost over the average remaining service period of a plan's active employees for active defined benefit pension plans and over the average remaining life of a plan's active employees for frozen defined benefit pension plans.

Share-based compensation

We have a stock incentive plan that provides for share-based employee compensation, including the granting of stock options, shares of restricted stock, restricted stock units and performance shares to certain key employees. Compensation expense is generally recognized in the Consolidated Statements of Income on a straight-line basis for all awards over the requisite service period. We estimate a forfeiture rate at the time of certain grants, and we update the estimate throughout the vesting of certain awards within the amount of compensation costs recognized in each period.

Earnings per common share

Basic earnings per common share ("EPS") is computed by dividing Net income attributable to Ingredion by the weighted average number of shares outstanding. Diluted EPS is calculated using the treasury stock method, computed by dividing Net income attributable to Ingredion by the weighted average number of shares outstanding, including the dilutive effect of outstanding stock options and other instruments associated with long-term incentive compensation plans.

Risks and uncertainties

We operate domestically and internationally, and our business and assets in each country are subject to varying degrees of risk and uncertainty. We insure our business and assets in each country against insurable risks in a manner that we deem appropriate. Because of our geographic dispersion, we believe that a loss from a non-insured event in any one country would not have a material adverse effect on our operations as a whole. Additionally, we believe there is no significant concentration of risk with any single customer or supplier whose failure or non-performance would materially affect our results. We do not consider the potential for insurance recoveries if we record accruals for estimated probable costs from events or circumstances that may be insured.

New Accounting Standards

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. The amendments in this update provide optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The amendments in this update are effective for all entities as of March 12, 2020 through December 31, 2024. We adopted ASU 2020-04 at the beginning of our 2023 fiscal year and this ASU did not have a material impact on our Consolidated Financial Statements.

In September 2022, the FASB issued ASU No. 2022-04, Liabilities — Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations. The amendments require buyers to disclose information about supplier finance programs that is sufficient to allow financial statement users to understand their nature, activity during the period, changes from period to period and potential magnitude. The amendments in this update are effective for annual periods beginning after December 15, 2022, except for the amendment on rollforward information, which is effective for fiscal years beginning after December 15, 2023. We adopted the updates to the standard at the beginning of our 2023 fiscal year and will adopt the amendment on rollforward information during the first quarter of 2024. These updates did not have a material impact to our Consolidated Balance Sheets. The disclosure required by the recently adopted accounting standard is reflected in Note 15. We are currently assessing the impact of the rollforward information amendment on our Consolidated Financial Statements.

In August 2023, the FASB issued ASU No. 2023-05, *Business Combinations* — *Joint Venture Formations* (*Subtopic 805-60*). The amendments in this update require that a joint venture apply a new basis of accounting upon formation. By applying a new basis of accounting, a joint venture, upon formation, will recognize and initially measure its assets and liabilities at fair value (with exceptions to fair value measurement that are consistent with the business combinations guidance). The amendments in this ASU are effective prospectively for all joint venture formations with a formation date on or after January 1, 2025. A joint venture that was formed before January 1, 2025 may elect to apply the amendments retrospectively. We plan to adopt this ASU on a prospective basis at the beginning of our 2025 fiscal year and do not believe it will have a material impact on our Consolidated Financial Statements.

In November 2023, the FASB issued ASU No. 2023-07, Segment Reporting (Topic 280). The amendments in this update improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. The amendments in this ASU are effective for annual periods beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. Entities must apply the amendments in this ASU retrospectively to all prior periods presented in the financial statements. We are currently assessing the impact of this ASU on our Consolidated Financial Statements.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures.*The amendments require public business entities on an annual basis to disclose specific categories in the rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. Additionally, the amendment requires information pertaining to taxes paid (net of refunds received) to be disaggregated by federal, state, and foreign taxes with further disaggregation for specific jurisdictions to the extent the related amounts exceed a quantitative threshold. The amendments in this ASU are effective for annual periods beginning after December 15, 2024, with early adoption permitted. We are currently assessing the impact of this ASU on our Consolidated Financial Statements.

2. Acquisitions and Divestitures

Acquisition of PureCircle Non-Controlling Interests

During 2023 and 2022, Ingredion purchased shares from minority shareholders in PureCircle Limited ("PureCircle") for \$2 million and \$46 million, respectively. These purchases increased our ownership percentage in PureCircle to 88 percent as of December 31, 2023, from 87 percent as of December 31, 2022, and from 75 percent as of December 31, 2021.

Other Acquisitions

On December 1, 2022, we acquired a 65 percent controlling interest in Mannitab Pharma Specialties Private Limited ("Mannitab"), which is an Indian manufacturer of spray dried mannitol and fine grade mannitol, for \$22 million. We agreed to acquire the remaining 35 percent of Mannitab on or before March 2026. To reflect our controlling interest in Mannitab, we recorded \$19 million of goodwill and \$9 million of definite-lived intangible assets on our Consolidated Financial Statements when we completed the purchase accounting in 2023. Beginning at the acquisition date, our Consolidated Financial Statements reflect the effects of the acquisition and Mannitab's financial results, which we report in our Asia-Pacific reportable business segment.

On August 1, 2022, we acquired 100 percent of Amishi Drugs and Chemicals Private Limited ("Amishi") for \$7 million, which added \$3 million of goodwill and intangible assets to our Consolidated Financial Statements. Amishi is an Indian manufacturer of chemically modified starch-based pharmaceutical excipients. Beginning at the acquisition date, our Consolidated Financial Statements reflect the effects of the acquisition and Amishi's financial results, which we report in our Asia-Pacific reportable business segment.

On April 1, 2021, we acquired 100 percent of KaTech, a privately held company headquartered in Germany. KaTech provides advanced texture and stabilization solutions to the food and beverage industry. To complete the closing, we made a total cash payment of \$40 million, net of cash acquired, which we funded from cash on hand. The acquisition added \$26 million of goodwill and intangible assets, as well as \$14 million of tangible assets. Beginning at the acquisition date, our Consolidated Financial Statements reflect the effects of the acquisition and KaTech's financial results, which we report in our Europe, Middle East and Africa ("EMEA") reportable business segment.

Pre-tax acquisition and integration costs were insignificant in 2023, \$1 million in 2022, and \$5 million in 2021. The acquisitions individually and in the aggregate would not have been material to our results of operations for any periods presented.

South Korea Divestiture

On November 10, 2023, we entered into a definitive agreement to sell our business in South Korea to an affiliate of the Sajo Group, a leading food company headquartered in Seoul, South Korea, for 384.0 billion South Korean won, or approximately \$294 million. We received 330.0 billion South Korean won, or \$247 million net of certain transaction costs, when the transaction closed on February 1, 2024, and we will receive the remaining consideration

in equal annual payments through February 2027. In the first quarter of 2024, we expect to record a gain from the imputed fair value of \$283 million in consideration. Our business in South Korea generated operating profits of \$30 million in 2023, \$14 million in 2022 and \$27 million in 2021.

In connection with this divestment, we reclassified the assets and liabilities of our South Korea business, which is in our Asia-Pacific reportable business segment, as held for sale during the fourth quarter of 2023 in our Consolidated Financial Statements. The following table presents the major classes of assets and liabilities classified as held for sale for the South Korea divestment. Assets classified as held for sale are included in Prepaid expenses and assets held for sale, and liabilities held for sale are included in Accrued liabilities and liabilities held for sale on the Consolidated Balance Sheets as of December 31, 2023.

	DECEMBER 31, 2023
Accounts receivable, net	38
Inventories	69
Property, plant and equipment, net	100
Other assets	4
Assets held for sale	\$211
Short-term borrowings	\$2
Accounts payable	30
Accrued liabilities	14
Non-current liabilities	5
Liabilities held for sale	\$51

3. Intangible Assets

Goodwill

The original carrying value of goodwill and accumulated impairment charges at December 31, 2023 are as follows:

(in millions)	NORTH AMERICA	SOUTH AMERICA	ASIA- PACIFIC	EMEA	TOTAL
Goodwill before impairment charges	\$623	\$49	\$311	\$72	\$1,055
Accumulated impairment charges	(1)	(33)	(121)	_	(155)
Balance at January 1, 2023	622	16	190	72	900
Acquisitions	_	_	19	_	19
Currency translation	_	2	(5)	2	(1)
Balance at December 31, 2023	\$622	\$18	\$204	\$74	\$918

We concluded that as of our July 1, 2023 impairment assessments, there were no impairments to goodwill.

Other Intangible Assets

A summary of other intangible assets is as follows:

December 31, 2023	GROSS	ACCUMULATED AMORTIZATION	NET	WEIGHTED AVERAGE USEFUL LIFE (YEARS)
Trademarks/tradenames (indefinite-lived)	\$143	\$—	\$143	_
Patents	31	(9)	22	12
Customer relationships	358	(170)	188	19
Technology	111	(103)	8	9
Other	41	(17)	24	15
Total other intangible assets	\$684	\$(299)	\$385	17

December 31, 2022	GROSS	ACCUMULATED AMORTIZATION	NET	WEIGHTED AVERAGE USEFUL LIFE (YEARS)
Trademarks/tradenames (indefinite-lived)	\$143	\$—	\$143	_
Patents	32	(7)	25	12
Customer relationships	356	(150)	206	19
Technology	102	(101)	1	9
Other	43	(17)	26	15
Total other intangible assets	\$676	\$(275)	\$401	17

Amortization expense related to intangible assets was \$26 million in 2023, \$26 million in 2022, and \$27 million in 2021. Based on the results of our impairment assessments, we concluded that as of July 1, 2023, there were no impairments to our indefinite-lived other intangible assets.

Estimated future amortization expense related to intangible assets is as follows:

Years ending December 31,	ESTIMATED FUTURE AMORTIZATION EXPENSE
2024	\$26
2025	26
2026	26
2027	26
2028	26

4. Investments

Investments as of December 31, 2023 and 2022 are as follows:

	2023	2022
Equity investments	\$ 27	\$ 23
Equity method investments	112	113
Marketable securities	4	3
Total investments	\$143	\$139

Our investments classified as equity investments do not have readily determinable fair values. Beginning on the dates we entered into the agreements for equity method investments, our share of income

from them is included within Other operating (income) expense in the Consolidated Statements of Income. Of the \$11 million of Restructuring/impairment charges in the Consolidated Statements of Income we recorded in 2023, \$10 million represented other-thantemporary-impairments on our Amyris joint venture and other joint ventures.

Amyris Joint Venture

On June 1, 2021, we entered into an agreement with Amyris for certain exclusive commercialization rights to Amyris' rebaudioside M by fermentation product, the exclusive licensing of the product's manufacturing technology, and a 31 percent ownership stake in a joint venture for the products (the "Amyris joint venture"). In exchange, we contributed \$28 million of total consideration, which included \$10 million of cash, as well as non-exclusive intellectual property licenses and other consideration valued at \$18 million. The transaction resulted in an \$8 million gain recorded in Other operating (income) expense, which included \$18 million related to the non-exclusive intellectual property licenses, offset by the \$10 million cash payment. Beginning June 1, 2021, we began accounting for the investment under the equity method and we recognize our share of results one quarter in arrears due to the timing of when results are available.

Argentina Joint Venture

On February 12, 2021, we entered into an agreement with an affiliate of Grupo Arcor, an Argentine food company, to establish Ingrear Holding S.A. (the "Argentina joint venture"), a joint venture that operates five manufacturing facilities in Argentina to sell value-added ingredients to customers in the food, beverage, pharmaceutical and other industries in Argentina, Chile and Uruguay. On August 2, 2021, we completed all closing conditions, pending customary antitrust review, to combine the manufacturing facilities, finalize the transaction and formally establish the Argentina joint venture, which is managed by a jointly appointed team of executives.

We exchanged certain assets and liabilities with a fair value of \$71 million from our Argentina, Chile and Uruguay operations for a value of \$64 million of the Argentina joint venture, as well as \$7 million of other consideration, including cash, from Grupo Arcor as of August 2, 2021. This resulted in our ownership of 49 percent of the Argentine joint venture's outstanding shares.

This transaction also resulted in a \$340 million impairment charge for assets and liabilities we contributed to the Argentina joint venture, which consisted of \$311 million related to the write-off of the cumulative translation losses associated with the contributed net assets and \$29 million related to the final write-down of the contributed net assets to fair value. We incurred \$4 million and \$6 million of pre-tax acquisition and integration costs to acquire the Argentina and Amyris joint venture investments in 2022 and 2021, respectively. The 2022 charges were recorded within Financing costs on the Consolidated Statements of Income.

The Argentina joint venture is accounted for on the equity method of accounting, and we recognize our share of income or expense in Other operating (income) expense one month in arrears due to the

timing of when results are available. On December 13, 2023, the new Argentine government allowed the Argentine peso to devalue from the exchange rate of approximately 366 pesos to one U.S. dollar, to 800 pesos to one U.S. dollar. Our 2023 results do not reflect the impact of this devaluation.

5. Restructuring Charges

During 2023, we recorded \$1 million of pre-tax restructuring charges related to the divestiture of our South Korea business.

During 2022, we recorded \$4 million of pre-tax restructuring charges, which included \$3 million of costs associated with our Cost Smart selling, general and administrative expense ("SG&A") program and \$1 million of costs as part of our Cost Smart Cost of sales program.

During 2021, we recorded a total of \$47 million of pre-tax restructuring charges. We recorded pre-tax net restructuring charges of \$27 million as part of our Cost Smart Cost of sales program, which primarily consisted of accelerated depreciation and other costs recorded in our North America segment. We also recorded \$17 million of employee-related and other costs associated with our Cost Smart SG&A program, consisting of professional services and employee-related severance costs primarily in our North America and EMEA segments.

6. Derivative Instruments and Hedging Activities

We are exposed to market risk stemming from changes in commodity prices (primarily corn and natural gas), foreign currency exchange rates and interest rates. In the normal course of business, we actively manage our exposure to these market risks by entering various hedging transactions authorized under established policies that place controls on these activities. These transactions utilize exchange-traded derivatives or over-the-counter derivatives with investment grade counterparties. We use derivative financial instruments that consist of commodity-related futures, options and swap contracts, foreign currency-related forward contracts, interest rate swaps and treasury locks ("T-Locks").

Commodity price hedging

Our principal use of derivative financial instruments is to manage commodity price risk relating to anticipated purchases of corn and natural gas that we intend to use in the manufacturing process, generally over the next 12 to 24 months. We maintain a commodityprice risk management strategy that uses derivative instruments to minimize significant, unanticipated earnings fluctuations caused by commodity-price volatility. To manage price risk related to corn purchases primarily in North America, we use corn futures and option contracts that trade on regulated commodity exchanges to lock in corn costs associated with fixed-priced customer sales contracts. We use soybean oil and soybean meal futures contracts in North America that trade on regulated commodity exchanges to hedge sales of our co-products. We also use over-the-counter natural gas swaps primarily in North America to hedge a portion of our natural gas usage. These derivative financial instruments limit the impact that volatility resulting from fluctuations in market prices will have on corn and natural gas purchases, as well as co-product sales.

Our natural gas, soybean meal and the majority of our corn and soybean oil derivatives have been designated as cash flow hedging instruments. A portion of our corn and soybean oil derivatives are not designated as hedging instruments for accounting purposes.

We had outstanding futures and option contracts that hedged the forecasted purchase of approximately 109 million and 120 million bushels of corn as of December 31, 2023 and 2022, respectively. We also had outstanding swap contracts that hedged the forecasted purchase of approximately 28 million and 31 million mmbtus of natural gas as of December 31, 2023 and 2022, respectively.

Foreign currency hedging

Due to our global operations, including operations in many emerging markets, we are exposed to fluctuations in foreign currency exchange rates. As a result, we have exposure to translational foreign-exchange risk when the results of our foreign net assets and operations are translated to U.S. dollars and to transactional foreign-exchange risk when transactions not denominated in the functional currency are revalued. Our foreign-exchange risk management strategy uses derivative financial instruments such as foreign currency forward contracts, swaps and options to manage our transactional foreign exchange risk. We enter into foreign currency derivative instruments that are designated as cash flow hedging instruments as well as instruments not designated as hedging instruments for accounting purposes in order to mitigate transactional foreign-exchange risk.

We hedge certain assets using foreign currency derivatives not designated as hedging instruments, which had a notional value of \$694 million and \$405 million as of December 31, 2023 and 2022, respectively. We also hedge certain liabilities using foreign currency derivatives not designated as hedging instruments, which had a notional value of \$182 million and \$239 million as of December 31, 2023 and 2022, respectively.

We hedge certain assets using foreign currency cash flow hedging instruments, which had a notional value of \$449 million and \$668 million as of December 31, 2023 and 2022, respectively. We also hedge certain liability positions using foreign currency cash flow hedging instruments, which had a notional value of \$621 million and \$840 million as of December 31, 2023 and 2022, respectively.

Interest rate hedging

We assess our exposure to variability in interest rates by identifying and monitoring changes in interest rates that may adversely impact future cash flows and the fair value of existing debt instruments and by evaluating hedging opportunities. Our risk management strategy is to monitor interest rate risk attributable to our outstanding and forecasted debt obligations as well as our offsetting hedge positions. Derivative financial instruments that we have used to manage our interest rate risk consist of interest rate swaps and T-Locks.

We periodically enter into T-Locks to hedge our exposure to interest rate changes. We have settled T-Locks associated with the issuance of our senior notes due in 2030 and 2050. The realized loss upon settlement of these T-Locks was recorded in AOCL and is amortized into earnings over the term of the senior notes. We did not have open T-Locks as of December 31, 2023 and 2022.

The derivative instruments designated as cash flow hedges included in AOCL as of December 31, 2023 and 2022, are as follows:

	GAINS (LOSSES) INCLUDED II AOCL AS OF DECEMBER 3		
Derivatives in Cash Flow Hedging Relationships	2023	2022	
Commodity contracts, net of income tax effect of \$17 and \$3, respectively	\$(46)	\$8	
Foreign currency contracts, net of income tax effect of \$ 1 and \$—, respectively	_	1	
Interest rate contracts, net of income tax effect of \$1	(2)	(3)	
Total	\$(48)	\$6	

As of December 31, 2023, AOCL included \$46 million of net losses (net of income taxes of \$16 million) on commodities-related derivative instruments, T-Locks and foreign currency hedges designated as cash flow hedges that are expected to be reclassified into earnings during the next twelve months.

The fair value and balance sheet location of our derivative instruments, presented gross in the Consolidated Balance Sheets, are as follows:

FAIR VALUE OF HEDGING INSTRUMENTS AS OF DECEMBER 31, 2023

	TAIR VALUE OF TIED GIVE INSTRUMENTS AS OF DECEMBER SI, 2025										
			TED HEDGING			NON-DESIGNATED HEDGING INSTRUMENTS					
Balance Sheet Location	COMMOD		FOREIGN CURRENCY CONTRACTS	то	TAL	COMMODITY CONTRACTS	FOREIGN CURRENCY CONTRACTS	TOTAL			
Accounts receivable, net	\$	6	\$ 11	\$	17	\$ —	\$ 5	\$ 5			
Other assets		_	4		4	_	_				
Assets		6	15		21	_	5	5			
Accounts payable and accrued liabilities		44	14		58	2	12	14			
Non-current liabilities		2	2		4	_	_	_			
Liabilities		46	16		62	2	12	14			
Net Assets/ (Liabilities)	\$(4	40)	\$(1)	\$(41)	\$(2)	\$(7)	\$(9)			

	FAIR VALUE OF HEDGING INSTRUMENTS AS OF DECEMBER 31, 2022							
		ED HEDGING NON-DESIGNATED HEDGIN UMENTS INSTRUMENTS				ING		
Balance Sheet Location	COMMODITY CONTRACTS	FOREIGN CURRENCY CONTRACTS	TOTAL	COMMODITY CONTRACTS	FOREIGN CURRENCY CONTRACTS	TOTAL		
Accounts receivable, net	\$28	\$20	\$48	\$-	\$5	\$5		
Other assets	1	6	7	_	_			
Assets	29	26	55	_	5	5		
Accounts payable and accrued liabilities	22	23	45	1	6	7		
Non-current liabilities	3	9	12	_	_	_		
Liabilities	25	32	57	1	6	7		
Net Assets/ (Liabilities)	\$ 4	\$(6)	\$(2)	\$(1)	\$(1)	\$(2)		

Additional information relating to our derivative instruments are as follows:

	RECOGN	IS (LOSSE IZED IN C RIVATIVE	CL ON		GAINS (LOSSES) RECLASSIFIED FROM AOCL INTO INCOME		
Derivatives in Cash Flow Hedging Relationships	2023	2022	2021	INCOME STATEMENT LOCATION	2023	2022	2021
Commodity contracts	\$(161)	\$202	\$218	Cost of sales	\$(87)	\$261	\$211
Foreign currency contracts	10	8	_	Net sales/ Cost of sales	10	7	(1)
Interest rate contracts	_	_	_	Financing costs	(1)	_	(1)
Total	\$(151)	\$210	\$218		\$(78)	\$268	\$209

7. Fair Value Measurements

We measure certain assets and liabilities at fair value, which is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. In determining fair value, we use various valuation approaches. The hierarchy of those valuation approaches is in three levels based on the reliability of inputs. Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Below is a summary of the hierarchy levels:

- Level 1 inputs consist of quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 inputs are inputs other than quoted prices included within
 Level 1 that are observable for the asset or liability, either directly or
 indirectly for substantially the full term of the financial instrument.
 Level 2 inputs are based on quoted prices for similar assets or
 liabilities in active markets, quoted prices for identical or similar
 assets or liabilities in markets that are not active, or inputs other than
 quoted prices that are observable for the asset or liability or can be
 derived principally from or corroborated by observable market data.
- Level 3 inputs are unobservable inputs for the asset or liability.
 Unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

Assets and liabilities measured at fair value on a recurring basis are presented below:

AS OF DECEMBER 31, 2023			AS (OF DECEM	ΛBER 31, 2	2022	
TOTAL	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
\$4	\$4	\$—	\$—	\$3	\$3	\$—	\$—
26	26	_	_	60	49	11	_
76	43	33	_	64	51	13	_
1,591	_	1,591	_	1,733	_	1,733	_
	\$4 26 76	TOTAL LEVEL 1 \$4 \$4 26 26 76 43	TOTAL LEVEL 1 LEVEL 2 \$4 \$4 \$- 26 26 - 76 43 33	TOTAL LEVEL 1 LEVEL 2 LEVEL 3 \$4 \$4 \$- \$- 26 26 - - 76 43 33 -	TOTAL LEVEL 1 LEVEL 2 LEVEL 3 TOTAL \$4 \$4 \$- \$- \$3 26 26 - - 60 76 43 33 - 64	TOTAL LEVEL 1 LEVEL 2 LEVEL 3 TOTAL LEVEL 1 \$4 \$4 \$- \$- \$3 \$3 26 26 - - 60 49 76 43 33 - 64 51	TOTAL LEVEL 1 LEVEL 2 LEVEL 3 TOTAL LEVEL 1 LEVEL 2 \$4 \$4 \$- \$- \$3 \$3 \$- 26 26 - - 60 49 11 76 43 33 - 64 51 13

The carrying values of cash equivalents, short-term investments, accounts receivable, accounts payable and short-term borrowings approximate fair values. Commodity futures, options and swap contracts are recognized at fair value. Foreign currency forward

contracts, swaps and options are also recognized at fair value. The fair value of our Long-term debt is estimated based on quotations of major securities dealers who are market makers in the securities. See Note 11 for information on the fair value of pension plan assets.

8. Financing Arrangements

We had total debt outstanding of approximately \$2.2 billion and \$2.5 billion at December 31, 2023 and 2022, respectively. As of December 31, 2023, our Short-term borrowings consisted primarily of commercial paper borrowings and amounts outstanding under various unsecured local country operating lines of credit. In 2023, we paid the outstanding principal in full and without penalty under our term loan credit agreement that was due on December 16, 2024.

In 2021, we established a commercial paper program under which we may issue senior unsecured notes of short maturities up to a maximum aggregate principal amount of \$1.0 billion outstanding at any time. The notes may be sold from time to time on customary terms in the U.S. commercial paper market. We use the note proceeds for general corporate purposes. From the inception of the program until December 31, 2021, the average amount of commercial paper outstanding was \$670 million with an average interest rate of 0.27 percent and a weighted average maturity of 48 days. During 2022, the average amount of commercial paper outstanding was \$522 million with an average interest rate of 1.97 percent and a weighted average maturity of 16 days. As of December 31, 2022, \$390 million of commercial paper was outstanding with an average interest rate of 4.75 percent and a weighted average maturity of 7 days. During 2023, the average amount of commercial paper outstanding was \$397 million with an average interest rate of 5.30 percent and a weighted average maturity of 11 days. As of December 31, 2023, \$327 million of commercial paper was outstanding with an average interest rate of 5.50 percent and a weighted average maturity of 11 days. The amount of commercial paper outstanding under this program in 2024 is expected to fluctuate.

Presented below are our debt carrying amounts, net of related discounts, premiums and debt issuance costs and fair values as of December 31, 2023 and 2022:

		2023		2022
	CARRYING VALUE	FAIR VALUE	CARRYING VALUE	FAIR VALUE
2.900% senior notes due June 1, 2030	\$596	\$536	\$595	\$510
3.200% senior notes due October 1, 2026	499	479	498	470
3.900% senior notes due June 1, 2050	391	300	390	293
6.625% senior notes due April 15, 2037	253	275	253	256
Term loan credit agreement due December 16, 2024	_	_	200	200
Revolving credit agreement	_	_	_	_
Other long-term borrowings	1	1	4	4
Total long-term debt	1,740	1,591	1,940	1,733
Commercial paper	327	327	390	390
Other short-term borrowings	121	121	153	153
Total short-term borrowings	448	448	543	543
Total debt	\$2,188	\$2,039	\$2,483	\$2,276

We guarantee certain obligations of our consolidated subsidiaries, which aggregated to \$49 million and \$63 million at December 31, 2023 and 2022, respectively.

9. Leases

The components of lease expense are as follows:

	2023	2022	2021
Operating lease expense	\$63	\$59	\$58
Variable operating lease expense	26	27	26
Short term lease expense	3	3	4
Lease expense	\$92	\$89	\$88

We have operating leases for certain rail cars, office spaces, warehouses and machinery and equipment. We currently have no finance leases. The following is a reconciliation of future undiscounted cash flows to the operating lease liabilities and the related operating lease assets as presented within Other non-current liabilities and Other assets, respectively, on our Consolidated Balance Sheets as of December 31, 2023:

2024	\$63
2025	52
2026	45
2027	29
2028	14
Thereafter	31
Total future lease payments	234
Less imputed interest	21
Present value of future lease payments	213
Less current lease liabilities	56
Non-current operating lease liabilities	\$157
Operating lease assets	\$208

Supplemental cash flow information arising from lease transactions is as follows:

	YEAR ENDED DEC	EMBER 31,
	2023	2022
Cash paid for amounts included in the measurement of lease liabilities: Operating cash flows from operating leases	\$64	\$60
Right-of-use assets obtained in exchange for lease liabilities:	672	ćca
Operating leases	\$72	\$52

	YEAR ENDED	DECEMBER 31,
Lease term and discount rate	2023	2022
Weighted average remaining lease term	5.3 years	5.9 years
Weighted average discount rate	4.6%	4.4%

10. Income Taxes

The components of income before income taxes and the provision for income taxes for the years indicated are presented below:

	2023	2022	2021
Income before income taxes:			
U.S.	\$244	\$111	\$39
Foreign	595	557	209
Total income before income taxes	839	668	248
Provision for income taxes:			
Current tax expense:			
U.S. federal	6	8	2
State and local	5	2	2
Foreign	183	159	180
Total current tax expense	194	169	184
Deferred tax expense (benefit):			
U.S. federal	_	5	(57)
State and local	1	(1)	(2)
Foreign	(7)	(7)	(2)
Total deferred tax (benefit)	(6)	(3)	(61)
Total provision for income taxes	\$188	\$166	\$123

Deferred income taxes are provided for the tax effects of temporary differences between the financial reporting basis and tax basis of assets and liabilities. Significant temporary differences as of December 31, 2023 and 2022, are summarized as follows:

	2023	2022
eferred tax assets attributable to:		
Employee benefit accruals	\$32	\$30
Pensions and postretirement plans	16	14
Lease liabilities	54	49
Bad debt	5	6
Inventory reserve	16	22
Net operating loss carryforwards	58	59
Tax credit carryforwards	5	5
Derivative contracts	16	_
Uniform capitalization	12	9
Other	35	33
Total deferred tax assets	249	227
Valuation allowances	(46)	(51)
Net deferred tax assets	203	176
eferred tax liabilities attributable to:		
Property, plant and equipment	184	175
Identified intangibles	33	48
Right-of-use lease assets	51	46
Foreign withholding and state taxes on unremitted earnings	1	1
Goodwill	35	31
Brazilian indirect tax credits	_	4
Derivative contracts	_	3
Total deferred tax liabilities	304	308
let deferred tax liabilities	\$101	\$132

Of the \$58 million of tax-effected net operating loss carryforwards as of December 31, 2023, \$42 million are for foreign loss carryforwards, \$14 million for state loss carryforwards, and \$2 million for U.S. federal loss carryforwards. Of the \$42 million of foreign loss carryforwards, \$24 million are related to Canada, \$5 million to Australia, \$4 million to Brazil, \$3 million to Argentina, and \$3 million to Malaysia with carryforward periods of 20 years, indefinite, indefinite, 5 years and 10 years, respectively. U.S. federal and state loss carryforwards have various expiration periods beginning in 2025.

A valuation allowance is established when it is more likely than not that all or a portion of a deferred tax asset will not be realized. Prior to establishing a valuation allowance, we consider historical taxable income, scheduled reversal of deferred tax liabilities, tax planning strategies, tax carryovers and projected future taxable income. As of December 31, 2023, we maintained valuation allowances of \$46 million, consisting of \$23 million primarily related to foreign loss carryforwards, \$14 million for state loss carryforwards, \$6 million for state credits and carryforwards, \$2 million for U.S. federal loss carryforwards and \$1 million for certain foreign tax credits, all of which we have determined will more likely than not expire prior to realization.

Net operating loss carryforwards disclosed in the financial statements differ from the as-filed tax returns due to an unrecognized tax benefit. Foreign net operating loss carryforwards and valuation allowances would increase \$10 million absent the unrecognized tax benefit.

A reconciliation of the U.S. federal statutory tax rate to our effective tax rate follows:

	2023	2022	2021
Provision for tax at U.S. statutory rate	21.0%	21.0%	21.0%
Tax rate difference on foreign income	6.1	7.2	13.3
Foreign currency foreign exchange	(1.8)	(0.3)	3.2
Inflation adjustments	(0.5)	(0.6)	(4.0)
Tax benefit of intercompany financing	(0.4)	(0.4)	(1.6)
U.S. international tax implications	1.0	2.2	0.8
Valuation allowance in Argentina	_	_	(0.4)
Favorable judgment on the treatment of credits and interest on indirect taxes	(0.2)	(0.3)	(4.8)
Unremitted earnings	_	_	(12.1)
Impairment charge related to Argentina joint venture	_	_	35.5
Foreign-derived intangible income (FDII)	(1.5)	(1.0)	_
Brazil exclusion of certain tax incentives	(1.2)	(4.0)	_
Other items, net	(0.1)	1.1	(1.3)
Provision at effective tax rate	22.4%	24.9%	49.6%

The 2023 statutory tax rates (including surcharges and local jurisdictional taxes when applicable) were 30 percent in Mexico, 32 percent in Germany, 35 percent in Colombia, 39 percent in Pakistan, and 26 percent in Canada, where we have significant operations. In addition, our subsidiary in Brazil has a statutory tax rate of 34 percent before the application of local incentives that vary each year.

During 2023, the IRS released Notice 2023-55, to address the final foreign tax credit regulations issued in 2022. The notice was effective in 2023 and provided retroactive relief to fiscal 2022. This increased our ability to claim certain foreign tax credits against U.S. taxes with respect to fiscal years 2022 and 2023.

Additionally, during 2023, the Brazilian Government published Law 14.596/23, which established a transfer pricing framework in Brazil that is aligned with the Organization for Economic Co-operation and Development ("OECD") guidelines. The law was effective January 1, 2024, but our subsidiary in Brazil elected to early adopt the law as of January 1, 2023, which provided a favorable country earnings mix and related increase in our foreign-derived intangible income.

As of December 31, 2023, we had a \$1 million accrual for foreign withholding on certain unremitted earnings from foreign subsidiaries. No foreign withholding taxes, federal and state taxes or foreign currency gains or losses have been provided on distributions of approximately \$2.7 billion of unremitted earnings of our foreign subsidiaries, as such amounts are considered permanently reinvested. It is not practicable to estimate the additional income taxes, including applicable foreign withholding taxes that would be due upon the repatriation of these earnings.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits, excluding interest and penalties, for 2023 and 2022 is as follows:

	2023	2022
Balance at January 1	\$30	\$29
Additions for tax positions related to prior years	1	5
Reductions for tax positions related to prior years	(1)	(1)
Additions based on tax positions related to the current year	1	1
Reductions related to a lapse in the statute of limitations	_	(4)
Balance at December 31	\$31	\$30

Of the \$31 million of unrecognized tax benefits as of December 31, 2023, \$20 million represents the amount that, if recognized, could affect the effective tax rate in future periods. The remaining \$11 million includes \$10 million of net operating loss carryforwards that would have otherwise had a valuation allowance and \$1 million of U.S. federal benefits.

We account for interest and penalties related to income tax matters within the provision for income taxes. We have accrued \$5 million of interest expense and penalties related to unrecognized tax benefits as of December 31, 2023.

We are subject to U.S. federal income tax as well as income tax in multiple states and non-U.S. jurisdictions. The U.S. federal tax returns are subject to audit for the years 2020 through 2023. In general, our foreign subsidiaries remain subject to audit for years 2013 and later.

It is reasonably possible that the total amount of unrecognized tax benefits including interest and penalties will increase or decrease within twelve months of December 31, 2023. We believe it is reasonably possible that \$4 million of the unrecognized tax benefits may be recognized within twelve months of December 31, 2023, as a result of a statute of limitations lapse and potential settlement.

11. Pension and Other Postretirement Benefits

We sponsor noncontributory defined benefit pension plans (qualified and non-qualified) covering a substantial portion of our employees in the U.S. and Canada and certain employees in other foreign countries. Plans for most salaried employees provide pay-related benefits based on years of service. Plans for hourly employees generally provide benefits based on flat dollar amounts and years of service. Our general funding policy is to make contributions to the plans that comply with minimum funding requirements and are within the limits of deductibility under current tax regulations. Certain foreign countries allow income tax deductions without regard to contribution levels and our policy in those countries is to make contributions required by the terms of the applicable plan.

Included in our pension obligation are nonqualified supplemental retirement plans for certain key employees. Benefits provided under these plans are unfunded and we make direct payments to plan participants. We also provide healthcare and/or life insurance benefits for retired employees in the U.S., Canada and Brazil. Healthcare benefits for retirees outside the U.S., Canada and Brazil are generally covered through local government plans.

Pension Plans

Pension obligation and funded status

The changes in pension benefit obligations and plan assets during 2023 and 2022, as well as the funded status and the amounts recognized in our Consolidated Balance Sheets related to our pension plans at December 31, 2023 and 2022, are as follows:

	U.S. PLANS		NON-	U.S. PLANS
	2023	2022	2023	2022
Benefit obligation				
At January 1	\$300	\$383	\$188	\$254
Service cost	3	4	4	3
Interest cost	15	9	10	9
Benefits paid	(18)	(25)	(13)	(13)
Actuarial loss (gain)	5	(71)	8	(49)
Curtailment/settlement/amendments	_	_	(1)	(2)
Foreign currency translation	_	_	4	(14)
Benefit obligation at December 31	\$305	\$300	\$200	\$188
Fair value of plan assets				
At January 1	\$317	\$420	\$189	\$244
Actual return on plan assets	25	(79)	17	(30)
Employer contributions	1	1	6	5
Benefits paid	(18)	(25)	(13)	(13)
Plan settlements	_	_	(1)	(2)
Foreign currency translation	_	_	2	(15)
Fair value of plan assets at December 31	\$325	\$317	\$200	\$189
Funded status	\$20	\$17	\$-	\$1

As of December 31, 2023, the actuarial loss for the U.S. and non-U.S. plans was primarily driven by a decrease in the discount rate compared to the prior year. As of December 31, 2022, the actuarial gain for the U.S. and non-U.S. plans was primarily driven by an increase in discount rates compared to the prior year.

Amounts recorded in the Consolidated Balance Sheets as of December 31, 2023 and 2022 are as follows:

		U.S. PLANS	NON-U.S. PLANS		
	2023	2022	2023	2022	
Non-current asset	\$28	\$25	\$47	\$43	
Current liabilities	(1)	(1)	(2)	(1)	
Non-current liabilities	(7)	(7)	(45)	(41)	
Net asset (liability) recognized	\$20	\$17	\$-	\$1	

Amounts recorded in AOCL, excluding tax effects that have not yet been recognized as components of net periodic benefit cost at December 31, 2023 and 2022, are as follows:

	U.:	S. PLANS	NON-U.S. PLANS		
	2023	2022	2023	2022	
Net actuarial loss	\$32	\$36	\$24	\$24	
Prior service (credit) cost	(2)	(3)	_	_	
Net amount recognized	\$30	\$33	\$24	\$24	

The amount recognized in AOCL at December 31, 2023 decreased compared to prior year for the U.S. pension plans mainly because the actual return on assets was more than the expected return on assets, which was partially offset by the decrease in discount rates used to measure our obligations under our U.S. pension. The net amount recognized in AOCL at December 31, 2023 for the non-U.S. pension plans as compared to December 31, 2022 was flat primarily due to the actuarial loss amortization, which was offset by foreign currency translation.

The accumulated benefit obligation for all defined benefit pension plans was \$485 million and \$469 million at December 31, 2023 and 2022, respectively. Information for pension plans with a projected benefit obligation in excess of plan assets and an accumulated benefit obligation in excess of plan assets is as follows:

		U.S. PLANS	NON-U.S. PLAN		
	2023	2022	2023	2022	
Projected benefit obligation	\$(8)	\$(8)	\$(51)	\$(45)	
Accumulated benefit obligation	(8)	(8)	(40)	(35)	
Fair value of plan assets	_	_	4	3	

Components of net periodic benefit cost consist of the following for 2023, 2022 and 2021:

	U.S. PLANS			N	ON-U.S.	PLANS
	2023	2022	2021	2023	2022	2021
Service cost	\$3	\$4	\$4	\$4	\$3	\$4
Interest cost	15	9	8	10	9	9
Expected return on plan assets	(17)	(16)	(17)	(9)	(7)	(8)
Amortization of actuarial loss	1	_	_	1	1	2
Amortization of prior service credit	(1)	(1)	(1)	_	_	_
Net periodic benefit cost	\$1	\$(4)	\$(6)	\$6	\$6	\$7

Total amounts recorded in other comprehensive income and net periodic benefit cost are as follows:

	U.S. PLANS			NON-U.S. PLANS			
(pre-tax)	2023	2022	2021	2023	2022	2021	
Net actuarial (gain) loss	\$(3)	\$25	\$(1)	\$-	\$(11)	\$(11)	
Prior service cost	_	_	_	_	_	_	
Amortization of actuarial loss	(1)	_	_	(1)	(1)	(2)	
Amortization of prior service credit	1	1	1	_	_	_	
Foreign currency translation	_	_	_	1	(2)	(11)	
Total recorded in other comprehensive (income) loss	(3)	26	_	_	(14)	(24)	
Net periodic benefit cost	1	(4)	(6)	6	6	7	
Total recorded in other comprehensive (income) loss and net periodic benefit cost	\$(2)	\$22	\$(6)	\$6	\$(8)	\$(17)	

The weighted average assumptions used to determine our obligations for the pension plans are as follows:

	U.	S. PLANS	NON-U.S. PLAN		
	2023	2022	2023	2022	
Discount rate	5.00%	5.19%	5.24%	5.66%	
Rate of compensation increase	3.83	3.92	3.76	3.83	
Cash balance interest credit rate	4.53	4.21	_	_	

The weighted average assumptions used to determine our net periodic benefit cost for the pension plans are as follows:

U.S. PLANS			NON-U.S	S. PLANS	
2023	2022	2021	2023	2022	2021
5.19%	2.91%	2.58%	5.67%	3.66%	2.84%
5.50	4.10	4.10	5.05	3.50	3.37
3.92	4.18	4.26	3.83	3.77	3.54
4.21	4.11	3.76	_	_	_
	5.19% 5.50 3.92	2023 2022 5.19% 2.91% 5.50 4.10 3.92 4.18	2023 2022 2021 5.19% 2.91% 2.58% 5.50 4.10 4.10 3.92 4.18 4.26	2023 2022 2021 2023 5.19% 2.91% 2.58% 5.67% 5.50 4.10 4.10 5.05 3.92 4.18 4.26 3.83	2023 2022 2021 2023 2022 5.19% 2.91% 2.58% 5.67% 3.66% 5.50 4.10 4.10 5.05 3.50 3.92 4.18 4.26 3.83 3.77

For 2023, we assumed an expected long-term rate of return on assets of 5.50 percent for U.S. plans and 4.66 percent for Canadian plans. In developing the expected long-term rate of return assumption on plan assets, which consist mainly of U.S. and Canadian debt and equity securities, we evaluated historical rates of return achieved on plan assets and the asset allocation of the plans, input from our independent actuaries and investment consultants, and historical trends in long-term inflation rates. Projected return estimates are based upon broad equity and bond indices.

The discount rate reflects a rate of return on high-quality fixed-income investments that match the duration of the expected benefit payments. We typically use returns on long-term, high-quality corporate AA bonds as a benchmark in establishing this assumption, and we elect to use a full yield curve approach to estimate these components of benefit cost by applying the specific spot rates along the yield curve used to determine the benefit obligation to the relevant projected cash flows.

Plan assets

Our investment policy for our pension plans is to balance risk and return through diversified portfolios of fixed income securities, equity instruments and short-term investments. Maturities for fixed income securities are managed such that sufficient liquidity exists to meet near-term benefit payment obligations. For U.S. pension plans, the weighted average target range allocation of assets was 9 to 19 percent in equities and 81 to 91 percent in fixed income inclusive of other short-term investments. The asset allocation is reviewed regularly, and portfolio investments are rebalanced to the targeted allocation when considered appropriate.

Our weighted average asset allocations as of December 31, 2023 and 2022, for U.S. and non-U.S. pension plan assets are as follows:

	U.S. PLANS			S. PLANS
Asset Category	2023	2022	2023	2022
Equity securities	12%	11%	8%	8%
Debt securities	86	87	78	77
Cash and other	2	2	14	15
Total	100%	100%	100%	100%

With the exception of cash, which is considered Level 1 in the fair value hierarchy, all significant pension plan assets are held in collective trusts by our U.S. and non-U.S. plans. The fair value of shares of collective trusts are based upon the net asset value ("NAV") of the fund reported by the fund managers based on quoted market prices of the underlying securities as of the balance sheet date and are considered to be Level 2 fair value measurements. Investments measured at NAV as a practical expedient for fair value, are excluded from the fair value hierarchy. This may produce a fair value measurement that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while we believe our valuation methods are appropriate and consistent with those of other market participants, different methods could result in different fair value measurements at the reporting date.

The fair values of our plan assets by asset category are as follows:

EATH VALUE MEACHDEMENTS AT DECEMBER 21, 2022

FAIR VALUE MEASUREMENTS AT DECEMBER 31, 2023							23
	NAV	L	EVEL 1	L	EVEL 2		TOTAL
2023	2022	2023	2022	2023	2022	2023	2022
\$ —	\$-	\$-	\$ —	\$24	\$22	\$24	\$22
_	_	_	_	16	14	16	14
_	_	_	_	133	127	133	127
_	_	_	_	89	89	89	89
57	59	_	_	_	_	57	59
_	_	_	_	6	6	6	6
\$57	\$59	\$ —	\$—	\$268	\$258	\$325	\$317
\$-	\$-	\$-	\$-	\$10	\$9	\$10	\$9
_	_	_	_	6	6	6	6
_	_	_	_	78	99	78	99
_	_	_	_	79	46	79	46
_	_	_	_	25	22	25	22
_	_	2	2	_	5	2	7
\$-	\$-	\$2	\$2	\$198	\$187	\$200	\$189
	\$ 57 \$57	NAV 2023 2022 \$- - - - 57 59 - - \$57 \$59 \$- - - - <	NAV L 2023 2022 2023 \$- \$- \$- - - - 57 59 - - - - \$57 \$59 \$- \$- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	NAV LEVEL 1 2023 2022 2023 2022 \$- \$- \$- \$- - - - - - - - - 57 59 - - \$57 \$59 \$- \$- \$- - - - \$- \$- \$- - \$- \$- \$- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	NAV LEVEL 1 L 2023 2022 2023 2022 2023 \$- \$- \$- \$- \$24 - - - - 16 - - - - 133 - - - - 89 57 59 - - - \$- - - - 6 \$57 \$59 \$- \$- \$268 \$- - - - 6 \$- - - - 6 \$- - - - 6 \$- - - - - 6 \$- - - - - - - - \$- - - - - - - - - - - - - - - - - -	NAV LUEL 1 LUEL 2 2023 2022 2023 2022 \$- \$- \$- \$24 \$22 \$- \$- \$- \$16 \$14 \$- \$- \$- \$133 \$127 \$- \$- \$- \$133 \$127 \$- \$- \$- \$89 \$89 \$57 \$59 \$- \$- \$6 \$6 \$57 \$59 \$- \$- \$268 \$258 \$- \$- \$- \$- \$6 \$6 \$- \$- \$- \$- \$10 \$9 \$- \$- \$- \$- \$6 \$6 \$- \$- \$- \$- \$6 \$6 \$- \$- \$- \$- \$6 \$6 \$- \$- \$- \$- \$6 \$6 \$- \$- \$- \$- \$6 <t< td=""><td>NAV LVEL 1 LVEL 2 2023 2022 2023 2022 2023 2022 2023 2022 2023 2022 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2024 2023 2024</td></t<>	NAV LVEL 1 LVEL 2 2023 2022 2023 2022 2023 2022 2023 2022 2023 2022 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023 2024 2023 2024

- (a) This category consists of both passively and actively managed equity index funds that track the return of large capitalization U.S. equities.
- (b) This category consists of both passively and actively managed equity index funds that track an index of returns on international developed and emerging market equities.
- (c) This category consists of an actively managed fixed-income index fund that invests in a diversified portfolio of fixed-income securities with maturities generally exceeding 10 years.
- (d) This category consists of both passively and actively managed fixed-income index funds that invest in a diversified portfolio of fixed income government debt securities with varying maturities.
- (e) This category consists of an actively managed common collective fund that invests in government bonds, collateralized mortgage obligations, investment grade private credit and real estate debt. This fund is priced monthly at the aggregated market value of the underlying investments and may be fully redeemed with 95 days notice.
- (f) This category represents cash, cash equivalents, or highly liquid short-term investments.
- (a) This category consists of both passively and actively managed fixed income index funds that track the return of government bonds with varying maturities.
- (h) This category consists of actively managed fixed income index funds that track the return of investment grade corporate bonds with varying maturities.
- (1) This category mainly consists of investment products provided by insurance companies that offer returns that are subject to a minimum guarantee and mutual funds.

During 2023, we made cash contributions of \$1 million to our U.S. pension plans and \$6 million to our non-U.S. pension plans. We anticipate that in 2024 we will make cash contributions of \$1 million to our U.S. pension plans and \$4 million to our non-U.S. pension plans. Cash contributions in subsequent years will depend on a number of factors, including the performance of plan assets.

We expect to pay the following benefit payments to beneficiaries, which reflect anticipated future service, as appropriate:

	U.S. PLANS	NON-U.S. PLANS
2024	\$26	\$12
2025	26	12
2026	26	12
2027	27	13
2028	24	38
Thereafter	114	73

We also maintain defined contribution plans. We make matching contributions to these plans that are subject to certain vesting requirements and are based on a percentage of employee contributions. The expense for defined contribution plans was \$28 million in 2023, \$22 million for 2022, and \$22 million in 2021.

Postretirement Benefit Plans

Our postretirement benefit plans currently are not funded. The information presented below includes plans in the U.S., Brazil and Canada. The changes in the benefit obligations of the plans during 2023 and 2022, as well as the amounts recognized in our Consolidated Balance Sheets at December 31, 2023 and 2022, are as follows:

	2023	2022
Accumulated postretirement benefit obligation		
At January 1	\$58	\$65
Service cost	1	1
Interest cost	4	3
Amendments	2	_
Actuarial (gain) loss	1	(7)
Benefits paid	(4)	(4)
Foreign currency translation	2	_
At December 31	64	58
Fair value of plan assets	_	_
Funded status	\$(64)	\$(58)

As of December 31, 2023, the actuarial loss was insignificant. As of December 31, 2022, the actuarial gain was mainly driven by higher discount rates.

Amounts recorded in the Consolidated Balance Sheets at December 31, 2023 and 2022 consist of:

	2023	2022
Current liabilities	\$(4)	\$(5)
Non-current liabilities	(60)	(53)
Net liability recognized	\$(64)	\$(58)

Amounts recorded in AOCL, excluding tax effects that have not yet been recognized as components of net periodic benefit cost at December 31, 2023 and 2022, are as follows:

	2023	2022
Net actuarial loss	\$4	\$1
Prior service cost	6	5
Net amount recognized	\$10	\$6

Components of net periodic benefit cost consisted of the following for 2023, 2022 and 2021:

	2023	2022	2021
Service cost	\$1	\$1	\$1
Interest cost	4	3	2
Amortization of actuarial (gain) loss	(1)	_	1
Amortization of prior service cost (credit)	1	_	(2)
Net periodic benefit cost	\$5	\$4	\$2

Total amounts recorded in other comprehensive income and net periodic benefit cost for 2023, 2022 and 2021 are as follows:

(pre-tax)	2023	2022	2021
Net actuarial loss (gain)	\$1	\$(7)	\$(5)
Prior service cost	2	_	4
Amortization of prior service (cost) credit	(1)	_	2
Amortization of actuarial gain (loss)	1	_	(1)
Foreign currency translation	1	_	(4)
Total recorded in other comprehensive loss (income)	4	(7)	(4)
Net periodic benefit cost	5	4	2
Total recorded in other comprehensive loss (income) and net periodic benefit cost	\$9	\$(3)	\$(2)

We used the following weighted average assumptions to determine our postretirement benefit obligations for 2023 and 2022:

	2023	2022
Discount rate	7.37%	7.30%

The following weighted average assumptions were used to determine our net postretirement benefit cost:

	2023	2022	2021
Discount rate	7.30%	4.22%	3.69%

The discount rate reflects a rate of return on high-quality fixed-income investments that match the duration of expected benefit payments. We typically use returns on long-term, high-quality corporate AA bonds as a benchmark in establishing this assumption.

The healthcare cost trend rates used in valuing our postretirement benefit obligations are established based upon actual healthcare trends and consultation with actuaries and benefit providers. We used the following assumptions as of December 31, 2023:

	U.S.	CANADA	BRAZIL
2023 increase in per capita cost	7.80%	5.04%	8.94%
Ultimate trend	4.50%	4.05%	8.94%
Year ultimate trend reached	2033	2040	2023

We expect to make the following benefit payments to beneficiaries under our postretirement benefit plans, which reflect anticipated future service, as appropriate:

2024	\$4
2025	4
2026	4
2027	4
2028	4
Thereafter	22

Multi-employer Plan

Ingredion participates in and contributes to one multi-employer benefit plan under the terms of collective bargaining agreements that cover certain union-represented employees and retirees in the U.S. The plan covers medical and dental benefits for active hourly employees and retirees represented by the United Steelworkers Union for certain U.S. locations. The risks of participating in this multi-employer plan are different from risk of participating in single-employer plans. This plan receives contributions from two or more unrelated employers pursuant to one or more collective bargaining agreements, and the assets contributed by one employer may be used to fund the benefits of all employees covered within the plan.

We are required to make contributions to this multi-employer plan as determined by the terms and conditions of the collective bargaining agreements and plan terms, but we do not provide more than five percent of the total contributions to the plan. We made regular contributions to the plan of \$11 million in 2023, \$10 million in 2022, and \$14 million in 2021. We cannot currently estimate the amount of multi-employer plan contributions that will be required in 2024 and future years, but these contributions could increase due to healthcare cost trends. The North Kansas City retiree medical group shifted from a multi-employer plan to the Ingredion Post Retirement Medical Health and Life Plan at the end of 2021. The remaining collective bargaining agreements associated with the multi-employer plan expire during 2024 through 2027.

12. Equity

Preferred stock

We have authorized 25 million shares of \$0.01 par value preferred stock, none of which were issued or outstanding at December 31, 2023 and 2022.

Treasury stock

On September 26, 2022, the Board of Directors approved a stock repurchase program authorizing us to purchase up to 6.0 million shares of our outstanding common stock until December 31, 2025. We may repurchase shares from time to time in the open market, in privately negotiated transactions, or otherwise, at prices we deem appropriate. We are not obligated to repurchase any shares under the authorization, and the repurchase program may be suspended, discontinued or modified at any time, for any reason and without notice. The parameters of our stock repurchase program are not established solely with reference to the dilutive impact of shares issued under our stock incentive plan. However, we expect that, over time, share repurchases will offset the dilutive impact of shares issued under the stock incentive plan.

During 2023, we repurchased 1.0 million outstanding shares of common stock in open market transactions at a net cost of \$101 million. During 2022, pursuant to our previous stock repurchase program which has since been terminated, we repurchased 1.3 million shares of common stock in open market transactions at a net cost of \$112 million.

Common stock share activity for 2023, 2022 and 2021 is as follows:

(Shares of common stock, in thousands)	ISSUED	HELD IN TREASURY	OUTSTANDING
Balance at December 31, 2020	77,811	10,795	67,016
Issuance of restricted stock units as compensation	_	(69)	69
Performance shares and other share-based awards	_	(6)	6
Stock options exercised	_	(331)	331
Purchase/acquisition of treasury stock	_	765	(765)
Balance at December 31, 2021	77,811	11,154	66,657
Issuance of restricted stock units as compensation	_	(95)	95
Performance shares and other share-based awards	_	(43)	43
Stock options exercised	_	(182)	182
Purchase/acquisition of treasury stock	_	1,283	(1,283)
Balance at December 31, 2022	77,811	12,117	65,694
Issuance of restricted stock units as compensation	_	(108)	108
Performance shares and other share-based awards	_	(51)	51
Stock options exercised	_	(386)	386
Purchase/acquisition of treasury stock	_	1,000	(1,000)
Balance at December 31, 2023	77,811	12,572	65,239

Share-based payments

Share-based compensation expense for 2023, 2022 and 2021 is as follows:

	2023	2022	2021
Stock options:			
Pre-tax compensation expense	\$4	\$4	\$3
Income tax benefit	_	_	_
Stock option expense, net of income taxes	4	4	3
Restricted stock units ("RSUs"):			
Pre-tax compensation expense	15	13	12
Income tax benefit	(2)	(1)	(1)
RSUs, net of income taxes	13	12	11
Performance shares and other share-based awards:			
Pre-tax compensation expense	14	12	8
Income tax benefit	(1)	(1)	(1)
Performance shares and other share-based compensation expense, net of income taxes	13	11	7
Total share-based compensation:			
Pre-tax compensation expense	33	29	23
Income tax benefit	(3)	(2)	(2)
Total share-based compensation expense, net of income taxes	\$30	\$27	\$21

We have a stock incentive plan ("SIP") that was approved on May 19, 2023 and which is administered by the People, Culture and Compensation Committee ("Compensation Committee") of our Board of Directors that provides for the granting of stock options, restricted stock, restricted stock units and other share-based awards to certain key employees. A maximum of 5.4 million shares were originally authorized for awards under the SIP. As of December 31, 2023, 5.4 million shares were available for future grants under the SIP. Shares covered by awards that expire, terminate or lapse will again be available for the grant of awards under the SIP.

Stock options

Under the SIP, stock options are granted at exercise prices that equal the market value of the underlying common stock on the date of grant. The options have a 10-year term and are exercisable upon vesting, which occurs over a three-year period at the anniversary dates of the date of grant.

We granted non-qualified options to purchase 197 thousand, 281 thousand and 358 thousand shares for 2023, 2022 and 2021, respectively. The fair value of each option grant was estimated using the Black-Scholes option-pricing model with the following assumptions:

	FOR THE Y	FOR THE YEAR ENDED DECEMBER 31			
	2023	2022	2021		
Expected life (in years)	5.5	5.5	5.5		
Risk-free interest rate	4.0%	2.0%	0.6%		
Expected volatility	28.3%	23.8%	23.2%		
Expected dividend yield	2.9%	2.9%	2.9%		

The expected life of options represents the weighted average period that we expect options granted to be outstanding giving consideration to vesting schedules and our historical exercise patterns. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the grant date for the period corresponding to the expected life of the options. Expected volatility is based on historical volatilities of our common stock, and dividend yields are based on our dividend yield at the date of issuance.

Stock option activity in 2023 is as follows:

	NUMBER OF OPTIONS (in thousands)	WEIGHTED AVERAGE EXERCISE PRICE PER SHARE	AVERAGE REMAINING CONTRACTUAL TERM (YEARS)	AGGREGATE INTRINSIC VALUE (in millions)
Outstanding as of December 31, 2022	2,222	\$92.32	5.16	\$24
Granted	197	98.69		
Exercised	(386)	71.76		
Cancelled	(80)	102.66		
Outstanding as of December 31, 2023	1,953	\$96.61	4.97	\$29
Exercisable as of December 31, 2023	1,523	\$97.80	4.03	\$22

For 2023, 2022 and 2021, cash received from the exercise of stock options was \$28 million, \$11 million and \$21 million, respectively. As of December 31, 2023, the unrecognized compensation cost related to non-vested stock options totaled \$3 million, which is expected to be amortized over the weighted-average period of approximately 1.6 years.

Additional information pertaining to stock option activity is as follows:

	YEAR ENDED DECEMBER 3			
	2023	2022	2021	
Weighted average grant date fair value of stock options granted (per share)	\$23.80	\$15.04	\$12.31	
Total intrinsic value of stock options exercised	13	6	10	

Restricted stock units

We have granted restricted stock units ("RSUs") to certain key employees. The RSUs are primarily subject to cliff vesting, generally after three years, provided the employee remains in our service. The fair value of the RSUs is determined based upon the number of shares granted and the quoted market price of our common stock at the grant date.

RSU activity in 2023 is as follows:

(shares in thousands)	NUMBER OF RESTRICTED SHARES	WEIGHTED AVERAGE FAIR VALUE PER SHARE
Non-vested at December 31, 2022	517	\$88.04
Granted	222	98.15
Vested	(154)	87.91
Cancelled	(33)	91.30
Non-vested at December 31, 2023	552	\$92.05

The total fair value of RSUs that vested in each of 2023, 2022 and 2021 was \$12 million.

At December 31, 2023, the total remaining unrecognized compensation cost related to RSUs was \$20 million, which will be amortized on a weighted-average basis over approximately 1.7 years. Recognized compensation cost related to unvested RSUs is included in Share-based payments subject to redemption in the Consolidated Balance Sheets and totaled \$28 million for both December 31, 2023 and 2022, respectively.

Performance shares

We have a long-term incentive plan for senior management in the form of performance shares. The vesting of the performance shares is generally based on two performance metrics. Fifty percent of the performance shares awarded vest based on our total shareholder return as compared to the total shareholder return of our peer group and the remaining fifty percent vest based on the calculation of our three-year average Adjusted Return on Invested Capital ("ROIC") against an established ROIC target. The 2021 performance shares were granted in two tranches. Vesting for the first tranche was split evenly between our total shareholder return and Adjusted ROIC against the applicable target. The second tranche of performance share awards vest 100 percent based on the calculation of Adjusted ROIC against the applicable target.

For the 2023 performance shares awarded based on our total shareholder return, the number of shares that ultimately vest can range from zero to 200 percent of the grant depending on our total shareholder return as compared to the total shareholder return of our peer group. The share award vesting will be calculated at the end of the three-year period and is subject to approval by management and the Compensation Committee of the Board of Directors. Compensation expense is based on the fair value of the performance shares at the grant date, established using a Monte Carlo simulation model. The total compensation expense for these awards is amortized over a three-year graded vesting schedule.

For the 2023 performance shares awarded based on Adjusted ROIC, the number of shares that ultimately vest can range from zero to 200 percent of the grant depending on our Adjusted ROIC performance against the target. The share award vesting will be calculated at the end of the three-year period and is subject to approval by management and the Compensation Committee. Compensation expense is based on the market price of our common stock on the grant date and the final number of shares that ultimately vest. We estimate the potential share vesting at least annually to adjust the compensation expense for these awards over the vesting period to reflect our estimated Adjusted ROIC performance against the target. The total compensation expense for these awards is amortized over a three-year graded vesting schedule.

We awarded 93 thousand, 86 thousand and 108 thousand performance shares in 2023, 2022 and 2021, respectively. The weighted average fair value of the shares granted during 2023, 2022 and 2021 was \$114.26, \$138.85 and \$100.29, respectively.

The 2020 performance share awards that vested during 2023 achieved a 77 percent payout of the granted performance shares. As of December 31, 2023, the 2021 performance share awards are estimated to pay out at 200 percent. Additionally, there were 34 thousand shares cancelled during 2023.

As of December 31, 2023, the unrecognized compensation cost relating to these plans was \$8 million, which will be amortized over the remaining requisite service periods of 1.8 years. Recognized compensation cost related to these unvested awards is included in Share-based payments subject to redemption in the Consolidated Balance Sheets and totaled \$27 million and \$20 million at December 31, 2023 and 2022, respectively.

Other share-based awards under the SIP

Under the compensation agreement with the Board of Directors, \$150,000 of a non-employee director's annual retainer is paid in Company common stock. A director may elect to defer all or a portion of the director's common stock or cash compensation, in shares of restricted stock units. These restricted units may not be transferred until a date not less than six months and no more than ten years and six months after the director's termination of service from the Board of Directors, at which time the restricted units will be settled by delivering shares of common stock with fractional shares to be paid in cash. The compensation expense relating to this plan included in the Consolidated Statements of Income was approximately \$2 million in each of 2023, 2022 and 2021. At December 31, 2023, there were approximately 235 thousand restricted stock units outstanding under this plan at a carrying value of approximately \$15 million.

Accumulated other comprehensive loss

A summary of Accumulated other comprehensive loss for 2023, 2022 and 2021 is presented below:

	CUMULATIVE TRANSLATION ADJUSTMENT	HEDGING ACTIVITIES	PENSION AND POSTRETIREMENT ADJUSTMENT	AOCL
Balance, December 31, 2020	\$(1,114)	\$42	\$(61)	\$(1,133)
Other comprehensive (loss) income before reclassification adjustments	(100)	218	28	146
Loss (income) reclassified from accumulated other comprehensive loss	311	(209)	_	102
Tax (provision)	_	(3)	(9)	(12)
Net other comprehensive income	211	6	19	236
Balance, December 31, 2021	(903)	48	(42)	(897)
Other comprehensive (loss) income before reclassification adjustments	(105)	210	(5)	100
(Income) reclassified from accumulated other comprehensive loss	_	(268)	_	(268)
Tax benefit	_	16	1	17
Net other comprehensive (loss)	(105)	(42)	(4)	(151)
Balance, December 31, 2022	(1,008)	6	(46)	(1,048)
Other comprehensive income (loss) before reclassification adjustments	47	(151)	(2)	(106)
Loss reclassified from accumulated other comprehensive loss	_	78	1	79
Tax benefit	_	19	_	19
Net other comprehensive income (loss)	47	(54)	(1)	(8)
Balance, December 31, 2023	\$(961)	\$(48)	\$(47)	\$(1,056)

Supplemental Information

The following table provides the computation of basic and diluted earnings per common share ("EPS").

			2023			2022			2021
	NET INCOME AVAILABLE TO INGREDION	WEIGHTED AVERAGE SHARES	PER SHARE AMOUNT	NET INCOME AVAILABLE TO INGREDION	WEIGHTED AVERAGE SHARES	PER SHARE AMOUNT	NET INCOME AVAILABLE TO INGREDION	WEIGHTED AVERAGE SHARES	PER SHARE AMOUNT
Basic EPS	\$643	66.0	\$9.74	\$492	66.2	\$7.43	\$117	67.1	\$1.74
Effect of Dilutive Securities:									
Incremental shares from assumed exercise of dilutive stock options and vesting of dilutive RSUs and		10			0.0			0.7	
other awards		1.0			0.8			0.7	
Diluted EPS	\$643	67.0	\$9.60	\$492	67.0	\$7.34	\$117	67.8	\$1.73

Approximately 0.5 million, 1.4 million and 0.9 million share-based awards of common stock were excluded for 2023, 2022 and 2021, respectively, from the calculation of the weighted average number of shares outstanding for diluted EPS because their effects were anti-dilutive.

13. Segment Information

We are principally engaged in the production and sale of starches and sweeteners for a wide range of industries and we are managed geographically on a regional basis. The nature, amount, timing and uncertainty of our Net sales are managed by us primarily based on our geographic segments, which we classify and report as North America, South America, Asia-Pacific and EMEA. Our North America segment includes businesses in the U.S., Mexico and Canada. Our South America segment includes businesses and our share of earnings from investments in joint ventures in Brazil, Colombia, Peru, Ecuador and Argentina. Our Asia-Pacific segment includes businesses in Thailand, China, Japan, Australia, Indonesia, India, the Philippines, Malaysia, Singapore, New Zealand, Vietnam and previously South Korea, in which we sold our business on February 1, 2024, as more fully described in Note 2. Our EMEA segment includes businesses in Germany, Pakistan, the United Kingdom, South Africa and Poland.

In November 2023, we announced plans to reorganize our business operations, which will result in a change to our reportable business segments. Once the reorganization is complete, which we expect to occur in 2024, we anticipate that our production assets and commercial efforts will align with a global focus on Texture and Healthful Solutions, a local focus on Food and Industrial Ingredients, and other businesses. We will continue to report our results using the existing reportable segment structure until the new segments are operational and discrete financial information consistent with the new segments is being provided to our Chief Operating Decision Maker.

Net sales to unaffiliated customers by reportable segment are as follows:

	2023	2022	2021
Net sales to unaffiliated customers:			
North America	\$5,188	\$4,934	\$4,137
South America	1,062	1,124	1,057
Asia-Pacific	1,089	1,107	997
EMEA	821	781	703
Total net sales	\$8,160	\$7,946	\$6,894

No customer accounted for 10 percent or more of our net sales in 2023, 2022 or 2021.

Operating income by reportable segment is as follows:

	2023	2022	2021
Operating income:			
North America	\$718	\$565	\$487
South America	142	169	138
Asia-Pacific	126	93	87
EMEA	156	110	106
Corporate	(173)	(150)	(133)
Subtotal	969	787	685
Acquisition/integration costs	_	(1)	(3)
Restructuring/impairment charges	(11)	(4)	(47)
Impairment on disposition of assets	_	_	(340)
Other matters	(1)	(20)	15
Total operating income	\$957	\$762	\$310

Total assets by reportable segment as of December 31, 2023 and 2022 are as follows:

AS OF DECEMBER 31,	
2023	2022
\$4,485	\$4,499
980	949
1,479	1,467
698	646
\$7,642	\$7,561
	\$4,485 980 1,479 698

⁽a) For purposes of presentation, North America includes Corporate assets.

Depreciation and amortization, mechanical stores expense and capital expenditures and mechanical stores purchases by reportable segment are as follows:

	2023	2022	2021
Depreciation and amortization:			
North America ^(a)	\$146	\$145	\$146
South America	19	18	18
Asia-Pacific	39	37	40
EMEA	15	15	16
Total	\$219	\$215	\$220
Mechanical stores expense ^{(b):}			
North America ^(a)	\$47	\$43	\$43
South America	6	4	6
Asia-Pacific	5	4	3
EMEA	4	4	3
Total	\$62	\$55	\$55
Capital expenditures and mechanical stores purchases:			
North America ^(a)	\$183	\$178	\$166
South America	42	31	38
Asia-Pacific	68	72	81
EMEA	23	19	15
Total	\$316	\$300	\$300

⁽a) North America includes Corporate activities.

Net sales to unaffiliated customers by country of origin are as follows:

	2023	2022	2021
U.S.	\$3,069	\$2,978	\$2,509
Mexico	1,571	1,444	1,170
Brazil	669	720	586
Canada	548	512	459
Germany	413	342	309
Colombia	332	333	260
South Korea	325	356	323
Others	1,233	1,261	1,278
Total	\$8,160	\$7,946	\$6,894

Long-lived assets (excluding intangible assets and deferred tax assets) by country as of December 31, 2023 and 2022 are as follows:

	2023	2022
U.S.	\$1,312	\$1,289
Mexico	294	309
Canada	288	273
Brazil	235	209
China	164	144
Thailand	162	153
Germany	133	126
Others	338	435
Total	\$2,926	\$2,938

14. Commitments and Contingencies

In October 2022, the Brazilian Superior Court of Justice issued a motion of clarification that certain tax incentives provided by local governments can be excluded from taxable income. In the fourth quarter of 2022, we filed an action for a right to recover previously taxable, local government tax incentives granted during fiscal years 2018 to 2022. As our recovery is probable, we recorded a \$27 million income tax benefit, which we expect to recover by the end of 2027. As of December 31, 2023 and 2022, we had \$32 million and \$27 million, respectively, of remaining tax incentives recorded within Other assets on the Consolidated Balance Sheets.

In May 2021, the Brazilian Supreme Court ("Court") issued its ruling related to the calculation of certain indirect taxes (referred as "Brazil indirect tax matters" in these financial statements), which affirmed the Brazil Federal Court of Appeals ("Lower Court") rulings that we had received in previous years and affirmed that we are entitled to previously recorded tax credits. The Court ruling ensured that we are entitled to \$15 million of additional credits from the period of 2015 to 2018 that was previously unrecorded pending a final Court ruling. We recorded the \$15 million of additional credits in 2021 within Other operating (income) expense in the Consolidated Statements of Income. As of December 31, 2023 and 2022, we had \$5 million and \$17 million, respectively, of remaining indirect tax credits recorded in Other assets and Prepaid expenses and assets held for sale on our Consolidated Balance Sheets. We will use the income tax offsets to eliminate our Brazilian federal tax payments in 2024, including the income tax payable for the indirect taxes recovered.

We are currently subject to claims and suits arising in the ordinary course of business, including labor matters, certain environmental proceedings and other commercial claims. We also routinely receive inquiries from regulators and other government authorities relating to various aspects of our business, including with respect to compliance with laws and regulations relating to the environment, and at any given time we have matters at various stages of resolution with the applicable governmental authorities. The outcomes of these matters are not within our complete control and may not be known for prolonged periods of time. We do not believe that the results of currently known legal proceedings and inquires will be material to us. There can be no assurance, however, that such proceedings, matters, claims, suits or investigations or those arising

⁽b) Represents costs for spare parts used in the production process that are recorded in PP&E as part of machinery and equipment until they are utilized in the manufacturing process and expensed as a period cost.

in the future, whether taken individually or in the aggregate, will not have a material adverse effect on our financial condition or results of operations.

15. SUPPLEMENTARY INFORMATION

Accounts Receivable, Net

Accounts receivable, net as of December 31, 2023 and 2022 were as follows:

	2023	2022
Accounts receivable — trade	\$1,145	\$1,200
Accounts receivable — other	154	228
Allowance for credit losses	(20)	(17)
Total accounts receivable, net	\$1,279	\$1,411

Write-offs of accounts receivable were immaterial in 2023 and 2022. There were no significant contract assets associated with customers as of December 31, 2023 or 2022.

Inventories

Inventories as of December 31, 2023 and 2022 were as follows:

	2023	2022
Finished and in process	\$926	\$962
Raw materials	434	539
Manufacturing supplies	90	96
Total inventories	\$1,450	\$1,597

PP&E, net

PP&E, net as of December 31, 2023 and 2022 were as follows:

2023	2022
Land \$178	\$199
Buildings 853	854
Machinery and equipment 4,767	4,680
Property, plant and equipment, at cost 5,798	5,733
Accumulated depreciation (3,428)	(3,326)
Property, plant and equipment, net \$2,370	\$2,407

We recorded capitalized interest to PP&E of \$3 million in 2023, \$4 million in 2022, and \$4 million in 2021. We recognized depreciation expense of \$193 million in 2023, \$189 million in 2022, and \$194 million in 2021.

Supply Chain Finance Programs

Under supply chain finance programs administered by third-party banks, our suppliers have the opportunity to sell receivables due from us to participating financing institutions and receive earlier payment at a discount. Our responsibility is limited to making payment on the terms originally negotiated with our supplier, regardless of whether such supplier sells its receivable to a financial institution. The payment terms we negotiate with a supplier are

independent of whether such supplier participates in a supply chain finance program, and participation in any such program by a supplier has no effect on our income or cash flows.

As of December 31, 2023 and 2022, participating financial institutions held \$153 million and \$175 million, respectively, of our liabilities recorded in Accounts payable on our Consolidated Balance Sheets. As of December 31, 2023, supply chain finance programs existed for operations in Brazil, China, Thailand, Mexico, Colombia and Peru.

Accrued Liabilities and Liabilities Held for Sale

Accrued liabilities as of December 31, 2023 and 2022 are as follows:

	2023	2022
Compensation-related costs	\$121	\$112
Current lease liabilities	56	48
Dividends payable	51	47
Taxes payable other than income taxes	46	45
Liabilities held for sale	51	_
Other accrued liabilities	221	214
Total accrued liabilities and liabilities held for sale	\$546	\$466

There were no significant contract liabilities associated with our customers as of December 31, 2023 and 2022. Liabilities for volume discounts and incentives were also not significant as of December 31, 2023 and 2022.

Other Non-Current Liabilities

Other non-current liabilities as of December 31, 2023 and 2022 were as follows:

	2023	2022
Non-current operating lease liabilities	\$157	\$146
Pension and postretirement liabilities	117	101
Deferred tax liabilities	116	145
Other	90	85
Total other non-current liabilities	\$480	\$477

Supplemental Statements of Income Information

Research and development ("R&D") expense was approximately \$63 million, \$52 million and \$43 million in 2023, 2022 and 2021, respectively. Our R&D expense, which we record in Operating expenses in the Consolidated Statements of Income, represents investments in new product development and innovation.

Supplemental Cash Flow Information

The following represents additional cash flow information:

	2023	2022	2021
Interest paid	\$96	\$82	\$72
Income taxes paid	157	187	168

Quarterly Financial Data (Unaudited)

Earnings per share for each quarter and the year are calculated individually and may not sum to the total for the respective year. Summarized quarterly financial data was as follows:

	1st QTR	2 nd QTR	3 rd QTR	4 th QTR
2023				
Net sales	\$2,137	\$2,069	\$2,033	\$1,921
Gross profit	487	441	421	400
Net income attributable to Ingredion	191	163	158	131
Basic earnings per common share of Ingredion	2.89	2.46	2.39	2.00
Diluted earnings per common share of Ingredion	2.85	2.42	2.36	1.97
share of highedron				
Per share dividends declared	\$0.71	\$0.71	\$0.78	\$0.78
	\$0.71	\$0.71 2 nd QTR	\$0.78	\$0.78 4 th QTR
			,	
Per share dividends declared			,	
Per share dividends declared	1 st QTR	2 nd QTR	3 rd QTR	4 th QTR
Per share dividends declared 2022 Net sales	1st QTR \$1,892	2 nd QTR \$2,044	3 rd QTR \$2,023	4 th QTR \$1,987
Per share dividends declared 2022 Net sales Gross profit Net income attributable to	1st QTR \$1,892 379	2 nd QTR \$2,044 390	3 rd QTR \$2,023 374	4 th QTR \$1,987 351

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

\$0.65

\$0.65

\$0.71

\$0.71

None.

Per share dividends declared

ITEM 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and our Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2023. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that, as of December 31, 2023, our disclosure controls and procedures (a) are effective in providing reasonable assurance that all information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, has been recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (b) are designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended, is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. This system of internal control is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our Consolidated Financial Statements for external purposes in accordance with GAAP.

Internal control over financial reporting includes those policies and processes that:

- 1. Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets.
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with generally accepted accounting principles accepted in the U.S., and that our receipts and expenditures are being made only with proper authorizations of our management and directors.
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

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

Management, under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer and the oversight of the Board of Directors, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2023 based upon the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework (2013)*. The scope of the assessment included all of the subsidiaries of Ingredion. Based on the evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2023. The effectiveness of our internal control over financial reporting has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included in the Consolidated Financial Statements filed with this report.

Changes in Internal Control Over Financial Reporting

There were no changes to 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.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Ingredion Incorporated:

Opinion on Internal Control Over Financial Reporting

We have audited Ingredion Incorporated and subsidiaries' (the Company) 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 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.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, equity and redeemable 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), and our report dated February 21, 2024 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ KPMG LLP Chicago, Illinois February 21, 2024

ITEM 9B. Other Information

Trading Arrangements

During the quarter ended December 31, 2023, none of the Company's directors or officers (as defined in Rule 16a-1(f) under the Securities Exchange Act of 1934, as amended) adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities intended to satisfy the

affirmative defense conditions of Rule 10b5-1(c) under the Securities Exchange Act of 1934, as amended, or any non-Rule 10b5-1 trading arrangement.

ITEM 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance

Information required by this Item 10 is incorporated herein by reference to Ingredion's definitive proxy statement for Ingredion's 2024 Annual Meeting of Stockholders (the "Proxy Statement"), including the information in the Proxy Statement appearing under the headings "Proposal 1. Election of Directors," "The Board and Committees," and "Delinquent Section 16(a) Reports." The information regarding executive officers required by Item 401 of Regulation S-K is included in Part 1 of this report under the heading "Information about our Executive Officers."

Ingredion has adopted a code of ethics that applies to its principal executive officer, principal financial officer and controller. The code of ethics is posted on Ingredion's Internet website, which is found at www.ingredion.com. Ingredion intends to disclose on its website, within any period that may be required under SEC rules, any amendments to, or waivers under, a provision of its code of ethics that applies to Ingredion's principal executive officer, principal financial officer or controller that relates to any element of the code of ethics definition enumerated in Item 406(b) of Regulation S-K.

ITEM 11. Executive Compensation

Information required by this Item 11 is incorporated herein by reference to the Proxy Statement, including the information in the Proxy Statement appearing under the headings "Executive Compensation," "Compensation Committee Report," "Director Compensation" and "Compensation Committee Interlocks and Insider Participation."

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this Item 12 is incorporated herein by reference to the Proxy Statement, including the information in the Proxy Statement appearing under the headings "Equity Compensation Plan Information as of December 31, 2023" and "Security Ownership of Certain Beneficial Owners and Management."

ITEM 13. Certain Relationships and Related Transactions and Director Independence

Information required by this Item 13 is incorporated herein by reference to the Proxy Statement, including the information in the Proxy Statement appearing under the headings "Review and Approval of Transactions with Related Persons," "Certain Relationships and Related Transactions" and "Independence of Board Members."

ITEM 14. Principal Accountant Fees and Services

Information required by this Item 14 is incorporated herein by reference to the Proxy Statement, including the information in the Proxy Statement appearing under the heading "2023 and 2022 Audit Firm Fee Summary."

ITEM 15. EX	chibit and Financial Statement	4.4	Seventh Supplemental Indenture, dated as of September 17, 2010, between Corn Products
Item 15(a)(1) Co	onsolidated Financial Statements		International, Inc. and The Bank of New York
	ments (see the Index to the Consolidated Financial page 42 of this report).		Mellon Trust Company, N.A. (as successor trustee to The Bank of New York), as Trustee (incorporated by reference to Exhibit 4.3 to Ingredion's Current
Item 15(a)(2) Fi	nancial Statement Schedules		Report on Form 8-K dated September 14, 2010, filed
information eit	ttement schedules have been omitted because the the cher is not required or is otherwise included in the inancial Statements and notes thereto.	4.5	on September 20, 2010) (File No. 1-13397). Ninth Supplemental Indenture, dated as of September 22, 2016, between Ingredion and The
Item 15(a)(3) Ex	xhibits		Bank of New York Mellon Trust Company, N.A. (as
_	ist of exhibits includes both exhibits submitted with as filed with the SEC and those incorporated by other filings.		successor trustee to The Bank of New York), as Trustee (incorporated by reference to Exhibit 4.1 to Ingredion's Current Report on Form 8-K dated September 22, 2016, filed on September 22, 2016)
Exhibit No.	Description		(File No. 1-13397).
3.1	Amended and Restated Certificate of Incorporation of Ingredion Incorporated ("Ingredion"), as amended (incorporated by reference to Exhibit 3.1 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2019, filed on February 19, 2020) (File No. 1-13397).	4.6	Tenth Supplemental Indenture, dated as of May 13, 2020, between Ingredion and The Bank of New York Mellon Trust Company, N.A. (as successor trustee to The Bank of New York), as Trustee (incorporated by reference to Exhibit 4.1 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, filed on August 5, 2020) (File No. 1-13397).
3.2	Amended and Restated By-Laws of Ingredion. (incorporated by reference to Exhibit 3.2 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).	4.7	Eleventh Supplemental Indenture, dated as of May 13, 2020, between Ingredion and The Bank of New York Mellon Trust Company, N.A. (as successor trustee to The Bank of New York), as Trustee (incorporated by reference to Exhibit 4.2
4.1	Description of Ingredion's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.1 to Ingredion's Annual Report on Form 10-K for the		to Ingredion's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, filed on August 5, 2020) (File No. 1-13397).
	year ended December 31, 2019, filed on February 19, 2020) (File No. 1-13397).	10.1*	Stock Incentive Plan as amended and restated as of May 19, 2021 (the "Stock Incentive Plan")
4.2	Indenture dated as of August 18, 1999, between Ingredion and The Bank of New York, as Trustee		(incorporated by reference to Exhibit 10.1 to Ingredion's Current Report on Form 8-K dated May 19, 2021, filed on May 20, 2021) (File No. 1-13397).
	(incorporated by reference to Exhibit 4.1 to Ingredion's Registration Statement on Form S-3, filed on September 19, 2019) (File No. 333-233854).	10.2*	Form of Indemnification Agreement entered into by each of the members of Ingredion's Board
4.3	Fourth Supplemental Indenture dated as of April 10, 2007, between Corn Products International, Inc. and The Bank of New York Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.4 to Ingredion's Current Report on Form 8 K dated April 10,		of Directors and Ingredion's executive officers (incorporated by reference to Exhibit 10.14 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 1997, filed on March 31, 1998) (File No. 1-13397).
	2007, filed on April 10, 2007) (File No. 1-13397).	10.3*	Supplemental Executive Retirement Plan as effective July 18, 2012 (incorporated by reference to Exhibit 10.7 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, filed on November 2, 2012) (File No. 1-13397).
		10.4*	Annual Incentive Plan as effective January 1, 2022 (incorporated by reference to Exhibit 10.4 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).
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10.5*	2023 Stock Incentive Plan, as effective May 19, 2023 (the "2023 Stock Incentive Plan") (incorporated by reference to Exhibit 10.1 to Ingredion's Current Report on Form 8-K dated May 19, 2023, filed on May 23, 2023) (File No. 1-13397)	10.14*	Form of 2019 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.12 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed on May 3, 2019) (File No. 1-13397).
10.6*	Form of 2023 Performance Share Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).	10.15*	Form of 2018 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to Ingredion's Current Report on Form 8-K for the year ended December 31, 2017, filed on February 12, 2018) (File No. 1-13397).
10.7*	Form of 2022 Performance Share Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2021, filed on February 22, 2022) (File No. 1-13397).	10.16*	Form of 2017 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to Ingredion's Current Report on Form 8-K dated February 7, 2017, Filed on February 14, 2017) (File No. 1-13397).
10.8*	Form of Amendment to 2022, March 2021, and February 2021 Performance Share Award Agreements, dated as of February 15, 2023 for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.9 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on	10.17*	Form of 2016 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.13 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2015, filed on February 19, 2016) (File No. 1-13397).
10.9*	February 21, 2023) (File No. 1-13397). Form of 2024 Stock Option Award Agreement for use in connection with awards under the 2023 Stock Incentive Plan.	10.18 [*]	Form of 2015 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to Ingredion's Current Report on Form
10.10*	Form of 2023 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.10 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).	10.19*	8-K dated February 3, 2015, filed on February 9, 2015) (File No. 1-13397). Form of 2024 Restricted Stock Units Award Agreement for use in connection with awards under the 2023 Stock Incentive Plan.
10.11*	Form of 2022 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2021, filed on	10.20 [*]	Form of 2023 Restricted Stock Units Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.20 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).
10.12 [*]	February 22, 2022) (File No. 1-13397). Form of 2021 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2020, filed on	10.21*	Form of 2022 Restricted Stock Units Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.8 to Ingredion's Annual Report on Form 10-K for the year ended December 31, 2021, filed on February 22, 2022) (File No. 1-13397).
10.13*	February 24, 2021) (File No. 1-13397). Form of 2020 Stock Option Award Agreement for use in connection with awards under the Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 6, 2020) (File No. 1-13397).	10.22*	Form of Executive Severance Agreement entered into by certain executive officers of Ingredion (incorporated by reference to Exhibit 10.17 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed on August 3, 2018) (File No. 1-13397).

10.23 [*]	Form of Executive Severance Agreement entered into by certain executive officers of Ingredion (incorporated by reference to Exhibit 10.18 to Ingredion's Quarterly Report on Form 10-Q for the	31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
40.24*	quarter ended June 30, 2018, filed on August 3, 2018) (File No. 1-13397).	31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) under the Securities
10.24*	Letter of Agreement, dated as of April 15, 2020, between Ingredion and Jeremy Xu (incorporated by reference to Exhibit 10.28 to Ingredion's Annual		Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
	Report on Form 10-K for the year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).	32.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code, as
10.25*	Letter of Agreement, dated as of November 1, 2021, between Ingredion and Nancy Wolfe (incorporated		adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
	by reference to Exhibit 10.1 to Ingredion's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, filed on May 8, 2023) (File No. 1-13397).	32.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934 and Section 1350 of
10.26*	Form of 2024 Performance Share Award Agreement for use in connection with awards under the 2023 Stock Incentive Plan.		Chapter 63 of Title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002.
10.27	Revolving Credit Agreement, dated as of June 30, 2021, by and among Ingredion Incorporated, as	97.1*	Policy on Recoupment of Incentive Compensation as restated as of October 27, 2023.
	Borrower, the Subsidiary Borrowers from time-to- time party thereto, the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent (incorporated by reference	101.INS	XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document).
	to Exhibit 10.1 to the Company's Current Report on Form 8-K dated July 1, 2021, filed on July 1, 2021) (File No. 1-13397).	101.SCH	Inline XBRL Taxonomy Extension Schema Document.
10.28	Amendment No. 1 to Revolving Credit Agreement, dated as of November 30, 2022, by and among	101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
	Ingredion Incorporated, as Borrower, the Subsidiary Borrowers from time-to-time party thereto, the	101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
	Lenders from time-to-time party thereto and JP Morgan Chase Bank, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2 to	101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
	Ingredion's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, filed on May 8, 2023)	101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
	(File No. 1-13397).	104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL
10.29*	Summary of Non-Employee Director Compensation.		document, which is contained in Exhibit 101).
10.30*	Letter of Agreement, dated as of November 23, 2020, between Ingredion and Eric Seip (incorporated by reference to Exhibit 10.27 to Ingredion's Annual Report on Form 10-K for the		contract or compensatory plan or arrangement required to exhibit to this form pursuant to Item 15(b) of this report.
	year ended December 31, 2022, filed on February 21, 2023) (File No. 1-13397).	ITEM 16. F	orm 10-K Summary
10.31*	Letter of Agreement, dated April 16, 2023, between Ingredion and Jeremy Xu	None.	

21.1

23.1

24.1

Subsidiaries of the Registrant.

Accounting Firm.

Power of Attorney.

Consent of Independent Registered Public

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.

INGREDION INCORPORATED

Date: February 21, 2024

By: /s/ James P. Zallie

James P. Zallie

President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant, in the capacities indicated and on the dates indicated.

Signature	Title	Date
/s/ James P. Zallie	President, Chief Executive Officer and Director	February 21, 2024
James P. Zallie	(Principal executive officer)	
/s/ James D. Gray	Chief Financial Officer	February 21, 2024
James D. Gray	(Principal financial officer)	
/s/ Davida M. Gable	Controller	February 21, 2024
Davida M. Gable	(Principal accounting officer)	
*David B. Fischer	Director	February 21, 2024
David B. Fischer		
*Rhonda L. Jordan	Director	February 21, 2024
Rhonda L. Jordan		
*Gregory B. Kenny	Director	February 21, 2024
Gregory B. Kenny		
*Charles Magro	Director	February 21, 2024
Charles Magro		
*Victoria J. Reich	Director	February 21, 2024
Victoria J. Reich		
*Catherine A. Suever	Director	February 21, 2024
Catherine A. Suever		
*Stephan B. Tanda	Director	February 21, 2024
Stephan B. Tanda		
*Jorge A. Uribe	Director	February 21, 2024
Jorge A. Uribe		
*Patricia Verduin	Director	February 21, 2024
Patricia Verduin		
*Dwayne A. Wilson	Director	February 21, 2024
Dwayne A. Wilson		

*By: /s/ Tanya Jaeger de Foras

Tanya Jaeger de Foras Attorney-in-fact Date: February 21, 2024 The performance graph below shows the cumulative total return to shareholders (stock price appreciation or depreciation plus reinvested dividends) during the 5-year period from December 31, 2018 to December 31, 2023, for our common stock compared to the cumulative total return during the same period for the S&P Composite 1500 Food Beverage & Tobacco Index, and our peer group. The S&P Composite 1500 Food Beverage & Tobacco Index is a comprehensive stock market index representing equity investments in selected food, beverage, and tobacco companies within the Composite 1500 Consumer Staples sector. The index is float-adjusted market cap weighted and only includes publicly-traded common stocks belonging to U.S. companies, as determined in accordance with the selection criteria of S&P Global, the creator of the index.

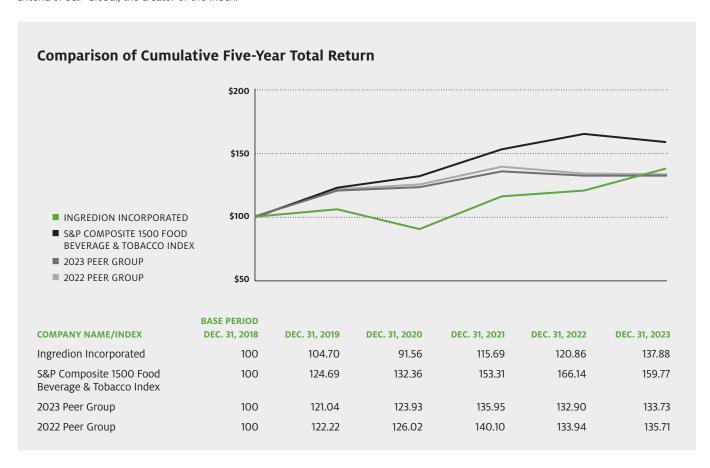
As of December 31, 2023, our total shareholder return peer group consisted of the following 19 companies:

AAK AB

Archer-Daniels-Midland Company
Associated British Foods plc
Celanese Corporation
Danone S.A.
Ecolab Inc.
General Mills, Inc.
Huntsman Corporation
Kellanova (f/k/a Kellogg Company)
Kerry Group plc

The Kraft Heinz Company
McCormick & Company, Incorporated
Mondelez International, Inc.
Novozymes A/S
Sealed Air Corporation
Sensient Technologies Corporation
Tate & Lyle plc
Tyson Foods, Inc.
Unilever PLC

*Koninklijke DSM N.V. was removed as a result of its merger with Firmenich International SA in May 2023.



Comparison of Cumulative Total Return among our Company, the S&P Composite 1500 Food Beverage & Tobacco Index, and our Peer Group (for the period from December 31, 2018 to December 31, 2023. Source: Standard & Poor's)

The graph assumes that:

- as of the market close on December 31, 2018, you made one-time \$100 investments in our common stock and in market capital base-weighted amounts which were apportioned among all the companies whose equity securities constitute each of the other three named indices, and
- all dividends were automatically reinvested in additional shares of the same class of equity securities constituting such investments at the frequency with which dividends were paid on such securities during the applicable time frame.

Financial Performance Metrics

Net Debt to Adjusted EBITDA ratio

(DOLLARS IN MILLIONS)	2023	2022
Short-term debt	\$448	\$543
Long-term debt	1,740	1,940
Less: Cash and cash equivalents	(401)	(236)
Short-term investments	(8)	(3)
Total net debt (a)	\$1,779	\$2,244
Income before income taxes (b)	839	668
Adjusted for:		
Depreciation and amortization	219	215
Financing costs	114	99
Other non-operating (income)	4	(5)
Restructuring/impairment ⁽ⁱ⁾	12	4
Acquisition/integration costs ⁽ⁱⁱ⁾	_	1
Other matters ⁽ⁱⁱⁱ⁾	1	20
Adjusted EBITDA (c)	\$1,189	\$1,002
Net debt to Income before income tax ratio (a/b)	2.1	3.4
Net debt to adjusted EBITDA ratio (a/c)	1.5	2.2

O During 2023, we recorded \$11 million of pre-tax net restructuring/impairment charges primarily related to an other-than-temporary impairment on our equity method investments. This was increased by \$1 million as it included a depreciation benefit that was already included in depreciation and amortization line. In 2022, we recorded \$4 million of pre-tax restructuring charges primarily related to the Cost Smart programs.

Reconciliation of GAAP Operating Income to Non-GAAP Adjusted Operating Income (Unaudited)

	THREE MONTHS	S ENDED DECEMBER 31,	TWELVE MONTHS ENDED DECEMBER 31,		
(in millions, pre-tax)	2023	2022	2023	2022	
Operating income	\$202	\$157	\$ 957	\$762	
Add back:					
Acquisition/integration costs ⁽ⁱ⁾	_	_	_	1	
Restructuring/impairment charges ⁽ⁱⁱ⁾	1	_	11	4	
Other matters(iii)	_	11	1	20	
Non-GAAP adjusted operating income	\$203	\$168	\$969	\$787	

⁽ⁱ⁾ During the twelve months ended December 31, 2022, we recorded \$1 million of pre-tax acquisition and integration charges within operating income primarily related to our investment in the Argentina joint venture.

⁽ii) In 2022, acquisition/integration costs were reduced by \$4 million as they were included in financing costs.

⁽ii) In 2023, we recorded pre-tax charges of \$5 million primarily related to the impacts of a U.S.-based work stoppage. This was partially offset by \$4 million of insurance recoveries. In 2022, we recorded pre-tax charges of \$20 million primarily related to the impacts of a U.S.-based work stoppage.

⁽ii) During the three and twelve months ended December 31, 2023, we recorded \$1 million and \$10 million, respectively, of pre-tax charges primarily related to an other-than-temporary impairment on our equity method investments. During the twelve months ended December 31, 2022, we recorded \$4 million of remaining pre-tax restructuring-related charges for our Cost Smart programs.

⁽iii) During the twelve months ended December 31, 2023, we recorded pre-tax charges of \$5 million primarily related to the impacts of a U.S.-based work stoppage. This was partially offset by \$4 million of insurance recoveries. During the three and twelve months ended December 31, 2022, we recorded pre-tax charges of \$11 million and \$20 million, respectively, primarily related to the impacts of a U.S.-based work stoppage.

Reconciliation of GAAP Net Income attributable to Ingredion and Diluted Earnings Per Share ("EPS") to Non-GAAP Adjusted Net Income attributable to Ingredion and Adjusted Diluted EPS (unaudited)

		THREE MONTHS ENDED DECEMBER 31, 2023		THREE MONTHS ENDED DECEMBER 31, 2022		TWELVE MONTHS ENDED DECEMBER 31, 2023		TWELVE MONTHS ENDED DECEMBER 31, 2022	
(in millions, pre-tax)	(IN MILLIONS)	DILUTED EPS	(IN MILLIONS)	DILUTED EPS	(IN MILLIONS)	DILUTED EPS	(IN MILLIONS)	DILUTED EPS	
Net Income attributable to Ingredion	\$131	\$1.97	\$114	\$1.71	\$643	\$9.60	\$492	\$7.34	
Add back:									
Acquisition/integration costs ⁽ⁱ⁾	_	_	4	0.06	_	_	5	0.08	
Restructuring/impairment charges(ii)	1	0.02	_	_	8	0.12	3	0.05	
Other matters(iii)	_	_	8	0.12	1	0.01	15	0.22	
Tax item - Mexico ^(iv)	_	_	(2)	(0.03)	(15)	(0.22)	(4)	(0.06)	
Other tax matters ^(v)	(1)	(0.02)	(14)	(0.21)	(6)	(0.09)	(12)	(0.18)	
Non-GAAP adjusted net income attributable to Ingredion	\$131	\$1.97	\$110	\$1.65	\$631	\$9.42	\$499	\$7.45	

Net income, EPS and tax rates may not foot or recalculate due to rounding

O During the three and twelve months ended December 31, 2022, we recorded \$4 million and \$5 million, respectively, of pre-tax acquisition and integration charges primarily related to our investment in the Argentina joint venture.

During the three and twelve months ended December 31, 2023, we recorded \$1 million and \$10 million, respectively, of pre-tax charges primarily related to an other-than-temporary impairment on our equity method investments. During the twelve months ended December 31, 2022, we recorded \$4 million of remaining pre-tax restructuring-related charges for our Cost Smart programs.

⁽III) During the twelve months ended December 31, 2023, we recorded pre-tax charges of \$5 million primarily related to the impacts of a U.S.-based work stoppage. This was partially offset by \$4 million of insurance recoveries. During the three and twelve months ended December 31, 2022, we recorded pre-tax charges of \$11 million and \$20 million, respectively, primarily related to the impacts of a U.S.-based work stoppage.

During the twelve months ended December 31, 2023, we recorded a tax benefit of \$15 million. We also recorded tax benefits of \$2 million and \$4 million for the three and twelve months ended December 31, 2022, respectively. These benefits were a result of the movement of the Mexican peso against the U.S. dollar and its impact on the remeasurement of our Mexico financial statements during the periods.

⁽v) This item relates to net prior year tax liabilities and contingencies, impacts from the Pakistan Super Tax, IRS Notice 2023-55, and tax results of the above non-GAAP addbacks. These were offset by interest on previously recognized tax benefits for certain Brazilian local incentives which were previously taxable.

Board of Directors

as of April 3, 2024

David B. Fischer²

Former President and Chief Executive Officer Greif. Inc.

Age 61; Director since 2013

Rhonda L. Jordan²

Former President, Global Health & Wellness, and Sustainability Kraft Foods Inc.

Age 66; Director since 2013

Gregory B. Kenny*3

Former President and Chief Executive Officer General Cable Corporation Age 71; Director since 2005

Charles V. Magro²

Chief Executive Officer of Corteva Agriscience Age 54; Director since 2022

Victoria J. Reich1

Former Senior Vice President and Chief Financial Officer Essendant Inc.

Age 66; Director since 2013

Catherine Suever¹

Former Executive Vice President Finance and Administration and Chief Financial Officer Parker-Hannifin Corporation Age 65; Director since 2021

Stephan B. Tanda³

President and Chief Executive Officer AptarGroup, Inc. Age 58; Director since 2019

Jorge A. Uribe³

Former Global Productivity and Organization Transformation Officer The Procter & Gamble Company Age 67; Director since 2015

Patricia Verduin³

Former Chief Technology Officer, Global Technology Colgate-Palmolive Company Age 64; Director since 2023

Dwayne A. Wilson¹

Former Senior Vice President Fluor Corporation Age 65; Director since 2010

James P. Zallie

President and Chief Executive Officer Ingredion Incorporated Age 62; Director since 2017

*Chairman of the Board

Committees of the Board

- ¹ Audit Committee, Ms. Reich is Chairman.
- ² People, Culture and Compensation Committee, Ms. Jordan is Chairman.
- $^{\scriptscriptstyle 3}$ Corporate Governance and Nominating Committee, Mr. Kenny is Chairman.

Corporate Officers

as of April 3, 2024

James P. Zallie

President and Chief Executive Officer Age 62; joined Company in 2010

Lori Arnold

Vice President, Tax Age 58; joined Company in 2011

Valdirene Evans

Senior Vice President and President, Global Texture Solutions Age 56; joined Company in 2018

Larry Fernandes

Senior Vice President and Chief Commercial and Sustainability Officer Age 59; joined Company in 1990

James D. Gray

Executive Vice President and Chief Financial Officer Age 57; joined Company in 2014

Tanya Jaeger de Foras

Senior Vice President, Chief Legal Officer, Corporate Secretary and Chief Compliance Officer Age 53; joined Company in 2021

Michael O'Riordan

Senior Vice President, Texture and Healthful Solutions, EMEA and Asia-Pacific Age 54; joined Company in 2010

Rob Ritchie

Senior Vice President, Food & Industrial Ingredients, LATAM and US/Canada Age 54; joined Company in 1996

Eric Seip

Senior Vice President, Global Operations and Chief Supply Chain Officer Age 56; joined Company in 2021

C. Kevin Wilson

Vice President and Corporate Treasurer Age 62; joined Company in 2014

Nancy Wolfe

Senior Vice President and Chief Human Resources Officer Age 55; joined Company in 2022

Jeremy Xu

Senior Vice President, Chief Innovation Officer and President, Global Healthful Solutions Age 56; joined Company in 2020 THIS PAGE INTENTIONALLY LEFT BLANK

Corporate Headquarters

5 Westbrook Corporate Center Westchester, IL 60154 708.551.2600 708.551.2700 fax www.ingredion.com

Stock Exchange

The common shares of Ingredion Incorporated trade on the New York Stock Exchange under the ticker symbol INGR. Our Company is a member of the Russell 1000 Index and the S&P MidCap 400 Index.

Transfer Agent, Dividend Disbursing Agent and Registrar

Computershare 866.517.4574 or 201.680.6685 (outside the U.S. and Canada) or 888.269.5221 (hearing impaired – TTY phone)

Shareholder Assistance

Ingredion Incorporated c/o Computershare P.O. Box 30170 College Station, TX 77842-3170

Send overnight correspondence to: Ingredion Incorporated c/o Computershare 211 Quality Circle, Suite 210 College Station, TX 77845

Shareholder website: www.computershare.com/investor

Shareholder online inquiries: https://www-us.computershare.com/investor/contact

Investor and Shareholder Contact

Investor Relations Department 708.551.2592 investor.relations@ingredion.com

Company Information

Copies of the Annual Report, the Annual Report on Form 10-K and quarterly reports on Form 10-Q may be obtained, without charge, by writing to Investor Relations at the corporate headquarters address, by calling 708.551.2603, by emailing investor.relations@ingredion.com or by visiting our website at ir.ingredionincorporated.com.

Annual Meeting of Shareholders

The 2024 Annual Meeting of Shareholders will be held on Wednesday, May 15, 2024, at 9:00 a.m. Central Daylight Time. The Annual Meeting will be a completely virtual meeting of shareholders, which may be attended via the internet by visiting https://www.virtualshareholdermeeting.com/INGR2024. A formal notice of that meeting, proxy statement and proxy voting card are being made available to stockholders in accordance with U.S. Securities and Exchange Commission regulations.

Independent Auditors

KPMG LLP 200 East Randolph Street Chicago, IL 60601 312.665.1000

Board Communication

Interested parties may communicate directly with any member of our board of directors, including the Chairman of the Board, or the independent directors, as a group, by writing in care of Corporate Secretary, Ingredion Incorporated, 5 Westbrook Corporate Center, Westchester, IL 60154.

Safe Harbor

Certain statements in this Annual Report that are neither reported financial results nor other historical information are forward-looking statements. Such forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results and Company plans and objectives to differ materially from those expressed in the forward-looking statements. A description of some of these risks and uncertainties is contained in our reports on Forms 10-K, 10-Q and 8-K filed with the SEC.



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Making Healthy Taste Better





Ingredion Incorporated

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