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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2022

OR

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

For the transition period from ________ to

Commission file number 333-211719

ASHLAND GLOBAL HOLDINGS INC.

(a Delaware corporation)
I.R.S. No. 81-2587835

8145 Blazer Drive
Wilmington, Delaware 19808
Telephone Number (302) 995-3000
Securities Registered Pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $.01 per share	ASH	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

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

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

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

Large Accelerated Filer	☑	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
		Emerging Growth Company	☐

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

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

At June 30, 2022, there were 54,139,396 shares of Registrant's Common Stock outstanding.

PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONSOLIDATED COMPREHENSIVE INCOME (LOSS)

	Three months ended June 30		Nine months ended June 30	
(In millions except per share data - unaudited)	2022	2021	2022	2021
Sales	$ 644	$ 543	$ 1,759	$ 1,520
Cost of sales	404	370	1,139	1,040
Gross profit	240	173	620	480
Selling, general and administrative expense	127	93	299	274
Research and development expense	14	13	40	37
Intangibles amortization expense	23	23	71	65
Equity and other income	1	1	2	7
Operating income	77	45	212	111
Net interest and other expense	59	1	108	18
Other net periodic benefit loss - Note K	(1)	—	—	—
Income on acquisitions and divestitures, net - Note B	35	2	42	11
Income from continuing operations before income taxes	52	46	146	104
Income tax expense (benefit)	1	(26)	25	(35)
Income from continuing operations	51	72	121	139
Income (loss) from discontinued operations (net of income taxes) - Note C	(15)	8	749	37
Net income	$ 36	$ 80	$ 870	$ 176
PER SHARE DATA				
Basic earnings per share - Note M				
Income from continuing operations	$ 0.94	$ 1.18	$ 2.16	$ 2.29
Income (loss) from discontinued operations	(0.28)	0.12	13.40	0.61
Net income	$ 0.66	$ 1.30	$ 15.56	$ 2.90
Diluted earnings per share - Note M				
Income from continuing operations	$ 0.93	$ 1.17	$ 2.12	$ 2.27
Income (loss) from discontinued operations	(0.28)	0.12	13.16	0.60
Net income	$ 0.65	$ 1.29	$ 15.28	$ 2.87
COMPREHENSIVE INCOME (LOSS)				
Net income	$ 36	$ 80	$ 870	$ 176
Other comprehensive income (loss), net of tax				
Unrealized translation gain (loss)	(86)	23	(107)	37
Unrealized gain (loss) on commodity hedges	(3)	—	(2)	—
Other comprehensive income (loss) - Note N	(89)	23	(109)	37
Comprehensive income (loss)	$ (53)	$ 103	$ 761	$ 213

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions - unaudited)	June 30 2022	September 30 2021
ASSETS		
Current assets		
Cash and cash equivalents	$ 629	$ 210
Accounts receivable (a) - Note H	488	369
Inventories - Note F	609	473
Other assets	91	68
Current assets held for sale - Note B	—	597
Total current assets	1,817	1,717
Noncurrent assets		
Property, plant and equipment		
Cost	3,065	3,066
Accumulated depreciation	1,713	1,639
Net property, plant and equipment	1,352	1,427
Goodwill - Note G	1,356	1,430
Intangibles - Note G	1,001	1,099
Operating lease assets, net - Note I	112	124
Restricted investments - Note E	346	384
Asbestos insurance receivable (b) - Note L	140	134
Deferred income taxes	30	30
Other assets	258	267
Total noncurrent assets	4,595	4,895
Total assets	$ 6,412	$ 6,612
LIABILITIES AND EQUITY		
Current liabilities		
Short-term debt - Note H	$ —	$ 365
Current portion of long-term debt - Note H	—	9
Trade and other payables	241	236
Accrued expenses and other liabilities	291	251
Current operating lease obligations - Note I	18	23
Current liabilities held for sale - Note B	—	50
Total current liabilities	550	934
Noncurrent liabilities		
Long-term debt - Note H	1,302	1,596
Asbestos litigation reserve - Note L	483	490
Deferred income taxes	218	237
Employee benefit obligations - Note K	137	144
Operating lease obligations - Note I	100	110
Other liabilities	356	349
Total noncurrent liabilities	2,596	2,926
Commitments and contingencies - Note L		
Stockholders' equity - Note N	3,266	2,752
Total liabilities and stockholders' equity	$ 6,412	$ 6,612

(a) Accounts receivable includes an allowance for credit losses of $2 million at both June 30, 2022 and September 30, 2021.
(b) Asbestos insurance receivable includes an allowance for credit losses of $3 million at both June 30, 2022 and September 30, 2021.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
STATEMENTS OF CONDENSED CONSOLIDATED CASH FLOWS

(In millions - unaudited)	Nine months ended June 30 2022	Nine months ended June 30 2021
CASH FLOWS PROVIDED (USED) BY OPERATING ACTIVITIES FROM CONTINUING OPERATIONS		
Net income	$ 870	$ 176
Income from discontinued operations (net of income taxes)	(749)	(37)
Adjustments to reconcile income from continuing operations to cash flows from operating activities:		
Depreciation and amortization	182	180
Original issue discount and debt issuance costs amortization	4	4
Deferred income taxes	(5)	(3)
Gain from sales of property and equipment	—	(3)
Distributions from equity affiliates	—	1
Stock based compensation expense	14	12
Excess tax benefit on stock based compensation	1	1
Loss (income) from restricted investments	59	(36)
Income on acquisitions and divestitures	(42)	(15)
Impairments	—	9
Pension contributions	(4)	(6)
Gain on pension and other postretirement plan remeasurements	(1)	—
Change in operating assets and liabilities (a)	(315)	31
Total cash flows provided by operating activities from continuing operations	14	314
CASH FLOWS PROVIDED (USED) BY INVESTING ACTIVITIES FROM CONTINUING OPERATIONS		
Additions to property, plant and equipment	(67)	(74)
Proceeds from disposal of property, plant and equipment	51	4
Purchase of operations - net of cash acquired	—	(308)
Proceeds from sale or restructuring of operations	—	14
Proceeds from settlement of Company-owned life insurance contracts	2	1
Company-owned life insurance payments	—	(1)
Net purchase of funds restricted for specific transactions	(74)	(1)
Reimbursements from restricted investments	28	25
Proceeds from sale of securities	75	56
Purchases of securities	(75)	(56)
Total cash flows used by investing activities from continuing operations	(60)	(340)
CASH FLOWS PROVIDED (USED) BY FINANCING ACTIVITIES FROM CONTINUING OPERATIONS		
Repurchase of common stock	(200)	—
Repayment of long-term debt	(250)	—
Proceeds from (repayment of) short-term debt	(365)	(185)
Cash dividends paid	(52)	(52)
Stock based compensation employee withholding taxes paid in cash	(9)	(6)
Total cash flows used by financing activities from continuing operations	(876)	(243)
CASH USED BY CONTINUING OPERATIONS	(922)	(269)
Cash provided (used) by discontinued operations		
Operating cash flows	(302)	84
Investing cash flows	1,650	(11)
Total cash provided by discontinued operations	1,348	73
Effect of currency exchange rate changes on cash and cash equivalents	(7)	4
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	419	(192)
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	210	454
CASH AND CASH EQUIVALENTS - END OF PERIOD	$ 629	$ 262

(a) Excludes changes resulting from operations acquired, sold or held for sale.

SEE NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

NOTE A – SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial reporting and Securities and Exchange Commission (SEC) regulations. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. These statements omit certain information and footnote disclosures required for complete annual financial statements and, therefore, should be read in conjunction with Ashland Global Holdings Inc. and consolidated subsidiaries (Ashland) Annual Report on Form 10-K for the fiscal year ended September 30, 2021. Results of operations for the periods ended June 30, 2022 are not necessarily indicative of the expected results for the remaining quarter in the fiscal year.

On February 28, 2022, Ashland completed the sale of its Performance Adhesives segment to Arkema, a French société anonyme. This divestiture represented a strategic shift in Ashland's business and qualified as a discontinued operation. As a result, the assets, liabilities, operating results and cash flows related to Performance Adhesives have been classified as discontinued operations for all periods presented within the Consolidated Financial Statements. See Notes B and C for additional information on this divestiture.

Ashland is comprised of four reportable segments: Life Sciences, Personal Care (formerly Personal Care and Household), Specialty Additives, and Intermediates (formerly Intermediates and Solvents). Unallocated and Other includes corporate governance activities and certain legacy matters. For additional information, see Note Q.

Use of estimates, risks and uncertainties

The preparation of Ashland’s Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosures of contingent assets and liabilities. Significant items that are subject to such estimates and assumptions include, but are not limited to, long-lived assets (including goodwill and other intangible assets), income taxes and liabilities and receivables associated with asbestos litigation and environmental remediation. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions.

Ashland’s results are affected by domestic and international economic, political, legislative, regulatory and legal actions. Economic conditions, such as recessionary trends, inflation, interest and monetary exchange rates, government fiscal policies and changes in the prices of certain key raw materials, can have a significant effect on operations. While Ashland maintains reserves for anticipated liabilities and carries various levels of insurance, Ashland could be affected by civil, criminal, regulatory or administrative actions, claims or proceedings relating to asbestos, environmental remediation or other matters.

New accounting pronouncements

A description of new U.S. GAAP accounting standards issued or adopted during the current year is required in interim financial reporting. A detailed listing of new accounting standards relevant to Ashland is included in the Annual Report on Form 10-K for the fiscal year ended September 30, 2021. There were no new standards that were either issued or adopted in the current fiscal year that will have a material impact on Ashland's consolidated financial statements.

NOTE B – ACQUISITIONS AND DIVESTITURES

Acquisitions

Personal Care acquisition

On April 30, 2021, Ashland completed its acquisition of the personal care business of Schülke & Mayr GmbH (Schülke), a portfolio company of the global investment organization EQT. Ashland included the purchase of this business within the Personal Care reporting segment.

The all-cash purchase price of Schülke was $312 million. Ashland incurred acquisition related transaction costs of $2 million and $4 million during the three and nine months ended June 30, 2021, respectively, which are recorded within the income on acquisitions and divestitures, net caption within the Statement of Consolidated Comprehensive Income (Loss). Within this same caption, Ashland recognized income of $4 million and $1 million during the three and nine months ended June 30, 2021, respectively, associated with foreign currency derivatives gains on foreign exchange contracts entered into to mitigate the exposure of the Euro dominated purchase price.

Divestitures

Performance Adhesives

On February 28, 2022, Ashland completed the sale of its Performance Adhesives business. Proceeds from the sale were approximately $1.7 billion, net of transaction costs. Ashland recognized a $732 million gain on sale within the Income (loss) from Discontinued Operations caption of the Statements of Consolidated Comprehensive Income (Loss) during the second quarter of fiscal 2022.

The transaction represented a strategic shift in Ashland's business and had a major effect on Ashland's operations and financial results. Accordingly, the operating results and cash flows related to Performance Adhesives have been reflected as discontinued operations in the Statements of Consolidated Comprehensive Income (Loss) and Statements of Condensed Consolidated Cash Flows, while the assets and liabilities that were sold have been classified within the Condensed Consolidated Balance Sheets as held for sale in periods preceding the sale. See Note C for the results of operations for Performance Adhesives for all periods presented.

Certain indirect corporate costs included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) that were previously allocated to the Performance Adhesives segment do not qualify for classification within discontinued operations and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis and within the Unallocated and other segment. These costs were $1 million and $4 million for the three months ended June 30, 2022 and 2021, respectively, and $8 million and $12 million for the nine months ended June 30, 2022 and 2021, respectively.

Following the completion of the sale, Ashland is providing certain transition services to Arkema for a fee. While the transition services are expected to vary in duration depending upon the type of service provided, Ashland does not expect these transition services, or related fees, will be significant. Ashland recognized transaction service fee income of less than $1 million for the three and nine months ended June 30, 2022.

Other manufacturing facility sales

During the nine months ended June 30, 2021, Ashland completed the sale of a Specialty Additives facility. Net proceeds received from the sale were approximately $14 million in the December 31, 2020 quarter ($20 million in total including a deposit received in fiscal year 2020). Ashland recognized a pre-tax gain of $14 million recorded within the Income on acquisitions and divestitures, net caption in the Statements of Consolidated Comprehensive Income (Loss) for the nine months ended June 30, 2021.

Other corporate assets

During the three and nine months ended June 30, 2022, Ashland completed the sale of two excess land properties. The net book value of the land was $8 million as of September 30, 2021. Ashland received net proceeds of approximately $50 million and recorded pre-tax gains of $35 million and $42 million within the Income (loss) on acquisitions and divestitures, net caption of the Statements of Consolidated Comprehensive Income (Loss) for the three and nine months ended June 30, 2022, respectively.

Held for sale classification

The assets and liabilities of the Performance Adhesives segment, along with other properties, had been reflected as assets and liabilities held for sale as described above for the period ended September 20, 2021. As a result, in accordance with U.S. GAAP standards, depreciation and amortization were not being recorded within the Statements of Consolidated Comprehensive Income (Loss) and the Condensed Consolidated Balance Sheets. These assets and liabilities are comprised of the following components:

(In millions)	September 30 2021
Accounts receivable, net	$ 26
Inventories	27
Net property, plant and equipment	80
Goodwill	453
Operating lease assets, net	10
Other assets	1
Current assets held for sale	$ 597
Trade and other payables	$ 33
Accrued expenses and other liabilities	7
Current operating lease obligations	1
Operating lease obligations	9
Current liabilities held for sale	$ 50

NOTE C– DISCONTINUED OPERATIONS

Ashland has divested certain businesses that have qualified as discontinued operations. The operating results from these divested businesses and subsequent adjustments related to ongoing assessments of certain retained liabilities and tax items have been recorded within the discontinued operations caption in the Statements of Consolidated Comprehensive Income (Loss) for all periods presented.

Components of amounts reflected in the Statements of Consolidated Comprehensive Income (Loss) related to discontinued operations are presented in the following table for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Income (loss) from discontinued operations (net of tax)				
Performance Adhesives	$ 4	$ 15	$ 38	$ 51
Composites/Marl facility	—	2	—	1
Valvoline	—	2	—	2
Asbestos	(13)	(8)	(13)	(8)
Water Technologies	(1)	(1)	(1)	(1)
Distribution	(5)	(2)	(7)	(4)
Gain (loss) on disposal of discontinued operations (net of tax)				
Performance Adhesives	—	—	732	—
Composites/Marl facility	—	—	—	(4)
	$ (15)	$ 8	$ 749	$ 37

The following table presents a reconciliation of the captions within Ashland's Statements of Consolidated Comprehensive Income (Loss) for the income (loss) from discontinued operations attributable to Performance Adhesives for the three and nine months ended June 30, 2022 and 2021. The sale of the Performance Adhesives business was completed on February 28, 2022.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Income (loss) from discontinued operations attributable to Performance Adhesives				
Sales	$ —	$ 94	$ 171	$ 266
Cost of sales	—	(69)	(122)	(180)
Selling, general and administrative expense	(1)	(6)	(12)	(16)
Research and development expense	—	(2)	(3)	(6)
Intangibles amortization expense	—	—	—	(1)
Pretax income of discontinued operations	(1)	17	34	63
Income tax (expense) benefit	5	(2)	4	(12)
Income from discontinued operations	$ 4	$ 15	$ 38	$ 51

NOTE D – RESTRUCTURING ACTIVITIES

Company-wide restructuring activities

Ashland periodically implements company-wide restructuring programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure.

Fiscal 2020 and 2021 restructuring program

Ashland recorded severance expense of zero and income of $6 million during the three months ended June 30, 2022 and 2021, respectively, and income of $1 million and expense of $2 million during the nine months ended June 30, 2022 and 2021, respectively, attributable to executive management changes and business management changes within the organization. As of June 30, 2022, the severance reserve associated with this transition was $2 million.

The following table details at June 30, 2022 and 2021, the amount of restructuring severance reserves related to this program. The severance reserves were primarily recorded within accrued expenses and other liabilities in the Condensed Consolidated Balance Sheet as of June 30, 2022 and 2021.

(In millions)	Severance costs
Balance at of September 30, 2021	$ 6
Restructuring reserve	(1)
Utilization (cash paid)	(3)
Balance at June 30, 2022	$ 2

(In millions)	Severance costs
Balance at of September 30, 2020	$ 39
Restructuring reserve	2
Utilization (cash paid)	(27)
Balance at June 30, 2021	$ 14

NOTE E – FAIR VALUE MEASUREMENTS

Ashland uses applicable guidance for defining fair value, the initial recording and periodic remeasurement of certain assets and liabilities measured at fair value and related disclosures for instruments measured at fair value. Fair value accounting guidance establishes a fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). An instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the instrument's fair value measurement. The three levels within the fair value hierarchy are described as follows.

Level 1 – Observable inputs such as unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3 – Unobservable inputs for the asset or liability for which there is little, if any, market activity at the measurement date. Unobservable inputs reflect Ashland's own assumptions about what market participants would use to price the asset or liability. The inputs are developed based on the best information available in the circumstances, which might include Ashland's own financial data such as internally developed pricing models, discounted cash flow methodologies, as well as instruments for which the fair value determination requires significant management judgment.

For assets that are measured using quoted prices in active markets (Level 1), the total fair value is the published market price per unit multiplied by the number of units held without consideration of transaction costs. Assets and liabilities that are measured using significant other observable inputs (Level 2) are primarily valued by reference to quoted prices of similar assets or liabilities in active markets, adjusted for any terms specific to that asset or liability. For all other assets and liabilities for which unobservable inputs are used (Level 3), fair value is derived using fair value models, such as a discounted cash flow model or other standard pricing models that Ashland deems reasonable.

The following table summarizes financial instruments subject to recurring fair value measurements as of June 30, 2022.

(In millions)	Carrying value	Total fair value	Quoted prices in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
Assets					
Cash and cash equivalents	$ 629	$ 629	$ 629	$ —	$ —
Restricted investments (a) (b)	407	407	407	—	—
Investment of captive insurance company (c)	9	9	9	—	—
Foreign currency derivatives (d)	2	2	—	2	—
Commodity derivatives (d)	3	3	—	3	—
Total assets at fair value	$ 1,050	$ 1,050	$ 1,045	$ 5	$ —
Liabilities					
Foreign currency derivatives (e)	$ 3	$ 3	$ —	$ 3	$ —
Commodity derivatives (e)	2	2	—	2	—
Total liabilities at fair value	$ 5	$ 5	$ —	$ 5	$ —

(a) Included in restricted investments and $61 million within other current assets in the Condensed Consolidated Balance Sheets.
(b) Includes $269 million related to the Asbestos trust and $138 million related to the Environmental trust.
(c) Included in other noncurrent assets in the Condensed Consolidated Balance Sheets.
(d) Included in accounts receivable in the Condensed Consolidated Balance Sheets.
(e) Included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets.

The following table summarizes financial asset instruments subject to recurring fair value measurements as of September 30, 2021.

(In millions)	Carrying value	Total fair value	Quoted prices in active markets for identical assets Level 1	Significant other observable inputs Level 2	Significant unobservable inputs Level 3
Assets					
Cash and cash equivalents	$ 210	$ 210	$ 210	$ —	$ —
Restricted investments (a) (b)	421	421	421	—	—
Investment of captive insurance company (c)	8	8	8	—	—
Foreign currency derivatives (d)	1	1	—	1	—
Commodity derivatives (d)	5	5	—	5	—
Total assets at fair value	$ 645	$ 645	$ 639	$ 6	$ —
Liabilities					
Foreign currency derivatives (e)	$ 2	$ 2	$ —	$ 2	$ —

(a) Included in restricted investments and $37 million within other current assets in the Condensed Consolidated Balance Sheets.

(b) Includes $333 million related to the Asbestos trust and $88 million related to the Environmental trust.

(c) Included in other noncurrent assets in the Condensed Consolidated Balance Sheets.

(d) Included in accounts receivable in the Condensed Consolidated Balance Sheets.

(e) Included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets.

Restricted investments

Investment income and realized gains and losses on these company-restricted investments are reported within the net interest and other expense caption on the Statements of Consolidated Comprehensive Income (Loss). The following table provides a summary of the activity within the investment portfolio as of June 30, 2022 and September 30, 2021:

(In millions)	June 30 2022	September 30 2021
Original cost	$ 335	$ 335
Accumulated adjustments, net	37	(50)
Adjusted cost, beginning of year (a)	372	285
Investment income (b)	13	12
Net unrealized gain (loss) (c)	(25)	49
Realized gains (losses) (c)	1	17
Funds restricted for specific transactions (d)	74	91
Disbursements	(28)	(33)
Fair value	$ 407	$ 421

(a) The adjusted cost of the demand deposits includes accumulated investment income, realized gains, additional funds restricted for specific transactions and disbursements recorded in previous periods. The adjusted cost as of June 30, 2022 includes the $90 million funding to establish the Environmental trust.

(b) Investment income relates to the demand deposit and includes interest income as well as dividend income transferred from the equity and fixed income mutual funds.

(c) Presented under the original cost method.

(d) The June 30, 2022 period included additional contributions to the Environmental trust from proceeds associated with the Performance Adhesives sale and excess land sales. The September 30, 2021 period included $90 million to establish the Environmental trust.

The following table presents gross unrealized gains and losses for the restricted investment securities as of June 30, 2022 and September 30, 2021:

(In millions)	Adjusted Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of June 30, 2022				
Demand deposit	$ 7	$ —	$ —	$ 7
Equity mutual fund	178	23	(13)	188
Fixed income mutual fund	247	—	(35)	212
Fair value	$ 432	$ 23	$ (48)	$ 407
As of September 30, 2021				
Demand deposit	$ 6	$ —	$ —	$ 6
Equity mutual fund	143	44	(1)	186
Fixed income mutual fund	223	7	(1)	229
Fair value	$ 372	$ 51	$ (2)	$ 421

The following table presents the investment income, net gains and losses realized and disbursements related to the investments within the portfolio for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Investment income	$ 3	$ 2	$ 13	$ 10
Net gains (losses)	(48)	15	(72)	26
Disbursements	—	(6)	(28)	(25)

Foreign currency derivatives

Ashland conducts business in a variety of foreign currencies. Accordingly, Ashland regularly uses foreign currency derivative instruments to manage exposure on certain transactions denominated in foreign currencies to curtail potential earnings volatility effects on certain assets and liabilities, including short-term inter-company loans, denominated in currencies other than Ashland's functional currency of an entity. These derivative contracts generally require exchange of one foreign currency for another at a fixed rate at a future date and generally have maturities of less than twelve months. The impacts of these contracts were largely offset by gains and losses resulting from the impact of changes in exchange rates on transactions denominated in non-functional currencies. The following table summarizes the net gains and losses recognized during the three and nine months ended June 30, 2022 and 2021 within the Statements of Consolidated Comprehensive Income (Loss).

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Foreign currency derivative gain (loss)	$ (12)	$ 3	$ (21)	$ 6

The following table summarizes the fair values of the outstanding foreign currency derivatives as of June 30, 2022 and September 30, 2021 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	June 30 2022	September 30 2021
Foreign currency derivative assets	$ 2	$ 1
Notional contract values	244	150
Foreign currency derivative liabilities	$ 3	$ 2
Notional contract values	263	212

Commodity derivatives

To manage its exposure to the market price volatility of natural gas consumed by its U.S. plants during the manufacturing process, Ashland regularly enters into forward contracts that are designated as cash flow hedges. The following table summarizes the net gains and losses recognized during the three and nine months ended June 30, 2022 and 2021 within the cost of sales caption of the Statements of Consolidated Comprehensive Income (Loss).

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Commodity derivative gain (loss)	$ 2	$ —	$ 6	$ —

The following table summarizes the fair values of the outstanding commodity derivatives as of June 30, 2022, and September 30, 2021 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	June 30 2022	September 30 2021
Commodity derivative assets	$ 3	$ 5
Notional contract values	12	6
Commodity derivative liabilities	$ 2	$ —
Notional contract values	10	—

Total return derivatives

Ashland maintains certain employee stock based compensation programs whereby certain employees receive awards that entitle them to a cash payout based on Ashland's stock price at a future date. To manage its exposure to the changes in fair value of the shares that determine the payout, Ashland entered into a Total Return Swap (TRS) in fiscal year 2022. The company pays a floating rate, based on LIBOR plus an interest rate spread on the notional amount of the TRS. The TRS is designed to substantially offset changes in the stock based compensation liabilities due to the change in the fair value of Ashland's stock. The contract term of the TRS is through December 2022 and is settled on quarterly basis. The following table summarized the net gains and losses recognized for the three and nine months ended June 30, 2022 and 2021 within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss).

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Total return swap gain (loss)	$ —	$ —	$ —	$ —

The following table summarizes the fair values of the outstanding TRS as of June 30, 2022 included in accounts receivable and accrued expenses and other liabilities of the Condensed Consolidated Balance Sheets.

(In millions)	June 30 2022	September 30 2021
Total return swap assets	$ —	$ —
Notional contract values	8	—

Other financial instruments

At June 30, 2022 and September 30, 2021, Ashland's long-term debt (including the current portion and excluding debt issuance cost discounts) had a carrying value of $1,317 million and $1,622 million, respectively, compared to a fair value of $1,181 million and $1,794 million, respectively. The fair values of long-term debt are based on quoted market prices or, if market prices are not available, the present values of the underlying cash flows discounted at Ashland's incremental borrowing rates. The carrying value of long-term debt with variable interest approximated fair value.

NOTE F – INVENTORIES

Inventories are carried at the lower of cost or net realizable value. Inventories are stated at cost using the weighted-average cost method.

The following table summarizes Ashland's inventories as of the reported Condensed Consolidated Balance Sheet dates.

(In millions)	June 30 2022	September 30 2021
Finished products	$ 350	$ 282
Raw materials, supplies and work in process	259	191
	$ 609	$ 473

NOTE G – GOODWILL AND OTHER INTANGIBLES

Goodwill

Ashland tests goodwill and other indefinite-lived intangible assets for impairment annually as of July 1 and when events and circumstances indicate an impairment may have occurred. Ashland tests goodwill and other indefinite-lived intangible assets for impairment by comparing the estimated fair value of the reporting units (for goodwill) and other indefinite-lived intangible assets to the related carrying value. If the carrying amount of a reporting unit or other indefinite-lived intangible asset exceeds its estimated fair value, Ashland records an impairment loss based on the difference between fair value and carrying amount, not to exceed the associated carrying amount of goodwill per reporting unit.

No indicators of impairment were identified in the three and nine months ended June 30, 2022.

Ashland's assessment of an impairment on any of these assets classified currently as having indefinite lives, including goodwill, could change in future periods if significant events happen and/or circumstances change that effect the previously mentioned assumptions such as: a significant change in projected business results, a divestiture decision, increase in Ashland's weighted-average cost of capital rates, decrease in growth rates or assumptions, economic deterioration that is more severe or of a longer duration than anticipated, or another significant economic event.

The following is a progression of goodwill by reportable segment for the nine months ended June 30, 2022.

(In millions)	Life Sciences	Personal Care (a)	Specialty Additives (a)	Intermediates (a)	Total
Balance at September 30, 2021	$ 856	$ 129	$ 445	$ —	$ 1,430
Currency translation	(44)	(7)	(23)	—	(74)
Balance at June 30, 2022	$ 812	$ 122	$ 422	$ —	$ 1,356

(a) As of June 30, 2022 and September 30, 2021, there were accumulated impairments of $356 million, $174 million and $90 million related to the Personal Care, Specialty Additives and Intermediates reportable segments, respectively.

Other intangible assets

Intangible assets principally consist of trademarks and trade names, intellectual property and customer and supplier relationships. Intangible assets classified as finite are amortized on a straight-line basis over their estimated useful lives. The cost of trademarks and trade names is amortized principally over 3 to 25 years, intellectual property over 5 to 25 years, and customer and supplier relationships over 3 to 24 years.

Ashland annually reviews, as of July 1, indefinite-lived intangible assets for possible impairment or whenever events or changes in circumstances indicate that carrying amounts may not be recoverable.

No indicators of impairment were identified in the three and nine months ended June 30, 2022.

Intangible assets were comprised of the following as of June 30, 2022 and September 30, 2021.

	June 30, 2022		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangibles			
Trademarks and trade names	$ 97	$ (36)	$ 61
Intellectual property	730	(519)	211
Customer and supplier relationships	820	(369)	451
Total definite-lived intangibles	1,647	(924)	723
Indefinite-lived intangibles			
Trademarks and trade names	278	—	278
Total intangible assets	$ 1,925	$ (924)	$ 1,001

	September 30, 2021		
(In millions)	Gross carrying amount	Accumulated amortization	Net carrying amount
Definite-lived intangibles			
Trademarks and trade names	$ 101	$ (32)	$ 69
Intellectual property	750	(495)	255
Customer and supplier relationships	849	(352)	497
Total definite-lived intangibles	1,700	(879)	821
Indefinite-lived intangibles			
Trademarks and trade names	278	—	278
Total intangible assets	$ 1,978	$ (879)	$ 1,099

Amortization expense recognized on intangible assets was $23 million for the three months ended June 30, 2022 and 2021, respectively, and $71 million and $65 million for the nine months ended June 30, 2022 and 2021, respectively, and is included in the intangibles amortization expense caption of the Statements of Consolidated Comprehensive Income (Loss). Estimated amortization expense for future periods is $96 million in 2022 (includes nine months actual and three months estimated), $96 million in 2023, $80 million in 2024, $75 million in 2025 and $72 million in 2026. Actual amounts may change from such estimated amounts due to fluctuations in foreign currency exchange rates, additional intangible asset acquisitions and divestitures, potential impairment, accelerated amortization, or other events.

NOTE H – DEBT AND OTHER FINANCING ACTIVITIES

The following table summarizes Ashland's current and long-term debt as of the dates reported in the Condensed Consolidated Balance Sheets.

(In millions)	June 30, 2022	September 30, 2021
3.375% Senior Notes, due 2031	$ 450	$ 450
2.00% Senior Notes, due 2028 (Euro 500 million principal)	522	580
6.875% notes, due 2043	282	282
Term loan A	—	250
Accounts receivable securitizations	—	117
6.50% junior subordinated notes, due 2029	59	57
Revolving credit facility	—	225
Other (a)	(11)	9
Total debt	1,302	1,970
Short-term debt (includes current portion of long-term debt)	—	(374)
Long-term debt (less current portion)	$ 1,302	$ 1,596

(a) Includes $15 million and $17 million of debt issuance cost discounts as of June 30, 2022 and September 30, 2021, respectively. Additionally, at September 30, 2021, Other included a European short-term loan facility with an outstanding balance of $23 million.

As of June 30, 2022, Ashland had no long-term debt (excluding debt issuance costs) maturing within the next 5 years.

Accounts Receivable Facilities and Off-Balance Sheet Arrangements

U.S. Accounts Receivable Sales Program

Ashland maintains a U.S. Accounts Receivable Sales Program entered into during fiscal 2021. Ashland accounts for the receivables transferred to buyers as sales. Ashland recognizes any gains or losses based on the excess of proceeds received net of buyer's discounts and fees compared to the carrying value of the assets. Proceeds received, net of buyer's discounts and fees, are recorded within the operating activities of the Statement of Condensed Consolidated Cash Flows. Losses on sale of assets, including related transaction expenses are recorded within the Net interest and other expense caption of the Statements of Consolidated Comprehensive Income (Loss). Ashland regularly assesses its servicing obligations and records them as assets or liabilities when appropriate. Ashland also monitors its obligation with regards to the limited guarantee and records the resulting guarantee liability when warranted. When applicable, Ashland discloses the amount of the receivable that serves as over-collateralization as a restricted asset.

Ashland recognized a loss of $1 million for the three and nine months ended June 30, 2022 and 2021, respectively, within the net interest and other expense caption of the Statements of Consolidated Comprehensive Income (Loss) associated with sales under the program. Ashland has recorded $50 million in sales at June 30, 2022 against the buyer's limit, which was $125 million at June 30, 2022 compared to $113 million of sales at September 30, 2021 against the buyer's limit, which was $125 million at September 30, 2021. Ashland transferred $140 million and $167 million in receivables to the special purpose entity as of June 30, 2022 and September 30, 2021, respectively. Ashland recorded liabilities related to its service obligations and limited guarantee as of June 30, 2022 and September 30, 2021 of less than $1 million. As of June 30, 2022, the year-to-date gross cash proceeds received for receivables transferred and derecognized was $205 million, of which $268 million was collected, which included collections from the sales in prior year transferred to the buyer. The difference of $63 million for receivables transferred and derecognized versus collected represents the impact of a net reduction in accounts receivable sales volume during the current year.

Foreign Accounts Receivable Securitization Facility

Ashland continues to maintain its Foreign 2018 Accounts Receivable Securitization Facility. Ashland accounts for the Foreign 2018 Accounts Receivable Securitization Facility as secured borrowings, and the receivables sold pursuant to the facility are included in the Consolidated Balance Sheets as accounts receivable. Ashland repaid all outstanding borrowings under the facility during the nine months ended June 30, 2022 for a total of $113 million. At June 30, 2022 and September 30, 2021, the outstanding amounts of accounts receivable transferred by Ashland were $159 million and $152 million, respectively, and borrowing (denominated in multiple currencies) under the facility were zero and $117 million, respectively.

Debt Repayments

2020 Credit Agreement

During the nine months ended June 30, 2022, Ashland prepaid its Term loan A principal balance of $250 million.

Other Debt

During the nine months ended June 30, 2022, Ashland repaid the outstanding balance on its European short-term loan facility for $23 million.

Available borrowing capacity and liquidity

The borrowing capacity remaining under the 2020 Credit Agreement which included the $600 million Revolving Credit Facility was $581 million due to an outstanding balance of zero, as well as a reduction of $19 million for letters of credit outstanding as of June 30, 2022. Ashland's total borrowing capacity at June 30, 2022 was $686 million, which included $105 million of available capacity from the Foreign 2018 Accounts Receivable Securitization Facility.

Additionally, Ashland had $58 million of available liquidity under its current U.S. Accounts Receivable Sales Program as of June 30, 2022.

Covenants related to current Ashland debt agreements

Ashland's debt contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of June 30, 2022, Ashland is in compliance with all debt agreement covenant restrictions.

The maximum consolidated net leverage ratio permitted under Ashland's current credit agreement (the 2020 Credit Agreement) is 4.0. At June 30, 2022, Ashland’s calculation of the consolidated net leverage ratio was 1.2.

The minimum required consolidated interest coverage ratio under the 2020 Credit Agreement during its entire duration is 3.0. At June 30, 2022, Ashland’s calculation of the interest coverage ratio was 9.7.

NOTE I – LEASING ARRANGEMENTS

Ashland leases certain office buildings, transportation equipment, warehouses and storage facilities, and equipment. Substantially all of Ashland’s leases are operating leases or short-term leases. Real estate leases represented over 80% of the total lease liability at June 30, 2022 and September 30, 2021, respectively.

The components of lease cost recognized within the Statements of Consolidated Comprehensive Income (Loss) were as follows:

		Three months ended June 30		Nine months ended June 30	
(In millions)	Location	2022	2021	2022	2021
Lease cost:					
Operating lease cost	Selling, General & Administrative (a)	$ 5	$ 3	$ 12	$ 10
Operating lease cost	Cost of Sales	3	4	10	11
Variable lease cost	Selling, General & Administrative	1	1	3	2
Variable lease cost	Cost of Sales	1	1	3	2
Short-term leases	Cost of Sales	1	1	2	3
Total lease cost		$ 11	$ 10	$ 30	$ 28

a) Includes $2 million lease termination fee for the three and nine months ended June 30, 2022.

The following table summarizes Ashland's lease assets and liabilities as presented in the Condensed Consolidated Balance Sheet:

(In millions)	June 30 2022	September 30 2021
Assets		
Operating lease assets, net	$ 112	$ 124
Total lease assets	$ 112	$ 124
Liabilities		
Current operating lease obligations	$ 18	$ 23
Non-current operating lease obligations	100	110
Total lease liabilities	$ 118	$ 133

Ashland often has options to renew lease terms for buildings and other assets. The exercise of lease renewal options are generally at Ashland's sole discretion. In addition, certain lease arrangements may be terminated prior to their original expiration date at Ashland's discretion. Ashland evaluates renewal and termination options at the lease commencement date to determine if it is reasonably certain to exercise the option on the basis of economic factors. The weighted average remaining lease term for operating leases as of June 30, 2022 and September 30, 2021 was approximately 15 years for each period.

Residual value guarantees are not common within Ashland's lease agreements nor are restrictions or covenants imposed by leases. Ashland has elected the practical expedient to combine lease and non-lease components. The discount rate implicit within the leases is generally not determinable. Therefore, Ashland determines the discount rate based on its incremental borrowing rate. The incremental borrowing rate is determined using a buildup method resulting in an estimated range of secured borrowing rates matching the lease term and the currency of the jurisdiction in which lease payments are made, adjusted for impacts of collateral. Consideration was given to Ashland's own relevant debt issuances as well as debt instruments of comparable companies with similar credit characteristics. The weighted average discount rate used to measure operating lease liabilities as of June 30, 2022 and September 30, 2021 was 2.8%, respectively. There are no leases that have not yet commenced but that create significant rights and obligations.

Right-of-use assets exchanged for new operating lease obligations were $7 million and $6 million for the three months ended June 30, 2022 and 2021, respectively, and $11 million and $16 million for the nine months ended June 30, 2022 and 2021. This includes $1 million of right-of-use assets and operating lease obligations recorded as a result of the purchase of the Schülke personal care business during the three and nine months ended June 30, 2021.

The following table provides cash paid for amounts included in the measurement of operating lease liabilities:

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2021	2020
Operating cash flows from operating leases	$ 9	$ 8	$ 23	$ 23

The following table summarizes Ashland's maturities of lease liabilities as of June 30, 2022 and September 30, 2021:

(In millions)	June 30 2022	September 30 2021
Remainder of 2022	$ 20	$ 39
2023	21	20
2024	16	16
2025	12	11
2026	9	9
Thereafter	74	78
Total lease payments	152	173
Less amount of lease payment representing interest	(34)	(40)
Total present value of lease payments	$ 118	$ 133

NOTE J – INCOME TAXES

Current fiscal year

Ashland's effective tax rate in any interim period is subject to adjustments related to discrete items and the mix of domestic and foreign operating results. The overall effective tax rate was 2% and 17% for the three and nine months ended June 30, 2022.

The current quarter tax rate was impacted by jurisdictional income mix, as well as a net $1 million benefit primarily from favorable return to provision adjustments for certain jurisdictions. The current nine month tax rate was impacted by jurisdictional income mix as well as $3 million from net unfavorable tax discrete items primarily related to restructuring and separation activity partially offset by a favorable valuation adjustment for certain foreign tax credits and adjustments to uncertain positions.

Prior fiscal year

The overall effective tax rate was a benefit of 57% for the three months ended June 30, 2021 and a benefit of 34% for the nine months ended June 30, 2021. The quarter tax rate was primarily impacted by jurisdictional income mix, as well as $33 million from favorable tax discrete items primarily related to uncertain tax positions. The nine months tax rate impacted by $52 million from favorable tax discrete items primarily related to the Specialty Additives facility sale and uncertain tax positions.

Unrecognized tax benefits

Changes in unrecognized tax benefits are summarized as follows for the nine months ended June 30, 2022.

(In millions)	
Balance at October 1, 2021	$ 82
Increases related to positions taken in the current year	2
Lapse of statute of limitations	(2)
Balance at June 30, 2022	$ 82

From a combination of statute expirations and audit settlements in the next twelve months, Ashland expects a decrease in the amount accrued for uncertain tax positions of between $6 million and $16 million. It is reasonably possible that there could be other material changes to the amount of uncertain tax positions due to activities of the taxing authorities, settlement of audit issues or the reassessment of existing uncertain tax positions; however, Ashland is not able to estimate the impact of these items at this time.

NOTE K - EMPLOYEE BENEFIT PLANS

Plan contributions

For the nine months ended June 30, 2022, Ashland contributed $4 million to its non-U.S. pension plans and less than $1 million to its U.S. pension plans. Ashland expects to make additional contributions of approximately $1 million to its non-U.S. and less than $1 million to its U.S. pension plans during the remainder of fiscal 2022.

Plan Remeasurements

Following the completion of the sale of its Performance Adhesives business segment on February 28, 2022, the post-retirement benefits for approximately 40 employees transferred to Arkema, all of whom participated in a non-contributory defined benefit plan in the U.S., were frozen. This resulted in a decrease in total expected future years of service within the plan and required Ashland to remeasure the plan as February 28, 2022. As a result, Ashland recorded a $1 million actuarial gain within the other net periodic benefits loss caption of the Statements of Consolidated Comprehensive Income (Loss) for the nine months ended June 30, 2022.

Components of net periodic benefit costs (income)

The following table details the components of pension and other postretirement benefit costs for continuing operations.

	Pension benefits		Other postretirement benefits	
(In millions)	2022	2021	2022	2021
Three months ended June 30				
Service cost	$ 1	$ 1	$ —	$ —
Interest cost	2	2	—	—
Expected return on plan assets	(1)	(2)	—	—
Actuarial (gain)	—	—	—	—
Total net periodic benefit costs	$ 2	$ 1	$ —	$ —
Nine months ended June 30				
Service cost	$ 3	$ 4	$ —	$ —
Interest cost	5	4	1	1
Expected return on plan assets	(5)	(5)	—	—
Actuarial (gain)	(1)	—	—	—
Total net periodic benefit costs	$ 2	$ 3	$ 1	$ 1

For segment reporting purposes, service cost is proportionately allocated to each segment, excluding the Unallocated and other segment, and is recorded within the selling, general and administrative expense and cost of sales captions on the Statements of Consolidated Comprehensive Income (Loss). All other components are recorded within the other net periodic benefit loss caption on the Statements of Consolidated Comprehensive Income (Loss), which netted to $1 million and zero for the three and nine months ended June 30, 2022, respectively, and zero for both the three and nine months ended June 30, 2021, respectively.

NOTE L – LITIGATION, CLAIMS AND CONTINGENCIES

Asbestos litigation

Ashland is subject to liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims result from indemnification obligations undertaken in 1990 in connection with the sale of Riley Stoker Corporation (Riley) and the acquisition of Hercules in November 2008. Although Riley, a former subsidiary, was neither a producer nor a manufacturer of asbestos, its industrial boilers contained some asbestos-containing components provided by other companies. Hercules, an indirect wholly-owned subsidiary of Ashland, has liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products sold by one of Hercules' former subsidiaries to a limited industrial market.

To assist in developing and annually updating independent reserve estimates for future asbestos claims and related costs given various assumptions for Ashland and Hercules asbestos claims, Ashland retained third party actuarial experts Gnarus. The methodology used by Gnarus to project future asbestos costs is based largely on recent experience, including claim-filing and settlement rates, disease mix, enacted legislation, open claims and litigation defense. The claim experience of Ashland and Hercules are separately compared to the results of previously conducted third party epidemiological studies estimating the number of people likely to develop asbestos-related diseases. Those studies were undertaken in connection with national analyses of the population expected to have been exposed to asbestos. Using that information, Gnarus estimates a range of the number of future claims that may be filed, as well as the related costs that may be incurred in resolving those claims. Changes in asbestos-related liabilities and receivables are recorded on an after-tax basis within the discontinued operations caption in the Statements of Consolidated Comprehensive Income (Loss).

Ashland asbestos-related litigation

The claims alleging personal injury caused by exposure to asbestos asserted against Ashland result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley. The amount and timing of settlements and number of open claims can fluctuate from period to period. A summary of Ashland asbestos claims activity, excluding Hercules claims, follows.

	Nine months ended June 30		Years ended September 30		
(In thousands)	2022	2021	2021	2020	2019
Open claims - beginning of year	46	49	49	53	53
New claims filed	1	1	2	2	2
Claims settled	(1)	—	(1)	(1)	(1)
Claims dismissed	(1)	(3)	(4)	(5)	(1)
Open claims - end of period	45	47	46	49	53

Ashland asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 40-year model developed with the assistance of Gnarus.

During the most recent annual update of this estimate completed during the June 2022 fiscal quarter, it was determined that the liability for Ashland asbestos-related claims should be increased by $16 million. Total reserves for asbestos claims were $310 million at June 30, 2022 compared to $320 million at September 30, 2021.

A progression of activity in the asbestos reserve is presented in the following table.

	Nine months ended June 30		Years ended September 30		
(In millions)	2022	2021	2021	2020	2019
Asbestos reserve - beginning of year	$ 320	$ 335	$ 335	$ 352	$ 380
Reserve adjustment	16	12	12	13	1
Amounts paid	(26)	(21)	(27)	(30)	(29)
Asbestos reserve - end of period (a)	$ 310	$ 326	$ 320	$ 335	$ 352

(a) Included $29 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of June 30, 2022 and September 30, 2021.

Ashland asbestos-related receivables

Ashland has insurance coverage for certain litigation defense and claim settlement costs incurred in connection with its asbestos claims, and coverage-in-place agreements exist with the insurance companies that provide substantially all of the coverage that will be accessed.

For the Ashland asbestos-related obligations, Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. A substantial portion of the estimated receivables from insurance companies are expected to be due from domestic insurers.

At June 30, 2022, Ashland's receivable for recoveries of litigation defense and claim settlement costs from insurers amounted to $102 million (excluding the Hercules receivable for asbestos claims) compared to $100 million at September 30, 2021. During the June 2022 fiscal quarter, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers was completed. This model update resulted in a $7 million increase in the receivable for probable insurance recoveries.

A progression of activity in the Ashland insurance receivable is presented in the following table.

	Nine months ended June 30		Years ended September 30		
(In millions)	2022	2021	2021	2020	2019
Insurance receivable - beginning of year	$ 100	$ 103	$ 103	$ 123	$ 140
Receivable adjustment (a)	7	6	6	1	(5)
Insurance settlement	—	—	—	(10)	—
Amounts collected	(5)	(7)	(9)	(11)	(12)
Insurance receivable - end of period (b)	$ 102	$ 102	$ 100	$ 103	$ 123

(a) The nine months ended June 30, 2021 includes a reserve adjustment of $2 million related to allowances for credit losses as a result of Ashland's adoption of the new credit measurement standard. The total allowance for credit losses was $2 million as of June 30, 2022.

(b) Includes $12 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of June 30, 2022 and September 30, 2021.

Hercules asbestos-related litigation

Hercules has liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products which were sold by one of Hercules' former subsidiaries to a limited industrial market. The amount and timing of settlements and number of open claims can fluctuate from period to period. A summary of Hercules' asbestos claims activity follows.

	Nine months ended June 30		Years ended September 30		
(In thousands)	2022	2021	2021	2020	2019
Open claims - beginning of year	12	12	12	13	13
New claims filed	1	1	1	1	1
Claims dismissed	(1)	(1)	(1)	(2)	(1)
Open claims - end of period	12	12	12	12	13

Hercules asbestos-related liability

From the range of estimates, Ashland records the amount it believes to be the best estimate of future payments for litigation defense and claim settlement costs, which generally approximates the mid-point of the estimated range of exposure from model results. Ashland reviews this estimate, and related assumptions quarterly and annually updates the results of a non-inflated, non-discounted approximate 40-year model developed with the assistance of Gnarus. As a result of the most recent annual update of this estimate, completed during the June 2022 fiscal quarter, it was determined that the liability for Hercules asbestos-related claims should be increased by $15 million. Total reserves for asbestos claims were $220 million at June 30, 2022 compared to $217 million at September 30, 2021.

A progression of activity in the asbestos reserve is presented in the following table.

(In millions)	Nine months ended June 30 2022	Nine months ended June 30 2021	Years ended September 30 2021	Years ended September 30 2020	Years ended September 30 2019
Asbestos reserve - beginning of year	$ 217	$ 229	$ 229	$ 252	$ 282
Reserve adjustments	15	8	8	(3)	(10)
Amounts paid	(12)	(16)	(20)	(20)	(20)
Asbestos reserve - end of period (a)	$ 220	$ 221	$ 217	$ 229	$ 252

(a) Included $18 million classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets as of June 30, 2022 and September 30, 2021.

Hercules asbestos-related receivables

For the Hercules asbestos-related obligations, certain reimbursement obligations pursuant to coverage-in-place agreements with insurance carriers exist. Ashland has estimated the value of probable insurance recoveries associated with its asbestos reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage, including an assumption that all solvent insurance carriers remain solvent. The estimated receivable consists exclusively of solvent domestic insurers.

As of June 30, 2022, Ashland's receivable for recoveries of litigation defense and claims costs from insurers with respect to Hercules amounted to $53 million. During fiscal year 2022, the annual update of the model used for purposes of valuing the asbestos reserve and its impact on valuation of future recoveries from insurers was completed. This model update resulted in an increase of $7 million in the receivable for probable insurance recoveries.

A progression of activity in the Hercules insurance receivable is presented in the following table.

(In millions)	Nine months ended June 30 2022	Nine months ended June 30 2021	Years ended September 30 2021	Years ended September 30 2020	Years ended September 30 2019
Insurance receivable - beginning of year	$ 47	$ 47	$ 47	$ 49	$ 54
Receivable adjustment (a)	7	1	1	(2)	(5)
Amounts collected	(1)	—	(1)	—	—
Insurance receivable - end of period (b)	$ 53	$ 48	$ 47	$ 47	$ 49

(a) The nine months ended June 30, 2021 includes a reserve adjustment of $1 million related to allowances for credit losses as a result of Ashland's adoption of the new credit measurement standard. The total allowance for credit losses was $1 million as of June 30, 2022.

(b) Includes $3 million and $1 million classified in accounts receivable on the Condensed Consolidated Balance Sheets as of June 30, 2022 and September 30, 2021, respectively.

Asbestos litigation cost projection

Projecting future asbestos costs is subject to numerous variables that are extremely difficult to predict. In addition to the significant uncertainties surrounding the number of claims that might be received, other variables include the type and severity of the disease alleged by each claimant, the long latency period associated with asbestos exposure, mortality rates, dismissal rates, costs of medical treatment, the impact of bankruptcies of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and the impact of potential changes in legislative or judicial standards. Furthermore, any predictions with respect to these variables are subject to even greater uncertainty as the projection period lengthens. Considering these inherent uncertainties, Ashland believes that the asbestos reserves for Ashland and Hercules represent the best estimate within a range of possible outcomes. As a part of the process to develop these estimates of future asbestos costs, a range of long-term cost models was developed. These models are based on national studies that predict the number of people likely to develop asbestos-related diseases and are heavily influenced by assumptions regarding long-term inflation rates for indemnity payments and legal defense costs, as well as other variables mentioned previously. Ashland has currently estimated in various models ranging from approximately 40 year periods that it is reasonably possible that total future litigation defense and claim settlement costs on an inflated and undiscounted basis could range as high as approximately $456 million for the Ashland asbestos-related litigation (current reserve of $310 million) and approximately $317 million for the Hercules asbestos-related litigation (current reserve of $220 million), depending on the combination of assumptions selected in the various models. If actual experience is worse than projected, relative to the number of claims filed, the severity of alleged disease associated with those claims or costs incurred to resolve those claims, or actuarial refinement or improvements to the assumptions used within these models are initiated, Ashland may need to further increase the estimates of the costs associated with asbestos claims and these increases could be material over time.

Environmental remediation and asset retirement obligations

Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively, environmental remediation) at multiple locations. At June 30, 2022, such locations included 76 sites where Ashland has been identified as a potentially responsible party under Superfund or similar state laws, 111 current and former operating facilities (including certain operating facilities conveyed as part of previous divestitures) and about 1,225 service station properties, of which 17 are being actively remediated.

Ashland's reserves for environmental remediation and related environmental litigation amounted to $226 million at June 30, 2022 compared to $207 million at September 30, 2021, of which $171 million at June 30, 2022 and $152 million at September 30, 2021 were classified in other noncurrent liabilities on the Condensed Consolidated Balance Sheets. The remaining reserves were classified in accrued expenses and other liabilities on the Condensed Consolidated Balance Sheets.

The following table provides a reconciliation of the changes in the environmental remediation reserves during the nine months ended June 30, 2022 and 2021.

	Nine months ended June 30	
(In millions)	2022	2021
Reserve - beginning of period	$ 207	$ 200
Disbursements	(42)	(35)
Changes in obligation estimates and accretion, net	61	40
Reserve - end of period	$ 226	$ 205

The total reserves for environmental remediation reflect Ashland's estimates of the most likely costs that will be incurred over an extended period to remediate identified conditions for which the costs are reasonably estimable, without regard to any third-party recoveries. Engineering studies, probability techniques, historical experience and other factors are used to identify and evaluate remediation alternatives and their related costs in determining the estimated reserves for environmental remediation. Ashland continues to discount certain environmental sites and regularly adjusts its reserves as environmental remediation continues. Ashland has estimated the value of its probable insurance recoveries associated with its environmental reserve based on management's interpretations and estimates surrounding the available or applicable insurance coverage. At June 30, 2022 and September 30, 2021, Ashland's recorded receivable for these probable insurance recoveries was $20 million and $16 million, of which $17 million and $13 million at June 30, 2022 and September 30, 2021, respectively, was classified in other noncurrent assets on the Condensed Consolidated Balance Sheets.

Components of environmental remediation expense included within the selling, general and administrative expense caption of the Statements of Consolidated Comprehensive Income (Loss) are presented in the following table for the three and nine ended June 30, 2022 and 2021.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Environmental expense	$ 45	$ 24	$ 60	$ 39
Accretion	1	—	1	1
Legal expense	1	1	3	2
Total expense	47	25	64	42
Insurance receivable	(2)	—	(5)	(1)
Total expense, net of receivable activity (a)	$ 45	$ 25	$ 59	$ 41

(a) Net expense of $9 million and $11 million for the three and nine months ended June 30, 2022, respectively, and $3 million and $6 million for the three and nine months ended June 30, 2021, respectively, relates to divested businesses which qualified for treatment as discontinued operations for which certain environmental liabilities were retained by Ashland. These amounts are classified within the income from discontinued operations caption of the Statements of Consolidated Comprehensive Income (loss).

Environmental remediation reserves are subject to numerous inherent uncertainties that affect Ashland's ability to estimate its share of the costs. Such uncertainties involve the nature and extent of contamination at each site, the extent of required cleanup efforts under existing environmental regulations, widely varying costs of alternate cleanup methods, changes in environmental regulations, the potential effect of continuing improvements in remediation technology, and the number and financial strength of other potentially responsible parties at multiparty sites. Although it is not possible to predict with certainty the ultimate costs of environmental remediation, Ashland currently estimates that the upper end of the reasonably possible range of future costs for identified sites could be as high as approximately $480 million. The largest reserve for any site is 12% of the remediation reserve at June 30, 2022.

Other legal proceedings and claims

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability, and other environmental matters, which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of June 30, 2022 and September 30, 2021. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of June 30, 2022.

NOTE M – EARNINGS PER SHARE

The following is the computation of basic and diluted earnings per share (EPS) from continuing operations attributable to Ashland. Stock appreciation rights (SARs), stock options and warrants available to purchase shares outstanding for each reporting period whose grant price was greater than the average market price of Ashland Common Stock for each applicable period were not included in the computation of income from continuing operations per diluted share because the effect of these instruments would be antidilutive. The total number of these shares outstanding was approximately 1 million at June 30, 2022 and 2021, respectively. Earnings per share is reported under the treasury stock method.

	Three months ended June 30		Nine months ended June 30	
(In millions, except per share data)	2022	2021	2022	2021
Numerator				
Numerator for basic and diluted EPS - Income from continuing operations	$ 51	$ 72	$ 121	$ 139
Denominator				
Denominator for basic EPS - Weighted-average common shares outstanding	54	61	56	61
Share based awards convertible to common shares	1	1	1	1
Denominator for diluted EPS - Adjusted weighted-average shares and assumed conversions	55	62	57	62
EPS from continuing operations				
Basic	$ 0.94	$ 1.18	$ 2.16	$ 2.29
Diluted	0.93	1.17	2.12	2.27

NOTE N – EQUITY ITEMS

2022 Stock repurchase program

On May 25, 2022, Ashland's board of directors authorized a new, evergreen $500 million common share repurchase program (2022 stock repurchase program). The new authorization terminates and replaces the company's 2018 $1 billion share repurchase program, which had $150 million outstanding at the date of termination.

2018 Stock repurchase program

In September 2021, under the 2018 stock repurchase program, Ashland entered into an accelerated share repurchase agreement (2021 ASR Agreement). Under the 2021 ASR Agreement, Ashland paid an initial purchase price of $450 million and received an initial delivery of 3.9 million shares of common stock during September 2021. The bank exercised its early termination option under the 2021 ASR Agreement in February 2022, and an additional 0.7 million shares were repurchased, bringing the total shares repurchased upon settlement to 4.6 million.

On March 1, 2022, under the 2018 stock repurchase program, Ashland entered into an agreement to repurchase an aggregate amount of $200 million of Ashland common stock using open-market purchases under rule 10b-18. On April 8, 2022, Ashland completed repurchases under this agreement repurchasing a total of 2.15 million shares for a total amount of $200 million.

Stockholder dividends

On May 25, 2022, Ashland's Board declared a quarterly cash dividend of $0.335 cents per share on the company's common stock representing a 12 percent increase from the previous quarter. The dividend was paid in the third quarter of fiscal 2022. Dividends of 30 cents per share were paid in the third and fourth quarters of fiscal 2021 and the first and second quarter of fiscal 2022 and 27.5 cents per share were paid in the first and second quarter of fiscal 2021.

Accumulated other comprehensive income (loss)

Components of other comprehensive income (loss) recorded in the Statements of Consolidated Comprehensive Income (Loss) are presented below.

	2022			2021		
(In millions)	Before tax	Tax (expense) benefit	Net of tax	Before tax	Tax (expense) benefit	Net of tax
Three months ended June 30						
Other comprehensive income (loss)						
Unrealized translation gain (loss)	$ (86)	$ —	$ (86)	$ 23	$ —	$ 23
Unrealized gain (loss) on commodity hedges	(4)	1	(3)	—	—	—
Total other comprehensive income (loss)	$ (90)	$ 1	$ (89)	$ 23	$ —	$ 23
Nine months ended June 30						
Other comprehensive income (loss)						
Unrealized translation gain (loss)	$ (108)	$ 1	$ (107)	$ 38	$ (1)	$ 37
Unrealized gain (loss) on commodity hedges	(3)	1	(2)	—	—	—
Total other comprehensive income (loss)	$ (111)	$ 2	$ (109)	$ 38	$ (1)	$ 37

Summary of stockholders' equity

A reconciliation of changes in stockholders' equity are as follows:

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Common stock and paid in capital				
Balance, beginning of period	$ 177	$ 773	$ 328	$ 770
Compensation expense and common shares issued (a)	1	4	5	7
Common shares purchased under repurchase program (b)	(45)	—	(200)	—
Balance, end of period	133	777	133	777
Retained earnings				
Balance, beginning of period	3,596	2,710	2,796	2,649
Adoption of new accounting pronouncements	—	—	—	(2)
Net income	36	80	870	176
Regular dividends	(18)	(19)	(52)	(52)
Balance, end of period	3,614	2,771	3,614	2,771
Accumulated other comprehensive income (loss)				
Balance, beginning of period	(392)	(369)	(372)	(383)
Unrealized translation gain (loss)	(86)	23	(107)	37
Unrealized gain (loss) on commodity hedges	(3)	—	(2)	—
Balance, end of period	(481)	(346)	(481)	(346)
Total stockholders' equity	$ 3,266	$ 3,202	$ 3,266	$ 3,202
Cash dividends declared per common share	$ 0.335	$ 0.300	$ 0.935	$ 0.850

(a) Common shares issued were 55,006 shares and 24,452 shares for the three months ended June 30, 2022 and 2021, respectively, and 163,656 shares and 165,158 shares for the nine months ended June 30, 2022 and 2021, respectively.

(b) Common shares repurchased were 449,932 and 2,853,312 shares for the three and nine months ended June 30, 2022.

NOTE O – STOCK INCENTIVE PLANS

The components of Ashland's pre-tax stock-based compensation expense included in continuing operations are as follows:

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022 (a)	2021 (b)	2022 (a)	2021 (b)
SARs	$ —	$ —	$ —	$ 1
Nonvested stock awards	4	2	10	8
Performance share awards	3	2	8	5
	$ 7	$ 4	$ 18	$ 14

(a) Included $1 million and $3 million of expense related to cash-settled nonvested restricted stock awards during the three and nine months ended June 30, 2022, and $1 million each of expense related to cash-settled performance units during the three and nine months ended June 30, 2022.

(b) Included zero and $2 million of expense related to cash-settled nonvested restricted stock awards during the three and nine months ended June 30, 2021.

NOTE P – REVENUE

Disaggregation of revenue

Ashland disaggregates its revenue by segment and geographical region as Ashland believes these categories best depict how management reviews the financial performance of its operations. Ashland includes only U.S. and Canada sales in its North America designation and includes Europe, Middle East and Africa in its Europe designation.

Sales by geography

(In millions)	Three months ended June 30 2022	Three months ended June 30 2021	Nine months ended June 30 2022	Nine months ended June 30 2021
Life Sciences				
North America	$ 70	$ 60	$ 185	$ 171
Europe	76	63	197	177
Asia Pacific	61	52	159	146
Latin America & other	21	18	61	54
	$ 228	$ 193	$ 602	$ 548

(In millions)	Three months ended June 30 2022	Three months ended June 30 2021	Nine months ended June 30 2022	Nine months ended June 30 2021
Personal Care				
North America	$ 50	$ 46	$ 146	$ 129
Europe	69	59	194	162
Asia Pacific	31	25	93	68
Latin America & other	22	17	57	50
	$ 172	$ 147	$ 490	$ 409

(In millions)	Three months ended June 30 2022	Three months ended June 30 2021	Nine months ended June 30 2022	Nine months ended June 30 2021
Specialty Additives				
North America	$ 71	$ 53	$ 185	$ 146
Europe	67	65	192	179
Asia Pacific	48	43	133	123
Latin America & other	8	8	22	26
	$ 194	$ 169	$ 532	$ 474

(In millions)	Three months ended June 30 2022	Three months ended June 30 2021	Nine months ended June 30 2022	Nine months ended June 30 2021
Intermediates				
North America	$ 47	$ 33	$ 121	$ 73
Europe	13	7	32	19
Asia Pacific	10	7	31	21
Latin America & other	3	2	8	5
	$ 73	$ 49	$ 192	$ 118

Trade receivables

Trade receivables are defined as receivables arising from contracts with customers and are recorded within the accounts receivable caption within the Condensed Consolidated Balance Sheets. Ashland's trade receivables were $444 million and $308 million as of June 30, 2022 and September 30, 2021, respectively. See Note H for additional information on Ashland's program to sell certain receivables on a revolving basis to third party banks up to an aggregate purchase limit (U.S Accounts Receivable Sales Program).

NOTE Q – REPORTABLE SEGMENT INFORMATION

Ashland determines its reportable segments based on how operations are managed internally for the products and services sold to customers, including how the results are reviewed by the chief operating decision maker, which includes determining resource allocation methodologies used for reportable segments. Operating income and EBITDA are the primary measures of performance that are reviewed by the chief operating decision maker in assessing each reportable segment's financial performance. Ashland does not aggregate operating segments to arrive at these reportable segments.

Change in reportable segments

On February 28, 2022, Ashland completed the sale of its Performance Adhesives segment. The operating results and cash flows for the Performance Adhesives segment have been classified as discontinued operations within the Consolidated Financial Statements for all periods presented. As a result, Ashland's reportable segments include Life Sciences, Personal Care, Specialty Additives and Intermediates.

Unallocated and Other includes corporate governance activities and certain legacy matters. The historical segment information has been recast to conform to the current segment structure.

Reportable segment business descriptions

Life Sciences is comprised of pharmaceuticals, nutrition, nutraceuticals, agricultural chemicals, advanced materials and fine chemicals. Pharmaceutical solutions include controlled release polymers, disintegrants, film coatings, solubilizers, and tablet binders. Nutrition solutions include thickeners, stabilizers, emulsifiers and additives for enhancing mouthfeel, controlling moisture migration, reducing oil uptake and controlling color. Nutraceutical solutions include products for weight management, joint comfort, stomach and intestinal health, sports nutrition and general wellness, and provide custom formulation, toll processing and particle engineering solutions. Customers include pharmaceutical, food, beverage, nutraceuticals and supplements manufacturers, hospitals and radiologists, and industrial manufacturers.

Personal Care (formerly Personal Care & Household) is comprised of biofunctionals, preservatives, skin care, sun care, oral care, hair care and household. These businesses have a broad range of nature-based, biodegradable, and performance ingredients for customer-driven solutions to help protect, renew, moisturize and revitalize skin and hair, and provide solutions for toothpastes, mouth washes and rinses, denture cleaning and care for teeth. Household supplies nature-derived rheology ingredients, biodegradable surface wetting agents, performance encapsulates, and specialty polymers for household, industrial and institutional cleaning products. Customers include formulators at large multinational branded consumer products companies and smaller, independent boutique companies.

Specialty Additives is comprised of rheology and performance-enhancing additives serving coatings, construction, energy, automotive and various industrial markets. Solutions include coatings additives for architectural paints, finishes and lacquers, cement and gypsum based dry mortars, ready-mixed joint compounds, synthetic plasters for commercial and residential construction, and specialty materials for industrial applications. Products include rheology modifiers (cellulosic and associative thickeners), foam control agents, surfactants and wetting agents, pH neutralizers, advanced ceramics used in catalytic converters, and environmental filters, ingredients that aid the manufacturing process of ceramic capacitors, plasma display panels and solar cells, ingredients for textile printing, thermoplastic metals and alloys for welding. Products help improve desired functional outcomes through rheology modification and control, water retention, workability, adhesive strength, binding power, film formation, deposition and suspension and emulsification. Customers include global paint manufacturers, electronics and automotive manufacturers, textile mills, the construction industry, and welders.

Intermediates (formerly Intermediates and Solvents) is comprised of the production of 1,4 butanediol (BDO) and related derivatives, including n-methylpyrrolidone. These products are used as chemical intermediates in the production of engineering polymers and polyurethanes, and as specialty process solvents in a wide array of applications including electronics, pharmaceuticals, water filtration membranes and more. Butanediol is also provided as a feedstock to Life Sciences, Personal Care, and Specialty Additives for use as a raw material.

Unallocated and Other generally includes items such as certain significant company-wide restructuring activities, corporate governance costs and legacy costs or activities that relate to divested businesses that are no longer operated by Ashland.

Reportable segment results

Results of Ashland's reportable segments are presented based on its management and internal accounting structure. The structure is specific to Ashland; therefore, the financial results of Ashland's reportable segments are not necessarily comparable with similar information for other comparable companies. Ashland allocates all significant costs to its reportable segments except for certain significant company-wide restructuring activities, certain corporate governance costs and other costs or activities that relate to former businesses that Ashland no longer operates. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded within the other net periodic benefit loss caption on the Statements of Consolidated Comprehensive Income (Loss). Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective basis.

The following table presents various financial information for each reportable segment for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30		Nine months ended June 30	
(In millions - unaudited)	2022	2021	2022	2021
SALES				
Life Sciences	$ 228	$ 193	$ 602	$ 548
Personal Care	172	147	490	409
Specialty Additives	194	169	532	474
Intermediates	73	49	192	118
Intersegment sales (a)	(23)	(15)	(57)	(29)
	$ 644	$ 543	$ 1,759	$ 1,520
OPERATING INCOME (LOSS)				
Life Sciences	$ 51	$ 37	$ 115	$ 101
Personal Care	25	16	67	49
Specialty Additives (b)	35	15	79	36
Intermediates	30	11	72	17
Unallocated and other	(64)	(34)	(121)	(92)
	$ 77	$ 45	$ 212	$ 111
DEPRECIATION EXPENSE				
Life Sciences	$ 9	$ 9	$ 25	$ 26
Personal Care	10	10	28	29
Specialty Additives	16	16	48	49
Intermediates	2	4	9	10
Unallocated and other	—	1	1	1
	$ 37	$ 40	$ 111	$ 115
AMORTIZATION EXPENSE				
Life Sciences	$ 7	$ 7	$ 21	$ 21
Personal Care	11	11	35	30
Specialty Additives	5	5	14	14
Intermediates	1	—	1	—
	$ 24	$ 23	$ 71	$ 65
EBITDA (c)				
Life Sciences	$ 67	$ 53	$ 161	$ 148
Personal Care	46	37	130	108
Specialty Additives	56	36	141	99
Intermediates	33	15	82	27
Unallocated and other	(64)	(33)	(120)	(91)
	$ 138	$ 108	$ 394	$ 291

(In millions - unaudited)	June 30 2022	September 30 2021
TOTAL ASSETS		
Life Sciences	$ 1,938	$ 1,945
Personal Care	1,087	1,145
Specialty Additives	1,601	1,636
Intermediates	185	160
Unallocated and other	1,601	1,726
	$ 6,412	$ 6,612

(a) Intersegment sales from Intermediates are accounted for at prices that approximate fair value. All other intersegment transfers are accounted for at cost.

(b) Includes a capital project impairment of $9 million for the nine months ended June 30, 2021 relating to a long-term capital project plan change at a plant facility.

(c) Excludes income (loss) from discontinued operations, other net periodic benefit income (expense) and income (loss) on acquisitions and divestitures, net. See the Statement of Consolidated Comprehensive Income (Loss) for applicable amounts excluded.

NOTE R – SUBSEQUENT EVENTS

On July 22, 2022, Ashland LLC and Ashland Services B.V., subsidiaries of Ashland, entered into an amended and restated credit agreement (the 2022 Credit Agreement) with a group of lenders, amending and restating the 2020 Credit Agreement. The 2022 Credit Agreement provides for a $600 million unsecured five-year revolving credit facility (the 2022 Revolving Credit Facility) replacing the 2020 Revolving Credit Facility. After the closing date, proceeds of borrowings under the 2022 Revolving Credit Facility will be used, among other things, to provide ongoing working capital and for other general corporate purposes.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements including, without limitation, statements made under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operation" (MD&A), 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. Ashland has identified some of these forward-looking statements with words such as "anticipates," "believes," "expects," "estimates," "is likely," "predicts," "projects," "forecasts," "objectives," "may," "will," "should," "plans" and "intends" and the negative of these words or other comparable terminology. Ashland may from time to time make forward-looking statements in its Annual Report to Shareholders, quarterly reports and other filings with the Securities and Exchange Commission (SEC), news releases and other written and oral communications. These forward-looking statements are based on Ashland's expectations and assumptions, as of the date such statements are made, regarding Ashland's future operating performance and financial condition and expected effects of the COVID-19 pandemic on Ashland's business, as well as the economy and other future events or circumstances. Ashland's expectations and assumptions include, without limitation, those mentioned within the MD&A, internal forecasts and analyses of current and future market conditions and trends, management plans and strategies, operating efficiencies, cost savings and economic conditions (such as prices, supply and demand, cost of raw materials, and the ability to recover raw-material cost increases through price increases), and risks and uncertainties associated with the following: the impact of acquisitions and/or divestitures Ashland has made or may make, including the acquisition of Schülke & Mayr's personal care business and the sale of the Performance Adhesive business (including the possibility that Ashland may not realize the anticipated benefits from such transactions); Ashland's substantial indebtedness (including the possibility that such indebtedness and related restrictive covenants may adversely affect Ashland's future cash flows, results of operations, financial condition and its ability to repay debt); execution risks associated with Ashland's growth strategies; the competitive nature of Ashland's business; severe weather, natural disasters, public health crises (including the COVID-19 pandemic), cyber events and legal proceedings and claims (including product recalls, environmental and asbestos matters); the effects of the COVID-19 pandemic, and the ongoing Ukraine and Russia conflict, on the geographies in which Ashland operates, the end markets Ashland serves and on Ashland's supply chain and customers; and without limitation, risks and uncertainties affecting Ashland that are contained in "Use of estimates, risks and uncertainties" in Note A of Notes to Consolidated Financial Statements and in Item 1A in its most recent Form 10-K filed with the SEC, which is available on Ashland's website at http://investor.ashland.com or on the SEC's website at http://www.sec.gov. Various risks and uncertainties may cause actual results to differ materially from those stated, projected or implied by any forward-looking statements. The extent and duration of the COVID-19 pandemic on our business and operations is uncertain. Factors that influence the impact on our business and operations include the duration and extent of the pandemic, the extent of imposed or recommended containment and mitigation measures, and the general economic consequences of the pandemic. Ashland believes its expectations and assumptions are reasonable, but there can be no assurance that the expectations reflected herein will be achieved. Unless legally required, Ashland undertakes no obligation to update any forward-looking statements made in this Form 10-Q whether as a result of new information, future events or otherwise. Information on Ashland's website is not incorporated into or a part of this Form 10-Q.

ASHLAND GLOBAL HOLDINGS INC. AND CONSOLIDATED SUBSIDIARIES
MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and the accompanying Notes to Condensed Consolidated Financial Statements herein.

BUSINESS OVERVIEW

Ashland profile

Ashland is a global specialty additives and materials company with a conscious and proactive mindset for sustainability. The Company serves customers in a wide range of consumer and industrial markets, architectural coatings, construction, energy, food and beverage, nutraceuticals, personal care and pharmaceutical. With approximately 3,800 employees worldwide, Ashland serves customers in more than 100 countries.

Ashland's sales generated outside of North America were 67% for the three and nine months ended June 30, 2022, respectively, and 67% and 68% for the three and nine months ended June 30, 2021, respectively. Sales by region expressed as a percentage of total consolidated sales for the three and nine months ended June 30 were as follows:

	Three months ended June 30		Nine months ended June 30	
Sales by Geography	2022	2021	2022	2021
North America (a)	33 %	33 %	33 %	32 %
Europe	35 %	36 %	35 %	35 %
Asia Pacific	23 %	23 %	24 %	24 %
Latin America & other	9 %	8 %	8 %	9 %
	100 %	100 %	100 %	100 %

(a) Ashland includes only U.S. and Canada in its North America designation and includes Europe, Middle East and Africa in its Europe designation.

Reportable segments

On August 31, 2021, Ashland announced its agreement with Arkema, a French société anonyme, to sell the Performance Adhesive business for $1.65 billion. The transaction closed February 28, 2022. Ashland received proceeds from the sale of approximately $1.7 billion, net of transaction costs. A portion of these proceeds were used during the nine months ended June 30, 2022 to reduce outstanding debt and execute an open-market stock repurchase agreement. Ashland intends to use the remaining proceeds to invest in the growth of its other reportable core businesses and explore further actions to optimize its balance sheet through debt reductions or utilization of unused authorized share repurchase program amounts. The divestiture represented a strategic shift in Ashland's business and qualified as a discontinued operation. As a result, the assets, liabilities, operating results and cash flows related to Performance Adhesives have been classified as discontinued operations for all periods presented within the Consolidated Financial Statements. See Notes B and C of the Notes to the Condensed Consolidated Financial Statements for additional information.

As a result, Ashland's reportable segments include Life Sciences, Personal Care (formerly Personal Care & Household), Specialty Additives and Intermediates (formerly Intermediates and Solvents). Unallocated and Other includes corporate governance activities and certain legacy matters. The contribution to sales by each reportable segment expressed as a percentage of total consolidated sales for the three and nine months ended June 30 was as follows:

	Three months ended June 30		Nine months ended June 30	
Sales by Reportable Segment	2022	2021	2022	2021
Life Sciences	35 %	36 %	35 %	36 %
Personal Care	27 %	27 %	28 %	27 %
Specialty Additives	30 %	31 %	30 %	31 %
Intermediates	8 %	6 %	7 %	6 %
	100 %	100 %	100 %	100 %

KEY DEVELOPMENTS

Business results current quarter

Ashland recorded net income of $36 million (income of $51 million in continuing operations and expense of $15 million in discontinued operations) and net income of $80 million (income of $72 million in continuing operations and $8 million in discontinued operations) in the current and prior year quarters, respectively. Ashland's EBITDA of $157 million increased by $39 million for the current quarter, while Ashland's Adjusted EBITDA of $174 million increased by $45 million for the current quarter, each compared to the prior year quarter (see U.S. GAAP reconciliation below under consolidated review). These increases were primarily driven by disciplined pricing leading to cost recovery in a high-inflation environment and improved product mix partially offset by unfavorable currency exchange and higher selling, general and administration costs.

Uncertainty relating to the Ukraine and Russia conflict

Business disruptions, including those related to the ongoing conflict between Ukraine and Russia continue to impact businesses around the globe. While it is impossible to predict the effects of the conflict such as possible escalating geopolitical tensions (including the imposition of existing and additional sanctions by the U.S and the European Union on Russia), worsening macroeconomic and general business conditions, supply chain interruptions and unfavorable energy markets, the impact could be material. Ashland is closely monitoring the situation and maintains business continuity plans that are intended to continue operations or mitigate the effects of events that could disrupt its business.

Ashland does not have manufacturing operations in Russia, Ukraine, or Belarus. Ashland sells (or previously sold) additives and specialty ingredients to manufacturers in these countries for their use in pharmaceuticals, personal care, and coatings applications. Sales to Russia and Belarus were previously limited and our products were primarily used in products and applications that are essential to the population's wellbeing and currently support our customers' humanitarian efforts. We have sales controls in place to ensure that future potential sales into the region are only to support critical pharmaceutical or personal hygiene products which are essential for the general population and in accordance with any applicable sanctions. Sales to Ukraine, Russia, and Belarus represent less than 1% of total sales and less than 1% of total assets (related to accounts receivable).

Uncertainty relating to the COVID-19 pandemic

Ashland continues to closely monitor the impact of the COVID-19 pandemic on all aspects of its business and geographies, including how it will impact customers, employees, suppliers, vendors, business partners and distribution channels. Ashland is unable to predict the impact that the COVID-19 pandemic will have on its future financial position and operating results due to numerous uncertainties. These uncertainties include the severity of the virus, the duration of the outbreak, governmental, business or other actions, impacts on Ashland's supply chain, the effect on customer demand, or changes to Ashland's operations. The health of Ashland's workforce and its ability to meet staffing needs throughout the critical functions cannot be predicted and is vital to operations. Further, the impacts of a potential worsening of global economic conditions and the continued disruptions to, and volatility in, the credit and financial markets, consumer spending as well as other unanticipated consequences remain unknown. In addition, Ashland cannot predict the impact that the COVID-19 pandemic will have on its customers, vendors, suppliers and other business partners; however, any material effect on these parties could adversely impact Ashland.

Ashland continues to successfully navigate the uncertain environment associated with the COVID-19 pandemic. Through the third quarter of fiscal 2022, Ashland has not experienced any additional major operating surprises related to the COVID-19 pandemic, continues to maintain supply chains in a challenging environment, had strong safety performance in the face of unprecedented pressures and improved operating discipline across each of its businesses. Ashland's businesses continued to show resiliency in the face of difficult economic circumstances. While sales were up in the quarter period-over-period, continued supply-chain and labor-shortage challenges inhibited Ashland's ability to meet strong overall customer demand. Ashland continues to carry a large backlog of unconfirmed orders it cannot commit to supply at this time. Ashland's overall liquidity remains strong and Ashland is able to meet its operating cash needs and other investing and financing cash requirements at this time, including those necessary to grow the business.

The situation surrounding the COVID-19 pandemic remains fluid, and Ashland is actively managing its response in collaboration with customers, government officials, team members and business partners. For further information regarding the impact of the COVID-19 pandemic on the Company, please see Item 1A, Risk Factors in Ashland's most recent Form 10-K filed with the SEC.

Other items

Performance Adhesives

Ashland completed the sale of its Performance Adhesives business segment on February 28, 2022, resulting in proceeds to Ashland of approximately $1.7 billion, net of transaction costs. Ashland recognized an after-tax gain of $732 million within the Income from Discontinued Operations caption of the Statement of Consolidated Comprehensive Income (Loss) for the nine months ended June 30, 2022 related to the sale of Performance Adhesives. Since this transaction represented a strategic shift in Ashland's business and had a major effect on Ashland's operations and financial results, the operating results and cash flows related to Performance Adhesives have been reflected as discontinued operations in the statement of Consolidated Comprehensive Income (Loss) and Statements of Condensed Consolidated Cash Flows. See Notes B and C of the Notes to the Condensed Consolidated Financial Statements for more information. Certain indirect corporate costs included within the selling, general and administrative expense caption of the Statement of Consolidated Comprehensive Income (Loss) that were previously allocated to the Performance Adhesives segment do not qualify for classification within discontinued operations and are now reported as selling, general and administrative expense within continuing operations on a consolidated basis and within the Unallocated and other segment. These costs were $1 million and $4 million for the three months ended June 30, 2022 and 2021, respectively, and $8 million and $12 million for the nine months ended June 30, 2022 and 2021, respectively. Ashland is currently implementing plans to eliminate certain of these costs.

Debt Repayment Activities

Ashland used a portion of the proceeds from the sale of its Performance Adhesives segment, during the second quarter of fiscal 2022, to prepay $250 million of principal on its Term loan A, reduce $240 million of outstanding borrowing under the 2020 Revolving Credit Facility, reduce $102 million of outstanding borrowing under the Foreign Accounts Receivable Securitization Facility, and repay the $23 million outstanding balance on its European short-term loan facility during the nine months ended June 30, 2022.

2022 Stock repurchase program

On May 25, 2022, Ashland's board of directors authorized a new, evergreen $500 million common share repurchase program (2022 stock repurchase program). The new authorization terminates and replaces the company's 2018 $1 billion share repurchase program, which had $150 million outstanding at the date of termination.

2018 Stock repurchase program

In September 2021, under the 2018 stock repurchase program, Ashland entered into an accelerated share repurchase agreement (2021 ASR Agreement). Under the 2021 ASR Agreement, Ashland paid an initial purchase price of $450 million and received an initial delivery of 3.9 million shares of common stock during September 2021. The bank exercised its early termination option under the 2021 ASR Agreement in February 2022, and an additional 0.7 million shares were repurchased, bringing the total shares repurchased upon settlement to 4.6 million.

On March 1, 2022, under the 2018 stock repurchase program, Ashland entered into an agreement to repurchase an aggregate amount of $200 million of Ashland common stock using open-market purchases under rule 10b-18. On April 8, 2022, Ashland completed repurchases under this agreement repurchasing a total of 2.15 million shares for a total amount of $200 million.

Operational business model changes and restructurings

As previously disclosed, during the second quarter of fiscal year 2020, Ashland changed the manner in which it manages the business moving from a functionally led to a business led organization. This new business-centric operational redesign of core operating systems and processes lead to a realignment in both the selling, general and administrative and research and development costs (SARD) associated with each business. In addition to the realignment of SARD, a productivity review with a focus on cost of goods sold (COGS) was also initiated. Based on these initiatives, Ashland targeted the following savings:

- $50 million of incremental SARD cost savings
- $50 million of incremental COGS productivity savings

As of June 30, 2022, Ashland has achieved substantially all of its target run-rate cost savings under these initiatives.

RESULTS OF OPERATIONS – CONSOLIDATED REVIEW

Consolidated review

Net income

Ashland’s net income is primarily affected by results within operating income, net interest and other expense, income taxes, discontinued operations and other significant events or transactions that are unusual or nonrecurring.

<u>Current Quarter</u> - Key financial results for the three months ended June 30, 2022 and 2021 included the following:

- Ashland’s net income amounted to $36 million compared to $80 million for the three months ended June 30, 2022 and 2021, respectively, or income of $0.65 and $1.29 diluted earnings per share, respectively.
- Discontinued operations, which are reported net of taxes, resulted in expense of $15 million and income of $8 million during the three months ended June 30, 2022 and 2021, respectively.
- Income from continuing operations, which excludes results from discontinued operations, amounted to income of $51 million and $72 million for the three months ended June 30, 2022 and 2021, respectively.

- The effective income tax rates were an expense of 2% and a benefit of 57% for the three months ended June 30, 2022 and 2021, respectively, and were significantly impacted by certain tax discrete items in both the current and prior year quarters.
- Ashland incurred pretax net interest and other expense of $59 million and $1 million for the three months ended June 30, 2022 and 2021, respectively. This includes losses of $48 million and gains of $15 million on restricted investments, respectively, for the current and prior year quarters.
- Other net periodic benefit loss amounted to a loss of $1 million in the current period.
- Income on acquisitions and divestitures, was $35 million and $2 million for the three months ended June 30, 2022 and 2021, respectively, reflecting the gain on sale of an excess and unused parcel of land in the current quarter.
- Operating income was $77 million and $45 million for the three months ended June 30, 2022 and 2021, respectively.

Year-to-date - Key financial results for the nine months ended June 30, 2022 and 2021 included the following:

- Ashland's net income amounted to $870 million compared to $176 million for the nine months ended June 30, 2022 and 2021, respectively, or income of $15.28 and $2.87 diluted earnings per share, respectively.
- Discontinued operations, which are reported net of taxes, resulted in income of $749 million and $37 million during the nine months ended June 30, 2022 and 2021, respectively. The current period includes a $732 million gain on the sale of the Performance Adhesives business segment.
- Income from continuing operations, which excludes results from discontinued operations, amounted to income of $121 million and $139 million for the nine months ended June 30, 2022 and 2021, respectively.
- The effective income tax rates were an expense of 17% and a benefit of 34% for the nine months ended June 30, 2022 and 2021, respectively, and were significantly impacted by certain tax discrete items in both the current and prior year periods.
- Ashland incurred pretax net interest and other expense of $108 million and $18 million for the nine months ended June 30, 2022 and 2021, respectively. This includes losses of $72 million and gains of $26 million on restricted investments, respectively, for the current and prior year periods.
- Other net periodic benefit loss netted to zero for both the current and prior year periods. See Note K for more information.
- Income on acquisitions and divestitures, was $42 million and $11 million for the nine months ended June 30, 2022 and 2021, respectively, reflecting the gain on sale of two excess and unused parcels of land in the current period.
- Operating income was $212 million and $111 million for the nine months ended June 30, 2022 and 2021, respectively.

For further information on the items reported above, see the discussion in the comparative Statements of Consolidated Comprehensive Income (Loss) caption review analysis.

Operating income

Current Quarter - Operating income amounted to income of $77 million and $45 million for the three months ended June 30, 2022 and 2021, respectively. The current and prior year quarters' operating income included certain key items that were excluded to arrive at Adjusted EBITDA and are quantified in the table below in the "EBITDA and Adjusted EBITDA" section. These operating key items for the applicable periods are summarized as follows:

- Restructuring, separation and other costs – Ashland periodically implements company-wide cost reduction programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure. Ashland often incurs severance, facility and integration costs associated with these programs. As a result of these activities, Ashland recorded expenses in the current and prior year quarters. See Note D in the Notes to Condensed Consolidated Financial Statements for further information on the restructuring activities.
- Inventory adjustment - Ashland recorded non-cash charges related to the fair value adjustment of inventory acquired from Schülke at the date of acquisition during the prior year quarter.
- Environmental reserve adjustments – Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively environmental remediation) at multiple locations. As a result of these activities, Ashland recorded adjustments during the current and prior year quarters to its environmental liabilities and receivables related to operating facilities and previously divested businesses or non-operational sites. See Note L of the Notes to Condensed Consolidated Financial Statements for more information.

Operating income for the three months ended June 30, 2022 and 2021 included depreciation and amortization of $61 million and $63 million, respectively.

Year-to-date - Operating income amounted to income of $212 million and $111 million for the nine months ended June 30, 2022 and 2021, respectively. The current and prior year periods' operating income included certain key items that were excluded to arrive at Adjusted EBITDA and are quantified in the table below in the "EBITDA and Adjusted EBITDA" section. These operating key items for the applicable periods are summarized as follows:

- Restructuring, separation and other costs – Ashland periodically implements company-wide cost reduction programs related to acquisitions, divestitures and other cost reduction programs in order to enhance profitability through streamlined operations and an improved overall cost structure. Ashland often incurs severance, facility and integration costs associated with these programs. As a result of these activities, Ashland recorded expenses in the current and prior year periods. See Note D in the Notes to Condensed Consolidated Financial Statements for further information on the restructuring activities.
- Inventory adjustment - Ashland recorded non-cash charges related to the fair value adjustment of inventory acquired from Schülke at the date of acquisition during the prior year period.
- During the nine months ended June 30, 2021, Ashland incurred an impairment charge associated with a long-term capital project plan change at a plant facility.
- Environmental reserve adjustments – Ashland is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively environmental remediation) at multiple locations. As a result of these activities, Ashland recorded adjustments during the current and prior year periods to its environmental liabilities and receivables related to operating facilities and previously divested businesses or non-operational sites. See Note L of the Notes to Condensed Consolidated Financial Statements for more information.

Operating income for the nine months ended June 30, 2022 and 2021 included depreciation and amortization of $182 million and $180 million, respectively.

Non-operating key items affecting EBITDA

- Income on acquisitions and divestitures, net – Ashland recorded income of $35 and $2 million during the three months ended June 30, 2022 and 2021, respectively, and income of $42 million and $11 million during the nine months ended June 30, 2022 and 2021, respectively. The income for the three and nine months ended June 30, 2022 related to pre-tax gains related to the sale of excess corporate property. Additionally, Ashland recorded a $2 million gain and $3 million expense relating to transaction costs associated with Schülke during the three and nine months ended June 30, 2021, respectively, and a $14 million gain related to the sale of a Specialty Additives facility during the nine months ended June 30, 2021.

Statements of Consolidated Comprehensive Income (Loss) – caption review

A comparative analysis of the Statements of Consolidated Comprehensive Income (Loss) by caption is provided as follows for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Sales	$ 644	$ 543	$ 101	$ 1,759	$ 1,520	$ 239

The following table provides a reconciliation of the change in sales for the three and nine months ended June 30, 2022 and 2021.

(In millions)	Three months ended June 30, 2022	Nine months ended June 30, 2022
Volume	$ 18	$ 37
Pricing/product mix	97	193
Foreign currency	(26)	(44)
Acquisition	12	53
Change in sales	$ 101	$ 239

Current Quarter - Sales for the current quarter increased $101 million compared to the prior year quarter. Favorable volume, including the acquisition of Schülke within the Personal Care reportable segment, and product pricing/product mix associated with cost inflation pricing actions increased sales by $30 million and $97 million, respectively, partially offset by unfavorable foreign currency exchange of $26 million.

Year-to-date - Sales for the current year increased $239 million compared to the prior year period. Favorable volume, including the acquisition of Schülke within the Personal Care reportable segment, and product pricing/product mix associated with cost inflation pricing actions increased sales by $90 million and $193 million, respectively, partially offset by unfavorable foreign currency exchange of $44 million.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Cost of sales	$ 404	$ 370	$ 34	$ 1,139	$ 1,040	$ 99
Gross profit as a percent of sales	37.3%	31.9%		35.2%	31.6%	

The following table provides a reconciliation of the change in cost of sales between the three and nine months ended June 30, 2022 and 2021.

(In millions)	Three months ended June 30, 2022	Nine months ended June 30, 2022
Changes in:		
Volume	$ 12	$ 24
Price/mix	28	68
Foreign currency	(12)	(23)
Acquisition	6	30
Change in cost of sales	$ 34	$ 99

Current Quarter - Cost of sales for the current quarter increased $34 million compared to the prior year quarter. Price/mix, which includes cost inflation associated with plant manufacturing and shipping costs, and higher volume, including Schülke, increased cost of sales by $28 million and $18 million, respectively. These increases were partially offset by foreign currency exchange, which decreased cost of sales by $12 million. Disciplined pricing and mix actions by Ashland's commercial teams continue to improve operating margins as gross profit as a percentage of sales expanded 5.4 percentage points during the current quarter.

Year-to-date - Cost of sales for the current year increased $99 million compared to the prior year period. Price/mix, which includes cost inflation associated with plant manufacturing and shipping costs, and higher volume, including Schülke, increased cost of sales by $68 million and $54 million, respectively. These increases were partially offset by foreign currency exchange, which decreased cost of sales by $23 million. Disciplined pricing and mix actions by Ashland's commercial teams continue to improve operating margins as gross profit as a percentage of sales expanded 3.6 percentage points during the current period.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Selling, general and administrative expense	$ 127	$ 93	$ 34	$ 299	$ 274	$ 25
As a percent of sales	19.7%	17.1%		17.0%	18.0%	

Current Quarter - Selling, general and administrative expense for the current quarter increased $34 million compared to the prior year quarter with expenses as a percent of sales increasing 2.6 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year quarter were:

- Expense of $1 million and income of $3 million during the three months ended June 30, 2022 and 2021, respectively, comprised of key items for severance, lease abandonment and other restructuring costs;
- $36 million and $22 million in net environmental-related expenses during the current and prior year quarter, respectively (see Note L for more information); and
- Increases associated with the following:
  - o Higher incentive pay of $6 million;
  - o Higher deferred and stock compensation expense of $4 million;
  - o Lower transition services income from INEOS of $3 million;
  - o Higher salary and benefits of $2 million; and
  - o Higher Schülke expense of $1 million.

Year-to-date - Selling, general and administrative expense for the current period increased $25 million compared to the prior year period with expenses as a percent of sales decreasing 1.0 percentage points. Key drivers of the fluctuation in selling, general and administrative expense compared to the prior year period were:

- Expense of $3 million and $10 million comprised of key items for severance, lease abandonment and other restructuring costs during the nine months ended June 30, 2022 and 2021, respectively;
- $9 million decrease related to a capital project impairment during the nine months ended June 30, 2021;
- $48 million and $35 million in net environmental-related expenses during the current and prior year period, respectively (see Note L for more information); and
- Increases associated with the following:
  - o Lower transition services income from INEOS of $8 million;
  - o Higher deferred and stock compensation expense of $7 million;
  - o Higher Schülke expense of $6 million;
  - o Higher incentive pay of $4 million; and
  - o Higher salary, benefits and travel and entertainment expenses of $3 million.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Research and development expense	$ 14	$ 13	$ 1	$ 40	$ 37	$ 3

Current Quarter - Research and development expense remained relatively consistent with the prior year quarter.

Year-to-date - Research and development expense increased $3 million primarily due to increased incentive accruals and the Schülke acquisition.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Intangibles amortization expense	$ 23	$ 23	$ —	$ 71	$ 65	$ 6

Current Quarter - The increase in amortization expense remained relatively consistent with the prior year quarter.

Year-to-date - The increase in amortization expense in the current year period is due to the amortization of intangible assets associated with the Schülke acquisition.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Equity and other income						
Other income	$ 1	$ 1	$ —	$ 2	$ 7	$ (5)
	$ 1	$ 1	$ —	$ 2	$ 7	$ (5)

Current Quarter - Other income remained relatively consistent with the prior year quarter.

Year-to-date - Other income of $7 million in the prior year period is primarily due to a gain on sale of corporate property, plant and equipment of roughly $4 million.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Net interest and other expense (income)						
Interest expense	$ 14	$ 17	$ (3)	$ 47	$ 50	$ (3)
Loss (income) from restricted investments	45	(17)	62	59	(36)	95
Other financing costs	—	1	(1)	2	4	(2)
	$ 59	$ 1	$ 58	$ 108	$ 18	$ 90

Current Quarter - Net interest and other expense increased by $58 million during the current quarter compared to the prior year quarter. Interest expense decreased $3 million primarily due to lower debt levels during the current quarter compared to the prior year quarter. Restricted investments loss of $45 million and income $17 million included realized losses of $48 million compared to gains of $15 million for the three months ended June 30, 2022 and 2021, respectively. See Note E for more information on the restricted investments.

Year-to-date - Net interest and other expense increased by $90 million during the current period compared to the prior year period. Interest expense decreased $3 million primarily due to lower debt levels during the current period compared to the prior year period. Restricted investments loss of $59 million and income of $36 million included realized losses of $72 million compared to gains of $26 million for the nine months ended June 30, 2022 and 2021, respectively. See Note E for more information on the restricted investments.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Other net periodic benefit loss	$ (1)	$ —	$ (1)	$ —	$ —	$ —

Current Quarter - Other net periodic benefit loss was minimal in both quarters.

Year-to-date - Other net periodic benefit loss included a $1 million actuarial gain on the remeasurement of a pension plan during the current period and netted to zero in each period. See Note K for more information.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Net income on acquisitions and divestitures	$ 35	$ 2	$ 33	$ 42	$ 11	$ 31

Current Quarter -The activity in the current quarter was related to a gain on the sale of excess corporate property. The activity in the prior year quarter related to a $2 million gain in transaction net costs associated with the acquisition of Schülke.

Year-to-date - The activity in the current year was related to gains on the sale of excess corporate property. The activity in the prior year related to a $3 million expense associated with acquisition related transactional costs (including gains associated with foreign currency derivatives) and a $14 million gain related to the sale of a Specialty Additives facility.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Income tax expense (benefit)	$ 1	$ (26)	$ 27	$ 25	$ (35)	$ 60
Effective tax rate	2%	-57%		17%	-34%	

Current Quarter - Ashland's effective tax rate in any interim period is subject to adjustments related to discrete items and the mix of domestic and foreign operating results. The overall effective tax rate was 2% for the three months ended June 30, 2022 and was impacted by jurisdictional income mix, as well as a net $1 million benefit primarily from favorable return to provision adjustments for certain jurisdictions.

The overall effective tax rate was a benefit of 57% for the three months ended June 30, 2021 and was impacted by jurisdictional income mix, as well as favorable discrete items of $33 million primarily related to uncertain tax positions.

Year-to-date - Ashland's effective tax rate in any interim period is subject to adjustments related to discrete items and the mix of domestic and foreign operating results. The overall effective tax rate was 17% for the nine months ended June 30, 2022 and was impacted by jurisdictional income mix, as well as net unfavorable discrete items of $3 million, primarily related to restructuring and separation activity partially offset by a favorable valuation allowance for certain foreign tax credits and adjustments to uncertain tax positions.

The overall effective tax rate was a benefit of 34% for the nine months ended June 30, 2021 and was impacted by jurisdictional income mix, as well as favorable discrete items of $53 million primarily related to the sale of a Specialty Additives facility and adjustments to uncertain tax positions.

Adjusted income tax expense (benefit)

Key items are defined as the financial effects from significant transactions that may have caused short-term fluctuations in net income and/or operating income which Ashland believes do not accurately reflect Ashland's underlying business performance and trends. Tax specific key items are defined as the financial effects from tax specific financial transactions, tax law changes or other matters that fall within the definition of key items as previously described. The effective tax rate, excluding key items, which is a non-GAAP measure, has been prepared to illustrate the ongoing tax effects of Ashland's operations. Management believes investors and analysts use this financial measure in assessing Ashland's business performance and that presenting this non-GAAP measure on a consolidated basis assists investors in better understanding Ashland's ongoing business performance and enhancing their ability to compare period-to-period financial results.

The effective tax rate during the three and nine months ended June 30, 2022 and 2021 was significantly impacted by the following tax specific key items:

- Uncertain tax positions - Includes the impact from the settlement of uncertain tax positions with various taxing authorities;
- Valuation allowances - Includes the impact from the release of certain foreign tax credit valuation allowances during 2022; and
- Restructuring and separation activity – Includes the impact from company-wide cost reduction programs, and the impact of the sale of a Specialty Additives facility.

The following table is a calculation of the effective tax rate, excluding these key items.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Income from continuing operations before income taxes	$ 52	$ 46	$ 146	$ 104
Key items (pre-tax) (a)	50	4	79	18
Adjusted income from continuing operations before income taxes	$ 102	$ 50	$ 225	$ 122
Income tax expense (benefit)	$ 1	$ (26)	$ 25	$ (35)
Income tax rate adjustments:				
Tax effect of key items	16	1	22	3
Tax specific key items: (b)				
Uncertain tax positions	—	33	—	39
Valuation allowance	—	—	4	—
Restructuring and separation activity	—	—	(10)	13
Total income tax rate adjustments	16	34	16	55
Adjusted income tax expense	$ 17	$ 8	$ 41	$ 20
Effective tax rate, excluding key items (Non-GAAP) (c)	16%	16%	18%	16%

(a) See Adjusted EBITDA reconciliation table disclosed in this MD&A for a summary of the key items, before tax.
(b) For additional information on the effect that these tax specific key items had on EPS, see the Adjusted Diluted EPS table disclosed in this MD&A.
(c) Due to rounding conventions, the effective tax rate presented may not recalculate precisely based on the numbers disclosed within this table.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Income (loss) from discontinued operations (net of taxes)						
Performance Adhesives	$ 4	$ 15	$ (11)	$ 38	$ 51	$ (13)
Composites/Marl facility	—	2	(2)	—	1	(1)
Valvoline	—	2	(2)	—	2	(2)
Asbestos	(13)	(8)	(5)	(13)	(8)	(5)
Water Technologies	(1)	(1)	—	(1)	(1)	—
Distribution	(5)	(2)	(3)	(7)	(4)	(3)
Gain (loss) on disposal of discontinued operations (net of taxes)						
Performance Adhesives	—	—	—	732	—	732
Composites/Marl facility	—	—	—	—	(4)	4
	$ (15)	$ 8	$ (23)	$ 749	$ 37	$ 712

<u>Current Quarter</u> - The activity for Water Technologies, Distribution, Valvoline and Composites/Marl facility during the current and prior year quarters was related to post-closing adjustments. The Performance Adhesives segment sales and pre-tax operating income included in discontinued operations were $94 million and $17 million, respectively, for the prior year quarter. The Performance Adhesives activity for the current quarter related to post-closing adjustments. Asbestos activity in each quarter primarily related to Ashland's annual update.

Year-to-date - The activity for Water Technologies, Distribution, Valvoline and Composites/Marl facility during the current and prior year periods was related to post-closing adjustments. The Composites/Marl Facility gain activity for the prior year period included post-closing purchase price dispute adjustments. The Performance Adhesives segment sales and pre-tax operating income included in discontinued operations were $171 million and $34 million, and $266 million and $63 million, respectively, for the current and prior year periods. A $732 million gain on disposal was recorded in the current period associated with the February 28, 2022 closing of the Performance Adhesives business segment divestiture. Asbestos activity in each period primarily related to Ashland's annual update.

Other comprehensive income (loss)

A comparative analysis of the components of other comprehensive income is provided below for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30			Nine months ended June 30		
(In millions)	2022	2021	Change	2022	2021	Change
Other comprehensive income (loss) (net of taxes)						
Unrealized translation gain (loss)	$ (86)	$ 23	$ (109)	$ (107)	$ 37	$ (144)
Unrealized gain (loss) on commodity hedges	(3)	—	(3)	(2)	—	(2)
	$ (89)	$ 23	$ (112)	$ (109)	$ 37	$ (146)

Current Quarter - Total other comprehensive income (loss), net of tax, for the current quarter decreased $112 million compared to the prior year quarter primarily as a result of the following:

- For the three months ended June 30, 2022, the change in unrealized gain (loss) from foreign currency translation adjustments resulted in a loss of $86 million compared to a gain of $23 million for the three months ended June 30, 2021. The fluctuations in unrealized translation gains and losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- For the three months ended June 30, 2022, the change in commodity hedges is primarily due to the fluctuations of the market prices of the underlying commodities.

Year-to-date - Total other comprehensive income (loss), net of tax, for the current year decreased $146 million compared to the prior year period primarily as a result of the following:

- For the nine months ended June 30, 2022, the change in unrealized gain (loss) from foreign currency translation adjustments resulted in a loss of $107 million compared to a gain of $37 million for the nine months ended June 30, 2021. The fluctuations in unrealized translation gains and losses are primarily due to translating foreign subsidiary financial statements from local currencies to U.S. Dollars.
- For the nine months ended June 30, 2022, the change in commodity hedges is primarily due to the fluctuations of the market prices of the underlying commodities.

Use of non-GAAP measures

Ashland has included within this document the following non-GAAP measures, on both a consolidated and reportable segment basis, which are not defined within U.S. GAAP and do not purport to be alternatives to net income or cash flows from operating activities as a measure of operating performance or cash flows:

- EBITDA – net income (loss), plus income tax expense (benefit), net interest and other expenses, and depreciation and amortization.
- Adjusted EBITDA – EBITDA adjusted for discontinued operations, income (loss) on acquisitions and divestitures, other income and (expense) and key items (including remeasurement gains and losses related to pension and other postretirement plans).
- Adjusted EBITDA margin – Adjusted EBITDA divided by sales.
- Adjusted diluted earnings per share (EPS) – income (loss) from continuing operations, adjusted for key items, net of tax, divided by the average outstanding diluted shares for the applicable period.
- Adjusted diluted earnings per share (EPS) excluding intangibles amortization expense – Adjusted earnings per share adjusted for intangibles amortization expense net of tax, divided by the average outstanding diluted shares for the applicable period.
- Free cash flow – operating cash flows less capital expenditures.
- Ongoing free cash flow – operating cash flows less capital expenditures and certain other adjustments as applicable.
- Ongoing free cash flow conversion – ongoing free cash flow divided by adjusted EBITDA.

Management believes the use of EBITDA and Adjusted EBITDA measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting comparable financial results between periods. Ashland believes that by removing the impact of depreciation and amortization and excluding certain non-cash charges, amounts spent on interest and taxes and certain other charges that are highly variable from year to year, EBITDA and Adjusted EBITDA provide Ashland’s investors with performance measures that reflect the impact to operations from trends in changes in sales, margin and operating expenses, providing a perspective not immediately apparent from net income and operating income. The adjustments Ashland makes to derive the non-GAAP measures of EBITDA and Adjusted EBITDA exclude items which may cause short-term fluctuations in net income and operating income and which Ashland does not consider to be the fundamental attributes or primary drivers of its business. EBITDA and Adjusted EBITDA provide disclosure on the same basis as that used by Ashland’s management to evaluate financial performance on a consolidated and reportable segment basis and provide consistency in our financial reporting, facilitate internal and external comparisons of Ashland’s historical operating performance and its business units and provide continuity to investors for comparability purposes.

The Adjusted diluted EPS metric enables Ashland to demonstrate what effect key items have on an earnings per diluted share basis by taking income (loss) from continuing operations, adjusted for key items after tax that have been identified in the Adjusted EBITDA table, and dividing by the average outstanding diluted shares for the applicable period. Ashland’s management believes this presentation is helpful to illustrate how the key items have impacted this metric during the applicable period.

The Adjusted diluted EPS, excluding intangibles amortization expense metric enables Ashland to demonstrate the impact of non-cash intangibles amortization expense on EPS, in addition to the key items previously mentioned. Ashland’s management believes this presentation is helpful to illustrate how previous acquisitions impact applicable period results.

The free cash flow metrics enable Ashland to provide a better indication of the ongoing cash being generated that is ultimately available for both debt and equity holders as well as other investment opportunities. Unlike cash flow provided by operating activities, free cash flow and ongoing free cash flow includes the impact of capital expenditures from continuing operations and other significant items impacting cash flow, providing a more complete picture of current and future cash generation. Free cash flow has certain limitations, including that it does not reflect adjustment for certain non-discretionary cash flows such as mandatory debt repayments. The amount of mandatory versus discretionary expenditures can vary significantly between periods.

Although Ashland may provide forward-looking guidance for Adjusted EBITDA, Adjusted diluted EPS and ongoing free cash flow, Ashland is not reaffirming or providing forward-looking guidance for U.S. GAAP-reported financial measures or a reconciliation of forward-looking non-GAAP financial measures to the most directly comparable U.S. GAAP measure because it is unable to predict with reasonable certainty the ultimate outcome of certain significant items that affect these metrics such as domestic and international economic, political, legislative, regulatory and legal actions. In addition, certain economic conditions, such as recessionary trends, inflation, interest and monetary exchange rates, government fiscal policies and changes in the prices of certain key raw materials, can have a significant effect on operations and are difficult to predict with certainty.

These non-GAAP measures should be considered supplemental in nature and should not be construed as more significant than comparable measures defined by U.S. GAAP. Limitations associated with the use of these non-GAAP measures include that these measures do not present all of the amounts associated with our results as determined in accordance with U.S. GAAP. The non-GAAP measures provided are used by Ashland management and may not be determined in a manner consistent with the methodologies used by other companies. EBITDA and Adjusted EBITDA provide a supplemental presentation of Ashland's operating performance on a consolidated and reportable segment basis. Adjusted EBITDA generally includes adjustments for items that impact comparability between periods. In addition, certain financial covenants related to Ashland's 2020 Credit Agreement are based on similar non-GAAP measures and are defined further in the sections that refer to this metric.

EBITDA and Adjusted EBITDA

EBITDA totaled income of $157 million and $118 million for the three months ended June 30, 2022 and 2021, respectively, and $1,185 million and $339 million for the nine months ended June 30, 2022 and 2021, respectively. EBITDA and Adjusted EBITDA results in the table below have been prepared to illustrate the ongoing effects of Ashland's operations, which exclude certain key items previously described. Management believes the use of such non-GAAP measures on a consolidated and reportable segment basis assists investors in understanding the ongoing operating performance by presenting the financial results between periods on a more comparable basis.

	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Net income	$ 36	$ 80	$ 870	$ 176
Income tax expense (benefit)	1	(26)	25	(35)
Net interest and other expense	59	1	108	18
Depreciation and amortization	61	63	182	180
EBITDA	157	118	1,185	339
(Income) loss from discontinued operations (net of tax)	15	(8)	(749)	(37)
Key items included in EBITDA:				
Restructuring, separation and other costs	1	(2)	3	10
Capital project impairment	—	—	—	9
Environmental reserve adjustments	36	21	46	34
Inventory adjustment	—	2	—	2
Gain on acquisitions and divestitures	(35)	(2)	(42)	(11)
Total key items included in EBITDA	2	19	7	44
Adjusted EBITDA	$ 174	$ 129	$ 443	$ 346
Total key items included in EBITDA	$ 2	$ 19	$ 7	$ 44
Unrealized (gain) loss on securities	48	(15)	72	(26)
Total key items, before tax	$ 50	$ 4	$ 79	$ 18

Diluted EPS and Adjusted Diluted EPS

The following table reflects the U.S. GAAP calculation for the income from continuing operations adjusted for the cumulative diluted EPS effect for key items after tax that have been identified in the Adjusted EBITDA table in the previous section. Key items are defined as the financial effects from significant transactions that may have caused short-term fluctuations in net income and/or operating income which Ashland believes do not accurately reflect Ashland's underlying business performance and trends. The Adjusted diluted EPS for the income from continuing operations in the following table has been prepared to illustrate the ongoing effects of Ashland's operations. Management believes investors and analysts use this financial measure in assessing Ashland's business performance and that presenting this non-GAAP measure on a consolidated basis assists investors in better understanding Ashland's ongoing business performance and enhances their ability to compare period-to-period financial results.

	Three months ended June 30		Nine months ended June 30	
	2022	2021	2022	2021
Diluted EPS from continuing operations (as reported)	$ 0.93	$ 1.17	$ 2.12	$ 2.27
Key items, before tax:				
Restructuring, separation and other costs	0.02	(0.04)	0.06	0.16
Environmental reserve adjustments	0.65	0.33	0.81	0.54
Capital project impairment	—	—	—	0.16
Inventory adjustment	—	0.03	—	0.03
Unrealized (gain) loss on securities	0.87	(0.24)	1.26	(0.42)
Net gain on acquisitions and divestitures	(0.63)	(0.03)	(0.73)	(0.17)
Key items, before tax	0.91	0.05	1.40	0.30
Tax effect of key items (a)	(0.29)	(0.02)	(0.39)	(0.05)
Key items, after tax	0.62	0.03	1.01	0.25
Tax specific key items:				
Restructuring and separation activity	—	—	0.18	(0.22)
Valuation allowance	—	—	(0.07)	—
Uncertain tax positions	—	(0.52)	—	(0.63)
Tax specific key items (b)	—	(0.52)	0.11	(0.85)
Total key items	0.62	(0.49)	1.12	(0.60)
Adjusted diluted EPS from continuing operations (non-GAAP)	$ 1.55	$ 0.68	$ 3.24	$ 1.67
Amortization expense adjustment (net of tax) (c)	$ 0.34	$ 0.30	$ 1.00	$ 0.85
Adjusted diluted EPS from continuing operations (non-GAAP) excluding intangibles amortization expense	$ 1.89	$ 0.98	$ 4.24	$ 2.52

(a) Represents the diluted EPS impact from the tax effect of the key items that are identified above.

(b) Represents the diluted EPS impact from tax specific financial transactions, tax law changes or other matters that fall within the definition of key items. For additional explanation of these tax specific key items, see the income tax expense (benefit) discussion within the Statements of Consolidated Comprehensive Income (Loss) caption review section above.

(c) Amortization expense adjustment (net of tax) tax rates were 20% and 21% for the three months ended June 30, 2022 and 2021, respectively, and 20% and 21% for the nine months ended June 30, 2022 and 2021, respectively.

RESULTS OF OPERATIONS – REPORTABLE SEGMENT REVIEW

Ashland's reportable segments include Life Sciences, Personal Care (formerly Personal Care and Household), Specialty Additives, and Intermediates (formerly Intermediates and Solvents). Unallocated and Other includes corporate governance activities and certain legacy matters.

Results of Ashland's reportable segments are presented based on its management and internal accounting structure. The structure is specific to Ashland; therefore, the financial results of Ashland's reportable segments are not necessarily comparable with similar information for other companies. Ashland allocates all significant costs to its reportable segments except for certain significant company-wide restructuring activities, certain corporate governance costs and other costs or activities that relate to former businesses that Ashland no longer operates. The service cost component of pension and other postretirement benefits costs is allocated to each reportable segment on a ratable basis; while the remaining components of pension and other postretirement benefits costs are recorded within the other net periodic benefit loss caption on the Statements of Consolidated Comprehensive Income (Loss). Ashland refines its expense allocation methodologies to the reportable segments from time to time as internal accounting practices are improved, more refined information becomes available and the industry or market changes. Significant revisions to Ashland's methodologies are adjusted for all segments on a retrospective basis.

The following table discloses sales, operating income, depreciation and amortization and EBITDA by reportable segment for the three and nine months ended June 30, 2022 and 2021.

	Three months ended June 30		Nine months ended June 30	
(In millions - unaudited)	2022	2021	2022	2021
SALES				
Life Sciences	$ 228	$ 193	$ 602	$ 548
Personal Care	172	147	490	409
Specialty Additives	194	169	532	474
Intermediates	73	49	192	118
Intersegment sales (a)	(23)	(15)	(57)	(29)
	$ 644	$ 543	$ 1,759	$ 1,520
OPERATING INCOME (LOSS)				
Life Sciences	$ 51	$ 37	$ 115	$ 101
Personal Care	25	16	67	49
Specialty Additives (b)	35	15	79	36
Intermediates	30	11	72	17
Unallocated and other	(64)	(34)	(121)	(92)
	$ 77	$ 45	$ 212	$ 111
DEPRECIATION EXPENSE				
Life Sciences	$ 9	$ 9	$ 25	$ 26
Personal Care	10	10	28	29
Specialty Additives	16	16	48	49
Intermediates	2	4	9	10
Unallocated and other	—	1	1	1
	$ 37	$ 40	$ 111	$ 115
AMORTIZATION EXPENSE				
Life Sciences	$ 7	$ 7	$ 21	$ 21
Personal Care	11	11	35	30
Specialty Additives	5	5	14	14
Intermediates	1	—	1	—
	$ 24	$ 23	$ 71	$ 65
EBITDA (c)				
Life Sciences	$ 67	$ 53	$ 161	$ 148
Personal Care	46	37	130	108
Specialty Additives	56	36	141	99
Intermediates	33	15	82	27
Unallocated and other	(64)	(33)	(120)	(91)
	$ 138	$ 108	$ 394	$ 291

(a) Intersegment sales from Intermediates are accounted for at prices that approximate fair value. All other intersegment transfers are accounted for at cost.

(b) Includes a capital project impairment of $9 million for the nine months ended June 30, 2021 relating to a long-term capital project plan change at a plant facility.

(c) Excludes income (loss) from discontinued operations, other net periodic benefit income (expense) and net income (loss) on divestitures, net. See the Statement of Consolidated Comprehensive Income (Loss) for applicable amounts excluded.

Life Sciences

Life Sciences is comprised of pharmaceuticals, nutrition, nutraceuticals, agricultural chemicals, advanced materials and fine chemicals. Pharmaceutical solutions include controlled release polymers, disintegrants, film coatings, solubilizers, and tablet binders. Nutrition solutions include thickeners, stabilizers, emulsifiers and additives for enhancing mouthfeel, controlling moisture migration, reducing oil uptake and controlling color. Nutraceutical solutions include products for weight management, joint comfort, stomach and intestinal health, sports nutrition and general wellness, and providing custom formulation, toll processing and particle engineering solutions. Customers include pharmaceutical, food, beverage, nutraceuticals and supplements manufacturers, hospitals and radiologists and industrial manufacturers.

June 2022 quarter compared to June 2021 quarter

Life Sciences' sales increased $35 million to $228 million in the current quarter. Favorable pricing/mix and higher volume increased sales by $26 million and $18 million, respectively, while unfavorable foreign currency exchange decreased sales by $9 million.

Operating income increased $14 million to income of $51 million for the current quarter. Favorable price/mix and higher volume increased operating income by $24 million and $6 million, respectively, partially offset by unfavorable foreign currency exchange and higher costs which decreased operating income by $6 million and $10 million, respectively. Current quarter EBITDA increased $14 million to $67 million. EBITDA margin increased 1.9 percentage points in the current quarter to 29.4%.

Fiscal 2022 year-to-date compared to fiscal 2021 year-to-date

Life Sciences' sales increased $54 million to $602 million in the current period. Favorable pricing/mix and higher volume increased sales by $44 million and $25 million, respectively, while unfavorable foreign currency decreased sales by $15 million.

Operating income increased $14 million to income of $115 million for the current period. Favorable price/mix and higher volume increased operating income by $28 million and $8 million, respectively, while unfavorable foreign currency and higher costs decreased operating income by $9 million and $13 million, respectively. Current period EBITDA increased $13 million to $161. EBITDA margin decreased 0.3 percentage points in the current period to 26.7%.

EBITDA and Adjusted EBITDA reconciliation

The EBITDA and Adjusted EBITDA amounts presented within this business section are provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for each segment. Each of these non-GAAP measures is defined as follows: EBITDA (operating income plus depreciation and amortization), Adjusted EBITDA (EBITDA adjusted for key items, which may include pro forma effects for significant acquisitions or divestitures, as applicable), and Adjusted EBITDA margin (Adjusted EBITDA, which may include pro forma adjustments, divided by sales or sales adjusted for pro forma results). Ashland does not allocate items to each reportable segment below operating income, such as interest expense and income taxes. As a result, reportable segment EBITDA and Adjusted EBITDA are reconciled directly to operating income since it is the most directly comparable Statements of Consolidated Comprehensive Income (Loss) caption.

The following EBITDA presentation for the three and nine months ended June 30, 2022 and 2021 is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Life Sciences. Life Sciences had no key items for the three and nine months ended June 30, 2022 or 2021.

	Life Sciences			
	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Operating income	$ 51	$ 37	$ 115	$ 101
Depreciation and amortization	16	16	46	47
EBITDA	$ 67	$ 53	161	148

Personal Care

Personal Care is comprised of biofunctionals, preservatives, skin care, sun care, oral care, hair care and household. These businesses have a broad range of nature-based, biodegradable, and performance-enhancing ingredients for customer-driven solutions to help protect, renew, moisturize and revitalize skin and hair, and provide solutions for toothpastes, mouth washes and rinses, denture cleaning and care for teeth. Household supplies nature-derived rheology ingredients, biodegradable surface wetting agents, performance encapsulates, and specialty polymers for household, industrial and institutional cleaning products. Customers include formulators at large multinational branded consumer products companies and smaller, independent boutique companies. As previously disclosed, on April 30, 2021 Ashland completed the $312 million acquisition of the personal care business from Schülke.

June 2022 quarter compared to June 2021 quarter

Personal Care's sales increased $25 million to $172 million in the current quarter. Favorable product pricing/mix and volume, including the impact of the Schülke acquisition, increased sales by $13 million and $19 million, respectively. Unfavorable currency exchange decreased sales by $7 million.

Operating income increased $9 million to income of $25 million for the current quarter. Favorable price/mix, favorable impact of the Schülke acquisition and higher volume increased operating income by $6 million, $3 million and $3 million, respectively. Unfavorable currency exchange and increased operating costs decreased operating income by $2 million and $1 million, respectively. Current quarter EBITDA increased $9 million to $46 million while Adjusted EBITDA increased $7 million to $46 million. Adjusted EBITDA margin increased 0.2 percentage points in the current quarter to 26.7%.

Fiscal 2022 year-to-date compared to fiscal 2021 year-to-date

Personal Care’s sales increased $81 million to $490 million in the current period. Favorable product pricing/mix and volume, including the impact of the Schülke acquisition, increased sales by $24 million and $70 million, respectively. Unfavorable currency exchange decreased sales by $13 million.

Operating income increased $18 million to income of $67 million for the current period. Favorable price/mix, lower costs, favorable impact of the Schülke acquisition and higher volume increased operating income by $3 million, $6 million, $6 million and $7 million, respectively. Unfavorable currency exchange decreased operating income by $4 million. Current period EBITDA increased $22 million to $130 million while Adjusted EBITDA increased $20 million to $130 million. Adjusted EBITDA margin decreased 0.4 percentage points in the current period to 26.5%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three and nine months ended June 30, 2022 and 2021 is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Personal Care. The key items during the three and nine months ended June 30, 2021 related to inventory adjustments within Personal Care.

	Personal Care			
	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Operating income	$ 25	$ 16	$ 67	$ 49
Depreciation and amortization	21	21	63	59
EBITDA	$ 46	$ 37	130	108
Inventory adjustment	—	2	—	2
Adjusted EBITDA	$ 46	$ 39	$ 130	$ 110

Specialty Additives

Specialty Additives is comprised of rheology- and performance-enhancing additives serving the coatings, construction, energy, automotive and various industrial markets. Solutions include coatings additives for architectural paints, finishes and lacquers, cement- and gypsum- based dry mortars, ready-mixed joint compounds, synthetic plasters for commercial and residential construction, and specialty materials for industrial applications. Products include rheology modifiers (cellulosic and associative thickeners), foam-control agents, surfactants and wetting agents, pH neutralizers, advanced ceramics used in catalytic converters, and environmental filters, ingredients that aid the manufacturing process of ceramic capacitors, plasma display panels and solar cells, ingredients for textile printing, thermoplastic metals and alloys for welding. Products help improve desired functional outcomes through rheology modification and control, water retention, workability, adhesive strength, binding power, film formation, deposition and suspension and emulsification. Customers include global paint manufacturers, electronics and automotive manufacturers, textile mills, the construction industry, and welders.

June 2022 quarter compared to June 2021 quarter

Specialty Additives' sales increased $25 million to $194 million in the current quarter. Favorable product pricing/mix increased sales by $35 million. Unfavorable volume, unfavorable currency exchange decreased sales by $2 million and $8 million, respectively.

Operating income increased $20 million to income of $35 million for the current quarter. Favorable pricing/mix increased operating income by $25 million. Higher costs and unfavorable foreign currency decreased operating income by $3 million and $2 million, respectively. Current quarter EBITDA increased $20 million to $56 million while Adjusted EBITDA increased $18 million to $57 million. Adjusted EBITDA margin increased 6.3 percentage points in the current quarter to 29.4%.

Fiscal 2022 year-to-date compared to fiscal 2021 year-to-date

Specialty Additives' sales increased $58 million to $532 million in the current period. Favorable product pricing/mix and volume increased sales by $66 million and $5 million, respectively. Unfavorable currency exchange decreased sales by $13 million.

Operating income increased $43 million to income of $79 million for the current period. Favorable volume, favorable pricing/mix and a capital project impairment in the prior year period increased operating income by $40 million, $1 million and $9 million, respectively. Higher costs and unfavorable foreign currency decreased operating income by $6 million and $1 million, respectively. Current period EBITDA increased $42 million to $141 million while Adjusted EBITDA increased $31 million to $142 million. Adjusted EBITDA margin increased 3.3 percentage points in the current period to 26.7%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation for the three and nine months ended June 30, 2022 and 2021 is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Specialty Additives. The key items related to a capital project impairment for the nine months ended June 30, 2021 and environmental reserve adjustments for the three and nine ended June 30, 2022 and 2021.

	Specialty Additives			
	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Operating income	$ 35	$ 15	$ 79	$ 36
Depreciation and amortization	21	21	62	63
EBITDA	56	36	141	99
Environmental reserve adjustments	1	3	1	3
Capital project impairment	—	—	—	9
Adjusted EBITDA	$ 57	$ 39	$ 142	$ 111

Intermediates

Intermediates is comprised of the production of 1,4 butanediol (BDO) and related derivatives, including n-methylpyrrolidone. These products are used as chemical intermediates in the production of engineering polymers and polyurethanes, and as specialty process solvents in a wide array of applications including electronics, pharmaceuticals, water filtration membranes and more. Butanediol is also provided to Life Sciences, Personal Care, and Specialty Additives for use as a raw material.

June 2022 quarter compared to June 2021 quarter

Intermediates' sales increased $24 million to $73 million in the current quarter. Improved product pricing/mix increased sales by $29 million, partially offset by unfavorable volumes and unfavorable foreign currency exchange which decreases sales by $3 million and $2 million, respectively.

Operating income increased $19 million to $30 million for the current quarter. Price/mix and lower costs increased operating income by $20 million and $2 million, respectively, and was partially offset by lower volume and unfavorable foreign currency which decreased operating income by $2 million and $1 million, respectively. Current quarter EBITDA increased $18 million to $33 million. EBITDA margin increased 14.6 percentage points in the current quarter to 45.2%.

Fiscal 2022 year-to-date compared to fiscal 2021 year-to-date

Intermediates' sales increased $74 million to $192 million in the current period. Improved product pricing/mix increased sales by $81 million. That increase was partially offset by lower volumes and unfavorable foreign currency exchange which decreased sales by $4 million and $3 million, respectively.

Operating income increased $55 million to $72 million for the current period. Price/mix and lower operating costs increased operating income by $58 million and $3 million, respectively. Unfavorable volume and unfavorable currency exchange decreased operating income by $3 million each, respectively. Current period EBITDA increased $55 million to $82 million. EBITDA margin increased 19.8 percentage points in the current period to 42.7%.

EBITDA and Adjusted EBITDA reconciliation

The following EBITDA presentation (as defined and described in the section above) for the three and nine months ended June 30, 2022 and 2021 is provided as a means to enhance the understanding of financial measurements that Ashland has internally determined to be relevant measures of comparison for the results of Intermediates. Intermediates had no key items for the three and nine months ended June 30, 2022 or 2021.

	Intermediates			
	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Operating income	$ 30	$ 11	$ 72	$ 17
Depreciation and amortization	3	4	10	10
EBITDA	$ 33	$ 15	$ 82	$ 27

Unallocated and other

The following table summarizes the key components of the Unallocated and other segment's operating income (loss) for the three and nine months ended June 30, 2022 and 2021.

	Unallocated and Other			
	Three months ended June 30		Nine months ended June 30	
(In millions)	2022	2021	2022	2021
Restructuring activities	$ (2)	$ (2)	$ (11)	$ (22)
Environmental expenses	(34)	(18)	(45)	(30)
Other expenses (primarily governance and legacy expenses)	(28)	(14)	(65)	(40)
Total expense	$ (64)	$ (34)	$ (121)	$ (92)

June 2022 quarter compared to June 2021 quarter

Unallocated and other recorded expense of $64 million and $34 million for the three months ended June 30, 2022 and 2021, respectively. The current and prior year quarter included expense of $2 million and $2 million, respectively, for restructuring activities mainly comprised of severance, lease abandonment and other restructuring costs related to company-wide cost reduction programs during the current and prior year quarter, respectively, as well as stranded costs of $1 million and $4 million associated with the Performance Adhesives divestiture.

The current quarter and prior year quarter included $34 million and $18 million for environmental expenses, respectively.

Other expenses increase of $14 million is primarily a result of increased incentive compensation expense in the current quarter as well as decreased transition services income associated with the Composites sale from INEOS in the current period.

Fiscal 2022 year-to-date compared to fiscal 2021 year-to-date

Unallocated and other recorded expense of $121 million and $92 million for the nine months ended June 30, 2022 and 2021, respectively. The current and prior year period included expense of $11 million and $22 million, respectively, for restructuring activities mainly comprised of severance, lease abandonment and other restructuring costs related to company-wide cost reduction programs during the current and prior year period, respectively, as well as stranded costs of $8 million and $12 million associated with the Performance Adhesives divestiture.

The current period and prior year period included $45 million and $30 million for environmental expenses, respectively.

Other expenses increase of $25 million is primarily a result of increased incentive compensation expense, a gain of $4 million in the prior year period associated with excess corporate property sales as well as decreased transition services income associated with the Composites sale from INEOS in the current period.

FINANCIAL POSITION

Liquidity

Ashland believes that cash flow from operations, availability under existing credit facilities and arrangements, current cash and investment balances and the ability to obtain other financing, if necessary, will provide adequate cash funds for Ashland's foreseeable working capital needs, capital expenditures at existing facilities, dividend payments and debt service obligations. Ashland's cash requirements are subject to change as business conditions warrant and opportunities arise. The timing and size of any new business ventures or acquisitions that the Company may complete may also impact its cash requirements. For information regarding the impact of COVID-19 on the Company, including on its liquidity and capital resources, please see item 1A, in Ashland's most recent Form 10-K filed with the SEC.

Cash flows

Ashland's cash flows from operating, investing and financing activities, as reflected in the Statements of Condensed Consolidated Cash Flows, are summarized as follows for the nine months ended June 30, 2022 and 2021.

(In millions)	Nine months ended June 30 2022	2021
Cash provided (used) by:		
Operating activities from continuing operations	$ 14	$ 314
Investing activities from continuing operations	(60)	(340)
Financing activities from continuing operations	(876)	(243)
Discontinued operations	1,348	73
Effect of currency exchange rate changes on cash and cash equivalents	(7)	4
Net increase (decrease) in cash and cash equivalents	$ 419	$ (192)

Cash and cash equivalents increased $419 million for the nine months ended June 30, 2022 compared to a $192 million decrease for the nine months ended June 30, 2021.

The $419 million increase for the nine months ended June 30, 2022 was primarily driven by the proceeds of the sale of the Performance Adhesives business segment of approximately $1.7 billion, net of transaction costs within discontinued operations cash flows, and $14 million of operating cash flows from continuing operations offset by short-term debt repayments of $365 million, long-term debt repayments of $250 million, $247 million of cash tax payment within discontinued operations cash flows related to the sale of Performance Adhesives, and $200 million of stock repurchase activity.

The $192 million decrease for the nine months ended June 30, 2021 was primarily driven by repayment of short-term debt of $185 million and the purchase of the Schülke business for $308 million offset by $314 million of operating cash flows from continuing operations.

See the Statements of Condensed Consolidated Cash Flows for additional details.

Ashland expects cash tax payments of roughly $83 million to occur during the last three months of fiscal 2022 for taxes associated with the Performance Adhesives sale.

Free cash flow and other liquidity resources

The following represents Ashland's calculation of free cash flow and ongoing free cash flows for the disclosed periods. Free cash flow does not reflect adjustments for certain non-discretionary cash flows such as mandatory debt repayments.

(In millions)		2022		2021
Total cash flows provided by operating activities from continuing operations	$	14	$	314
less:				
Additions to property, plant and equipment		(67)		(74)
Free cash flows		(53)		240
Cash (inflows) outflows from U.S. Accounts Receivable Sales Program (a)		42		(76)
Restructuring-related payments (b)		9		35
Environmental and related litigation payments (c)		36		29
Ongoing free cash flow	$	34	$	228
Adjusted EBITDA (d)		443		346
Ongoing free cash flow conversion (e)		8%		66%

(a) Represents activity associated with the U.S. Accounts Receivable Sales Program impacting each period presented.

(b) Restructuring payments incurred during each period.

(c) Represents cash outflows associated with environmental and related litigation payments which will be reimbursed by the environmental trust.

(d) See adjusted EBITDA reconciliation.

(e) Ongoing free cash flow divided by Adjusted EBITDA.

Working capital (current assets minus current liabilities, excluding long-term debt due within one year) amounted to $1,267 million and $792 million as of June 30, 2022 and September 30, 2021, respectively. The increase in working capital was the primary reason of the $194 million decline in ongoing free cash flows between periods primarily as a result of increased inventories to navigate supply-chain issues as well as cost inflation and increased accounts receivable as a result of higher sales volumes. Higher cash tax payments of $32 million also negatively impacted ongoing free cash flows between periods. Liquid assets (cash, cash equivalents and accounts receivable) amounted to 203% and 65% of current liabilities (excluding current liabilities held for sale) as of June 30, 2022 and September 30, 2021, respectively.

The following summary reflects Ashland's cash, unused borrowing capacity and liquidity as of June 30, 2022 and September 30, 2021.

(In millions)		June 30 2022		September 30 2021
Cash and investment securities				
Cash and cash equivalents	$	629	$	210
Restricted investments (a)		407		421
Unused borrowing capacity and liquidity				
Revolving credit facility		581		356
2018 accounts receivable securitization (foreign)		105		—
Accounts receivable sales program (U.S.)		58		12

(a) Includes $269 million and $333 million related to the Asbestos trust and $138 million and $88 million related to the Environmental trust as of June 30, 2022 and September 30, 2021, respectively.

The borrowing capacity remaining under the $600 million revolving credit facility was $581 million due to an outstanding balance of zero, as well as a reduction of $19 million for letters of credit outstanding at June 30, 2022. In total, Ashland's available liquidity position, which includes cash, the revolving credit facility and foreign accounts receivable securitization facility, was $1,315 million at June 30, 2022, compared to $566 million at September 30, 2021. Ashland had $58 million of available liquidity under the U.S. Accounts Receivable Sales Program as of June 30, 2022. Ashland also maintained $407 million of restricted investments to pay for future asbestos claims and environmental remediation and related litigation.

Capital resources

Debt

The following summary reflects Ashland's debt as of June 30, 2022 and September 30, 2021.

(In millions)		June 30 2022		September 30 2021
Short-term debt (includes current portion of long-term debt)	$	—	$	374
Long-term debt (less current portion and debt issuance cost discounts) (a)		1,302		1,596
Total debt	$	1,302	$	1,970

(a) Includes $15 million and $17 million of debt issuance cost discounts as of June 30, 2022 and September 30, 2021, respectively.

Debt as a percent of capital employed was 29% and 42% at June 30, 2022 and at September 30, 2021, respectively. At June 30, 2022, Ashland's total debt had an outstanding principal balance of $1,354 million, discounts of $37 million, and debt issuance costs of $15 million. There are no maturities of long-term debt due within the next five years.

Ashland credit ratings

Ashland's corporate credit ratings remained unchanged at BB+ by Standard & Poor's and Ba1 by Moody's Investor Services. As of June 30, 2022, both Moody's Investor Services and Standard & Poor's outlook remained at stable. Subsequent changes to these ratings or outlook may have an effect on Ashland's borrowing rate or ability to access capital markets in the future.

Ashland debt covenant restrictions

Ashland's current credit agreement (the 2020 Credit Agreement) contains usual and customary representations, warranties and affirmative and negative covenants, including financial covenants for leverage and interest coverage ratios, limitations on liens, additional subsidiary indebtedness, restrictions on subsidiary distributions, investments, mergers, sale of assets and restricted payments and other customary limitations. As of June 30, 2022, Ashland is in compliance with all debt agreement covenant restrictions under the 2020 Credit Agreement.

The maximum consolidated net leverage ratio permitted under the 2020 Credit Agreement is 4.0. The 2020 Credit Agreement defines the consolidated net leverage ratio as the ratio of consolidated indebtedness minus unrestricted cash and cash equivalents to consolidated EBITDA (Covenant Adjusted EBITDA) for any measurement period. In general, the 2020 Credit Agreement defines Covenant Adjusted EBITDA as net income plus consolidated interest charges, taxes, depreciation and amortization expense, fees and expenses related to capital market transactions and proposed or actual acquisitions and divestitures, restructuring and integration charges, noncash stock and equity compensation expense, and any other nonrecurring expenses or losses that do not represent a cash item in such period or any future period; less any noncash gains or other items increasing net income. The computation of Covenant Adjusted EBITDA differs from the calculation of EBITDA and Adjusted EBITDA, which have been reconciled above in the “consolidated review” section. In general, consolidated indebtedness includes debt plus all purchase money indebtedness, banker’s acceptances and bank guaranties, deferred purchase price of property or services, attributable indebtedness and guarantees. At June 30, 2022, Ashland’s calculation of the consolidated net leverage ratio was 1.2.

The minimum required consolidated interest coverage ratio under the 2020 Credit Agreement is 3.0. The 2020 Credit Agreement defines the consolidated interest coverage ratio as the ratio of Covenant Adjusted EBITDA to consolidated interest charges for any measurement period. At June 30, 2022, Ashland’s calculation of the consolidated interest coverage ratio was 9.7.

Any change in Covenant Adjusted EBITDA of $100 million would have an approximate 0.2x effect on the consolidated net leverage ratio and a 1.7x effect on the consolidated interest coverage ratio. The change in consolidated indebtedness of $100 million would affect the consolidated leverage ratio by approximately 0.2x.

Additional capital resources

Total equity

Total equity increased by $514 million since September 30, 2021 to $3,266 million at June 30, 2022. The increase of $514 million was due to net income of $870 million and compensation expense and common shares issued of $5 million offset by $2 million of deferred losses on commodity hedges, stock repurchase activity of $200 million, dividends of $52 million, and deferred translation loss of $107 million.

2022 Stock repurchase program

On May 25, 2022, Ashland's board of directors authorized a new, evergreen $500 million common share repurchase program (2022 stock repurchase program). The new authorization terminates and replaces the company's 2018 $1 billion share repurchase program, which had $150 million outstanding at the date of termination.

2018 Stock repurchase program

In September 2021, under the 2018 stock repurchase program, Ashland entered into an accelerated share repurchase agreement (2021 ASR Agreement). Under the 2021 ASR Agreement, Ashland paid an initial purchase price of $450 million and received an initial delivery of 3.9 million shares of common stock during September 2021. The bank exercised its early termination option under the 2021 ASR Agreement in February 2022, and an additional 0.7 million shares were repurchased, bringing the total shares repurchased upon settlement to 4.6 million.

On March 1, 2022, under the 2018 stock repurchase program, Ashland entered into an agreement to repurchase an aggregate amount of $200 million of Ashland common stock using open-market purchases under rule 10b-18. On April 8, 2022, Ashland completed repurchases under this agreement repurchasing a total of 2.15 million shares for a total amount of $200 million.

Stockholder dividends

On May 25, 2022, Ashland's Board declared a quarterly cash dividend of $0.335 cents per share on the company's common stock representing a 12 percent increase from the previous quarter. The dividend was paid in the third quarter of fiscal 2022. Dividends of 30 cents per share were paid in the third quarter of fiscal 2021 and the first and second quarter of fiscal 2022 and 27.5 cents per share were paid in the first and second quarter of fiscal 2021.

Capital expenditures

Capital expenditures were $67 million for the nine months ended June 30, 2022 compared to $74 million for the nine months ended June 30, 2021.

CRITICAL ACCOUNTING POLICIES

The preparation of Ashland’s Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales and expenses, and the disclosures of contingent assets and liabilities. Significant items that are subject to such estimates and assumptions include, but are not limited to, long-lived assets (including goodwill and other intangible assets), income taxes, other liabilities and receivables associated with asbestos litigation and environmental remediation. These accounting policies are discussed in detail in “Management’s Discussion and Analysis – Critical Accounting Policies” in Ashland’s Annual Report on Form 10-K for the fiscal year ended September 30, 2021. Although management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, actual results could differ significantly from the estimates under different assumptions or conditions. Management has reviewed the estimates affecting these items with the Audit Committee of Ashland’s Board of Directors. No material changes have been made to the valuation techniques during the nine months ended June 30, 2022.

OUTLOOK

Ashland issued its outlook for fiscal 2022 in November 2021. Ashland now expects Sales and Adjusted EBITDA for fiscal year 2022 to be above the previously communicated ranges. This increased outlook assumes a headwind from negative foreign currency in the fiscal fourth quarter of approximately $30 million impacting Sales and $10 million impacting Adjusted EBITDA.

	PREVIOUS FY 2022 Outlook	**NEW FY 2022 Outlook**
Key Operating Metrics		
Sales	$2.25 - $2.35 billion	$2.35 - $2.40 billion
Adjusted EBITDA	$550 - $570 million	$580 - $590 million

Ashland is unable to reconcile forward-looking adjusted EBITDA to forward-looking net income, the most closely comparable GAAP financial measure, because the information needed to provide such reconciliation would require unreasonable efforts.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Ashland’s market risk exposure at June 30, 2022 is generally consistent with the types of market risk exposures presented in Ashland’s Annual Report on Form 10-K for the fiscal year ended September 30, 2021.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures - As of the end of the period covered by this quarterly report, Ashland, under the supervision and with the participation of its management, including Ashland’s Chief Executive Officer and its Chief Financial Officer, evaluated the effectiveness of Ashland’s disclosure controls and procedures pursuant to Rule 13a-15(b) and 15d-15(b) promulgated under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective as of June 30, 2022.

Changes in Internal Control over Financial Reporting - During the three months ended June 30, 2022, there were no significant changes in Ashland's internal control over financial reporting, or in other factors, that occurred during the period covered by this quarterly report that have materially affected, or are reasonably likely to materially affect, Ashland's internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The following is a description of Ashland's material legal proceedings. Ashland's threshold for disclosing material environmental legal proceedings involving a governmental authority where potential monetary sanctions are involved is $1 million.

Asbestos-Related Litigation

Ashland is subject to liabilities from claims alleging personal injury caused by exposure to asbestos. Such claims result primarily from indemnification obligations undertaken in 1990 in connection with the sale of Riley Stoker Corporation (Riley), a former subsidiary. Although Riley was neither a producer nor a manufacturer of asbestos, its industrial boilers contained some asbestos-containing components provided by other companies.

Hercules LLC (formerly Hercules Incorporated), an indirect wholly-owned subsidiary of Ashland, is also subject to liabilities from asbestos-related personal injury lawsuits involving claims which typically arise from alleged exposure to asbestos fibers from resin encapsulated pipe and tank products which were sold by one of Hercules' former subsidiaries to a limited industrial market.

Ashland and Hercules are also defendants in lawsuits alleging exposure to asbestos at facilities formerly or presently owned or operated by Ashland or Hercules.

For additional detailed information regarding liabilities arising from asbestos-related litigation, see Note L of Notes to Condensed Consolidated Financial Statements in this quarterly report on Form 10-Q.

Environmental Proceedings

(a) CERCLA and Similar State Law Sites - Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and similar state laws, Ashland and its subsidiaries may be subject to joint and several liability for cleanup costs in connection with alleged releases of hazardous substances at sites where it has been identified as a "potentially responsible party" (PRP). As of June 30, 2022, Ashland and its subsidiaries have been identified as a PRP by U.S. federal and state authorities, or by private parties seeking contribution, for the cost of environmental investigation and/or cleanup at 76 sites. These sites are currently subject to ongoing investigation and remedial activities, overseen by the United States Environmental Protection Agency (USEPA) or a state agency, in which Ashland or its subsidiaries are typically participating as a member of a PRP group. Generally, the types of relief sought include remediation of contaminated soil and/or groundwater, reimbursement for past costs of site cleanup and administrative oversight and/or long-term monitoring of environmental conditions at the sites. The ultimate costs are not predictable with assurance.

(b) Lower Passaic River, New Jersey Matters - Ashland, through two formerly owned facilities, and ISP, through a now-closed facility, have been identified as PRPs, along with approximately 70 other companies (the Cooperating Parties Group or the CPG), in a May 2007 Administrative Order of Consent (AOC) with the USEPA. The parties are required to perform a remedial investigation and feasibility study (RI/FS) of the entire 17 miles of the Passaic River. In June 2007, the USEPA separately commenced a Focused Feasibility Study (FFS) as an interim measure. In accordance with the 2007 AOC, in June 2012 the CPG voluntarily entered into another AOC for an interim removal action focused solely at mile 10.9 of the Passaic River. The allocations for the 2007 AOC and the 2012 removal action are based on interim allocations, are immaterial and have been accrued. In April 2014, the USEPA released the FFS. The CPG submitted the Draft RI/FS Report on April 30, 2015. The USEPA has released the FFS Record of Decision for the lower 8 miles and recently reached an agreement with another chemical company to conduct and pay for the remedial design. This chemical company has sued Ashland, ISP and numerous other defendants to recover past and future costs pursuant to the CERCLA. Ashland, ISP and numerous other defendants have filed a Motion to Dismiss all of the claims. Ashland and ISP are participating in an USEPA allocation process. The release of the FFS Record of Decision, the current allocations proceedings and the lawsuit are not expected to be material to Ashland.

For additional information regarding environmental matters and reserves, see Note L of Notes to Condensed Consolidated Financial Statements in this quarterly report on Form 10-Q.

Other Pending Legal Proceedings

In addition to the matters described above, there are other various claims, lawsuits and administrative proceedings pending or threatened against Ashland and its current and former subsidiaries. Such actions are with respect to commercial matters, product liability, toxic tort liability and other environmental matters which seek remedies or damages, some of which are for substantial amounts. While Ashland cannot predict with certainty the outcome of such actions, it believes that adequate reserves have been recorded and losses already recognized with respect to such actions were immaterial as of June 30, 2022. There is a reasonable possibility that a loss exceeding amounts already recognized may be incurred related to these actions; however, Ashland believes that such potential losses were immaterial as of June 30, 2022.

ITEM 1A. RISK FACTORS

During the period covered by this report, there were no material changes from the risk factors previously disclosed in Ashland's Annual Report on Form 10-K for the fiscal year ended September 30, 2021.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Share repurchase activity during the three months ended June 30, 2022 was as follow:

Issuer Purchases of Equity Securities

Q3 Fiscal Periods	Total Number of Shares Purchased	Average Price Paid Per Share, including commission	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that May Be Purchased Under the Plans or Programs (in millions) (a) (c)
April 1, 2022 to April 30, 2022 (b)	449,932	$ 98.97	449,932	$ 150
May 1, 2022 to May 31, 2022	—	—	—	500
June 1, 2022 to June 30, 2022	—	—	—	500
Total	449,932		449,932	$ 500

(a) During March 2018, Ashland's Board of Directors approved a new $1 billion stock repurchase program, which replaced the previous stock repurchase program. Ashland's stock repurchase program does not obligate it to acquire any specific number of shares. Under the program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 of the Exchange Act.

(b) During April 2022, Ashland completed repurchases under the March 1, 2022 agreement repurchasing a total of 2.15 million shares for $200 million.

(c) During May 2022, Ashland's Board of Directors approved a new evergreen $500 million stock repurchase program which replaced the previous stock repurchase. Ashland's stock repurchase program does not obligate it to acquire any specific number of shares. Under the program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 of the Exchange Act.

ITEM 6. EXHIBITS

(a) Exhibits

10.1	Amended and Restated Credit Agreement dated as of July 22, 2022, among Ashland Global Holdings, Inc., Ashland Chemco Inc., Ashland LLC, Ashland Services B.V., each lender from time to time party thereto, The Bank of Nova Scotia, Houston Branch, as administrative agent, swing line lender and a letter of credit issuer, each other letter of credit issuer from time to time party thereto and Citibank, N.A., as syndication agent, filed as Exhibit 10.1 to Ashland's Current Report on Form 8-K dated July 22, 2022 (SEC File No. 333-211719 and incorporated herein by reference.
31.1*	Certificate of Guillermo Novo, Chief Executive Officer of Ashland pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certificate of J. Kevin Willis, Chief Financial Officer of Ashland pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certificate of Guillermo Novo, Chief Executive Officer of Ashland, and J. Kevin Willis, Chief Financial Officer of Ashland pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	Inline XBRL Instance Document.
101.SCH**	Inline XBRL Taxonomy Extension Schema Document.
101.CAL**	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF**	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB**	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).

* Filed herewith.

** Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) Statements of Consolidated Comprehensive Income (Loss) for the three months ended June 30, 2022 and June 30, 2021; (ii) Condensed Consolidated Balance Sheets at June 30, 2022 and September 30, 2021; (iii) Statements of Condensed Consolidated Cash Flows for the nine months ended June 30, 2022 and June 30, 2021; and (iv) Notes to Condensed Consolidated Financial Statements.

SM Service mark, Ashland or its subsidiaries, registered in various countries.

™ Trademark, Ashland or its subsidiaries, registered in various countries.

SIGNATURE

Pursuant to the requirements 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.

	Ashland Global Holdings Inc.
	(Registrant)
July 28, 2022	/s/ J. Kevin Willis
	J. Kevin Willis Senior Vice President and Chief Financial Officer (on behalf of the Registrant and as principal financial officer)

EXHIBIT 31.1

CERTIFICATION

I, Guillermo Novo, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ashland Global Holdings Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented of the made in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 28, 2022

/s/ Guillermo Novo

Guillermo Novo
Chair and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATIONS

I, J. Kevin Willis, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ashland Global Holdings Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of the registrant's Board of Directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 28, 2022

/s/ J. Kevin Willis
J. Kevin Willis
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32

ASHLAND GLOBAL HOLDINGS INC.

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ashland Global Holdings Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned, Guillermo Novo, Chief Executive Officer of the Company, and J. Kevin Willis, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Guillermo Novo

Guillermo Novo
Chief Executive Officer
July 28, 2022

/s/ J. Kevin Willis

J. Kevin Willis
Chief Financial Officer
July 28, 2022