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, 2021**

OR

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

For the transition period from _____ To _____

Commission file number: 1-3247

CORNING INCORPORATED

(Exact name of registrant as specified in its charter)

New York	**16-0393470**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Riverfront Plaza, Corning, New York	**14831**
(Address of principal executive offices)	(Zip Code)

607-974-9000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	**GLW**	**New York Stock Exchange (NYSE)**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

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

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

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

Yes ☐ No ☐

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

Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding as of October 22, 2021
Corning's Common Stock, $0.50 par value per share	853,408,459 shares

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF INCOME
(Unaudited; in millions, except per share amounts)

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net sales	$ 3,615	$ 3,001	$ 10,406	$ 7,953
Cost of sales	2,294	2,000	6,614	5,635
Gross margin	1,321	1,001	3,792	2,318
Operating expenses:				
Selling, general and administrative expenses	486	480	1,351	1,276
Research, development and engineering expenses	251	231	715	922
Amortization of purchased intangibles	32	33	97	87
Operating income	552	257	1,629	33
Equity in earnings (losses) of affiliated companies	16	(76)	31	17
Interest income	3	3	8	12
Interest expense	(72)	(70)	(227)	(201)
Translated earnings contract (loss) gain, net (Note 12)	(13)	(100)	262	5
Transaction-related gain, net (Note 3)		498		498
Other (expense) income, net	(6)	(62)	118	(71)
Income before income taxes	480	450	1,821	293
Provision for income taxes (Note 5)	(109)	(23)	(402)	(33)
Net income attributable to Corning Incorporated	$ 371	$ 427	$ 1,419	$ 260
Earnings per common share available to common shareholders:				
Basic (Note 6)	$ 0.44	$ 0.53	$ 0.72	$ 0.25
Diluted (Note 6)	$ 0.43	$ 0.48	$ 0.71	$ 0.24
Reconciliation of net income attributable to Corning Incorporated versus net income available to common shareholders:				
Net income attributable to Corning Incorporated	$ 371	$ 427	$ 1,419	$ 260
Series A convertible preferred stock dividend			(24)	(73)
Excess consideration paid for redemption of preferred shares [1]			(803)	
Net income available to common shareholders	$ 371	$ 427	$ 592	$ 187

[1] Refer to Note 6 (Earnings per Share) and Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

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

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited; in millions)

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net income attributable to Corning Incorporated	$ 371	$ 427	$ 1,419	$ 260
Foreign currency translation adjustments and other (Note 14)	(192)	283	(515)	76
Unamortized gains (losses) and prior service credits (costs) for postretirement benefit plans		4	(1)	(8)
Net unrealized (losses) gains on designated hedges	(15)	11	(3)	(31)
Other comprehensive (loss) income, net of tax	(207)	298	(519)	37
Comprehensive income attributable to Corning Incorporated	$ 164	$ 725	$ 900	$ 297

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

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEETS
(In millions, except share and per share amounts)

	September 30, 2021	December 31, 2020
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	$ 2,212	$ 2,672
Trade accounts receivable, net of doubtful accounts - $43 and $46	2,114	2,133
Inventories, net (Note 7)	2,463	2,438
Other current assets	890	761
Total current assets	7,679	8,004
Property, plant and equipment, net of accumulated depreciation - $13,857 and $13,663	15,383	15,742
Goodwill, net	2,425	2,460
Other intangible assets, net	1,192	1,308
Deferred income taxes (Note 5)	1,062	1,121
Other assets	1,965	2,140
Total Assets	$ 29,706	$ 30,775
Liabilities and Equity		
Current liabilities:		
Current portion of long-term debt and short-term borrowings (Note 9)	$ 50	$ 156
Accounts payable	1,396	1,174
Other accrued liabilities (Note 8 and Note 11)	2,891	2,437
Total current liabilities	4,337	3,767
Long-term debt (Note 9)	7,019	7,816
Postretirement benefits other than pensions (Note 10)	729	727
Other liabilities (Note 8 and Note 11)	5,266	5,017
Total liabilities	17,351	17,327
Commitments and contingencies (Note 11)		
Shareholders' equity (Note 14):		
Convertible preferred stock, Series A – Par value $100 per share; Shares authorized 10 million; Shares issued: 0 and 2,300		2,300
Common stock – Par value $0.50 per share; Shares authorized 3.8 billion; Shares issued: 1.8 billion and 1.7 billion	907	863
Additional paid-in capital – common stock	16,398	14,642
Retained earnings	16,110	16,120
Treasury stock, at cost; Shares held: 963 million and 961 million	(20,011)	(19,928)
Accumulated other comprehensive loss	(1,259)	(740)
Total Corning Incorporated shareholders' equity	12,145	13,257
Non-controlling interests	210	191
Total equity	12,355	13,448
Total Liabilities and Equity	$ 29,706	$ 30,775

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

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited; in millions)

	Nine months ended September 30,	
	2021	2020
Cash Flows from Operating Activities:		
Net income	$ 1,419	$ 260
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	1,005	1,041
Amortization of purchased intangibles	97	87
Loss on disposal of assets	8	107
Severance charges		141
Severance payments	(24)	(126)
Share-based compensation expense	117	127
Equity in earnings of affiliated companies	(31)	(17)
Translation (gain) loss on Japanese yen-denominated debt	(127)	50
Deferred tax provision (benefit)	68	(96)
Pension plan contributions		(80)
Customer deposits and government incentives	168	184
Translated earnings contract gain	(262)	(5)
Unrealized translation losses (gains) on transactions	65	(54)
Tax assessment refunds		101
Asset impairment		217
Transaction-related gain, net		(498)
Changes in certain working capital items:		
Trade accounts receivable	(146)	(281)
Inventories	(72)	240
Other current assets	(210)	(19)
Accounts payable and other current liabilities	425	(139)
Other, net	(111)	166
Net cash provided by operating activities	2,389	1,406
Cash Flows from Investing Activities:		
Capital expenditures	(1,014)	(986)
Proceeds from sale or disposal of assets	17	27
Proceeds from sale of business	102	
Proceeds from and investment in unconsolidated entities, net	87	(7)
Realized gains on translated earnings contract	30	10
Other, net	(25)	24
Net cash used in investing activities	(803)	(932)
Cash Flows from Financing Activities:		
Repayments of short-term borrowings	(144)	
Repayments of long-term debt	(716)	
Proceeds from issuance of long-term debt	19	212
Payment for redemption of preferred stock	(507)	
Payments of employee withholding tax on stock awards	(57)	(10)
Proceeds from exercise of stock options	91	49
Purchases of common stock for treasury	(22)	(105)
Dividends paid	(659)	(587)
Other, net	5	26
Net cash used in financing activities	(1,990)	(415)
Effect of exchange rates on cash	(56)	21
Net (decrease) increase in cash and cash equivalents	(460)	80
Cash and cash equivalents at beginning of period	2,672	2,434
Cash and cash equivalents at end of period	$ 2,212	$ 2,514

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

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited; in millions)

(In millions)	Convertible preferred stock	Common stock	Additional paid-in capital common	Retained earnings	Treasury stock	Accumulated other comprehensive loss	Total Corning Incorporated shareholders' equity	Non-controlling interests	Total
Balance, December 31, 2020	$ 2,300	$ 863	$ 14,642	$ 16,120	$ (19,928)	$ (740)	$ 13,257	$ 191	$ 13,448
Net income				599			599	2	601
Other comprehensive loss						(352)	(352)	(1)	(353)
Shares issued to benefit plans and for option exercises		1	80				81		81
Common dividends ($0.24 per share)				(187)			(187)		(187)
Preferred dividends ($10,625 per share)				(24)			(24)		(24)
Other, net [1]				1	(6)		(5)	(3)	(8)
Balance, March 31, 2021	$ 2,300	$ 864	$ 14,722	$ 16,509	$ (19,934)	$ (1,092)	$ 13,369	$ 189	$ 13,558
Net income				449			449	5	454
Other comprehensive income						40	40	1	41
Redemption of preferred stock [2]	(700)			(803)			(1,503)		(1,503)
Conversion of preferred stock to common stock [3]	(1,600)	40	1,560				—		—
Purchase of common stock for treasury					(1)		(1)		(1)
Shares issued to benefit plans and for option exercises		3	70				73		73
Common dividends ($0.48 per share)				(416)			(416)		(416)
Other, net [1]					(51)		(51)	(13)	(64)
Balance, June 30, 2021	$ —	$ 907	$ 16,352	$ 15,739	$ (19,986)	$ (1,052)	$ 11,960	$ 182	$ 12,142
Net income				371			371	13	384
Other comprehensive loss						(207)	(207)	(1)	(208)
Purchase of common stock for treasury					(24)		(24)		(24)
Shares issued to benefit plans and for option exercises			46				46		46
Other, net					(1)		(1)	16	15
Balance, September 30, 2021	**$ —**	**$ 907**	**$ 16,398**	**$ 16,110**	**$ (20,011)**	**$ (1,259)**	**$ 12,145**	**$ 210**	**$ 12,355**

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited; in millions)

(In millions)	Convertible preferred stock	Common stock	Additional paid-in capital common	Retained earnings	Treasury stock	Accumulated other comprehensive loss	Total Corning Incorporated shareholders' equity	Non-controlling interests	Total
Balance, December 31, 2019	$ 2,300	$ 859	$ 14,323	$ 16,408	$ (19,812)	$ (1,171)	$ 12,907	$ 90	$ 12,997
Net loss				(96)			(96)		(96)
Other comprehensive loss						(326)	(326)	(1)	(327)
Purchase of common stock for treasury					(105)		(105)		(105)
Shares issued to benefit plans and for option exercises			17				17		17
Common dividends ($0.22 per share)				(168)			(168)		(168)
Preferred dividends ($10,625 per share)				(24)			(24)		(24)
Other, net				(6)	(1)		(7)		(7)
Balance, March 31, 2020	$ 2,300	$ 859	$ 14,340	$ 16,114	$ (19,918)	$ (1,497)	$ 12,198	$ 89	$ 12,287
Net (loss) income				(71)			(71)	6	(65)
Other comprehensive income						65	65		65
Shares issued to benefit plans and for option exercises		1	58				59		59
Common dividends ($0.22 per share)				(171)			(171)		(171)
Preferred dividends ($10,625 per share)				(25)			(25)		(25)
Other, net					(6)		(6)	(11)	(17)
Balance, June 30, 2020	$ 2,300	$ 860	$ 14,398	$ 15,847	$ (19,924)	$ (1,432)	$ 12,049	$ 84	$ 12,133
Net income				427			427	5	432
Other comprehensive income						298	298	1	299
Shares issued to benefit plans and for option exercises		1	96				97		97
Common dividends ($0.22 per share)				(171)			(171)		(171)
Preferred dividends ($10,625 per share)				(24)			(24)		(24)
Non-controlling interest in HSG [4]								102	102
Other, net				(14)	(2)		(16)	5	(11)
Balance, September 30, 2020	**$ 2,300**	**$ 861**	**$ 14,494**	**$ 16,065**	**$ (19,926)**	**$ (1,134)**	**$ 12,660**	**$ 197**	**$ 12,857**

(1) Treasury stock includes the deemed surrender to the Company of common stock to satisfy employee tax withholding obligations.
(2) Refer to Note 6 (Earnings per Share) and Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.
(3) Refer to Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.
(4) Refer to Note 3 (HSG Transactions) to the consolidated financial statements for more information.

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

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CORNING INCORPORATED AND SUBSIDIARY COMPANIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Significant Accounting Policies

Basis of Presentation

In these notes, the terms “Corning,” “Company,” “we,” “us,” or “our” mean Corning Incorporated and its subsidiary companies.

The accompanying unaudited consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”) and in accordance with U.S. Generally Accepted Accounting Principles (“GAAP”) for interim financial information. Certain information and note disclosures normally included in financial statements prepared in accordance with GAAP have been omitted or condensed. These interim consolidated financial statements should be read in conjunction with Corning’s consolidated financial statements and notes thereto included in its Annual Report on Form 10-K for the year ended December 31, 2020 (“2020 Form 10-K”).

The unaudited consolidated financial statements reflect all adjustments which, in the opinion of management, are necessary for a fair statement of the results of operations, financial position and cash flows for the interim periods presented. All such adjustments are of a normal recurring nature. The results for interim periods are not necessarily indicative of results which may be expected for any other interim period or for the full year.

The equity method of accounting is used for investments in affiliated companies that are not controlled by Corning and in which the Company’s interest is generally between 20% and 50% and we have significant influence over the entity.

On September 9, 2020, Hemlock Semiconductor Group (“HSG”) redeemed the entire ownership interest of DuPont de Nemours, Inc. (“DuPont”) in HSG with a value of $250 million ("Redemption"). Upon completion of the Redemption, the Company obtained a 100% interest in Hemlock Semiconductor LLC ("HS LLC") and an 80.5% interest in Hemlock Semiconductor Operations LLC ("HSO LLC"), which are affiliated entities within HSG. HSG's results have been consolidated in “All Other”. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates. The novel coronavirus (“COVID-19”) pandemic and the resulting adverse impacts to global economic conditions may impact future estimates including, but not limited to, inventory valuations, fair value measurements, goodwill and long-lived asset impairments, the effectiveness of the Company’s hedging instruments, deferred tax valuation allowances, actuarial losses on retirement benefit plans and discount rate assumptions.

Certain prior year amounts have been reclassified to conform to the current-year presentation. These reclassifications had no impact on the results of operations, financial position, or changes in shareholders’ equity.

New Accounting Standards

During the first quarter of 2021, Corning early adopted ASU 2020-06. This simplifies an issuer’s accounting for convertible instruments by eliminating separate accounting for beneficial and cash conversion features under ASC 470-20. The ASU clarifies the settlement assessment that entities are required to perform to determine whether a contract qualifies for equity classification under ASC 815-40. Entities are required to use the if-converted method for all convertible instruments in the diluted earnings per share calculation, to include the effect of potential share settlement if the effect is more dilutive, for instruments that may be settled in cash or shares under ASC 260. The adoption of ASU 2020-06 did not have any impact on Corning’s consolidated financial statements.

Other Accounting Standards

No other accounting standards, newly issued or adopted as of September 30, 2021, had a material impact on Corning’s financial statements or disclosures.

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2. Restructuring, Impairment and Other Charges and Credits

2021

There was no material restructuring, impairment and other charges and credits activity for the first nine months of 2021. As of September 30, 2021, Corning had unpaid severance liabilities of $17 million, and payment is expected to be complete in less than twelve months.

2020

In the first nine months of 2020, and in response to uncertain global economic conditions, Corning undertook actions to transform the Company's cost structure and improve operational efficiency.

During the three and nine months ended September 30, 2020, $171 million and $733 million were recorded, respectively, in restructuring, impairment and other charges and credits. Severance charges of $6 million and $141 million, respectively, were primarily related to a reduction in workforce to facilitate realignment of capacity in the Asia regions for our Display Technologies segment, optimize our Optical Communications segment and certain corporate costs. Asset impairment losses of $22 million and $217 million, respectively, were incurred for an asset group related to the reassessment of research and development programs within "All Other". Charges of $143 million and $375 million, respectively, primarily included accelerated depreciation, asset disposals and other related exit costs in our Display Technologies and Specialty Materials segments.

For the three and nine months ended September 30, 2020, total restructuring, impairment and other charges and credits were reflected on the consolidated statements of income as follows:

	Three months ended September 30, 2020				
	Gross margin (1)	Selling, general and administrative expenses	Research, development and engineering expenses	Other	Total
Severance	$ 3	$ 3			$ 6
Asset impairment		6	$ 16		22
Capacity realignment	95		1		96
Other charges and credits	26	12	1	$ 8	47
Total restructuring, impairment and other charges and credits	$ 124	$ 21	$ 18	$ 8	$ 171

(1) Activity reflected in cost of sales.

	Nine months ended September 30, 2020				
	Gross margin (1)	Selling, general and administrative expenses	Research, development and engineering expenses	Other	Total
Severance	$ 79	$ 34	$ 28		$ 141
Asset impairment		6	211		217
Capacity realignment	243		2		245
Other charges and credits	61	51	2	$ 16	130
Total restructuring, impairment and other charges and credits	$ 383	$ 91	$ 243	$ 16	$ 733

(1) Activity reflected in cost of sales.

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3. HSG Transactions

In 2016, Corning realigned its ownership interest in Dow Corning Corporation ("Dow Corning"), exchanging its 50% interest in the joint venture between Corning and The Dow Chemical Corporation ("Dow") for a newly formed company that held a 49.9% interest in HS LLC and a 40.25% interest in HSO LLC, which were recorded as equity method investments of Corning and are affiliated companies of HSG. DuPont subsequently undertook Dow's ownership interest in HSG. HSG manufactures polysilicon products for the semiconductor and solar industries, and is one of the world's leading providers of ultra-pure polycrystalline silicon to the semiconductor industry.

2020

On September 9, 2020, HSG entered into a series of agreements with DuPont resulting in a change in control and consolidation for Corning.

HSG acquired DuPont's TCS manufacturing assets, which were determined to be a business and recorded as a business combination. The fair value of the purchase price was $255 million. In conjunction with this acquisition, HSG settled the pre-existing TCS relationship ("TCS Settlement") for a contractual amount of $175 million, which was determined to have a fair value of $200 million. HSG is paying for the TCS Settlement over three years with equal annual payments of approximately $58 million. Corning's share of the pre-tax loss related to the TCS Settlement was $81 million and was recorded in equity in earnings of affiliated companies in the consolidated statements of income (loss).

HSG also completed the Redemption, redeeming Dupont's entire ownership of HSG with a value of $250 million. The Redemption was funded with HSG's existing cash on-hand of $75 million and its newly obtained third-party debt of $175 million, maturing on September 8, 2021. Debt repayments have been recorded as a financing activity on Corning's consolidated statements of cash flows. As of September 30, 2021, the third-party debt has been fully repaid.

Upon completion of the Redemption, Corning obtained a 100% interest in HS LLC and an 80.5% interest in HSO LLC. Corning accounted for the Redemption under the acquisition method of accounting in accordance with business combinations without the transfer of net cash consideration. The Redemption price of $250 million approximated the fair value of Corning's equity interest in HSG immediately preceding the Redemption.

The net gain on previously owned equity was calculated as follows (in millions):

Fair value of previously held equity investment	$	250
Equity investment liability balance as of acquisition date		(248)
Corning's gain on previously held equity investment	$	498

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The following table summarizes the amounts of recorded assets acquired and liabilities assumed as of September 9, 2020, which includes the TCS assets and liabilities acquired by HSG immediately prior to the Redemption and the consolidation by Corning. Recognized amounts of identified assets and liabilities recorded at fair value (in millions):

Inventory	$	503
Property, plant and equipment		651
Intangible assets		285
Other current and non-current assets (1)		173
Short-term borrowings		(178)
Trade payables and other accrued liabilities		(329)
Other liabilities		(1,261)
Total identified net liabilities		(156)
Non-controlling interests (2)		(102)
Total fair value of Corning's previously held equity investment (2)		(250)
Goodwill (3)	$	508

(1) The other current and non-current assets included a contingent consideration asset of $20 million at fair value for a cost adjustment contract related to the TCS Transaction. Refer to Note 13 (Fair Value Measurements) to the consolidated financial statements for additional information.
(2) The purchase price being used to measure the goodwill of the Redemption is $352 million, including the fair value of Corning's previously held equity interest and non-controlling interest, of $250 million and $102 million, respectively.
(3) The goodwill recognized is not deductible for U.S. income tax purposes. The goodwill was allocated to "All Other" within segment reporting as disclosed in Note 16 (Reportable Segments) to the consolidated financial statements.

Upon completion of the Redemption and resulting consolidation, Corning recorded the values of assets acquired and liabilities assumed from HSG, including a customer deposit liability and deferred revenue. Refer to Note 4 (Revenue) to the consolidated financial statements for additional information.

The goodwill is primarily related to other intangibles and synergies of the acquired business which do not qualify for separate recognition. Intangible assets consist primarily of $215 million of developed technologies and know-how, and $70 million of other intangibles that are amortized over the weighted-average useful life of approximately 20 and 15 years, respectively.

HSG's revenue and net income have been consolidated in "All Other" in Corning's consolidated statements of income.

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4. Revenue

Revenue Disaggregation Table

The following table shows revenues by major product categories, similar to the Company's reportable segment disclosure. Within each product category, contract terms, conditions and economic factors affecting the nature, amount, timing and uncertainty of revenue recognition and cash flows are substantially similar. Commercial markets and selling channels are also similar. Except for an inconsequential amount of revenue for Telecommunications products, product category revenues are recognized at point in time when control transfers to the customer.

Revenues by product category are as follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Display products	$ 936	$ 834	$ 2,758	$ 2,211
Telecommunication products	1,131	909	3,143	2,587
Specialty glass products	556	570	1,490	1,339
Environmental substrate and filter products	382	369	1,233	891
Life science products	304	220	917	707
All Other (1)	306	99	865	218
Total revenue	$ 3,615	$ 3,001	$ 10,406	$ 7,953
Impact of foreign currency movements (2)	24	6		66
Cumulative adjustment related to customer contract (3)				105
Net sales of reportable segments and All Other	$ 3,639	$ 3,007	$ 10,406	$ 8,124

(1) The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in "All Other" as of September 9, 2020.
(2) This amount primarily represents the impact of foreign currency adjustments in the Display Technologies segment.
(3) Amount represents the negative impact of a cumulative adjustment to reduce revenue by $105 million recorded during the first quarter of 2020. The adjustment was associated with a previously recorded commercial benefit asset, reflected as a prepayment, to a customer with a long-term supply agreement that substantially exited its production of LCD panels.

Refer to Note 16 (Reportable Segments) to the consolidated financial statements for additional information.

Contract Assets and Liabilities

Contract assets, such as incremental costs to obtain or fulfill contracts, are an insignificant component of Corning's revenue recognition process. Most of Corning's fulfillment costs as a manufacturer of products are classified as inventory, fixed assets and intangible assets, which are accounted for under the respective guidance for those asset types. Other contract fulfillment costs are immaterial due to the nature of the products and their respective manufacturing processes.

Contract liabilities include deferred revenue, other advance payments and customer deposits. Other advance payments are not significant to operations and are classified as part of other accrued liabilities in the consolidated financial statements. Customer deposits and deferred revenue are predominately related to Display products and Corning's controlling interest in HSG, respectively.

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Customer Deposits

As of September 30, 2021 and December 31, 2020, Corning had customer deposits of approximately $1.3 billion and $1.4 billion, respectively. Most of these customer deposits were non-refundable and allowed customers to secure rights to glass produced by Corning under long-term supply agreements. The duration of these long-term supply agreements ranges up to 10 years. As glass is shipped to customers, Corning will recognize revenue and reduce the amount of the customer deposit liability.

Customer deposits used were $59 million and $182 million, respectively, and $34 million and $107 million, respectively, in the three and nine months ended September 30, 2021 and 2020. As of September 30, 2021 and December 31, 2020, $1.1 billion was recorded as other long-term liabilities. The remaining $224 million and $211 million, respectively, were classified as other current liabilities.

Deferred Revenue

As of September 30, 2021 and December 31, 2020, Corning had deferred revenue of approximately $932 million and $1.0 billion, respectively. The deferred revenue was related to the performance obligations of non-refundable consideration previously received by HSG from its customers under long-term supply agreements.

The deferred revenue is tracked on a per-customer contract-unit basis. As customers take delivery of the committed volumes under the terms of the contract, a per-unit amount of deferred revenue is recognized when control of the promised goods is transferred to the customer based upon the units shipped.

As of September 30, 2021 and December 31, 2020, $792 million and $872 million, respectively, were classified as long-term liabilities and $140 million and $152 million, respectively, were classified as current liabilities.

Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information.

5. Income Taxes

The provision for income taxes and the related effective income tax rates are as follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Provision for income taxes	$ (109)	$ (23)	$ (402)	$ (33)
Effective tax rate	22.7%	5.1%	22.1%	11.3%

For the three months ended September 30, 2021, the effective income tax rate differed from the United States ("U.S.") statutory rate of 21%, primarily due to non-deductible expenses for tax purposes, foreign rate differential, and tax reform items. For the nine months ended September 30, 2021, the effective income tax rate differed from the U.S. statutory rate of 21% primarily due to an adjustment to the permanently reinvested foreign income position, excess tax benefit related to share-based compensation payments, foreign rate differential, and tax reform items related to The Tax Cuts and Jobs Act of 2017.

For the three and nine months ended September 30, 2020, the effective income tax rate differed from the U.S. statutory rate of 21%, primarily due to an estimate of income tax benefits generated by a current year net operating loss that will be carried-back to prior years as allowed under the CARES Act and changes of estimates based on the final 2019 U.S. tax return which were partially offset by additional income tax reserves. For the nine months ended September 30, 2020, the effective income tax rate differed from the U.S. statutory rate of 21% primarily due to an estimate of income tax benefits generated by a current year net operating loss that will be carried-back to prior years as allowed under the CARES Act and changes of estimates based on the final 2019 U.S. tax return which were partially offset by income tax reserves, an adjustment to the permanently reinvested foreign income position and foreign valuation allowances on deferred tax assets.

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Corning Precision Materials is currently appealing certain tax assessments and tax refund claims in South Korea for tax years 2010 through 2018. The Company was required to deposit the disputed amounts with the South Korean government as a condition of its appeal of any tax assessments. Corning believes that it is more likely than not the Company will prevail in the appeals process. As of September 30, 2021 and December 31, 2020, non-current receivables of $350 million and $365 million, respectively, were recorded related to these appeals.

6. Earnings per Common Share

The following table sets forth the computation of basic and diluted earnings per common share (in millions, except per share amounts):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net income attributable to Corning Incorporated	$ 371	$ 427	$ 1,419	$ 260
Less: Series A convertible preferred stock dividend		24	24	73
Less: Excess consideration paid for redemption of preferred shares			803	
Net income available to common shareholders – basic	371	403	592	187
Plus: Series A convertible preferred stock dividend		24		
Net income available to common shareholders – diluted	$ 371	$ 427	$ 592	$ 187
Weighted-average common shares outstanding – basic	852	760	821	760
Effect of dilutive securities:				
Employee stock options and other dilutive securities	14	14	16	8
Series A convertible preferred stock (1)		115		
Weighted-average common shares outstanding – diluted	866	889	837	768
Basic earnings per common share	$ 0.44	$ 0.53	$ 0.72	$ 0.25
Diluted earnings per common share	$ 0.43	$ 0.48	$ 0.71	$ 0.24
Anti-dilutive potential shares excluded from diluted earnings per common share:				
Series A convertible preferred stock (1)			41	115
Employee stock options and awards		3		7
Total	—	3	41	122

(1) For the nine months ended September 30, 2021 and 2020, the Preferred Stock was anti-dilutive; therefore, it was excluded from the calculation of diluted earnings per share.

Fixed Rate Cumulative Convertible Preferred Stock, Series A

As of December 31, 2020, Corning had 2,300 outstanding shares of Fixed Rate Cumulative Convertible Preferred Stock, Series A (the “Preferred Stock”).

On January 16, 2021, the Preferred Stock became convertible into 115 million Common Shares, in whole or in part, at the option of the holder, Samsung Display Co., Ltd. (“SDC”). On April 5, 2021, Corning and SDC executed a Share Repurchase Agreement ("SRA").

Pursuant to the SRA, on April 8, 2021 ("Initial Closing Date"), the Preferred Stock was fully converted into 115 million Common Shares. The common equivalent for the preferred shares was prospectively removed from the calculation of diluted earnings per share.

The Company repurchased 35 million of the converted Common Shares pursuant to the SRA and excluded them from the weighted-average common shares outstanding for the calculation of the Company’s basic and diluted earnings per share. The redemption of these Common Shares resulted in a reduction of retained earnings of $803 million which reduced the net income available to common shareholders.

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The remaining 80 million Common Shares are outstanding and are included in the weighted-average common shares outstanding for the calculation of the Company's basic and diluted earnings per share.

Refer to Note 14 (Shareholders' Equity) to the consolidated financial statements for more information.

7. Inventories, Net

Inventories, net comprise the following (in millions):

	September 30, 2021	December 31, 2020
Finished goods	$ 1,195	$ 1,236
Work in process	339	357
Raw materials and accessories	419	370
Supplies and packing materials	510	475
Total inventories, net	$ 2,463	$ 2,438

8. Other Liabilities

Other liabilities follow (in millions):

	September 30, 2021	December 31, 2020
Current liabilities:		
Wages and employee benefits	$ 636	$ 572
Income taxes	145	173
Derivative instruments (Note 12)	72	189
Deferred revenue (Note 4)	140	152
Settlement liability (Note 3)	58	58
Customer deposits (Note 4)	224	211
Share repurchase liability (Note 14)	504	
Short-term operating leases	96	96
Other current liabilities	1,016	986
Other accrued liabilities	$ 2,891	$ 2,437
Non-current liabilities:		
Defined benefit pension plan liabilities	$ 884	$ 887
Derivative instruments (Note 12)	29	155
Asbestos and other litigation	35	94
Deferred revenue (Note 4)	792	872
Settlement liability (Note 3)	58	117
Customer deposits (Note 4)	1,095	1,148
Share repurchase liability (Note 14)	515	
Deferred tax liabilities	263	313
Long-term operating leases	626	633
Other non-current liabilities	969	798
Other liabilities	$ 5,266	$ 5,017

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9. Debt

Based on borrowing rates currently available to us for loans with similar terms and maturities, the fair value of long-term debt was $8.4 billion and $9.4 billion at September 30, 2021 and December 31, 2020, respectively, compared to recorded book values of $7.0 billion and $7.8 billion at September 30, 2021 and December 31, 2020, respectively. The Company measures the fair value of its long-term debt using Level 2 inputs based primarily on current market yields for its existing debt traded in the secondary market.

Corning had no outstanding commercial paper at September 30, 2021 and December 31, 2020.

Debt Issuances and Redemptions

2021

In the third quarter of 2021, Corning redeemed $250 million of 3.7% debentures due in 2023, paying a premium of $19 million by exercising our make-whole call. The bond redemption resulted in a $20 million loss during the same quarter.

In the second quarter of 2021, Corning redeemed $375 million of 2.9% debentures due in 2022, paying a premium of $10 million by exercising our make-whole call. The bond redemption resulted in an $11 million loss during the same quarter.

Losses on bond redemption have been recorded in other (expense) income, net on the consolidated statements of income during the quarter in which they occurred.

On a quarterly basis, Corning will recognize the foreign currency translation gains and losses resulting from changes in exchanges rates within accumulated other comprehensive income (loss) in shareholders' equity. Cash proceeds from loans and debt issuances are disclosed as financing activities, and cash payments for interest are disclosed as operating activities, in the consolidated statements of cash flows.

10. Employee Retirement Plans

Corning has defined benefit pension plans covering certain domestic and international employees. The Company's funding policy is to contribute, over time, an amount exceeding the minimum requirements to achieve the Company's long-term funding targets. During 2021, the Company expects to make cash contributions of $30 million to our international pension plans.

The following table summarizes the components of net periodic benefit cost for Corning's defined benefit pension and postretirement health care and life insurance plans (in millions):

	Pension benefits				Postretirement benefits			
	Three months ended September 30,		Nine months ended September 30,		Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020	2021	2020	2021	2020
Service cost	$ 32	$ 29	$ 96	$ 87	$ 3	$ 2	$ 8	$ 7
Interest cost	22	32	65	94	3	5	11	15
Expected return on plan assets	(54)	(49)	(162)	(147)				
Amortization of prior service cost (credit)	1	1	3	4	(1)	(2)	(4)	(5)
Recognition of actuarial loss (gain)			10	(2)		1	1	1
Total pension and postretirement benefit expense	$ 1	$ 13	$ 12	$ 36	$ 5	$ 6	$ 16	$ 18

The components of net periodic benefit cost, other than the service cost component, are included in the line item other (expense) income, net, in the consolidated statements of income.

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11. Commitments and Contingencies

Corning is a defendant in various lawsuits and is subject to various claims that arise in the normal course of business, the most significant of which are summarized below. In the opinion of management, the likelihood that the ultimate disposition of these matters will have a material adverse effect on Corning's consolidated financial position, liquidity, or results of operations, is remote.

Asbestos Claims

Corning is a defendant in certain cases alleging injuries from asbestos. At September 30, 2021 and December 31, 2020, the amount of the reserve for these asbestos claims was estimated to be $38 million and $96 million, respectively, and represented the undiscounted projection of claims and related legal fees for the estimated life of the litigation.

Dow Corning Chapter 11 Related Matters

Until June 1, 2016, Corning and Dow each owned 50% of the common stock of Dow Corning. On May 31, 2016, Corning and Dow realigned their ownership interest in Dow Corning. Following the realignment, Corning no longer owned any interest in Dow Corning. With the realignment, Corning agreed to indemnify Dow Corning for 50% of Dow Corning's non-ordinary course, pre-closing liabilities to the extent such liabilities exceed the amounts reserved for them by Dow Corning as of May 31, 2016, subject to certain conditions and limits.

Dow Corning Breast Implant Litigation

In May 1995, Dow Corning filed for bankruptcy protection to address pending and claimed liabilities arising from many thousands of breast implant product lawsuits. On June 1, 2004, Dow Corning emerged from Chapter 11 with a Plan of Reorganization (the "Plan") which provided for the settlement or other resolution of implant claims. The Plan includes releases for Corning and Dow as shareholders in exchange for contributions to the Plan.

Under the terms of the Plan, Dow Corning has established and funded a Settlement Trust and a Litigation Facility, referred to above, to provide a means for tort claimants to settle or litigate their claims. Inclusive of insurance, Dow Corning has paid approximately $1.8 billion to the Settlement Trust. As of May 31, 2016, Dow Corning had recorded a reserve for breast implant litigation of $290 million. In the event Dow Corning's total liability for these claims exceeds such amount, Corning may be required to indemnify Dow for up to 50% of the excess liability, subject to certain conditions and limits. As of September 30, 2021 and December 31, 2020, Dow Corning had recorded a reserve for breast implant litigation of $160 million. As a result, Corning does not believe its indemnity obligation for Dow Corning's breast implant litigation liability, if any, will be material.

Dow Corning Bankruptcy Pendency Interest Claims

As a separate matter arising from the bankruptcy proceedings, Dow Corning had been defending claims asserted by commercial creditors who claimed additional compounded interest at default and state statutory judgment rates as well as attorneys' fees and other enforcement costs, during the period from May 1995 through June 2004. As of May 31, 2016, Dow Corning had recorded a reserve for these claims of $107 million. Dow Corning settled those claims as of September 30, 2019 and received approval of the settlement from the bankruptcy court. Corning does not believe its indemnity obligation, if any, for Dow Corning's liability to be material.

Dow Corning Environmental Claims

In September 2019, Dow formally notified Corning of certain environmental matters for which Dow asserts that it has, or will, experience losses arising from remediation and response at a number of sites. In the event Dow is liable for these claims, Corning may be required to indemnify Dow for up to 50% of that liability, subject to certain conditions and limits. As of September 30, 2021, Corning has determined a potential liability for these environmental matters is probable and the amount recorded was not material.

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Environmental Litigation

Corning has been named by the Environmental Protection Agency (the Agency) under the Superfund Act, or by state governments under similar state laws, as a potentially responsible party for 15 active hazardous waste sites. Under the Superfund Act, all parties who may have contributed any waste to a hazardous waste site, identified by the Agency, are jointly and severally liable for the cost of cleanup unless the Agency agrees otherwise. It is Corning's policy to accrue for its estimated liability related to Superfund sites and other environmental liabilities related to property owned by Corning based on expert analysis and continual monitoring by both internal and external consultants. As of September 30, 2021 and December 31, 2020, Corning had accrued approximately $60 million and $68 million, respectively, for the estimated undiscounted liability for environmental cleanup and related litigation. Based upon the information developed to date, management believes that the accrued reserve is a reasonable estimate of the Company's liability and that the risk of an additional loss in an amount materially higher than that accrued is remote.

12. Hedging Activities

Cash Flow Hedges

Corning uses over-the-counter ("OTC") foreign exchange forward contracts to reduce the risk that movements in exchange rates will adversely affect the net cash flows resulting from the sale of products to customers and purchases from suppliers. The total gross notional values for foreign currency cash flow hedges are $751 million and $1.1 billion at September 30, 2021 and December 31, 2020, respectively, with maturities spanning the years 2021 through 2023. Corning defers gains and losses related to the cash flow hedges into accumulated other comprehensive loss on the consolidated balance sheets until the hedged item impacts earnings. At September 30, 2021, the amount expected to be reclassified into earnings within the next 12 months is a pre-tax gain of $41 million.

Undesignated Hedges

Corning uses OTC foreign exchange forward and option contracts that are not designated as hedging instruments for accounting purposes. The undesignated hedges limit exposure to foreign functional currency fluctuations related to certain subsidiaries' monetary assets, monetary liabilities and net earnings in foreign currencies.

The majority of average rate forward and option contracts hedge a significant portion of the Company's exposure to the Japanese yen with maturities spanning years 2021 through 2024. The following table summarizes the total gross notional value for translated earnings contracts at September 30, 2021 and December 31, 2020 (in billions):

	September 30, 2021	December 31, 2020
Average rate forward contracts:		
Japanese yen-denominated	$ 3.5	$ 4.5
South Korean won-denominated	0.7	0.4
Euro-denominated	0.3	0.5
Other foreign currencies (1)	0.1	0.1
Option contracts:		
Japanese yen-denominated (2)	1.9	2.0
Other foreign currencies (3)	1.4	
Total gross notional value for translated earning contracts	$ 7.9	$ 7.5

(1) Denominational currencies for average rate forward contracts include the Chinese yuan and British pound.
(2) Japanese yen-denominated option contracts include zero-cost collars, purchased put and call options. With respect to the zero-cost collars, the gross notional amount includes the value of the put and call options. However, due to the nature of the zero-cost collars, only the put or call option can be exercised at maturity.
(3) Other foreign currencies option contracts are purchased basket options that include a basket of underlying currencies, including the Japanese yen, South Korean won, Chinese yuan, euro and British pound, and each basket option will be settled against USD.

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The following table summarizes the notional amounts and respective fair values of Corning's derivative financial instruments on a gross basis for September 30, 2021 and December 31, 2020 (in millions):

	Notional amount		Asset derivatives			Liability derivatives		
			Balance	Fair value		Balance	Fair value	
	September 30, 2021	December 31, 2020	sheet location	September 30, 2021	December 31, 2020	sheet location	September 30, 2021	December 31, 2020
Derivatives designated as hedging instruments								
Foreign exchange contracts and other (1)	$ 751	$ 1,143	Other current assets	$ 43	$ 37	Other accrued liabilities	$ (1)	$ (3)
			Other assets	19	21	Other liabilities	(2)	(1)
Derivatives not designated as hedging instruments								
Foreign exchange contracts	5,278	6,144	Other current assets	43	45	Other accrued liabilities	(49)	(76)
			Other assets	10	41	Other liabilities	(19)	(59)
Translated earnings contracts	7,909	7,453	Other current assets	90	66	Other accrued liabilities	(22)	(110)
			Other assets	126	61	Other liabilities	(8)	(95)
Total derivatives	$ 13,938	$ 14,740		$ 331	$ 271		$ (101)	$ (344)

(1) At September 30, 2021, derivatives designated as hedging instruments include foreign exchange cash flow hedges with gross notional amounts of $751 million. At December 31, 2020, derivatives designated as hedging instruments include foreign currency contracts with notional amounts of $892 million and $251 million, respectively, for cash flow hedges and net investment hedges.

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The following tables summarize the effect of Corning's derivative financial instruments on the consolidated financial statements (in millions):

	Three months ended September 30,				
Derivatives in hedging relationships for cash flow hedges	(Loss) gain recognized in other comprehensive income (OCI)		Location of gain (loss) reclassified from accumulated OCI into income effective (ineffective)	Gain (loss) reclassified from accumulated OCI into income	
	2021	2020		2021	2020
			Net sales	$ 3	$ (2)
Foreign exchange contracts and other	$ (5)	$ 16	Cost of sales	11	3
Total cash flow hedges	$ (5)	$ 16		$ 14	$ 1

	Nine months ended September 30,				
Derivatives in hedging relationships for cash flow hedges	Gain (loss) recognized in other comprehensive income (OCI)		Location of gain (loss) reclassified from accumulated OCI into income effective (ineffective)	Gain (loss) reclassified from accumulated OCI into income	
	2021	2020		2021	2020
			Net sales	$ 9	$ (4)
			Cost of sales	28	7
Foreign exchange contracts and other	$ 36	$ (51)	Other expense, net (1)		(14)
Total cash flow hedges	$ 36	$ (51)		$ 37	$ (11)

(1) A loss of $14 million was reclassified from accumulated other comprehensive loss into other expense, net, resulting from the de-designation of certain cash flow hedges.

		(Loss) gain recognized in income			
		Three months ended September 30,		Nine months ended September 30,	
Undesignated derivatives	Location of (loss) gain recognized in income	2021	2020	2021	2020
Foreign exchange contracts	Other income (expense), net	$ (9)	$ (48)	$ 26	$ (62)
Translated earnings contracts	Translated earnings contract (loss) gain, net	(13)	(100)	262	5
Total undesignated		$ (22)	$ (148)	$ 288	$ (57)

13. Fair Value Measurements

Fair value standards under GAAP define fair value, establish a framework for measuring fair value in applying generally accepted accounting principles, and require disclosures about fair value measurements. The standards identify two kinds of inputs that are used to determine the fair value of assets and liabilities: observable and unobservable. Observable inputs are based on market data or independent sources, while unobservable inputs are based on the Company's own market assumptions. Once inputs have been characterized, the inputs are prioritized into one of three broad levels (provided in the table below) used to measure fair value. Fair value standards apply whenever an entity is measuring fair value under other accounting pronouncements that require or permit fair value measurement and require the use of observable market data when available.

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The following tables provide fair value measurement information for the Company's major categories of financial assets and liabilities measured on a recurring basis; Level 1, quoted market prices in active markets for identical assets, Level 2, significant other observable inputs, and Level 3, significant unobservable inputs (in millions):

	September 30, 2021	Fair value measurements at reporting date		
		(Level 1)	(Level 2)	(Level 3)
Current assets:				
Other current assets (1)(2)(3)	$ 197	$ 11	$ 176	$ 10
Non-current assets:				
Other assets (1)(2)	$ 162		$ 155	$ 7
Current liabilities:				
Other accrued liabilities (1)	$ 72		$ 72	
Non-current liabilities:				
Other liabilities (1)(4)	$ 46		$ 46	

(1) Derivative assets and liabilities include foreign exchange contracts which were measured using observable inputs for similar assets and liabilities.
(2) Included in other current assets and other assets is a contingent consideration asset for a cost adjustment contract of $17 million, resulting from the HSG Transactions as of September 9, 2020, that was measured using unobservable (Level 3) inputs.
(3) Equity securities with readily available fair values of $11 million were measured using Level 1 inputs and have been included in other current assets as of September 30, 2021. An investment was sold for $84 million during the second quarter of 2021.
(4) Other liabilities include a $17 million put option pursuant to the Share Repurchase Agreement with SDC, which was measured using significant other observable (Level 2) inputs. Refer to Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

	December 31, 2020	Fair value measurements at reporting date		
		(Level 1)	(Level 2)	(Level 3)
Current assets:				
Other current assets (1)(2)(3)	$ 152		$ 148	$ 4
Non-current assets:				
Investments (4)	$ 137	$ 137		
Other assets (1)(2)(3)	$ 139		$ 123	$ 16
Current liabilities:				
Other accrued liabilities (1)	$ 189		$ 189	
Non-current liabilities:				
Other liabilities (1)	$ 155		$ 155	

(1) Derivative assets and liabilities include foreign exchange contracts which were measured using observable inputs for similar assets and liabilities.
(2) Included in other current assets and other assets is a contingent consideration asset for a cost adjustment contract of $20 million, resulting from the HSG Transactions as of September 9, 2020, that was measured using unobservable (Level 3) inputs.
(3) For the year ended December 31, 2020, assets and liabilities that were measured using unobservable (Level 3) inputs resulted in losses recognized in earnings of $21 million for a renewable energy derivative contract and $4 million for auction rate securities.
(4) Included in investments were equity securities with readily available fair values that were measured using Level 1 inputs. A pre-tax gain of $107 million was recognized from the initial public offering of an investment for the year ended December 31, 2020.

Assets and Liabilities Measured on a Non-Recurring Basis

For the year ended December 31, 2020, Corning incurred a long-lived asset impairment and disposal loss for an asset group related to the reassessment of research and development programs within "All Other". Given the economic environment and market opportunities, Corning discontinued its investment in these research and development programs. The impairment analysis and disposition of certain assets resulted in a total pre-tax charge of $217 million primarily recorded in the second quarter of 2020, which was substantially all the carrying value, inclusive of an insignificant amount of goodwill. The fair value of the asset group for the impairment analysis was measured using unobservable (Level 3) inputs.

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Fair value measurements (Level 3) related to the Redemption are disclosed in Note 3 (HSG Transactions) to the consolidated financial statements.

There were no other significant financial assets and liabilities measured on a nonrecurring basis as of September 30, 2021 and December 31, 2020.

14. Shareholders' Equity

Fixed Rate Cumulative Convertible Preferred Stock, Series A

As of December 31, 2020, Corning had 2,300 outstanding shares of Preferred Stock.

On January 16, 2021, the Preferred Stock became convertible into 115 million Common Shares, in whole or in part, at the option of SDC. On April 5, 2021, Corning and SDC executed the SRA.

Pursuant to the SRA, on the Initial Closing Date, the Preferred Stock was fully converted. As a result, the 115 million Common Share equivalent resulting from the conversion of the Preferred Stock was prospectively removed from the calculation of diluted earnings per share.

Immediately following the conversion, Corning repurchased and retired 35 million of the Common Shares held by SDC for an aggregate purchase price of approximately $1.5 billion, of which approximately $507 million was paid on the Initial Closing Date. Subsequent payments of approximately $507 million will be paid on each of the first and second anniversaries of the Initial Closing Date.

- The 35 million Common Shares repurchased by Corning were excluded from the weighted-average common shares outstanding for the calculation of the Company's basic and diluted earnings per share starting on the Initial Closing Date.
- The Shares repurchased were accounted for as a redemption of Preferred Stock. The excess of the $1.5 billion consideration paid over the carrying value of the Preferred Stock reduced the net income available to common shareholders by $803 million.

The remaining 80 million Common Shares were accounted for as a conversion of Preferred Stock and resulted in an increase of common stock and additional paid-in-capital based on the carrying value of the Preferred Stock and were included in the weighted-average common shares outstanding for the calculation of the Company's basic and diluted earnings per share.

Pursuant to the SRA, with respect to the 80 million Common Shares outstanding held by SDC:

- SDC has the option to sell an additional 22 million Common Shares to Corning in specified tranches from time to time in calendar years 2024 through 2027. Corning may, at its sole discretion, elect to repurchase such Common Shares. If Corning elects not to repurchase the Common Shares and SDC sells the Common Shares on the open market, Corning will be required to pay SDC a make-whole payment, subject to a 5% cap of the repurchase proceeds that otherwise would have been paid by Corning. As of September 30, 2021, the fair value of the option was $17 million when measured using significant other observable inputs.
- The remaining 58 million shares of Common Shares are subject to a seven-year lock-up period expiring in 2027.

Refer to Note 13 (Fair Value Measurements) to the consolidated financial statements for additional information.

Share Repurchases

On April 26, 2018, Corning's Board of Directors approved a $2 billion share repurchase program with no expiration date (the "2018 Repurchase Program"). On July 17, 2019, Corning's Board of Directors authorized $5 billion in share repurchases with no expiration date (the "2019 Repurchase Program").

For the three and nine months ended September 30, 2021, the Company repurchased 629 thousand and 668 thousand shares of common stock on the open market for approximately $24 million and $25 million, respectively, as part of its 2019 Repurchase Program.

During the three months ended June 30, 2021, the Company repurchased 35 million shares of common stock, under the 2018 and 2019 Repurchase Programs, for an aggregate purchase price of approximately $1.5 billion, of which approximately $507 million was paid on the Initial Closing Date. Subsequent payments of approximately $507 million will be paid on each of the first and second anniversaries of the Initial Closing Date. These shares were repurchased immediately following the conversion of preferred shares, as discussed above.

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The Company made no share repurchases for the three months ended September 30, 2020. For the nine months ended September 30, 2020, the Company repurchased 4.1 million shares of common stock on the open market for approximately $105 million, as part of its 2018 Repurchase Program.

Accumulated Other Comprehensive Loss

In the three and nine months ended September 30, 2021 and 2020, the change in accumulated other comprehensive loss was primarily related to the foreign currency translation adjustment.

A summary of changes in the foreign currency translation adjustment component of accumulated other comprehensive loss is as follows (in millions) (1):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Beginning balance	$ (652)	$ (1,064)	$ (329)	$ (857)
Other comprehensive (loss) income (2)	(185)	274	(501)	75
Equity method affiliates (3)	(7)	9	(14)	1
Net current-period other comprehensive (loss) income	(192)	283	(515)	76
Ending balance	$ (844)	$ (781)	$ (844)	$ (781)

(1) All amounts are after tax. Amounts in parentheses indicate debits to accumulated other comprehensive loss.
(2) For the three and nine months ended September 30, 2021, amounts are net of tax benefit of $31 million and $42 million, respectively. For the three and nine months ended September 30, 2020, amounts are net of tax expense of $21 million and $10 million, respectively.
(3) Tax effects are not significant.

15. Share-Based Compensation

Corning maintains long-term incentive plans (the "Plans") for key employees and non-employee members of its Board of Directors. The Plans allow Corning to grant equity-based compensation awards, including stock options, stock appreciation rights, performance share units, restricted stock units, restricted stock awards or a combination of awards (collectively, share-based awards). At September 30, 2021, there were approximately 39 million unissued common shares available for future grants authorized under the Plans.

Share-based compensation cost is allocated to the cost of sales, selling, general and administrative, and research, development and engineering, expenses lines in the consolidated statements of income.

Stock Compensation Plans

The Company measures and recognizes compensation cost for all share-based payment awards made to employees and directors based on estimated fair values.

Total share-based compensation cost was $39 million and $62 million, respectively, and $117 million and $127 million, respectively, for the three and nine months ended September 30, 2021 and 2020. The income tax benefit realized from share-based compensation was $3 million and $31 million for the three and nine months ended September 30, 2021, respectively, and not significant during the same periods in 2020. Refer to Note 5 (Income Taxes) to the consolidated financial statements for additional information.

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Stock Options

Corning's stock option plans provide non-qualified and incentive stock options to purchase authorized but unissued common shares, or treasury shares, at the market price on the grant date and generally become exercisable in installments from one year to five years from the grant date. The maximum term of non-qualified and incentive stock options is 10 years from the grant date. An award is considered vested when the employee's retention of the award is no longer contingent on providing subsequent service (the "non-substantive vesting period approach").

The following table summarizes information regarding stock options outstanding, including the related transactions under the stock option plans for the nine months ended September 30, 2021:

	Number of shares (in thousands)	Weighted-average exercise price	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Options outstanding as of December 31, 2020	17,095	$ 21.60		
Granted	—	—		
Exercised	(4,464)	20.17		
Forfeited and expired	(324)	21.98		
Options outstanding as of September 30, 2021	12,307	22.10	6.74	$ 176,960
Options expected to vest as of September 30, 2021	12,206	22.13	6.72	175,319
Options exercisable as of September 30, 2021	6,919	20.90	5.53	107,865

Corning uses a multiple-point Black-Scholes valuation model to estimate the fair value of stock option grants. Corning utilizes a blended approach for calculating the volatility assumption used in the multiple-point Black-Scholes valuation model defined as the weighted average of the short-term implied volatility, the most recent volatility for the period equal to the expected term, and the most recent 15-year historical volatility. The expected term is the period the options are expected to be outstanding and is calculated using a combination of historical exercise experience adjusted to reflect the current vesting period of options being valued, and partial life cycles of outstanding options. The risk-free rates used in the multiple-point Black-Scholes valuation model are the implied rates for a zero-coupon U.S. Treasury bond with a term equal to the option's expected term. Ranges used reflect results from separate groups of employees exhibiting different exercise behavior.

The following inputs were used for the valuation of option grants under our stock option plans (1):

	Three months ended June 30, 2020
Expected volatility	32.9%
Weighted-average volatility	32.9%
Expected dividends	4.48%
Risk-free rate	0.5%
Average risk-free rate	0.5%
Expected term (in years)	7.4
Pre-vesting executive departure rate	0.6%
Pre-vesting non-executive departure rate	2.5%

(1) Stock options were only granted during the second quarter of 2020. There have been no stock options granted since June 30, 2020.

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Incentive Stock Plans

The Corning Incentive Stock Plans permit restricted stock and restricted stock unit grants, either determined by specific performance goals or issued directly, in most instances, subject to the possibility of forfeiture and without cash consideration. Restricted stock and restricted stock units under the Incentive Stock Plans are granted at the closing market price on the grant date, contingently vest over a period of generally one year to ten years, and generally have contractual lives of one year to ten years. The fair value is based on the grant date closing price of the Company's stock.

Time-Based Restricted Stock and Restricted Stock Units

Time-based restricted stock and restricted stock units are issued by the Company on a discretionary basis, and are payable in shares of the Company's common stock upon vesting. The fair value is based on the closing market price of the Company's stock on the grant date. Compensation cost is recognized over the requisite vesting period and adjusted for actual forfeitures before vesting.

The following table summarizes the Company's non-vested time-based restricted stock and restricted stock units as of December 31, 2020 and changes which occurred during the nine months ended September 30, 2021:

	Number of shares (in thousands)		Weighted average grant-date fair value
Non-vested shares and share units at December 31, 2020	12,943	$	22.87
Granted	1,399		42.07
Vested	(3,518)		22.82
Forfeited	(424)		23.74
Non-vested shares and share units at September 30, 2021	10,400	$	25.44

Performance-Based Restricted Stock Units

Performance-based restricted stock units are earned upon the achievement of certain targets, and are payable in shares of the Company's common stock upon vesting, typically over a three year period. The fair value is based on the closing market price of the Company's stock on the grant date and assumes that the target payout level will be achieved. Compensation cost is recognized over the requisite vesting period and adjusted for actual forfeitures before vesting. During the performance period, compensation cost may be adjusted based on changes in the expected outcome of the performance-related target.

The following table summarizes the Company's non-vested performance-based restricted stock units as of December 31, 2020 and September 30, 2021:

	Number of shares (in thousands)		Weighted average grant-date fair value
Non-vested share units at December 31, 2020	1,765	$	28.06
Granted	1,222		38.82
Vested	(119)		28.06
Forfeited	(79)		31.83
Non-vested share units at September 30, 2021	2,789	$	32.67

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16. Reportable Segments

The Company's reportable segments are as follows:

- Display Technologies – manufactures glass substrates for flat panel liquid crystal displays and other high-performance display panels.
- Optical Communications – manufactures carrier network and enterprise network components for the telecommunications industry.
- Specialty Materials – manufactures products that provide more than 150 material formulations for glass, glass ceramics and fluoride crystals to meet demand for unique customer needs.
- Environmental Technologies – manufactures ceramic substrates and filters for automotive and diesel applications.
- Life Sciences – manufactures glass and plastic labware, equipment, media, serum and reagents enabling workflow solutions for drug discovery and bioproduction.

All other businesses that do not meet the quantitative threshold for separate reporting have been grouped as "All Other." This group is primarily comprised of the results of the pharmaceutical technologies, auto glass, new product lines, development projects, and certain corporate investments.

The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in "All Other" as of September 9, 2020. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information on this transaction.

Financial results for the reportable segments are prepared on a basis consistent with the internal disaggregation of financial information to assist the chief operating decision maker ("CODM") in making internal operating decisions. A significant portion of segment revenues and expenses are denominated in currencies other than the U.S. dollar. Management believes it is important to understand the impact on core net income of translating these currencies into U.S. dollars. The Company uses constant currency reporting for Display Technologies, Specialty Materials, Environmental Technologies and Life Sciences. Corning excludes the impact of these currencies from segment sales and net income. The adjustment for constant currency is primarily related to the Display Technologies' segment and excludes the impact of the fluctuation of the Japanese yen, South Korean won, Chinese yuan, and new Taiwan dollar. Certain income and expenses are included in the unallocated amounts in the reconciliation of reportable segment net income (loss) to consolidated net income. These include items that are not used by the CODM in evaluating the results of, or in allocating resources to, the segments and include the following: the impact of translated earnings contracts; acquisition-related costs; discrete tax items and other tax-related adjustments; certain litigation, regulatory and other legal matters; restructuring, impairment losses and other charges and credits; adjustments relating to acquisitions; and other non-recurring non-operational items. Although these amounts are excluded from segment results, they are included in reported consolidated results.

Earnings of equity affiliates that are closely associated with the reportable segments are included in the respective segment's net income (loss). Certain common expenses among reportable segments have been allocated differently than they would be for stand-alone financial information. Segment net income (loss) may not be consistent with measures used by other companies.

Reportable Segments (in millions):

	Display Technologies	Optical Communications	Specialty Materials	Environmental Technologies	Life Sciences	All Other	Total
Three months ended							
September 30, 2021							
Segment net sales	$ 956	$ 1,131	$ 556	$ 385	$ 305	$ 306	$ 3,639
Depreciation [1]	$ 153	$ 58	$ 42	$ 34	$ 14	$ 38	$ 339
Research, development and engineering expenses [2]	$ 31	$ 57	$ 49	$ 28	$ 9	$ 44	$ 218
Income tax (provision) benefit [3]	$ (64)	$ (38)	$ (28)	$ (16)	$ (12)	$ (1)	$ (159)
Segment net income (loss) [4]	$ 247	$ 139	$ 107	$ 60	$ 45	$ (5)	$ 593

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	Display Technologies	Optical Communications	Specialty Materials	Environmental Technologies	Life Sciences	All Other	Total
Three months ended							
September 30, 2020							
Segment net sales	$ 827	$ 909	$ 570	$ 379	$ 223	$ 99	$ 3,007
Depreciation [1]	$ 134	$ 59	$ 40	$ 32	$ 12	$ 16	$ 293
Research, development and engineering expenses [2]	$ 22	$ 50	$ 39	$ 24	$ 7	$ 35	$ 177
Income tax (provision) benefit [3]	$ (52)	$ (32)	$ (38)	$ (18)	$ (8)	$ 12	$ (136)
Segment net income (loss) [4]	$ 196	$ 115	$ 146	$ 69	$ 28	$ (50)	$ 504

	Display Technologies	Optical Communications	Specialty Materials	Environmental Technologies	Life Sciences	All Other	Total
Nine months ended							
September 30, 2021							
Segment net sales	$ 2,758	$ 3,143	$ 1,490	$ 1,233	$ 917	$ 865	$ 10,406
Depreciation [1]	$ 450	$ 174	$ 125	$ 105	$ 40	$ 104	$ 998
Research, development and engineering expenses [2]	$ 79	$ 160	$ 143	$ 84	$ 25	$ 114	$ 605
Income tax (provision) benefit [3]	$ (184)	$ (109)	$ (74)	$ (57)	$ (39)	$ 10	$ (453)
Segment net income (loss) [4]	$ 708	$ 398	$ 279	$ 215	$ 145	$ (44)	$ 1,701

	Display Technologies	Optical Communications	Specialty Materials	Environmental Technologies	Life Sciences	All Other	Total
Nine months ended							
September 30, 2020							
Segment net sales	$ 2,331	$ 2,587	$ 1,339	$ 925	$ 724	$ 218	$ 8,124
Depreciation [1]	$ 400	$ 183	$ 120	$ 99	$ 37	$ 43	$ 882
Research, development and engineering expenses [2]	$ 77	$ 157	$ 113	$ 74	$ 20	$ 126	$ 567
Income tax (provision) benefit [3]	$ (133)	$ (63)	$ (76)	$ (27)	$ (26)	$ 50	$ (275)
Segment net income (loss) [4]	$ 500	$ 225	$ 287	$ 104	$ 97	$ (185)	$ 1,028

[1] Depreciation expense for Corning's reportable segments includes an allocation of depreciation of corporate property not specifically identifiable to a segment.
[2] Research, development and engineering expenses include direct project spending that is identifiable to a segment.
[3] Income tax (provision) benefit reflects a tax rate of 21%.
[4] Many of Corning's administrative and staff functions are performed on a centralized basis. Where practicable, Corning charges these expenses to segments based upon the extent to which each business uses a centralized function. Other staff functions, such as corporate finance, human resources and legal, are allocated to segments, primarily as a percentage of sales. Expenses that are not allocated to the segments are included in the reconciliation of reportable segment net income (loss) to consolidated net income.

A reconciliation of reportable segment and All Other net sales to consolidated net sales follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net sales of reportable segments and All Other	$ 3,639	$ 3,007	$ 10,406	$ 8,124
Impact of foreign currency movements (1)	(24)	(6)		(66)
Cumulative adjustment related to customer contract (2)				(105)
Consolidated net sales	$ 3,615	$ 3,001	$ 10,406	$ 7,953

[1] This amount primarily represents the impact of foreign currency adjustments in the Display Technologies segment.
[2] Amount represents the negative impact of a cumulative adjustment to reduce revenue by $105 million recorded during the first quarter of 2020. The adjustment was associated with a previously recorded commercial benefit asset, reflected as a prepayment, to a customer with a long-term supply agreement that substantially exited its production of LCD panels.

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A reconciliation of reportable segment net income (loss) to consolidated net income follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net income of reportable segments	$ 598	$ 554	$ 1,745	$ 1,213
Net loss of All Other (1)	(5)	(50)	(44)	(185)
Unallocated amounts:				
Impact of foreign currency movements not included in segment net income (loss)	(33)		(47)	(25)
(Loss) gain on foreign currency hedges related to translated earnings	(13)	(99)	262	(6)
Translation gain (loss) on Japanese yen-denominated debt	4	(39)	127	(50)
Litigation, regulatory and other legal matters	(3)	(83)	(11)	(108)
Research, development, and engineering expenses (2)(3)	(34)	(35)	(103)	(111)
Transaction-related gain, net (4)		498		498
Equity in earnings (losses) of affiliated companies (5)	10	(79)	9	20
Amortization of intangibles	(32)	(33)	(97)	(87)
Interest expense, net	(64)	(67)	(205)	(189)
Income tax benefit	50	113	51	242
Cumulative adjustment related to customer contract (6)				(105)
Severance charges (3)	1	(6)		(141)
Asset impairment (3)		(22)		(217)
Capacity realignment and other charges and credits (3)	(41)	(143)	(42)	(375)
Gain on sale of a business			54	
Other corporate items	(67)	(82)	(280)	(114)
Net income	$ 371	$ 427	$ 1,419	$ 260

(1) The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in “All Other” as of September 9, 2020.
(2) Amount does not include research, development, and engineering expense related to restructuring, impairment and other charges and credits.
(3) Refer to Note 2 (Restructuring, Impairment and Other Charges and Credits) to the consolidated financial statements for additional information on restructuring activities and impairment.
(4) Amount represents the pre-tax gain recorded on Corning's previously held equity investment in HSG. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information.
(5) Primarily represents the equity earnings of HSG prior to September 9, 2020. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information.
(6) Amount represents the negative impact of a cumulative adjustment to reduce revenue by $105 million recorded during the first quarter of 2020. The adjustment was associated with a previously recorded commercial benefit asset, reflected as a prepayment, to a customer with a long-term supply agreement that substantially exited its production of LCD panels.

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

ORGANIZATION OF INFORMATION

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") provides a historical and prospective narrative on the Company's financial condition and results of operations. This interim MD&A should be read in conjunction with the MD&A in Corning's 2020 Form 10-K. The various sections of this MD&A contain forward-looking statements that involve risks and uncertainties. Words such as "anticipates," "expects," "intends," "plans," "goals," "believes," "seeks," "estimates," "continues," "may," "will," "should," and variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections of the Company's future financial performance, anticipated growth and trends in the businesses, uncertain events or assumptions, and other characterizations of future events or circumstances are forward-looking statements. Such statements are based on current expectations and could be affected by the uncertainties and risk factors described throughout this filing and particularly in "Risk Factors" in Part I, Item 1A of Corning's 2020 Form 10-K, and as may be updated in the Forms 10-Q. Actual results may differ materially, and these forward-looking statements do not reflect the potential impact of any divestitures, mergers, acquisitions, or other business combinations that had not been completed as of September 30, 2021.

MD&A includes the following sections:

- Overview
- Results of Operations
- Core Performance Measures
- Reportable Segments
- Capital Resources and Liquidity
- Critical Accounting Estimates
- Environment
- Forward-Looking Statements

OVERVIEW

In response to the COVID-19 pandemic ("the pandemic") and the ensuing economic uncertainty, including changing market conditions, the Company has and will continue to focus on three core priorities: preserving the financial health of the Company; protecting employees and communities; and delivering on customer commitments. We are continuing to build a stronger, more resilient company that is committed to rewarding shareholders and supporting all global stakeholders.

Despite the pandemic and resulting global disruptions, Corning adapted rapidly and remained resilient. We acted quickly to preserve our financial strength by executing well and advancing major innovations with industry leaders. We have continued to effectively leverage our focused and cohesive portfolio to create value and outperform our underlying markets, contributing to sales and earnings growth and strong free cash flow in the second half of 2020 and the first nine months of 2021.

Corning announced the Strategy & Growth Framework in 2019, highlighting significant opportunities to sell more Corning content through each of our Market-Access Platforms. The Company is focused on our cohesive portfolio and the utilization of our financial strength, supported by strong operating cash flow generation, which we expect to continue. Corning has and will continue to use its cash to grow, extend its leadership and reward shareholders. Our key growth drivers remain intact, and some are accelerating as key trends converge around Corning's capabilities.

Corning will continue to advance the objectives of the Strategy & Growth Framework, which sets its leadership priorities and articulates opportunities across its businesses. Our probability of success increases as we invest in our world-class capabilities. Corning is concentrating approximately 80% of its research, development and engineering investment along with capital spending on a cohesive set of three core technologies, four manufacturing and engineering platforms, and five market-access platforms. This strategy allows us to quickly apply our talents and repurpose our assets across the company, as needed, to capture high-return opportunities.

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Summary of results for the three and nine months ended September 30, 2021

In the third quarter, net sales were $3,615 million, compared to $3,001 million during the same period in 2020, a net increase of $614 million, or 20%. Net sales for the nine months ended September 30, 2021 were $10,406 million, compared to $7,953 million during the same period in 2020, a net increase of $2,453 million, or 31%, driven by increases in all segments.

In the third quarter of 2021, Corning generated net income of $371 million, or $0.43 per diluted share, compared to net income of $427 million, or $0.48 per diluted share, for the same period in 2020. The decrease in net income of $56 million was primarily driven by the following items (amounts presented after-tax):

- The absence of an after-tax gain recorded on a previously held equity investment in HSG of $387 million.

The negative impacts to net income, outlined above, were partially offset by the following items:

- Higher segment net income primarily driven by higher sales; net income increases by segment were $51 million, $24 million, $17 million and $45 million for Display Technologies, Optical Communications, Life Sciences and "All Other", respectively;
- Lower severance charges, impairment losses, capacity realignment and other costs of $98 million;
- Translated earnings contract losses were $67 million lower than the third quarter of 2020; and
- Equity in losses of affiliated companies were $66 million lower.

In the first nine months of 2021, Corning generated net income of $1,419 million, or $0.71 per diluted share, compared to net income of $260 million, or $0.24 per diluted share, for the same period in 2020. The increase in net income of $1,159 million and diluted earnings per share of $0.47, was primarily driven by the following items (amounts presented after-tax):

- Higher segment net income of $673 million primarily driven by higher sales; net income increases by segment were $208 million, $173 million, $111 million, $48 million, and $141 million for Display Technologies, Optical Communications, Environmental Technologies, Life Sciences and "All Other", respectively;
- The absence of after-tax asset impairment losses related to investments in research and development programs within our All Other segment of $170 million;
- Lower severance charges, capacity realignment and other costs of $346 million;
- Translated earnings contract gains in the current period were $207 million higher than prior year;
- The absence of a negative impact of a cumulative adjustment recorded during the first quarter of 2020 to reduce revenue $105 million; and
- Higher translation gains of $137 million on Japanese yen-denominated debt.

The positive impacts to net income, outlined above, were partially offset by the following items:

- The absence of an after-tax gain recorded on a previously held equity investment in HSG of $387 million.

The change in diluted earnings per share for the three months ended September 30, 2021, was primarily driven by changes in net income, outlined above. The change in diluted earnings per share for the nine months ended September 30, 2021, was primarily driven by the changes in net income, outlined above, as well as the conversion of the Preferred Stock into 115 million Common Shares. The immediate repurchase and retirement of 35 million Common Shares resulted in an $803 million one-time reduction to net income available to common shareholders during the second quarter of 2021. Refer to Note 6 (Earnings per Common Share) and Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

The translation impact of fluctuations in foreign currency exchange rates, including the impact of hedges realized in the current quarter, adversely impacted Corning’s consolidated net income by $19 million and $20 million in the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020.

2021 Corporate Outlook

We expect core net sales of approximately $3.5 to $3.7 billion for the fourth quarter of 2021.

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RESULTS OF OPERATIONS

Selected highlights from operations are as follows (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Net sales	$ 3,615	$ 3,001	20%	$ 10,406	$ 7,953	31%
Gross margin	$ 1,321	$ 1,001	32%	$ 3,792	$ 2,318	64%
(gross margin %)	37%	33%		36%	29%	
Selling, general and administrative expenses	$ 486	$ 480	1%	$ 1,351	$ 1,276	6%
(as a % of net sales)	13%	16%		13%	16%	
Research, development and engineering expenses	$ 251	$ 231	9%	$ 715	$ 922	(22%)
(as a % of net sales)	7%	8%		7%	12%	
Translated earnings contract (loss) gain, net	$ (13)	$ (100)	(87%)	$ 262	$ 5	*
(as a % of net sales)	0%	(3%)		3%	0%	
Transaction-related gain, net		$ 498	*		$ 498	*
(as a % of net sales)		17%			6%	
Income before income taxes	$ 480	$ 450	7%	$ 1,821	$ 293	522%
(as a % of net sales)	13%	15%		17%	4%	
Provision for income taxes	$ (109)	$ (23)	374%	$ (402)	$ (33)	1118%
(as a % of net sales)	(3%)	(1%)		(4%)	0%	
Net income attributable to Corning Incorporated	$ 371	$ 427	(13%)	$ 1,419	$ 260	446%
(as a % of net sales)	10%	14%		14%	3%	

* Not meaningful

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Segment Net Sales

The following table presents segment net sales by reportable segment and All Other (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Display Technologies	$ 956	$ 827	16%	$ 2,758	$ 2,331	18%
Optical Communications	1,131	909	24%	3,143	2,587	21%
Specialty Materials	556	570	(2%)	1,490	1,339	11%
Environmental Technologies	385	379	2%	1,233	925	33%
Life Sciences	305	223	37%	917	724	27%
All Other (1)	306	99	209%	865	218	297%
Net sales of reportable segments and All Other	3,639	3,007	21%	10,406	8,124	28%
Impact of foreign currency movements (2)	(24)	(6)	(300%)		(66)	*
Cumulative adjustment related to customer contract (3)					(105)	*
Consolidated net sales	$ 3,615	$ 3,001	20%	$ 10,406	$ 7,953	31%

(1) The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in "All Other" as of September 9, 2020.
(2) This amount primarily represents the impact of foreign currency adjustments in the Display Technologies segment.
(3) Amount represents the negative impact of a cumulative adjustment recorded during the first quarter of 2020 to reduce revenue by $105 million. The adjustment was associated with a previously recorded commercial benefit asset, reflected as a prepayment, to a customer with a long-term supply agreement that substantially exited its production of LCD panels.

** Not meaningful*

In the third quarter, net sales of reportable segments were $3,639 million, compared to $3,007 million during the same period in 2020, a net increase of $632 million, or 21%. Changes in net sales were as follows:

- Display Technologies' net sales increased by $129 million or 16%, largely due to volume growth of more than 10 percent and increased price in the low-single digits in percentage terms;
- Optical Communications' net sales increased by $222 million, or 24%, as sales volumes increased $179 million and $43 million for carrier products and enterprise products, respectively, primarily driven by 5G, broadband and cloud computing;
- Specialty Materials' net sales decreased by $14 million, or 2%, primarily due to extremely strong demand for cover materials in support of customer product launches experienced during the third quarter of 2020;
- Net sales for Environmental Technologies increased by $6 million, or 2%, driven by higher diesel product sales, partially offset by lower automotive product sales, which were significantly impacted by an industry-wide shortage of automotive components and semiconductor chips;
- Net sales for Life Sciences increased by $82 million, or 37%, primarily driven by the ongoing recovery in academic and pharmaceutical research labs and continued strong demand for bioproduction vessels and diagnostic-related consumables; and
- Net sales for "All Other" increased by $207 million, mainly driven by the consolidation of HSG, as of September 9, 2020.

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In the nine months ended September 30, 2021, net sales of reportable segments were $10,406 million, compared to $8,124 million during the same period in 2020, a net increase of $2,282 million, or 28%. Changes in net sales were as follows:

- Display Technologies' net sales increased by $427 million or 18%, largely due to mid-teens volume growth, in percentage terms, and consistent pricing;
- Optical Communications' net sales increased by $556 million, or 21%, as sales volumes increased $372 million and $184 million for carrier products and enterprise products, respectively, primarily driven by 5G, broadband and cloud computing;
- Specialty Materials' net sales increased by $151 million, or 11%, primarily driven by strong demand for premium cover materials, strength in the IT market, and greater optical content in semiconductor manufacturing;
- Net sales for Environmental Technologies increased by $308 million, or 33%, primarily driven by improving markets and increased Corning content, along with strong demand for diesel products in China and North America;
- Net sales for Life Sciences increased by $193 million, or 27%, primarily driven by the ongoing recovery in academic and pharmaceutical research labs and continued strong demand for bioproduction vessels and diagnostic-related consumables; and
- Net sales for "All Other" increased by $647 million, mainly driven by the consolidation of HSG.

Movements in foreign exchange rates adversely impacted Corning's consolidated net sales by $24 million and positively by $53 million, in the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020.

Cost of Sales

The types of expenses included in the cost of sales line item are: raw materials consumption, including direct and indirect materials; salaries, wages and benefits; depreciation and amortization; production utilities; production-related purchasing; warehousing (including receiving and inspection); repairs and maintenance; inter-location inventory transfer costs; production and warehousing facility property insurance; rent for production facilities; freight and logistics costs; and other production overhead.

Gross Margin

In the three and nine months ended September 30, 2021, gross margin increased by $320 million, or 32% and $1,474 million, or 64%, respectively. Gross margin as a percentage of sales increased by 4 percentage points and 7 percentage points, respectively. The increase in gross margin was primarily driven by higher sales, as well as lower charges for restructuring and capacity realignment of $124 million and $383 million, respectively. These increases were partially offset by increased expenses due to elevated freight and logistics costs, as well as higher inflation.

The translation impact of fluctuations in foreign currency exchange rates, including the impact of hedges realized in the current quarter, adversely impacted Corning's consolidated gross margin by $42 million and $40 million in the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020.

Selling, General and Administrative Expenses

In the three and nine months ended September 30, 2021, selling, general and administrative expenses increased by $6 million, or 1%, and $75 million, or 6%, respectively, and declined by 3 percentage points as a percentage of sales, when compared to the prior periods. Increases in these costs were primarily driven by higher compensation and benefit expenses and the consolidation of HSG, partially offset by lower restructuring and other charges and credits of $21 million and $91 million, respectively, when compared to the same periods in 2020.

The types of expenses included in the selling, general and administrative expenses line item are: salaries, wages and benefits; share-based compensation expense; travel; sales commissions; professional fees; and depreciation and amortization, utilities, rent for administrative facilities and restructuring, impairment and other charges and credits.

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Research, Development and Engineering Expenses

In the three and nine months ended September 30, 2021, research, development and engineering expenses increased by $20 million, or 9%, and decreased $207 million, or 22%, respectively, when compared to the same periods last year. The primary driver was lower restructuring, impairment, and other charges and credits of $18 million and $243 million, respectively. As a percentage of sales, these expenses were 1 and 5 percentage points lower, respectively, for the three and nine months ended September 30, 2021, when compared to the same periods last year.

Translated earnings contract (loss) gain, net

Included in the line item translated earnings contract (loss) gain, net, is the impact of foreign currency hedges which hedge translation exposure arising from movements in the Japanese yen, South Korean won, new Taiwan dollar, euro, Chinese yuan and British pound and its impact on net income. The following table provides detailed information on the impact of translated earnings contract gains and losses:

	Three months ended September 30, 2021		Three months ended September 30, 2020		Change 2021 vs. 2020	
(in millions)	Income before taxes	Net income	Income before taxes	Net income	Income before taxes	Net income
Hedges related to translated earnings:						
Realized gain (loss), net [1]	$ 12	$ 9	$ (7)	$ (5)	$ 19	$ 14
Unrealized loss, net [2]	(25)	(19)	(93)	(73)	68	54
Total translated earnings contract loss, net	$ (13)	$ (10)	$ (100)	$ (78)	$ 87	$ 68

	Nine months ended September 30, 2021		Nine months ended September 30, 2020		Change 2021 vs. 2020	
(in millions)	Income before taxes	Net income	Income before taxes	Net income	Income before taxes	Net income
Hedges related to translated earnings:						
Realized gain (loss), net [1]	$ 11	$ 9	$ (9)	$ (6)	$ 20	$ 15
Unrealized gain, net [2]	251	193	14	10	237	183
Total translated earnings contract gain, net	$ 262	$ 202	$ 5	$ 4	$ 257	$ 198

(1) Includes before tax realized losses related to the expiration of option contracts for the three and nine months ended September 30, 2021 and 2020 of $5 million and $19 million, respectively, for both periods. Activity has been reflected in operating activities in the consolidated statements of cash flows.
(2) The impact to income was primarily driven by yen-denominated hedges of translated earnings.

Income Before Income Taxes

The translation impact of fluctuations in foreign currency exchange rates, including the impact of hedges realized in the current quarter, adversely impacted Corning's consolidated income before income taxes by $23 million and $25 million for the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020.

Provision for Income Taxes

The provision for income taxes and the related effective income tax rates are as follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Provision for income taxes	$ (109)	$ (23)	$ (402)	$ (33)
Effective tax rate	22.7%	5.1%	22.1%	11.3%

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For the three months ended September 30, 2021, the effective income tax rate differed from the U.S. statutory rate of 21%, primarily due to non-deductible expenses for tax purposes, foreign rate differential, and tax reform items. For the nine months ended September 30, 2021, the effective income tax rate differed from the U.S. statutory rate of 21% primarily due to an adjustment to the permanently reinvested foreign income position, excess tax benefit related to share-based compensation payments, foreign rate differential, and tax reform items related to The Tax Cuts and Jobs Act of 2017.

For the three and nine months ended September 30, 2020, the effective income tax rate differed from the U.S. statutory rate of 21%, primarily due to an estimate of income tax benefits generated by a current year net operating loss that will be carried-back to prior years as allowed under the CARES Act and changes of estimates based on the final 2019 U.S. tax return which were partially offset by additional income tax reserves. For the nine months ended September 30, 2020, the effective income tax rate differed from the U.S. statutory rate of 21% primarily due to an estimate of income tax benefits generated by a current year net operating loss that will be carried-back to prior years as allowed under the CARES Act and changes of estimates based on the final 2019 U.S. tax return which were partially offset by income tax reserves, an adjustment to the permanently reinvested foreign income position and foreign valuation allowances on deferred tax assets.

Refer to Note 5 (Income Taxes) to the consolidated financial statements for additional information.

Net Income Attributable to Corning Incorporated

Net income and per share data is as follows (in millions, except per share amounts):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Net income attributable to Corning Incorporated	$ 371	$ 427	$ 1,419	$ 260
Less: Series A convertible preferred stock dividend		(24)	(24)	(73)
Less: Excess consideration paid for redemption of preferred shares (1)			(803)	
Net income available to common shareholders used in basic earnings per common share calculation (1)	$ 371	$ 403	$ 592	$ 187
Net income available to common shareholders used in diluted earnings per common share calculation (1)	$ 371	$ 427	$ 592	$ 187
Basic earnings per common share	$ 0.44	$ 0.53	$ 0.72	$ 0.25
Diluted earnings per common share	$ 0.43	$ 0.48	$ 0.71	$ 0.24
Weighted-average common shares outstanding - basic	852	760	821	760
Weighted-average common shares outstanding - diluted	866	889	837	768

(1) Refer to Note 6 (Earnings per Common Share) to the consolidated financial statements for additional information.

Comprehensive Income

For the three months ended September 30, 2021, comprehensive income decreased by $561 million when compared to the same period in 2020, primarily due to a decline in net income of $56 million and a net loss on foreign currency translation adjustments of $475 million, largely driven by the Japanese yen, South Korean won and euro.

For the nine months ended September 30, 2021, comprehensive income increased by $603 million when compared to the same period in 2020, primarily due to an increase in net income of $1,159 million. The increase in comprehensive income was partially offset by the net loss on foreign currency translation adjustments of $591 million, primarily driven by the Japanese yen, South Korean won, and euro.

Refer to Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

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CORE PERFORMANCE MEASURES

In managing the Company and assessing our financial performance, certain measures provided by our consolidated financial statements are adjusted to exclude specific items to arrive at core performance measures. These items include gains and losses on translated earnings contracts, acquisition-related costs, certain discrete tax items and other tax-related adjustments, restructuring, impairment losses, and other charges and credits, certain litigation-related expenses, pension mark-to-market adjustments and other items which do not reflect on-going operating results of the Company or our equity affiliates. Corning utilizes constant-currency reporting for our Display Technologies, Environmental Technologies, Specialty Materials and Life Sciences segments for the Japanese yen, South Korean won, Chinese yuan, new Taiwan dollar and the euro. The Company believes that the use of constant-currency reporting allows investors to understand our results without the volatility of currency fluctuations and reflects the underlying economics of the translated earnings contracts used to mitigate the impact of changes in currency exchange rates on earnings and cash flows. Corning also believes that reporting core performance measures provides investors greater transparency to the information used by the management team to make financial and operational decisions.

Core performance measures are not prepared in accordance with GAAP. We believe investors should consider these non-GAAP measures in evaluating results as they are more indicative of our core operating performance and how management evaluates operational results and trends. These measures are not, and should not, be viewed as a substitute for GAAP reporting measures. With respect to the Company's outlook for future periods, it is not possible to provide reconciliations for these non-GAAP measures because the Company does not forecast the movement of foreign currencies against the U.S. dollar, or other items that do not reflect ongoing operations, nor does it forecast items that have not yet occurred or are out of the Company's control. As a result, the Company is unable to provide outlook information on a GAAP basis.

For a reconciliation of non-GAAP performance measures to their most directly comparable GAAP financial measure, please see "Reconciliation of Non-GAAP Measures".

RESULTS OF OPERATIONS – CORE PERFORMANCE MEASURES

Selected highlights from continuing operations, excluding certain items, follow (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Core net sales	$ 3,639	$ 3,007	21%	$ 10,406	$ 8,124	28%
Core equity in earnings of affiliated companies	$ 17	$ 9	89%	$ 33	$ 78	(58)%
Core net income	$ 485	$ 380	28%	$ 1,346	$ 775	74%

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Core Net Sales

Core net sales are consistent with net sales by reportable segment. Net sales by reportable segment are presented below (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Display Technologies	$ 956	$ 827	16%	$ 2,758	$ 2,331	18%
Optical Communications	1,131	909	24%	3,143	2,587	21%
Specialty Materials	556	570	(2)%	1,490	1,339	11%
Environmental Technologies	385	379	2%	1,233	925	33%
Life Sciences	305	223	37%	917	724	27%
All Other [1]	306	99	209%	865	218	297%
Net sales of reportable segments and All Other	$ 3,639	$ 3,007	21%	$ 10,406	$ 8,124	28%

(1) The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in “All Other” as of September 9, 2020.

Core Net Income

In the three months ended September 30, 2021, we generated core net income of $485 million, or $0.56 per diluted share, compared to core net income generated in the three months ended September 30, 2020 of $380 million, or $0.43 per diluted share. The increase of $105 million, or $0.13 per diluted share, was primarily due to higher segment net income when compared to the same period in 2020. Net income increases by reportable segment are as follows:

- Display Technologies’ net income increased by $51 million, primarily driven by increased volume;
- Optical Communications’ net income increased by $24 million, largely driven by volume, partially offset by increased raw material and shipping costs; and
- Life Sciences’ and “All Other” net income increased by $17 million, and $45 million, respectively.

The increases to segment net income were partially offset by income declines of $39 million and $9 million for Specialty Materials and Environmental Technologies, respectively. The change in diluted earnings per share was primarily driven by changes in net income.

In the nine months ended September 30, 2021, we generated core net income of $1,346 million, or $1.53 per diluted share, compared to core net income generated in the nine months ended September 30, 2020 of $775 million, or $0.88 per diluted share. The increase of $571 million, and $0.65 per diluted share, was primarily due to higher earnings across most operating segments when compared to the same period in 2020. Net income changes by reportable segment are as follows:

- Display Technologies’ net income increased by $208 million, primarily driven by increased volume;
- Optical Communications’ net income increased by $173 million, largely driven by volume, partially offset by increased raw material and shipping costs;
- Specialty Materials' net income decreased by $8 million;
- Environmental Technologies’ net income increased by $111 million; and
- Life Sciences' and "All Other" net income increased by $48 million and $141 million, respectively.

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The change in diluted earnings per share was primarily driven by changes in net income, outlined above, and the Company's repurchase and retirement of 35 million Common Shares. Refer to Note 6 (Earnings per Common Share) and Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

Net periodic pension expense of $1 million and $2 million, respectively, and $13 million and $38 million, respectively, is included in core net income for the three and nine months ended September 30, 2021 and September 30, 2020.

Core Earnings per Common Share

The following table sets forth the computation of core basic and core diluted earnings per common share (in millions, except per share amounts):

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
Core net income attributable to Corning Incorporated	$ 485	$ 380	$ 1,346	$ 775
Less: Series A convertible preferred stock dividend		24	24	73
Core net income available to common shareholders - basic	485	356	1,322	702
Plus: Series A convertible preferred stock dividend		24	24	73
Core net income available to common shareholders - diluted	$ 485	$ 380	$ 1,346	$ 775
Weighted-average common shares outstanding - basic	852	760	821	760
Effect of dilutive securities:				
Stock options and other dilutive securities	14	14	16	8
Series A convertible preferred stock		115	41	115
Weighted-average common shares outstanding - diluted	866	889	878	883
Core basic earnings per common share	$ 0.57	$ 0.47	$ 1.61	$ 0.92
Core diluted earnings per common share	$ 0.56	$ 0.43	$ 1.53	$ 0.88

Reconciliation of Non-GAAP Measures

Corning utilizes certain financial measures and key performance indicators that are not calculated in accordance with GAAP to assess financial and operating performance. A non-GAAP financial measure is defined as a numerical measure of a company’s financial performance that (i) excludes amounts, or is subject to adjustments that have the effect of excluding amounts, that are included in the comparable measure calculated and presented in accordance with GAAP in the consolidated statements of income or statements of cash flows, or (ii) includes amounts, or is subject to adjustments that have the effect of including amounts, that are excluded from the comparable measure as calculated and presented in accordance with GAAP in the consolidated statements of income or statements of cash flows.

Core net sales, core equity in earnings of affiliated companies and core net income are non-GAAP financial measures utilized by management to analyze financial performance without the impact of items that are driven by general economic conditions and events that do not reflect the underlying fundamentals and trends in the Company’s operations.

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The following tables reconcile the non-GAAP financial measures to their most directly comparable GAAP financial measure (amounts in millions except percentages and per share amounts):

	Three months ended September 30, 2021					
	Net sales	Equity earnings	Income before income taxes	Net income	Effective tax rate (a)	Per share
As reported - GAAP	**$ 3,615**	**$ 16**	**$ 480**	**$ 371**	**22.7%**	**$ 0.43**
Constant-currency adjustment (1)	24	1	33	23		0.03
Translation gain on Japanese yen-denominated debt (2)			(4)	(4)		(0.00)
Translated earnings contract loss (3)			13	10		0.01
Acquisition-related costs (4)			38	30		0.03
Discrete tax items and other tax-related adjustments (5)				(1)		(0.00)
Pension mark-to-market adjustment (6)			(1)	(1)		(0.00)
Restructuring, impairment and other charges and credits (7)			40	31		0.04
Litigation, regulatory and other legal matters (8)			3	15		0.02
Preferred stock conversion (9)			(4)	(4)		(0.00)
Bond redemption loss (10)			20	15		0.02
Core performance measures	$ 3,639	$ 17	$ 618	$ 485	21.5%	$ 0.56

(a) Based upon statutory tax rates in the specific jurisdiction for each event.

	Three months ended September 30, 2020					
	Net sales	Equity (losses) earnings	Income before income taxes	Net income	Effective tax rate (a)	Per share
As reported - GAAP	**$ 3,001**	**$ (76)**	**$ 450**	**$ 427**	**5.1%**	**$ 0.48**
Constant-currency adjustment (1)	6			(14)		(0.02)
Translation loss on Japanese yen-denominated debt (2)			39	31		0.03
Translated earnings contract loss (3)			99	77		0.09
Acquisition-related costs (4)			47	37		0.04
Discrete tax items and other tax-related adjustments (5)				(58)		(0.07)
Restructuring, impairment and other charges and credits (7)			171	129		0.15
Litigation, regulatory and other legal matters (8)			83	72		0.08
Equity in losses of affiliated companies (13)		85	85	66		0.07
Transaction-related gain, net (14)			(498)	(387)		(0.44)
Core performance measures	$ 3,007	$ 9	$ 476	$ 380	20.2%	$ 0.43

(a) Based upon statutory tax rates in the specific jurisdiction for each event.

See Part 1, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, Results of Operations – Core Performance Measures, Reconciliation of Non-GAAP Measures, "Items which we exclude from GAAP measures to report core performance measures" for the descriptions of the footnoted reconciling items.

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	Nine months ended September 30, 2021					
	Net sales	Equity earnings	Income before income taxes	Net income	Effective tax rate (a)	Per share
As reported – GAAP	**$ 10,406**	**$ 31**	**$ 1,821**	**$ 1,419**	**22.1%**	**$ 0.71**
Preferred stock redemption (b)						0.91
Subtotal	**10,406**	**31**	**1,821**	**1,419**	**22.1%**	**1.62**
Constant-currency adjustment (1)		2	47	29		0.03
Translation gain on Japanese yen-denominated debt (2)			(127)	(98)		(0.12)
Translated earnings contract gain (3)			(262)	(202)		(0.24)
Acquisition-related costs (4)			123	95		0.11
Discrete tax items and other tax-related adjustments (5)				5		0.01
Pension mark-to-market adjustment (6)			23	18		0.02
Restructuring, impairment and other charges and credits (7)			42	33		0.04
Litigation, regulatory and other legal matters (8)			11	23		0.03
Preferred stock conversion (9)			17	17		0.02
Bond redemption loss (10)			31	23		0.03
Loss on investments (11)			39	30		0.04
Gain on sale of business (12)			(54)	(46)		(0.05)
Core performance measures	$ 10,406	$ 33	$ 1,711	$ 1,346	21.3%	$ 1.53

(a) Based upon statutory tax rates in the specific jurisdiction for each event.
(b) Pursuant to the SRA, the Preferred Stock was converted into 115 million Common Shares. Corning immediately repurchased 35 million of the converted Common Shares and excluded them from the weighted-average common shares outstanding for the calculation of the Company's basic and diluted earnings per share. The redemption of these Common Shares resulted in an $803 million reduction of retained earnings which reduced the net income available to common shareholders.

	Nine months ended September 30, 2020					
	Net sales	Equity earnings	Income before income taxes	Net income	Effective tax rate (a)	Per share
As reported - GAAP	**$ 7,953**	**$ 17**	**$ 293**	**$ 260**	**11.3%**	**$ 0.24**
Constant-currency adjustment (1)	66		25	(33)		(0.04)
Translation loss on Japanese yen-denominated debt (2)			50	39		0.05
Translated earnings contract loss (3)			6	5		0.01
Acquisition-related costs (4)			104	79		0.10
Discrete tax items and other tax-related adjustments (5)				19		0.02
Pension mark-to-market adjustment (6)			(2)	(1)		(0.00)
Restructuring, impairment and other charges and credits (7)			733	549		0.71
Litigation, regulatory and other legal matters (8)			108	92		0.12
Equity in losses of affiliated companies (13)		61	61	48		0.06
Transaction-related gain, net (14)			(498)	(387)		(0.50)
Cumulative adjustment related to customer contract (15)	105		105	105		0.14
Core performance measures	$ 8,124	$ 78	$ 985	$ 775	21.3%	$ 0.88

(a) Based upon statutory tax rates in the specific jurisdiction for each event.

See Part 1, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, Results of Operations – Core Performance Measures, Reconciliation of Non-GAAP Measures, "Items which we exclude from GAAP measures to report core performance measures" for the descriptions of the footnoted reconciling items.

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Items which we exclude from GAAP measures to arrive at core performance measures are as follows:

(1) Constant-currency adjustment: Because a significant portion of segment revenues and expenses are denominated in currencies other than the U.S. dollar, management believes it is important to understand the impact on core net income of translating these currencies into U.S. dollars. Display Technologies' segment sales and net income are primarily denominated in Japanese yen, but also impacted by the South Korean won, Chinese yuan, and new Taiwan dollar. Environmental Technologies and Life Science segments sales and net income are primarily impacted by the euro and Chinese yuan. Presenting results on a constant-currency basis mitigates the translation impact and allows management to evaluate performance period over period, analyze underlying trends in the businesses, and establish operational goals and forecasts. We establish constant-currency rates based on internally derived management estimates which are closely aligned with the currencies we have hedged.

Constant-currency rates are as follows:

Currency	Japanese yen	Korean won	Chinese yuan	New Taiwan dollar	Euro
Rate	¥107	₩1,175	¥6.7	NT$31	€.81

(2) Translation (gain) loss on Japanese yen-denominated debt: We have excluded the gain or loss on the translation of the yen-denominated debt to U.S. dollars.

(3) Translated earnings contract (loss) gain: We have excluded the impact of the realized and unrealized gains and losses of the Japanese yen, South Korean won, Chinese yuan, euro and new Taiwan dollar-denominated foreign currency hedges related to translated earnings, as well as the unrealized gains and losses of the British pound-denominated foreign currency hedges related to translated earnings.

(4) Acquisition-related costs: These expenses include intangible amortization, inventory valuation adjustments, external acquisition-related deal costs, and other transaction related costs.

(5) Discrete tax items and other tax-related adjustments: These include discrete period tax items such as changes of tax reserves and changes in our permanently reinvested foreign income position.

(6) Pension mark-to-market adjustment: Defined benefit pension mark-to-market gains and losses, which arise from changes in actuarial assumptions and the difference between actual and expected returns on plan assets and discount rates.

(7) Restructuring, impairment and other charges and credits: This amount includes restructuring, impairment losses and other charges and credits, primarily accelerated depreciation and asset write-offs, which are not related to continuing operations and are not classified as restructuring expense. During the third quarter of 2021, we recorded asset write-offs and charges related to facility repairs resulting from the impact of power outages. The Company is pursuing recoveries under its applicable property insurance policies.

(8) Litigation, regulatory and other legal matters: Includes amounts that reflect developments in commercial litigation, intellectual property disputes, adjustments to the estimated liability for environmental-related items and other legal matters.

(9) Preferred stock conversion: This amount includes the put option from the Share Repurchase Agreement with Samsung Display Co., Ltd.

(10) Bond redemption loss: Amount represents premiums on redemption of debentures

(11) Loss on investments: Amount represents the loss recognized due to mark-to-mark adjustments capturing the change in fair value based on the closing stock market price.

(12) Gain on sale of business: Amount represents the gain recognized for the sale of certain businesses.

(13) Equity in losses of affiliated companies: These adjustments relate to costs not related to continuing operations of our affiliated companies, such as restructuring, impairment losses, inventory adjustments, other charges and credits and settlements under "take-or-pay" contracts, including Corning's share of HSG's settlement of its pre-existing relationship of its long-term supply contract related to the HSG's acquisition of TCS.

(14) Transaction-related gain, net: Amount represents the pre-tax gain recorded on a previously held equity investment in HSG.

(15) Cumulative adjustment related to customer contract: The negative impact of a cumulative adjustment recorded during the first quarter of 2020 to reduce revenue by $105 million. The adjustment was associated with a previously recorded commercial benefit asset, reflected as a prepayment, to a customer with a long-term supply agreement that substantially exited its production of LCD panels.

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REPORTABLE SEGMENTS

Reportable segments are as follows:

- Display Technologies – manufactures glass substrates for flat panel liquid crystal displays and other high-performance display panels.
- Optical Communications – manufactures carrier network and enterprise network components for the telecommunications industry.
- Specialty Materials – manufactures products that provide more than 150 material formulations for glass, glass ceramics and fluoride crystals to meet demand for unique customer needs.
- Environmental Technologies – manufactures ceramic substrates and filters for automotive and diesel applications.
- Life Sciences – manufactures glass and plastic labware, equipment, media, serum and reagents enabling workflow solutions for drug discovery and bioproduction.

All other businesses that do not meet the quantitative threshold for separate reporting have been grouped as "All Other." This group is primarily comprised of the results of the pharmaceutical technologies, auto glass, new product lines, development projects, and certain corporate investments.

The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in "All Other" as of September 9, 2020. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information on this transaction.

Financial results for the reportable segments are prepared on a basis consistent with the internal disaggregation of financial information to assist the CODM in making internal operating decisions. A significant portion of segment revenues and expenses are denominated in currencies other than the U.S. dollar. Management believes it is important to understand the impact on core net income of translating these currencies into U.S. dollars. The Company uses constant currency reporting for Display Technologies, Specialty Materials, Environmental Technologies and Life Sciences. Corning excludes the impact of these currencies from segment sales and net income. The adjustment for constant currency is primarily related to the Display Technologies' segment and excludes the impact of the fluctuation of the Japanese yen, South Korean won, Chinese yuan, and new Taiwan dollar. Certain income and expenses are included in the unallocated amounts in the reconciliation of reportable segment net income (loss) to consolidated net income. These include items that are not used by the CODM in evaluating the results of or in allocating resources to the segments and include the following items: the impact of translated earnings contracts; acquisition-related costs; discrete tax items and other tax-related adjustments; certain litigation, regulatory and other legal matters; restructuring, impairment losses and other charges and credits; adjustments relating to acquisitions; and other non-recurring non-operational items. Although these amounts are excluded from segment results, they are included in reported consolidated results.

Earnings of equity affiliates that are closely associated with the reportable segments are included in the respective segment's net income (loss). Certain common expenses among reportable segments have been allocated differently than they would for stand-alone financial information. Segment net income (loss) may not be consistent with measures used by other companies.

Display Technologies

The following table provides net sales and net income for the Display Technologies segment (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 956	$ 827	16%	$ 2,758	$ 2,331	18%
Segment net income	$ 247	$ 196	26%	$ 708	$ 500	42%

Net sales in the Display Technologies segment increased by $129 million and $427 million in the three and nine months ended September 30, 2021, respectively, and were largely driven by volume growth of more than 10 percent and mid-teens in percentage terms, respectively, and low single-digit price increases in percentage terms and consistent pricing, respectively.

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Net income in the Display Technologies segment increased by $51 million and $208 million in the three and nine months ended September 30, 2021, respectively, primarily driven by the increases in sales outlined above.

Optical Communications

The following table provides net sales and net income for the Optical Communications segment (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 1,131	$ 909	24%	$ 3,143	$ 2,587	21%
Segment net income	$ 139	$ 115	21%	$ 398	$ 225	77%

Optical Communications' net sales increased by $222 million and $556 million, respectively, in the three and nine months ended September 30, 2021. Net sales of carrier products increased by $179 million and $372 million, respectively, and enterprise products were $43 million and $184 million higher, respectively, primarily driven by 5G, broadband and cloud computing.

Net income increased by $24 million and $173 million for the three and nine months ended September 30, 2021, respectively, primarily driven by the changes in sales, outlined above, and cost control measures, partially offset by increased raw material and shipping costs.

Movements in foreign currency exchange rates did not materially impact net income in this segment in the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020.

Specialty Materials

The following table provides net sales and net income for the Specialty Materials segment (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 556	$ 570	(2%)	$ 1,490	$ 1,339	11%
Segment net income	$ 107	$ 146	(27%)	$ 279	$ 287	(3%)

Net sales in the Specialty Materials segment declined by $14 million and increased $151 million, respectively, for the three and nine months ended September 30, 2021. Net sales declined slightly for the three months ended September 30, 2021, primarily due to extremely strong demand for cover materials in support of customer product launches experienced during the third quarter of 2020. Strong demand for premium cover materials, strength in the IT market and greater optical content in semiconductor manufacturing were the primary drivers of the increase for the nine months ended September 30, 2021.

Net income decreased by $39 million and $8 million, respectively, for the three and nine months ended September 30, 2021, primarily driven by increased investments in innovation programs that are moving towards commercialization and higher inflationary and logistics costs.

Environmental Technologies

The following table provides net sales and net income for the Environmental Technologies segment (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 385	$ 379	2%	$ 1,233	$ 925	33%
Segment net income	$ 60	$ 69	(13%)	$ 215	$ 104	107%

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Net sales in the Environmental Technologies segment increased by $6 million and $308 million, respectively, for the three and nine months ended September 30, 2021. Sales of diesel products grew $38 million and $176 million, respectively, primarily driven by customers continuing to adopt more advanced aftertreatment in China and continued strength in the North American heavy-duty truck market. Automotive sales declined $32 million and increased $132 million, respectively. In the first half of 2021, we saw year-over-year growth versus 2020, primarily driven by improving markets and increased Corning content, along with strong demand for diesel products in China and North America. In the third quarter of 2021, diesel product sales were higher, partially offset by lower automotive product sales, which were significantly impacted by an industry-wide shortage of automotive components and semiconductor chips.

Net income decreased by $9 million and increased $111 million for the three and nine months ended September 30, 2021, respectively, primarily driven by the sales drivers outlined above, partially offset by higher inflationary and logistics costs.

Life Sciences

The following table provides net sales and net income for the Life Sciences segment (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 305	$ 223	37%	$ 917	$ 724	27%
Segment net income	$ 45	$ 28	61%	$ 145	$ 97	49%

Net sales in the Life Sciences segment increased by $82 million and $193 million for the three and nine months ended September 30, 2021, respectively, primarily driven by the ongoing recovery in academic and pharmaceutical research labs and continued strong demand for bioproduction vessels and diagnostic-related consumables.

Net income increased by $17 million and $48 million for the three and nine months ended September 30, 2021, respectively, primarily driven by the higher sales volume outlined above.

All Other

All other businesses that do not meet the quantitative threshold for separate reporting have been grouped as “All Other.” This group is primarily comprised of the results of the pharmaceutical technologies, auto glass, new product lines and development projects, as well as certain corporate investments.

The Company obtained a controlling interest in HSG during the third quarter of 2020 and has consolidated results in “All Other” as of September 9, 2020. Refer to Note 3 (HSG Transactions) to the consolidated financial statements for additional information on this transaction.

The following table provides net sales and net loss for All Other (in millions):

	Three months ended September 30,		% change	Nine months ended September 30,		% change
	2021	2020	21 vs. 20	2021	2020	21 vs. 20
Segment net sales	$ 306	$ 99	209%	$ 865	$ 218	297%
Segment net loss	$ (5)	$ (50)	90%	$ (44)	$ (185)	76%

Net sales of this segment increased by $207 million and $647 million for the three and nine months ended September 30, 2021, respectively, when compared to the same periods in 2020, driven mainly by the consolidation of HSG. Net loss decreased by $45 million and $141 million, also primarily driven by the consolidation of HSG.

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CAPITAL RESOURCES AND LIQUIDITY

Financing and Capital Resources

2021

In the third quarter of 2021, Corning redeemed $250 million of 3.7% debentures due in 2023, paying a premium of $19 million by exercising our make-whole call. The bond redemption resulted in a $20 million loss during the same quarter.

In the second quarter of 2021, Corning redeemed $375 million of 2.9% debentures due in 2022, paying a premium of $10 million by exercising our make-whole call. The bond redemption resulted in an $11 million loss during the same quarter.

Share Repurchase Program

On April 26, 2018, Corning's Board of Directors approved a $2 billion share repurchase program with no expiration date (the "2018 Repurchase Program"). On July 17, 2019, Corning's Board of Directors authorized $5 billion in share repurchases with no expiration date (the "2019 Repurchase Program").

For the three and nine months ended September 30, 2021, the Company repurchased 629 thousand and 668 thousand shares of common stock on the open market for approximately $24 million and $25 million, respectively, as part of its 2019 Repurchase Program.

During the three months ended June 30, 2021, the Company repurchased 35 million shares of common stock, under the 2018 and 2019 Repurchase Programs. These shares were repurchased immediately following the conversion of preferred shares, for an aggregate purchase price of approximately $1.5 billion, of which approximately $507 million was paid on the Initial Closing Date. Subsequent payments of approximately $507 million will be paid on each of the first and second anniversaries of the Initial Closing Date.

The Company made no share repurchases for the three months ended September 30, 2020. For the nine months ended September 30, 2020, the Company repurchased 4.1 million shares of common stock on the open market for approximately $105 million, as part of its 2018 Repurchase Program.

Refer to Note 6 (Earnings per Share) and Note 14 (Shareholders' Equity) to the consolidated financial statements for additional information.

Capital Spending

Capital spending totaled $1.0 billion for the nine months ended September 30, 2021.

Cash Flow

Summary of cash flow data (in millions):

	Nine months ended September 30,	
	2021	2020
Net cash provided by operating activities	$ 2,389	$ 1,406
Net cash used in investing activities	$ (803)	$ (932)
Net cash used in financing activities	$ (1,990)	$ (415)

Net cash provided by operating activities increased by $983 million in the nine months ended September 30, 2021, when compared to the same period in the prior year, primarily driven by an increase in net income.

Net cash used in investing activities decreased by $129 million in the nine months ended September 30, 2021, when compared to the same period last year. The decrease was primarily driven by higher proceeds from the sales of businesses and investments in unconsolidated entities of $102 million and $94 million, respectively, partially offset by an increase in capital expenditures of $28 million.

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Net cash used in financing activities increased by $1.6 billion in the nine months ended September 30, 2021, when compared to the same period last year. The increase was primarily driven by higher debt repayments of $860 million, the payment for conversion of the Preferred Stock of $507 million, lower proceeds of long-term debt and repurchases of common stock of $193 million and $83 million, respectively.

Defined Benefit Pension Plans

Corning has defined benefit pension plans covering certain domestic and international employees. The Company's funding policy is to contribute, over time, an amount exceeding the minimum requirements to achieve the Company's long-term funding targets. During 2021, the Company expects to make cash contributions of $30 million to our international pension plans.

Key Balance Sheet Data

Balance sheet and working capital measures are provided in the following table (in millions):

	September 30, 2021	December 31, 2020
Working capital	$ 3,342	$ 4,237
Current ratio	1.8:1	2.1:1
Trade accounts receivable, net of doubtful accounts	$ 2,114	$ 2,133
Days sales outstanding	53	57
Inventories, net	$ 2,463	$ 2,438
Inventory turns	3.6	3.2
Days payable outstanding (1)	48	44
Long-term debt	$ 7,019	$ 7,816
Total debt	$ 7,069	$ 7,972
Total debt to total capital	36%	37%

(1) Includes trade payables only.

Management Assessment of Liquidity

Corning is committed to strong financial stewardship and expects to maintain a strong cash balance and generate positive free cash flow for the year.

We ended the third quarter of 2021 with approximately $2.2 billion of cash and cash equivalents. Our cash and cash equivalents are held in various locations throughout the world and are generally unrestricted. We utilize a variety of strategies to ensure that our worldwide cash is available in the locations in which it is needed. At September 30, 2021, approximately 74% of the consolidated amount was held outside the U.S.

Corning has a commercial paper program pursuant to which we may issue short-term, unsecured commercial paper notes up to a maximum aggregate principal amount outstanding at any one time of $1.5 billion. Under this program, the Company may issue the paper from time to time and will use the proceeds for general corporate purposes. As of September 30, 2021, Corning had no outstanding commercial paper.

The Company's $1.5 billion Revolving Credit Agreement is available to support its commercial paper program, if needed, and for general corporate purposes.

Other

Comprehensive reviews of significant customers and their creditworthiness are completed by analyzing their financial strength, at least annually or more frequently, for customers where Corning has identified an increased measure of risk. The Company closely monitors payments and developments which may signal possible customer credit issues. During the three months ended September 30, 2021, Corning sold accounts receivable and accelerated collections for the period by $80 million. Sales of accounts receivable during the first and second quarter of 2021, were $133 million and $192 million, respectively, which the Company believes would have been collected during the normal course of business in the quarter following the respective sales. Corning has not currently identified any potential material impact on our liquidity resulting from customer credit issues.

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We believe we have sufficient liquidity to fund operations, acquisitions, capital expenditures, scheduled debt repayments and dividend payments

The Revolving Credit Agreement includes affirmative and negative covenants with which we must comply, including a leverage (debt to capital ratio) financial covenant. The required leverage ratio is a maximum of 60%. At September 30, 2021, the leverage using this measure was approximately 36%. As of September 30, 2021, we were in compliance and no amounts were outstanding under the Company's Revolving Credit Agreement.

The Company's debt instruments contain customary event of default provisions, which allow the lenders the option of accelerating all obligations upon the occurrence of certain events. In addition, some of the debt instruments contain a cross default provision, whereby an uncured default of a specified amount on one debt obligation of the Company, would be considered a default under the terms of another debt instrument. As of September 30, 2021, we were in compliance with all such provisions.

Other than discussed, management is not aware of any known trends or any known demands, commitments, events or uncertainties that will, or are reasonably likely to, result in insufficient liquidity. There are no known trends, favorable or unfavorable, that would have a material change in the overall cost of liquidity.

Off Balance Sheet Arrangements

There have been no material changes outside the ordinary course of business in off balance sheet arrangements as disclosed in the 2020 Form 10-K under the caption "Off Balance Sheet Arrangements."

Contractual Obligations

There have been no material changes outside the ordinary course of business in the contractual obligations disclosed in the 2020 Form 10-K under the caption "Contractual Obligations".

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements requires management to make estimates and assumptions that affect amounts reported therein. The estimates that require management's most difficult, subjective or complex judgments are described in the 2020 Form 10-K and remain unchanged through the first nine months of 2021. For certain items, additional details are provided below.

Impairment of Assets Held for Use

We are required to assess the recoverability of the carrying value of long-lived assets when an indicator of impairment has been identified. We review long-lived assets in each quarter in which impairment indicators are present. We must exercise judgment in assessing whether an event of impairment has occurred.

Manufacturing equipment includes certain components of production equipment that are constructed of precious metals, primarily platinum and rhodium. These metals are not depreciated because they have very low physical losses and are repeatedly reclaimed and reused in the manufacturing process and have a very long useful life. Precious metals are reviewed for impairment as part of the assessment of long-lived assets. This review considers all the Company's precious metals that are either in place in the production process; in reclamation, fabrication, or refinement in anticipation of re-use; or awaiting use to support increased capacity. Precious metals are acquired to support the manufacturing operations and are not held for trading or other purposes.

At September 30, 2021 and December 31, 2020, the carrying value of precious metals was $3.3 billion and $3.4 billion, respectively, and significantly lower than the fair market value. Most of these precious metals are utilized by the Display Technologies and Specialty Materials segments. The potential for impairment exists in the future if negative events significantly decrease the cash flow of these segments. Such events include, but are not limited to, a significant decrease in demand for products or a significant decrease in profitability in these segments.

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NEW ACCOUNTING STANDARDS

Refer to Note 1 (Significant Accounting Policies) to the consolidated financial statements.

ENVIRONMENT

Corning has been named by the Environmental Protection Agency (the Agency) under the Superfund Act, or by state governments under similar state laws, as a potentially responsible party for 15 active hazardous waste sites. Under the Superfund Act, all parties who may have contributed any waste to a hazardous waste site, identified by the Agency, are jointly and severally liable for the cost of cleanup unless the Agency agrees otherwise. It is Corning's policy to accrue for its estimated liability related to Superfund sites and other environmental liabilities related to property owned by Corning based on expert analysis and continual monitoring by both internal and external consultants. At September 30, 2021 and December 31, 2020, Corning had accrued approximately $60 million and $68 million, respectively, for the estimated undiscounted liability for environmental cleanup and related litigation. Based upon the information developed to date, management believes that the accrued reserve is a reasonable estimate of the Company's liability and that the risk of an additional loss in an amount materially higher than that accrued is remote.

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FORWARD-LOOKING STATEMENTS

The statements in this Quarterly Report on Form 10-Q, in reports subsequently filed by Corning with the SEC on Forms 8-K, and related comments by management that are not historical facts or information and contain words such as “will,” “believe,” “anticipate,” “expect,” “intend,” “plan,” “seek,” “see,” “would,” and “target” and similar expressions are forward-looking statements. Such statements relate to future events that by their nature address matters that are, to different degrees, uncertain. These forward-looking statements relate to, among other things, the Company’s future operating performance, the Company's share of new and existing markets, the Company's revenue and earnings growth rates, the Company’s ability to innovate and commercialize new products, and the Company’s implementation of cost-reduction initiatives and measures to improve pricing, including the optimization of the Company’s manufacturing capacity.

Although the Company believes that these forward-looking statements are based upon reasonable assumptions regarding, among other things, current estimates and forecasts, general economic conditions, its knowledge of its business, and key performance indicators that impact the Company, actual results could differ materially. The Company does not undertake to update forward-looking statements. Some of the risks, uncertainties and other factors that could cause actual results to differ materially from those expressed in or implied by the forward-looking statements include, but are not limited to:

- the duration and severity of the COVID-19 pandemic, and its impact across our businesses on demand, operations, our global supply chains and stock price;
- the effects of acquisitions, dispositions and other similar transactions;
- global economic trends, competition and geopolitical risks, or an escalation of sanctions, tariffs or other trade tensions between the U.S. and China or other countries, and related impacts on our businesses' global supply chains and strategies;
- changes in macroeconomic and market conditions and market volatility (including developments and volatility arising from the COVID-19 pandemic), including inflation, interest rates, the value of securities and other financial assets, precious metals, oil, natural gas and other commodity prices and exchange rates (particularly between the U.S. dollar and the Japanese yen, new Taiwan dollar, euro, Chinese yuan and South Korean won), and the impact of such changes and volatility on our financial position and businesses;
- product demand and industry capacity;
- competitive products and pricing;
- availability and costs of critical components and materials;
- new product development and commercialization;
- order activity and demand from major customers;
- the amount and timing of our cash flows and earnings and other conditions, which may affect our ability to pay our quarterly dividend at the planned level or to repurchase shares at planned levels;
- possible disruption in commercial activities or our supply chain due to terrorist activity, cyber-attack, armed conflict, political or financial instability, natural disasters, international trade disputes or major health concerns;
- loss of intellectual property due to theft, cyber-attack, or disruption to our information technology infrastructure;
- unanticipated disruption to our supply chain, equipment, facilities, IT systems or operations;
- effect of regulatory and legal developments;
- ability to pace capital spending to anticipated levels of customer demand;
- our ability to increase margins through implementation of operational changes, pricing actions and cost reduction measures;
- rate of technology change;
- ability to enforce patents and protect intellectual property and trade secrets;
- adverse litigation;
- product and components performance issues;
- retention of key personnel;
- customer ability to maintain profitable operations and obtain financing to fund ongoing operations and manufacturing expansions and pay receivables when due;
- loss of significant customers;
- changes in tax laws and regulations;
- the impacts of audits by taxing authorities; and the potential impact of legislation, government regulations, and other government action and investigations; and
- other risks detailed in Corning’s SEC filings.

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ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk Disclosures

As noted in the 2020 Form 10-K, we operate and conduct business in many foreign countries and as a result are exposed to fluctuations between the U.S. dollar and other currencies. Volatility in the global financial markets could increase the volatility of foreign currency exchange rates which would, in turn, impact sales and net income. For a discussion of the Company's exposure to market risk and how we mitigate that risk, refer to Part II, Item 1A, Risk Factors in this Quarterly Report on Form 10-Q and Part II, Item 7A, Quantitative and Qualitative Disclosures About Market Risks, contained in the 2020 Form 10-K.

ITEM 4. CONTROLS AND PROCEDURES

Under the supervision of and with the participation of Corning's management, including the chief executive officer and chief financial officer, we evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended), as of September 30, 2021, the end of the period covered by this report. Based on that evaluation, we have concluded that the Company's disclosure controls and procedures were effective as of that date. Corning's disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by Corning in the reports that it files or submits under the Exchange Act is accumulated and communicated to Corning's management, including Corning's principal executive and principal financial officers, or other persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

An evaluation of internal controls over financial reporting was performed to determine whether any changes have occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the internal control over financial reporting. The chief executive officer and chief financial officer concluded that there was no change in Corning's internal control over financial reporting that materially affected, or is reasonably likely to materially affect, internal control over financial reporting.

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Part II – Other Information

ITEM 1. LEGAL PROCEEDINGS

Environmental Litigation. See the 2020 Form 10-K, Part I, Item 3. For additional information and updates to estimated liabilities as of September 30, 2021, see Part I, Item 1, Financial Statements, Note 11 (Commitments and Contingencies) of the notes to the consolidated financial statements included under Item 1 of this Quarterly Report, which is incorporated herein by reference.

ITEM 1A. RISK FACTORS

In addition to other information set forth in this report, you should carefully consider the factors discussed in Part I, Item 1A. Risk Factors in Corning's 2020 Form 10-K, which could materially impact the Company's business, financial condition or future results. Risks disclosed in the 2020 Form 10-K are not the only risks facing the Company. Additional risks and uncertainties not currently known to us or that we currently deem immaterial may materially adversely impact Corning's business, financial condition or operating results. There have been no material changes to Part I, Item 1A. Risk Factors in the 2020 Form 10-K.

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

This table provides information about purchases of common stock during the third quarter of 2021:

Issuer Purchases of Equity Securities

Period	Total number of shares purchased (1)	Average price paid per share (2)	Number of shares purchased as part of publicly announced programs	Approximate dollar value of shares that may yet be purchased under the programs
July 1 - 31, 2021	31,731	$ 40.01		
August 1 - 31, 2021	1,567	40.23		
September 1 - 30, 2021	630,568	38.16	628,931	
Total	663,866	$ 38.26	628,931	$ 3,770,708,134

(1) This column reflects the deemed surrender to the Company of common stock to satisfy employee tax withholding obligations during the third quarter of 2021: (i) 4,367 shares of common stock related to the vesting of employee restricted stock units; (ii) 30,375 shares of common stock related to the vesting of restricted stock issued to employees; (iii) 193 shares of common stock related to the vesting of employee performance-based restricted stock units; and (iv) the purchase of 628,931 shares of common stock in open market repurchases under the 2019 Repurchase Program.

(2) Represents the stock price at the time of surrender.

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ITEM 6. EXHIBITS

(a) Exhibits

Exhibit Number	Exhibit Name
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) under the Exchange Act
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) under the Exchange Act
32	Certification Pursuant to 18 U.S.C. Section 1350
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document
101.LAB	Inline XBRL Taxonomy Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document
101.DEF	Inline XBRL Taxonomy Definition Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

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SIGNATURES

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

Corning Incorporated
(Registrant)

October 29, 2021	/s/ Edward A. Schlesinger
Date	Edward A. Schlesinger Senior Vice President and Corporate Controller

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Exhibit 31.1

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, Wendell P. Weeks, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Corning Incorporated (the registrant);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

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

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

October 29, 2021

/s/ Wendell P. Weeks

Wendell P. Weeks
Chairman and Chief Executive Officer
(Principal Executive Officer)

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Exhibit 31.2

CHIEF FINANCIAL OFFICER CERTIFICATION

I, R. Tony Tripeny, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Corning Incorporated (the registrant);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

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

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

October 29, 2021

/s/ R. Tony Tripeny

R. Tony Tripeny
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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Exhibit 32

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

In connection with the Quarterly Report of Corning Incorporated (the Company) on Form 10-Q for the period ended September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the Report), we, Wendell P. Weeks, Chairman and Chief Executive Officer and R. Tony Tripeny, Executive Vice President and Chief Financial Officer, of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: October 29, 2021

/s/ Wendell P. Weeks
Wendell P. Weeks
Chairman and Chief Executive Officer

/s/ R. Tony Tripeny
R. Tony Tripeny
Executive Vice President and Chief Financial Officer

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