Table of Contents

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 June 30, 2020

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 1-71

HEXION INC.
(Exact name of registrant as specified in its charter)

New Jersey	**13-0511250**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
180 East Broad St., Columbus, OH 43215	**614-225-4000**
(Address of principal executive offices including zip code)	**(Registrant's telephone number including area code)**

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
None		None

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

Explanatory Note: While the registrant is not subject to the filing requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, it has filed all reports required to be filed by such filing requirements during the preceding 12 months.

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
		Emerging growth company	☐

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

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☒ No ☐

Number of shares of common stock, par value $0.01 per share, outstanding as of the close of business on August 1, 2020: 100

HEXION INC.

INDEX

		Page
PART I – FINANCIAL INFORMATION		
Item 1.	**Hexion Inc. Condensed Consolidated Financial Statements (Unaudited)**	
	Condensed Consolidated Balance Sheets	3
	Condensed Consolidated Statements of Operations	4
	Condensed Consolidated Statements of Comprehensive Loss	5
	Condensed Consolidated Statements of Cash Flows	6
	Condensed Consolidated Statements of Equity (Deficit)	7
	Notes to Condensed Consolidated Financial Statements	8
Item 2.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	34
Item 4.	Controls and Procedures	34
PART II – OTHER INFORMATION		
Item 1.	Legal Proceedings	35
Item 1A.	Risk Factors	35
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	35
Item 3.	Defaults upon Senior Securities	35
Item 4.	Mine Safety Disclosures	35
Item 5.	Other Information	35
Item 6.	Exhibits	36

PART I - FINANCIAL INFORMATION
Item 1. Financial Statements
HEXION INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

(In millions, except share data)	June 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents (including restricted cash of $3 and $4, respectively)	$ 295	$ 254
Accounts receivable (net of allowance for doubtful accounts of $3)	365	365
Inventories:		
Finished and in-process goods	230	232
Raw materials and supplies	89	100
Other current assets	45	51
Total current assets	1,024	1,002
Investment in unconsolidated entities	18	17
Deferred tax assets	6	6
Other long-term assets	54	55
Property and equipment:		
Land	110	116
Buildings	177	172
Machinery and equipment	1,392	1,368
	1,679	1,656
Less accumulated depreciation	(182)	(78)
	1,497	1,578
Operating lease assets	117	122
Goodwill	178	178
Other intangible assets, net	1,150	1,188
Total assets	$ 4,044	$ 4,146
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 290	$ 341
Debt payable within one year	76	70
Interest payable	31	35
Income taxes payable	14	17
Accrued payroll and incentive compensation	39	48
Current portion of operating lease liabilities	22	22
Other current liabilities	124	105
Total current liabilities	596	638
Long-term liabilities:		
Long-term debt	1,839	1,715
Long-term pension and post employment benefit obligations	246	252
Deferred income taxes	153	164
Operating lease liabilities	82	86
Other long-term liabilities	209	216
Total liabilities	3,125	3,071
Commitments and contingencies (see Note 8)		
Equity		
Common stock —$0.01 par value; 100 shares authorized, issued and outstanding	—	—
Paid-in capital	1,164	1,165
Accumulated other comprehensive loss	(55)	(1)
Accumulated deficit	(190)	(89)
Total equity	919	1,075
Total liabilities and equity	$ 4,044	$ 4,146

See Notes to Condensed Consolidated Financial Statements

HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

(In millions)	Successor Three Months Ended June 30, 2020	Predecessor Three Months Ended June 30, 2019	Successor Six Months Ended June 30, 2020	Predecessor Six Months Ended June 30, 2019
Net sales	$ 628	$ 892	$ 1,454	$ 1,778
Cost of sales (exclusive of depreciation and amortization shown below, see Note 2)	528	735	1,208	1,462
Selling, general and administrative expense (see Note 2)	55	57	130	145
Depreciation and amortization (see Note 2)	56	26	114	52
Asset impairments	—	—	16	—
Business realignment costs	18	11	39	15
Other operating expense, net	4	8	11	16
Operating (loss) income	(33)	55	(64)	88
Interest expense, net	25	9	51	89
Other non-operating income, net	(4)	(10)	(4)	(11)
Reorganization items, net	—	156	—	156
Loss before income tax and earnings from unconsolidated entities	(54)	(100)	(111)	(146)
Income tax (benefit) expense	(11)	8	(8)	15
Loss before earnings from unconsolidated entities	(43)	(108)	(103)	(161)
Earnings from unconsolidated entities, net of taxes	1	1	2	2
Net loss	$ (42)	$ (107)	$ (101)	$ (159)
Net income attributable to noncontrolling interest	—	(1)	—	(1)
Net loss attributable to Hexion Inc.	$ (42)	$ (108)	$ (101)	$ (160)

See Notes to Condensed Consolidated Financial Statements

HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Unaudited)

	Successor	Predecessor	Successor	Predecessor
(In millions)	**Three Months Ended June 30, 2020**	**Three Months Ended June 30, 2019**	**Six Months Ended June 30, 2020**	**Six Months Ended June 30, 2019**
Net loss	$ (42)	$ (107)	$ (101)	$ (159)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	6	(8)	(36)	(8)
Unrealized loss on cash flow hedge	(3)	—	(18)	—
Other comprehensive income (loss)	3	(8)	(54)	(8)
Comprehensive loss	$ (39)	$ (115)	$ (155)	$ (167)
Comprehensive income attributable to noncontrolling interest	—	(1)	—	(1)
Comprehensive loss attributable to Hexion Inc.	$ (39)	$ (116)	$ (155)	$ (168)

See Notes to Condensed Consolidated Financial Statements

HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Successor	Predecessor
(In millions)	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Cash flows used in operating activities		
Net loss	$ (101)	$ (159)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	114	52
Non-cash asset impairments	16	—
Non-cash reorganization items, net	—	139
Deferred tax benefit	(7)	—
Loss on sale of assets	9	3
Unrealized foreign currency losses (gains)	4	(7)
Non-cash stock based compensation expense	9	—
Financing fees included in net loss	—	13
Other non-cash adjustments	(1)	(2)
Net change in assets and liabilities:		
Accounts receivable	(16)	(88)
Inventories	5	(19)
Accounts payable	(34)	(28)
Income taxes payable	(3)	8
Other assets, current and non-current	(6)	(8)
Other liabilities, current and long-term	(8)	(17)
Net cash used in operating activities	(19)	(113)
Cash flows used in investing activities		
Capital expenditures	(61)	(43)
Proceeds from sale of assets, net	—	1
Net cash used in investing activities	(61)	(42)
Cash flows provided by financing activities		
Net short-term debt repayments	(14)	(4)
Borrowings of long-term debt	181	667
Repayments of long-term debt	(32)	(527)
Return of capital to parent (see Note 5)	(10)	—
Financing fees paid	—	(13)
Net cash provided by financing activities	125	123
Effect of exchange rates on cash and cash equivalents, including restricted cash	(4)	—
Change in cash and cash equivalents, including restricted cash	41	(32)
Cash, cash equivalents and restricted cash at beginning of period	254	128
Cash, cash equivalents and restricted cash at end of period	$ 295	$ 96
Supplemental disclosures of cash flow information		
Cash paid for:		
Interest, net	$ 53	$ 66
Income taxes, net	4	10
Reorganization items, net	—	17

See Notes to Condensed Consolidated Financial Statements

HEXION INC.
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY (DEFICIT) (Unaudited)

(In millions)	Common Stock	Paid-in Capital	Treasury Stock	Loan Receivable from Parent	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Hexion Inc. (Deficit) Equity	Noncontrolling Interest	Total Shareholder's (Deficit) Equity
Predecessor									
Balance at March 31, 2019	$ 1	$ 526	$ (296)	$ —	$ (18)	$ (3,177)	$ (2,964)	$ (2)	$ (2,966)
Net loss	—	—	—	—	—	(108)	(108)	1	(107)
Other comprehensive loss	—	—	—	—	(8)	—	(8)	—	(8)
Balance at June 30, 2019	$ 1	$ 526	$ (296)	$ —	$ (26)	$ (3,285)	$ (3,080)	$ (1)	$ (3,081)
Balance at December 31, 2018	$ 1	$ 526	$ (296)	$ —	$ (18)	$ (3,125)	$ (2,912)	$ (2)	$ (2,914)
Net loss	—	—	—	—	—	(160)	(160)	1	(159)
Other comprehensive loss	—	—	—	—	(8)	—	(8)	—	(8)
Balance at June 30, 2019	$ 1	$ 526	$ (296)	$ —	$ (26)	$ (3,285)	$ (3,080)	$ (1)	$ (3,081)
Successor									
Balance at March 31, 2020	$ —	$ 1,170	$ —	$ (10)	$ (58)	$ (148)	$ 954	$ —	$ 954
Net loss	—	—	—	—	—	(42)	(42)	—	(42)
Stock-based compensation expense	—	4	—	—	—	—	4	—	4
Other comprehensive income	—	—	—	—	3	—	3	—	3
Return of capital to parent (see Note 5)	—	(10)	—	—	—	—	(10)	—	(10)
Settlement of affiliate loan (see Note 5)	—	—	—	10	—	—	10	—	10
Balance at June 30, 2020	$ —	$ 1,164	$ —	$ —	$ (55)	$ (190)	$ 919	$ —	$ 919
Balance at December 31, 2019	$ —	$ 1,165	$ —	$ —	$ (1)	$ (89)	$ 1,075	$ —	$ 1,075
Net loss	—	—	—	—	—	(101)	(101)	—	(101)
Stock-based compensation expense	—	9	—	—	—	—	9	—	9
Other comprehensive loss	—	—	—	—	(54)	—	(54)	—	(54)
Return of capital to parent (see Note 5)	—	(10)	—	—	—	—	(10)	—	(10)
Distribution of affiliate loan (see Note 5)	—	—	—	(10)	—	—	(10)	—	(10)
Settlement of affiliate loan (see Note 5)	—	—	—	10	—	—	10	—	10
Balance at June 30, 2020	$ —	$ 1,164	$ —	$ —	$ (55)	$ (190)	$ 919	$ —	$ 919

See Notes to Condensed Consolidated Financial Statements

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)
(In millions, except share data)

1. Background and Basis of Presentation

Based in Columbus, Ohio, Hexion Inc. (“Hexion” or the “Company”) serves global adhesive, coatings, composites and industrial markets through a broad range of thermoset technologies, specialty products and technical support for customers in a diverse range of applications and industries. The Company’s business is organized based on the products offered and the markets served. In January 2020, the Company changed its reporting segments to align around its growth platforms. At June 30, 2020, the Company had three reportable segments: Adhesives; Coatings and Composites; and Corporate and Other.

The unaudited Condensed Consolidated Financial Statements include the accounts of the Company and its majority-owned subsidiaries in which minority shareholders hold no substantive participating rights. Intercompany accounts and transactions are eliminated in consolidation. In the opinion of management, all adjustments consisting of normal, recurring adjustments considered necessary for a fair statement have been included. Results for the interim periods are not necessarily indicative of results for the entire year.

Year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”), certain information and disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. These unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and the accompanying notes included in the Company’s most recent Annual Report on Form 10-K.

Emergence from Chapter 11 and Fresh Start Accounting

On April 1, 2019, the Company, Hexion Holdings LLC, Hexion LLC and certain of the Company’s subsidiaries (collectively, the “Debtors”) filed voluntary petitions (the “Bankruptcy Petitions”) for reorganization under Chapter 11 (“Chapter 11”) of the U.S. Bankruptcy Code (the “Bankruptcy Code”) in the United States Bankruptcy Court for the District of Delaware, (the “Bankruptcy Court”). The Chapter 11 proceedings were jointly administered under the caption *In re Hexion TopCo, LLC*, No. 19-10684 (the “Chapter 11 Cases”). The Debtors continued to operate their businesses as “debtors-in-possession” under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code and orders of the Bankruptcy Court.

On June 25, 2019, the Court entered an order (the “Confirmation Order”) confirming the Second Amended Joint Chapter 11 Plan of Reorganization of Hexion Holdings LLC and its Debtor Affiliates under Chapter 11 (the “Plan”). On the morning of July 1, 2019 (the "Effective Date"), in accordance with the terms of the Plan and the Confirmation Order, the Plan became effective and the Debtors emerged from bankruptcy (the “Emergence”).

As a result of the Company’s reorganization and emergence from Chapter 11 bankruptcy on the Effective Date, the Company’s direct parent is Hexion Intermediate Holding 2, Inc. (“Hexion Intermediate”), a holding company and wholly owned subsidiary of Hexion Intermediate Holding 1, Inc., a holding company and wholly owned subsidiary of Hexion Holdings Corporation, the ultimate parent of Hexion (“Hexion Holdings” or “Parent”). Prior to its reorganization, the Company’s parent was Hexion LLC, a holding company and wholly owned subsidiary of Hexion Holdings LLC (now known as Hexion TopCo, LLC or “TopCo”), the previous ultimate parent entity of Hexion, which was controlled by investment funds managed by affiliates of Apollo Management Holdings, L.P. (together with Apollo Global Management, Inc. and its subsidiaries, “Apollo”). On the Effective Date, the Company’s existing common stock were cancelled and 100 new shares of common stock were issued at a par value of $0.01 to the Company’s new direct parent Hexion Intermediate in accordance with the Plan.

On the Effective Date, the Company applied fresh start accounting to its financial statements, which resulted in a new basis of accounting and the Company became a new entity for financial reporting purposes. As a result of the application of fresh start accounting and the effects of the implementation of the Plan, the Condensed Consolidated Financial Statements after the Effective Date are not comparable with the Condensed Consolidated Financial Statements prior to that date. References to “Successor” or “Successor Company” relate to the financial position and results of operations of the Company after the Effective Date. References to “Predecessor” or “Predecessor Company” refer to the financial position and results of operations of the Company on or before the Effective Date.

2. Summary of Significant Accounting Policies

Use of Estimates—The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and also requires the disclosure of contingent assets and liabilities at the date of the financial statements. In addition, it requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Revenue Recognition—The Company follows the principles-based five step model to recognize revenue upon the transfer of promised goods or services to customers and in an amount that reflects the consideration for which the entity expects to be entitled in exchange for those goods or services. Revenue, net of estimated allowances and returns, is recognized when the Company has completed its performance obligations under a contract and control of the product is transferred to the customer. Substantially all revenue is recognized at the time shipment is made or upon delivery as risk and title to the product transfer to the customer. Sales, value add, and other taxes that are collected concurrently with revenue-producing activities are excluded from revenue. Contract terms for certain transactions, including sales made on a consignment basis, result in the transfer of control of the finished product to the customer prior to the point at which the Company has the right to invoice for the product. In these cases, timing of revenue recognition will differ from the timing of invoicing to customers and will result in the Company recording a contract asset. A contract asset balance of $8 and $9 is recorded within “Other current assets” at June 30, 2020 and December 31, 2019, respectively, in the unaudited Condensed Consolidated Balance Sheet. Refer to Note 11 for additional discussion of the Company’s net sales by reportable segment disaggregated by geographic region.

Cash and Cash Equivalents— The Company considers all highly liquid investments that are purchased with an original maturity of three months or less to be cash equivalents. The Company’s restricted cash balance of $3 and $4 at June 30, 2020 and December 31, 2019, respectively, represents deposits to secure certain bank guarantees issued to third parties to guarantee potential obligations of the Company primarily related to the completion of tax audits and environmental liabilities. These balances will remain restricted as long as the underlying exposures exist and are included in the unaudited Condensed Consolidated Balance Sheets as a component of “Cash and cash equivalents.”

Allowance for Doubtful Accounts— Under adoption of ASU 2016-13, the Company has updated its credit loss methodology to consider a broader range of reasonable and supportable information to inform its credit loss estimates. The Company utilizes a historical aging method disaggregated by portfolio segment of geographic region, and then the Company makes any necessary adjustments for current conditions and forecasts about future economic conditions for calculating its allowance for doubtful accounts. The Company evaluates each pooled receivables’ geographic region by differing regional industrial and economic conditions, overall end market conditions and groups of customers with similar risk profiles related to timing and uncertainty of future collections. If particular accounts receivable balances no longer display risk characteristics that are similar to other pooled receivables, the Company performs individual assessments of expected credit losses for those specific receivables. Receivables are charged against the allowance for doubtful accounts when it is probable that the receivable will not be collected.

During the three and six months ended June 30, 2020, the Company increased its allowance for doubtful accounts provision for expected credit losses by less than $1, to reflect current business conditions, forecasts of future economic conditions and the impacts related to the global business and market disruptions of the coronavirus disease 2019 (“COVID-19”) pandemic in accordance with ASU 2016-13 (see Note 3 for more information). The Company’s current expectations and assumptions regarding its business, the economy and other future events and conditions and are based on currently available financial, economic and competitive data and current business plans as of June 30, 2020. Actual results could vary materially depending on risks and uncertainties that may affect the Company’s operations, markets, services, prices and other factors.

The Company recorded an allowance for doubtful accounts of $3 at both June 30, 2020 and December 31, 2019, to reduce accounts receivable to their estimated net realizable value. Accounts receivable balances are written-off against the allowance if a final determination of uncollectibility is made. There were no write-offs or recoveries for the Successor three and six months ended June 30, 2020.

Goodwill— Goodwill is reviewed annually for impairment of value or more frequently when potential impairment triggering events are present. The Company’s annual impairment testing date is October 1. The Company continuously monitors events which could trigger an interim impairment analysis, such as changing business conditions and environmental factors, which included the impact of the COVID-19 pandemic for the quarter ended June 30, 2020. The Company determined there was no triggering event requiring an interim impairment analysis in the quarter ended June 30, 2020. However, the continued duration and severity of COVID-19 may result in future impairment charges as a prolonged pandemic could have an additional impact on the results of the Company’s operations.

Income Statement Presentation— As a result of the application of fresh start accounting upon the Company’s emergence from Chapter 11, the Company elected to change its income statement presentation of depreciation and amortization expense beginning in the Successor period July 2, 2019 through December 31, 2019 and all periods thereafter. As a result, “Depreciation and amortization” has been added as a line item in the unaudited Condensed Consolidated Statements of Operations and “Cost of sales” and “Selling, general and administrative expense” will now exclude all depreciation and amortization expense. In addition, the Company no longer presents “Gross profit” as a subtotal caption. For comparability purposes, this presentation change is applied to all comparable periods presented in this Quarterly Report on Form 10-Q and all future filings.

The effects of the income statement presentation change on the Predecessor Company’s previously reported unaudited Condensed Consolidated Statements of Operations are presented below. As noted above, a component of this presentation change is removal of the “Gross profit” subtotal.

Unaudited Condensed Consolidated Statements of Operations for the three months ended June 30, 2019:

	Previous Presentation Method	Effect of Presentation Change	As Reported
Cost of sales	$ 757	$ (22)	$ 735
Selling, general and administrative expense	61	(4)	57
Depreciation and amortization	—	26	26

Unaudited Condensed Consolidated Statements of Operations for the six months ended June 30, 2019:

	Previous Presentation Method	Effect of Presentation Change	As Reported
Cost of sales	$ 1,507	$ (45)	$ 1,462
Selling, general and administrative expense	152	(7)	145
Depreciation and amortization	—	52	52

Subsequent Events—The Company has evaluated events and transactions subsequent to June 30, 2020 through the date of issuance of its unaudited Condensed Consolidated Financial Statements.

Recently Issued Accounting Standards

Newly Adopted Accounting Standards

In June 2016, the FASB issued ASU 2016-13: Financial Instruments - Credit Losses (Topic 820): *Measurement of Credit Losses on Financial Instruments*, ("ASU 2016-13"). The amendments in this update replace the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. New disclosures are also required with this standard. The standard is effective for annual and interim periods beginning after December 15, 2019. This standard impacts the Company's accounts receivables and contract assets. The Company adopted ASU 2016-13 at January 1, 2020, using a modified retrospective adoption method. Under this method of adoption, there is no impact to the comparative Consolidated Statement of Operations and the Consolidated Balance Sheets. There was an immaterial impact of adopting ASU 2016-13 on the date of adoption.

In August 2018, the FASB issued ASU 2018-15: Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40)*: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract* ("ASU 2018-15"). ASU 2018-15 align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The standard was effective for annual and interim periods beginning after December 15, 2019. The Company adopted ASU 2018-15 prospectively on January 1, 2020 and the adoption had an immaterial impact on its condensed consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04: Reference Rate Reform (Topic 848): *Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04"). ASU 2020-04 will provide optional expedients and exceptions for a limited period of time to ease the potential burden in accounting for contracts, hedging relationships and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The amendments in this ASU are effective for all entities as of March 12, 2020 through December 31, 2022. The Company has adopted ASU 2020-04 and the initial adoption of this ASU did not have an impact on our condensed consolidated financial statements.

Recently Issued Accounting Standards

In December 2019, the FASB issued ASU 2019-12: Income Taxes (Topic 740): *Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 will simplify the accounting for income taxes by removing certain exceptions to the general principles in income tax accounting and improve consistent application of and simplify GAAP for other areas of income tax accounting by clarifying and amending existing guidance. The new guidance is effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company is currently assessing the potential impact ASU 2019-12 will have on its condensed consolidated financial statements**.**

In August 2018, the FASB issued ASU 2018-14: Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): *Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans* ("ASU 2018-14"). ASU 2018-14 modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The standard is effective for fiscal years ending after December 15, 2020. The Company is currently assessing the potential impact of ASU 2018-14 on its financial statements.

3. COVID-19 Impacts

In March 2020, the World Health Organization categorized COVID-19 as a global pandemic. Around the world, local governments' responses to COVID-19 continue to evolve, which has led to stay-at-home orders, social distancing guidelines and other preventative measures that have disrupted various industries in the global economy and the markets in which our products are manufactured, distributed and sold.

During this pandemic, the Company has implemented additional guidelines to further protect the health and safety of its employees as the Company continues to operate with its suppliers and customers. The Company has maintained a focus on the safety of its employees while minimizing potential disruptions caused by COVID-19. For example, the Company is following all legislatively-mandated travel directives in the various countries where it operates, and the Company has also put additional travel restrictions in place for its associates designed to reduce the risk from COVID-19. Additionally, the Company is utilizing extended work from home options to protect its office associates, while adjusting its meeting protocols and processes at its manufacturing sites.

The Company's businesses have been designated by many governments as essential businesses and the Company's operations have continued through June 30, 2020. While the Company has continued to operate during the pandemic, it did incur adverse financial impacts to its sales and profitability results during the three and six months ended June 30, 2020 from COVID-19, primarily related to reduced volumes associated with the pandemic. The pandemic has impacted global economic conditions and lowered demand in many of the end use markets in which the Company operates such as automotive, aerospace, industrial products, oil and gas, construction and housing. The ultimate impact that COVID-19 will have on the Company's future financial position, operating results and cash flows involves numerous risks and uncertainties, including new information which may emerge concerning the severity and duration of COVID-19 and actions to contain the virus or treat its impact.

The Coronavirus Aid, Relief, and Economic Security (the "CARES") Act was enacted on March 27, 2020 in the U.S. The CARES Act includes several significant provisions, such as delaying certain payroll tax payments, mandatory transition tax payments under the Tax Cuts and Jobs Act, and estimated income tax payments. The Company does not currently expect the CARES Act to have a material impact on its financial results, including on its annual estimated effective tax rate but the Company anticipates delaying approximately $15 of certain tax payments to the second half of 2020 and deferring $5 of certain tax payments to future years. The Company will continue to monitor and assess the CARES Act and similar legislation in other jurisdictions where the Company operates that may impact the Company's business and financial results.

Subsequent to June 30, 2020, the United States, and the global regions where the Company operates, continue to be affected by COVID-19. The Company is closely monitoring the COVID-19 pandemic on all aspects of its businesses and geographies, including the impact on its facilities, employees, customers, suppliers, vendors, business partners and distribution.

4. Asset Impairments

During the first quarter of 2020, the Company indefinitely idled certain assets within its Adhesives segment. These represented triggering events resulting in impairment evaluations of the fixed assets within both the oilfield and phenolic specialty resins asset groups. As a result, asset impairments totaling $16 were recorded in "Asset impairments" in the unaudited Condensed Consolidated Statements of Operations during the Successor six months ended June 30, 2020.

5. Related Party Transactions

Transactions with Apollo

As of the Company's emergence from bankruptcy on July 1, 2019, Apollo is no longer a related party to the Company. Sales to various Apollo affiliates were $1 for the Predecessor three and six months ended June 30, 2019. There were no purchases during the Predecessor three and six months ended June 30, 2019.

Management Consulting Agreement

The Company was party to a Management Consulting Agreement with Apollo (the "Management Consulting Agreement") pursuant to which the Company received certain structuring and advisory services from Apollo and its affiliates. Apollo was entitled to an annual fee equal to the greater of $3 or 2% of the Company's Adjusted EBITDA. In conjunction with the Company's Chapter 11 proceedings and the Support Agreement filed on April 1, 2019, Apollo agreed to waive its annual management fee for 2019. In connection with the Company's emergence from Chapter 11, the Management Consulting Agreement was terminated pursuant to the Confirmation Order, as of the Effective Date.

Transactions with MPM

As of May 15, 2019, Momentive Performance Materials ("MPM") is no longer under the common control of Apollo and no longer a related party to the Company.

Shared Services Agreement

The Company previously held a shared services agreement with MPM (the "Shared Services Agreement"). Under this agreement, the Company provided to MPM, and MPM provided to the Company, certain services, including, but not limited to, executive and senior management, administrative support, human resources, information technology support, accounting, finance, legal and procurement services. The Shared Services Agreement established certain criteria upon which the costs of such services are allocated between the Company and MPM. On March 14, 2019, MPM terminated the Shared Services Agreement, which triggered a transition period for the parties to work together to facilitate an orderly transition of services. In the first quarter of 2020, the transition of services was completed.

Pursuant to the Shared Services Agreement, during the Predecessor six months ended June 30, 2019, the Company incurred approximately $15 of net costs for shared services and MPM incurred approximately $14 of net costs for shared services. Included in the net costs incurred during the Predecessor six months ended June 30, 2019 were net billings from Hexion to MPM of $11 to bring the percentage of total net incurred costs for shared services under the Shared Services Agreement to the applicable agreed upon allocation percentage.

Sales and Purchases of Products with MPM

There were no products sold to MPM during the Predecessor three and six months ended June 30, 2019. During the Predecessor three and six months ended June 30, 2019, the Company earned less than $1 from MPM as compensation for acting as distributor of products and had purchases from MPM of $3 and $10, respectively.

Other Transactions and Arrangements

In March 2020, the Company entered into a $10 short term affiliate loan with its Parent at a 0% interest rate to fund Parent share repurchases, which was recorded in “Loan Receivable from Parent” in the Condensed Consolidated Balance Sheets at March 31, 2020. In June 2020, the Company made a $10 non-cash distribution to its Parent treated as a return of capital to settle this affiliate loan. This return of capital reduced “Paid-in capital” in the unaudited Condensed Consolidated Balance Sheet at June 30, 2020.

The Company sells products and provides services to, and purchases products from, its joint ventures which are recorded under the equity method of accounting. Refer to the below table for a summary of the sales and purchases with the Company and its joint ventures which are recorded under the equity method of accounting:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Sales to joint ventures	$ <1	$ 1	$ 1	$ 2
Purchases from joint ventures	1	1	1	2

	June 30, 2020	December 31, 2019
Accounts receivable from joint ventures	$ 1	$ 1
Accounts payable to joint ventures	<1	<1

In addition to the accounts receivable from joint ventures disclosed above, the Company had a loan receivable of $6 and $7 as of June 30, 2020 and December 31, 2019, respectively, from its unconsolidated forest products joint venture in Russia.

6. Fair Value

Fair value is the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurement provisions establish a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. This guidance describes three levels of inputs that may be used to measure fair value:

- **Level 1:** Inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- **Level 2:** Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reported date.
- **Level 3:** Unobservable inputs that are supported by little or no market activity and are developed based on the best information available in the circumstances. For example, inputs derived through extrapolation or interpolation that cannot be corroborated by observable market data.

Derivative Financial Instruments

The Company is exposed to certain risks related to its ongoing business operations. The primary risks managed by using derivative instruments are interest rate risk, foreign currency exchange risk and commodity price risk. The Company does not hold or issue derivative financial instruments for trading purposes.

Recurring Fair Value Measurements

As of June 30, 2020, the Company had derivative assets related to foreign exchange, electricity and natural gas contracts of less than $1, which were measured using Level 2 inputs, and consisted of derivative instruments transacted primarily in over-the-counter markets. There were no transfers between Level 1, Level 2 or Level 3 measurements during the Successor six months ended June 30, 2020 or the Predecessor six months ended June 30, 2019.

The Company calculates the fair value of its Level 2 derivative liabilities using standard pricing models with market-based inputs, adjusted for nonperformance risk. When its financial instruments are in a liability position, the Company evaluates its credit risk as a component of fair value. At both June 30, 2020 and December 31, 2019, no adjustment was made by the Company to reduce its derivative position for nonperformance risk.

When its financial instruments are in an asset position, the Company is exposed to credit loss in the event of nonperformance by other parties to these contracts and evaluates their credit risk as a component of fair value.

Interest Rate Swap

The Company will from time to time use interest rate swaps to alter interest rate exposures between floating and fixed rates on certain long-term debt. Under interest rate swaps, the Company agrees with other parties to exchange, at specified intervals, the difference between fixed rate and floating rate interest amounts calculated using an agreed-upon notional principal amount. The counter-parties to the interest rate swap agreements are financial institutions with investment grade ratings.

In October 2019, the Company executed an interest rate swap syndication agreement where by Hexion receives a variable 3-month LIBOR, and pays fixed interest rate swaps, beginning January 1, 2020 through January 1, 2025 (the "Hedge") for a total notional amount of $300. The purpose of this arrangement is to hedge the variability caused by quarterly changes in cash flow due to associated changes in LIBOR for $300 of the Company's variable rate Senior Secured Term Loan denominated in USD ($717 outstanding at June 30, 2020). The Company has evaluated this transaction and designated this derivative instrument as a cash flow hedge under Accounting Standard Codification, No. 815, "Derivatives and hedging," ("ASC 815"). For the Hedge, the Company records changes in the fair value of the derivative in other comprehensive income ("OCI") and will subsequently reclassify gains and losses from these changes in fair value from OCI to the unaudited Condensed Consolidated Statement of Operations in the same period that the hedged transaction affects net income and in the same unaudited Condensed Consolidated Statement of Operations category as the hedged item, "Interest expense, net".

The following tables summarize the Company's derivative financial instrument designated as a hedging instrument:

		June 30, 2020		December 31, 2019	
	Balance Sheet Location	**Notional Amount**	**Fair Value Liability**	**Notional Amount**	**Fair Value Asset**
Derivatives designated as hedging instruments					
Interest Rate Swap	Other current (liabilities)/assets	$ 300	$ (15)	$ 300	$ 3
Total derivatives designated as hedging instruments			$ (15)		$ 3

	Amount of Loss Recognized in OCI on Derivatives			
	Successor	**Predecessor**	**Successor**	**Predecessor**
Derivatives designated as hedging instruments	**Three Months Ended June 30, 2020**	**Three Months Ended June 30, 2019**	**Six Months Ended June 30, 2020**	**Six Months Ended June 30, 2019**
Interest Rate Swaps				
Interest Rate Swap	$ (3)	$ —	$ (18)	$ —
Total	$ (3)	$ —	$ (18)	$ —

In the Successor three and six months ended June 30, 2020, the Company reclassified a loss of less than $1 and a gain of less than $1, respectively, from OCI to "Interest expense, net" on the Condensed Consolidated Statement of Operations related to the settlement of a portion of the Hedge.

Interest Rate Cap

In 2019, the Company executed an interest rate cap derivative instrument for a premium amount of less than $1. This instrument is a derivative under ASC 815 that does not qualify for hedge accounting and as a result, changes in fair value are recognized within earnings throughout the term of the instrument. For the Successor three and six months ended June 30, 2020, the Company recognized an unrealized loss of less than $1 for the change in fair value of the instrument, which is included in "Other operating expense, net" in the unaudited Condensed Consolidated Statement of Operations.

Non-derivative Financial Instruments

The following table summarizes the carrying amount and fair value of the Company's non-derivative financial instruments:

	Carrying Amount	Fair Value			
		Level 1	**Level 2**	**Level 3**	**Total**
June 30, 2020					
Debt	$ 1,915	$ —	$ 1,831	$ 57	$ 1,888
December 31, 2019					
Debt	$ 1,785	$ —	$ 1,751	$ 64	$ 1,815

Fair values of debt classified as Level 2 are determined based on other similar financial instruments, or based upon interest rates that are currently available to the Company for the issuance of debt with similar terms and maturities. Level 3 amounts represent finance leases and sale leaseback financing arrangements whose fair value is determined through the use of present value and specific contract terms. The carrying amount and fair value of the Company's debt is exclusive of unamortized deferred financing fees. The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and other accrued liabilities are classified as Level 1 and are considered reasonable estimates of their fair values due to the short-term maturity of these financial instruments.

7. Debt Obligations

Debt outstanding at June 30, 2020 and December 31, 2019 is as follows:

	June 30, 2020		December 31, 2019	
	Long-Term	Due Within One Year	Long-Term	Due Within One Year
Senior Secured Credit Facilities:				
ABL Facility	$ 164	$ —	$ —	$ —
Senior Secured Term Loan - USD due 2026 (includes $6 and $7, respectively, of unamortized debt discount)	704	7	708	7
Senior Secured Term Loan - EUR due 2026 (includes $4 of unamortized debt discount)	473	—	473	—
Senior Notes:				
7.875% Senior Notes due 2027	450	—	450	—
Other Borrowings:				
Australia Facility due 2021	—	28	27	4
Brazilian bank loans	5	16	7	34
Lease obligations [1]	43	14	50	14
Other	—	11	—	11
Total	$ 1,839	$ 76	$ 1,715	$ 70

(1) Lease obligations include finance leases and sale leaseback financing arrangements.

8. Commitments and Contingencies

Environmental Matters

The Company’s operations involve the use, handling, processing, storage, transportation and disposal of hazardous materials. The Company is subject to extensive environmental regulation at the federal, state and local levels as well as foreign laws and regulations, and is therefore exposed to the risk of claims for environmental remediation or restoration. In addition, violations of environmental laws or permits may result in restrictions being imposed on operating activities, substantial fines, penalties, damages or other costs, any of which could have a material adverse effect on the Company’s business, financial condition, results of operations or cash flows.

The following table summarizes all probable environmental remediation, indemnification and restoration liabilities, including related legal expenses, at June 30, 2020 and December 31, 2019:

	Liability		Range of Reasonably Possible Costs at June 30, 2020	
Site Description	**June 30, 2020**	**December 31, 2019**	**Low**	**High**
Geismar, LA	$ 12	$ 12	$ 9	$ 22
Superfund and offsite landfills – allocated share:				
Less than 1%	3	3	2	6
Equal to or greater than 1%	6	6	5	14
Currently-owned	9	8	4	14
Formerly-owned:				
Remediation	18	21	14	37
Monitoring only	—	1	—	1
Total	$ 48	$ 51	$ 34	$ 94

These amounts include estimates for unasserted claims that the Company believes are probable of loss and reasonably estimable. The estimate of the range of reasonably possible costs is less certain than the estimates upon which the liabilities are based. To establish the upper end of a range, assumptions less favorable to the Company among the range of reasonably possible outcomes were used. As with any estimate, if facts or circumstances change, the final outcome could differ materially from these estimates. At June 30, 2020 and December 31, 2019, $19 and $18 of these liabilities have been included in “Other current liabilities” with the remaining amount included in “Other long-term liabilities” within the unaudited Condensed Consolidated Balance Sheets.

Following is a discussion of the Company's environmental liabilities and the related assumptions at June 30, 2020:

Geismar, LA Site—The Company formerly owned a basic chemicals and polyvinyl chloride business that was taken public as Borden Chemicals and Plastics Operating Limited Partnership ("BCPOLP") in 1987. The Company retained a 1% interest, the general partner interest and the liability for certain environmental matters after BCPOLP's formation. Under a Settlement Agreement approved by the United States Bankruptcy Court for the District of Delaware among the Company, BCPOLP, the United States Environmental Protection Agency and the Louisiana Department of Environmental Quality, the Company agreed to perform certain tasks related to BCPOLP's obligations for soil and groundwater contamination at BCPOLP's Geismar, Louisiana site. The Company bears the sole responsibility for these obligations because there are no other potentially responsible parties ("PRP") or third parties from whom the Company could seek reimbursement.

A groundwater pump and treat system to remove contaminants is operational, and natural attenuation studies are proceeding. If closure procedures and remediation systems prove to be inadequate, or if additional contamination is discovered, costs that would approach the higher end of the range of possible outcomes could result.

Due to the long-term nature of the project, the reliability of timing and the ability to estimate remediation payments, a portion of this liability was recorded at its net present value, assuming a 3% discount rate and a time period of 20 years. The range of possible outcomes is discounted in a similar manner. The undiscounted liability, which is expected to be paid over the next 20 years, is approximately $16. Over the next five years, the Company expects to make ratable payments totaling $6.

Superfund Sites and Offsite Landfills—The Company is currently involved in environmental remediation activities at a number of sites for which it has been notified that it is, or may be, a PRP under the United States Comprehensive Environmental Response, Compensation and Liability Act or similar state "superfund" laws. The Company anticipates approximately 50% of the estimated liability for these sites will be paid within the next five years, with the remainder over the next twenty-five years. The Company generally does not bear a significant level of responsibility for these sites, and as a result, has little control over the costs and timing of cash flows.

The Company's ultimate liability will depend on many factors including its share of waste volume, the financial viability of other PRPs, the remediation methods and technology used, the amount of time necessary to accomplish remediation and the availability of insurance coverage. The range of possible outcomes takes into account the maturity of each project, resulting in a more narrow range as the project progresses. To estimate both its current reserves for environmental remediation at these sites and the possible range of additional costs, the Company has not assumed that it will bear the entire cost of remediation of every site to the exclusion of other known PRPs who may be jointly and severally liable. The Company has limited information to assess the viability of other PRPs and their probable contribution on a per site basis. The Company's insurance provides very limited, if any, coverage for these environmental matters.

Sites Under Current Ownership—The Company is conducting environmental remediation at a number of locations that it currently owns, of which ten sites are no longer in operation. As the Company is performing a portion of the remediation on a voluntary basis, it has some control over the costs to be incurred and the timing of cash flows. The factors influencing the ultimate outcome include the methods of remediation elected, the conclusions and assessment of site studies remaining to be completed, and the time period required to complete the work. No other parties are responsible for remediation at these sites.

Formerly-Owned Sites—The Company is conducting, or has been identified as a PRP in connection with, environmental remediation at a number of locations that it formerly owned and/or operated. Remediation costs at these former sites, such as those associated with the Company's former phosphate mining and processing operations, could be material. The Company has accrued those costs for formerly-owned sites which are currently probable and reasonably estimable. One such site is the Coronet Industries, Inc. Superfund Alternative Site in Plant City, Florida. The current owner of the site alleged that it incurred environmental costs at the site for which it has a contribution claim against the Company, and that additional future costs are likely to be incurred. The Company signed a settlement agreement in 2016 with the current site owner and a past site owner, pursuant to which the Company paid $10 for past remediation costs and accepted a 40% allocable share of specified future remediation costs at this site. The Company estimates its allocable share of future remediation costs to be approximately $8. The final costs to the Company will depend on natural variations in remediation costs, including unforeseen circumstances, agency requests, new contaminants of concern and the ongoing financial viability of the other PRPs.

Monitoring Only Sites—The Company is responsible for a number of sites that require monitoring where no additional remediation is expected. The Company has established reserves for costs related to these sites. Payment of these liabilities is anticipated to occur over the next ten or more years. The ultimate cost to the Company will be influenced by fluctuations in projected monitoring periods or by findings that are different than anticipated.

Indemnifications—In connection with the acquisition of certain of the Company's operating businesses, the Company has been indemnified by the sellers against certain liabilities of the acquired businesses, including liabilities relating to both known and unknown environmental contamination arising prior to the date of the purchase. The indemnifications may be subject to certain exceptions and limitations, deductibles and indemnity caps. While it is reasonably possible that some costs could be incurred, except for those sites identified above, the Company has inadequate information to allow it to estimate a potential range of liability, if any.

Non-Environmental Legal Matters

The Company is involved in various legal proceedings in the ordinary course of business and had reserves of $2 at both June 30, 2020 and December 31, 2019 for all non-environmental legal defense costs incurred and settlement costs that it believes are probable and estimable. At both June 30, 2020 and December 31, 2019, $1 has been included in "Other current liabilities" in the unaudited Condensed Consolidated Balance Sheets, with the remaining amount included in "Other long-term liabilities."

Other Legal Matters—The Company is also involved in various product liability, commercial and employment litigation, personal injury, property damage and other legal proceedings, including actions that allege harm caused by products the Company has allegedly made or used, containing silica, vinyl chloride monomer and asbestos. The Company believes it has adequate reserves and that it is not reasonably possible that a loss exceeding amounts already reserved would be material. Furthermore, the Company has insurance to cover claims of these types.

Other Commitments and Contingencies

The Company has contractual agreements with third parties to purchase feedstocks, tolling arrangements or other services. The terms of these different agreements can vary and may be extended at the Company's request and are cancellable by either party as provided for in each agreement. While the agreements vary by scope and terms, early cancellation of contractual agreements could result in one-time contract termination costs.

9. Pension and Postretirement Benefit Plans

The Company's service cost component of net benefit cost is included in "Operating income" and all other components of net benefit cost are included in "Other non-operating income, net" within the Company's unaudited Condensed Consolidated Statements of Operations. The Company recognized less than $1 of net non-pension postretirement benefit cost for both the Successor three and six months ended June 30, 2020 and for the Predecessor three and six months ended June 30, 2019. Following are the components of net pension benefit cost recognized by the Company for the Successor three and six months ended June 30, 2020 and for the Predecessor three and six months ended June 30, 2019:

	Pension Benefits							
	Successor		Predecessor		Successor		Predecessor	
	Three Months Ended June 30, 2020		Three Months Ended June 30, 2019		Six Months Ended June 30, 2020		Six Months Ended June 30, 2019	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Service cost	$ 1	$ 4	$ 1	$ 3	$ 1	$ 9	$ 2	$ 7
Interest cost on projected benefit obligation	1	2	2	2	3	3	4	4
Expected return on assets	(3)	(3)	(3)	(3)	(6)	(6)	(6)	(6)
Net (benefit) expense	$ (1)	$ 3	$ —	$ 2	$ (2)	$ 6	$ —	$ 5

10. Stock Based Compensation

The Company grants stock-based compensation to employees, directors, and other key service providers under the Hexion Holdings Corporation 2019 Omnibus Incentive Plan (the "2019 Incentive Plan"). Under the 2019 Incentive Plan, the Company may grant stock options, restricted stock units, performance stock units and other equity-based awards to be awarded from time to time as the Board of Directors of Hexion Holdings (the "Board") determines. The restricted and performance stock units are deemed to be equivalent to one share of common stock of Hexion Holdings. The awards contain restrictions on transferability and other typical terms and conditions.

In the first quarter of 2020, Hexion Holdings granted 821,758 Restricted Stock Units ("RSUs") to certain employees and non-employee directors that time vest over three years with a weighted average grant date fair value of $15.80 per share. Additionally, Hexion Holdings granted 823,619 Performance Stock Units ("PSUs") to certain employees that vest based on performance conditions with a weighted average grant date fair value of $15.80. Compensation cost will be recognized over the service period of the PSUs once the satisfaction of the applicable performance condition is deemed probable. As of June 30, 2020, the Company performance conditions underlying the PSU's were not considered probable of occurring and thus no PSU expense has been recorded.

As of June 30, 2020, all RSUs and PSUs were unvested and there were an insignificant number of units forfeited.

The Company recognized $4 and $9 of stock-based compensation costs for the Successor three and six months ended June 30, 2020, respectively. There were no stock-based compensation costs for the Predecessor three and six months ended June 30, 2019. The amounts are included in "Selling, general and administrative expense" in the Condensed Consolidated Statements of Operations.

11. Segment Information

Realignment of Reportable Segments in 2020

As part of the Company's continuing efforts to drive growth and greater operating efficiencies, in January 2020, the Company changed its reporting segments to align around its two growth platforms: (i) Adhesives and (ii) Coatings and Composites. At June 30, 2020, the Company has three reportable segments, which consist of the following businesses:

- **Adhesives**: these businesses focus on the global adhesives market. They include the Company's global wood adhesives business, including: forest products resin assets in North America, Latin America, Europe, Australia and New Zealand; global formaldehyde; and the global phenolic specialty resins business, which now also includes the oilfield technologies group.

- **Coatings and Composites**: these businesses focus on the global coatings and composites market. They include the Company's base and specialty epoxy resins and Versatic™ Acids and Derivatives businesses.
- **Corporate and Other**: primarily corporate general and administrative expenses that are not allocated to the other segments, such as shared service and administrative functions and foreign exchange gains and losses.

The Company has recast its Net Sales and Segment EBITDA (as defined below) for the Predecessor three and six months ended June 30, 2019 to reflect the new reportable segments. The recast of previously issued financial information does not represent a correction of error with respect to, and has no impact on, the Company's previously issued financial statements.

Reportable Segments

Following are net sales and Segment EBITDA by reportable segment. Segment EBITDA is defined as EBITDA (earnings before interest, income taxes, depreciation and amortization) adjusted for certain non-cash items and other income and expenses. Segment EBITDA is the primary performance measure used by the Company's senior management, the chief operating decision-maker and the Board of Directors to evaluate operating results and allocate capital resources among segments. Segment EBITDA is also the profitability measure used to set management and executive incentive compensation goals. Corporate and Other is primarily corporate general and administrative expenses that are not allocated to the other segments, such as shared service and administrative functions and foreign exchange gains and losses not allocated to continuing segments.

Net Sales [1]:

Following is revenue by reportable segment. Product sales within each reportable segment share economically similar risks. These risks include general economic and industrial conditions, competitive pricing pressures and the Company's ability to pass on fluctuations in raw material prices to its customers. A substantial number of the Company's raw material inputs are petroleum-based and their prices fluctuate with the price of oil. Due to differing regional industrial and economic conditions, the geographic distribution of revenue may impact the amount, timing and uncertainty of revenue and cash flows from contracts with customers.

Following is net sales by reportable segment disaggregated by geographic region:

	Successor			Predecessor		
	Three Months Ended June 30, 2020			Three Months Ended June 30, 2019 [2]		
	Adhesives	Coatings and Composites	Total	Adhesives	Coatings and Composites	Total
North America	$ 224	$ 104	$ 328	$ 326	$ 149	$ 475
Europe	69	106	175	103	152	255
Asia Pacific	30	72	102	40	74	114
Latin America	23	—	23	48	—	48
Total	$ 346	$ 282	$ 628	$ 517	$ 375	$ 892

	Successor			Predecessor		
	Six Months Ended June 30, 2020			Six Months Ended June 30, 2019[2]		
	Adhesives	Coatings and Composites	Total	Adhesives	Coatings and Composites	Total
North America	$ 520	$ 258	$ 778	$ 659	$ 285	$ 944
Europe	171	260	431	217	304	521
Asia Pacific	62	122	184	81	129	210
Latin America	61	—	61	103	—	103
Total	$ 814	$ 640	$ 1,454	$ 1,060	$ 718	$ 1,778

(1) Intersegment sales are not significant and, as such, are eliminated within the selling segment.
(2) Previously reported Net Sales by reportable segment for the Predecessor three and six months ended June 30, 2019 is shown below:

	Predecessor					
	Three Months Ended June 30, 2019			Six Months Ended June 30, 2019		
	Forest Products Resins	Epoxy, Phenolic and Coating Resins	Total	Forest Products Resins	Epoxy, Phenolic and Coating Resins	Total
North America	$ 259	$ 216	$ 475	$ 519	$ 425	$ 944
Europe	43	212	255	90	431	521
Asia Pacific	30	84	114	63	147	210
Latin America	48	—	48	103	—	103
Total	$ 380	$ 512	$ 892	$ 775	$ 1,003	$ 1,778

Reconciliation of Net Loss to Segment EBITDA:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Reconciliation:				
Net loss attributable to Hexion Inc.	$ (42)	$ (108)	$ (101)	$ (160)
Net income attributable to noncontrolling interest	—	(1)	—	(1)
Net loss	$ (42)	$ (107)	$ (101)	$ (159)
Income tax (benefit) expense	(11)	8	(8)	15
Interest expense, net	25	9	51	89
Depreciation and amortization [1]	56	26	114	52
EBITDA	28	(64)	56	(3)
Adjustments to arrive at Segment EBITDA:				
Asset impairments	$ —	$ —	$ 16	$ —
Business realignment costs [2]	18	11	39	15
Transaction costs [3]	4	3	7	26
Realized and unrealized foreign currency (gains) losses	—	(7)	6	(6)
Reorganization items, net [4]	—	156	—	156
Other non-cash items [5]	13	7	25	9
Other [6]	2	6	5	18
Total adjustments	37	176	98	218
Segment EBITDA	$ 65	$ 112	$ 154	$ 215
Segment EBITDA [7]:				
Adhesives	$ 51	$ 73	$ 122	$ 149
Coatings and Composites	26	52	65	96
Corporate and Other	(12)	(13)	(33)	(30)
Total	$ 65	$ 112	$ 154	$ 215

(1) For the three and six months ended June 30, 2020, accelerated depreciation of less than $1 and $2, respectively, has been included in “Depreciation and amortization.”

(2) Business realignment costs for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Severance costs	$ 2	$ 7	$ 10	$ 9
In-process facility rationalizations	5	1	12	3
Business services implementation	8	—	12	—
Legacy environmental reserves	2	1	4	1
Other	1	2	1	2

(3) For the Successor three and six months ended June 30, 2020, transaction costs included certain professional fees related to strategic projects. For the Predecessor three and six months ended June 30, 2019, transaction costs primarily included $2 and $21, respectively, of certain professional fees and other expenses related to the Company’s Chapter 11 Proceedings.

(4) Represents incremental costs incurred directly as a result of the Company’s Chapter 11 proceedings after the date of filing.

(5) Other non-cash items for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Fixed asset write-offs	$ 6	$ 2	$ 8	$ 3
Stock-based compensation costs	4	—	9	—
Long-term retention programs	3	4	6	5
Other	—	1	2	1

(6) Other for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Legacy expenses	$ 2	$ —	$ 5	$ 3
IT outage costs (recoveries), net	(2)	5	(4)	10
Management fees and other	2	1	4	5

(7) Previously reported Segment EBITDA by reportable segment for the Predecessor three and six months ended June 30, 2019 is shown below:

	Predecessor	
	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Segment EBITDA:		
Forest Products Resins	$ 66	$ 134
Epoxy, Phenolic and Coating Resins	59	111
Corporate and Other	(13)	(30)
Total	$ 112	$ 215

12. Changes in Accumulated Other Comprehensive Loss

Following is a summary of changes in "Accumulated other comprehensive loss" for the Successor three and six months ended June 30, 2020 and the Predecessor three and six months ended June 30, 2019:

	Defined Benefit Pension and Postretirement Plans	Foreign Currency Translation Adjustments	Cash Flow Hedge	Total
Predecessor				
Balance at March 31, 2019	$ (1)	$ (17)	$ —	$ (18)
Change in value	—	(8)	—	(8)
Balance at June 30, 2019	$ (1)	$ (25)	$ —	$ (26)
Balance at December 31, 2018	$ (1)	$ (17)	$ —	$ (18)
Change in value	—	(8)	—	(8)
Balance at June 30, 2019	$ (1)	$ (25)	$ —	$ (26)
Successor				
Balance at March 31, 2020	$ —	$ (45)	$ (13)	$ (58)
Change in value	—	6	(3)	3
Balance at June 30, 2020	$ —	$ (39)	$ (16)	$ (55)
Balance at December 31, 2019	$ —	$ (3)	$ 2	$ (1)
Change in value	—	(36)	(18)	(54)
Balance at June 30, 2020	$ —	$ (39)	$ (16)	$ (55)

13. Income Taxes

The income tax (benefit) expense for the Successor three months ended June 30, 2020 and the Predecessor three months ended June 30, 2019 was $(11) and $8, respectively. The income tax (benefit) expense for the Successor six months ended June 30, 2020 and the Predecessor six months ended June 30, 2019 was $(8) and $15, respectively. The income tax (benefit) expense is comprised of tax expense on income and tax benefit on losses from certain foreign operations. In 2020 and 2019, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance.

The effective tax rate for the Successor three months ended June 30, 2020 and for the Predecessor three months ended June 30, 2019 was 20% and (8)%, respectively. The effective tax rate for the Successor six months ended June 30, 2020 and for the Predecessor six months ended June 30, 2019 was 7% and (10)%, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which the Company operates. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations (dollar amounts in millions)

The following commentary should be read in conjunction with the audited Consolidated Financial Statements and the accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Company's most recent Annual Report on Form 10-K.

Within the following discussion, unless otherwise stated, "the second quarter of 2020" refers to the three months ended June 30, 2020 and "the second quarter of 2019" refers to the three months ended June 30, 2019, "the first half of 2020" refers to the six months ended June 30, 2020 and "the first half of 2019" refers to the six months ended June 30, 2019.

Forward-Looking and Cautionary Statements

Certain statements in this report, including without limitation, certain statements made under the caption "Overview and Outlook," are forward-looking statements within the meaning of and made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In addition, our management may from time to time make oral forward-looking statements. All statements, other than statements of historical facts, are forward-looking statements. Forward-looking statements may be identified by the words "believe," "expect," "anticipate," "project," "might," "plan," "estimate," "may," "will," "could," "should," "seek" or "intend" and similar expressions. Forward-looking statements reflect our current expectations and assumptions regarding our business, the economy and other future events and conditions and are based on currently available financial, economic and competitive data and our current business plans. Actual results could vary materially depending on risks and uncertainties that may affect our operations, markets, services, prices and other factors as discussed in the Risk Factors section of this report and our other filings with the SEC. While we believe our assumptions are reasonable, we caution you against relying on any forward-looking statements as it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, a weakening of global economic and financial conditions, interruptions in the supply of or increased cost of raw materials, the loss of, or difficulties with the further realization of, cost savings in connection with our strategic initiatives, the impact of our indebtedness, our failure to comply with financial covenants under our credit facilities or other debt, pricing actions by our competitors that could affect our operating margins, changes in governmental regulations and related compliance and litigation costs, uncertainties related to COVID-19 and the impact of our responses to it and the other factors listed in the Risk Factors section of this report and in our other SEC filings. For a more detailed discussion of these and other risk factors, see the Risk Factors section of this report and our most recent filings made with the SEC. All forward-looking statements are expressly qualified in their entirety by this cautionary notice. The forward-looking statements made by us speak only as of the date on which they are made. Factors or events that could cause our actual results to differ may emerge from time to time. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

Overview and Outlook

COVID-19 Impact

In March 2020, the World Health Organization categorized COVID-19 as a global pandemic. Around the world, local governments' responses to COVID-19 continue to evolve, which has led to stay-at-home orders, social distancing guidelines and other preventative measures that have disrupted various industries in the global economy and the markets in which our products are manufactured, distributed and sold.

During this pandemic, we have implemented additional guidelines to further protect the health and safety of our employees as we continue to operate with our suppliers and customers. We have committed to maintaining a paramount focus on the safety of our employees while minimizing potential disruptions caused by COVID-19. For example we are following all legislatively-mandated travel directives in the various countries where we operate, and we have also put additional travel restrictions in place for our associates designed to reduce the risk from COVID-19. Additionally, we are utilizing extended work from home options to protect our office associates, while adjusting our meeting protocols and processes at our manufacturing sites.

Our businesses have been designated by many governments as essential businesses and our operations have continued through June 30, 2020. While we have continued to operate during the pandemic, we did incur adverse financial impacts to our sales and profitability results during the three and six months ended June 30, 2020 from COVID-19, primarily related to reduced volumes associated with the pandemic. The pandemic has impacted global economic conditions and lowered demand in many of the end use markets in which the Company operates such as automotive, aerospace, industrial products, oil and gas, construction and housing. The ultimate impact that COVID-19 will have on our future financial position, operating results and cash flows involves numerous risks and uncertainties, including new information which may emerge concerning the severity and duration of COVID-19 and actions to contain the virus or treat its impact.

Business Overview

We are a large participant in the specialty chemicals industry, one of the world's largest producers of thermosetting resins, or thermosets, and a leading producer of adhesive and structural resins and coatings. Thermosets are a critical ingredient for most paints, coatings, glues and other adhesives produced for consumer or industrial uses. We provide a broad array of thermosets and associated technologies and have significant market positions in all of the key markets that we serve.

Our products are used in thousands of applications and are sold into diverse markets, such as forest products, architectural and industrial paints, packaging, consumer products and automotive coatings, as well as higher growth markets, such as wind energy and electrical composites. Major industry sectors that we serve include industrial/marine, construction, consumer/durable goods, automotive, wind energy, aviation, electronics, architectural, civil engineering, repair/remodeling and oil and gas drilling. Key drivers for our business include general economic and industrial conditions, including housing starts and auto build rates. In addition, due to the nature of our products and the markets we serve, competitor capacity constraints and the availability of similar products in the market may impact our results. As is true for many industries, our financial results are impacted by the effect on our customers of economic upturns or downturns, as well as by the impact on our own costs to produce, sell and deliver our products. Our customers use most of our products in their production processes. As a result, factors that impact their industries can and have significantly affected our results.

Through our worldwide network of strategically located production facilities, we serve more than 3,100 customers in approximately 85 countries. Our global customers include large companies in their respective industries, such as Akzo Nobel, BASF, Norbord, Louisiana Pacific, Monsanto, Owens Corning, PPG Industries, Sherwin Williams and Weyerhaeuser.

Realignment of Reportable Segments in 2020

As part of our continuing efforts to drive growth and greater operating efficiencies, in January 2020, we changed our reporting segments to align around our two growth platforms: Adhesives; and Coatings and Composites. At June 30, 2020, we have three reportable segments, which consist of the following businesses:

- **Adhesives**: these businesses focus on the global adhesives market. They include our global wood adhesives business, including: forest products resin assets in North America, Latin America, Europe, Australia and New Zealand; global formaldehyde; and the global phenolic specialty resins business, which now also includes the oilfield technologies group.

- **Coatings and Composites**: these businesses focus on the global coatings and composites market. They include our base and specialty epoxy resins and Versatic™ Acids and Derivatives businesses.

- **Corporate and Other**: primarily corporate general and administrative expenses that are not allocated to the other segments, such as shared service and administrative functions and foreign exchange gains and losses.

In this quarterly report on form 10-Q, we have recast our Net Sales and Segment EBITDA by reportable segment, for the comparable Predecessor three and six months ended June 30, 2019 to reflect the new reportable segments. The recast of previously issued financial information does not represent a correction of error with respect to, and has no impact on, our previously issued financial statements.

Fresh Start Accounting

As a result of the Company’s reorganization and emergence from Chapter 11 on the Effective Date, we applied fresh start accounting to our financial statements, which resulted in a new basis of accounting and we became a new entity for financial reporting purposes. As a result of the application of fresh start accounting and the effects of the implementation of the Plan, the Condensed Consolidated Financial Statements after the Effective Date are not comparable with the Condensed Consolidated Financial Statements prior to that date. References to “Successor” or “Successor Company” relate to the financial position and results of operations of the Company after the Effective Date. References to “Predecessor” or “Predecessor Company” refer to the financial position and results of operations of the Company on or before the Effective Date.

2020 Overview

Following are highlights from our results of operations for the six months ended June 30, 2020 and 2019:

	Successor	Predecessor		
	June 30, 2020	June 30, 2019	$ Change	% Change
Statements of Operations:				
Net sales	$ 1,454	$ 1,778	$ (324)	(18)%
Operating (loss) income	(64)	88	(152)	(173)%
Loss before income tax	(111)	(146)	35	24 %
Net loss	(101)	(159)	58	36 %
Segment EBITDA:				
Adhesives	$ 122	$ 149	$ (27)	(18)%
Coatings and Composites	65	96	(31)	(32)%
Corporate and Other	(33)	(30)	(3)	(10)%
Total	$ 154	$ 215	$ (61)	(28)%

- ***Net Sales***—In the first half of 2020, net sales decreased by $324, or 18%, compared to the first half of 2019. COVID-19's global impact on demand across various industries and markets in the second quarter of 2020 was the main driver of the decrease in net sales. Volumes negatively impacted net sales by $194, which was primarily related to volume decreases in our North American resins business due to weaker demand and in our base epoxy and phenolic resins businesses due to overall weakness in the market, primarily in the automotive and construction industries. Pricing negatively impacted sales by $98 due primarily to raw material price decreases contractually passed through to customers across many of our businesses, as well as softer market conditions in our base epoxy resins business. Foreign currency translation negatively impacted net sales by $32 due to the weakening of various foreign currencies against the U.S. dollar in the first half of 2020 compared to the first half of 2019.

- ***Net Loss***—In the first half of 2020, net loss decreased by $58 as compared to the first half of 2019. This decrease in net loss was mainly driven by $156 of reorganization costs incurred in the first half of 2019 and a reduction in interest expense of $38 as a result of the restructuring of our debt through our Chapter 11 proceedings. These were partially offset by a reduction in operating income of $152, primarily related to an increase of $62 in depreciation and amortization expense related to the step up of our fixed and intangible assets as a result of the application of fresh-start accounting, $16 of asset impairments in our oilfield and phenolic specialty resins businesses in the first quarter 2020, a $24 increase in business realignment costs driven by higher severance expenses related to current cost reduction actions and a decrease in gross profit due primarily to the impacts of COVID-19 on volumes in our businesses.

- ***Segment EBITDA***—For the first half of 2020, Segment EBITDA was $154, a decrease of 28% compared with $215 in the first half of 2019. This decrease was primarily due to the impacts of COVID-19 on volumes in our businesses, most notably in our base epoxy resins and forest products resins businesses. We also experienced a temporary manufacturing outage at our Pernis site, which negatively impacted our second quarter 2020 Segment EBITDA by approximately $8. These Segment EBITDA decreases were partially offset by favorability in our specialty epoxy business driven by strong global demand in wind energy.

- ***Restructuring and Cost Reduction Activities*—**During the first half of 2020, we achieved $8 in cost savings related to our cost reduction activities. These activities include certain in-process facility rationalizations and the creation of a business service group within the Company to provide certain administrative functions for us going forward. Overall we have $11 of in-process cost savings related to these activities, which we expect to realize over the next 12 months.

Short-term Outlook

Overall, we expect negative COVID-19 volume impacts to continue to challenge our business results throughout the remainder of 2020. While our businesses have been designated by many governments as essential businesses which has allowed our operations to continue during the pandemic, we saw weaker economic conditions begin to develop in the latter half of March 2020 and through the second quarter, specifically within automotive and certain industrial markets. We expect these weaknesses and overall lower global economic demand caused by COVID-19 to negatively impact our sales and profitability results through the remainder of 2020. The ultimate impact that COVID-19 will have on our operating results will depend on the severity and duration of the COVID-19 pandemic and actions to contain the virus or treat its impact.

We anticipate that the COVID-19 pandemic will have an impact on our overall Coatings and Composites segment due to the markets and geographies in which this segment operates. Despite overall economic headwinds, we expect our epoxy specialty business to continue to benefit from government supported investment in the China wind energy market, as well as a strong overall global wind energy market. We expect competitive market conditions in our base epoxy business to continue throughout 2020.

Within our Adhesives segment, we expect year over year declines in Segment EBITDA in our North American forest products resins business based on COVID-19's impact on the latest expectations in U.S. housing starts, remodeling and macroeconomic conditions. We also expect COVID-19 to negatively impact market demand for volumes in our North American formaldehyde business throughout the remainder of 2020. We also expect weaker volumes in our phenolic specialty resins business due primarily to the impact of COVID-19 on the automotive industry.

We also anticipate that our businesses will continue to benefit from the savings associated with our restructuring and cost reduction initiatives. In addition, we expect lower raw material costs to positively impact results across many of our businesses. Further, we plan to implement efficiency initiatives in 2020, which include process improvement and other productivity projects. Lastly, despite the prevailing economic headwinds, the benefits of our new capital structure and decreasing working capital will have a positive impact on free cash flow in 2020.

Matters Impacting Comparability of Results

Chapter 11 Bankruptcy and Fresh Start Accounting Impacts

As a result of the emerging from Chapter 11 and qualifying for the application of fresh-start accounting, at the Effective Date, our assets and liabilities were recorded at their estimated fair values which, in some cases, were significantly different than amounts included in our financial statements prior to the Effective Date. Accordingly, our financial condition and results of operations on and after the Effective Date are not directly comparable to our financial condition and results of operations prior to the Effective Date. Specifically, our depreciation and amortization expense after the Effective Date reflects the step-up of fixed and intangible assets as a result of fresh-start accounting, and our interest expense after the Effective Date reflects the restructuring of our debt through the Chapter 11 process.

In addition, during the first half of 2019, we incurred $179 directly related to our Chapter 11 proceedings. These costs included certain professional fees, financing fees payable, DIP ABL Facility fees, and other legal fees and expenses. Of these costs, $156 are classified within “Reorganization items, net” and we incurred $21 of costs related to our Chapter 11 proceedings prior to filing which are classified within “Selling, general and administrative expense” in the unaudited Condensed Consolidated Statements of Operations.

Raw Material Prices

Raw materials comprise approximately 80% of our cost of sales (excluding depreciation expense). The three largest raw materials used in our production processes are phenol, methanol and urea. These materials represent about half of our total raw material costs. Fluctuations in energy costs, such as volatility in the price of crude oil and related petrochemical products, as well as the cost of natural gas have historically caused volatility in our raw material and utility costs. In the first half of 2020 compared to the first half of 2019, the average price of phenol, urea and methanol decreased by approximately 5%, 8% and 20%, respectively. The impact of passing through raw material price changes to customers can result in significant variances in sales comparisons from year to year.

We expect long-term raw material cost volatility to continue because of price movements of key feedstocks. To help mitigate raw material volatility, we have purchase and sale contracts and commercial arrangements with many of our vendors and customers that contain periodic price adjustment mechanisms. Due to differences in timing of the pricing trigger points between our sales and purchase contracts, there is often a “lead-lag” impact. In many cases this “lead-lag” impact can negatively impact our margins in the short term in periods of rising raw material prices and positively impact them in the short term in periods of falling raw material prices.

Other Comprehensive Loss

Our other comprehensive loss is primarily impacted by foreign currency translation. The impact of foreign currency translation is driven by the translation of assets and liabilities of our foreign subsidiaries which are denominated in functional currencies other than the U.S. dollar. Our non-U.S. operations accounted for approximately 56% of our sales in the first half of 2020. The primary assets and liabilities driving the adjustments are cash and cash equivalents; accounts receivable; inventory; property, plant and equipment; accounts payable; pension and other postretirement benefit obligations and certain intercompany loans payable and receivable. The primary currencies in which these assets and liabilities are denominated are the euro, Brazilian real, Chinese yuan, Canadian dollar and Australian dollar.

In 2019, we entered into an interest rate swap agreement to hedge interest rate variability caused by quarterly changes in cash flow due to associated changes in LIBOR under our Senior Secured Term Loan. This swap is designated as a cash flow hedge and the change in fair value was recorded in “Accumulated other comprehensive loss”.

The impact of defined benefit pension and postretirement benefit adjustments is primarily driven by unrecognized prior service cost related to our defined benefit and other non-pension postretirement benefit plans (“OPEB”), as well as the subsequent amortization of these amounts from accumulated other comprehensive income in periods following the initial recording of such amounts. Upon the application of fresh start accounting, on the Effective Date, all prior unrecognized service cost within accumulated other comprehensive income related to our defined benefit pension and OPEB plans were reset in accordance with ASC 852.

Results of Operations

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Successor		Predecessor	
	Three Months Ended June 30, 2020		Three Months Ended June 30, 2019	
	$	% of Net Sales	$	% of Net Sales
Net sales	$ 628	100 %	$ 892	100 %
Cost of sales (exclusive of depreciation and amortization shown below)	528	84 %	735	82 %
Selling, general and administrative expense	55	9 %	57	6 %
Depreciation and amortization	56	9 %	26	3 %
Business realignment costs	18	3 %	11	1 %
Other operating expense, net	4	1 %	8	1 %
Operating (loss) income	(33)	(5)%	55	6 %
Interest expense, net	25	4 %	9	1 %
Other non-operating income, net	(4)	(1)%	(10)	(1)%
Reorganization items, net	—	— %	156	17 %
Total non-operating expense	21	3 %	155	17 %
Loss before income tax and earnings from unconsolidated entities	(54)	(9)%	(100)	(11)%
Income tax (benefit) expense	(11)	(2)%	8	1 %
Loss before earnings from unconsolidated entities	(43)	(7)%	(108)	(12)%
Earnings from unconsolidated entities, net of taxes	1	— %	1	— %
Net loss	(42)	(7)%	(107)	(12)%
Net income attributable to noncontrolling interest	—	— %	(1)	— %
Net loss attributable to Hexion Inc.	$ (42)	(7)%	$ (108)	(12)%
Other comprehensive income (loss)	$ 3		$ (8)	

Three Months Ended June 30, 2020 vs. Three Months Ended June 30, 2019

Net Sales

In the second quarter of 2020, net sales decreased by $264, or 30%, compared to the second quarter of 2019. Volume decreases in the second quarter of 2020 driven by COVID-19's global economic impact across various industries and markets was the main driver of the decrease in net sales. Volumes negatively impacted net sales by $206, which was primarily related to volume decreases in our North American resins business due to weaker demand and in our base epoxy and phenolic resins businesses due to overall weakness in the market, primarily in the automotive and construction industries. Pricing negatively impacted sales by $41 due primarily to raw material price decreases contractually passed through to customers across many of our businesses, as well as softer market conditions in our base epoxy resins business. Foreign currency translation negatively impacted net sales by $17 due to weakening of various foreign currencies against the U.S. dollar in the second quarter of 2020 compared to the second quarter of 2019.

Operating Income

In the second quarter of 2020, operating (loss) income decreased by $88 from operating income of $55 in the second quarter of 2019 to an operating loss of $33 in the second quarter 2020. This was primarily driven by the impacts of COVID-19 on volumes in our businesses discussed above, increases in depreciation and amortization of $30 and an increase in business realignment costs of $7. The increase in depreciation and amortization is due to the step up of our fixed and intangible assets as a result of fresh start accounting adjustments and the increase in business realignment costs is driven by higher severance expenses related to current cost reduction actions.

Non-Operating Expense

In the second quarter of 2020, total non-operating expense decreased by $134 compared to the second quarter of 2019. This was due to $156 of reorganization costs related to our Chapter 11 proceedings in the second quarter of 2019, partially offset by an increase in interest expense of $16 as during our Chapter 11 proceedings in the second quarter of 2019, we did not incur interest expense on certain of our debt instruments and a decrease of $6 in other non-operating income driven by lower realized and unrealized foreign currency gains.

Income Tax Expense

The income tax (benefit) expense for the Successor three months ended June 30, 2020, and the Predecessor three months ended June 30, 2019 was $(11) and $8, respectively. The income tax (benefit) expense relates primarily to losses and income from certain foreign operations as well as the impacts of reorganization adjustments and fresh start accounting. In 2020 and 2019, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance.

The effective tax rate for the Successor three months ended June 30, 2020, and the Predecessor three months ended June 30, 2019 was 20% and (8)%, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which we operate. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

Other Comprehensive Income

For the second quarter of 2020, foreign currency translation positively impacted other comprehensive income by $6, due primarily to the strengthening of the euro against the U.S. dollar in the second quarter of 2020, partially offset by an unrealized loss of $3 on an interest rate swap designated as a cash flow hedge recorded to other comprehensive income.

For the second quarter of 2019, foreign currency translation negatively impacted other comprehensive loss by $8, primarily due to the weakening of various foreign currencies against the U.S. dollar in the second quarter of 2019.

	Successor		Predecessor	
	Six Months Ended June 30, 2020		Six Months Ended June 30, 2019	
	$	% of Net Sales	$	% of Net Sales
Net sales	$ 1,454	100 %	$ 1,778	100 %
Cost of sales (exclusive of depreciation and amortization shown below)	1,208	83 %	1,462	82 %
Selling, general and administrative expense	130	9 %	145	8 %
Depreciation and amortization	114	8 %	52	3 %
Asset impairments	16	1 %	—	— %
Business realignment costs	39	3 %	15	1 %
Other operating expense, net	11	1 %	16	1 %
Operating (loss) income	(64)	(4) %	88	5 %
Interest expense, net	51	4 %	89	5 %
Other non-operating income, net	(4)	— %	(11)	(1) %
Reorganization items, net	—	— %	156	9 %
Total non-operating expense	47	3 %	234	13 %
Loss before income tax and earnings from unconsolidated entities	(111)	(8) %	(146)	(8) %
Income tax (benefit) expense	(8)	(1) %	15	1 %
Loss before earnings from unconsolidated entities	(103)	(7) %	(161)	(9) %
Earnings from unconsolidated entities, net of taxes	2	— %	2	— %
Net loss	(101)	(7) %	(159)	(9) %
Net income attributable to noncontrolling interest	—	— %	(1)	— %
Net loss attributable to Hexion Inc.	$ (101)	(7) %	$ (160)	(9) %
Other comprehensive loss	$ (54)		$ (8)	

Six Months Ended June 30, 2020 vs. Six Months Ended June 30, 2019

Net Sales

In the first half of 2020, net sales decreased by $324, or 18%, compared to the first half of 2019. Volume decreases in the second quarter of 2020 driven by COVID-19's global economic impact across various industries and markets was the main driver of the decrease in net sales. Volumes negatively impacted net sales by $194 which was primarily related to volume decreases in our North American resins business due to weaker demand and in our base epoxy and phenolic resins businesses due to overall weakness in the market, primarily in the automotive and construction industries. Pricing negatively impacted sales by $98 due primarily to raw material price decreases contractually passed through to customers across many of our businesses, as well as softer market conditions in our base epoxy resins business. Foreign currency translation negatively impacted net sales by $32 due to the weakening of various foreign currencies against the U.S. dollar in the first half of 2020 compared to the first half of 2019.

Operating Income

In the first half of 2020, operating (loss) income decreased by $152 from operating income of $88 in the first half of 2019 to an operating loss of $64 in the first half of 2020. This decrease was driven by an increase of $62 in depreciation and amortization expense related to the step up of our fixed and intangible assets as a result of the application of fresh-start accounting, a $24 increase in business realignment costs driven by higher severance expenses related to current cost reduction actions and a decrease in gross profit due primarily to the impacts of COVID-19 on our businesses discussed above. These reductions to operating income were partially offset by $21 of costs related to our Chapter 11 proceedings incurred in the first quarter 2019 prior to filing for bankruptcy.

Non-Operating Expense

In the first half of 2020, total non-operating expense decreased by $187 compared to the first half of 2019 due primarily to $156 of reorganization costs related to our Chapter 11 proceedings in the second quarter of 2019 and a decrease in interest expense of $38 as a result of the restructuring of our debt through our Chapter 11 proceedings, partially offset by a decrease of $7 in other non-operating income driven by lower realized and unrealized foreign currency gains.

Income Tax Expense

The income tax (benefit) expense for the Successor six months ended June 30, 2020 and the Predecessor six months ended June 30, 2019 was $(8) and $15, respectively. The income tax (benefit) expense is comprised of tax expense on income and tax benefit on losses from certain foreign operations. In 2020 and 2019, losses in the United States and certain foreign jurisdictions had no impact on income tax expense as no tax benefit was recognized due to the maintenance of a full valuation allowance.

The effective tax rate for the Successor six months ended June 30, 2020 and for the Predecessor six months ended June 30, 2019 was 7% and (10)%, respectively. The change in the effective tax rate was primarily attributable to the amount and distribution of income and losses among the various jurisdictions in which we operate. The effective tax rates were also impacted by operating gains and losses generated in jurisdictions where no tax expense or benefit was recognized due to the maintenance of a full valuation allowance.

Other Comprehensive Loss

For the first half of 2020, foreign currency translation negatively impacted other comprehensive loss by $36, due to an overall weakening of various foreign currencies against the U.S. dollar in the first half of 2020 and an unrealized loss of $18 on an interest rate swap designated as a cash flow hedge recorded to other comprehensive loss.

For the first half of 2019, foreign currency translation negatively impacted other comprehensive loss by $8, primarily due to an overall weakening of various foreign currencies against the U.S. dollar in the first half of 2019.

Results of Operations by Segment

Following are net sales and Segment EBITDA (earnings before interest, income taxes, depreciation and amortization) by reportable segment. Segment EBITDA is defined as EBITDA adjusted for certain non-cash items and other income and expenses. Segment EBITDA is the primary performance measure used by our senior management, the chief operating decision-maker and the Board of Directors to evaluate operating results and allocate capital resources among segments. Segment EBITDA is also the profitability measure used to set management and executive incentive compensation goals. Segment EBITDA should not be considered a substitute for net loss or other results reported in accordance with U.S. GAAP. Segment EBITDA may not be comparable to similarly titled measures reported by other companies.

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019 [2]	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019 [2]
Net Sales [1]:				
Adhesives	$ 346	$ 517	$ 814	$ 1,060
Coatings and Composites	282	375	640	718
Total	$ 628	$ 892	$ 1,454	$ 1,778
Segment EBITDA:				
Adhesives	$ 51	$ 73	$ 122	$ 149
Coatings and Composites	26	52	65	96
Corporate and Other	(12)	(13)	(33)	(30)
Total	$ 65	$ 112	$ 154	$ 215

(1) Intersegment sales are not significant and, as such, are eliminated within the selling segment.

(2) Previously reported Net Sales and Segment EBITDA by reportable segment for the Predecessor three and six months ended June 30, 2019 is shown below:

	Predecessor		Predecessor	
	Three Months Ended June 30, 2019		Six Months Ended June 30, 2019	
Net Sales:				
Forest Products Resins	$	380	$	775
Epoxy, Phenolic and Coating Resins		512		1,003
Total	$	892	$	1,778
Segment EBITDA:				
Forest Products Resins	$	66	$	134
Epoxy, Phenolic and Coating Resins		59		111
Corporate and Other		(13)		(30)
Total	$	112	$	215

Three Months Ended June 30, 2020 vs. Three Months Ended June 30, 2019 Segment Results

Following is an analysis of the percentage change in net sales by segment from the Predecessor three months ended June 30, 2019 to the Successor three months ended June 30, 2020:

	Volume	Price/Mix	Currency Translation	Total
Adhesives	(26) %	(4) %	(3) %	(33) %
Coatings and Composites	(18) %	(5) %	(2) %	(25) %

Adhesives

Net sales in the second quarter of 2020 decreased by $171, or 33%, when compared to the second quarter of 2019. Volume decreases in the second quarter of 2020 driven by COVID-19’s global economic impact across various industries and markets was the main driver of the decrease in net sales. Volumes negatively impacted net sales by $137, due to volume decreases in our North American and Latin American resins businesses and decreases within our phenolic specialty resins business driven by overall market conditions. Pricing negatively impacted net sales by $21, which was primarily due to raw material price decreases contractually passed through to customers across many of our businesses. Foreign currency translation negatively impacted net sales by $13 mainly due to the strengthening of the U.S dollar against various foreign currencies in the second quarter of 2020 compared to the second quarter of 2019.

Segment EBITDA in the second quarter of 2020 decreased by $22, to $51, compared to the second quarter of 2019. This decrease was primarily driven by COVID-19 impacts on volumes in our North American forest products resins and phenolic specialty resins businesses, as discussed above.

Coatings and Composites

Net sales in the second quarter of 2020 decreased by $93, or 25%, when compared to the second quarter of 2019. Volume decreases in the second quarter of 2020 driven by COVID-19’s global economic impact across various industries and markets was the main driver for the decrease in net sales. Volumes negatively impacted net sales by $69, which was primarily related to volume decreases in our base epoxy and versatic acid businesses driven by overall weakness in the market, primarily in the automotive and construction industries. These volume decreases were partially offset by favorability in our specialty epoxy business driven by strong global demand in wind energy. Pricing negatively impacted net sales by $20, due primarily to raw material decreases contractually passed through to customers across many of our businesses, as well as continued competitive market conditions in our base epoxy resins business. Lastly, foreign currency translation negatively impacted net sales by $4, due primarily to the strengthening of the U.S. dollar against the euro and Chinese yuan in the second quarter of 2020 compared to the second quarter of 2019.

Segment EBITDA in the second quarter of 2020 decreased by $26 to $26, compared to the second quarter of 2019. The decrease was primarily due to COVID-19 impacts and continued competitive market conditions in our base epoxy resins business discussed above, as well as a temporary manufacturing outage at our Pernis site, which negatively impacted our second quarter 2020 Segment EBITDA by approximately $8. These Segment EBITDA decreases were partially offset by favorability in our specialty epoxy business driven by strong global demand in wind energy.

Corporate and Other

Corporate and Other is primarily corporate, general and administrative expenses that are not allocated to the other segments, such as shared service and administrative functions and unallocated foreign exchange gains and losses. Corporate and Other charges in the second quarter of 2020 decreased $1 compared to the second quarter of 2019 due primarily to lower compensation costs, travel expenses and savings associated with our ongoing cost reduction efforts, partially offset by the impact of termination of our Shared Services Agreement with MPM.

Six Months Ended June 30, 2020 vs. Six Months Ended June 30, 2019 Segment Results

Following is an analysis of the percentage change in net sales by segment from the Predecessor six months ended June 30, 2019 to the Successor six months ended June 30, 2020:

	Volume	Price/Mix	Currency Translation	Total
Adhesives	(16) %	(5) %	(2) %	(23) %
Coatings and Composites	(4) %	(6) %	(1) %	(11) %

Adhesives

Net sales in the first half of 2020 decreased by $246, or 23%, when compared to the first half of 2019. Volume decreases in the second quarter of 2020 driven by COVID-19’s global economic impact across various industries and markets was the main driver for the decrease in net sales. Volumes negatively impacted net sales by $166, primarily related to volume reductions in our phenolic specialty resins, North America resins and Latin American resins businesses driven by overall weakness in the market, primarily in the automotive and construction industries. Pricing negatively impacted net sales by $57, primarily due to raw material price decreases contractually passed through to customers across many of our businesses. Lastly, foreign currency translation negatively impacted net sales by $23, due largely to the weakening of various foreign currencies against the U.S. dollar in the first half of 2020 compared to the first half of 2019.

Segment EBITDA in the first half of 2020 decreased by $27 to $122, when compared to the first half of 2019. This decrease was primarily driven by COVID-19 impacts on volumes in our North American forest products resins and phenolic specialty resins businesses, as discussed above.

Coatings and Composites

Net sales in the first half of 2020 decreased by $78, or 11%, when compared to the first half of 2019. Pricing negatively impacted net sales by $41 due primarily to raw material decreases contractually passed through to customers across many of our businesses, as well as continued competitive market conditions in our base epoxy resins and specialty epoxy resins businesses. Volumes negatively impacted net sales by $28, which was primarily due to volume decreases in our base epoxy and versatic acid businesses driven by the impact of COVID-19 on overall market demand, primarily in the automotive and construction industries. Foreign currency translation negatively impacted net sales by $9, due primarily to the weakening of various foreign currencies against the U.S. dollar in the first half of 2020 compared to the first half of 2019.

Segment EBITDA in the first half of 2020 decreased by $31 to $65 compared to the first half of 2019. The decrease was primarily due to COVID-19 impacts and continued competitive market conditions in our base epoxy resins business, as well as a temporary manufacturing outage at our Pernis site, which negatively impacted our second quarter 2020 Segment EBITDA by approximately $8. These Segment EBITDA decreases were partially offset by favorability in our specialty epoxy business driven by strong global demand in wind energy.

Corporate and Other

Corporate and Other is primarily corporate, general and administrative expenses that are not allocated to the other segments, such as shared service and administrative functions and unallocated foreign exchange gains and losses. Corporate and Other charges in the first half of 2020 increased by $3 compared to the first half of 2019 due primarily to the impact of termination of our Shared Services Agreement with MPM, partially offset by savings associated with our ongoing cost reduction efforts and lower compensation costs in 2020.

Reconciliation of Net Loss to Segment EBITDA:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Reconciliation:				
Net loss attributable to Hexion Inc.	$ (42)	$ (108)	$ (101)	$ (160)
Net income attributable to noncontrolling interest	—	(1)	—	(1)
Net loss	$ (42)	$ (107)	$ (101)	$ (159)
Income tax (benefit) expense	(11)	8	(8)	15
Interest expense, net	25	9	51	89
Depreciation and amortization [1]	56	26	114	52
EBITDA	28	(64)	56	(3)
Adjustments to arrive at Segment EBITDA:				
Asset impairments	$ —	$ —	$ 16	$ —
Business realignment costs [2]	18	11	39	15
Transaction costs [3]	4	3	7	26
Realized and unrealized foreign currency (gains) losses	—	(7)	6	(6)
Reorganization items, net [4]	—	156	—	156
Other non-cash items [5]	13	7	25	9
Other [6]	2	6	5	18
Total adjustments	37	176	98	218
Segment EBITDA	$ 65	$ 112	$ 154	$ 215
Segment EBITDA [7]:				
Adhesives	$ 51	$ 73	$ 122	$ 149
Coatings and Composites	26	52	65	96
Corporate and Other	(12)	(13)	(33)	(30)
Total	$ 65	$ 112	$ 154	$ 215

(1) For the three and six months ended June 30, 2020, accelerated depreciation of less than $1 and $2, respectively, has been included in “Depreciation and amortization.”

(2) Business realignment costs for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Severance costs	$ 2	$ 7	$ 10	$ 9
In-process facility rationalizations	5	1	12	3
Business services implementation	8	—	12	—
Legacy environmental reserves	2	1	4	1
Other	1	2	1	2

(3) For the Successor three and six months ended June 30, 2020, transaction costs included certain professional fees related to strategic projects. For the Predecessor three and six months ended June 30, 2019, transaction costs primarily included $2 and $21, respectively, of certain professional fees and other expenses related to the Company’s Chapter 11 Proceedings.

(4) Represents incremental costs incurred directly as a result of the Company’s Chapter 11 proceedings after the date of filing.

(5) Other non-cash items for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Fixed asset write-offs	$ 6	$ 2	$ 8	$ 3
Stock-based compensation costs	4	—	9	—
Long-term retention programs	3	4	6	5
Other	—	1	2	1

(6) Other for the three and six months ended June 30, 2020 and 2019 included:

	Successor	Predecessor	Successor	Predecessor
	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Legacy expenses	$ 2	$ —	$ 5	$ 3
IT outage costs (recoveries), net	(2)	5	(4)	10
Management fees and other	2	1	4	5

(7) Previously reported Segment EBITDA by reportable segment for the Predecessor three and six months ended June 30, 2019 is shown below:

	Predecessor	
	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Segment EBITDA:		
Forest Products Resins	$ 66	$ 134
Epoxy, Phenolic and Coating Resins	59	111
Corporate and Other	(13)	(30)
Total	$ 112	$ 215

Liquidity and Capital Resources

2020 Outlook

Following our emergence from our Chapter 11 proceedings, we believe we are favorably positioned to fund our ongoing liquidity requirements for the foreseeable future through cash generated from operations, as well as available borrowings under our ABL Facility. The impact of the Plan on our capital structure resulted in a reduction of more than $200 in our annual debt service obligations and the additional liquidity from the Rights Offerings has provided operational and financial flexibility and allowed us to be well positioned to make strategic capital investments, leverage our leadership positions with both our customers and suppliers, optimize our portfolio and drive new growth programs.

As the impact of the COVID-19 pandemic on the global economy and our operations evolves, we will continue to assess our liquidity needs. We have taken a number of actions to mitigate the unfavorable liquidity impacts of the pandemic, including:

- Reducing our anticipated 2020 capital expenditures to between $110 and $120 and reviewing the timing of manufacturing turnarounds at certain of our sites;
- Continuing to focus on reducing working capital, which we expect to be positively impacted by the pass through of significantly lower raw material prices;
- Reducing selling, general and administrative expense wherever possible, including travel and other discretionary spending items, as well as moving to a managed services model;
- Delaying approximately $15 of certain tax payments to later in 2020 and deferring $5 of certain tax payments to future years in conjunction with the CARES Act and tax relief measures in other jurisdictions where we operate; and
- Drawing down $164 on our ABL Facility as a precautionary measure to increase cash balances and preserve financial flexibility.

In the second quarter of 2020, we generated $83 of cash flow from operations, driven by our continued focus on working capital management. Our short-term cash needs are expected to include funding operations as currently planned and we believe that we will be able to meet our liquidity needs over the next 12 months based on our current projections of cash flow from operations and borrowing availability under financing arrangements.

At June 30, 2020, we had $1,915 of outstanding debt and $479 in liquidity consisting of the following:

- $292 of unrestricted cash and cash equivalents (of which $125 is maintained in foreign jurisdictions);
- $127 of borrowings available under our ABL Facility ($350 borrowing base less $164 of outstanding borrowings and $59 of outstanding letters of credit); and

- $60 of time drafts and borrowings available under credit facilities at certain international subsidiaries

Our net working capital (defined as accounts receivable and inventories less accounts payable) at June 30, 2020 and December 31, 2019 was $394 and $356, respectively. A summary of the components of our net working capital as of June 30, 2020 and December 31, 2019 is as follows:

	June 30, 2020	% of LTM Net Sales	December 31, 2019	% of LTM Net Sales
Accounts receivable	$ 365	12 %	$ 365	11 %
Inventories	319	10 %	332	10 %
Accounts payable	(290)	(10) %	(341)	(10) %
Net working capital (1)	$ 394	12 %	$ 356	11 %

(1) Management believes that this non-GAAP measure is useful supplemental information. This non-GAAP measure should be considered by the reader in addition to but not instead of, the financial statements prepared in accordance with GAAP.

The increase in net working capital of $38 from December 31, 2019 was driven by a decrease in accounts payable of $51, partially offset by a decrease in inventory of $13. The decrease in accounts payable was largely related to raw material price decreases in the first half of 2020 and timing of vendor payments and the decrease in inventories was driven by raw material price decreases in the first half of 2020.

We regularly review our portfolio and are currently exploring potential divestitures. While there is no guarantee of a transaction, it could include a specific business unit or combination of several businesses. We expect that the proceeds from a transaction or transactions upon completion would be used to help reduce the absolute amount of our debt.

Sources and Uses of Cash

Following are highlights from our unaudited Condensed Consolidated Statements of Cash Flows:

	Successor	Predecessor
	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
(Uses) sources of cash:		
Operating activities	$ (19)	$ (113)
Investing activities	(61)	(42)
Financing activities	125	123
Effect of exchange rates on cash flow	(4)	—
Net change in cash and cash equivalents	$ 41	$ (32)

Operating Activities

In the first half of 2020, operations used $19 of cash. Net loss of $101 included $144 of net non-cash expense items, consisting of depreciation and amortization of $114, non-cash asset impairments of $16, unrealized foreign currency losses of $4, non-cash stock based compensation expense of $9 and loss on sale of assets of $9, partially offset by a deferred tax benefit of $7 and other non-cash adjustments of $1. Net working capital used $45, which was driven by a decrease in accounts payable, partially offset by decreases in inventory, both due primarily to raw material price decreases. Changes in other assets and liabilities and income taxes payable used $17 due to the timing of when items were expensed versus paid, which primarily included operating lease expense, interest expense, employee retention programs, incentive compensation, pension plan contributions and taxes.

In the first half of 2019, operations used $113 of cash. Net loss of $159 included $198 of net non-cash expense items related to our Chapter 11 proceedings of $139 and DIP Facility financing fees of $13, depreciation and amortization of $52, partially offset by unrealized foreign currency gains of $7. Net working capital used $135, which was largely driven by increases in accounts receivable due primarily to seasonality of our businesses, and decreases in accounts payable related to timing of vendor payments, primarily as a result of our Chapter 11 proceedings. Changes in other assets and liabilities and income taxes payable used $17 due to the timing of when items were expensed versus paid, which primarily included operating lease expense, interest expense, employee retention programs, incentive compensation, pension plan contributions and taxes.

Investing Activities

In the first half of 2020, investing activities used $61 of cash related to capital expenditures.

In the first half of 2019, investing activities used $42 of cash primarily related to capital expenditures of $43 and partially offset by proceeds from sale of assets of $1.

Financing Activities

In the first half of 2020, financing activities provided $125 of cash. Net short-term debt borrowings were $14 and net long-term debt borrowings were $149. Our long-term debt borrowings primarily consisted of $164 of ABL borrowings in the first quarter of 2020. The Company distributed a $10 affiliate loan to its Parent, which was subsequently settled with a return of capital.

In the first half of 2019, financing activities provided $123 of cash. Net short-term debt repayments were $4 and net long-term debt borrowings were $140. Our long-term debt borrowings primarily consisted of the proceeds from our DIP Term Loan Facility entered into as part of our Chapter 11 proceedings, offset by adequate protection payments made as part of our Chapter 11 proceedings and the repayment of our DIP ABL Facility.

There are certain restrictions on the ability of certain of our subsidiaries to transfer funds to Hexion Inc. in the form of cash dividends, loans or otherwise, which primarily arise as a result of certain foreign government regulations or as a result of restrictions within certain subsidiaries' financing agreements limiting such transfers to the amounts of available earnings and profits or otherwise limit the amount of dividends that can be distributed. In either case, we have alternative methods to obtain cash from these subsidiaries in the form of intercompany loans and/or returns of capital in such instances where payment of dividends is limited to the extent of earnings and profits.

Covenant Compliance

New Credit Facilities and Senior Notes

The instruments that govern our indebtedness contain, among other provisions, restrictive covenants (and incurrence tests in certain cases) regarding indebtedness, dividends and distributions, mergers and acquisitions, asset sales, affiliate transactions, capital expenditures and, in the case of our ABL Facility, the maintenance of a financial ratio (depending on certain conditions). Payment of borrowings under the ABL Facility and our notes may be accelerated if there is an event of default as determined under the governing debt instrument. Events of default under the credit agreement governing our ABL Facility includes the failure to pay principal and interest when due, a material breach of representations or warranties, events of bankruptcy, a change of control, and most covenant defaults. Events of default under the indentures governing our notes include the failure to pay principal and interest, a failure to comply with covenants, subject to a 30-day grace period in certain instances, and certain events of bankruptcy.

The indenture that governs our 7.875% Senior Notes due 2027 (the "Indenture") contains a Pro Forma EBITDA to Fixed Charges ratio incurrence test which may restrict our ability to take certain actions such as incurring additional debt or making acquisitions if we are unable to meet this ratio (measured on a last twelve months, or LTM, basis) of at least 2.0:1. The Pro Forma EBITDA to Fixed Charges Ratio under the Indenture is generally defined as the ratio of (a) Pro Forma EBITDA to (b) net interest expense excluding the amortization or write-off of deferred financing costs, each measured on an LTM basis. See below for our Pro Forma EBITDA to Fixed Charges Ratio calculation.

Our ABL Facility, which is subject to a borrowing base, does not have any financial maintenance covenant other than a minimum fixed charge coverage ratio of 1.0 to 1.0 that would only apply if our availability under the ABL Facility at any time is less than the greater of (a) $30 and (b) 10.0% of the lesser of the borrowing base and the total ABL Facility commitments at such time. The fixed charge coverage ratio under the credit agreement governing the ABL Facility is generally defined as the ratio of (a) Pro Forma EBITDA minus non-financed capital expenditures and cash taxes to (b) debt service plus cash interest expense plus certain restricted payments, each measured for the four most recent quarters for which financial statements have been delivered.

Reconciliation of Last Twelve Months Net Income to Pro Forma EBITDA

Pro Forma EBITDA is defined as EBITDA adjusted for certain non-cash and certain non-recurring items and other adjustments calculated on a pro-forma basis, including the expected future cost savings from business optimization programs or other programs and the expected future impact of acquisitions, in each case as determined under the governing debt instrument. We believe that including the supplemental adjustments that are made to calculate Pro Forma EBITDA provides additional information to investors about our ability to comply with our financial covenants and to obtain additional debt in the future. Pro Forma EBITDA and Fixed Charges are not defined terms under U.S. GAAP. Pro Forma EBITDA is not a measure of financial condition, liquidity or profitability, and should not be considered as an alternative to net income (loss) determined in accordance with U.S. GAAP or operating cash flows determined in accordance with U.S. GAAP. Additionally, EBITDA is not intended to be a measure of free cash flow for management's discretionary use, as it does not take into account certain items such as interest and principal payments on our indebtedness, depreciation and amortization expense (because we use capital assets, depreciation and amortization expense is a necessary element of our costs and ability to generate revenue), working capital needs, tax payments (because the payment of taxes is part of our operations, it is a necessary element of our costs and ability to operate), non-recurring expenses and capital expenditures. Fixed Charges under the Indenture should not be considered an alternative to interest expense.

The following table reconciles net income to EBITDA and Pro Forma EBITDA for the twelve month period that includes combined information from the Predecessor Company on July 1, 2019 and the Successor Company from July 2, 2019 through June 30, 2020, and calculates the ratio of Pro Forma EBITDA to Fixed Charges as calculated under our Indenture for the period presented:

	June 30, 2020 LTM Period
Net income	$ 2,865
Income tax expense	190
Interest expense, net	105
Depreciation and amortization	223
EBITDA	3,383
Adjustments to arrive at Pro Forma EBITDA:	
Asset impairments	16
Business realignment costs [(1)]	63
Realized and unrealized foreign currency losses	12
Unrealized losses on pension and postretirement benefits [(2)]	5
Transaction costs [(3)]	18
Reorganization items, net [(4)]	(3,261)
Non-cash impact of inventory step-up [(5)]	29
Other non-cash items [(6)]	35
Acceleration of deferred revenue [(7)]	18
Other [(8)]	24
Cost reduction programs savings [(9)]	11
Pro Forma EBITDA	$ 353
Pro forma fixed charges [(10)]	$ 106
Ratio of Pro Forma EBITDA to Fixed Charges [(11)]	3.33

(1) Primarily represents costs related to certain in-process cost reduction activities, including severance costs of $20, $17 related to certain in-process facility rationalizations, $11 for future environmental clean-up of closed facilities and one-time implementation and transition costs associated with the creation of a business services group within the Company of $12.

(2) Represents non-cash losses resulting from pension and postretirement benefit plan liability remeasurements.

(3) Represents certain professional fees related to strategic projects, including $6 of certain professional fees and other expenses related to our Chapter 11 proceedings incurred post-emergence.

(4) Represents incremental costs incurred directly as a result of our Chapter 11 proceedings after the date of filing, gains on the settlement of liabilities under the Plan and the net impact of fresh start accounting adjustments.

(5) Represents $29 of non-cash expense related to the step up of finished goods inventory on July 1, 2019 as part of fresh start accounting that was expensed in the successor period upon the sale of the inventory.

(6) Primarily includes expenses for stock-based compensation costs of $17, non-cash fixed asset write-offs of $14 and long-term retention programs of $4.

(7) Represents the impact of deferred revenue that was accelerated on July 1, 2019 as part of fresh start accounting.

(8) Primarily represents $12 of expenses related to legacy liabilities, $6 of business optimization expense, $9 related to management fees and other expenses, offset by $3 of IT outage recoveries.

(9) Represents pro forma impact of in-process cost reduction programs savings. Cost reduction program savings represent the unrealized headcount reduction savings and plant rationalization savings related to cost reduction programs and other unrealized savings associated with the Company's business realignments activities, and represent our estimate of the unrealized savings from such initiatives that would have been realized had the related actions been completed at the beginning of the period presented. The savings are calculated based on actual costs of exiting headcount and elimination or reduction of site costs. We expect the savings to be realized within the next 18 months.

(10) Reflects pro forma interest expense based on interest rates at June 30, 2020.

(11) The Company's ability to incur additional indebtedness, among other actions, is restricted under the Secured Indentures, unless the Company has a Pro Forma EBITDA to Fixed Charges ratio of at least 2.0 to 1.0.

Recently Issued Accounting Standards

See Note 2 in Item 1 of Part I of this Quarterly Report on Form 10-Q for a detailed description of recently issued accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no material developments during the first six months of 2020 on the matters we have previously disclosed about quantitative and qualitative market risk in our Annual Report on Form 10-K for the year ended December 31, 2019.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including the Acting Chief Executive Officer and Executive Vice President, Chief Financial Officer, performed an evaluation of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of June 30, 2020. Based upon that evaluation, the Acting Chief Executive Officer and Executive Vice President, Chief Financial Officer concluded that our disclosure controls and procedures were effective at June 30, 2020.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Company’s internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

There have been no other material developments during the second quarter of 2020 in any of the ongoing legal proceedings that are included in our Annual Report on Form 10-K for the year ended December 31, 2019.

Item 1A. Risk Factors

Our operations and results may be negatively impacted by the COVID-19 outbreak.

Global or national health concerns, including the outbreak of pandemic or contagious disease, such as the recent COVID-19 pandemic, may adversely affect us.

Since December 2019, the COVID-19 virus which was first reported in Wuhan, China, has spread further in China and other regions including Europe and the United States, where we have operations. In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. Around the world, local governments' responses to COVID-19 continue to evolve, which has led to stay-at-home orders, social distancing guidelines and other preventative measures that have disrupted various industries in the global economy and created significant volatility in the financial markets.

While the Company has continued to operate during the pandemic, it did incur adverse financial impacts to its sales and profitability results during the three and six months ended June 30, 2020 from COVID-19, primarily related to reduced volumes associated with the pandemic. Future COVID developments could adversely result in business and manufacturing disruption, inventory shortages, delivery delays, our ability to obtain financing on favorable terms, and reduced sales due to an economic downturn that could affect demand for our products. The extent to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. A prolonged economic downturn from COVID-19 could also result in impairments to long-lived assets, including goodwill and intangibles.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

This item is not applicable to the registrant.

Item 5. Other Information

As of the filing date of this current report on Form 10-Q, Craig Rogerson, the Company's Chairman and Chief Executive Officer ("CEO"), remains on a medical leave of absence. As resolved by the Hexion Holdings Board of Directors on March 29, 2020, George Knight, the Company's Executive Vice President and Chief Financial Officer, has been named acting CEO and has assumed all of Mr. Rogerson's authority and responsibilities until he returns from his leave of absence.

Item 6. Exhibits

31.1	Rule 13a-14 Certifications:
	(a) Certificate of the Acting Chief Executive Officer and Executive Vice President, Chief Financial Officer
32.1	Section 1350 Certifications
101.INS*	XBRL Instance Document
101.SCH*	XBRL Schema Document
101.CAL*	XBRL Calculation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document
101.LAB*	XBRL Label Linkbase Document
101.PRE*	XBRL Presentation Linkbase Document

* Attached as Exhibit 101 to this report are documents formatted in XBRL (Extensible Business Reporting Language). The financial information in the XBRL-related documents is “unaudited” or “unreviewed.”

† Represents a management contract or compensatory plan or arrangement

SIGNATURE

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

HEXION INC.

Date: August 14, 2020

/s/ George F. Knight

George F. Knight
Acting Chief Executive Officer and Executive Vice President, Chief Financial Officer
(Principal Financial Officer)

Exhibit 31.1

Certification of Financial Statements and Internal Controls

I, George F. Knight, certify that:

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

Date: August 14, 2020

/s/ George F. Knight

George F. Knight

Acting Chief Executive Officer and Chief Financial Officer

Exhibit 32.1

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 Hexion Inc. (the “Company”) on Form 10-Q for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15 (d) of the Securities Exchange Act of 1934; and

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

/s/ George F. Knight

George F. Knight
Acting Chief Executive Officer and Chief Financial Officer

August 14, 2020

A signed original of this statement required by Section 906 has been provided to Hexion Inc. and will be retained by Hexion Inc. and furnished to the Securities and Exchange Commission or its staff upon request.