

Risks and Uncertainties Statement

On August 1, 2019, Quaker Chemical Corporation (the "Company", also known as Quaker Houghton) completed its combination with Houghton International, Inc. ("Houghton"), herein referred to as "the Combination". Therefore, two months of Houghton's operations are included in the Company's third quarter of 2019 results described in this presentation.

Regulation G

The attached charts include Company information that does not conform to generally accepted accounting principles ("GAAP"). Management believes that an analysis of this data is meaningful to investors because it provides insight with respect to ongoing operating results of the Company and allows investors to better evaluate the financial results of the Company. These measures should not be viewed as an alternative to GAAP measures of performance. Furthermore, these measures may not be consistent with similar measures provided by other companies. This data should be read in conjunction with the Company's most recent annual report filed on form 10-K, as amended by Form 10-K/A, as well as the third quarter earnings news release dated November 12, 2019, which has been furnished to the Securities and Exchange Commission ("SEC") on Form 8-K and the Company's Form 10-Q for the period ended September 30, 2019, which has been filed with the SEC.

Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements can be identified by the fact that they do not relate strictly to historical or current facts. We have based these forward-looking statements on our current expectations about future events. These forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, intentions, financial condition, results of operations, future performance, and business, including but not limited to statements relating to the potential benefits of the Combination described above, our current and future results and plans, and statements that include the words "may," "could," "bolieve," "expect," "anticipate," "estimate," "intend," "plan" or similar expressions. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected in such statements. A major risk is that demand for the Company's products and services is largely derived from the demand for its customers' products, which subjects the Company to uncertainties related to downturns in a customer's business and unanticipated customer production shutdowns. Other major risks and uncertainties include, but are not limited to, significant increases in raw material costs, customer financial stability, worldwide economic and political conditions, foreign currency fluctuations, significant changes in applicable tax rates and regulations, future terrorist attacks and other acts of violence. Furthermore, the Company is subject to the same business cycles as those experienced by steel, automobile, alored, appliance, and durable goods manufacturers. Our forward-looking statements are subject to risks, uncertainties and assumptions about the Company is business could cause its results to differ materially from expected and hi

- potential adverse effects on the Company's business, properties or operations caused by the implementation of the Combination;
- the Company's ability to promptly, efficiently and effectively integrate the operations of Houghton and Quaker Chemical;
- the ability to develop or modify financial reporting, information systems and other related financial tools to ensure overall financial integrity and adequacy of internal control procedures;
- the ability to identify and take advantage of potential synergies, including cost reduction opportunities, while maintaining legacy business and other related attributes, as well as the risk that the costs to achieve synergies may be more than anticipated;
- difficulties in managing a larger, combined company, addressing differences in business culture and retaining keypersonnel;
- risks related to each company's distraction from ongoing business operations due to the Combination; and,
- the outcome of any legal proceedings that may be instituted against the companies related to the Combination.

Therefore, we caution you not to place undue reliance on our forward-looking statements. For more information regarding these risks and uncertainties as well as certain additional risks that we face, you should refer to the Risk Factors detailed in Item 1A of our Form 10-K for the year ended December 31, 2018 as well as the proxy statement the companyfiled on July 31, 2017 and in our quarterly and other reports filed from time to time with the SEC. We do not intend to, and we disclaim any duty or obligation to, update or revise any forward-looking statements to reflect new information or future events or for any other reason. This discussion is provided as permitted by the Private Securities Litigation Reform Act of 1995.



Speakers

Michael F. Barry

Chairman of the Board, Chief Executive Officer & President

Mary Dean Hall

Senior Vice President, Chief Financial Officer & Treasurer

Joseph Berquist

Senior Vice President, Global Specialty Businesses & Chief Strategy Officer

Shane Hostetter

Vice President, Finance & Chief Accounting Officer



Chairman Comments

Third Quarter 2019

- Net sales negatively impacted by the compounding conditions of a weak global automotive market, a generally weaker industrial environment in most parts of the world, some customer inventory corrections in their markets and the continued strength of the U.S. dollar
- Results positively impacted by gaining market share, achieving targeted gross margin and making good progress with our integration and related cost synergies
- These positive contributions, along with the benefits of higher foreign exchange transaction gains, drove pro forma adjusted EBITDA growth of 3% quarter-over-quarter despite a 7% decrease in proforma net sales

Affirm 2019 Outlook and 2021 Expectations

- Reaffirm previous guidance for the full year 2019 pro forma Quaker Houghton adjusted EBITDA;
 given Q3'19 results, the expected adjusted EBITDA range for Q4'19 is \$52 million to \$59 million
- Expectations remain that by August 2021 the Company's planned cost synergies will be achieved, Quaker Houghton will be a \$300+ million adjusted EBITDA company on a going forward basis and the Company will be on track for organic growth of 2 to 4% above the market



Financial Highlights – Actual Results

Third quarter of 2019 (inclusive of two months of Houghton's results)

- Net sales of \$325.1 million increase 46% compared to prior year primarily due to Houghton
 - Excluding Houghton, net sales declined 7% due to lower volumes of 4%, negative foreign exchange translation of 2% and a decline in price and product mix of 1%
- Gross profit increase of \$24.0 million primarily due to Houghton but partially offset by a \$10.2 million one-time expense related to Houghton's inventory sold at its fair value due to purchase accounting
 - Excluding the purchase accounting adjustment, estimated gross margin of 35.5% decreased compared to 36.5% in the prior year due to lower gross margins in the Houghton business
- SG&A increased \$27.5 million due to additional Houghton SG&A, partially offset by lower SG&A on the
 decline in net sales, a benefit from foreign exchange translation and the initial benefits of realized cost
 savings associated with the Combination
- Below operating income performance driven by higher other income due to a benefit from foreign exchange gains in the current quarter and higher equity earnings from Houghton's Korean joint venture
- Effective tax rates of 27.6% and 18.5% in Q3'19 and Q3'18, respectively, include the impact of certain non-deductible acquisition-related and other non-core costs; ETR without these would have been approximately 20% and 22%, respectively
- Net loss of \$13.1 million or \$0.80 per diluted share compared to prior year net income of \$19.7 million or \$1.47 per diluted share, primarily due to Combination-related costs



Financial Highlights – Non-GAAP & Pro Forma

Third quarter of 2019

Non-GAAP Results (inclusive of two months of Houghton's results)

- Non-GAAP EPS of \$1.56 declined from \$1.63 in the prior year impacted by the timing of the Combination's close and related share count increase
- Non-GAAP operating income increased to \$34.5 million compared to \$27.8 million in the prior year, primarily due to additional net sales and operating income from Houghton
- Non-GAAP adjusted EBITDA increased to \$51.4 million compared to \$33.0 million in the prior year, primarily due to additional earnings from Houghton

Pro forma Results (inclusive of three months of estimated Quaker Houghton's results)

- Pro forma net sales of approximately \$386 million decreased 7% compared to approximately \$417 million in the prior year, primarily due to similar negative volume and foreign exchange declines previously discussed in the actual comparisons
- Pro forma adjusted EBITDA of approximately \$61 million increased 3% compared to approximately \$59 million in the prior year, primarily due to improved gross margin, lower SG&A and an increase in foreign exchange transaction gains, partially offset by lower net sales and the negative impact of foreign exchange translation



Financial Snapshot

Third quarter of 2019 (dollars in millions unless otherwise noted)

	Q3 2019		Q3 2018		YTI	D 2019	ΥT	D 2018
GAAP								
Net Sales	\$	325.1	\$	222.0	\$	742.2	\$	656.0
Gross Profit		105.1		81.1		256.0		237.5
Operating (Loss) Income		(14.5)		24.9		25.9		67.7
Net (Loss) Income		(13.1)		19.7		16.4		51.7
(Loss) Earnings Per Share		(0.80)		1.47		1.14		3.87
Non-GAAP								
Non-GAAP Operating Income	\$	34.5	\$	27.8	\$	84.3	\$	80.1
Non-GAAP Operating Margin (%)		10.6%		12.5%		11.4%		12.2%
Adjusted EBITDA		51.4		33.0		112.5		96.1
Adjusted EBITDA Margin (%)		15.8%		14.9%		15.2%		14.6%
Non-GAAP Earnings Per Diluted Share		1.56		1.63		4.53		4.63
Pro Forma								
Sales Revenue	\$	386	\$	417	\$	1,171	\$	1,255
Adjusted EBITDA		61		59		173		178
Adjusted EBITDA Margin (%)		16%		14%		15%		14%



Quaker Houghton's Pro-Forma Adjusted EBITDA

(dollars in millions)



TTM Q3'19 and YTD Q3'19 adjusted EBITDA decreases due to lower volumes and FX, but Q3'19 up on improved gross margin and benefits from higher other income and equity income



Note: Estimated pro-forma adjusted EBITDA represents full year performance for both Quaker and Houghton and adjusts for divestiture and other accounting adjustments during each respective period. See appendix for reconciliations.

Leverage and Liquidity Update

- At close on August 1, 2019, net debt to pro forma TTM adjusted EBITDA estimated to be ~3.4x compared to ~3.3x as of September 30, 2019; Norman Hay acquisition increases leverage to ~3.5x initially
- Remain committed to de-levering to below 2.5x within 2 years after close
- Cash and cash equivalents on hand of \$128 million and undrawn revolver of \$290 million as of September 30, 2019 provide ample liquidity
- Cost of debt approximately 3.3% as of September 30, 2019
- Capex expected to be ~2% of sales in the first two years and ~1.5% of sales thereafter



Update to Certain Accounting Adjustments and Other Financial Items

- Previously disclosed net sales decrease due to conforming of accounting policies including revenue recognition now estimated to be ~\$15—\$30 million; minimal impact to consolidated EBITDA
- Total depreciation and amortization expense estimate of ~\$80 million per year, including ~\$5 million due to estimated purchase accounting adjustments
- One-time expenses related to integration and achieving planned cost synergies estimated to be ~1x planned cost synergies (~\$60 million); timing of one-time expenses will be front loaded in 2019 and 2020
- Interest expense of ~3.3% reduces combined interest cost by \$20–25 million per year
- Tax rate estimates, excluding acquisition-related costs and other non-core items: Q4 2019: 23–25%; Full year 2019 and 2020: 22–24%
- Share count increased ~4.3 million shares to ~17.7 million shares









Non-GAAP and Pro Forma Measures

The information included in the attached charts includes non-GAAP (unaudited) financial information that includes EBITDA, adjusted EBITDA, non-GAAP operating income, non-GAAP earnings per diluted share and pro forma adjusted EBITDA. The Company believes these non-GAAP financial measures provide meaningful supplemental information as they enhance a reader's understanding of the financial performance of the Company, are indicative of future operating performance of the Company, and facilitate a comparison among fiscal periods, as the non-GAAP financial measures exclude items that are not indicative of future operating performance or not considered core to the Company's operations. Non-GAAP results are presented for supplemental informational purposes only and should not be considered a substitute for the financial information presented in accordance with GAAP.

The Companypresents EBITDA which is calculated as net income attributable to the Companybefore depreciation and amortization, interest expense, net, and taxes on income before equity in net income of associated companies. The Companyalso presents adjusted EBITDA which is calculated as EBITDA plus or minus certain items that are not indicative of future operating performance or not considered core to the Companypresents non-GAAP operating income which is calculated as operating income plus or minus certain items that are not indicative of future operating performance or not considered core to the Company's operations. Adjusted EBITDA margin and non-GAAP operating margin are calculated as the percentage of adjusted EBITDA and non-GAAP operating income to consolidated net sales, respectively. The Companybelieves these non-GAAP measures provide transparent and useful information and are widely used by analysts, investors, and competitors in our industry as well as by management in assessing the operating performance of the Companyon a consistent basis.

Additionally, the Companypresents non-GAAP earnings per diluted share as additional performance measures. Non-GAAP earnings per diluted share is calculated as non-GAAP net income per diluted share as accounted for under the "two-class share method." The Companybelieves that non-GAAP earnings per diluted share provide transparent and useful information and are widely used by analysts, investors, and competitors in our industry as well as by management in assessing the operating performance of the Companyon a consistent basis.

During the first quarter of 2019, the Company updated its calculation methodology to include the use of interest expense net of interest income in the reconciliation of EBITDA and adjusted EBITDA, compared to its historical use of only interest expense, and also to include the non-service component of the Company's pension and postretirement benefit costs in the reconciliation of adjusted EBITDA and non-GAAP earnings per diluted share. Prior year amounts have been recast for comparability purposes and the change in calculation methodology does not produce materially different results. The Company believes these updated calculations better reflect its underlying operating performance and better aligns the Company's calculations to those commonly used by analysts, investors, and competitors in our industry.

As it relates to the Company's forward looking guidance for the fourth quarter of 2019 and other forward-looking guidance, the Company has not provided guidance for GAAP measures or a quantitative reconciliation of forward-looking non-GAAP financial measures to the most directly comparable U.S. GAAP measure because it is unable to predict with reasonable certainty the ultimate outcome of certain significant items necessary to calculate such measures without unreasonable effort. These items include, but are not limited to, certain non-recurring or non-core items the Company may record that could materially impact net income, such as Combination and other acquisition-related expenses and restructuring expenses, as well as income taxes. These items are uncertain, depend on various factors, and could have a material impact on the U.S. GAAP reported results for the guidance period.

In addition, the Company has provided certain unaudited pro forma financial information in the attached charts. The unaudited pro forma financial information is based on the historical consolidated financial statements and results of both Quaker, as reported, and Houghton, and has been prepared to illustrate the effects of the Combination. The unaudited pro forma financial information has been presented for informational purposes only and is not necessarily indicative of Quaker Houghton's past results of operations, nor is it indicative of the future operating results of Quaker Houghton and should not be considered a substitute for the financial information presented in accordance with GAAP.

The following charts should be read in conjunction with the Company's third quarter earnings news release dated November 12, 2019, which has been furnished to the Securities and Exchange Commission ("SEC") on Form 8-K and the Company's Form 10-Q for the period ended September 30, 2019, which has been filed with the SEC. These documents may contain additional explanatory language and information regarding certain of the items included in the following reconciliations.



Non-GAAP Operating Income Reconciliation

(dollars in thousands unless otherwise noted)

	Q3 2019		Q3 :	Q3 2018		D 2019	Υ	TD 2018
Operating (loss) income	\$	(14,502)	\$	24,919	\$	25,858	\$	67,713
Fair value step up of Houghton inventory sold		10,214		-		10,214		-
Houghton combination and other acquisition-related expenses		14,702		2,904		23,789		12,404
Restructuring expense		24,045		-		24,045		-
Charges related to the settlement of a non-core equipment sale		-		-		384		-
Non-GAAP operating income	\$	34,459	\$	27,823	\$	84,290	\$	80,117
Non-GAAP operating margin (%)		10.6%		12.5%		11.4%		12.2%



Adjusted EBITDA Reconciliation

(dollars in thousands unless otherwise noted)

	Q3 2019		Q3 2018	Y	YTD 2019		TD 2018
Net (loss) income attributable to Quaker Chemical Corporation	\$ (13	,053) \$	19,690	\$	16,382	\$	51,668
Depreciation and amortization	14	,312	4,883		24,014		14,911
Interest expense, net	6	,102	989		7,611		3,223
Taxes on income before equity in net income of associated companies	(5	,633)	4,330		4,096		13,554
EBITDA	1	,728	29,892	•	52,103		83,356
Equity income in a captive insurance company		(524)	(440)		(1,260)		(1,083)
Fair value step up of Houghton inventory sold	10	,214	-		10,214		-
Houghton combination and other acquisition-related expenses	14	,702	2,904		23,789		11,794
Restructuring expense	24	,045	-		24,045		-
Pension and postretirement benefit costs, non-service components		513	568		2,304		1,713
Charges related to the settlement of a non-core equipment sale		-	-		384		-
Gain on liquidation of an inactive legal entity		-	(446)		-		(446)
Currency conversion impacts of hyper-inflationary economies		728	520		891		764
Adjusted EBITDA	\$ 51	,406 \$	32,998	\$	112,470	\$	96,098
Adjusted EBITDA Margin (%)	1	5.8%	14.9%		15.2%		14.6%



Non-GAAP EPS Reconciliation

	Q	3 2019	Q3 2018	YT	D 2019	YTD 2018
GAAP (loss) earnings per diluted share	\$	(0.80) \$	1.47	\$	1.14	\$ 3.87
Equity income in a captive insurance company per diluted share		(0.03)	(0.03)		(0.09)	(0.08)
Fair value step up of Houghton inventory sold per diluted share		0.47	-		0.53	-
Houghton combination and other acquisition-related expenses per diluted share		0.75	0.23		1.50	0.89
Restructuring expense per diluted share		1.13	-		1.28	-
Transition tax adjustments per diluted share		(0.03)	(80.0)		(0.03)	(0.17)
Pension and postretirement benefit costs, non-service components per diluted share		0.02	0.03		0.12	0.09
Charges related to the settlement of a non-core equipment sale per diluted share		-	-		0.02	-
Gain on liquidation of an inactive legal entity per diluted share		-	(0.03)		-	(0.03)
Currency conversion impacts of hyper-inflationary economies per diluted share		0.05	0.04		0.06	0.06
Non-GAAP earnings per diluted share	\$	1.56 \$	1.63	\$	4.53	\$ 4.63



Segment Performance

(dollars in thousands)

	Q3 2019 Q3 2018		Y	TD 2019	YTD 2018		
Net sales							
Americas	\$	116,710	\$ 77,374	\$	260,682	\$	225,115
EMEA		82,468	51,346		184,280		164,753
Asia/Pacific		74,266	49,928		165,234		143,388
Global Specialty Businesses		51,686	43,374		132,013		122,783
Total net sales	\$	325,130	\$ 222,022	\$	742,209	\$	656,039
	-						
Segment operating earnings							
Americas	\$	23,880	\$ 16,998	\$	52,235	\$	47,877
EMEA		13,370	8,592		31,232		28,102
Asia/Pacific		20,404	14,012		45,375		39,631
Global Specialty Businesses		14,983	12,215		36,100		33,224
Total segment operating earnings		72,637	51,817		164,942		148,834
Combination and other acquisition-related expenses		(14,702)	(2,904)		(23,789)		(12,404)
Restructuring and related activities		(24,045)	-		(24,045)		-
Fair value step up of Houghton inventory sold		(10,214)	-		(10,214)		-
Non-operating and administrative expenses		(29, 123)	(22,064)		(68, 266)		(63,044)
Depreciation of corporate assets and amortization		(9,055)	(1,930)		(12,770)		(5,673)
Operating (Loss) Income		(14,502)	24,919		25,858		67,713
Other income (expense), net		203	(523)		(389)		(631)
Interest expense, net		(6,102)	(989)		(7,611)		(3,223)
(Loss) Income before taxes and equity in net income							
of associated companies	\$	(20,401)	\$ 23,407	\$	17,858	\$	63,859







Q3 2019 Pro Forma Reconciliations

	QTD September 2019											
	As Re	ported	Ho	ughton	Divestitures		s Other (a)		Pro	Forma*		
Net sales	\$	325	\$	72	\$	(9)	\$	(2)	\$	386		
Net (Loss) Income Attributable to Quaker Houghton	\$	(13)	\$	(7)	\$	(1)	\$	2	\$	(20)		
Depreciation and Amortization		14		4		-		0		19		
Interest Expense, Net		6		5		-		(2)		9		
Taxes on (Loss) Income (b)		(6)		4_		(0)		0_		(2)		
EBITDA*		2		6		(1)		0		7		
Equity Income in a Captive Insurance Company		(1)		-		-		-		(1)		
Fair Value Step Up of Houghton Inventory Sold		10		-		-		-		10		
Combination and Other Acquisition-Related Expenses		15		40		-		-		55		
Restructuring Expenses		24		-		-		-		24		
Gain on Sale of Divested Assets		-		(35)		-		-		(35)		
Pension and Postretirement Benefit Costs, Non-Service Components		1		(0)		-		-		0		
Other Addbacks (c)		1_	_	0		-		-		1		
Adjusted EBITDA*	\$	51	\$	11	\$	(1)	\$	0	\$	61		
Adjusted EBITDA Margin* (%)		16%		15%		13%		-5%		16%		

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increased to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on income related to the Divestiture and Other reflect each tax effected at the U.S. tax rate of 21%.
- (c) Other addbacks include currency conversion impacts on hyper-inflationary economies.



Q3 2018 Pro Forma Reconciliations

				QT	D Sept	tember 20	18			
	As Re	eported	Ηοι	ıghton	Dive	stitures	Other (a)		Pro I	Forma*
Net sales	\$	222	\$	213	\$	(13)	\$	(5)	\$	417
Net Income Attributable to Quaker Houghton	\$	20	\$	1	\$	(3)	\$	4	\$	23
Depreciation and Amortization		5		13		-		1		19
Interest Expense, Net		1		14		-		(6)		9
Taxes on Income (b)		4		(3)	_	(1)		1_		2
EBITDA*		30		26		(3)		0		53
Equity Income in a Captive Insurance Company		(0)		-		-		-		(0)
Combination and Other Acquisition-Related Expenses		3		3		-		-		5
Restructuring Expenses		-		0		-		-		0
Pension and Postretirement Benefit Costs, Non-Service Components		1		(1)		-		-		0
Affiliate Management Fees		-		1		-		-		1
Other Addbacks (c)		0		1		-		-		1
Adjusted EBITDA*	\$	33	\$	29	\$	(3)	\$	0	\$	59
Adjusted EBITDA Margin* (%)		15%		14%		25%		-4%		14%

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increased to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on income related to the Divestiture and Other reflect each tax effected at the U.S. tax rate of 21%.
- (c) Other addbacks include currency conversion impacts on hyper-inflationary economies, a gain on the liquidation of an inactive legal entity and charges related to non-recurring non-income tax and VAT charges.



YTD September 2019 Pro Forma Reconciliations

	YTD September 2019										
	As Re	eported	Hou	ughton	Divestitures		s Other (a)		Pro	Forma*	
Net sales	\$	742	\$	475	\$	(34)	\$	(13)	\$	1,171	
Net Income Attributable to Quaker Houghton	\$	16	\$	(3)	\$	(6)	\$	9	\$	16	
Depreciation and Amortization		24		31		-		3		58	
Interest Expense, Net		8		33		-		(14)		26	
Taxes on Income (b)		4		(1)		(2)		3		4	
EBITDA*		52		60		(8)		1		104	
Equity Income in a Captive Insurance Company		(1)		-		-		-		(1)	
Fair Value Step Up of Houghton Inventory Sold		10		-		-		-		10	
Combination and Other Acquisition-Related Expenses		24		44		-		-		68	
Restructuring Expenses		24		(0)		-		-		24	
Gain on Sale of Divested Assets		-		(35)		-		-		(35)	
Pension and Postretirement Benefit Costs, Non-Service Components		2		(0)		-		-		2	
Other Addbacks (c)		1		0		-		-		1	
Adjusted EBITDA*	\$	112	\$	68	\$	(8)	\$	1	\$	173	
Adjusted EBITDA Margin* (%)		15%		14%		24%		-4%		15%	

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increased to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on income related to the Divestiture and Other reflect each tax effected at the U.S. tax rate of 21%.
- (c) Other addbacks include currency conversion impacts on hyper-inflationary economies and charges related to the settlement of a non-core equipment sale.



YTD September 2018 Pro Forma Reconciliations

	YTD September 2018												
	As Re	eported	Ηοι	ıghton	Dive	Divestitures		Other (a)		Forma*			
Net sales	\$	656	\$	654	\$	(40)	\$	(15)	\$	1,255			
Net Income Attributable to Quaker Houghton	\$	52	\$	5	\$	(8)	\$	12	\$	60			
Depreciation and Amortization		15		41		-		4		60			
Interest Expense, Net		3		42		-		(19)		26			
Taxes on Income (b)		14		(2)		(2)		3		13			
EBITDA*		83		85		(10)		1		159			
Equity Income in a Captive Insurance Company		(1)		-		-		-		(1)			
Combination and Other Acquisition-Related Expenses		12		5		-		-		17			
Restructuring Expenses		-		0		-		-		0			
Pension and Postretirement Benefit Costs, Non-Service Components		2		(1)		-		-		0			
Affiliate Management Fees		-		2		-		-		2			
Other Addbacks (c)		0		1		-		-		1			
Adjusted EBITDA*	\$	96	\$	91	\$	(10)	\$	1	\$	178			
Adjusted EBITDA Margin* (%)		15%		14%		25%		-4%		14%			

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increased to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on income related to the Divestiture and Other reflect each tax effected at the U.S. tax rate of 21%.
- (c) Other addbacks include currency conversion impacts on hyper-inflationary economies, a gain on the liquidation of an inactive legal entity and charges related to non-recurring non-income tax and VAT charges.



Full Year 2016 Pro Forma Reconciliation

(dollars in millions)

	As Re	ported	Hou	ghton	Dives	titures	Oth	er (a)	Pro F	Forma*
Net Income Attributable to Quaker Houghton	\$	61	\$	(37)	\$	(8)	\$	7	\$	23
Depreciation and Amortization		20		55		-		5		80
Interest Expense, Net		1		51		-		(14)		37
Taxes on Income (b)		23		(5)		(2)		2		18
EBITDA*		105		64		(10)		0		158
Equity Income in a Captive Insurance Company		(2)		-		-		-		(2)
Combination and Other Acquisition-Related Expenses		2		3		-		-		5
Pension and Postretirement Benefit Costs, Non-Service Components	3	2		(1)		-		-		1
Cost Reduction Activities		-		4		-		-		4
Impairment of Goodwill and Intangible Assets		-		41		-		-		41
Affiliate Management Fees		-		2		-		-		2
Non-Income Tax Settlement Expense		-		2		-		-		2
Full-Year Impact of Wallover Acquisition		-		3		-		-		3
Other Addbacks (c)		(0)		1		-		-		1
Adjusted EBITDA*	\$	107	\$	119	\$	(10)	\$	0	\$	215
Adjusted EBITDA Margin* (%)		14%		16%		22%		0%		15%

2040

(a) Other includes estimated increases to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.

(b) Taxes on Income related to the Divestitures and Other, as described above, each tax effected at the U.S. tax rate of 21%.

(c) Other Addbacks includes a charge related to a legal settlement, a charge related to inventory fair value adjustments in the Wallover acquisition, offset by a gain on the sale of an asset, currency conversion impacts of hyper-inflationary economies and a restructuring credit.



^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

Full Year 2017 Pro Forma Reconciliation

	As Re	ported	Houg	ghton	Dives	titures	Othe	er (a)	Pro F	Forma*
Net Income Attributable to Quaker Houghton	\$	20	\$	(47)	\$	(9)	\$	9	\$	(26)
Depreciation and Amortization		20		55		-		5		80
Interest Expense, Net		1		51		-		(16)		37
Taxes on Income (b)		42		42		(2)		2		84
EBITDA*		83		102		(11)		0		175
Equity Income in a Captive Insurance Company		(3)		-		-		-		(3)
Combination and Other Acquisition-Related Expenses		30		10		-		-		40
Pension and Postretirement Benefit Costs, Non-Service Components	;	4		(1)		-		-		4
Cost Reduction Activities		0		2		-		-		2
Loss on Disposal of Held-for-Sale Asset		0		-		-		-		0
Insurance Insolvency Recovery		(1)		-		-		-		(1)
Affiliate Management Fees		-		2		-		-		2
Non-Income Tax Settlement Expense		-		1		-		-		1
Other Addbacks (c)		0		0				-		1
Adjusted EBITDA*	\$	115	\$	116	\$	(11)	\$	0	\$	221
Adjusted EBITDA Margin* (%)	·	14%		15%		20%		0%		14%

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increases to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on Income related to the Divestitures and Other, as described above, each tax effected at the U.S. tax rate of 21%.
- (c) Other Addbacks includes charges related to inventory fair value adjustments in the Wallover acquisition, currency conversion impacts of hyper-inflationary economies and other non-recurring charges.



Full Year 2018 Pro Forma Reconciliation

(dollars in millions)

	2018									
	As Rep			hton	Divest	titures Other (a		(a)	Pro F	orma*
Net Income Attributable to Quaker Houghton	\$	59	\$	0	\$	(9)	\$	15	\$	66
Depreciation and Amortization		20		54		-		5		80
Interest Expense, Net		4		56		-		(25)		35
Taxes on Income (b)		25		3		(2)		4		30
EBITDA*		108		114		(12)		0		210
Equity Income in a Captive Insurance Company		(1)		-		-		-		(1)
Combination and Other Acquisition-Related Expenses		16		7		-		-		23
Pension and Postretirement Benefit Costs, Non-Service Components	3	2		(2)		-		-		1
Cost Reduction Activities		-		0		-		-		0
Currency Conversion Impacts of Hyper-Inflationary Economies		1		0		-		-		1
Affiliate Management Fees		-		2		-		-		2
Other Addbacks (c)		(1)		0		-		-		(0)
Adjusted EBITDA*	\$	126	\$	122	\$	(12)	\$	0	\$	236
Adjusted EBITDA Margin* (%)		14%		15%		23%		0%		14%

2010

- * Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.
- (a) Other includes estimated increases to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on Income related to the Divestitures and Other, as described above, each tax effected at the U.S. tax rate of 21%.
- (c) Other Addbacks includes charges related to non-recurring non-income tax and VAT charges, an insurance insolvency recovery and a gain on the liquidation of an inactive legal entity.



TTM Q3 '19 Pro Forma Reconciliation

	TTM Q3 2019									
	As Reported		Houghton		Divestitures		Other (a)		Pro Forma*	
Net Income Attributable to Quaker Houghton	\$	24	\$	(7)	\$	(9)	\$	13	\$	21
Depreciation and Amortization		29		44		-		5		78
Interest Expense, Net		8		48		-		(21)		35
Taxes on Income (b)		16		4		(2)		4		21
EBITDA*		77		89		(11)		0		154
Equity Income in a Captive Insurance Company		(1)		-		-		-		(1)
Fair Value Step Up of Houghton Inventory Sold		10		-		-		-		10
Combination and Other Acquisition-Related Expenses		28		46		-		-		74
Restructuring Expenses		24		(0)		-		-		24
Gain on Sale of Divested Assets		-		(35)		-		-		(35)
Pension and Postretirement Benefit Costs, Non-Service Components		3		(0)		-		-		2
Affiliate Management Fees		-		1		-		-		1
Other Addbacks (c)		1		(0)		-		-		1
Adjusted EBITDA*	\$	142	\$	99	\$	(11)	\$	0	\$	230
Adjusted EBITDA Margin* (%)		15%		15%		25%		0%		15%

^{*} Certain amounts may not calculate due to round, including EBITDA, Adjusted EBITDA, Adjusted EBITDA margin (%) as well as the total pro forma financial results presented for combined Quaker Houghton.

- (a) Other includes estimated increased to depreciation and amortization due to purchase accounting fair value adjustments and a reduction of interest expense based on the average borrowings of the period plus the purchase consideration under the Quaker Houghton facility estimated interest rates.
- (b) Taxes on income related to the Divestiture and Other reflect each tax effected at the U.S. tax rate of 21%.
- (c) Other addbacks include insurance insolvencies, currency conversion impacts on hyper-inflationary economies, and a gain on the liquidation of an inactive legal entity.

