

Non-US GAAP Financial Measures and Supplemental Information

January 28, 2019

In this document, the terms the "Company," "we" and "our" refer to Celanese Corporation and its subsidiaries on a consolidated basis.

Purpose

The purpose of this document is to provide information of interest to investors, analysts and other parties including supplemental financial information and reconciliations and other information concerning our use of non-US GAAP financial measures. This document is updated quarterly.

Presentation

This document presents the Company's three business segments, Engineered Materials, Acetate Tow and Acetyl Chain.

Use of Non-US GAAP Financial Measures

From time to time, management may publicly disclose certain numerical "non-GAAP financial measures" in the course of our earnings releases, financial presentations, earnings conference calls, investor and analyst meetings and otherwise. For these purposes, the Securities and Exchange Commission ("SEC") defines a "non-GAAP financial measure" as a numerical measure of historical or future financial performance, financial position or cash flows that excludes amounts, or is subject to adjustments that effectively exclude amounts, included in the most directly comparable measure calculated and presented in accordance with US GAAP, and vice versa for measures that include amounts, or are subject to adjustments that effectively include amounts, that are excluded from the most directly comparable US GAAP measure so calculated and presented. For these purposes, "GAAP" refers to generally accepted accounting principles in the United States.

Non-GAAP financial measures disclosed by management are provided as additional information to investors, analysts and other parties because the Company believes them to be important supplemental measures for assessing our financial and operating results and as a means to evaluate our financial condition and period-to-period comparisons. These non-GAAP financial measures should be viewed as supplemental to, and should not be considered in isolation or as alternatives to, net earnings (loss), operating profit (loss), operating margin, cash flow from operating activities (together with cash flow from investing and financing activities), earnings per share or any other US GAAP financial measure. These non-GAAP financial measures should be considered within the context of our complete audited and unaudited financial results for the given period, which are available on the Financial Information/Documents page of our website, investors.celanese.com. The definition and method of calculation of the non-GAAP financial measures used herein may be different from other companies' methods for calculating measures with the same or similar titles. Investors, analysts and other parties should understand how another company calculates such non-GAAP financial measures before comparing the other company's non-GAAP financial measures to any of our own. These non-GAAP financial measures may not be indicative of the historical operating results of the Company nor are they intended to be predictive or projections of future results.

Pursuant to the requirements of SEC Regulation G, whenever we refer to a non-GAAP financial measure, we will also present in this document, in the presentation itself or on a Form 8-K in connection with the presentation on the Financial Information/Non-GAAP Financial Measures page of our website, investors.celanese.com, to the extent practicable, the most directly comparable financial measure calculated and presented in accordance with GAAP, along with a reconciliation of the differences between the non-GAAP financial measure we reference and such comparable GAAP financial measure.

This document includes definitions and reconciliations of non-GAAP financial measures used from time to time by the Company.

Specific Measures Used

This document provides information about the following non-GAAP measures: adjusted EBIT, adjusted EBIT margin, operating EBITDA, operating EBITDA margin, operating profit (loss) attributable to Celanese Corporation, adjusted earnings per share, net debt, free cash flow and return on invested capital (adjusted). The most directly comparable financial measure presented in accordance with US GAAP in our consolidated financial statements for adjusted EBIT and operating EBITDA is net earnings (loss) attributable to Celanese Corporation; for adjusted EBIT margin and operating EBITDA margin is operating margin; for operating profit (loss) attributable to Celanese Corporation is operating profit (loss); for adjusted earnings per share is earnings (loss) from continuing operations attributable to Celanese Corporation per common share-diluted; for net debt is total debt; for free cash flow is net cash provided by (used in) operations; and for return on invested capital (adjusted) is net earnings (loss) attributable to Celanese Corporation divided by the sum of the average of beginning and end of the year short- and long-term debt and Celanese Corporation stockholders' equity.

Definitions

- Adjusted EBIT is a performance measure used by the Company and is defined by the Company as net earnings (loss) attributable to Celanese Corporation, plus (earnings) loss from discontinued operations, less interest income, plus interest expense, plus refinancing expense and taxes, and further adjusted for Certain Items (refer to [Table 8](#)). We believe that adjusted EBIT provides transparent and useful information to management, investors, analysts and other parties in evaluating and assessing our primary operating results from period-to-period after removing the impact of unusual, non-operational or restructuring-related activities that affect comparability. Our management recognizes that adjusted EBIT has inherent limitations because of the excluded items. Adjusted EBIT is one of the measures management uses for planning and budgeting, monitoring and evaluating financial and operating results and as a performance metric in the Company's incentive compensation plan. We do not provide reconciliations for adjusted EBIT on a forward-looking basis (including those contained in this document) when we are unable to provide a meaningful or accurate calculation or estimation of reconciling items and the information is not available without unreasonable effort. This is due to the inherent difficulty of forecasting the timing and amount of Certain Items, such as mark-to-market pension gains and losses, that have not yet occurred, are out of our control and/or cannot be reasonably predicted. For the same reasons, we are unable to address the probable significance of the unavailable information. Adjusted EBIT margin is defined by the Company as adjusted EBIT divided by net sales. Adjusted EBIT margin has the same uses and limitations as Adjusted EBIT.*
- Adjusted EBIT by business segment may also be referred to by management as segment income. Adjusted EBIT margin by business segment may also be referred to by management as segment income margin.*
- Operating EBITDA is a performance measure used by the Company and is defined by the Company as net earnings (loss) attributable to Celanese Corporation, plus (earnings) loss from discontinued operations, less interest income, plus interest expense, plus refinancing expense, taxes and depreciation and amortization, and further adjusted for Certain Items, which Certain Items include accelerated depreciation and amortization expense. Operating EBITDA is equal to adjusted EBIT plus depreciation and amortization. We believe that Operating EBITDA provides transparent and useful information to investors, analysts and other parties in evaluating our operating performance relative to our peer companies. Operating EBITDA margin is defined by the Company as Operating EBITDA divided by net sales. Operating EBITDA margin has the same uses and limitations as Operating EBITDA.*
- Operating profit (loss) attributable to Celanese Corporation is defined by the Company as operating profit (loss), less earnings (loss) attributable to noncontrolling interests ("NCI"). We believe that operating profit (loss) attributable to Celanese Corporation provides transparent and useful information to management, investors, analysts and other parties in evaluating our core operational performance. Operating margin attributable to Celanese Corporation is defined by the Company as operating profit (loss) attributable to Celanese Corporation divided by net sales. Operating margin attributable to Celanese Corporation has the same uses and limitations as Operating profit (loss) attributable to Celanese Corporation.*
- Adjusted earnings per share is a performance measure used by the Company and is defined by the Company as earnings (loss) from continuing operations attributable to Celanese Corporation, adjusted for income tax (provision) benefit, Certain Items, and refinancing and related expenses, divided by the number of basic common shares and dilutive restricted stock units and stock options calculated using the treasury method. We believe that adjusted earnings per share provides transparent and useful information to management, investors, analysts and other parties in evaluating and assessing our primary operating results from period-to-period after removing the impact of the above stated items that affect comparability and as a performance metric in the Company's incentive compensation plan. We do not provide reconciliations for adjusted earnings per share on a forward-looking basis (including those contained in this document) when we are unable to provide a meaningful or accurate calculation or estimation of reconciling items and the information is not available without unreasonable effort. This is due to the inherent difficulty of forecasting the timing and amount of Certain Items, such as mark-to-market pension gains and losses, that have not yet occurred, are out of our control and/or cannot be reasonably predicted. For the same reasons, we are unable to address the probable significance of the unavailable information.*

Note: The income tax expense (benefit) on Certain Items ("Non-GAAP adjustments") is determined using the applicable rates in the taxing jurisdictions in which the Non-GAAP adjustments occurred and includes both current and deferred income tax expense (benefit). The income tax rate used for adjusted earnings per share approximates the midpoint in a range of forecasted tax rates for the year. This range may include certain partial or full-year forecasted tax opportunities and related costs, where applicable, and specifically excludes changes in uncertain tax positions, discrete recognition of GAAP items on a quarterly basis, other pre-tax items adjusted out of our GAAP earnings for adjusted earnings per share purposes and changes in management's assessments regarding the ability to realize deferred tax assets for GAAP. In determining the adjusted earnings per share tax rate, we reflect the impact of foreign tax credits when utilized, or expected to be utilized, absent discrete events impacting the timing of foreign tax credit utilization. We analyze this rate quarterly and adjust it if there is a material change in the range of forecasted tax rates; an updated forecast would not necessarily result in a change to our tax rate used for adjusted earnings per share. The adjusted tax rate is an estimate and may differ from the actual tax rate used for GAAP reporting in any given reporting period. [Table 3a](#) summarizes the reconciliation of our estimated GAAP effective tax rate to the adjusted tax rate. The estimated GAAP rate excludes discrete recognition of GAAP items due to our inability to forecast such items. As part of the year-end reconciliation, we will update the reconciliation of the GAAP effective tax rate to the adjusted tax rate for actual results.

- *Free cash flow is a liquidity measure used by the Company and is defined by the Company as net cash provided by (used in) operations, less capital expenditures on property, plant and equipment, and adjusted for capital contributions from or distributions to Mitsui & Co., Ltd. ("Mitsui") related to our methanol joint venture, Fairway Methanol LLC ("Fairway"). We believe that free cash flow provides useful information to management, investors, analysts and other parties in evaluating the Company's liquidity and credit quality assessment because it provides an indication of the long-term cash generating ability of our business. Although we use free cash flow as a measure to assess the liquidity generated by our business, the use of free cash flow has important limitations, including that free cash flow does not reflect the cash requirements necessary to service our indebtedness, lease obligations, unconditional purchase obligations or pension and postretirement funding obligations.*
- *Net debt is defined by the Company as total debt less cash and cash equivalents. We believe that net debt provides useful information to management, investors, analysts and other parties in evaluating changes to the Company's capital structure and credit quality assessment.*
- *Return on invested capital (adjusted) is defined by the Company as adjusted EBIT, tax effected using the adjusted tax rate, divided by the sum of the average of beginning and end of the year short- and long-term debt and Celanese Corporation stockholders' equity. We believe that return on invested capital (adjusted) provides useful information to management, investors, analysts and other parties in order to assess our income generation from the point of view of our stockholders and creditors who provide us with capital in the form of equity and debt and whether capital invested in the Company yields competitive returns. In addition, achievement of certain predetermined targets relating to return on invested capital (adjusted) is one of the factors we consider in determining the amount of performance-based compensation received by our management.*

Supplemental Information

Supplemental Information we believe to be of interest to investors, analysts and other parties includes the following:

- *Net sales for each of our business segments and the percentage increase or decrease in net sales attributable to price, volume, currency and other factors for each of our business segments.*
- *Cash dividends received from our equity investments.*
- *For those consolidated ventures in which the Company owns or is exposed to less than 100% of the economics, the outside stockholders' interests are shown as NCI. Beginning in 2014, this includes Fairway for which the Company's ownership percentage is 50%. Amounts referred to as "attributable to Celanese Corporation" are net of any applicable NCI.*

Recent Developments

Effective January 1, 2018, we reorganized our operating and reportable segments to align with recent structural and management reporting changes. The changes reflect the movement of our food ingredients business from the Consumer Specialties reportable segment into the Engineered Materials reportable segment. In addition, the former Consumer Specialties reportable segment was renamed the Acetate Tow segment, and the former Advanced Engineered Materials reportable segment was renamed the Engineered Materials segment. This reorganization better reflects how we manage our food ingredients' related products commercially. Engineered Materials and food ingredients are both project-based models that focus on delivering customized solutions and are led by the same senior management team.

Effective December 31, 2018, we further reorganized our operating and reportable segments to align with recent structural and management reporting changes. The change reflects the resegmentation of the former Industrial Specialties and former Acetyl Intermediates operating and reportable segments, to the Acetyl Chain operating and reportable segment. This reorganization reflects the culmination of a shift in operating strategy and organizational hierarchy, with a focus on integration, collaboration and maximization of value creation through our global optionality and integrated chain model of the underlying businesses along the Acetyl Chain segment. These changes in operating and reportable segments were applied retrospectively to prior periods through 2014.

Results Unaudited

The results in this document, together with the adjustments made to present the results on a comparable basis, have not been audited and are based on internal financial data furnished to management. Quarterly results should not be taken as an indication of the results of operations to be reported for any subsequent period or for the full fiscal year.

Table 1
Adjusted EBIT and Operating EBITDA - Reconciliation of Non-GAAP Measures - Unaudited

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Net earnings (loss) attributable to Celanese Corporation	1,207	99	401	344	363	843	203	226	231	183
(Earnings) loss from discontinued operations.....	5	(3)	6	—	2	13	1	4	8	—
Interest income.....	(6)	(2)	(2)	—	(2)	(2)	—	(1)	(1)	—
Interest expense.....	125	30	30	32	33	122	31	32	30	29
Refinancing expense	1	1	—	—	—	—	—	—	—	—
Income tax provision (benefit).....	292	76	54	97	65	213	60	57	40	56
Certain Items attributable to Celanese Corporation (Table 8)	228	192	5	18	13	167	57	27	18	65
Adjusted EBIT	1,852	393	494	491	474	1,356	352	345	326	333
Depreciation and amortization expense ⁽¹⁾	316	78	77	82	79	303	79	78	75	71
Operating EBITDA	2,168	471	571	573	553	1,659	431	423	401	404

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Engineered Materials.....	1	—	—	1	—	—	—	—	—	—
Acetate Tow.....	19	5	11	3	—	—	—	—	—	—
Acetyl Chain.....	7	5	2	—	—	2	—	2	—	—
Other Activities ⁽²⁾	—	—	—	—	—	—	—	—	—	—
Accelerated depreciation and amortization expense	27	10	13	4	—	2	—	2	—	—
Depreciation and amortization expense ⁽¹⁾	316	78	77	82	79	303	79	78	75	71
Total depreciation and amortization expense	343	88	90	86	79	305	79	80	75	71

⁽¹⁾ Excludes accelerated depreciation and amortization expense as detailed in the table above, which amounts are included in Certain Items above.

⁽²⁾ Other Activities includes corporate Selling, general and administrative ("SG&A") expenses, the results of captive insurance companies and certain components of net periodic benefit cost (interest cost, expected return on plan assets and net actuarial gains and losses).

Table 2 - Supplemental Segment Data and Reconciliation of Segment Adjusted EBIT and Operating EBITDA - Non-GAAP Measures - Unaudited

	2018		Q4 '18		Q3 '18		Q2 '18		Q1 '18		2017		Q4 '17		Q3 '17		Q2 '17		Q1 '17	
	(In \$ millions, except percentages)																			
Operating Profit (Loss) / Operating Margin																				
Engineered Materials.....	460	17.7%	95	15.3%	124	19.3%	114	17.2%	127	19.1%	412	18.6%	98	16.9%	105	18.3%	105	19.2%	104	20.2%
Acetate Tow.....	130	20.0%	19	11.8%	26	16.5%	39	24.1%	46	27.4%	189	28.3%	41	26.1%	45	28.7%	41	25.2%	62	32.5%
Acetyl Chain ⁽¹⁾	1,024	25.3%	211	22.5%	287	28.5%	273	26.0%	253	24.1%	509	15.1%	175	19.7%	147	17.0%	135	16.3%	52	6.5%
Other Activities ⁽²⁾	(280)		(66)		(63)		(68)		(83)		(253)		(74)		(68)		(63)		(48)	
Total	1,334	18.6%	259	15.3%	374	21.1%	358	19.4%	343	18.5%	857	14.0%	240	15.1%	229	14.6%	218	14.4%	170	11.6%
Less: Net Earnings (Loss) Attributable to NCI ⁽¹⁾	6		2		1		1		2		6		1		2		2		1	
Operating Profit (Loss) Attributable to Celanese Corporation.....	1,328	18.6%	257	15.2%	373	21.1%	357	19.4%	341	18.4%	851	13.9%	239	15.0%	227	14.5%	216	14.3%	169	11.5%
Operating Profit (Loss) / Operating Margin Attributable to Celanese Corporation																				
Engineered Materials.....	460	17.7%	95	15.3%	124	19.3%	114	17.2%	127	19.1%	412	18.6%	98	16.9%	105	18.3%	105	19.2%	104	20.2%
Acetate Tow.....	130	20.0%	19	11.8%	26	16.5%	39	24.1%	46	27.4%	189	28.3%	41	26.1%	45	28.7%	41	25.2%	62	32.5%
Acetyl Chain ⁽¹⁾	1,018	25.2%	209	22.3%	286	28.4%	272	25.9%	251	23.9%	503	14.9%	174	19.6%	145	16.8%	133	16.1%	51	6.4%
Other Activities ⁽²⁾	(280)		(66)		(63)		(68)		(83)		(253)		(74)		(68)		(63)		(48)	
Total	1,328	18.6%	257	15.2%	373	21.1%	357	19.4%	341	18.4%	851	13.9%	239	15.0%	227	14.5%	216	14.3%	169	11.5%
Equity Earnings and Dividend Income, Other Income (Expense) Attributable to Celanese Corporation																				
Engineered Materials.....	219	⁽³⁾	49		62		54		54		171		43		47		38		43	
Acetate Tow.....	116		25		26		33		32		107		26		24		28		29	
Acetyl Chain.....	8		1		2		3		2		6		2		1		2		1	
Other Activities ⁽²⁾	15		8		1		—		6		10		8		(4)		2		4	
Total	358		83		91		90		94		294		79		68		70		77	
Non-Operating Pension and Other Post-Retirement Employee Benefit (Expense) Income Attributable to Celanese Corporation																				
Engineered Materials.....	—		—		—		—		—		—		—		—		—		—	
Acetate Tow.....	—		—		—		—		—		—		—		—		—		—	
Acetyl Chain.....	—		—		—		—		—		2		1		1		—		—	
Other Activities ⁽²⁾	(62)		(139)		25		26		26		42		(24)		22		22		22	
Total	(62)		(139)		25		26		26		44		(23)		23		22		22	
Certain Items Attributable to Celanese Corporation (Table 8)																				
Engineered Materials.....	15		6		1		7		1		16		1		5		7		3	
Acetate Tow.....	27		9		13		5		—		5		1		—		2		2	
Acetyl Chain.....	(4)		5		(11)		2		—		64		1		10		(3)		56	
Other Activities ⁽²⁾	190		172		2		4		12		82		54		12		12		4	
Total	228		192		5		18		13		167		57		27		18		65	
Adjusted EBIT / Adjusted EBIT Margin																				
Engineered Materials.....	694	26.8%	150	24.1%	187	29.1%	175	26.4%	182	27.4%	599	27.1%	142	24.5%	157	27.4%	150	27.5%	150	29.2%
Acetate Tow.....	273	42.1%	53	32.9%	65	41.1%	77	47.5%	78	46.4%	301	45.1%	68	43.3%	69	43.9%	71	43.6%	93	48.7%
Acetyl Chain.....	1,022	25.3%	215	23.0%	277	27.5%	277	26.4%	253	24.1%	575	17.1%	178	20.0%	157	18.2%	132	16.0%	108	13.6%
Other Activities ⁽²⁾	(137)		(25)		(35)		(38)		(39)		(119)		(36)		(38)		(27)		(18)	
Total	1,852	25.9%	393	23.3%	494	27.9%	491	26.6%	474	25.6%	1,356	22.1%	352	22.1%	345	22.0%	326	21.6%	333	22.6%

⁽¹⁾ Net earnings (loss) attributable to NCI is included within the Acetyl Chain segment.

⁽²⁾ Other Activities includes corporate SG&A expenses, the results of captive insurance companies and certain components of net periodic benefit cost (interest cost, expected return on plan assets and net actuarial gains and losses).

⁽³⁾ Includes \$218 million of Equity in net earnings (loss) of affiliates and \$1 million of Other income.

Table 2 - Supplemental Segment Data and Reconciliation of Segment Adjusted EBIT and Operating EBITDA - Non-GAAP Measures - Unaudited (cont.)

	2018		Q4 '18		Q3 '18		Q2 '18		Q1 '18		2017		Q4 '17		Q3 '17		Q2 '17		Q1 '17	
	(In \$ millions, except percentages)																			
Depreciation and Amortization Expense⁽¹⁾																				
Engineered Materials.....	125		30	31	32	32	32	32	32	32	111	29	30	27	25					
Acetate Tow.....	39		9	10	10	10	10	10	10	41	11	10	10	10	10					
Acetyl Chain.....	141		36	34	36	35	36	35	35	141	37	34	36	36	34					
Other Activities ⁽²⁾	11		3	2	4	2	4	2	2	10	2	4	2	4	2					
Total	316		78	77	82	79	82	79	79	303	79	78	75	75	71					
Operating EBITDA / Operating EBITDA Margin																				
Engineered Materials.....	819	31.6%	180	28.9%	218	34.0%	207	31.2%	214	32.2%	710	29.5%	187	32.6%	177	32.4%	175	34.0%	175	34.0%
Acetate Tow.....	312	48.1%	62	38.5%	75	47.5%	87	53.7%	88	52.4%	342	51.2%	79	50.3%	79	50.3%	81	49.7%	103	53.9%
Acetyl Chain.....	1,163	28.8%	251	26.8%	311	30.9%	313	29.8%	288	27.4%	716	24.2%	191	22.1%	168	20.3%	142	17.9%	142	17.9%
Other Activities ⁽²⁾	(126)		(22)	(33)	(34)	(37)	(34)	(37)	(37)	(109)	(34)	(34)	(25)	(34)	(16)					
Total	2,168	30.3%	471	27.9%	571	32.2%	573	31.1%	553	29.9%	1,659	27.0%	431	27.1%	401	26.6%	404	27.5%	404	27.5%

⁽¹⁾ Excludes accelerated depreciation and amortization expense, which amounts are included in Certain Items above. See [Table 1](#) for details.

⁽²⁾ Other Activities includes corporate SG&A expenses, the results of captive insurance companies and certain components of net periodic benefit cost (interest cost, expected return on plan assets and net actuarial gains and losses).

Table 3
Adjusted Earnings (Loss) per Share - Reconciliation of a Non-GAAP Measure - Unaudited

	2018		Q4 '18		Q3 '18		Q2 '18		Q1 '18		2017		Q4 '17		Q3 '17		Q2 '17		Q1 '17	
	per share		per share		per share		per share		per share		per share		per share		per share		per share		per share	
(In \$ millions, except per share data)																				
Earnings (loss) from continuing operations attributable to Celanese Corporation	1,212	8.95	96	0.73	407	3.00	344	2.52	365	2.68	856	6.19	204	1.50	230	1.68	239	1.72	183	1.30
Income tax provision (benefit)	292		76		54		97		65		213		60		57		40		56	
Earnings (loss) from continuing operations before tax	1,504		172		461		441		430		1,069		264		287		279		239	
Certain Items attributable to Celanese Corporation (Table 8) ..	228		192		5		18		13		167		57		27		18		65	
Refinancing and related expenses.....	1		1		—		—		—		—		—		—		—		—	
Adjusted earnings (loss) from continuing operations before tax.....	1,733		365		466		459		443		1,236		321		314		297		304	
Income tax (provision) benefit on adjusted earnings ⁽¹⁾	(243)		(51)		(65)		(64)		(62)		(198)		(51)		(50)		(48)		(49)	
Adjusted earnings (loss) from continuing operations⁽²⁾ ..	1,490	11.00	314	2.38	401	2.96	395	2.90	381	2.79	1,038	7.51	270	1.98	264	1.93	249	1.79	255	1.81
Diluted shares (in millions) ⁽³⁾																				
Weighted average shares outstanding.....	134.3		131.2		134.5		135.6		135.9		137.9		135.8		136.6		138.6		140.6	
Incremental shares attributable to equity awards	1.1		0.9		1.0		0.7		0.5		0.4		0.5		0.4		0.4		0.4	
Total diluted shares	135.4		132.1		135.5		136.3		136.4		138.3		136.3		137.0		139.0		141.0	

⁽¹⁾ Calculated using adjusted effective tax rates (Table 3a) as follows:

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
(In percentages)										
Adjusted effective tax rate.....	14	14	14	14	14	16	16	16	16	16

⁽²⁾ Excludes the immediate recognition of actuarial gains and losses and the impact of actual vs. expected plan asset returns.

	Actual Plan Asset Returns	Expected Plan Asset Returns
(In percentages)		
Q4 '18 & 2018	(3.9)	6.7
Q4 '17 & 2017	10.5	7.3

⁽³⁾ Potentially dilutive shares are included in the adjusted earnings per share calculation when adjusted earnings are positive.

Table 3a
Adjusted Tax Rate - Reconciliation of a Non-GAAP Measure - Unaudited

	2018	Actual 2017
	(In percentages)	
US GAAP annual effective tax rate	19	20
Discrete quarterly recognition of GAAP items ⁽¹⁾	—	(11)
Tax impact of other charges and adjustments ⁽²⁾	—	1
Utilization of foreign tax credits	—	20
Changes in valuation allowances, excluding impact of other charges and adjustments ⁽³⁾	(5)	(13)
Other ⁽⁴⁾	—	(1)
Adjusted tax rate	14	16

Note: As part of the year-end reconciliation, we updated the reconciliation of the GAAP effective tax rate for actual results.

- ⁽¹⁾ Such as changes in tax laws (including US tax reform), deferred taxes on outside basis differences, changes in uncertain tax positions and prior year audit adjustments.
- ⁽²⁾ Reflects the tax impact on pre-tax adjustments presented in Certain Items ([Table 8](#)), which are excluded from pre-tax income for adjusted earnings per share purposes.
- ⁽³⁾ Reflects changes in valuation allowances related to changes in judgment regarding the realizability of deferred tax assets or current year operations, excluding other charges and adjustments.
- ⁽⁴⁾ Tax impacts related to full-year forecasted tax opportunities and related costs.

Table 4
Net Sales by Segment - Unaudited

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Engineered Materials	2,593	622	642	664	665	2,213	580	573	546	514
Acetate Tow	649	161	158	162	168	668	157	157	163	191
Acetyl Chain	4,042	936	1,006	1,049	1,051	3,371	888	863	826	794
Other Activities ⁽¹⁾	—	—	—	—	—	—	—	—	—	—
Intersegment eliminations ⁽²⁾	(129)	(30)	(35)	(31)	(33)	(112)	(32)	(27)	(25)	(28)
Net sales	7,155	1,689	1,771	1,844	1,851	6,140	1,593	1,566	1,510	1,471

⁽¹⁾ Other Activities includes corporate SG&A expenses, the results of captive insurance companies and certain components of net periodic benefit cost (interest cost, expected return on plan assets and net actuarial gains and losses).

⁽²⁾ Includes intersegment sales primarily related to the Acetyl Chain.

Table 4a
Factors Affecting Segment Net Sales Sequentially - Unaudited

Three Months Ended December 31, 2018 Compared to Three Months Ended September 30, 2018

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	(4)	2	(1)	—	(3)
Acetate Tow.....	2	(1)	—	—	1
Acetyl Chain.....	(3)	(4)	(1)	1	(7)
Total Company	(3)	(2)	(1)	1	(5)

Three Months Ended September 30, 2018 Compared to Three Months Ended June 30, 2018

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	(2)	—	(1)	—	(3)
Acetate Tow.....	(2)	—	—	—	(2)
Acetyl Chain.....	(4)	2	(2)	—	(4)
Total Company	(3)	1	(2)	—	(4)

Three Months Ended June 30, 2018 Compared to Three Months Ended March 31, 2018

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	(1)	3	(2)	—	—
Acetate Tow.....	(3)	—	(1)	—	(4)
Acetyl Chain.....	(2)	4	(1)	(1)	—
Total Company	(2)	3	(1)	—	—

Three Months Ended March 31, 2018 Compared to Three Months Ended December 31, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	10	3	2	—	15 ⁽¹⁾
Acetate Tow.....	8	—	—	—	8
Acetyl Chain.....	8	9	3	(2)	18
Total Company	9	6	2	(1)	16

Three Months Ended December 31, 2017 Compared to Three Months Ended September 30, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	(8)	9	—	—	1
Acetate Tow.....	2	(2)	—	—	—
Acetyl Chain.....	(5)	7	—	1	3
Total Company	(5)	7	—	—	2

Three Months Ended September 30, 2017 Compared to Three Months Ended June 30, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	1	1	3	—	5
Acetate Tow.....	(5)	1	—	—	(4)
Acetyl Chain.....	1	—	3	—	4
Total Company	—	1	3	—	4

Three Months Ended June 30, 2017 Compared to Three Months Ended March 31, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	4	—	2	—	6 ⁽²⁾
Acetate Tow	(12)	(3)	—	—	(15)
Acetyl Chain	—	5	1	(2)	4
Total Company	—	3	1	(1)	3

Three Months Ended March 31, 2017 Compared to Three Months Ended December 31, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	33	—	(1)	—	32 ⁽³⁾
Acetate Tow	2	(6)	—	—	(4)
Acetyl Chain	2	5	(1)	—	6
Total Company	11	2	(1)	—	12

⁽¹⁾ 2018 includes the effect of the acquisition of Omni Plastics, L.L.C.

⁽²⁾ 2017 includes the effect of the acquisition of the nylon compounding division of Nilit Group.

⁽³⁾ 2017 includes the effect of the SO.F.TER. S.p.A. acquisition.

Table 4b
Factors Affecting Segment Net Sales Year Over Year - Unaudited

Three Months Ended December 31, 2018 Compared to Three Months Ended December 31, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	2	7	(2)	—	7
Acetate Tow	5	(2)	—	—	3
Acetyl Chain	(2)	10	(2)	(1)	5
Total Company	—	8	(2)	—	6

Three Months Ended September 30, 2018 Compared to Three Months Ended September 30, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	7	6	(1)	—	12
Acetate Tow	5	(3)	—	(1)	1
Acetyl Chain	(3)	22	—	(2)	17
Total Company	1	14	(1)	(1)	13

Three Months Ended June 30, 2018 Compared to Three Months Ended June 30, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	11	7	4	—	22
Acetate Tow	1	(2)	—	—	(1)
Acetyl Chain	6	19	5	(3)	27
Total Company	7	13	4	(2)	22

Three Months Ended March 31, 2018 Compared to Three Months Ended March 31, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	19	3	7	—	29
Acetate Tow	(9)	(4)	1	—	(12)
Acetyl Chain	3	25	7	(3)	32
Total Company	7	14	6	(1)	26

Three Months Ended December 31, 2017 Compared to Three Months Ended December 31, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	45	—	4	—	49
Acetate Tow	(14)	(9)	1	1	(21)
Acetyl Chain	(2)	19	4	(2)	19
Total Company	10	10	3	(1)	22

Three Months Ended September 30, 2017 Compared to Three Months Ended September 30, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	45	(2)	2	—	45
Acetate Tow	(12)	(8)	1	—	(19)
Acetyl Chain	—	13	2	(2)	13
Total Company	11	6	2	(1)	18

Three Months Ended June 30, 2017 Compared to Three Months Ended June 30, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	42	(2)	(1)	—	39
Acetate Tow	(13)	(9)	—	—	(22)
Acetyl Chain	(3)	12	(2)	(1)	6
Total Company	8	5	(1)	—	12

Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	<u>(In percentages)</u>				
Engineered Materials	43	(4)	(2)	—	37
Acetate Tow	(6)	(7)	—	—	(13)
Acetyl Chain	(9)	5	(2)	1	(5)
Total Company	5	1	(2)	1	5

Table 4c
Factors Affecting Segment Net Sales Year Over Year - Unaudited

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Engineered Materials	9	6	2	—	17
Acetate Tow	—	(3)	—	—	(3)
Acetyl Chain	1	19	2	(2)	20
Total Company	4	12	2	(1)	17

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Engineered Materials	44	(2)	1	—	43
Acetate Tow	(11)	(8)	—	—	(19)
Acetyl Chain	(4)	12	—	—	8
Total Company	9	5	—	—	14

Table 5
Free Cash Flow - Reconciliation of a Non-GAAP Measure - Unaudited

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Net cash provided by (used in) investing activities.....	(507)	(98)	(78)	(96)	(235)	(549)	(92)	(68)	(325)	(64)
Net cash provided by (used in) financing activities	(1,165)	(526)	(383)	(254)	(2)	(351)	145	(247)	21	(270)
Net cash provided by (used in) operating activities	1,558	363	467	585	143	803	58	255	298	192
Capital expenditures on property, plant and equipment.....	(337)	(93)	(79)	(79)	(86)	(267)	(87)	(64)	(54)	(62)
Capital (distributions to) contributions from NCI.....	(23)	(9)	(6)	(6)	(2)	(27)	(9)	(10)	(4)	(4)
Free cash flow⁽¹⁾⁽²⁾	1,198	261	382	500	55	509	(38)	181	240	126
Net sales	7,155	1,689	1,771	1,844	1,851	6,140	1,593	1,566	1,510	1,471
Free cash flow as % of Net sales	16.7%	15.5%	21.6%	27.1%	3.0%	8.3%	(2.4)%	11.6%	15.9%	8.6%

⁽¹⁾ Free cash flow is a liquidity measure used by the Company and is defined by the Company as net cash provided by (used in) operating activities, less capital expenditures on property, plant and equipment, and adjusted for capital contributions from or distributions to Mitsui & Co., Ltd. ("Mitsui") related to our joint venture, Fairway Methanol LLC ("Fairway").

⁽²⁾ Excludes required debt service and capital lease payments of \$63 million and \$27 million for the years ending December 31, 2018 and 2017, respectively.

Table 6
Cash Dividends Received - Unaudited

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Dividends from equity method investments	221	62	44	39	76	131	17	5	59	50
Dividends from equity investments without readily determinable fair values	117	25	26	34	32	108	26	24	29	29
Total	338	87	70	73	108	239	43	29	88	79

Table 7
Net Debt - Reconciliation of a Non-GAAP Measure - Unaudited

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17
	(In \$ millions)									
Short-term borrowings and current installments of long-term debt - third party and affiliates....	561	561	229	366	425	326	326	435	384	107
Long-term debt, net of unamortized deferred financing costs.....	2,970	2,970	3,196	3,228	3,343	3,315	3,315	2,954	2,931	2,851
Total debt	3,531	3,531	3,425	3,594	3,768	3,641	3,641	3,389	3,315	2,958
Cash and cash equivalents	(439)	(439)	(703)	(708)	(490)	(576)	(576)	(461)	(511)	(501)
Net debt	3,092	3,092	2,722	2,886	3,278	3,065	3,065	2,928	2,804	2,457

Table 8
Certain Items - Unaudited

The following Certain Items attributable to Celanese Corporation are included in Net earnings (loss) and are adjustments to non-GAAP measures:

	2018	Q4 '18	Q3 '18	Q2 '18	Q1 '18	2017	Q4 '17	Q3 '17	Q2 '17	Q1 '17	Income Statement Classification
	(In \$ millions)										
Plant/office closures	19	16	—	3	—	58	2	2	(3)	57	Cost of sales / SG&A / R&D / Other charges (gains), net
Mergers and acquisitions.....	33	6	3	11	13	35	9	10	7	9	Cost of sales / SG&A / Other income (expense), net
Impact from natural disasters ⁽¹⁾	—	—	—	—	—	11	—	11	—	—	Cost of sales
InfraServ ownership change.....	—	—	—	—	—	8	—	—	8	—	Other charges (gains), net / Equity in net earnings (loss) of affiliates
Actuarial (gain) loss on pension and postretirement plans.....	166	166	—	—	—	46	46	—	—	—	Cost of sales / SG&A / Non-operating pension and other postretirement employee benefit (expense) income
Restructuring	9	4	2	3	—	9	—	4	3	2	Cost of sales / SG&A / Other charges (gains), net / Non-operating pension and other postretirement employee benefit (expense) income
Other.....	1	—	—	1	—	—	—	—	3	(3)	(Gain) loss on disposition, net / Equity in net earnings (loss) of affiliates
Certain Items attributable to Celanese Corporation	228	192	5	18	13	167	57	27	18	65	

⁽¹⁾ Primarily associated with Hurricane Harvey.

Table 9
Return on Invested Capital (Adjusted) - Presentation of a Non-GAAP Measure - Unaudited

	2018			2017		
	(In \$ millions, except percentages)			(In \$ millions, except percentages)		
Net earnings (loss) attributable to Celanese Corporation	1,207			843		
Adjusted EBIT (Table 1).....	1,852			1,356		
Adjusted effective tax rate (Table 3a)	14%			16%		
Adjusted EBIT tax effected	1,593			1,139		
	2018	2017	Average	2017	2016	Average
	(In \$ millions, except percentages)					
Short-term borrowings and current installments of long-term debt - third parties and affiliates	561	326	444	326	118	222
Long-term debt, net of unamortized deferred financing costs	2,970	3,315	3,143	3,315	2,890	3,103
Celanese Corporation stockholders' equity	2,984	2,887	2,936	2,887	2,588	2,738
Invested capital	6,523			6,063		
Return on invested capital (adjusted)	24.4%			18.8%		
Net earnings (loss) attributable to Celanese Corporation as a percentage of invested capital.....	18.5%			13.9%		