

Non-US GAAP Financial Measures and Supplemental Information

October 17, 2016

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 business segments in two subtotals, reflecting our two cores, the Acetyl Chain and Materials Solutions, based on similarities among customers, business models and technical processes. As described in the Company's annual report on Form 10-K and quarterly reports on Form 10-Q, the Acetyl Chain includes the Company's Acetyl Intermediates segment and the Industrial Specialties segment. Materials Solutions includes the Company's Advanced Engineered Materials segment and the Consumer Specialties segment. For comparative purposes, the historical financial information included herein has been presented to reflect the Acetyl Chain and Materials Solutions subtotals. There has been no change to the composition of the Company's business segments.

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 Investor Relations/Financial Information/SEC Filings page of our website, www.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 Investor Relations/Financial Information/Non-GAAP Financial Measures page of our website, www.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 may provide guidance on adjusted EBIT but are unable to reconcile forecasted adjusted EBIT to a US GAAP financial measure without unreasonable efforts because a forecast of Certain Items, such as mark-to-market pension gains and losses, which may be significant, is not practical. 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 by core (i.e. Acetyl Chain and/or Materials Solutions) may also be referred to by management as core income. Adjusted EBIT margin by business segment may also be referred to by management as segment income margin. Adjusted EBIT margin by core may also be referred to by management as core 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. We may provide guidance on adjusted earnings per share but are unable to reconcile forecasted adjusted earnings per share to a GAAP financial measure without unreasonable efforts because a forecast of Certain Items, such as mark-to-market pension gains and losses, which may be significant, is not practical.*

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 Materials Solutions, the Acetyl Chain and each of our business segments and the percentage increase or decrease in net sales attributable to price, volume, currency and other factors for Materials Solutions, the Acetyl Chain and each of our business segments.*
- *Cash dividends received from our equity and cost 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.*

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

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15
	(In \$ millions)							
Net earnings (loss) attributable to Celanese Corporation	262	221	257	304	(298)	161	205	236
(Earnings) loss from discontinued operations	3	—	(1)	2	—	—	2	—
Interest income	—	—	(1)	(1)	—	—	(1)	—
Interest expense	28	30	33	119	33	29	30	27
Refinancing expense	4	—	2	—	—	—	—	—
Income tax provision (benefit)	15	52	60	201	31	74	24	72
Certain Items attributable to Celanese Corporation (Table 8)	7	9	8	611	490	41	65	15
Adjusted EBIT	319	312	358	1,236	256	305	325	350
Depreciation and amortization expense ⁽¹⁾	71	73	73	279	76	70	66	67
Operating EBITDA	390	385	431	1,515	332	375	391	417
	(In \$ millions)							
Advanced Engineered Materials	—	—	—	—	—	—	—	—
Consumer Specialties	1	—	—	10	10	—	—	—
Industrial Specialties	—	—	—	28	18	10	—	—
Acetyl Intermediates	—	—	—	40	1	—	39	—
Other Activities ⁽²⁾	—	—	—	—	—	—	—	—
Accelerated depreciation and amortization expense	1	—	—	78	29	10	39	—
Depreciation and amortization expense ⁽¹⁾	71	73	73	279	76	70	66	67
Total depreciation and amortization expense	72	73	73	357	105	80	105	67

⁽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

	Q3 '16		Q2 '16		Q1 '16		2015		Q4 '15		Q3 '15		Q2 '15		Q1 '15	
	(In \$ millions, except percentages)															
Operating Profit (Loss) / Operating Margin																
Materials Solutions	161	27.3%	162	27.0%	166	27.9%	497	21.7%	97	17.4 %	135	23.6%	144	24.2%	121	21.2%
Acetyl Chain ⁽¹⁾	108	14.2%	107	13.7%	145	17.3%	69	2.0%	(246)	(30.3)%	73	8.4%	82	9.0%	160	17.6%
Other Activities ⁽²⁾	(23)		(26)		(24)		(240)		(156)		(22)		(38)		(24)	
Total	246	18.6%	243	18.0%	287	20.4%	326	5.7%	(305)	(22.9)%	186	13.2%	188	12.7%	257	17.7%
Less: Net Earnings (Loss) Attributable to NCI ⁽¹⁾	1		2		2		(19)		(3)		(10)		(4)		(2)	
Operating Profit (Loss) Attributable to Celanese Corporation	245	18.5%	241	17.8%	285	20.3%	345	6.1%	(302)	(22.6)%	196	13.9%	192	13.0%	259	17.9%
Operating Profit (Loss) / Operating Margin Attributable to Celanese Corporation																
Advanced Engineered Materials	93	25.5%	82	22.5%	88	25.1%	235	17.7%	51	16.4 %	58	17.8%	67	19.4%	59	17.2%
Consumer Specialties	68	30.2%	80	34.0%	78	32.0%	262	27.0%	46	18.7 %	77	31.2%	77	30.9%	62	27.3%
Total Materials Solutions	161	27.3%	162	27.0%	166	27.9%	497	21.7%	97	17.4 %	135	23.6%	144	24.2%	121	21.2%
Industrial Specialties	25	10.2%	29	11.1%	31	12.3%	72	6.7%	(4)	(1.7)%	19	6.9%	28	9.8%	29	10.3%
Acetyl Intermediates ⁽¹⁾	82	13.9%	75	12.7%	112	16.9%	16	0.6%	(239)	(37.1)%	64	9.4%	58	8.2%	133	18.7%
Eliminations	—		1		—		—		—		—		—		—	
Total Acetyl Chain	107	14.0%	105	13.5%	143	17.0%	88	2.5%	(243)	(29.9)%	83	9.5%	86	9.4%	162	17.8%
Other Activities ⁽²⁾	(23)		(26)		(24)		(240)		(156)		(22)		(38)		(24)	
Total	245	18.5%	241	17.8%	285	20.3%	345	6.1%	(302)	(22.6)%	196	13.9%	192	13.0%	259	17.9%
Equity Earnings, Cost-Dividend Income, Other Income (Expense) Attributable to Celanese Corporation																
Advanced Engineered Materials	33		27		31		151		33		44 ⁽³⁾		31		43	
Consumer Specialties	27		28		28		108		27		26		27		28	
Total Materials Solutions	60		55		59		259		60		70		58		71	
Industrial Specialties	—		—		—		—		—		—		—		—	
Acetyl Intermediates	1		2		2		7		3		2		1		1	
Total Acetyl Chain	1		2		2		7		3		2		1		1	
Other Activities ⁽²⁾	6		5		4		14		5		(4)		9		4	
Total	67		62		65		280		68		68		68		76	
Certain Items Attributable to Celanese Corporation (Table 8)																
Advanced Engineered Materials	1		2		1		11		1		4		4		2	
Consumer Specialties	3		—		—		41		36		2		1		2	
Total Materials Solutions	4		2		1		52		37		6		5		4	
Industrial Specialties	—		1		2		38		26		9		2		1	
Acetyl Intermediates	1		3		1		365		296		18		48		3	
Total Acetyl Chain	1		4		3		403		322		27		50		4	
Other Activities ⁽²⁾	2		3		4		156		131		8		10		7	
Total	7		9		8		611		490		41		65		15	
Adjusted EBIT / Adjusted EBIT Margin																
Advanced Engineered Materials	127	34.8%	111	30.4%	120	34.3%	397	29.9%	85	27.3 %	106	32.5%	102	29.5%	104	30.3%
Consumer Specialties	98	43.6%	108	46.0%	106	43.4%	411	42.4%	109	44.3 %	105	42.5%	105	42.2%	92	40.5%
Total Materials Solutions	225	38.1%	219	36.5%	226	38.0%	808	35.2%	194	34.8 %	211	36.8%	207	34.8%	196	34.4%
Industrial Specialties	25	10.2%	30	11.5%	33	13.0%	110	10.2%	22	9.2 %	28	10.2%	30	10.5%	30	10.6%
Acetyl Intermediates	84	14.3%	80	13.5%	115	17.3%	388	14.1%	60	9.3 %	84	12.4%	107	15.1%	137	19.2%
Eliminations	—		1		—		—		—		—		—		—	
Total Acetyl Chain	109	14.3%	111	14.2%	148	17.6%	498	14.2%	82	10.1 %	112	12.8%	137	15.0%	167	18.4%
Other Activities ⁽²⁾	(15)		(18)		(16)		(70)		(20)		(18)		(19)		(13)	
Total	319	24.1%	312	23.1%	358	25.5%	1,236	21.8%	256	19.2 %	305	21.6%	325	22.0%	350	24.1%

⁽¹⁾ Net earnings (loss) attributable to NCI is included within the Acetyl Intermediates 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 \$43 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.)

	Q3 '16		Q2 '16		Q1 '16		2015		Q4 '15		Q3 '15		Q2 '15		Q1 '15	
	(In \$ millions, except percentages)															
Depreciation and Amortization Expense⁽¹⁾																
Advanced Engineered Materials	22		25		24		99		24		26		24		25	
Consumer Specialties	11		11		11		50		12		15		12		11	
Total Materials Solutions	33		36		35		149		36		41		36		36	
Industrial Specialties	9		8		8		36		7		10		9		10	
Acetyl Intermediates	27		27		27		83		29		17		18		19	
Total Acetyl Chain	36		35		35		119		36		27		27		29	
Other Activities ⁽²⁾	2		2		3		11		4		2		3		2	
Total	71		73		73		279		76		70		66		67	
Operating EBITDA / Operating EBITDA Margin																
Advanced Engineered Materials	149	40.8%	136	37.3%	144	41.1%	496	37.4%	109	35.0%	132	40.5%	126	36.4%	129	37.6%
Consumer Specialties	109	48.4%	119	50.6%	117	48.0%	461	47.6%	121	49.2%	120	48.6%	117	47.0%	103	45.4%
Total Materials Solutions	258	43.7%	255	42.5%	261	43.9%	957	41.7%	230	41.3%	252	44.0%	243	40.8%	232	40.7%
Industrial Specialties	34	13.9%	38	14.5%	41	16.2%	146	13.5%	29	12.1%	38	13.9%	39	13.6%	40	14.2%
Acetyl Intermediates	111	18.8%	107	18.1%	142	21.4%	471	17.2%	89	13.8%	101	14.9%	125	17.7%	156	21.9%
Eliminations	—		1		—		—		—		—		—		—	
Total Acetyl Chain	145	19.0%	146	18.7%	183	21.8%	617	17.6%	118	14.5%	139	15.9%	164	18.0%	196	21.6%
Other Activities ⁽²⁾	(13)		(16)		(13)		(59)		(16)		(16)		(16)		(11)	
Total	390	29.5%	385	28.5%	431	30.7%	1,515	26.7%	332	24.9%	375	26.5%	391	26.5%	417	28.8%

⁽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

	Q3 '16		Q2 '16		Q1 '16		2015		Q4 '15		Q3 '15		Q2 '15		Q1 '15	
	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	265	1.83	221	1.50	256	1.73	306	2.01	(298)	(2.03)	161	1.07	207	1.34	236	1.53
Income tax provision (benefit)	15		52		60		201		31		74		24		72	
Earnings (loss) from continuing operations before tax	280		273		316		507		(267)		235		231		308	
Certain Items attributable to Celanese Corporation (Table 8)	7		9		8		611		490		41		65		15	
Refinancing and related expenses	4		—		2		—		—		—		—		—	
Adjusted earnings (loss) from continuing operations before tax	291		282		326		1,118		223		276		296		323	
Income tax (provision) benefit on adjusted earnings ⁽¹⁾	(49)		(48)		(55)		(201)		(40)		(50)		(53)		(58)	
Adjusted earnings (loss) from continuing operations⁽²⁾	242	1.67	234	1.59	271	1.83	917	6.02	183	1.25	226	1.50	243	1.58	265	1.72
Diluted shares (in millions) ⁽³⁾																
Weighted average shares outstanding	144.0		146.5		147.4		150.8		146.9		149.8		153.5		153.2	
Incremental shares attributable to equity awards	0.6		0.6		0.7		1.5		—		1.2		0.5		0.7	
Total diluted shares	<u>144.6</u>		<u>147.1</u>		<u>148.1</u>		<u>152.3</u>		<u>146.9</u>		<u>151.0</u>		<u>154.0</u>		<u>153.9</u>	

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

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15
(In percentages)								
Adjusted effective tax rate	17	17	17	18	18	18	18	18

⁽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
Q4 '15 & 2015	(2.5)%	7.8%

⁽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

	Estimated 2016	Actual 2015
	(In percentages)	
US GAAP effective tax rate	16	41
Discrete quarterly recognition of GAAP items ⁽¹⁾	2	2
Tax impact of other charges and adjustments	—	(15)
Utilization of foreign tax credits	—	(2)
Changes in valuation allowances, excluding impact of other charges and adjustments	(2)	(5)
Other ⁽²⁾	1	(3)
Adjusted tax rate	17	18

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

⁽¹⁾ Such as changes in tax laws, deferred taxes on outside basis differences, changes in uncertain tax positions and prior year audit adjustments.

⁽²⁾ Tax impacts related to full-year forecasted tax opportunities and related costs.

Table 4
Net Sales by Segment - Unaudited

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15
	(In \$ millions)							
Advanced Engineered Materials	365	365	350	1,326	311	326	346	343
Consumer Specialties	225	235	244	969	246	247	249	227
Total Materials Solutions	590	600	594	2,295	557	573	595	570
Industrial Specialties	245	262	253	1,082	239	274	287	282
Acetyl Intermediates	589	592	663	2,744	644	680	707	713
Eliminations ⁽¹⁾	(71)	(74)	(76)	(323)	(71)	(82)	(83)	(87)
Total Acetyl Chain	763	780	840	3,503	812	872	911	908
Other Activities ⁽²⁾	—	—	—	—	—	—	—	—
Intersegment eliminations ⁽¹⁾	(30)	(29)	(30)	(124)	(35)	(32)	(29)	(28)
Net sales	1,323	1,351	1,404	5,674	1,334	1,413	1,477	1,450

⁽¹⁾ Includes intersegment sales as follows:

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15
	(In \$ millions)							
Industrial Specialties	(1)	(1)	—	—	—	—	—	—
Acetyl Intermediates	(100)	(102)	(106)	(447)	(106)	(114)	(112)	(115)
Intersegment eliminations	(101)	(103)	(106)	(447)	(106)	(114)	(112)	(115)

⁽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 4a
Factors Affecting Segment Net Sales Sequentially - Unaudited

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

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	(1)	1	—	—	—
Consumer Specialties	(4)	—	—	—	(4)
Total Materials Solutions	(2)	—	—	—	(2)
Industrial Specialties	(6)	—	(1)	—	(7)
Acetyl Intermediates	—	—	—	—	—
Total Acetyl Chain	(2)	—	(1)	1	(2)
Total Company	(2)	—	—	—	(2)

Three Months Ended June 30, 2016 Compared to Three Months Ended March 31, 2016

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	6	(2)	1	—	5
Consumer Specialties	(3)	(1)	—	—	(4)
Total Materials Solutions	2	(2)	1	—	1
Industrial Specialties	4	(1)	1	—	4
Acetyl Intermediates	(11)	—	—	—	(11)
Total Acetyl Chain	(7)	(1)	1	—	(7)
Total Company	(4)	(1)	1	—	(4)

Three Months Ended March 31, 2016 Compared to Three Months Ended December 31, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	12	—	—	—	12
Consumer Specialties	6	(7)	—	—	(1)
Total Materials Solutions	10	(3)	—	—	7
Industrial Specialties	9	(3)	—	—	6
Acetyl Intermediates	7	(4)	—	—	3
Total Acetyl Chain	8	(4)	—	(1)	3
Total Company	9	(4)	—	—	5

Three Months Ended December 31, 2015 Compared to Three Months Ended September 30, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	(3)	—	(1)	—	(4)
Consumer Specialties	(1)	1	—	—	—
Total Materials Solutions	(3)	—	—	—	(3)
Industrial Specialties	(7)	(5)	(1)	—	(13)
Acetyl Intermediates	1	(7)	(1)	2	(5)
Total Acetyl Chain	(2)	(7)	(1)	3	(7)
Total Company	(1)	(4)	(1)	—	(6)

Three Months Ended September 30, 2015 Compared to Three Months Ended June 30, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	(5)	(1)	—	—	(6)
Consumer Specialties	—	—	—	—	—
Total Materials Solutions	(3)	(1)	—	—	(4)
Industrial Specialties	(5)	1	—	—	(4)
Acetyl Intermediates	(1)	(3)	—	—	(4)
Total Acetyl Chain	(2)	(2)	—	—	(4)
Total Company	(3)	(1)	—	—	(4)

Three Months Ended June 30, 2015 Compared to Three Months Ended March 31, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u> (In percentages)	<u>Other</u>	<u>Total</u>
Advanced Engineered Materials	2	—	(1)	—	1
Consumer Specialties	11	(1)	—	—	10
Total Materials Solutions	6	(1)	(1)	—	4
Industrial Specialties	6	(4)	(1)	—	1
Acetyl Intermediates	(1)	1	(1)	—	(1)
Total Acetyl Chain	2	(1)	(1)	—	—
Total Company	3	(1)	(1)	1	2

Table 4a
Factors Affecting Segment Net Sales Sequentially - Unaudited (Cont.)

Three Months Ended March 31, 2015 Compared to Three Months Ended December 31, 2014

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	6	2	(4)	—	4
Consumer Specialties	(16)	(2)	—	—	(18)
Total Materials Solutions	(4)	—	(3)	—	(7)
Industrial Specialties	16	(4)	(5)	—	7
Acetyl Intermediates	1	(11)	(3)	—	(13)
Total Acetyl Chain	5	(10)	(4)	1	(8)
Total Company	2	(6)	(4)	1	(7)

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

Three Months Ended September 30, 2016 Compared to Three Months Ended September 30, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	16	(4)	—	—	12
Consumer Specialties	(2)	(7)	—	—	(9)
Total Materials Solutions	8	(5)	—	—	3
Industrial Specialties	(1)	(9)	(1)	—	(11)
Acetyl Intermediates	(3)	(11)	—	1	(13)
Total Acetyl Chain	(3)	(12)	—	2	(13)
Total Company	1	(9)	—	2	(6)

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	8	(4)	1	—	5
Consumer Specialties	2	(8)	—	—	(6)
Total Materials Solutions	5	(5)	1	—	1
Industrial Specialties	(1)	(8)	—	—	(9)
Acetyl Intermediates	(5)	(13)	—	2	(16)
Total Acetyl Chain	(4)	(12)	—	2	(14)
Total Company	—	(10)	—	1	(9)

Three Months Ended March 31, 2016 Compared to Three Months Ended March 31, 2015

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	5	(2)	(1)	—	2
Consumer Specialties	17	(9)	—	—	8
Total Materials Solutions	9	(5)	—	—	4
Industrial Specialties	—	(9)	(1)	—	(10)
Acetyl Intermediates	6	(13)	(2)	2	(7)
Total Acetyl Chain	5	(13)	(2)	1	(9)
Total Company	7	(10)	(2)	1	(4)

Three Months Ended December 31, 2015 Compared to Three Months Ended December 31, 2014

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	(2)	1	(5)	—	(6)
Consumer Specialties	(8)	(3)	(1)	—	(12)
Total Materials Solutions	(5)	(1)	(3)	—	(9)
Industrial Specialties	8	(12)	(6)	—	(10)
Acetyl Intermediates	—	(17)	(5)	1	(21)
Total Acetyl Chain	2	(17)	(5)	3	(17)
Total Company	(1)	(11)	(5)	2	(15)

Three Months Ended September 30, 2015 Compared to Three Months Ended September 30, 2014

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	(3)	(1)	(7)	—	(11)
Consumer Specialties	(10)	(4)	(1)	—	(15)
Total Materials Solutions	(7)	(2)	(4)	—	(13)
Industrial Specialties	—	(5)	(8)	—	(13)
Acetyl Intermediates	(6)	(15)	(6)	—	(27)
Total Acetyl Chain	(5)	(14)	(7)	2	(24)
Total Company	(5)	(10)	(6)	1	(20)

Three Months Ended June 30, 2015 Compared to Three Months Ended June 30, 2014

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	(1)	(1)	(9)	—	(11)
Consumer Specialties	(10)	(3)	(1)	—	(14)
Total Materials Solutions	(5)	(2)	(5)	—	(12)
Industrial Specialties	(1)	(4)	(9)	—	(14)
Acetyl Intermediates	(4)	(10)	(8)	—	(22)
Total Acetyl Chain	(3)	(10)	(9)	3	(19)
Total Company	(4)	(7)	(8)	2	(17)

Table 4b
Factors Affecting Segment Net Sales Year Over Year - Unaudited (Cont.)

Three Months Ended March 31, 2015 Compared to Three Months Ended March 31, 2014

	Volume	Price	Currency	Other	Total
	(In percentages)				
Advanced Engineered Materials	—	—	(8)	—	(8)
Consumer Specialties	(21)	(3)	(1)	—	(25)
Total Materials Solutions	(9)	(2)	(5)	—	(16)
Industrial Specialties	(4)	3	(9)	—	(10)
Acetyl Intermediates	(2)	(7)	(6)	—	(15)
Total Acetyl Chain	(3)	(5)	(7)	1	(14)
Total Company	(6)	(3)	(7)	1	(15)

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

Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

	<u>Volume</u>	<u>Price</u>	<u>Currency</u>	<u>Other</u>	<u>Total</u>
	(In percentages)				
Advanced Engineered Materials	(1)	(1)	(7)	—	(9)
Consumer Specialties	(13)	(3)	(1)	—	(17)
Total Materials Solutions	(6)	(2)	(4)	—	(12)
Industrial Specialties	—	(4)	(8)	—	(12)
Acetyl Intermediates	(3)	(13)	(6)	—	(22)
Total Acetyl Chain	(3)	(11)	(7)	2	(19)
Total Company	(4)	(8)	(6)	1	(17)

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

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15
	(In \$ millions)							
Net cash provided by (used in) investing activities	(54)	(63)	(75)	(558)	(97)	(107)	(181)	(173)
Net cash provided by (used in) financing activities	265	(259)	(473)	(66)	(2)	(99)	18	17
Net cash provided by (used in) operating activities	304	349	287	862	136	173	283	270
Capital expenditures on property, plant and equipment	(58)	(58)	(70)	(520)	(89)	(104)	(165)	(162)
Capital (distributions to) contributions from NCI	(9)	(6)	—	214	27	32	75	80
Free cash flow⁽¹⁾⁽²⁾	237	285	217	556	74	101	193	188

⁽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 \$56 million and \$25 million for the years ending December 31, 2016 and 2015, respectively.

Table 6
Cash Dividends Received - Unaudited

	<u>Q3 '16</u>	<u>Q2 '16</u>	<u>Q1 '16</u>	<u>2015</u>	<u>Q4 '15</u>	<u>Q3 '15</u>	<u>Q2 '15</u>	<u>Q1 '15</u>
	(In \$ millions)							
Dividends from equity method investments	6	73	37	176	54	5	29	88
Dividends from cost method investments	26	29	27	107	27	26	26	28
Total	32	102	64	283	81	31	55	116

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

	<u>Q3 '16</u>	<u>Q2 '16</u>	<u>Q1 '16</u>	<u>2015</u>	<u>Q4 '15</u>	<u>Q3 '15</u>	<u>Q2 '15</u>	<u>Q1 '15</u>
	(In \$ millions)							
Short-term borrowings and current installments of long-term debt - third party and affiliates	92	119	116	513	513	463	123	128
Long-term debt, net of unamortized deferred financing costs	2,923	2,464	2,487	2,468	2,468	2,522	2,532	2,515
Total debt	3,015	2,583	2,603	2,981	2,981	2,985	2,655	2,643
Cash and cash equivalents	(1,252)	(735)	(716)	(967)	(967)	(952)	(988)	(851)
Net debt	1,763	1,848	1,887	2,014	2,014	2,033	1,667	1,792

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:

	Q3 '16	Q2 '16	Q1 '16	2015	Q4 '15	Q3 '15	Q2 '15	Q1 '15	Income Statement Classification
	(In \$ millions)								
Employee termination benefits ⁽¹⁾	3	3	5	53	33	6	10	4	Other charges (gains), net
Plant/office closures	2	—	1	48	31	13	1	3	Other charges (gains), net / Cost of sales / SG&A
Singapore contract termination	—	—	—	174	174	—	—	—	Other charges (gains), net
Business optimization	1	1	2	20	4	6	5	5	Cost of sales / SG&A
Asset impairments	—	1	—	126	125	1	—	—	Other charges (gains), net
(Gain) loss on disposition of business and assets, net	(2)	—	—	4	(1)	—	5	—	(Gain) loss on disposition, net
Commercial disputes ⁽²⁾	—	—	—	6	—	5	—	1	Cost of sales / Other charges (gains), net
Write-off of other productive assets	1	2	—	39	—	—	39	—	Cost of sales / R&D
Employee benefit plan changes	—	1	—	4	(1)	2	1	2	Cost of sales / SG&A / R&D
Actuarial (gain) loss on pension and postretirement plans	—	—	—	127	126	—	1	—	Cost of sales / SG&A / R&D
Start-up costs ⁽³⁾	1	1	—	10	(1)	8	3	—	Cost of sales
Mergers and acquisitions	1	—	—	—	—	—	—	—	SG&A
Certain Items attributable to Celanese Corporation	7	9	8	611	490	41	65	15	

⁽¹⁾ Primarily associated with site shutdown costs.

⁽²⁾ Primarily associated with litigation settlement costs.

⁽³⁾ Primarily associated with Fairway joint venture operational start-up costs.

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

	2015		
	(In \$ millions, except percentages)		
Net earnings (loss) attributable to Celanese Corporation	304		
Adjusted EBIT (Table 1)	1,236		
Adjusted effective tax rate (Table 3a)	18%		
Adjusted EBIT tax effected	1,014		
	2015	2014	Average
	(In \$ millions, except percentages)		
Short-term borrowings and current installments of long-term debt - third parties and affiliates	513	137	325
Long-term debt, net of unamortized deferred financing costs	2,468	2,586	2,527
Celanese Corporation stockholders' equity	2,378	2,818	2,598
Invested capital	5,450		
Return on invested capital (adjusted)	18.6%		
Net earnings (loss) attributable to Celanese Corporation as a percentage of invested capital	5.6%		