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

FORM 10-Q

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended **September 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	Exact Name of Registrant as Specified in its Charter, Principal Office Address and Telephone Number	State of Incorporation or Organization	I.R.S. Employer Identification No.
001-38646	**Dow Inc.** 2211 H.H. Dow Way, Midland, MI 48674 (989) 636-1000	Delaware	30-1128146
001-03433	**The Dow Chemical Company** 2211 H.H. Dow Way, Midland, MI 48674 (989) 636-1000	Delaware	38-1285128

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

Registrant	Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Dow Inc.	Common Stock, par value $0.01 per share	DOW	New York Stock Exchange
The Dow Chemical Company	0.500% Notes due March 15, 2027	DOW/27	New York Stock Exchange
The Dow Chemical Company	1.125% Notes due March 15, 2032	DOW/32	New York Stock Exchange
The Dow Chemical Company	1.875% Notes due March 15, 2040	DOW/40	New York Stock Exchange
The Dow Chemical Company	4.625% Notes due October 1, 2044	DOW/44	New York Stock Exchange

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.

Dow Inc. ☑ Yes ☐ No **The Dow Chemical Company** ☑ 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).

Dow Inc. ☑ Yes ☐ No **The Dow Chemical Company** ☑ 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.

Dow Inc.	Large accelerated filer	☑	Accelerated filer	☐	Non-accelerated filer	☐	Smaller reporting company	☐	Emerging growth company ☐
The Dow Chemical Company	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.

Dow Inc.	☐	**The Dow Chemical Company**	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Dow Inc.	☐	Yes	☑	No	**The Dow Chemical Company**	☐ Yes	☑ No

Dow Inc. had 703,759,269 shares of common stock, $0.01 par value, outstanding at September 30, 2022. The Dow Chemical Company had 100 shares of common stock, $0.01 par value, outstanding at September 30, 2022, all of which were held by the registrant's parent, Dow Inc.

The Dow Chemical Company meets the conditions set forth in General Instruction H(1)(a) and (b) for Form 10-Q and therefore is filing this form with a reduced disclosure format.

Dow Inc. and Subsidiaries
The Dow Chemical Company and Subsidiaries

QUARTERLY REPORT ON FORM 10-Q
For the quarterly period ended September 30, 2022

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Dow Inc. and Subsidiaries
The Dow Chemical Company and Subsidiaries

This Quarterly Report on Form 10-Q is a combined report being filed by Dow Inc. and The Dow Chemical Company and its consolidated subsidiaries (“TDCC” and together with Dow Inc., “Dow” or the "Company") due to the parent/subsidiary relationship between Dow Inc. and TDCC. The information reflected in the report is equally applicable to both Dow Inc. and TDCC, except where otherwise noted. Each of Dow Inc. and TDCC is filing information in this report on its own behalf and neither company makes any representation to the information relating to the other company.

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

Certain statements in this report are “forward-looking statements” within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements often address expected future business and financial performance, financial condition, and other matters, and often contain words or phrases such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “opportunity,” “outlook,” “plan,” “project,” “seek,” “should,” “strategy,” “target,” “will,” “will be,” “will continue,” “will likely result,” “would” and similar expressions, and variations or negatives of these words or phrases.

Forward-looking statements are based on current assumptions and expectations of future events that are subject to risks, uncertainties and other factors that are beyond Dow’s control, which may cause actual results to differ materially from those projected, anticipated or implied in the forward-looking statements and speak only as of the date the statements were made. These factors include, but are not limited to: sales of Dow’s products; Dow’s expenses, future revenues and profitability; the continuing global and regional economic impacts of the coronavirus disease 2019 (“COVID-19”) pandemic and other public health-related risks and events on Dow’s business; any sanction, export restrictions, supply chain disruptions or increased economic uncertainty related to the ongoing conflict between Russia and Ukraine; capital requirements and need for and availability of financing; unexpected barriers in the development of technology, including with respect to Dow's contemplated capital and operating projects; Dow's ability to realize its commitment to carbon neutrality on the contemplated timeframe; size of the markets for Dow’s products and services and ability to compete in such markets; failure to develop and market new products and optimally manage product life cycles; the rate and degree of market acceptance of Dow’s products; significant litigation and environmental matters and related contingencies and unexpected expenses; the success of competing technologies that are or may become available; the ability to protect Dow’s intellectual property in the United States and abroad; developments related to contemplated restructuring activities and proposed divestitures or acquisitions such as workforce reduction, manufacturing facility and/or asset closure and related exit and disposal activities, and the benefits and costs associated with each of the foregoing; fluctuations in energy and raw material prices; management of process safety and product stewardship; changes in relationships with Dow’s significant customers and suppliers; changes in consumer preferences and demand; changes in laws and regulations, political conditions or industry development; global economic and capital markets conditions, such as inflation, market uncertainty, interest and currency exchange rates, and equity and commodity prices; business or supply disruptions; security threats, such as acts of sabotage, terrorism or war including the ongoing conflict between Russia and Ukraine; weather events and natural disasters; disruptions in Dow’s information technology networks and systems; and risks related to Dow’s separation from DowDuPont Inc. such as Dow’s obligation to indemnify DuPont de Nemours, Inc. and/or Corteva, Inc. for certain liabilities.

Where, in any forward-looking statement, an expectation or belief as to future results or events is expressed, such expectation or belief is based on the current plans and expectations of management and expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. A detailed discussion of principal risks and uncertainties which may cause actual results and events to differ materially from such forward-looking statements is included in the section titled “Risk Factors” contained in Part II, Item 1A of this Quarterly Report on Form 10-Q and in Part I, Item 1A of the Company’s Annual Report on Form 10-K for the year ended December 31, 2021. These are not the only risks and uncertainties that Dow faces. There may be other risks and uncertainties that Dow is unable to identify at this time or that Dow does not currently expect to have a material impact on its business. If any of those risks or uncertainties develops into an actual event, it could have a material adverse effect on Dow’s business. Dow and TDCC assume no obligation to update or revise publicly any forward-looking statements whether because of new information, future events, or otherwise, except as required by securities and other applicable laws.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Dow Inc. and Subsidiaries

Consolidated Statements of Income

In millions, except per share amounts (Unaudited)	Three Months Ended		Nine Months Ended	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 14,115	$ 14,837	$ 45,043	$ 40,604
Cost of sales	12,381	11,611	37,682	32,413
Research and development expenses	191	210	626	632
Selling, general and administrative expenses	356	403	1,289	1,209
Amortization of intangibles	83	100	256	301
Restructuring and asset related charges - net	—	—	186	22
Equity in earnings (losses) of nonconsolidated affiliates	(58)	249	311	751
Sundry income (expense) - net	69	(350)	292	(225)
Interest income	41	14	105	35
Interest expense and amortization of debt discount	155	178	487	561
Income before income taxes	1,001	2,248	5,225	6,027
Provision for income taxes	241	542	1,232	1,383
Net income	760	1,706	3,993	4,644
Net income attributable to noncontrolling interests	21	23	24	69
Net income available for Dow Inc. common stockholders	$ 739	$ 1,683	$ 3,969	$ 4,575
Per common share data:				
Earnings per common share - basic	$ 1.03	$ 2.25	$ 5.45	$ 6.11
Earnings per common share - diluted	$ 1.02	$ 2.23	$ 5.41	$ 6.06
Weighted-average common shares outstanding - basic	714.3	744.5	724.9	745.4
Weighted-average common shares outstanding - diluted	718.1	750.0	729.8	750.9
Depreciation	$ 482	$ 517	$ 1,459	$ 1,550
Capital expenditures	$ 452	$ 413	$ 1,224	$ 1,035

See Notes to the Consolidated Financial Statements.

Dow Inc. and Subsidiaries

Consolidated Statements of Comprehensive Income

In millions (Unaudited)	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net income	$ 760	$ 1,706	$ 3,993	$ 4,644
Other comprehensive income (loss), net of tax				
Unrealized losses on investments	(122)	(13)	(371)	(45)
Cumulative translation adjustments	(403)	(157)	(1,081)	(345)
Pension and other postretirement benefit plans	125	149	356	1,432
Derivative instruments	22	32	491	148
Total other comprehensive income (loss)	(378)	11	(605)	1,190
Comprehensive income	382	1,717	3,388	5,834
Comprehensive income attributable to noncontrolling interests, net of tax	21	23	24	69
Comprehensive income attributable to Dow Inc.	$ 361	$ 1,694	$ 3,364	$ 5,765

See Notes to the Consolidated Financial Statements.

Dow Inc. and Subsidiaries

Consolidated Balance Sheets

In millions, except share amounts (Unaudited)	Sep 30, 2022	Dec 31, 2021
Assets		
Current Assets		
Cash and cash equivalents	$ 2,216	$ 2,988
Accounts and notes receivable:		
Trade (net of allowance for doubtful receivables - 2022: $212; 2021: $54)	6,407	6,841
Other	2,123	2,713
Inventories	7,571	7,372
Other current assets	1,460	934
Total current assets	19,777	20,848
Investments		
Investment in nonconsolidated affiliates	1,785	2,045
Other investments (investments carried at fair value - 2022: $1,685; 2021: $2,079)	2,732	3,193
Noncurrent receivables	499	478
Total investments	5,016	5,716
Property		
Property	56,931	57,604
Less: Accumulated depreciation	36,899	37,049
Net property	20,032	20,555
Other Assets		
Goodwill	8,524	8,764
Other intangible assets (net of accumulated amortization - 2022: $4,888; 2021: $4,725)	2,483	2,881
Operating lease right-of-use assets	1,231	1,412
Deferred income tax assets	1,136	1,358
Deferred charges and other assets	1,358	1,456
Total other assets	14,732	15,871
Total Assets	$ 59,557	$ 62,990
Liabilities and Equity		
Current Liabilities		
Notes payable	$ 185	$ 161
Long-term debt due within one year	364	231
Accounts payable:		
Trade	5,008	5,577
Other	2,599	2,839
Operating lease liabilities - current	277	314
Income taxes payable	579	623
Accrued and other current liabilities	3,303	3,481
Total current liabilities	12,315	13,226
Long-Term Debt	12,921	14,280
Other Noncurrent Liabilities		
Deferred income tax liabilities	716	506
Pension and other postretirement benefits - noncurrent	6,541	7,557
Asbestos-related liabilities - noncurrent	868	931
Operating lease liabilities - noncurrent	1,012	1,149
Other noncurrent obligations	6,555	6,602
Total other noncurrent liabilities	15,692	16,745
Stockholders' Equity		
Common stock (authorized 5,000,000,000 shares of $0.01 par value each; issued 2022: 768,611,564 shares; 2021: 764,226,882 shares)	8	8
Additional paid-in capital	8,396	8,151
Retained earnings	23,068	20,623
Accumulated other comprehensive loss	(9,582)	(8,977)
Unearned ESOP shares	—	(15)
Treasury stock at cost (2022: 64,852,295 shares; 2021: 29,011,573 shares)	(3,773)	(1,625)
Dow Inc.'s stockholders' equity	18,117	18,165
Noncontrolling interests	512	574
Total equity	18,629	18,739
Total Liabilities and Equity	$ 59,557	$ 62,990

See Notes to the Consolidated Financial Statements.

Dow Inc. and Subsidiaries

Consolidated Statements of Cash Flows

In millions (Unaudited)	Nine Months Ended Sep 30, 2022	Nine Months Ended Sep 30, 2021
Operating Activities		
Net income	$ 3,993	$ 4,644
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	2,104	2,187
Provision for deferred income tax	124	488
Earnings of nonconsolidated affiliates less than (in excess of) dividends received	517	(519)
Net periodic pension benefit cost	19	34
Pension contributions	(156)	(1,166)
Net gain on sales of assets, businesses and investments	(11)	(67)
Restructuring and asset related charges - net	186	22
Other net loss	159	874
Changes in assets and liabilities, net of effects of acquired and divested companies:		
Accounts and notes receivable	323	(2,222)
Inventories	(254)	(1,502)
Accounts payable	(860)	1,487
Other assets and liabilities, net	(736)	252
Cash provided by operating activities - continuing operations	5,408	4,512
Cash used for operating activities - discontinued operations	(11)	(78)
Cash provided by operating activities	5,397	4,434
Investing Activities		
Capital expenditures	(1,224)	(1,035)
Investment in gas field developments	(134)	(44)
Purchases of previously leased assets	(5)	(5)
Proceeds from sales of property and businesses, net of cash divested	16	15
Acquisitions of property and businesses, net of cash acquired	(54)	(107)
Investments in and loans to nonconsolidated affiliates	(69)	—
Distributions and loan repayments from nonconsolidated affiliates	10	11
Proceeds from sales of ownership interests in nonconsolidated affiliates	11	—
Purchases of investments	(445)	(1,004)
Proceeds from sales and maturities of investments	596	644
Other investing activities, net	(41)	(10)
Cash used for investing activities	(1,339)	(1,535)
Financing Activities		
Changes in short-term notes payable	72	(44)
Proceeds from issuance of short-term debt greater than three months	—	144
Payments on short-term debt greater than three months	(14)	—
Proceeds from issuance of long-term debt	82	95
Payments on long-term debt	(957)	(2,638)
Purchases of treasury stock	(2,200)	(600)
Proceeds from issuance of stock	99	212
Transaction financing, debt issuance and other costs	(8)	(536)
Employee taxes paid for share-based payment arrangements	(34)	(11)
Distributions to noncontrolling interests	(42)	(35)
Dividends paid to stockholders	(1,511)	(1,561)
Cash used for financing activities	(4,513)	(4,974)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(261)	(57)
Summary		
Decrease in cash, cash equivalents and restricted cash	(716)	(2,132)
Cash, cash equivalents and restricted cash at beginning of period	3,033	5,108
Cash, cash equivalents and restricted cash at end of period	$ 2,317	$ 2,976
Less: Restricted cash and cash equivalents, included in "Other current assets"	101	65
Cash and cash equivalents at end of period	$ 2,216	$ 2,911

See Notes to the Consolidated Financial Statements.

Dow Inc. and Subsidiaries

Consolidated Statements of Equity

In millions, except per share amounts (Unaudited)	Three Months Ended		Nine Months Ended	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Common Stock				
Balance at beginning and end of period	$ 8	$ 8	$ 8	$ 8
Additional Paid-in Capital				
Balance at beginning of period	8,343	7,898	8,151	7,595
Common stock issued/sold	2	11	99	211
Stock-based compensation and allocation of ESOP shares	79	79	198	182
Treasury stock issuances - compensation and benefit plans	(28)	—	(52)	—
Balance at end of period	8,396	7,988	8,396	7,988
Retained Earnings				
Balance at beginning of period	22,827	18,200	20,623	16,361
Net income available for Dow Inc. common stockholders	739	1,683	3,969	4,575
Dividends to stockholders	(493)	(518)	(1,511)	(1,561)
Other	(5)	(8)	(13)	(18)
Balance at end of period	23,068	19,357	23,068	19,357
Accumulated Other Comprehensive Loss				
Balance at beginning of period	(9,204)	(9,676)	(8,977)	(10,855)
Other comprehensive income (loss)	(378)	11	(605)	1,190
Balance at end of period	(9,582)	(9,665)	(9,582)	(9,665)
Unearned ESOP Shares				
Balance at beginning of period	—	(32)	(15)	(49)
Allocation of ESOP shares	—	8	15	25
Balance at end of period	—	(24)	—	(24)
Treasury Stock				
Balance at beginning of period	(3,001)	(825)	(1,625)	(625)
Treasury stock purchases	(800)	(400)	(2,200)	(600)
Treasury stock issuances - compensation and benefit plans	28	—	52	—
Balance at end of period	(3,773)	(1,225)	(3,773)	(1,225)
Dow Inc.'s stockholders' equity	18,117	16,439	18,117	16,439
Noncontrolling Interests	512	589	512	589
Total Equity	$ 18,629	$ 17,028	$ 18,629	$ 17,028

Dividends declared per share of common stock	$ 0.70	$ 0.70	$ 2.10	$ 2.10

See Notes to the Consolidated Financial Statements.

The Dow Chemical Company and Subsidiaries

Consolidated Statements of Income

In millions (Unaudited)	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 14,115	$ 14,837	$ 45,043	$ 40,604
Cost of sales	12,379	11,610	37,676	32,410
Research and development expenses	191	210	626	632
Selling, general and administrative expenses	357	403	1,289	1,209
Amortization of intangibles	83	100	256	301
Restructuring and asset related charges - net	—	—	186	22
Equity in earnings (losses) of nonconsolidated affiliates	(58)	249	311	751
Sundry income (expense) - net	73	(356)	287	(231)
Interest income	45	15	111	36
Interest expense and amortization of debt discount	155	178	487	561
Income before income taxes	1,010	2,244	5,232	6,025
Provision for income taxes	242	542	1,233	1,380
Net income	768	1,702	3,999	4,645
Net income attributable to noncontrolling interests	21	23	24	69
Net income available for The Dow Chemical Company common stockholder	$ 747	$ 1,679	$ 3,975	$ 4,576

Depreciation	$ 482	$ 517	$ 1,459	$ 1,550
Capital expenditures	$ 452	$ 413	$ 1,224	$ 1,035

See Notes to the Consolidated Financial Statements.

The Dow Chemical Company and Subsidiaries

Consolidated Statements of Comprehensive Income

In millions (Unaudited)	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net income	$ 768	$ 1,702	$ 3,999	$ 4,645
Other comprehensive income (loss), net of tax				
Unrealized losses on investments	(122)	(13)	(371)	(45)
Cumulative translation adjustments	(403)	(157)	(1,081)	(345)
Pension and other postretirement benefit plans	125	149	356	1,432
Derivative instruments	22	32	491	148
Total other comprehensive income (loss)	(378)	11	(605)	1,190
Comprehensive income	390	1,713	3,394	5,835
Comprehensive income attributable to noncontrolling interests, net of tax	21	23	24	69
Comprehensive income attributable to The Dow Chemical Company	$ 369	$ 1,690	$ 3,370	$ 5,766

See Notes to the Consolidated Financial Statements.

The Dow Chemical Company and Subsidiaries
Consolidated Balance Sheets

In millions, except share amounts (Unaudited)	*Sep 30, 2022*	*Dec 31, 2021*
Assets		
Current Assets		
Cash and cash equivalents	$ 2,216	$ 2,988
Accounts and notes receivable:		
Trade (net of allowance for doubtful receivables - 2022: $212; 2021: $54)	6,407	6,841
Other	2,120	2,712
Inventories	7,571	7,372
Other current assets	1,425	924
Total current assets	19,739	20,837
Investments		
Investment in nonconsolidated affiliates	1,785	2,045
Other investments (investments carried at fair value - 2022: $1,685; 2021: $2,079)	2,732	3,193
Noncurrent receivables	489	452
Total investments	5,006	5,690
Property		
Property	56,931	57,604
Less accumulated depreciation	36,899	37,049
Net property	20,032	20,555
Other Assets		
Goodwill	8,524	8,764
Other intangible assets (net of accumulated amortization - 2022: $4,888; 2021: $4,725)	2,483	2,881
Operating lease right-of-use assets	1,231	1,412
Deferred income tax assets	1,135	1,358
Deferred charges and other assets	1,358	1,455
Total other assets	14,731	15,870
Total Assets	$ 59,508	$ 62,952
Liabilities and Equity		
Current Liabilities		
Notes payable	$ 185	$ 161
Long-term debt due within one year	364	231
Accounts payable:		
Trade	5,008	5,577
Other	2,599	2,841
Operating lease liabilities - current	277	314
Income taxes payable	579	623
Accrued and other current liabilities	3,146	3,299
Total current liabilities	12,158	13,046
Long-Term Debt	12,921	14,280
Other Noncurrent Liabilities		
Deferred income tax liabilities	716	506
Pension and other postretirement benefits - noncurrent	6,541	7,557
Asbestos-related liabilities - noncurrent	868	931
Operating lease liabilities - noncurrent	1,012	1,149
Other noncurrent obligations	6,415	6,454
Total other noncurrent liabilities	15,552	16,597
Stockholder's Equity		
Common stock (authorized and issued 100 shares of $0.01 par value each)	—	—
Additional paid-in capital	8,456	8,159
Retained earnings	19,491	19,288
Accumulated other comprehensive loss	(9,582)	(8,977)
Unearned ESOP shares	—	(15)
The Dow Chemical Company's stockholder's equity	18,365	18,455
Noncontrolling interests	512	574
Total equity	18,877	19,029
Total Liabilities and Equity	$ 59,508	$ 62,952

See Notes to the Consolidated Financial Statements.

The Dow Chemical Company and Subsidiaries

Consolidated Statements of Cash Flows

In millions (Unaudited)	Nine Months Ended Sep 30, 2022	Nine Months Ended Sep 30, 2021
Operating Activities		
Net income	$ 3,999	$ 4,645
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	2,104	2,187
Provision for deferred income tax	125	488
Earnings of nonconsolidated affiliates less than (in excess of) dividends received	517	(519)
Net periodic pension benefit cost	19	34
Pension contributions	(156)	(1,166)
Net gain on sales of assets, businesses and investments	(11)	(67)
Restructuring and asset related charges - net	186	22
Other net loss	167	878
Changes in assets and liabilities, net of effects of acquired and divested companies:		
Accounts and notes receivable	323	(2,222)
Inventories	(254)	(1,502)
Accounts payable	(860)	1,487
Other assets and liabilities, net	(718)	369
Cash provided by operating activities	5,441	4,634
Investing Activities		
Capital expenditures	(1,224)	(1,035)
Investment in gas field developments	(134)	(44)
Purchases of previously leased assets	(5)	(5)
Proceeds from sales of property and businesses, net of cash divested	16	15
Acquisitions of property and businesses, net of cash acquired	(54)	(107)
Investments in and loans to nonconsolidated affiliates	(69)	—
Distributions and loan repayments from nonconsolidated affiliates	10	11
Proceeds from sales of ownership interests in nonconsolidated affiliates	11	—
Purchases of investments	(445)	(1,004)
Proceeds from sales and maturities of investments	596	644
Other investing activities, net	(41)	(10)
Cash used for investing activities	(1,339)	(1,535)
Financing Activities		
Changes in short-term notes payable	72	(44)
Proceeds from issuance of short-term debt greater than three months	—	144
Payments on short-term debt greater than three months	(14)	—
Proceeds from issuance of long-term debt	82	95
Payments on long-term debt	(957)	(2,638)
Proceeds from issuance of stock	99	212
Transaction financing, debt issuance and other costs	(8)	(536)
Employee taxes paid for share-based payment arrangements	(34)	(11)
Distributions to noncontrolling interests	(42)	(35)
Dividends paid to Dow Inc.	(3,755)	(2,361)
Cash used for financing activities	(4,557)	(5,174)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(261)	(57)
Summary		
Decrease in cash, cash equivalents and restricted cash	(716)	(2,132)
Cash, cash equivalents and restricted cash at beginning of period	3,033	5,108
Cash, cash equivalents and restricted cash at end of period	$ 2,317	$ 2,976
Less: Restricted cash and cash equivalents, included in "Other current assets"	101	65
Cash and cash equivalents at end of period	$ 2,216	$ 2,911

See Notes to the Consolidated Financial Statements.

The Dow Chemical Company and Subsidiaries

Consolidated Statements of Equity

In millions (Unaudited)	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Common Stock				
Balance at beginning and end of period	$ —	$ —	$ —	$ —
Additional Paid-in Capital				
Balance at beginning of period	8,375	7,906	8,159	7,603
Issuance of parent company stock - Dow Inc.	2	11	99	211
Stock-based compensation and allocation of ESOP shares	79	79	198	182
Balance at end of period	8,456	7,996	8,456	7,996
Retained Earnings				
Balance at beginning of period	20,049	17,745	19,288	16,300
Net income available for The Dow Chemical Company common stockholder	747	1,679	3,975	4,576
Dividends to Dow Inc.	(1,301)	(919)	(3,755)	(2,361)
Other	(4)	(8)	(17)	(18)
Balance at end of period	19,491	18,497	19,491	18,497
Accumulated Other Comprehensive Loss				
Balance at beginning of period	(9,204)	(9,676)	(8,977)	(10,855)
Other comprehensive income (loss)	(378)	11	(605)	1,190
Balance at end of period	(9,582)	(9,665)	(9,582)	(9,665)
Unearned ESOP Shares				
Balance at beginning of period	—	(32)	(15)	(49)
Allocation of ESOP shares	—	8	15	25
Balance at end of period	—	(24)	—	(24)
The Dow Chemical Company's stockholder's equity	18,365	16,804	18,365	16,804
Noncontrolling Interests	512	589	512	589
Total Equity	$ 18,877	$ 17,393	$ 18,877	$ 17,393

See Notes to the Consolidated Financial Statements.

Dow Inc. and Subsidiaries
The Dow Chemical Company and Subsidiaries

(Unaudited)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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NOTE 1 – CONSOLIDATED FINANCIAL STATEMENTS

Basis of Presentation

Dow Inc. is the direct parent company of The Dow Chemical Company and its consolidated subsidiaries ("TDCC" and together with Dow Inc., "Dow" or the "Company"). The unaudited interim consolidated financial statements of Dow Inc. and TDCC were prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and reflect all adjustments (including normal recurring accruals) which, in the opinion of management, are considered necessary for the fair presentation of the results for the periods presented. These statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the combined Dow Inc. and TDCC Annual Report on Form 10-K for the year ended December 31, 2021 ("2021 10-K").

As a result of the parent/subsidiary relationship between Dow Inc. and TDCC, and considering that the financial statements and disclosures of each company are substantially similar, the companies are filing a combined report for this Quarterly Report on Form 10-Q. The information reflected in the report is equally applicable to both Dow Inc. and TDCC, except where otherwise noted. Transactions between TDCC and Dow Inc. are treated as related party transactions for TDCC. See Note 22 for additional information.

Except as otherwise indicated by the context, the term "Union Carbide" means Union Carbide Corporation and the term "Dow Silicones" means Dow Silicones Corporation, both wholly owned subsidiaries of the Company.

NOTE 2 – RECENT ACCOUNTING GUIDANCE

Accounting Guidance Issued But Not Adopted at September 30, 2022

In September 2022, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") 2022-04, "Liabilities — Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations," which requires disclosures intended to enhance the transparency of supplier finance programs. The amendments in this ASU require buyers in a supplier finance program to disclose sufficient information about the program to allow a user of financial statements to understand the program's nature, activity during the period, changes from period to period, and potential magnitude. The amendments are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, except for the disclosure of rollforward information, which is effective for fiscal years beginning after December 15, 2023. Early adoption is permitted. The amendments should be applied retrospectively to each period in which a balance sheet is presented, except for disclosure of rollforward information, which should be applied prospectively. The Company is currently evaluating the impact of adopting this guidance on the Company's disclosures.

NOTE 3 – SEPARATION FROM DOWDUPONT

For additional information on the separation from DowDuPont Inc. ("DowDuPont"), see Note 3 to the Consolidated Financial Statements included in the 2021 10-K.

Agreements Related to the Separation and Distribution

The impacts of indemnifications and other post-separation matters relating to Dow's separation from DowDuPont were primarily included in the consolidated financial statements of Dow Inc. At September 30, 2022, the Company had assets of $23 million (zero at December 31, 2021) included in "Other current assets" and $2 million ($20 million at December 31, 2021) included in "Noncurrent receivables," and liabilities of $128 million ($148 million at December 31, 2021) included in "Accrued and other current liabilities" and $32 million ($39 million at December 31, 2021) included in "Other noncurrent obligations" in the consolidated balance sheets of Dow Inc. related to these agreements.

In addition, the Company deferred a portion of the cash distribution received from DowDuPont at separation and recorded an associated liability with an offset to "Retained earnings" in the consolidated balance sheets of Dow Inc. At September 30, 2022, $10 million ($15 million at December 31, 2021) of this liability was recorded in "Accrued and other current liabilities" and $96 million ($96 million at December 31, 2021) was recorded in "Other noncurrent obligations" in the consolidated balance sheets of Dow Inc.

NOTE 4 – REVENUE

Revenue Recognition

The majority of the Company's revenue is derived from product sales. The Company's revenue related to product sales was 99 percent for the three and nine months ended September 30, 2022 (99 percent and 98 percent for the three and nine months ended September 30, 2021, respectively). The remaining sales were primarily related to the Company's insurance operations and licensing of patents and technologies. Product sales consist of sales of the Company's products to manufacturers and distributors. The Company considers order confirmations or purchase orders, which in some cases are governed by master supply agreements, to be contracts with a customer. The Company enters into licensing arrangements in which it licenses certain rights of its patents and technology to customers. Revenue from the Company's licenses for patents and technology is derived from sales-based royalties and licensing arrangements based on billing schedules established in each contract.

Remaining Performance Obligations

Remaining performance obligations represent the transaction price allocated to unsatisfied or partially unsatisfied performance obligations. At September 30, 2022, the Company had unfulfilled performance obligations of $919 million ($829 million at December 31, 2021) related to the licensing of technology. The Company expects revenue to be recognized for the remaining performance obligations over the next six years.

The remaining performance obligations are for product sales that have expected durations of one year or less, product sales of materials delivered through a pipeline for which the Company has elected the right to invoice practical expedient, or variable consideration attributable to royalties for licenses of patents and technology. The Company has received advance payments from customers related to long-term supply agreements that are deferred and recognized over the life of the contract, with remaining contract terms that range up to 18 years. The Company will have rights to future consideration for revenue recognized when product is delivered to the customer. These payments are included in "Accrued and other current liabilities" and "Other noncurrent obligations" in the consolidated balance sheets.

Disaggregation of Revenue

The Company disaggregates its revenue from contracts with customers by operating segment and business, as the Company believes it best depicts the nature, amount, timing and uncertainty of its revenue and cash flows. See details in the tables below:

Net Trade Sales by Segment and Business	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Hydrocarbons & Energy	$ 2,509	$ 2,251	$ 7,704	$ 6,010
Packaging and Specialty Plastics	4,818	5,485	15,483	14,929
Packaging & Specialty Plastics	$ 7,327	$ 7,736	$ 23,187	$ 20,939
Industrial Solutions	$ 1,420	$ 1,377	$ 4,381	$ 3,627
Polyurethanes & Construction Chemicals	2,636	3,102	8,560	8,670
Other	3	2	12	6
Industrial Intermediates & Infrastructure	$ 4,059	$ 4,481	$ 12,953	$ 12,303
Coatings & Performance Monomers	$ 1,052	$ 1,110	$ 3,256	$ 2,975
Consumer Solutions	1,602	1,416	5,450	4,139
Performance Materials & Coatings	$ 2,654	$ 2,526	$ 8,706	$ 7,114
Corporate	$ 75	$ 94	$ 197	$ 248
Total	$ 14,115	$ 14,837	$ 45,043	$ 40,604

Net Trade Sales by Geographic Region	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
U.S. & Canada	$ 5,334	$ 5,476	$ 16,578	$ 14,431
EMEAI [1]	4,634	5,229	15,823	14,660
Asia Pacific	2,571	2,579	7,997	7,423
Latin America	1,576	1,553	4,645	4,090
Total	$ 14,115	$ 14,837	$ 45,043	$ 40,604

1. Europe, Middle East, Africa and India.

Contract Assets and Liabilities

The Company receives payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Contract assets include amounts related to the Company's contractual right to consideration for completed performance obligations not yet invoiced. Contract liabilities include payments received in advance of performance under the contract and are recognized in revenue when the performance obligations are met. "Contract liabilities - current" primarily reflects deferred revenue from prepayments from customers for product to be delivered in 12 months or less and royalty payments that are deferred and will be recognized in 12 months or less. "Contract liabilities - noncurrent" includes advance payments that the Company has received from customers related to long-term supply agreements and royalty payments that are deferred and recognized over the life of the contract.

Revenue recognized in the first nine months of 2022 from amounts included in contract liabilities at the beginning of the period was approximately $165 million (approximately $250 million in the first nine months of 2021). In the first nine months of 2022, the amount of contract assets reclassified to receivables as a result of the right to the transaction consideration becoming unconditional was insignificant (approximately $5 million in the first nine months of 2021).

The following table summarizes contract assets and liabilities at September 30, 2022 and December 31, 2021:

Contract Assets and Liabilities In millions	*Balance Sheet Classification*	*Sep 30, 2022*	*Dec 31, 2021*
Accounts and notes receivable - trade	Accounts and notes receivable - trade	$ 6,407	$ 6,841
Contract assets - current	Other current assets	$ 40	$ 34
Contract assets - noncurrent	Deferred charges and other assets	$ 19	$ 26
Contract liabilities - current [1]	Accrued and other current liabilities	$ 315	$ 209
Contract liabilities - noncurrent [2]	Other noncurrent obligations	$ 1,727	$ 1,925

1. The increase from December 31, 2021 to September 30, 2022 was due to the reclassification of deferred royalty payments from noncurrent to current.
2. The decrease from December 31, 2021 to September 30, 2022 was due to the recognition of revenue on long-term product supply agreements and reclassification of deferred royalty payments from noncurrent to current.

NOTE 5 – RESTRUCTURING AND ASSET RELATED CHARGES - NET

Charges for restructuring programs and other asset related charges, which includes asset impairments, are recorded in "Restructuring and asset related charges - net" in the consolidated statements of income. For additional information on the Company's restructuring programs, see Note 6 to the Consolidated Financial Statements included in the 2021 10-K.

2020 Restructuring Program

Actions related to the restructuring program approved by the Dow Inc. Board of Directors ("Board") on September 29, 2020 ("2020 Restructuring Program") were substantially complete at the end of 2021, with the exception of certain cash payments that will continue through 2022 and into 2023. The following table summarizes the activities related to the 2020 Restructuring Program since January 1, 2021:

2020 Restructuring Program In millions	*Severance and Related Benefit Costs*	*Asset Write-downs and Write-offs*	*Costs Associated with Exit and Disposal Activities*	*Total*
Reserve balance at Jan 1, 2021	$ 289	$ —	$ 75	$ 364
Cash payments	(37)	—	(12)	(49)
Reserve balance at Mar 31, 2021	$ 252	$ —	$ 63	$ 315
Packaging & Specialty Plastics	$ —	$ —	$ 8	$ 8
Industrial Intermediates & Infrastructure	—	1	—	1
Performance Materials & Coatings	—	8	2	10
Corporate	—	3	—	3
Total restructuring charges	$ —	$ 12	$ 10	$ 22
Charges against the reserve	—	(12)	—	(12)
Cash payments	(53)	—	(3)	(56)
Reserve balance at Jun 30, 2021	$ 199	$ —	$ 70	$ 269
Cash payments	(55)	—	(2)	(57)
Reserve balance at Sep 30, 2021	$ 144	$ —	$ 68	$ 212
Restructuring charges - Corporate	(10)	—	—	(10)
Cash payments	(30)	—	(4)	(34)
Reserve balance at Dec 31, 2021	$ 104	$ —	$ 64	$ 168
Cash payments	(59)	—	(1)	(60)
Reserve balance at Mar 31, 2022	$ 45	$ —	$ 63	$ 108
Cash payments	(8)	—	(2)	(10)
Reserve balance at Jun 30, 2022	$ 37	$ —	$ 61	$ 98
Cash payments	(5)	—	(1)	(6)
Reserve balance at Sep 30, 2022	$ 32	$ —	$ 60	$ 92

At September 30, 2022, $38 million of the reserve balance was included in "Accrued and other current liabilities" ($112 million at December 31, 2021) and $54 million was included in "Other noncurrent obligations" ($56 million at December 31, 2021) in the consolidated balance sheets.

The Company recorded pretax restructuring charges of $585 million inception-to-date under the 2020 Restructuring Program, consisting of severance and related benefit costs of $287 million, asset write-downs and write-offs of $208 million and costs associated with exit and disposal activities of $90 million.

The Company expects to incur additional costs in the future related to its restructuring activities. Future costs are expected to include demolition costs related to closed facilities and restructuring implementation costs; these costs will be recognized as incurred. The Company also expects to incur additional employee-related costs, including involuntary termination benefits, related to its other optimization activities. These costs cannot be reasonably estimated at this time.

2022 Asset Related Charges

In the first quarter of 2022, the Company recorded pretax asset related charges of $186 million due to the Russia and Ukraine conflict and the expectation that certain assets will not be recoverable. These charges included the write-down of inventory, the recording of bad debt reserves and the impairment of other assets. Asset related charges by segment were as follows: $31 million in Packaging & Specialty Plastics, $109 million in Industrial Intermediates & Infrastructure, $16 million in Performance Materials & Coatings and $30 million in Corporate.

NOTE 6 – SUPPLEMENTARY INFORMATION

Dow Inc. Sundry Income (Expense) – Net	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Non-operating pension and other postretirement benefit plan net credits [1]	$ 89	$ 86	$ 267	$ 247
Foreign exchange losses	(31)	(5)	(46)	(21)
Loss on early extinguishment of debt [2]	—	(472)	(8)	(574)
Gains on sales of other assets and investments	10	12	53	74
Indemnification and other transaction related costs [3]	(7)	—	(3)	(5)
Luxi arbitration award [4]	—	54	—	54
Other - net	8	(25)	29	—
Total sundry income (expense) – net	$ 69	$ (350)	$ 292	$ (225)

1. See Note 17 for additional information.
2. See Note 12 for additional information.
3. See Note 3 for additional information.
4. The three and nine months ended September 30, 2021 includes an arbitration award and interest assessment paid by Luxi Chemical Group Co., Ltd., related to Industrial Intermediates & Infrastructure.

TDCC Sundry Income (Expense) – Net	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Non-operating pension and other postretirement benefit plan net credits [1]	$ 89	$ 86	$ 267	$ 247
Foreign exchange losses	(34)	(8)	(54)	(24)
Loss on early extinguishment of debt [2]	—	(472)	(8)	(574)
Gains on sales of other assets and investments	10	12	53	74
Luxi arbitration award [3]	—	54	—	54
Other - net	8	(28)	29	(8)
Total sundry income (expense) – net	$ 73	$ (356)	$ 287	$ (231)

1. See Note 17 for additional information.
2. See Note 12 for additional information.
3. The three and nine months ended September 30, 2021 includes an arbitration award and interest assessment paid by Luxi Chemical Group Co., Ltd., related to Industrial Intermediates & Infrastructure.

NOTE 7 - EARNINGS PER SHARE CALCULATIONS

The following tables provide earnings per share calculations for Dow Inc. for the three and nine months ended September 30, 2022 and 2021. Earnings per share of TDCC is not presented as this information is not required in financial statements of wholly owned subsidiaries.

Net Income for Earnings Per Share Calculations	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net income	$ 760	$ 1,706	$ 3,993	$ 4,644
Net income attributable to noncontrolling interests	21	23	24	69
Net income attributable to participating securities [1]	4	8	21	23
Net income attributable to common stockholders	$ 735	$ 1,675	$ 3,948	$ 4,552

Earnings Per Share - Basic and Diluted	*Three Months Ended*		*Nine Months Ended*	
Dollars per share	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Earnings per common share - basic	$ 1.03	$ 2.25	$ 5.45	$ 6.11
Earnings per common share - diluted	$ 1.02	$ 2.23	$ 5.41	$ 6.06

Share Count Information	*Three Months Ended*		*Nine Months Ended*	
Shares in millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Weighted-average common shares outstanding - basic	714.3	744.5	724.9	745.4
Plus dilutive effect of equity compensation plans	3.8	5.5	4.9	5.5
Weighted-average common shares outstanding - diluted	718.1	750.0	729.8	750.9
Stock options and restricted stock units excluded from EPS calculations [2]	9.7	7.2	6.8	5.6

1. Restricted stock units are considered participating securities due to the Company's practice of paying dividend equivalents on unvested shares.
2. These outstanding options to purchase shares of common stock and restricted stock units were excluded from the calculation of diluted earnings per share because the effect of including them would have been antidilutive.

NOTE 8 – INVENTORIES

The following table provides a breakdown of inventories:

Inventories		
In millions	*Sep 30, 2022*	*Dec 31, 2021*
Finished goods	$ 4,745	$ 4,554
Work in process	1,626	1,615
Raw materials	1,016	822
Supplies	874	866
Total	$ 8,261	$ 7,857
Adjustment of inventories to a LIFO basis	(690)	(485)
Total inventories	$ 7,571	$ 7,372

NOTE 9 – NONCONSOLIDATED AFFILIATES

For additional information on the Company's nonconsolidated affiliates, see Note 12 to the Consolidated Financial Statements included in the 2021 10-K.

The Company's investments in companies accounted for using the equity method ("nonconsolidated affiliates"), by classification in the consolidated balance sheets, and dividends received from nonconsolidated affiliates are shown in the following tables:

Investments in Nonconsolidated Affiliates In millions	*Sep 30, 2022*	*Dec 31, 2021*
Investment in nonconsolidated affiliates	$ 1,785	$ 2,045
Other noncurrent obligations	(148)	—
Net investment in nonconsolidated affiliates	$ 1,637	$ 2,045

Dividends from Nonconsolidated Affiliates	*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*
Dividends from nonconsolidated affiliates [1]	$ 828	$ 232

1. Included in "Earnings of nonconsolidated affiliates less than (in excess of) dividends received" in the consolidated statements of cash flows.

At September 30, 2022, the Company had a negative investment balance in EQUATE Petrochemical Company K.S.C.C of $148 million included in "Other noncurrent obligations" (positive $115 million at December 31, 2021 included in "Investment in nonconsolidated affiliates") in the consolidated balance sheets.

NOTE 10 – GOODWILL AND OTHER INTANGIBLE ASSETS

The following table shows changes in the carrying amount of goodwill by reportable segment:

Goodwill In millions	*Packaging & Specialty Plastics*	*Industrial Intermediates & Infrastructure*	*Performance Materials & Coatings*	*Total*
Net goodwill at Dec 31, 2021	$ 5,105	$ 1,096	$ 2,563	$ 8,764
Foreign currency impact	(14)	(7)	(219)	(240)
Net goodwill at Sep 30, 2022	$ 5,091	$ 1,089	$ 2,344	$ 8,524

The following table provides information regarding the Company's other intangible assets:

Other Intangible Assets	*Sep 30, 2022*			*Dec 31, 2021*		
In millions	*Gross Carrying Amount*	*Accum Amort*	*Net*	*Gross Carrying Amount*	*Accum Amort*	*Net*
Intangible assets with finite lives:						
Developed technology	$ 2,633	$ (1,985)	$ 648	$ 2,637	$ (1,871)	$ 766
Software	1,356	(960)	396	1,396	(945)	451
Trademarks/tradenames	352	(345)	7	352	(344)	8
Customer-related	3,013	(1,598)	1,415	3,204	(1,565)	1,639
Total other intangible assets, finite lives	$ 7,354	$ (4,888)	$ 2,466	$ 7,589	$ (4,725)	$ 2,864
In-process research and development	17	—	17	17	—	17
Total other intangible assets	$ 7,371	$ (4,888)	$ 2,483	$ 7,606	$ (4,725)	$ 2,881

The following table provides information regarding amortization expense related to intangible assets:

Amortization Expense	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Other intangible assets, excluding software	$ 83	$ 100	$ 256	$ 301
Software, included in “Cost of sales”	$ 20	$ 22	$ 60	$ 67

Total estimated amortization expense for 2022 and the five succeeding fiscal years, including amounts expected to be capitalized, is as follows:

Estimated Amortization Expense	
In millions	
2022	$ 411
2023	$ 376
2024	$ 357
2025	$ 266
2026	$ 192
2027	$ 159

NOTE 11 – TRANSFERS OF FINANCIAL ASSETS

Accounts Receivable Programs

The Company maintains committed accounts receivable facilities with various financial institutions, including in the United States, which expires in November 2022 and is expected to be renewed in the fourth quarter (“U.S. Program”) and in Europe, which expires in July 2023 (“Europe Program” and together with the U.S. Program, "the Programs"). Under the terms of the Programs, the Company may sell certain eligible trade accounts receivable at any point in time, up to $900 million for the U.S. Program and up to €500 million for the Europe Program. Under the terms of the Programs, the Company continues to service the receivables from the customer, but retains no interest in the receivables, and remits payment to the financial institutions. The Company also provides a guarantee to the financial institutions for the creditworthiness and collection of the receivables in satisfaction of the facility. See Note 13 for additional information related to guarantees. In the third quarter of 2022, the Company sold no receivables under the Programs ($391 million in the first nine months of 2022; zero for the three and nine months ended September 30, 2021).

NOTE 12 – NOTES PAYABLE, LONG-TERM DEBT AND AVAILABLE CREDIT FACILITIES

Notes Payable In millions	*Sep 30, 2022*	*Dec 31, 2021*
Commercial paper	$ 100	$ —
Notes payable to banks and other lenders	85	161
Total notes payable	$ 185	$ 161
Period-end average interest rates	8.09 %	5.78 %

Long-Term Debt In millions	*2022 Average Rate*	*Sep 30, 2022*	*2021 Average Rate*	*Dec 31, 2021*
Promissory notes and debentures:				
Final maturity 2022	— %	$ —	8.64 %	$ 121
Final maturity 2023	7.63 %	250	7.63 %	250
Final maturity 2025	5.63 %	333	5.63 %	333
Final maturity 2026	— %	—	3.63 %	750
Final maturity 2028 and thereafter [1]	5.15 %	9,364	5.15 %	9,363
Other facilities:				
Foreign currency notes and loans, various rates and maturities	1.16 %	2,339	1.17 %	2,730
InterNotes®, varying maturities through 2052	3.52 %	462	3.37 %	392
Finance lease obligations [2]		804		869
Unamortized debt discount and issuance costs		(267)		(297)
Long-term debt due within one year [3]		(364)		(231)
Long-term debt		$ 12,921		$ 14,280

1. Cost includes net fair value hedge adjustment gains of $47 million at September 30, 2022 and December 31, 2021. See Note 19 for additional information.
2. See Note 14 for additional information.
3. Presented net of current portion of unamortized debt issuance costs.

Maturities of Long-Term Debt for Next Five Years at Sep 30, 2022 In millions	
2022	$ 34
2023	$ 390
2024	$ 84
2025	$ 386
2026	$ 79
2027	$ 1,068

2022 Activity
In the second quarter of 2022, the Company redeemed $750 million aggregate principal amount of 3.625 percent notes due May 2026. As a result of the redemption, the Company recognized a pretax loss on the early extinguishment of debt of $8 million, included in "Sundry income (expense) - net" in the consolidated statements of income and related to Corporate.

In the first nine months of 2022, the Company issued an aggregate principal amount of $82 million of InterNotes®. The Company also repaid approximately $121 million of long-term debt at maturity and approximately $2 million of long-term debt was repaid by consolidated variable interest entities.

2021 Activity
In the second quarter of 2021, the Company redeemed $208 million aggregate principal amount of 3.15 percent notes due May 2024 and $811 million aggregate principal amount of 3.50 percent notes due October 2024. As a result of the redemptions, the Company recognized a pretax loss on the early extinguishment of debt of

$101 million, included in "Sundry income (expense) - net" in the consolidated statements of income and related to Corporate.

In the third quarter of 2021, the Company completed cash tender offers for certain debt securities. In total, $1,042 million aggregate principal amount was tendered and retired. As a result, the Company recognized a pretax loss of $472 million on the early extinguishment of debt, included in "Sundry income (expense) – net" in the consolidated statements of income (related to Corporate) and included in "Other net loss" in the consolidated statements of cash flows. In addition, the Company voluntarily repaid $81 million of long-term debt due within one year.

In the first nine months of 2021, the Company issued an aggregate principal amount of $95 million of InterNotes®, and redeemed an aggregate principal amount of $28 million at maturity. In addition, the Company voluntarily repaid an aggregate principal amount of $213 million of InterNotes® with various maturities. As a result, the Company recognized a pretax loss on the early extinguishment of debt for the nine months ended September 30, 2021 of $1 million, included in "Sundry income (expense) - net" in the consolidated statements of income and related to Corporate. The Company also repaid approximately $173 million of long-term debt at maturity and approximately $14 million of long-term debt was repaid by consolidated variable interest entities.

Available Credit Facilities
The following table summarizes the Company's credit facilities:

Committed and Available Credit Facilities at Sep 30, 2022				
In millions	*Committed Credit*	*Available Credit*	*Maturity Date*	*Interest*
Five Year Competitive Advance and Revolving Credit Facility	$ 5,000	$ 5,000	November 2026	Floating rate
Bilateral Revolving Credit Facility	200	200	November 2022	Floating rate
Bilateral Revolving Credit Facility	200	200	September 2023	Floating rate
Bilateral Revolving Credit Facility	250	250	September 2023	Floating rate
Bilateral Revolving Credit Facility	300	300	September 2023	Floating rate
Bilateral Revolving Credit Facility	300	300	December 2023	Floating rate
Bilateral Revolving Credit Facility	300	300	December 2023	Floating rate
Bilateral Revolving Credit Facility	100	100	October 2024	Floating rate
Bilateral Revolving Credit Facility	100	100	March 2025	Floating rate
Bilateral Revolving Credit Facility	250	250	March 2025	Floating rate
Bilateral Revolving Credit Facility	100	100	March 2025	Floating rate
Bilateral Revolving Credit Facility	100	100	March 2025	Floating rate
Bilateral Revolving Credit Facility	200	200	September 2025	Floating rate
Bilateral Revolving Credit Facility	100	100	March 2026	Floating rate
Bilateral Revolving Credit Facility	100	100	October 2026	Floating rate
Bilateral Revolving Credit Facility	150	150	November 2026	Floating rate
Bilateral Revolving Credit Facility	100	100	May 2027	Floating rate
Bilateral Revolving Credit Facility	350	350	June 2027	Floating rate
Bilateral Revolving Credit Facility	200	200	September 2027	Floating rate
Total committed and available credit facilities	$ 8,400	$ 8,400		

Debt Covenants and Default Provisions
There were no material changes to the debt covenants and default provisions related to the Company's outstanding long-term debt and primary, private credit agreements in the first nine months of 2022. For additional information on the Company's debt covenants and default provisions, see Note 15 to the Consolidated Financial Statements included in the 2021 10-K.

NOTE 13 – COMMITMENTS AND CONTINGENCIES

A summary of the Company's commitments and contingencies can be found in Note 16 to the Consolidated Financial Statements included in the 2021 10-K, which is incorporated by reference herein.

Environmental Matters

Accruals for environmental matters are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. At September 30, 2022, the Company had accrued obligations of $1,197 million for probable environmental remediation and restoration costs ($1,220 million at December 31, 2021), including $239 million for the remediation of Superfund sites ($237 million at December 31, 2021). This is management's best estimate of the costs for remediation and restoration with respect to environmental matters for which the Company has accrued liabilities, although it is reasonably possible that the ultimate cost with respect to these particular matters could range up to approximately two times that amount. Consequently, it is reasonably possible that environmental remediation and restoration costs in excess of amounts accrued could have a material impact on the Company's results of operations, financial condition and cash flows. It is the opinion of the Company's management, however, that the possibility is remote that costs in excess of the range disclosed will have a material impact on the Company's results of operations, financial condition and cash flows. Inherent uncertainties exist in these estimates primarily due to unknown conditions, changing governmental regulations and legal standards regarding liability, and emerging remediation technologies for handling site remediation and restoration. As new or additional information becomes available and/or certain spending trends become known, management will evaluate such information in determination of the current estimate of environmental liability.

Litigation

Asbestos-Related Matters of Union Carbide Corporation

Each quarter, Union Carbide reviews claims filed, settled and dismissed, as well as average settlement and resolution costs by disease category. Union Carbide also considers additional quantitative and qualitative factors such as the nature of pending claims, trial experience of Union Carbide and other asbestos defendants, current spending for defense and processing costs, significant appellate rulings and legislative developments, trends in the tort system, and their respective effects on expected future resolution costs. Union Carbide's management considers these factors in conjunction with the most recent actuarial study and determines whether a change in the estimate is warranted. Based on Union Carbide's review of 2022 activity, it was determined that no adjustment to the accrual was required at September 30, 2022.

Union Carbide's total asbestos-related liability for pending and future claims and defense and processing costs was $958 million at September 30, 2022 ($1,016 million at December 31, 2021). At September 30, 2022, approximately 25 percent of the recorded claim liability related to pending claims and approximately 75 percent related to future claims.

Dow Silicones Chapter 11 Related Matters

At September 30, 2022, Dow Silicones and its insurers have made life-to-date payments of $1,835 million to the settlement program administered by an independent claims office (the "Settlement Facility"), created to resolve breast implant and other product liability claims. At September 30, 2022, Dow Silicones estimates that it will be obligated to contribute an additional $87 million to the Settlement Facility which was included in "Accrued and other current liabilities" in the consolidated balance sheets ($130 million at December 31, 2021, which was included in "Accrued and other current liabilities" and "Other noncurrent obligations" in the consolidated balance sheets).

Indemnifications with Corning Incorporated

The Company had indemnification assets with Corning Incorporated of $99 million at September 30, 2022 ($95 million at December 31, 2021), which were included primarily in "Noncurrent receivables" in the consolidated balance sheets.

Gain Contingency - Dow v. Nova Chemicals Corporation Patent Infringement Matter

As a result of a 2017 damages judgment related to the patent infringement matter, Nova Chemicals Corporation ("Nova") was ordered to pay the Company $645 million Canadian dollars, plus pre- and post-judgment interest, for which the Company received payment of $501 million U.S. dollars in July 2017. At September 30, 2022, the Company had $341 million ($341 million at December 31, 2021) included in "Accrued and other current liabilities" in the consolidated balance sheets related to the disputed portion of the damages judgment.

Gain Contingency - Dow v. Nova Chemicals Corporation Ethylene Asset Matter
As a result of a 2019 damages judgment related to the ethylene asset matter, Nova was ordered to pay the Company $1.43 billion Canadian dollars (equivalent to approximately $1.08 billion U.S. dollars). In October 2019, Nova paid $1.08 billion Canadian dollars (equivalent to approximately $0.8 billion U.S. dollars) directly to the Company, and remitted $347 million Canadian dollars to the Canada Revenue Agency ("CRA") for the tax account of one of the Company's subsidiaries. In March 2020, the Company received the full refund from the CRA, equivalent to $259 million U.S. dollars. At September 30, 2022, $323 million ($323 million at December 31, 2021) was included in "Other noncurrent obligations" in the Company's consolidated balance sheets related to the disputed portion of the damages judgment.

Brazilian Tax Credits
In March 2017, the Federal Supreme Court of Brazil (“Brazil Supreme Court”) ruled in a leading case that a Brazilian value-added tax ("ICMS") should not be included in the base used to calculate a taxpayer's federal contribution on total revenue known as PIS/COFINS (the “2017 Decision”). Previously, three of the Company’s Brazilian subsidiaries filed lawsuits challenging the inclusion of ICMS in their calculation of PIS/COFINS, seeking recovery of excess taxes paid. In response to the 2017 Decision, the Brazilian tax authority filed an appeal seeking clarification of the amount of ICMS tax to exclude from the calculation of PIS/COFINS. In May 2021, the Brazil Supreme Court ruled in a leading case related to the amount of ICMS tax to exclude from the calculation of PIS/COFINS, which resolved two of the lawsuits filed by the Company and, in May 2022, a court decision related to the remaining lawsuit, ruling in favor of the Company's Brazilian subsidiary, became final and unappealable. As a result, the Company recorded pretax gains of $112 million in the second quarter of 2022 and $61 million in the second quarter of 2021 for certain excess PIS/COFINS paid from 2009 to 2019, plus applicable interest, which the Company expects to apply to future required federal tax payments, and the reversal of related liabilities. The pretax gains were recorded in “Cost of sales” in the consolidated statements of income. At September 30, 2022, related tax credits available and expected to be applied to future required federal tax payments totaled $129 million ($52 million at December 31, 2021).

Guarantees
The following table provides a summary of the final expiration, maximum future payments and recorded liability included in the consolidated balance sheets for guarantees:

Guarantees	*Sep 30, 2022*			*Dec 31, 2021*		
In millions	*Final Expiration*	*Maximum Future Payments* [1]	*Recorded Liability*	*Final Expiration*	*Maximum Future Payments* [1]	*Recorded Liability*
Guarantees	2038	$ 1,249	$ 205	2038	$ 1,273	$ 220

1. In addition, TDCC has provided guarantees, in proportion to the Company's 35 percent ownership interest, of all future interest payments that will become due on Sadara’s project financing debt during the grace period, which Dow's share is estimated to be $480 million at September 30, 2022 ($446 million at December 31, 2021). Based on Sadara's current forecasted cash flows, the Company does not expect to be required to perform under the guarantees.

Guarantees arise during the ordinary course of business from relationships with customers, committed accounts receivable facilities and nonconsolidated affiliates when the Company undertakes an obligation to guarantee the performance of others (via delivery of cash or other assets) if specified triggering events occur. With guarantees, such as commercial or financial contracts, non-performance by the guaranteed party triggers the obligation of the Company to make payments to the beneficiary of the guarantee. The majority of the Company’s guarantees relate to debt of nonconsolidated affiliates, which have expiration dates ranging from less than 1 year to 16 years. The Company’s current expectation is that future payment or performance related to the non-performance of others is considered remote.

TDCC has entered into guarantee agreements related to Sadara, a nonconsolidated affiliate. Sadara reached an agreement with its lenders to re-profile its outstanding project financing debt in the first quarter of 2021. In conjunction with the debt re-profiling, TDCC entered into a guarantee of up to approximately $1.3 billion of Sadara’s debt, proportionate to the Company's 35 percent ownership interest. The debt re-profiling also includes a grace period until June 2026, during which Sadara is obligated to make interest-only payments which are guaranteed by TDCC in proportion to the Company’s 35 percent ownership interest. As part of the debt re-profiling, Sadara established a $500 million revolving credit facility guaranteed by Dow, which would be used to fund Dow’s pro-rata share of any potential shortfall during the grace period. Based on Sadara's forecasted cash flows and no significant scheduled debt repayments until 2026, the Company does not expect Sadara to draw on the facility.

NOTE 14 - LEASES

For additional information on the Company's leases, see Note 17 to the Consolidated Financial Statements included in the 2021 10-K.

The components of lease cost for operating and finance leases for the three and nine months ended September 30, 2022 and 2021 were as follows:

Lease Cost	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Operating lease cost	$ 98	$ 123	$ 294	$ 362
Finance lease cost				
Amortization of right-of-use assets - finance	$ 28	$ 19	$ 80	$ 53
Interest on lease liabilities - finance	8	6	25	19
Total finance lease cost	$ 36	$ 25	$ 105	$ 72
Short-term lease cost	69	57	194	177
Variable lease cost	164	78	412	228
Sublease income	(2)	(2)	(8)	(5)
Total lease cost	$ 365	$ 281	$ 997	$ 834

The following table provides supplemental cash flow and other information related to leases:

Other Lease Information	*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 289	$ 364
Operating cash flows for finance leases	$ 25	$ 19
Financing cash flows for finance leases	$ 79	$ 48
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 93	$ 133
Finance leases	$ 44	$ 73

The following table summarizes the lease-related assets and liabilities recorded in the consolidated balance sheets at September 30, 2022 and December 31, 2021:

Lease Position In millions	*Balance Sheet Classification*	*Sep 30, 2022*	*Dec 31, 2021*
Assets			
Operating lease assets	Operating lease right-of-use assets	$ 1,231	$ 1,412
Finance lease assets	Property	1,145	1,158
Finance lease amortization	Accumulated depreciation	(418)	(368)
Total lease assets		$ 1,958	$ 2,202
Liabilities			
Current			
Operating	Operating lease liabilities - current	$ 277	$ 314
Finance	Long-term debt due within one year	110	106
Noncurrent			
Operating	Operating lease liabilities - noncurrent	1,012	1,149
Finance	Long-Term Debt	694	763
Total lease liabilities		$ 2,093	$ 2,332

The weighted-average remaining lease term and discount rate for leases recorded in the consolidated balance sheets at September 30, 2022 and December 31, 2021 are provided below:

Lease Term and Discount Rate	*Sep 30, 2022*	*Dec 31, 2021*
Weighted-average remaining lease term		
Operating leases	7.7 years	7.9 years
Finance leases	11.1 years	11.8 years
Weighted-average discount rate		
Operating leases	4.21 %	3.72 %
Finance leases	4.19 %	4.17 %

The following table provides the maturities of lease liabilities at September 30, 2022:

Maturities of Lease Liabilities In millions	*Sep 30, 2022*	
	Operating Leases	*Finance Leases*
2022	$ 93	$ 40
2023	298	166
2024	230	109
2025	186	76
2026	151	70
2027 and thereafter	590	545
Total future undiscounted lease payments	$ 1,548	$ 1,006
Less: Imputed interest	259	202
Total present value of lease liabilities	$ 1,289	$ 804

At September 30, 2022, Dow had additional leases of approximately $85 million, primarily for equipment, which had not yet commenced. These leases are expected to commence in 2022 and 2025, with lease terms of up to 16 years.

Dow provides guarantees related to certain leased assets, specifying the residual value that will be available to the lessor at lease termination through the sale of the assets to the lessee or third parties. The following table provides a summary of the final expiration, maximum future payments and recorded liability included in the consolidated balance sheets for residual value guarantees at September 30, 2022 and December 31, 2021. The lease agreements do not contain any material restrictive covenants.

Lease Guarantees	*Sep 30, 2022*			*Dec 31, 2021*		
In millions	*Final Expiration*	*Maximum Future Payments*	*Recorded Liability*	*Final Expiration*	*Maximum Future Payments*	*Recorded Liability*
Residual value guarantees	2031	$ 245	$ —	2031	$ 280	$ —

NOTE 15 – STOCKHOLDERS' EQUITY

Treasury Stock

Dow Inc.

On April 1, 2019, the Dow Inc. Board ratified the share repurchase program originally approved on March 15, 2019, authorizing up to $3 billion for the repurchase of the Company's common stock, with no expiration date. The Company completed the April 1, 2019 share repurchase program in the second quarter of 2022. On April 13, 2022, the Dow Inc. Board approved a new share repurchase program authorizing up to $3 billion for the repurchase of the Company's common stock, with no expiration date. The Company repurchased $800 million of its common stock in the third quarter of 2022 ($2,200 million in the first nine months of 2022). At September 30, 2022, approximately $2,175 million of the new share repurchase program authorization remained available for repurchases.

The Company began issuing treasury shares to satisfy its obligation to make matching contributions to plan participants under The Dow Employees' Savings Plan in the first quarter of 2022. The Company may satisfy these obligations using shares of Dow Inc. treasury stock or by issuing new shares of common stock.

Accumulated Other Comprehensive Loss

The changes in each component of accumulated other comprehensive loss ("AOCL") for the three and nine months ended September 30, 2022 and 2021 were as follows:

Accumulated Other Comprehensive Loss	Three Months Ended		Nine Months Ended	
In millions	Sep 30, 2022	Sep 30, 2021	Sep 30, 2022	Sep 30, 2021
Unrealized Gains (Losses) on Investments				
Beginning balance	$ (190)	$ 72	$ 59	$ 104
Unrealized gains (losses) on investments	(61)	(10)	(385)	(25)
Tax (expense) benefit	(55)	3	12	5
Net unrealized gains (losses) on investments	(116)	(7)	(373)	(20)
(Gains) losses reclassified from AOCL to net income [1]	(8)	(8)	2	(33)
Tax expense (benefit) [2]	2	2	—	8
Net (gains) losses reclassified from AOCL to net income	(6)	(6)	2	(25)
Other comprehensive income (loss), net of tax	(122)	(13)	(371)	(45)
Ending balance	$ (312)	$ 59	$ (312)	$ 59
Cumulative Translation Adjustment				
Beginning balance	$ (2,033)	$ (1,118)	$ (1,355)	$ (930)
Gains (losses) on foreign currency translation	(369)	(148)	(1,034)	(298)
Tax (expense) benefit	(17)	(8)	(7)	(43)
Net gains (losses) on foreign currency translation	(386)	(156)	(1,041)	(341)
(Gains) losses reclassified from AOCL to net income [3]	(17)	(1)	(40)	(4)
Other comprehensive income (loss), net of tax	(403)	(157)	(1,081)	(345)
Ending balance	$ (2,436)	$ (1,275)	$ (2,436)	$ (1,275)
Pension and Other Postretirement Benefits				
Beginning balance	$ (7,103)	$ (8,276)	$ (7,334)	$ (9,559)
Gains (losses) arising during the period [4]	6	2	11	1,270
Tax (expense) benefit	—	—	—	(298)
Net gains (losses) arising during the period	6	2	11	972
Amortization of net loss and prior service credits reclassified from AOCL to net income [5]	155	191	468	583
Tax expense (benefit) [2]	(36)	(44)	(123)	(123)
Net loss and prior service credits reclassified from AOCL to net income	119	147	345	460
Other comprehensive income (loss), net of tax	125	149	356	1,432
Ending balance	$ (6,978)	$ (8,127)	$ (6,978)	$ (8,127)
Derivative Instruments				
Beginning balance	$ 122	$ (354)	$ (347)	$ (470)
Gains (losses) on derivative instruments	122	55	802	167
Tax (expense) benefit	(31)	(9)	(114)	(10)
Net gains (losses) on derivative instruments	91	46	688	157
(Gains) losses reclassified from AOCL to net income [6]	(80)	(16)	(222)	(10)
Tax expense (benefit) [2]	11	2	25	1
Net (gains) losses reclassified from AOCL to net income	(69)	(14)	(197)	(9)
Other comprehensive income (loss), net of tax	22	32	491	148
Ending balance	$ 144	$ (322)	$ 144	$ (322)
Total AOCL ending balance	$ (9,582)	$ (9,665)	$ (9,582)	$ (9,665)

1. Reclassified to "Net sales" and "Sundry income (expense) - net."
2. Reclassified to "Provision for income taxes."
3. Reclassified to "Sundry income (expense) - net."
4. The 2021 impact relates to an interim remeasurement of U.S. pension plans due to the announced freeze of plan benefits in the first quarter of 2021.
5. These AOCL components are included in the computation of net periodic benefit cost of the Company's defined benefit pension and other postretirement benefit plans. See Note 17 for additional information.
6. Reclassified to "Cost of sales," "Sundry income (expense) - net" and "Interest expense and amortization of debt discount."

NOTE 16 – NONCONTROLLING INTERESTS

Ownership interests in the Company's subsidiaries held by parties other than the Company are presented separately from the Company's equity in the consolidated balance sheets as "Noncontrolling interests." The amount of consolidated net income attributable to the Company and the noncontrolling interests are both presented on the face of the consolidated statements of income.

The following table summarizes the activity for equity attributable to noncontrolling interests for the three and nine months ended September 30, 2022 and 2021:

Noncontrolling Interests	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Balance at beginning of period	$ 534	$ 580	$ 574	$ 570
Net income attributable to noncontrolling interests [1]	21	23	24	69
Distributions to noncontrolling interests [2]	(20)	(7)	(35)	(27)
Cumulative translation adjustments	(24)	(8)	(51)	(23)
Other	1	1	—	—
Balance at end of period	$ 512	$ 589	$ 512	$ 589

1. The nine months ended September 30, 2022 includes the portion of asset related charges attributable to noncontrolling interests related to a joint venture in Russia. See Note 5 for additional information.
2. Distributions to noncontrolling interests are net of $7 million for the three and nine months ended September 30, 2022 ($8 million for the three and nine months ended September 30, 2021) in dividends paid to a joint venture, which were reclassified to "Equity in earnings (losses) of nonconsolidated affiliates" in the consolidated statements of income.

NOTE 17 – PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS

A summary of the Company's pension and other postretirement benefit plans can be found in Note 20 to the Consolidated Financial Statements included in the 2021 10-K.

The Company's funding policy is to contribute to defined benefit pension plans in the United States and a number of other countries when pension laws and/or economics either require or encourage funding. The Company expects to contribute approximately $250 million to its pension plans in 2022, of which $156 million has been contributed through September 30, 2022.

The following table provides the components of the Company's net periodic benefit cost for all significant plans:

Net Periodic Benefit Cost for All Significant Plans	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Defined Benefit Pension Plans				
Service cost	$ 97	$ 95	$ 295	$ 293
Interest cost	170	151	512	444
Expected return on plan assets	(420)	(434)	(1,267)	(1,291)
Amortization of prior service credit	(5)	(5)	(16)	(15)
Amortization of net loss	163	198	495	622
Curtailment gain	—	—	—	(19)
Net periodic benefit cost	$ 5	$ 5	$ 19	$ 34

Other Postretirement Benefit Plans				
Service cost	$ 1	$ 2	$ 4	$ 6
Interest cost	6	6	20	17
Amortization of net gain	(3)	(2)	(11)	(5)
Net periodic benefit cost	$ 4	$ 6	$ 13	$ 18

Net periodic benefit cost, other than the service cost component, is included in "Sundry income (expense) - net" in the consolidated statements of income.

NOTE 18 – STOCK-BASED COMPENSATION

A summary of the Company's stock-based compensation plans can be found in Note 21 to the Consolidated Financial Statements included in the 2021 10-K.

Stock Incentive Plan

The Company grants stock-based compensation to employees and non-employee directors under the 2019 Stock Incentive Plan, as amended. Most of the Company's stock-based compensation awards are granted in the first quarter of each year.

In the first quarter of 2022, Dow Inc. granted the following stock-based compensation awards to employees:

- 1.2 million stock options with a weighted-average exercise price of $60.95 per share and a weighted-average fair value of $11.08 per share;
- 1.7 million restricted stock units with a weighted-average fair value of $60.96 per share; and
- 1.2 million performance stock units with a weighted-average fair value of $65.83 per share.

There was minimal grant activity in the second and third quarters of 2022.

Employee Stock Purchase Plan

The Dow Inc. 2021 Employee Stock Purchase Plan (the "2021 ESPP") was adopted by the Dow Inc. Board on February 11, 2021, and approved by stockholders at the Company's annual meeting on April 15, 2021. Under the 2022 annual offering of the 2021 ESPP, most employees were eligible to purchase shares of common stock of Dow Inc. valued at up to 10 percent of their annual total base salary or wages. The number of shares purchased is determined using the amount contributed by the employee divided by the plan price. The plan price of the stock is equal to 85 percent of the fair market value (closing price) of the common stock at April 1, 2022 (beginning) or October 7, 2022 (ending) of the offering period, whichever is lower.

In the first quarter of 2022, employees subscribed to the right to purchase approximately 2.7 million shares under the 2021 ESPP. The shares were delivered to employees in October 2022.

NOTE 19 – FINANCIAL INSTRUMENTS

A summary of the Company's financial instruments, risk management policies, derivative instruments and hedging activities can be found in Note 22 to the Consolidated Financial Statements included in the 2021 10-K.

The following table summarizes the fair value of financial instruments at September 30, 2022 and December 31, 2021:

Fair Value of Financial Instruments	*Sep 30, 2022*				*Dec 31, 2021*			
In millions	*Cost*	*Gain*	*Loss*	*Fair Value*	*Cost*	*Gain*	*Loss*	*Fair Value*
Cash equivalents:								
Held-to-maturity securities [1]	$ 327	$ —	$ —	$ 327	$ 317	$ —	$ —	$ 317
Money market funds	735	—	—	735	489	—	—	489
Total cash equivalents	$ 1,062	$ —	$ —	$ 1,062	$ 806	$ —	$ —	$ 806
Marketable securities [2]	$ 136	$ 12	$ —	$ 148	$ 237	$ 8	$ —	$ 245
Other investments:								
Debt securities:								
Government debt [3]	$ 744	$ 1	$ (155)	$ 590	$ 746	$ 17	$ (28)	$ 735
Corporate bonds	1,268	5	(188)	1,085	1,251	93	(20)	1,324
Total debt securities	$ 2,012	$ 6	$ (343)	$ 1,675	$ 1,997	$ 110	$ (48)	$ 2,059
Equity securities [4]	4	6	—	10	7	13	—	20
Total other investments	$ 2,016	$ 12	$ (343)	$ 1,685	$ 2,004	$ 123	$ (48)	$ 2,079
Total cash equivalents, marketable securities and other investments	$ 3,214	$ 24	$ (343)	$ 2,895	$ 3,047	$ 131	$ (48)	$ 3,130
Long-term debt including debt due within one year [5]	$ (13,285)	$ 1,996	$ (333)	$ (11,622)	$ (14,511)	$ 27	$ (2,641)	$ (17,125)
Derivatives relating to:								
Interest rates [6]	$ —	$ 198	$ —	$ 198	$ —	$ 1	$ (140)	$ (139)
Foreign currency	—	189	(158)	31	—	46	(18)	28
Commodities [6]	—	274	(100)	174	—	142	(92)	50
Total derivatives	$ —	$ 661	$ (258)	$ 403	$ —	$ 189	$ (250)	$ (61)

1. The Company's held-to-maturity securities primarily included treasury bills and time deposits.
2. The Company's investments in marketable securities are included in "Other current assets" in the consolidated balance sheets.
3. U.S. Treasury obligations, U.S. agency obligations, U.S. agency mortgage-backed securities and other municipalities' obligations.
4. Equity securities with a readily determinable fair value.
5. Cost includes fair value hedge adjustment gains of $47 million at September 30, 2022 and December 31, 2021 on $2,279 million of debt at September 30, 2022 and December 31, 2021.
6. Presented net of cash collateral where master netting arrangements allow.

Cost approximates fair value for all other financial instruments.

Debt Securities

The Company's investments in debt securities are primarily classified as available-for-sale. The following table provides investing results from available-for-sale securities for the nine months ended September 30, 2022 and 2021:

Investing Results	*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*
Proceeds from sales of available-for-sale securities	$ 449	$ 339
Gross realized gains	$ 40	$ 41
Gross realized losses	$ (42)	$ (8)

The following table summarizes contractual maturities of the Company's investments in debt securities:

Contractual Maturities of Debt Securities at Sep 30, 2022 [1] In millions	*Cost*	*Fair Value*
Within one year	$ 71	$ 66
One to five years	706	627
Six to ten years	710	581
After ten years	525	401
Total	$ 2,012	$ 1,675

1. Includes marketable securities with maturities of less than one year.

Equity Securities

There were no material adjustments to the carrying value of the not readily determinable investments for impairment or observable price changes for the three months ended September 30, 2022. There was $2 million of net unrealized losses recognized in earnings on equity securities for the three months ended September 30, 2022 ($6 million net unrealized loss for the three months ended September 30, 2021). There was $8 million of net unrealized losses recognized in earnings on equity securities for the nine months ended September 30, 2022 ($7 million net unrealized loss for the nine months ended September 30, 2021).

Investments in Equity Securities In millions	*Sep 30, 2022*	*Dec 31, 2021*
Readily determinable fair value	$ 10	$ 20
Not readily determinable fair value	$ 191	$ 209

Derivative Instruments

The notional amounts of the Company's derivative instruments presented on a net basis at September 30, 2022 and December 31, 2021 were as follows:

Notional Amounts - Net In millions	*Sep 30, 2022*	*Dec 31, 2021*
Derivatives designated as hedging instruments:		
Interest rate contracts	$ 3,000	$ 3,000
Foreign currency contracts	$ 13,131	$ 5,300
Derivatives not designated as hedging instruments:		
Interest rate contracts	$ 10	$ 36
Foreign currency contracts	$ 15,743	$ 8,234

The notional amounts of the Company's commodity derivatives presented on a net basis at September 30, 2022 and December 31, 2021 were as follows:

Commodity Notionals - Net	*Sep 30, 2022*	*Dec 31, 2021*	*Notional Volume Unit*
Derivatives designated as hedging instruments:			
Hydrocarbon derivatives	13.5	9.7	million barrels of oil equivalent
Derivatives not designated as hedging instruments:			
Hydrocarbon derivatives	—	0.1	million barrels of oil equivalent
Power derivatives	—	3.3	thousands of megawatt hours

Maturity Dates of Derivatives Designated as Hedging Instruments	Year
Interest rate contracts	2023
Foreign currency contracts	2023
Commodity contracts	2026

The following tables provide the fair value and balance sheet classification of derivative instruments at September 30, 2022 and December 31, 2021:

Fair Value of Derivative Instruments		Sep 30, 2022		
In millions	*Balance Sheet Classification*	*Gross*	*Counterparty and Cash Collateral Netting* [1]	*Net Amounts Included in the Consolidated Balance Sheets*
Asset derivatives				
Derivatives designated as hedging instruments:				
Interest rate contracts	Other current assets	$ 657	$ (459)	$ 198
Foreign currency contracts	Other current assets	862	(700)	162
Commodity contracts	Other current assets	478	(225)	253
Commodity contracts	Deferred charges and other assets	7	—	7
Total		$ 2,004	$ (1,384)	$ 620
Derivatives not designated as hedging instruments:				
Foreign currency contracts	Other current assets	$ 110	$ (83)	$ 27
Commodity contracts	Other current assets	34	(20)	14
Total		$ 144	$ (103)	$ 41
Total asset derivatives		$ 2,148	$ (1,487)	$ 661
Liability derivatives				
Derivatives designated as hedging instruments:				
Interest rate contracts	Accrued and other current liabilities	$ 459	$ (459)	$ —
Foreign currency contracts	Accrued and other current liabilities	723	(700)	23
Commodity contracts	Accrued and other current liabilities	335	(245)	90
Commodity contracts	Other noncurrent obligations	1	(1)	—
Total		$ 1,518	$ (1,405)	$ 113
Derivatives not designated as hedging instruments:				
Foreign currency contracts	Accrued and other current liabilities	$ 218	$ (83)	$ 135
Commodity contracts	Accrued and other current liabilities	31	(21)	10
Total		$ 249	$ (104)	$ 145
Total liability derivatives		$ 1,767	$ (1,509)	$ 258

1. Counterparty and cash collateral amounts represent the estimated net settlement amount when applying netting and set-off rights included in master netting arrangements between the Company and its counterparties and the payable or receivable for cash collateral held or placed with the same counterparty.

Fair Value of Derivative Instruments		Dec 31, 2021		
In millions	*Balance Sheet Classification*	*Gross*	*Counterparty and Cash Collateral Netting* [1]	*Net Amounts Included in the Consolidated Balance Sheets*
Asset derivatives				
Derivatives designated as hedging instruments:				
Interest rate contracts	Other current assets	$ 14	$ (14)	$ —
Interest rate contracts	Deferred charges and other assets	130	(130)	—
Foreign currency contracts	Other current assets	24	(13)	11
Foreign currency contracts	Deferred charges and other assets	117	(89)	28
Commodity contracts	Other current assets	305	(173)	132
Commodity contracts	Deferred charges and other assets	9	(2)	7
Total		$ 599	$ (421)	$ 178
Derivatives not designated as hedging instruments:				
Interest rate contracts	Other current assets	$ 1	$ —	$ 1
Foreign currency contracts	Other current assets	23	(16)	7
Foreign currency contracts	Deferred charges and other assets	1	(1)	—
Commodity contracts	Other current assets	8	(5)	3
Total		$ 33	$ (22)	$ 11
Total asset derivatives		$ 632	$ (443)	$ 189
Liability derivatives				
Derivatives designated as hedging instruments:				
Interest rate contracts	Accrued and other current liabilities	$ 33	$ (14)	$ 19
Interest rate contracts	Other noncurrent obligations	192	(130)	62
Foreign currency contracts	Accrued and other current liabilities	15	(13)	2
Foreign currency contracts	Other noncurrent obligations	90	(89)	1
Commodity contracts	Accrued and other current liabilities	267	(192)	75
Commodity contracts	Other noncurrent obligations	2	(2)	—
Total		$ 599	$ (440)	$ 159
Derivatives not designated as hedging instruments:				
Interest rate contracts	Accrued and other current liabilities	$ 59	$ —	$ 59
Foreign currency contracts	Accrued and other current liabilities	31	(16)	15
Foreign currency contracts	Other noncurrent obligations	1	(1)	—
Commodity contracts	Accrued and other current liabilities	25	(8)	17
Total		$ 116	$ (25)	$ 91
Total liability derivatives		$ 715	$ (465)	$ 250

1. Counterparty and cash collateral amounts represent the estimated net settlement amount when applying netting and set-off rights included in master netting arrangements between the Company and its counterparties and the payable or receivable for cash collateral held or placed with the same counterparty.

Assets and liabilities related to forward contracts, interest rate swaps, currency swaps, options and other conditional or exchange contracts executed with the same counterparty under a master netting arrangement are netted. Collateral accounts are netted with corresponding assets or liabilities, when applicable. The Company posted cash collateral of $54 million at September 30, 2022 ($71 million at December 31, 2021). No cash collateral was posted by counterparties with the Company at September 30, 2022 and December 31, 2021.

The following tables summarize the gain (loss) of derivative instruments in the consolidated statements of income and comprehensive income for the three and nine months ended September 30, 2022 and 2021:

Effect of Derivative Instruments	*Amount of gain (loss) recognized in OCI* [1]		*Amount of gain (loss) recognized in income* [2]		
	Three Months Ended		*Three Months Ended*		
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*	*Income Statement Classification*
Derivatives designated as hedging instruments:					
Cash flow hedges:					
Interest rate contracts	$ 24	$ 5	$ (3)	$ (2)	Interest expense and amortization of debt discount
Foreign currency contracts	2	4	4	(3)	Cost of sales
Commodity contracts	23	37	79	21	Cost of sales
Net foreign investment hedges:					
Foreign currency contracts	88	20	—	—	
Excluded components [3]	25	12	15	1	Sundry income (expense) - net
Total derivatives designated as hedging instruments	$ 162	$ 78	$ 95	$ 17	
Derivatives not designated as hedging instruments:					
Interest rate contracts	$ —	$ —	$ —	$ (2)	Interest expense and amortization of debt discount
Foreign currency contracts	—	—	(255)	(84)	Sundry income (expense) - net
Commodity contracts	—	—	10	(12)	Cost of sales
Total derivatives not designated as hedging instruments	$ —	$ —	$ (245)	$ (98)	
Total derivatives	$ 162	$ 78	$ (150)	$ (81)	

1. OCI is defined as other comprehensive income (loss).
2. Pretax amounts.
3. The excluded components are related to the time value of the derivatives designated as hedges.

Effect of Derivative Instruments	Amount of gain (loss) recognized in OCI [1]		Amount of gain (loss) recognized in income [2]		
	Nine Months Ended		Nine Months Ended		
In millions	Sep 30, 2022	Sep 30, 2021	Sep 30, 2022	Sep 30, 2021	Income Statement Classification
Derivatives designated as hedging instruments:					
Fair value hedges:					
Interest rate contracts	$ —	$ —	$ —	$ (25)	Interest expense and amortization of debt discount [3]
Excluded components [4]	—	2	—	—	Interest expense and amortization of debt discount
Cash flow hedges:					
Interest rate contracts	231	(39)	(8)	(7)	Interest expense and amortization of debt discount
Foreign currency contracts	8	10	10	(15)	Cost of sales
Commodity contracts	310	143	220	32	Cost of sales
Net foreign investment hedges:					
Foreign currency contracts	135	33	—	—	
Excluded components [4]	59	20	38	5	Sundry income (expense) - net
Total derivatives designated as hedging instruments	$ 743	$ 169	$ 260	$ (10)	
Derivatives not designated as hedging instruments:					
Interest rate contracts	$ —	$ —	$ (1)	$ (5)	Interest expense and amortization of debt discount
Foreign currency contracts	—	—	(531)	(202)	Sundry income (expense) - net
Commodity contracts	—	—	39	(47)	Cost of sales
Total derivatives not designated as hedging instruments	$ —	$ —	$ (493)	$ (254)	
Total derivatives	$ 743	$ 169	$ (233)	$ (264)	

1. OCI is defined as other comprehensive income (loss).
2. Pretax amounts.
3. Gain (loss) recognized in income of derivatives is offset by gain (loss) recognized in income of the hedged item.
4. The excluded components are related to the time value of the derivatives designated as hedges.

The following table provides the net after-tax gain (loss) expected to be reclassified from AOCL to income within the next 12 months:

Expected Reclassifications from AOCL within the next 12 months In millions	Sep 30, 2022
Cash flow hedges:	
Interest rate contracts	$ (8)
Commodity contracts	$ 170
Foreign currency contracts	$ 9
Net foreign investment hedges:	
Excluded components	$ 18

NOTE 20 – FAIR VALUE MEASUREMENTS

A summary of the Company's recurring and nonrecurring fair value measurements can be found in Note 23 to the Consolidated Financial Statements included in the 2021 10-K.

Fair Value Measurements on a Recurring Basis

The following table summarizes the bases used to measure certain assets and liabilities at fair value on a recurring basis:

Basis of Fair Value Measurements on a Recurring Basis	Sep 30, 2022				Dec 31, 2021			
In millions	*Level 1*	*Level 2*	*Level 3*	*Total*	*Level 1*	*Level 2*	*Level 3*	*Total*
Assets at fair value:								
Cash equivalents:								
Held-to-maturity securities [1]	$ —	$ 327	$ —	$ 327	$ —	$ 317	$ —	$ 317
Money market funds	—	735	—	735	—	489	—	489
Marketable securities [2]	—	148	—	148	—	245	—	245
Equity securities [3]	10	—	—	10	20	—	—	20
Debt securities: [3]								
Government debt [4]	—	590	—	590	—	735	—	735
Corporate bonds	35	1,050	—	1,085	44	1,280	—	1,324
Derivatives relating to: [5]								
Interest rates	—	657	—	657	—	145	—	145
Foreign currency	—	972	—	972	—	165	—	165
Commodities	19	500	—	519	15	307	—	322
Total assets at fair value	$ 64	$ 4,979	$ —	$ 5,043	$ 79	$ 3,683	$ —	$ 3,762
Liabilities at fair value:								
Long-term debt including debt due within one year [6]	$ —	$ 11,622	$ —	$ 11,622	$ —	$ 17,125	$ —	$ 17,125
Guarantee liability [7]	—	—	205	205	—	—	220	220
Derivatives relating to: [5]								
Interest rates	—	459	—	459	—	284	—	284
Foreign currency	—	941	—	941	—	137	—	137
Commodities	37	330	—	367	37	257	—	294
Total liabilities at fair value	$ 37	$ 13,352	$ 205	$ 13,594	$ 37	$ 17,803	$ 220	$ 18,060

1. The Company's held-to-maturity securities primarily included treasury bills and time deposits.
2. The Company's investments in marketable securities are included in "Other current assets" in the consolidated balance sheets.
3. The Company's investments in debt securities, which are primarily available-for-sale, and equity securities are included in "Other investments" in the consolidated balance sheets.
4. U.S. Treasury obligations, U.S. agency obligations, U.S. agency mortgage-backed securities and other municipalities' obligations.
5. See Note 19 for the classification of derivatives in the consolidated balance sheets.
6. See Note 19 for information on fair value measurements of long-term debt.
7. Estimated liability for TDCC's guarantee of Sadara's debt which is included in "Other noncurrent obligations" in the consolidated balance sheets. See Note 13 for additional information.

For equity securities calculated at net asset value per share (or its equivalent), the Company had $97 million in private market securities and $20 million in real estate at September 30, 2022 ($106 million in private market securities and $22 million in real estate at December 31, 2021). There are no redemption restrictions and the unfunded commitments on these investments were $54 million at September 30, 2022 ($59 million at December 31, 2021).

For certain investments in limited liability companies accounted for as nonconsolidated affiliates, the unfunded commitment on the investments was $72 million at September 30, 2022.

For liabilities classified as Level 3 measurements, fair value is based on significant unobservable inputs including assumptions where there is little, if any, market activity. The fair value of the Company's accrued liability related to the guarantee of Sadara's debt is in proportion to the Company's 35 percent ownership interest in Sadara. The estimated fair value of the guarantee was calculated using a "with" and "without" method. The fair value of the debt was calculated "with" the guarantee less the fair value of the debt "without" the guarantee. The "with" and "without" values were calculated using a discounted cash flow method based on contractual cash flows as well as projected prepayments made on the debt by Sadara. See Note 13 for further information on guarantees classified as Level 3 measurements.

NOTE 21 – VARIABLE INTEREST ENTITIES

A summary of the Company's variable interest entities ("VIEs") can be found in Note 24 to the Consolidated Financial Statements included in the 2021 10-K.

Assets and Liabilities of Consolidated VIEs

The Company's consolidated financial statements include the assets, liabilities and results of operations of VIEs for which the Company is the primary beneficiary. The other equity holders' interests are included in "Net income attributable to noncontrolling interests" in the consolidated statements of income and "Noncontrolling interests" in the consolidated balance sheets.

The following table summarizes the carrying amounts of these entities' assets and liabilities included in the Company's consolidated balance sheets at September 30, 2022 and December 31, 2021:

Assets and Liabilities of Consolidated VIEs In millions	*Sep 30, 2022*	*Dec 31, 2021*
Cash and cash equivalents	$ 14	$ 40
Other current assets	38	40
Net property	152	184
Other noncurrent assets	15	15
Total assets [1]	$ 219	$ 279
Current liabilities	$ 35	$ 37
Long-term debt	—	3
Other noncurrent obligations	10	13
Total liabilities [2]	$ 45	$ 53

1. All assets were restricted at September 30, 2022 and December 31, 2021.
2. All liabilities were nonrecourse at September 30, 2022 and December 31, 2021.

Amounts presented in the consolidated balance sheets and the table above as restricted assets or nonrecourse obligations relating to consolidated VIEs at September 30, 2022 and December 31, 2021 are adjusted for intercompany eliminations.

Nonconsolidated VIEs

The following table summarizes the carrying amounts of assets included in the consolidated balance sheets at September 30, 2022 and December 31, 2021, related to variable interests in joint ventures or entities for which the Company is not the primary beneficiary. The Company's maximum exposure to loss is the same as the carrying amounts.

Carrying Amounts of Assets Related to Nonconsolidated VIEs In millions	*Description of asset*	*Sep 30, 2022*	*Dec 31, 2021*
Silicon joint ventures	Equity method investments [1]	$ 113	$ 110

1. Included in "Investment in nonconsolidated affiliates" in the consolidated balance sheets.

NOTE 22 – RELATED PARTY TRANSACTIONS

TDCC has committed to fund Dow Inc.'s dividends paid to common stockholders and share repurchases, as approved by the Dow Inc. Board from time to time, as well as certain governance expenses. Funding is accomplished through intercompany loans. TDCC's Board reviews and determines a dividend distribution to Dow Inc. to settle the intercompany loans. The following table summarizes cash dividends TDCC declared and paid to Dow Inc. for the three and nine months ended September 30, 2022 and 2021:

TDCC Cash Dividends Declared and Paid	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Cash dividends declared and paid	$ 1,301	$ 919	$ 3,755	$ 2,361

At September 30, 2022 and December 31, 2021, TDCC's outstanding intercompany loan balance with Dow Inc. was insignificant.

NOTE 23 – SEGMENTS AND GEOGRAPHIC REGIONS

Dow's measure of profit/loss for segment reporting purposes is Operating EBIT as this is the manner in which the Company's chief operating decision maker assesses performance and allocates resources. The Company defines Operating EBIT as earnings (i.e., "Income before income taxes") before interest, excluding the impact of significant items. Operating EBIT by segment includes all operating items relating to the businesses; items that principally apply to Dow as a whole are assigned to Corporate.

Segment Information In millions	*Pack. & Spec. Plastics*	*Ind. Interm. & Infrast.*	*Perf. Materials & Coatings*	*Corp.*	*Total*
Three months ended Sep 30, 2022					
Net sales	$ 7,327	$ 4,059	$ 2,654	$ 75	$ 14,115
Equity in earnings (losses) of nonconsolidated affiliates	$ 55	$ (114)	$ 1	$ —	$ (58)
Dow Inc. Operating EBIT [1]	$ 785	$ 167	$ 302	$ (59)	$ 1,195
Three months ended Sep 30, 2021					
Net sales	$ 7,736	$ 4,481	$ 2,526	$ 94	$ 14,837
Equity in earnings of nonconsolidated affiliates	$ 124	$ 122	$ 3	$ —	$ 249
Dow Inc. Operating EBIT [1]	$ 1,954	$ 713	$ 284	$ (65)	$ 2,886
Nine months ended Sep 30, 2022					
Net sales	$ 23,187	$ 12,953	$ 8,706	$ 197	$ 45,043
Equity in earnings (losses) of nonconsolidated affiliates	$ 303	$ 5	$ 6	$ (3)	$ 311
Dow Inc. Operating EBIT [1]	$ 3,455	$ 1,254	$ 1,458	$ (178)	$ 5,989
Nine months ended Sep 30, 2021					
Net sales	$ 20,939	$ 12,303	$ 7,114	$ 248	$ 40,604
Equity in earnings of nonconsolidated affiliates	$ 360	$ 381	$ 5	$ 5	$ 751
Dow Inc. Operating EBIT [1]	$ 5,196	$ 1,687	$ 571	$ (186)	$ 7,268

1. Operating EBIT for TDCC for the three and nine months ended September 30, 2022 and 2021 is substantially the same as that of Dow Inc. and therefore has not been disclosed separately in the table above. A reconciliation of "Net income" to Operating EBIT is provided in the following table.

Reconciliation of "Net income" to Operating EBIT	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net income	$ 760	$ 1,706	$ 3,993	$ 4,644
+ Provision for income taxes	241	542	1,232	1,383
Income before income taxes	$ 1,001	$ 2,248	$ 5,225	$ 6,027
- Interest income	41	14	105	35
+ Interest expense and amortization of debt discount	155	178	487	561
- Significant items	(80)	(474)	(382)	(715)
Operating EBIT	$ 1,195	$ 2,886	$ 5,989	$ 7,268

The following tables summarize the pretax impact of significant items by segment excluded from Operating EBIT:

Significant Items by Segment	*Three Months Ended Sep 30, 2022*					*Nine Months Ended Sep 30, 2022*				
In millions	*Pack. & Spec. Plastics*	*Ind. Interm. & Infrast.*	*Perf. Mat. & Coatings*	*Corp.*	*Total*	*Pack. & Spec. Plastics*	*Ind. Interm. & Infrast.*	*Perf. Mat. & Coatings*	*Corp.*	*Total*
Digitalization program costs [1]	$ —	$ —	$ —	$ (62)	$ (62)	$ —	$ —	$ —	$ (154)	$ (154)
Restructuring, implementation costs and asset related charges - net [2]	—	—	—	(11)	(11)	—	—	—	(31)	(31)
Russia / Ukraine conflict charges [3]	—	—	—	—	—	(31)	(109)	(16)	(30)	(186)
Loss on early extinguishment of debt [4]	—	—	—	—	—	—	—	—	(8)	(8)
Indemnification and other transaction related costs [5]	—	—	—	(7)	(7)	—	—	—	(3)	(3)
Total	$ —	$ —	$ —	$ (80)	$ (80)	$ (31)	$ (109)	$ (16)	$ (226)	$ (382)

1. Includes costs associated with implementing the Company's Digital Acceleration program.
2. Includes costs associated with implementing the Company's 2020 Restructuring Program.
3. Asset related charges due to the Russia and Ukraine conflict. See Note 5 for additional information.
4. The Company redeemed outstanding long-term debt resulting in a loss on early extinguishment. See Note 12 for additional information.
5. Primarily related to charges associated with agreements entered into with DuPont de Nemours, Inc. and Corteva, Inc. as part of the separation and distribution which, among other matters, provides for cross-indemnities and allocations of obligations and liabilities for periods prior to, at and after the completion of the separation. See Note 3 for additional information.

Significant Items by Segment	*Three Months Ended Sep 30, 2021*					*Nine Months Ended Sep 30, 2021*				
In millions	*Pack. & Spec. Plastics*	*Ind. Interm. & Infrast.*	*Perf. Mat. & Coatings*	*Corp.*	*Total*	*Pack. & Spec. Plastics*	*Ind. Interm. & Infrast.*	*Perf. Mat. & Coatings*	*Corp.*	*Total*
Digitalization program costs [1]	$ —	$ —	$ —	$ (40)	$ (40)	$ —	$ —	$ —	$ (121)	$ (121)
Restructuring, implementation costs and asset related charges - net [2]	—	—	—	(16)	(16)	(8)	(1)	(10)	(50)	(69)
Loss on early extinguishment of debt [3]	—	—	—	(472)	(472)	—	—	—	(574)	(574)
Litigation related charges, awards and adjustments [4]	—	54	—	—	54	—	54	—	—	54
Indemnification and other transactions related costs [5]	—	—	—	—	—	—	—	—	(5)	(5)
Total	$ —	$ 54	$ —	$ (528)	$ (474)	$ (8)	$ 53	$ (10)	$ (750)	$ (715)

1. Includes costs associated with implementing the Company's Digital Acceleration program.
2. Includes costs associated with implementing the Company's 2020 Restructuring Program.
3. The Company redeemed outstanding long-term debt resulting in a loss on early extinguishment. See Note 12 for additional information.
4. Related to an arbitration award and interest assessment paid by Luxi Chemical Group Co., Ltd.
5. Primarily related to charges associated with agreements entered into with DuPont de Nemours, Inc. and Corteva, Inc. as part of the separation and distribution which, among other matters, provides for cross-indemnities and allocations of obligations and liabilities for periods prior to, at and after the completion of the separation. See Note 3 for additional information.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

This Quarterly Report on Form 10-Q is a combined report being filed by Dow Inc. and The Dow Chemical Company and its consolidated subsidiaries (“TDCC” and together with Dow Inc., “Dow” or the "Company") due to the parent/subsidiary relationship between Dow Inc. and TDCC. The information reflected in the report is equally applicable to both Dow Inc. and TDCC, except where otherwise noted. Each of Dow Inc. and TDCC is filing information in this report on its own behalf and neither company makes any representation to the information relating to the other company.

Pursuant to General Instruction H(1)(a) and (b) for Form 10-Q "Omission of Information by Certain Wholly-Owned Subsidiaries," TDCC is filing this Form 10-Q with a reduced disclosure format.

Except as otherwise indicated by the context, the term "Union Carbide" means Union Carbide Corporation and the term "Dow Silicones" means Dow Silicones Corporation, both wholly owned subsidiaries of the Company.

Russia and Ukraine Conflict

In February 2022, Russia invaded Ukraine resulting in the United States, Canada, the European Union and other countries imposing economic sanctions on Russia. Dow is monitoring and evaluating the broader economic impact, including sanctions imposed, the potential for additional sanctions and any responses from Russia that could directly affect the Company’s supply chain, business partners or customers. At the time of this filing, the conflict between Russia and Ukraine has not had and is not expected to have a material impact on the Company's financial condition or results of operations.

In the first quarter of 2022, the Company recorded pretax asset related charges of $186 million due to the Russia and Ukraine conflict and the expectation that certain assets will not be recoverable. The Company's remaining net asset exposure is not significant.

OUTLOOK

In the near-term, Dow expects the macro environment to remain dynamic. As a result, Dow has outlined a playbook of actions that have the potential to deliver more than $1 billion in cost savings in 2023 while Dow continues to leverage its scale, geographic diversity and feedstock and derivative flexibility. Dow remains focused on advancing its decarbonize and grow strategy with higher-return investments that will extend its competitive advantages and industry leadership positions. Dow's strong financial position and balance sheet as well as its continued focus on cash flow generation give it ample flexibility to execute on its capital allocation priorities, including attractive shareholder remuneration, as it maximizes value creation over the longer-term.

OVERVIEW

The following is a summary of the results for the three months ended September 30, 2022:

- The Company reported net sales in the third quarter of 2022 of $14.1 billion, down 5 percent from $14.8 billion in the third quarter of 2021, with decreases in Packaging & Specialty Plastics and Industrial Intermediates & Infrastructure, partially offset by an increase in Performance Materials & Coatings. Net sales decreased in the U.S. & Canada and Europe, Middle East, Africa and India ("EMEAI"), were flat in Asia Pacific and increased in Latin America. Net sales were down 10 percent from $15.7 billion in the second quarter of 2022, with decreases across all operating segments and geographic regions.
- Local price increased 3 percent compared with the third quarter of 2021 with a decrease in Packaging & Specialty Plastics (down 2 percent) which was more than offset by increases in Industrial Intermediates & Infrastructure (up 5 percent) and Performance Materials & Coatings (up 15 percent). Local price increased in all geographic regions, except the U.S. & Canada, compared with the third quarter of 2021. Local price decreased 6 percent compared with the second quarter of 2022.
- Volume decreased 4 percent compared with the third quarter of 2021. Volume was flat in Packaging & Specialty Plastics and decreased in Industrial Intermediates & Infrastructure (down 9 percent) and Performance Materials & Coatings (down 5 percent). Volume decreased 12 percent in EMEAI, which was partially offset by 2 percent increases in the U.S. & Canada and Asia Pacific. Volume decreased 3 percent compared with the second quarter of 2022.
- Currency had an unfavorable impact of 4 percent on net sales compared with the third quarter of 2021, driven by EMEAI (down 10 percent) and Asia Pacific (down 4 percent).
- Equity in losses of nonconsolidated affiliates was $58 million in the third quarter of 2022, compared with equity in earnings of nonconsolidated affiliates of $249 million in the third quarter of 2021, primarily due to margin compression in polyurethanes at Sadara Chemical Company ("Sadara") and monoethylene glycol ("MEG") at the Kuwait joint ventures.
- Net income available for Dow Inc. and TDCC common stockholder(s) was $739 million and $747 million, respectively, in the third quarter of 2022, compared with $1,683 million and $1,679 million in the third quarter of 2021. Earnings per share for Dow Inc. was $1.02 per share in the third quarter of 2022, compared with $2.23 per share in the third quarter of 2021. These decreases reflect margin compression due to higher energy costs, primarily in EMEAI.
- Cash provided by operating activities - continuing operations was $1.9 billion in the third quarter of 2022, down $779 million compared with the same period last year. Compared with the second quarter of 2022, cash provided by operating activities - continuing operations increased $84 million.
- Dow Inc. repurchased $800 million of the Company's common stock in the third quarter of 2022.
- On August 10, 2022, Dow Inc. announced that its Board of Directors ("Board") declared a dividend of $0.70 per share, which was paid on September 9, 2022, to shareholders of record as of August 31, 2022.

In addition to the highlights above, the following events occurred subsequent to the third quarter of 2022:

- On October 13, 2022, Dow Inc. announced that its Board declared a dividend of $0.70 per share, payable on December 9, 2022, to shareholders of record as of November 30, 2022.
- On October 17, 2022 Dow Inc. announced it will accelerate the sustainability targets the Company set in 2020 by expanding its Stop the Waste target to a Transform the Waste target. By 2030, Dow will transform plastic waste and other forms of alternative feedstock to commercialize 3 million metric tons of circular and renewable plastics solutions annually.

RESULTS OF OPERATIONS

Net Sales

The following tables summarize net sales and sales variances by operating segment and geographic region from the prior year:

Summary of Sales Results	Three Months Ended		Nine Months Ended	
In millions	Sep 30, 2022	Sep 30, 2021	Sep 30, 2022	Sep 30, 2021
Net sales	$ 14,115	$ 14,837	$ 45,043	$ 40,604

Sales Variances by Operating Segment and Geographic Region								
	Three Months Ended Sep 30, 2022				Nine Months Ended Sep 30, 2022			
Percentage change from prior year	Local Price & Product Mix	Currency	Volume	Total	Local Price & Product Mix	Currency	Volume	Total
Packaging & Specialty Plastics	(2)%	(3)%	— %	(5)%	12 %	(3)%	2 %	11 %
Industrial Intermediates & Infrastructure	5	(5)	(9)	(9)	15	(5)	(5)	5
Performance Materials & Coatings	15	(5)	(5)	5	29	(4)	(3)	22
Total	3 %	(4)%	(4)%	(5)%	16 %	(4)%	(1)%	11 %
Total, excluding the Hydrocarbons & Energy business	4 %	(4)%	(8)%	(8)%	15 %	(4)%	(3)%	8 %
U.S. & Canada	(5)%	— %	2 %	(3)%	12 %	— %	3 %	15 %
EMEAI	11	(10)	(12)	(11)	24	(9)	(7)	8
Asia Pacific	2	(4)	2	—	12	(3)	(1)	8
Latin America	1	—	—	1	11	—	3	14
Total	3 %	(4)%	(4)%	(5)%	16 %	(4)%	(1)%	11 %

Net sales in the third quarter of 2022 were $14.1 billion, down 5 percent from $14.8 billion in the third quarter of 2021, with local price up 3 percent, volume down 4 percent and an unfavorable currency impact of 4 percent. Net sales decreased in Packaging & Specialty Plastics and Industrial Intermediates & Infrastructure, which were partially offset by an increase in Performance Materials & Coatings. Local price decreased in Packaging & Specialty Plastics (down 2 percent) and increased in Industrial Intermediates & Infrastructure (up 5 percent) and Performance Materials & Coatings (up 15 percent). Volume was flat in Packaging & Specialty Plastics and decreased in Industrial Intermediates & Infrastructure (down 9 percent) and Performance Materials & Coatings (down 5 percent). Volume decreased in EMEAI reflecting the impact of inflation and high energy costs on demand and was partially offset by increases in the U.S. & Canada and Asia Pacific. Currency unfavorably impacted net sales by 4 percent, driven by EMEAI (down 10 percent) and Asia Pacific (down 4 percent). Excluding the Hydrocarbons & Energy business, net sales decreased 8 percent.

Net sales for the first nine months of 2022 were $45.0 billion, up 11 percent from $40.6 billion in the same period last year, with local price up 16 percent, volume down 1 percent and an unfavorable currency impact of 4 percent. Net sales increased in all operating segments and geographic regions. Local price increased in all operating segments and geographic regions, primarily driven by tight supply and demand dynamics and increasing raw material prices. Local price increased in Packaging & Specialty Plastics (up 12 percent), Industrial Intermediates & Infrastructure (up 15 percent) and Performance Materials & Coatings (up 29 percent). Volume increased in Packaging & Specialty Plastics (up 2 percent) and decreased in Industrial Intermediates & Infrastructure (down 5 percent) and Performance Materials & Coatings (down 3 percent). Volume decreases in EMEAI and Asia Pacific were partially offset by increases in the U.S. & Canada and Latin America. Currency unfavorably impacted net sales by 4 percent compared with the same period last year, driven by EMEAI (down 9 percent) and Asia Pacific (down 3 percent). Excluding the Hydrocarbons & Energy business, net sales increased 8 percent.

Cost of Sales
Cost of sales ("COS") was $12.4 billion in the third quarter of 2022, up from $11.6 billion in the third quarter of 2021, primarily due to higher feedstocks, energy, other raw material costs, and logistics costs, partially offset by insurance recoveries related to certain weather-related events in the prior year. For the first nine months of 2022, COS was $37.7 billion, up from $32.4 billion in the first nine months of 2021, primarily due to higher feedstocks, energy, other raw material costs, and logistics costs, partially offset by insurance recoveries related to certain weather-related events in the prior year. The third quarter of 2022 included $55 million ($36 million in the third quarter of 2021) and $137 million in the first nine months of 2022 ($106 million in the first nine months of 2021) of costs associated with implementing the Company's digital acceleration program (related to Corporate). Cost of sales as a percentage of net sales in the third quarter of 2022 was 87.7 percent (78.3 percent in the third quarter of 2021) and 83.7 percent for the first nine months of 2022 (79.8 percent for the first nine months of 2021).

Research and Development Expenses
Research and development ("R&D") expenses totaled $191 million in the third quarter of 2022, compared with $210 million in the third quarter of 2021. R&D expenses for the first nine months of 2022 were $626 million, compared with $632 million in the first nine months of 2021. R&D expenses for the three and nine months ended September 30, 2022 decreased primarily due to lower performance-based compensation costs and a decrease in fringe benefit expenses which reflected stock market declines.

Selling, General and Administrative Expenses
Selling, general and administrative ("SG&A") expenses totaled $356 million in the third quarter of 2022, compared with $403 million in the third quarter of 2021. SG&A expenses decreased in the third quarter of 2022 due to lower performance-based compensation costs and a decrease in fringe benefit expenses which reflected stock market declines. In the first nine months of 2022, SG&A expenses were $1,289 million, compared with $1,209 million in the first nine months of 2021. SG&A expenses for the first nine months of 2022 increased primarily due to higher bad debt reserves which more than offset lower performance-based compensation costs and a decrease in fringe benefit expenses which reflected stock market declines.

Amortization of Intangibles
Amortization of intangibles was $83 million in the third quarter of 2022, compared with $100 million in the third quarter of 2021. In the first nine months of 2022, amortization of intangibles was $256 million, compared with $301 million in the first nine months of 2021. See Note 10 to the Consolidated Financial Statements for additional information on intangible assets.

Restructuring and Asset Related Charges - Net
Asset Related Charges
In the first quarter of 2022, the Company recorded pretax asset related charges of $186 million due to the Russia and Ukraine conflict and the expectation that certain assets will not be recoverable. These charges included the write-down of inventory, the recording of bad debt reserves and the impairment of other assets. Asset related charges by segment were as follows: $31 million in Packaging & Specialty Plastics, $109 million in Industrial Intermediates & Infrastructure, $16 million in Performance Materials & Coatings and $30 million in Corporate.

2020 Restructuring Program
Actions related to the restructuring program approved by the Dow. Inc. Board on September 29, 2020 were substantially complete at the end of 2021, with the exception of certain cash payments that will continue through 2022 and into 2023. For the nine months ended September 30, 2021, the Company recorded pretax restructuring charges of $12 million for asset write-downs and write-offs and $10 million for costs associated with exit and disposal activities. Restructuring charges by segment were as follows: $8 million in Packaging & Specialty Plastics, $1 million in Industrial Intermediates & Infrastructure, $10 million in Performance Materials & Coatings and $3 million in Corporate.

Equity in Earnings (Losses) of Nonconsolidated Affiliates
The Company's share of equity in losses of nonconsolidated affiliates was $58 million in the third quarter of 2022, compared with equity in earnings of nonconsolidated affiliates of $249 million in the third quarter of 2021, primarily due to margin compression in polyurethanes at Sadara and MEG at the Kuwait joint ventures. Equity in earnings of nonconsolidated affiliates was $311 million in the first nine months of 2022, compared with $751 million in the first nine months of 2021, primarily due to lower equity earnings at Sadara due to planned maintenance turnaround activity, pandemic-related lockdowns in China and margin compression in polyurethanes, as well as MEG margin

compression at the Kuwait joint ventures. See Note 9 to the Consolidated Financial Statements for additional information.

Sundry Income (Expense) – Net
Sundry income (expense) – net includes a variety of income and expense items such as foreign currency exchange gains and losses, dividends from investments, gains and losses on sales of investments and assets, non-operating pension and other postretirement benefit plan credits or costs, losses on early extinguishment of debt and certain litigation matters.

For the three months ended September 30, 2022, Sundry income (expense) - net was income of $69 million and $73 million for Dow Inc. and TDCC, respectively, compared with expense of $350 million and $356 million, respectively, for the three months ended September 30, 2021. The third quarter of 2022 included non-operating pension and postretirement benefit plan credits and gains on the sales of assets and investments. These were partially offset by foreign currency exchange losses. In addition, Dow Inc. included a $7 million loss associated with agreements entered into with DuPont de Nemours, Inc. ("DuPont") and Corteva, Inc. ("Corteva") as part of the separation and distribution (related to Corporate). The third quarter of 2021 included a $472 million loss on the early extinguishment of debt (related to Corporate). This was partially offset by non-operating pension and postretirement benefit plan credits and a $54 million gain related to an arbitration award (related to Industrial Intermediates & Infrastructure).

For the nine months ended September 30, 2022, Sundry income (expense) - net was income of $292 million and $287 million for Dow Inc. and TDCC, respectively, compared with expense of $225 million and $231 million for Dow Inc. and TDCC, respectively, for the nine months ended September 30, 2021. The first nine months of 2022 included non-operating pension and postretirement benefit plan credits and gains on the sales of assets and investments. These were partially offset by foreign currency exchange losses and an $8 million loss on the early extinguishment of debt (related to Corporate). In addition, Dow Inc. included a $3 million loss associated with agreements entered into with DuPont and Corteva as part of the separation and distribution (related to Corporate). The first nine months of 2021 included a $574 million loss on the early extinguishment of debt (related to Corporate) and foreign currency exchange losses. These were partially offset by non-operating pension and postretirement benefit plan credits, gains on the sales of assets and investments and a $54 million gain related to an arbitration award (related to Industrial Intermediates & Infrastructure). In addition, Dow Inc. included a $5 million loss associated with agreements entered into with DuPont and Corteva as part of the separation and distribution (related to Corporate).

Interest Expense and Amortization of Debt Discount
Interest expense and amortization of debt discount was $155 million in the third quarter of 2022, compared with $178 million in the third quarter of 2021. Interest expense and amortization of debt discount was $487 million in the first nine months of 2022, compared with $561 million in the first nine months of 2021. The decrease in interest expense is primarily due to the liability management actions taken in 2021.

Provision for Income Taxes
The Company's effective tax rate fluctuates based on, among other factors, where income is earned, the level of income relative to tax attributes and the level of equity earnings, since most earnings from the Company's equity method investments are taxed at the joint venture level. The effective tax rate for the third quarter of 2022 was 24.1 percent and 24.0 percent for Dow Inc. and TDCC, respectively, compared with 24.1 percent and 24.2 percent for the third quarter of 2021. For the first nine months of 2022, the effective tax rate was 23.6 percent for Dow Inc. and TDCC, compared with 22.9 percent for the first nine months of 2021.

Net Income Available for Common Stockholder(s)
Dow Inc.
Net income available for Dow Inc. common stockholders was $739 million, or $1.02 per share, in the third quarter of 2022, compared with $1,683 million, or $2.23 per share, in the third quarter of 2021. Net income available for Dow Inc. common stockholders was $3,969 million, or $5.41 per share, in the first nine months of 2022, compared with $4,575 million, or $6.06 per share, in the first nine months of 2021. See Note 7 to the Consolidated Financial Statements for details on Dow Inc.'s earnings per share calculations.

TDCC

Net income available for the TDCC common stockholder was $747 million in the third quarter of 2022, compared with $1,679 million in the third quarter of 2021. Net income available for the TDCC common stockholder was $3,975 million in the first nine months of 2022, compared with $4,576 million in the first nine months of 2021. TDCC's common shares are owned solely by Dow Inc.

SEGMENT RESULTS

Dow's measure of profit/loss for segment reporting purposes is Operating EBIT as this is the manner in which the Company's chief operating decision maker assesses performance and allocates resources. The Company defines Operating EBIT as earnings (i.e., "Income before income taxes") before interest, excluding the impact of significant items. Operating EBIT by segment includes all operating items relating to the businesses; items that principally apply to Dow as a whole are assigned to Corporate.

PACKAGING & SPECIALTY PLASTICS

The Packaging & Specialty Plastics operating segment consists of two highly integrated global businesses: Hydrocarbons & Energy and Packaging and Specialty Plastics. The segment employs the industry's broadest polyolefin product portfolio, supported by the Company's proprietary catalyst and manufacturing process technologies. These differentiators, plus collaboration at the customer's design table, enable the segment to deliver more reliable, durable, higher-performing solutions designed for recyclability and enhanced plastics circularity and sustainability. The segment serves customers, brand owners and ultimately consumers in key markets including food and specialty packaging; industrial and consumer packaging; health and hygiene; caps, closures and pipe applications; consumer durables; mobility and transportation; and infrastructure. Ethylene is transferred to downstream derivative businesses at market-based prices, which are generally equivalent to prevailing market prices for large volume purchases. This segment also includes the results of The Kuwait Styrene Company K.S.C.C. and The SCG-Dow Group, as well as a portion of the results of EQUATE Petrochemical Company K.S.C.C. ("EQUATE"), The Kuwait Olefins Company K.S.C.C. ("TKOC"), Map Ta Phut Olefins Company Limited ("Map Ta Phut") and Sadara, all joint ventures of the Company.

The Company is responsible for marketing a majority of Sadara products outside of the Middle East zone through the Company's established sales channels. As part of this arrangement, the Company purchases and sells Sadara products for a marketing fee. In 2021, Dow and the Saudi Arabian Oil Company agreed to and began transitioning the marketing rights and responsibilities for Sadara's finished products to levels more consistent with each partner's equity ownership, which is being implemented through 2026. This transition will not impact equity earnings but is expected to reduce the Company's sales of Sadara products over the five year period.

Packaging & Specialty Plastics In millions	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 7,327	$ 7,736	$ 23,187	$ 20,939
Operating EBIT	$ 785	$ 1,954	$ 3,455	$ 5,196
Equity earnings	$ 55	$ 124	$ 303	$ 360

Packaging & Specialty Plastics Percentage change from prior year	*Three Months Ended Sep 30, 2022*	*Nine Months Ended Sep 30, 2022*
Change in Net Sales from Prior Period due to:		
Local price & product mix	(2)%	12 %
Currency	(3)	(3)
Volume	—	2
Total	(5)%	11 %

Packaging & Specialty Plastics net sales were $7,327 million in the third quarter of 2022, down 5 percent from net sales of $7,736 million in the third quarter of 2021, with local price down 2 percent, volume flat and an unfavorable currency impact of 3 percent, primarily in EMEAI. Local price decreased in both businesses as gains in functional polymers were more than offset by lower polyethylene prices. Local price decreased in Hydrocarbons & Energy in the U.S. & Canada which more than offset increases in EMEAI. Local price decreased in Packaging and Specialty Plastics in the U.S. & Canada and Latin America which more than offset increases in EMEAI and Asia Pacific.

Volume increased in Hydrocarbons & Energy, primarily in the U.S. & Canada. Volume decreased in Packaging and Specialty Plastics in EMEAI, the U.S. & Canada and Asia Pacific which more than offset an increase in Latin America.

Operating EBIT was $785 million in the third quarter of 2022, down $1,169 million from Operating EBIT of $1,954 million in the third quarter of 2021. Operating EBIT decreased primarily due to higher raw material and energy costs, lower selling prices and decreased equity earnings which were partially offset by insurance recoveries related to certain weather-related events in the prior year.

Packaging & Specialty Plastics net sales were $23,187 million in the first nine months of 2022, up 11 percent from net sales of $20,939 million in the first nine months of 2021, with local price up 12 percent, volume up 2 percent and an unfavorable currency impact of 3 percent, primarily in EMEAI. Local price increased in both businesses and all geographic regions. Local price increased in Hydrocarbons & Energy, primarily in EMEAI and the U.S. & Canada, as prices for co-products are generally correlated to Brent crude oil prices, which, on average, increased 50 percent compared with the first nine months of 2021. Local price increased in Packaging and Specialty Plastics, driven by favorable supply and demand dynamics in polyethylene and functional polymers, notably in flexible food and beverage packaging and infrastructure material applications. Volume increased in Hydrocarbons & Energy, primarily in the U.S. & Canada and EMEAI. Volume decreased in Packaging and Specialty Plastics in EMEAI, the U.S. & Canada and Asia Pacific which more than offset an increase in Latin America.

Operating EBIT was $3,455 million in the first nine months of 2022, down $1,741 million from Operating EBIT of $5,196 million in the first nine months of 2021. Operating EBIT decreased primarily due to higher feedstock and raw material costs and lower equity earnings, which were partially offset by higher selling prices and insurance recoveries related to certain weather-related events in the prior year.

INDUSTRIAL INTERMEDIATES & INFRASTRUCTURE

The Industrial Intermediates & Infrastructure operating segment consists of two customer-centric global businesses - Industrial Solutions and Polyurethanes & Construction Chemicals - that develop important intermediate chemicals that are essential to manufacturing processes, as well as downstream, customized materials and formulations that use advanced development technologies. These businesses primarily produce and market ethylene oxide and propylene oxide derivatives that are aligned to market segments as diverse as appliances, coatings, electronics, surfactants for cleaning and sanitization, infrastructure and oil and gas. The businesses' global scale and reach, world-class technology, R&D capabilities and materials science expertise enable the Company to be a premier solutions provider offering customers value-add sustainable solutions to enhance comfort, energy efficiency, product effectiveness and durability across a wide range of home comfort and appliance, building and construction, mobility and transportation, and adhesive and lubricant applications, among others. This segment also includes a portion of the results of EQUATE, TKOC, Map Ta Phut and Sadara, all joint ventures of the Company.

The Company is responsible for marketing a majority of Sadara products outside of the Middle East zone through the Company's established sales channels. As part of this arrangement, the Company purchases and sells Sadara products for a marketing fee. In 2021, Dow and the Saudi Arabian Oil Company agreed to and began transitioning the marketing rights and responsibilities for Sadara's finished products to levels more consistent with each partner's equity ownership, which is being implemented through 2026. This transition will not impact equity earnings but is expected to reduce the Company's sales of Sadara products over the five year period.

Industrial Intermediates & Infrastructure	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 4,059	$ 4,481	$ 12,953	$ 12,303
Operating EBIT	$ 167	$ 713	$ 1,254	$ 1,687
Equity earnings (losses)	$ (114)	$ 122	$ 5	$ 381

Industrial Intermediates & Infrastructure Percentage change from prior year	*Three Months Ended Sep 30, 2022*	*Nine Months Ended Sep 30, 2022*
Change in Net Sales from Prior Period due to:		
Local price & product mix	5 %	15 %
Currency	(5)	(5)
Volume	(9)	(5)
Total	(9)%	5 %

Industrial Intermediates & Infrastructure net sales were $4,059 million in the third quarter of 2022, down 9 percent from $4,481 million in the third quarter of 2021, with local price up 5 percent, volume down 9 percent, and an unfavorable currency impact of 5 percent. Local price increased in both businesses and across all geographic regions, except Asia Pacific. Currency had an unfavorable impact on sales in both businesses, driven by EMEAI and Asia Pacific. Volume declines in Polyurethanes & Construction Chemicals were partially offset by gains in Industrial Solutions. Volume increased in Industrial Solutions in all geographic regions, except Latin America, driven by strong demand in energy, pharmaceutical, and mobility end-markets and increased catalyst sales. Volume declines in Polyurethanes & Construction Chemicals in the U.S. & Canada and EMEAI were driven by inflationary pressure on demand for consumer durables, industrial, and building and construction applications.

Operating EBIT was $167 million in the third quarter of 2022, down $546 million from Operating EBIT of $713 million in the third quarter of 2021. Operating EBIT decreased primarily due to lower demand in EMEAI, margin compression due to rising raw material and energy costs and lower equity earnings at Sadara and the Kuwait and Map Ta Phut joint ventures, which were partially offset by higher selling prices and insurance recoveries related to certain weather-related events in the prior year.

Industrial Intermediates & Infrastructure net sales were $12,953 million in the first nine months of 2022, up 5 percent from net sales of $12,303 million in the first nine months of 2021, with local price up 15 percent, volume down 5 percent, and an unfavorable currency impact of 5 percent. Local price increased in both businesses and across all geographic regions, primarily driven by rising raw material and energy prices. Currency had an unfavorable impact on sales in both businesses, driven by EMEAI and Asia Pacific. Volume in Industrial Solutions increased in all geographic regions driven by improved supply availability as the year-ago period was impacted by Winter Storm Uri, and by strong demand in agricultural, pharmaceutical and energy related applications. Volume in Polyurethanes & Construction Chemicals decreased in all geographic regions, except Latin America, primarily due to lower demand, particularly for consumer durables, combined with reduced supply from planned maintenance turnaround activity, Sadara and third-party outages.

Operating EBIT was $1,254 million in the first nine months of 2022, down $433 million from Operating EBIT of $1,687 million in the first nine months of 2021. Operating EBIT decreased primarily due to inflationary pressure on demand, particularly for consumer durables, margin compression due to higher raw material and energy costs and lower equity earnings at Sadara and the Kuwait and Map Ta Phut joint ventures, combined with reduced supply from planned maintenance turnaround activity and third-party outages, which were partially offset by local price increases in both businesses and insurance recoveries related to certain weather-related events in the prior year.

PERFORMANCE MATERIALS & COATINGS

The Performance Materials & Coatings operating segment includes industry-leading franchises that deliver a wide array of solutions into consumer, infrastructure and mobility end-markets. The segment consists of two global businesses: Coatings & Performance Monomers and Consumer Solutions. These businesses primarily utilize the Company's acrylics-, cellulosics- and silicone-based technology platforms to serve the needs of the architectural and industrial coatings; home care and personal care; consumer and electronics; mobility and transportation; industrial and chemical processing; and building and infrastructure end-markets. Both businesses employ materials science capabilities, global reach and unique products and technology to combine chemistry platforms to deliver differentiated, market-driven and sustainable innovations to customers.

Performance Materials & Coatings In millions	*Three Months Ended*		*Nine Months Ended*	
	Sep 30, 2022	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 2,654	$ 2,526	$ 8,706	$ 7,114
Operating EBIT	$ 302	$ 284	$ 1,458	$ 571
Equity earnings	$ 1	$ 3	$ 6	$ 5

Performance Materials & Coatings Percentage change from prior year	*Three Months Ended Sep 30, 2022*	*Nine Months Ended Sep 30, 2022*
Change in Net Sales from Prior Period due to:		
Local price & product mix	15 %	29 %
Currency	(5)	(4)
Volume	(5)	(3)
Total	5 %	22 %

Performance Materials & Coatings net sales were $2,654 million in the third quarter of 2022, up 5 percent from net sales of $2,526 million in the third quarter of 2021, with local price up 15 percent, volume down 5 percent and an unfavorable currency impact of 5 percent. Local price increased in both businesses and across all geographic regions. Volume decreased in Consumer Solutions in EMEAI and the U.S. & Canada, driven by lower demand in siloxanes and planned maintenance turnaround activity, which was partially offset by increases in Asia Pacific and Latin America. Volume decreased in Coatings & Performance Monomers in EMEAI, Asia Pacific and the U.S. & Canada, driven by lower demand for architectural coatings, which was partially offset by an increase in Latin America. The unfavorable currency impact was driven by EMEAI and Asia Pacific.

Operating EBIT was $302 million in the third quarter of 2022, up $18 million from Operating EBIT of $284 million in the third quarter of 2021. Operating EBIT increased due to insurance recoveries related to certain weather-related events in the prior year in Coatings & Performance Monomers and price increases in Consumer Solutions offset by higher raw material costs.

Performance Materials & Coatings net sales were $8,706 million in the first nine months of 2022, up 22 percent from net sales of $7,114 million in the first nine months of 2021, with local price up 29 percent, volume down 3 percent and an unfavorable currency impact of 4 percent. Local price increased in both businesses and across all geographic regions due to favorable supply and demand dynamics and higher raw material prices. Volume decreased in both businesses and in EMEAI, Latin America and Asia Pacific, which was partially offset by an increase in the U.S. & Canada. Volume decreased in Consumer Solutions in EMEAI, the U.S. & Canada and Latin America, which was partially offset by an increase in Asia Pacific. Volume decreased in Coatings & Performance Monomers in Asia Pacific and EMEAI, which was partially offset by an increase in the U.S. & Canada, primarily due to improved supply availability as the year-ago period was impacted by Winter Storm Uri, and Latin America. The unfavorable currency impact was driven by EMEAI and Asia Pacific.

Operating EBIT was $1,458 million in the first nine months of 2022, up $887 million from Operating EBIT of $571 million in the first nine months of 2021. Operating EBIT increased primarily due to margin expansion in Consumer Solutions and insurance recoveries related to certain weather-related events in the prior year in Coatings & Performance Monomers.

CORPORATE

Corporate includes certain enterprise and governance activities (including insurance operations, environmental operations, etc.); non-business aligned joint ventures; non-business aligned litigation expenses; and discontinued or non-aligned businesses.

Corporate	*Three Months Ended*		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Net sales	$ 75	$ 94	$ 197	$ 248
Operating EBIT	$ (59)	$ (65)	$ (178)	$ (186)
Equity earnings (losses)	$ —	$ —	$ (3)	$ 5

Net sales for Corporate, which primarily relate to the Company's insurance operations, were $75 million in the third quarter of 2022, a decrease from net sales of $94 million in the third quarter of 2021. Net sales were $197 million in the first nine months of 2022, a decrease from net sales of $248 million in the first nine months of 2021.

Operating EBIT was a loss of $59 million in the third quarter of 2022, compared with a loss of $65 million in the third quarter of 2021. Operating EBIT was a loss of $178 million in the first nine months of 2022, compared with a loss of $186 million in the first nine months of 2021. Operating EBIT improved primarily due to lower costs.

CHANGES IN FINANCIAL CONDITION

The Company had cash and cash equivalents of $2,216 million at September 30, 2022 and $2,988 million at December 31, 2021, of which $1,216 million at September 30, 2022 and $1,745 million at December 31, 2021 was held by subsidiaries in foreign countries, including U.S. territories. For each of its foreign subsidiaries, Dow makes an assertion regarding the amount of earnings intended for permanent reinvestment, with the balance available to be repatriated to the United States.

Cash held by foreign subsidiaries for permanent reinvestment is generally used to finance the subsidiaries' operational activities and future foreign investments. Dow has the ability to repatriate additional funds to the U.S., which could result in an adjustment to the tax liability for foreign withholding taxes, foreign and/or U.S. state income taxes and the impact of foreign currency movements. At September 30, 2022, management believed that sufficient liquidity was available in the United States. The Company has and expects to continue repatriating certain funds from its non-U.S. subsidiaries that are not needed to finance local operations; however, these particular repatriation activities have not and are not expected to result in a significant incremental tax liability to the Company.

The Company's cash flows from operating, investing and financing activities, as reflected in the consolidated statements of cash flows, are summarized in the following table:

Cash Flow Summary	*Dow Inc.*		*TDCC*	
	Nine Months Ended		*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*	*Sep 30, 2022*	*Sep 30, 2021*
Cash provided by (used for):				
Operating activities - continuing operations	$ 5,408	$ 4,512	$ 5,441	$ 4,634
Operating activities - discontinued operations	(11)	(78)	—	—
Operating activities	5,397	4,434	5,441	4,634
Investing activities	(1,339)	(1,535)	(1,339)	(1,535)
Financing activities	(4,513)	(4,974)	(4,557)	(5,174)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(261)	(57)	(261)	(57)
Summary				
Decrease in cash, cash equivalents and restricted cash	(716)	(2,132)	(716)	(2,132)
Cash, cash equivalents and restricted cash at beginning of period	3,033	5,108	3,033	5,108
Cash, cash equivalents and restricted cash at end of period	$ 2,317	$ 2,976	$ 2,317	$ 2,976
Less: Restricted cash and cash equivalents, included in "Other current assets"	101	65	101	65
Cash and cash equivalents at end of period	$ 2,216	$ 2,911	$ 2,216	$ 2,911

Cash Flows from Operating Activities

Cash provided by operating activities from continuing operations in the first nine months of 2022 was primarily driven by the Company's cash earnings and dividends from equity method investments, which were partially offset by cash used for working capital requirements and performance-based compensation payments. Cash provided by operating activities from continuing operations in the first nine months of 2021 was primarily driven by the Company's cash earnings and dividends from equity method investments, which were partially offset by elective pension contributions, cash used for working capital requirements and performance-based compensation payments.

Net Working Capital	*Dow Inc.*		*TDCC*	
In millions	*Sep 30, 2022*	*Dec 31, 2021*	*Sep 30, 2022*	*Dec 31, 2021*
Current assets	$ 19,777	$ 20,848	$ 19,739	$ 20,837
Current liabilities	12,315	13,226	12,158	13,046
Net working capital	$ 7,462	$ 7,622	$ 7,581	$ 7,791
Current ratio	1.61:1	1.58:1	1.62:1	1.60:1

Working Capital Metrics	*Three Months Ended*		
	Sep 30, 2022	*Jun 30, 2022*	*Sep 30, 2021*
Days sales outstanding in trade receivables	45	43	43
Days sales in inventory	59	56	56
Days payables outstanding	63	58	58

Cash used for operating activities from discontinued operations in the first nine months of 2022 and 2021 was related to cash payments and receipts Dow Inc. had with DuPont and Corteva that related to certain agreements and matters related to the separation from DowDuPont Inc. ("DowDuPont"). See Note 3 to the Consolidated Financial Statements for additional information.

Cash Flows from Investing Activities
Cash used for investing activities in the first nine months of 2022 was primarily for capital expenditures and purchases of investments, which were partially offset by proceeds from sales and maturities of investments. Cash used for investing activities in the first nine months of 2021 was primarily for capital expenditures, purchases of investments and acquisitions of property and businesses, which were partially offset by proceeds from sales and maturities of investments.

The Company's capital expenditures were $1,224 million in the first nine months of 2022, compared with $1,035 million in the first nine months of 2021. The Company expects full year capital spending in 2022 to be approximately $1.9 billion. The Company will adjust its spending through the year as economic conditions evolve.

Cash Flows from Financing Activities
Cash used for financing activities in the first nine months of 2022 was primarily for payments on long-term debt. In addition, Dow Inc. included cash outflows for dividends paid to stockholders and purchases of treasury stock. TDCC included cash outflows for dividends paid to Dow Inc. Cash used for financing activities in the first nine months of 2021 included payments on long-term debt and transaction financing, debt issuance and other costs, which were partially offset by proceeds from issuance of common stock and proceeds from issuance of short-term debt greater than three months. In addition, Dow Inc. included cash outflows for dividends paid to stockholders and purchases of treasury stock. TDCC included cash outflows for dividends paid to Dow Inc. See Note 12 to the Consolidated Financial Statements for additional information related to the issuance and retirement of debt.

Dow Inc. Non-GAAP Cash Flow Measures
Free Cash Flow
Dow defines Free Cash Flow as "Cash provided by operating activities - continuing operations," less capital expenditures. Under this definition, Free Cash Flow represents the cash generated by Dow from operations after investing in its asset base. Free Cash Flow, combined with cash balances and other sources of liquidity, represents the cash available to fund obligations and provide returns to shareholders. Free Cash Flow is an integral financial measure used in the Company's financial planning process.

Operating EBITDA
Dow defines Operating EBITDA as earnings (i.e., "Income before income taxes") before interest, depreciation and amortization, excluding the impact of significant items.

Cash Flow Conversion (Operating EBITDA to Cash Flow from Operations)
Dow defines Cash Flow Conversion (Operating EBITDA to Cash Flow from Operations) as "Cash provided by operating activities - continuing operations," divided by Operating EBITDA. Management believes Cash Flow Conversion is an important financial metric as it helps the Company determine how efficiently it is converting its earnings into cash flow.

These financial measures are not recognized in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and should not be viewed as alternatives to U.S. GAAP financial measures of performance. All companies do not calculate non-GAAP financial measures in the same manner and, accordingly, Dow's definitions may not be consistent with the methodologies used by other companies.

Reconciliation of Free Cash Flow	*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*
Cash provided by operating activities - continuing operations (GAAP)	$ 5,408	$ 4,512
Capital expenditures	(1,224)	(1,035)
Free Cash Flow (non-GAAP) [1]	$ 4,184	$ 3,477

1. Free cash flow in the first nine months of 2021 reflects a $1 billion elective pension contribution.

Reconciliation of Cash Flow Conversion (Operating EBITDA to Cash Flow from Operations)	*Nine Months Ended*	
In millions	*Sep 30, 2022*	*Sep 30, 2021*
Net income (GAAP)	$ 3,993	$ 4,644
+ Provision for income taxes	1,232	1,383
Income before income taxes	$ 5,225	$ 6,027
- Interest income	105	35
+ Interest expense and amortization of debt discount	487	561
- Significant items [1]	(382)	(715)
Operating EBIT (non-GAAP)	$ 5,989	$ 7,268
+ Depreciation and amortization	2,104	2,187
Operating EBITDA (non-GAAP)	$ 8,093	$ 9,455
Cash provided by operating activities - continuing operations (GAAP)	$ 5,408	$ 4,512
Cash Flow Conversion (Operating EBITDA to cash flow from operations) (non-GAAP) [2]	66.8 %	47.7 %

1. The nine months ended September 30, 2022 includes costs associated with implementing the Company's Digital Acceleration program and 2020 Restructuring Program, asset related charges due to the Russia and Ukraine conflict, a loss on the early extinguishment of debt and activity related to the separation from DowDuPont. The nine months ended September 30, 2021 includes costs associated with implementing the Company's Digital Acceleration program and 2020 Restructuring Program, a loss on early extinguishment of debt, litigation related charges, awards and adjustments and activity related to the separation from DowDuPont. See Note 23 to the Consolidated Financial Statements for additional information.
2. Cash flow conversion in the first nine months of 2021 reflects a $1 billion elective pension contribution.

Liquidity & Financial Flexibility

The Company's primary source of incremental liquidity is cash flows from operating activities. In addition to cash from operating activities, the Company's current liquidity sources also include TDCC's U.S. and Euromarket commercial paper programs, committed and uncommitted credit facilities, committed accounts receivable facilities, a medium-term notes program, a U.S. retail note program ("InterNotes®") and other debt markets.

The Company continues to maintain a strong financial position with all of its committed credit facilities undrawn and fully available at September 30, 2022. Cash and committed and available forms of liquidity were $12 billion at September 30, 2022. The Company also has no substantive long-term debt maturities due until 2027. As a well-known seasoned issuer the Company may issue debt at any time as an additional source of liquidity. Additional details on sources of liquidity are as follows:

Commercial Paper

TDCC issues promissory notes under its U.S. and Euromarket commercial paper programs. TDCC had $100 million of commercial paper outstanding at September 30, 2022. TDCC maintains access to the commercial paper market at competitive rates. Amounts outstanding under TDCC's commercial paper programs during the period may be greater, or less than, the amount reported at the end of the period. Subsequent to September 30, 2022, TDCC issued approximately $600 million of commercial paper.

Committed Credit Facilities
The Company also has the ability to access liquidity through TDCC's committed and available credit facilities. At September 30, 2022, TDCC had total committed and available credit facilities of $8.4 billion. See Note 12 to the Consolidated Financial Statements for additional information on committed and available credit facilities.

Committed Accounts Receivable Facilities
In addition to the above committed credit facilities, the Company maintains a committed accounts receivable facility in the U.S. where eligible trade accounts receivable, up to $900 million, may be sold at any point in time. The Company also maintains a committed accounts receivable facility in Europe where eligible trade accounts receivable, up to €500 million, may be sold at any point in time. In the third quarter of 2022, the Company sold no receivables under the U.S. and Europe committed accounts receivable facilities ($391 million in the first nine months of 2022). See Note 11 to the Consolidated Financial Statements for additional information.

Company-Owned Life Insurance
The Company has investments in company-owned life insurance ("COLI") policies, which are recorded at their cash surrender value as of each balance sheet date. The Company has the ability to monetize its investment in its COLI policies as an additional source of liquidity. The Company had no outstanding monetization of its existing COLI policies' surrender value at September 30, 2022. For additional information, see Note 7 to the Consolidated Financial Statements included in the 2021 10-K.

Uncommitted Credit Facilities
The Company has entered into various uncommitted bilateral credit arrangements as a potential source of excess liquidity. These lines can be used to support short-term liquidity needs and for general purposes, including letters of credit. The Company had no drawdowns outstanding at September 30, 2022.

Shelf Registration - U.S.
On June 13, 2022, Dow Inc. and TDCC filed a shelf registration statement with the U.S. Securities and Exchange Commission. The shelf indicates that Dow Inc. may offer common stock; preferred stock; depositary shares; debt securities; guarantees; warrants to purchase common stock, preferred stock and debt securities; and stock purchase contracts and stock purchase units, with pricing and availability of any such offerings depending on market conditions. The shelf also indicates that TDCC may offer debt securities, guarantees and warrants to purchase debt securities, with pricing and availability of any such offerings depending on market conditions. On July 22, 2022, TDCC filed a prospectus supplement under this shelf registration to register an undetermined amount of securities for issuance under InterNotes®. Also, on July 22, 2022, TDCC filed a prospectus supplement under this shelf registration to register an undetermined amount of securities for issuance under a medium-term notes program.

Debt

As the Company continues to maintain its strong balance sheet and financial flexibility, management is focused on net debt (a non-GAAP financial measure), as the Company believes this is the best representation of its financial leverage at this point in time. As shown in the following table, net debt is equal to total gross debt minus "Cash and cash equivalents" and "Marketable securities."

Total Debt	*Dow Inc.*		*TDCC*	
In millions	*Sep 30, 2022*	*Dec 31, 2021*	*Sep 30, 2022*	*Dec 31, 2021*
Notes payable	$ 185	$ 161	$ 185	$ 161
Long-term debt due within one year	364	231	364	231
Long-term debt	12,921	14,280	12,921	14,280
Gross debt	$ 13,470	$ 14,672	$ 13,470	$ 14,672
- Cash and cash equivalents	2,216	2,988	2,216	2,988
- Marketable securities [1]	148	245	148	245
Net debt	$ 11,106	$ 11,439	$ 11,106	$ 11,439
Total equity	$ 18,629	$ 18,739	$ 18,877	$ 19,029
Gross debt as a percent of total capitalization	42.0 %	43.9 %	41.6 %	43.5 %
Net debt as a percent of total capitalization	37.3 %	37.9 %	37.0 %	37.5 %

1. Included in "Other current assets" in the consolidated balance sheets.

In the second quarter of 2022, the Company redeemed $750 million aggregate principal amount of 3.625 percent notes due May 2026.

The Company may at any time repurchase certain debt securities in the open market or in privately negotiated transactions subject to: the applicable terms under which any such debt securities were issued, certain internal approvals of the Company, and applicable laws and regulations of the relevant jurisdiction in which any such potential transactions might take place. This in no way obligates the Company to make any such repurchases nor should it be considered an offer to do so.

TDCC's public debt instruments and primary, private credit agreements contain, among other provisions, certain customary restrictive covenant and default provisions. TDCC's most significant debt covenant with regard to its financial position is the obligation to maintain the ratio of its consolidated indebtedness to consolidated capitalization at no greater than 0.70 to 1.00 at any time the aggregate outstanding amount of loans under the Five Year Competitive Advance and Revolving Credit Facility Agreement ("Revolving Credit Agreement") equals or exceeds $500 million. The ratio of TDCC's consolidated indebtedness to consolidated capitalization as defined in the Revolving Credit Agreement was 0.39 to 1.00 at September 30, 2022. Management believes TDCC was in compliance with all of its covenants and default provisions at September 30, 2022. For information on TDCC's debt covenants and default provisions, see Note 15 to the Consolidated Financial Statements included in the 2021 10-K. There were no material changes to the debt covenants and default provisions related to TDCC's outstanding long-term debt and primary, private credit agreements in the first nine months of 2022.

While taking into consideration the current economic environment, management expects that the Company will continue to have sufficient liquidity and financial flexibility to meet all of its business obligations.

Credit Ratings

At September 30, 2022, TDCC's credit ratings were as follows:

Credit Ratings	*Long-Term Rating*	*Short-Term Rating*	*Outlook*
Fitch Ratings	BBB+	F2	Positive
Moody's Investors Service	Baa1	P-2	Stable
Standard & Poor's	BBB	A-2	Positive

On May 31, 2022, Moody's Investors Service announced a credit rating upgrade for TDCC from Baa2 to Baa1, affirmed its P-2 rating and maintained a stable outlook. On June 8, 2022, Standard & Poor's affirmed TDCC's BBB and A-2 rating, and revised its outlook to positive from stable. On June 16, 2022, Fitch Ratings affirmed TDCC's BBB+ and F2 rating, and revised its outlook to positive from stable. These credit agencies' decisions were made as part of their annual review process and reflect the Company's supportive financial policies and strong operating performance.

Dividends

Dow Inc.

Dow Inc. has paid dividends on a quarterly basis since the separation from DowDuPont and expects to continue to do so, subject to approval by the Dow Inc. Board. Dividends declared by the Board align to the Company's strategy announced in 2018 of returning approximately 45 percent of operating net income[1] to the shareholders through the dividend and total shareholder remuneration of approximately 65 percent, when including share repurchases, over the economic cycle. The following table summarizes cash dividends declared by the Board and paid to common stockholders of record by Dow Inc. in 2022:

Dow Inc. Cash Dividends Declared and Paid			
Declaration Date	*Record Date*	*Payment Date*	*Amount (per share)*
February 10, 2022	February 28, 2022	March 11, 2022	$ 0.70
April 13, 2022	May 31, 2022	June 10, 2022	$ 0.70
August 10, 2022	August 31, 2022	September 9, 2022	$ 0.70
October 13, 2022	November 30, 2022	December 9, 2022	$ 0.70

TDCC

TDCC has committed to fund Dow Inc.'s dividends paid to common stockholders and share repurchases, as approved by the Dow Inc. Board from time to time, as well as certain governance expenses. Funding is accomplished through intercompany loans. TDCC's Board reviews and determines a dividend distribution to Dow Inc. to settle the intercompany loans. For the three months ended September 30, 2022, TDCC declared and paid a dividend to Dow Inc. of $1,301 million ($3,755 million for the nine months ended September 30, 2022). At September 30, 2022, TDCC's intercompany loan balance with Dow Inc. was insignificant. See Note 22 to the Consolidated Financial Statements for additional information.

Share Repurchase Program

On April 1, 2019, the Dow Inc. Board ratified the share repurchase program originally approved on March 15, 2019, authorizing up to $3 billion for the repurchase of the Company's common stock, with no expiration date. The Company completed the April 1, 2019 share repurchase program in the second quarter of 2022. On April 13, 2022, the Dow Inc. Board approved a new share repurchase program authorizing up to $3 billion for the repurchase of the Company's common stock, with no expiration date. The Company repurchased $800 million of its common stock in the third quarter of 2022 ($2,200 million in the first nine months of 2022). At September 30, 2022, approximately $2,175 million of the new share repurchase program authorization remained available for repurchases. As previously announced, the Company intends to repurchase shares to cover dilution over the cycle. With the announcement of the new share repurchase program, the Company may from time to time expand its share repurchases beyond dilution, based on a number of factors including macroeconomic conditions, free cash flow generation, and the Dow share price. Any share repurchases, when coupled with the Company's dividends, are intended to implement the long-term strategy of ensuring shareholder remuneration is approximately 65 percent over the economic cycle.

Pension Plans

The Company has both funded and unfunded defined benefit pension plans that cover employees in the United States and a number of other countries. The Company's funding policy is to contribute to funded plans when pension laws and/or economics either require or encourage funding. The Company expects to contribute approximately $250 million to its pension plans in 2022, of which $156 million has been contributed through September 30, 2022. See Note 17 to the Consolidated Financial Statements and Note 20 to the Consolidated Financial Statements included in the 2021 10-K for additional information related to the Company's pension plans.

1. Operating net income is a non-GAAP measure that Dow defines as "Net income available for Dow Inc. common stockholders," excluding the impact of significant items.

Restructuring
The actions related to the 2020 Restructuring Program are expected to result in additional cash expenditures of $92 million, primarily through 2022 and into 2023, consisting of severance and related benefit costs and costs associated with exit and disposal activities, including contract cancellation penalties and environmental remediation. Restructuring implementation costs, primarily decommissioning and demolition activities related to asset actions, are expected to result in additional cash expenditures of approximately $10 million, primarily through the end of 2022. Restructuring implementation costs totaled $11 million in the third quarter of 2022 ($31 million in the first nine months of 2022).

The Company expects to incur additional costs in the future related to its restructuring activities, which will be recognized as incurred. The Company also expects to incur additional employee-related costs, including involuntary termination benefits related to its other optimization activities. These costs cannot be reasonably estimated at this time. See Note 5 to the Consolidated Financial Statements for additional information on the Company's restructuring activities.

Digital Acceleration
In 2021, Dow announced plans to further advance and expand its digitalization efforts to deliver long-term value creation by accelerating investment in three key areas: expanding digital tools to accelerate materials science innovation; further enhancing the e-commerce buying and fulfillment experience for Dow's customers; and adopting real-time digital manufacturing insights, operational data intelligence and demand sensing to enhance the productivity and reliability of Dow's operations. The Company expects more than $300 million in incremental annual run rate Operating EBITDA generation by the end of 2025 related to digital acceleration, with an additional one-time $100 million in structural working capital efficiency gains, driven in part by enhanced planning from digital tools. The activities related to digital acceleration are expected to result in additional cash expenditures of approximately $80 million, primarily through the end of 2022. Digital acceleration expenses totaled $62 million in the third quarter of 2022 ($154 million in the first nine months of 2022).

Contractual Obligations
Information related to the Company's contractual obligations, commercial commitments and expected cash requirements for interest can be found in Notes 15, 16, 17 and 20 to the Consolidated Financial Statements included in the 2021 10-K. With the exception of the items noted below, there have been no material changes in the Company's contractual obligations since December 31, 2021.

Contractual Obligations at Sep 30, 2022	*Payments Due In*				
In millions	*2022*	*2023-2024*	*2025-2026*	*2027 and beyond*	*Total*
Dow Inc.					
Long-term debt obligations [1]	$ 34	$ 474	$ 465	$ 12,579	$ 13,552
Expected cash requirements for interest [2]	$ 151	$ 1,151	$ 1,104	$ 7,385	$ 9,791

1. Excludes unamortized debt discount and issuance costs of $267 million. Includes finance lease obligations of $804 million.
2. Cash requirements for interest on long-term debt was calculated using current interest rates at September 30, 2022, and includes $11 million of various floating rate notes.

Off-Balance Sheet Arrangements
Off-balance sheet arrangements are obligations the Company has with nonconsolidated entities related to transactions, agreements or other contractual arrangements. The Company holds variable interests in joint ventures accounted for under the equity method of accounting. The Company is not the primary beneficiary of these joint ventures and therefore is not required to consolidate these entities (see Note 21 to the Consolidated Financial Statements).

Guarantees arise during the ordinary course of business from relationships with customers, committed accounts receivable facilities and nonconsolidated affiliates when the Company undertakes an obligation to guarantee the performance of others if specific triggering events occur. Additional information related to guarantees can be found in the "Guarantees" section of Note 13 to the Consolidated Financial Statements.

Fair Value Measurements
See Note 20 to the Consolidated Financial Statements for information concerning fair value measurements.

OTHER MATTERS

Critical Accounting Estimates

The preparation of financial statements and related disclosures in accordance with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Note 1 to the Consolidated Financial Statements included in the 2021 10-K describes the significant accounting policies and methods used in the preparation of the consolidated financial statements. The Company's critical accounting policies that are impacted by judgments, assumptions and estimates are described in Management's Discussion and Analysis of Financial Condition and Results of Operations included in the 2021 10-K. Since December 31, 2021, there have been no material changes in the Company's accounting policies that are impacted by judgments, assumptions and estimates.

Asbestos-Related Matters of Union Carbide Corporation

Union Carbide is and has been involved in a large number of asbestos-related suits filed primarily in state courts during the past four decades. These suits principally allege personal injury resulting from exposure to asbestos-containing products and frequently seek both actual and punitive damages. The alleged claims primarily relate to products that Union Carbide sold in the past, alleged exposure to asbestos-containing products located on Union Carbide's premises, and Union Carbide's responsibility for asbestos suits filed against a former Union Carbide subsidiary, Amchem Products, Inc. ("Amchem"). In many cases, plaintiffs are unable to demonstrate that they have suffered any compensable loss as a result of such exposure, or that injuries incurred in fact resulted from exposure to Union Carbide's products.

The table below provides information regarding asbestos-related claims pending against Union Carbide and Amchem based on criteria developed by Union Carbide and its external consultants:

Asbestos-Related Claim Activity	*2022*	*2021*
Claims unresolved at Jan 1	8,747	9,126
Claims filed	3,662	3,177
Claims settled, dismissed or otherwise resolved	(5,823)	(3,340)
Claims unresolved at Sep 30	6,586	8,963
Claimants with claims against both Union Carbide and Amchem	(1,502)	(2,312)
Individual claimants at Sep 30	5,084	6,651

Plaintiffs' lawyers often sue numerous defendants in individual lawsuits or on behalf of numerous claimants. As a result, the damages alleged are not expressly identified as to Union Carbide, Amchem or any other particular defendant, even when specific damages are alleged with respect to a specific disease or injury. In fact, there are no personal injury cases in which only Union Carbide and/or Amchem are the sole named defendants. For these reasons and based upon Union Carbide's litigation and settlement experience, Union Carbide does not consider the damages alleged against Union Carbide and Amchem to be a meaningful factor in its determination of any potential asbestos-related liability.

For additional information, see Asbestos-Related Matters of Union Carbide Corporation in Note 13 to the Consolidated Financial Statements; Part II, Item 1. Legal Proceedings; and Note 16 to the Consolidated Financial Statements included in the 2021 10-K.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See Note 19 to the Consolidated Financial Statements and Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk in the combined Dow Inc. and TDCC Annual Report on Form 10-K for the year ended December 31, 2021, for information on the Company's utilization of financial instruments and an analysis of the sensitivity of these instruments.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this Quarterly Report on Form 10-Q, Dow Inc. and The Dow Chemical Company (the "Companies") carried out an evaluation, under the supervision and with the participation of the Companies' Disclosure Committee and the Companies' management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of the Companies' disclosure controls and procedures pursuant to paragraph (b) of Exchange Act Rules 13a-15 and 15d-15. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Companies' disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There were no changes in the Companies' internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 and 15d-15 that was conducted during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Companies' internal control over financial reporting.

Dow Inc. and Subsidiaries
The Dow Chemical Company and Subsidiaries

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Asbestos-Related Matters of Union Carbide Corporation
No material developments regarding this matter occurred in the first nine months of 2022. For a current status of this matter, see Note 13 to the Consolidated Financial Statements.

Environmental Proceedings
On May 17, 2021, the Company received a civil complaint from the State of Texas ("State") on behalf of the Texas Commission on Environmental Quality. The complaint, filed in the 250th District Court of Travis County, Texas, alleges environmental violations at the Company's Freeport, Texas, site involving 12 discrete air emissions events. The State is seeking monetary relief of no more than $1 million and injunctive relief to prevent recurrence. On August 31, 2021, the State informed the Company that it would be including additional air emissions events in the complaint, which may impact the monetary relief sought by the State. Discussions between the Company and the Texas Office of the Attorney General are ongoing.

On February 3, 2022, the U.S. Environmental Protection Agency (“EPA”) proposed a draft administrative order to resolve alleged violations at the Rohm and Haas Chemicals facility in Kankakee, Illinois, relating to a storage tank at the site that does not have certain control equipment specified by EPA Clean Air Act regulations. This issue was self-disclosed by the facility to the Illinois Environmental Protection Agency in 2015. Negotiations with the agencies are ongoing.

ITEM 1A. RISK FACTORS

Since December 31, 2021, there have been no material changes to the Company's Risk Factors, except as noted below, which was updated in the first and second quarters of 2022:

Global Economic Considerations: The Company operates in a global, competitive environment which gives rise to operating and market risk exposure.
The Company sells its broad range of products and services in a competitive, global environment, and competes worldwide for sales on the basis of product quality, price, technology and customer service. Increased levels of competition could result in lower prices or lower sales volume, which could have a negative impact on the Company’s results of operations. Sales of the Company's products are also subject to extensive federal, state, local and foreign laws and regulations; trade agreements; import and export controls; taxes; and duties and tariffs. The imposition of additional regulations, controls, taxes and duties and tariffs or changes to bilateral and regional trade agreements could result in lower sales volume, which could negatively impact the Company’s results of operations.

Economic conditions around the world, and in certain industries in which the Company does business, also impact sales price and volume. As a result, market uncertainty or an economic downturn driven by inflationary pressures; political tensions; war, including the ongoing conflict between Russia and Ukraine and the related sanctions and export restrictions; terrorism; epidemics; pandemics; or political instability in the geographic regions or industries in which the Company sells its products could reduce demand for these products and result in decreased sales volume, which could have a negative impact on the Company’s results of operations.

In February 2022, Russia invaded Ukraine resulting in the United States, Canada, the European Union and other countries imposing economic sanctions on Russia. Dow suspended all purchases of feedstocks and energy from Russia and has significantly reduced its operations and product offerings in the country. Dow has also stopped all investments in Russia and is only supplying limited essential goods to Russia. These actions have not had and are not expected to have a material impact on the Company's financial condition or results of operations. However, the fluidity and continuation of the conflict may result in additional economic sanctions and other impacts which could have a negative impact on the Company’s financial condition, results of operations and cash flows. These include decreased sales; supply chain and logistics disruptions; volatility in foreign exchange rates and interest rates; inflationary pressures on raw materials and energy; and heightened cybersecurity threats.

In addition, volatility and disruption of financial markets could limit customers' ability to obtain adequate financing to maintain operations, which could result in a decrease in sales volume and have a negative impact on the Company's results of operations. The Company's global business operations also give rise to market risk exposure related to changes in inflation, foreign currency exchange rates, interest rates, commodity prices and other market factors such as equity prices. To manage such risks, the Company enters into hedging transactions, where deemed appropriate, pursuant to established guidelines and policies. If the Company fails to effectively manage such risks, it could have a negative impact on its results of operations.

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

Issuer Purchases of Equity Securities

The following table provides information regarding purchases of Dow Inc. common stock by the Company during the three months ended September 30, 2022:

Issuer Purchases of Equity Securities				
Period	*Total number of shares purchased*	*Average price paid per share*	*Total number of shares purchased as part of the Company's publicly announced share repurchase program*	*Approximate dollar value of shares that may yet be purchased under the Company's publicly announced share repurchase program* [1] *(In millions)*
July 2022	1,850,168	$ 51.52	1,850,168	$ 2,880
August 2022	12,110,900	$ 53.77	12,110,900	$ 2,228
September 2022	1,043,146	$ 51.55	1,043,146	$ 2,175
Third quarter 2022	15,004,214	$ 53.34	15,004,214	$ 2,175

1. On April 1, 2019, the Dow Inc. Board ratified the share repurchase program originally approved on March 15, 2019, authorizing up to $3.0 billion for the repurchase of the Company's common stock, with no expiration date. The Company completed the April 1, 2019 share repurchase program in the second quarter of 2022. On April 13, 2022, the Dow Inc. Board approved a new share repurchase program authorizing up to $3.0 billion for the repurchase of the Company's common stock, with no expiration date.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

EXHIBIT NO.	DESCRIPTION
4.3	Dow Inc. agrees to provide the SEC, on request, copies of all other such indentures and instruments that define the rights of holders of long-term debt of Dow Inc. and its consolidated subsidiaries, including The Dow Chemical Company, pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K.
23 *	Ankura Consulting Group, LLC's Consent.
31.1 *	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 *	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 *	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2 *	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File. The cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

* Filed herewith

Dow Inc.
The Dow Chemical Company and Subsidiaries

Trademark Listing

The following registered trademark of InspereX Holdings LLC appears in this report: InterNotes®

® ™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow, except as otherwise specified.

Dow Inc. and Subsidiaries
The Dow Chemical Company and Subsidiaries

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

DOW INC.
THE DOW CHEMICAL COMPANY

Date: October 21, 2022

/s/ RONALD C. EDMONDS

Ronald C. Edmonds
Controller and Vice President
of Controllers and Tax
(Authorized Signatory and
Principal Accounting Officer)

Ankura Consulting Group, LLC (“Ankura”) hereby consents to the use of Ankura's name and the reference to Ankura's reports in this Quarterly Report on Form 10-Q of Dow Inc. and The Dow Chemical Company for the period ended September 30, 2022, and the incorporation by reference thereof in the following Registration Statements of Dow Inc. and The Dow Chemical Company:

DOW INC.

Form S-3:

Nos. 333-230668
333-232862
333-265556

Form S-8:

Nos. 333-220352-01
333-230680
333-230681
333-255472
333-255473

THE DOW CHEMICAL COMPANY

Form S-3:

Nos. 333-232862-01
333-265556-01

Form S-4:

Nos. 333-88443
333-234108

Form S-8:

Nos. 33-61795
333-40271
333-91027
333-103519
333-220352

Date: October 21, 2022

/s/ AMY BROCKMAN

Amy Brockman
Senior Managing Director
Ankura Consulting Group, LLC

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jim Fitterling, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Dow Inc. and The Dow Chemical Company;

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 registrants as of, and for, the periods presented in this report;

4. The registrants' 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 registrants 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 registrants, 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 registrants' 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 registrants' internal control over financial reporting that occurred during the registrants' most recent fiscal quarter (the registrants' fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrants' internal control over financial reporting; and

5. The registrants' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrants' auditors and the audit committee of registrants' board of directors (or persons performing the equivalent function):

   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 registrants' 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 registrants' internal control over financial reporting.

Date: October 21, 2022

/s/ JIM FITTERLING

Jim Fitterling
Chairman and Chief Executive Officer

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Howard I. Ungerleider, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Dow Inc. and The Dow Chemical Company;

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 registrants as of, and for, the periods presented in this report;

4. The registrants' 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 registrants 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 registrants, 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 registrants' 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 registrants' internal control over financial reporting that occurred during the registrants' most recent fiscal quarter (the registrants' fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrants' internal control over financial reporting; and

5. The registrants' other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrants' auditors and the audit committee of registrants' board of directors (or persons performing the equivalent function):

   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 registrants' 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 registrants' internal control over financial reporting.

Date: October 21, 2022

/s/ HOWARD I. UNGERLEIDER

Howard I. Ungerleider
President and Chief Financial Officer

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Jim Fitterling, Chairman and Chief Executive Officer of Dow Inc. and The Dow Chemical Company (the "Companies"), certify that:

1. The Quarterly Report on Form 10-Q of the Companies for the quarter ended September 30, 2022 as filed with the Securities and Exchange Commission (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 Companies.

Date: October 21, 2022

/s/ JIM FITTERLING

Jim Fitterling
Chairman and Chief Executive Officer

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Howard I. Ungerleider, President and Chief Financial Officer of Dow Inc. and The Dow Chemical Company (the "Companies"), certify that:

1. The Quarterly Report on Form 10-Q of the Companies for the quarter ended September 30, 2022 as filed with the Securities and Exchange Commission (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 Companies.

Date: October 21, 2022

/s/ HOWARD I. UNGERLEIDER

Howard I. Ungerleider
President and Chief Financial Officer