Table 1 - Reconciliation of Segment Information to Consolidated Financial Information

Table 1 - Reconciliation of Segment Information to Consolidated Financial Informatio						2019						2020
Millions of dollars		Q1		Q2		Q3		Q4		Total		Q1
Sales and other operating revenues:												
Olefins & Polyolefins - Americas	\$	2,111	\$	2,114	\$	2,137	\$	2,073	\$	8,435	\$	1,792
Olefins & Polyolefins - EAI		2,535		2,505		2,309		2,155		9,504		2,224
Intermediates & Derivatives		1,894		2,062		2,046		1,832		7,834		1,770
Advanced Polymer Solutions		1,339		1,258		1,186		1,067		4,850		1,096
Refining		1,882		2,180		2,134		2,055		8,251		1,448
Technology		141		173		146		203		663		122
Other/Eliminations		(1,124)		(1,244)		(1,236)		(1,206)		(4,810)		(958)
Continuing operations	\$	8,778	\$	9,048	\$	8,722	\$	8,179	\$	34,727	\$	7,494
Operating income (loss):												
Olefins & Polyolefins - Americas	\$	384	\$	504	\$	524	\$	365	\$	1,777	\$	238
Olefins & Polyolefins - EAI	4	186	Ψ	226	Ψ	202	Ψ	59	Ψ	673	Ψ	135
Intermediates & Derivatives		314		372		314		249		1,249		131
Advanced Polymer Solutions		119		91		67		13		290		70
Refining		(59)		(110)		(52)		(19)		(240)		(314)
Technology		73		96		73		132		374		47
Other		_		(2)		(4)		(1)		(7)		(3)
Continuing operations	\$	1,017	\$	1,177	\$	1,124	\$	798	\$	4,116	\$	304
Depreciation and amortization:												
Olefins & Polyolefins - Americas	\$	115	\$	117	\$	118	\$	120	\$	470	\$	124
Olefins & Polyolefins - EAI	4	53	Ψ	52	Ψ	51	Ψ	52	Ψ	208	Ψ	53
Intermediates & Derivatives		72		74		75		74		295		70
Advanced Polymer Solutions		29		30		32		42		133		44
Refining		43		44		41		41		169		42
Technology		10		11		10		6		37		9
Continuing operations	\$	322	\$	328	\$	327	\$	335	\$	1,312	\$	342
EBITDA: ^(a)												
Olefins & Polyolefins - Americas	\$	516	\$	635	\$	653	\$	498	\$	2,302	\$	366
Olefins & Polyolefins - EAI		296		331		291		144		1,062		189
Intermediates & Derivatives		390		448		390		329		1,557		203
Advanced Polymer Solutions		148		120		102		54		424		113
Refining		(15)		(66)		(6)		22		(65)		(272)
Technology		83		107		83		138		411		56
Other		10		4		_		(13)		1		(9)
Continuing operations	\$	1,428	\$	1,579	\$	1,513	\$	1,172	\$	5,692	\$	646
Capital, turnarounds and IT deferred spending:												
Olefins & Polyolefins - Americas	\$	276	\$	257	\$	295	\$	271	\$	1,099	\$	204
Olefins & Polyolefins - EAI		64		39		45		65		213		42
Intermediates & Derivatives		179		238		317		330		1,064		353
Advanced Polymer Solutions		16		11		14		18		59		13
Refining		43		53		41		12		149		16
Technology		17		17		26		34		94		30
Other		4		7		4		1	_	16		2
Continuing operations	\$	599	\$	622	\$	742	\$	731	\$	2,694	\$	660

⁽a) See Table 7 for the reconciliation of net income to EBITDA, including and excluding LCM.

Table 2 - Selected Segment Operating Information

				2020		
	Q1	Q2	2019 Q3	Q4	Total	Q1
Olefins and Polyolefins - Americas						
<u>Volumes (kilotons)</u>						
Ethylene produced	1,096	1,110	944	1,143	4,293	1,014
Propylene produced	332	308	367	336	1,343	325
Polyethylene sold	637	634	673	644	2,588	689
Polypropylene sold	219	232	247	207	905	216
Benchmark Market Prices						
West Texas Intermediate crude oil (USD per barrel)	54.90	59.80	56.40	56.98	57.02	45.97
Light Louisiana Sweet ("LLS") crude oil (USD per barrel)	62.38	66.94	60.64	60.78	62.68	48.17
Houston Ship Channel natural gas (USD per million BTUs)	2.86	2.46	2.26	2.24	2.46	1.82
U.S. weighted average cost of ethylene production (USD per metric ton)	362	262	209	260	273	198
U.S. ethylene (USD per metric ton)	614	535	584	632	591	525
U.S. polyethylene [high density] (USD per metric ton)	1,168	1,235	1,146	1,036	1,146	970
U.S. propylene (USD per metric ton)	838	823	845	775	820	683
U.S. polypropylene [homopolymer] (USD per metric ton)	1,323	1,308	1,308	1,224	1,291	1,014
Olefins and Polyolefins - Europe, Asia, International						
Volumes (kilotons)						
Ethylene produced	408	456	448	430	1,742	468
Propylene produced	239	274	271	249	1,033	272
Polyethylene sold	678	562	619	591	2,450	677
Polypropylene sold	752	729	718	722	2,921	729
Benchmark Market Prices (€ per metric ton)						
Western Europe weighted average cost of ethylene production	466	493	433	576	492	352
Western Europe ethylene	995	1,065	993	973	1,007	953
Western Europe polyethylene [high density]	1,126	1,191	1,125	1,097	1,135	1,044
Western Europe propylene	933	983	893	852	915	838
Western Europe polypropylene [homopolymer]	1,222	1,268	1,185	1,136	1,203	1,084
Intermediates and Derivatives						
Volumes Sold (kilotons)						
Propylene oxide and derivatives	363	343	353	336	1,395	366
Intermediate Chemicals:						
Ethylene oxide and derivatives	120	133	133	118	504	112
Styrene monomer	372	392	408	306	1,478	376
Acetyls	296	358	308	283	1,245	216
Oxvfuels and Related Products:						
TBA intermediates	160	177	160	154	651	156
MTBE/ETBE	677	819	884	805	3,185	835
Benchmark Market Margins (USD per metric ton) MTDE Northwest Funese	126	205	274	202	266	165
MTBE - Northwest Europe Advanced Polymer Solutions	126	295	374	282	266	165
Volumes Sold (kilotons)						
Compounding & Solutions	503	475	452	422	1,852	424
Advanced Polymers	104	105	106	91	406	105
Refining	104	103	100	91	400	103
Volumes (thousands of barrels per day)						
Heavy crude oil processing rates	259	261	264	267	263	226
Benchmark Market Margins						
Light crude oil - 2-1-1	9.92	14.12	14.11	11.59	12.44	10.09
Light crude oil - Maya differential	3.63	4.87	4.02	7.85	5.14	7.12
Source: LYB and third party consultants	2.03	,		7.00		···-

Source: LYB and third party consultants

Note: Benchmark market prices for U.S. and Western Europe polyethylene and polypropylene reflect discounted prices. Volumes presented represent third party sales of selected key products.

Table 3 - Unaudited Income Statement Information

				2019			2020
Millions of dollars	Q1	Q2		Q3	Q4	Total	Q1
Sales and other operating revenues	\$ 8,778	\$ 9,04	3 \$	8,722	\$ 8,179	\$ 34,727	\$ 7,494
Cost of sales ^(a)	7,446	7,542	2	7,269	7,044	29,301	6,868
Selling, general and administrative expenses ^(b)	287	302	2	303	307	1,199	295
Research and development expenses	28	2	7	26	30	111	27
Operating income	1,017	1,17	7	1,124	798	4,116	304
Income from equity investments	64	64	1	51	46	225	_
Interest expense, net	(86)	(70	5)	(81)	(85)	(328)	(86)
Other income, net	25	10)	11	(7)	39	
Income from continuing operations before income taxes	1,020	1,17	5	1,105	752	4,052	218
Provision for income taxes ^(c)	203	169)	136	140	648	75
Income from continuing operations ^(d)	817	1,000	5	969	612	3,404	143
Loss (income) from discontinued operations, net of tax		(3)	(4)		(7)	1
Net income ^(d)	817	1,000	3	965	612	3,397	144
Dividends on redeemable non-controlling interests	(2)	(l) _	(2)	(2)	(7)	(2)
Net income attributable to Company shareholders ^(d)	\$ 815	\$ 1,002	2 \$	963	\$ 610	\$ 3,390	\$ 142

⁽a) The third quarter of 2019, fourth quarter of 2019 and first quarter of 2020 include pre-tax charges of \$3 million, \$20 million and \$3 million, respectively, for integration costs associated with our acquisition of A. Schulman.

⁽b) The first quarter of 2019, second quarter of 2019, third quarter of 2019, fourth quarter of 2019 and first quarter of 2020 include pre-tax charges of \$16 million, \$19 million, \$18 million and \$11 million, respectively, for integration costs associated with our 2018 acquisition of A. Schulman.

⁽c) The third quarter of 2019 includes a non-cash benefit of \$85 million from the previously unrecognized tax benefits and release of associated accrued interest.

⁽d) The first quarter of 2019, second quarter of 2019, third quarter of 2019, fourth quarter of 2019 and first quarter of 2020 include after-tax charges of \$12 million, \$15 million, \$29 million and \$13 million, respectively, for integration costs associated with our 2018 acquisition of A. Schulman.

Table 4 - Charges (Benefits) Included in Net Income

	2019									2020
Millions of dollars (except share data)		Q1		Q2		Q3		Q4		Q1
Pretax charges (benefits):										
LCM charges	\$	_	\$	_	\$	_	\$	33	\$	419
Tax benefit from release of previously unrecognized tax benefits and associated accrued interest		_		_		(85)		_		_
Acquisition-related costs - A. Schulman		16		19		43		38		14
Total pretax charges (benefits)		16		19		(42)		71		433
Benefit from income taxes related to these items		(4)		(4)		(10)		(17)		(69)
After-tax effect of net charges (benefits)	\$	12	\$	15	\$	(52)	\$	54	\$	364
Effect on diluted earnings per share:										
LCM charges	\$	_	\$	_	\$	_	\$	(0.07)	\$	(1.05)
Tax benefit from release of previously unrecognized tax benefits and associated accrued interest		_		_		0.25		_		_
Acquisition-related costs - A. Schulman		(0.03)		(0.04)		(0.10)		(0.08)		(0.04)
Total	\$	(0.03)	\$	(0.04)	\$	0.15	\$	(0.15)	\$	(1.09)

Table 5 - Unaudited Cash Flow Information

	2019										 2020
Millions of dollars	Q1		Q2		Q3)3		Total		Q1
Net cash provided by operating activities	\$	657	\$	1,186	\$	1,876	\$	1,242	\$	4,961	\$ 542
Net cash used in investing activities		(178)		(278)		(754)		(425)		(1,635)	(663)
Net cash (used in) provided by financing activities		(521)		39		(1,900)		(453)		(2,835)	884

Table 6 - Unaudited Balance Sheet Information

Millions of dollars	M	Iarch 31, 2019	J	June 30, 2019	Se	eptember 30, 2019	Dec	ember 31, 2019	M	arch 31, 2020
Cash and cash equivalents	\$	339	\$	1,279	\$	476	\$	858	\$	1,596
Restricted cash		19		29		36		30		37
Short-term investments		423		52		53		196		199
Accounts receivable, net		3,680		3,758		3,469		3,102		3,043
Inventories		4,496		4,685		4,446		4,588		3,973
Prepaid expenses and other current assets		1,329		1,285		1,150		736		844
Total current assets		10,286		11,088		9,630		9,510		9,692
Operating lease assets		1,534		1,560		1,510		1,468		1,453
Property, plant and equipment, net		12,797		13,285		13,669		14,130		14,387
Investments and long-term receivables:										
Investment in PO joint ventures		464		489		486		504		497
Equity investments		1,650		1,599		1,609		1,602		1,539
Other investments and long-term receivables		23		24		24		22		22
Goodwill		1,803		1,848		1,848		1,891		1,800
Intangible assets, net		945		892		841		869		808
Other assets		387		386		497		439		902
Total assets	\$	29,889	\$	31,171	\$	30,114	\$	30,435	\$	31,100
Current maturities of long-term debt	\$	5	\$	4	\$	4	\$	3	\$	3
Short-term debt		2,377		2,812		2,438		445		1,493
Accounts payable		3,187		3,115		3,201		2,928		2,638
Accrued liabilities		1,443		1,607		1,745		1,822		1,387
Total current liabilities		7,012		7,538		7,388		5,198		5,521
Long-term debt		7,522		7,586		9,628		11,614		12,159
Operating lease liabilities		1,282		1,304		1,257		1,216		1,192
Other liabilities		1,830		1,876		1,801		2,213		2,808
Deferred income taxes		1,967		2,008		2,018		2,015		1,961
Commitments and contingencies										
Redeemable non-controlling interests		116		116		116		116		116
Shareholders' equity		10,138		10,721		7,888		8,044		7,324
Non-controlling interests		22		22		18		19		19
Total liabilities, redeemable non-controlling interests and equity	\$	29,889	\$	31,171	\$	30,114	\$	30,435	\$	31,100

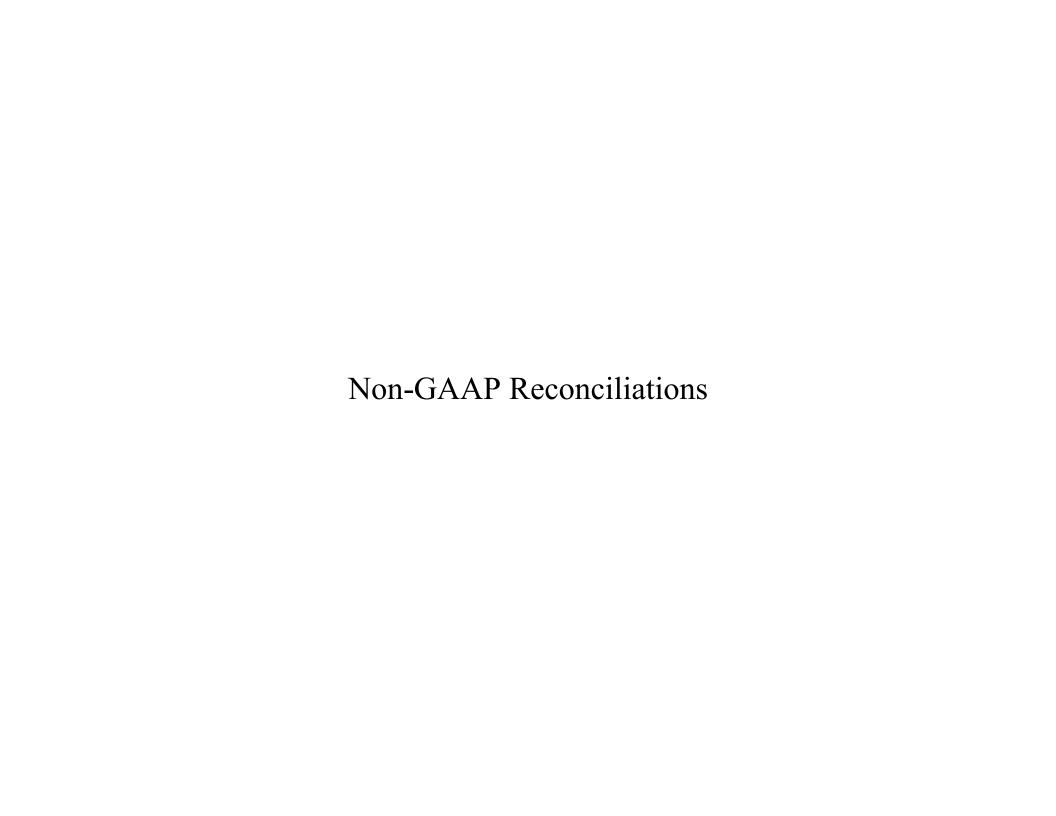


Table 7 - Reconciliation of Net Income to EBITDA, including and excluding LCM

		Three	Months Ended		Year Ended	Т	hree Moi	nths Ended	Last Twelve Months
Millions of dollars	ch 31, 019	June 30, 2019	September 30, 2019	nber 31, 019	December 31, 2019		rch 31, 2019	March 31, 2020	March 31, 2020
Net income ^(a)	\$ 817	\$ 1,003	\$ 965	\$ 612	\$ 3,397	\$	817	\$ 144	\$ 2,724
add: LCM charges, after-tax				25	25			351	376
Net income excluding LCM adjustments	817	1,003	965	637	3,422		817	495	3,100
less: LCM charges, after-tax				(25)	(25)			(351)	(376)
Net income ^(a)	817	1,003	965	612	3,397		817	144	2,724
Loss (income) from discontinued operations, net of tax	_	3	4	_	7		_	(1)	6
Income from continuing operations ^(a)	817	1,006	969	612	3,404		817	143	2,730
Provision for income taxes	203	169	136	140	648		203	75	520
Depreciation and amortization	322	328	327	335	1,312		322	342	1,332
Interest expense, net	86	76	81	85	328		86	86	328
add: LCM charges, pre-tax	_	_	_	33	33		_	419	452
EBITDA excluding LCM adjustments	1,428	1,579	1,513	1,205	5,725		1,428	1,065	5,362
less: LCM charges, pre-tax	_	_	_	(33)	(33)		_	(419)	(452)
EBITDA ^(b)	\$ 1,428	\$ 1,579	\$ 1,513	\$ 1,172	\$ 5,692	\$	1,428	\$ 646	\$ 4,910

Note: Last twelve months March 31, 2020 is calculated as year ended December 31, 2019 plus three months ended March 31, 2020, minus three months ended March 31, 2019.

⁽a) The first quarter of 2019, second quarter of 2019, third quarter of 2019, fourth quarter of 2019, and first quarter of 2020 include after-tax charges of \$12 million, \$15 million, \$33 million, \$29 million and \$13 million, respectively, for integration costs associated with our 2018 acquisition of A. Schulman.

⁽b) EBITDA for the first quarter of 2019, second quarter of 2019, third quarter of 2019, fourth quarter of 2019 and first quarter of 2020 include pre-tax charges of \$16 million, \$19 million, \$43 million, \$38 million and \$14 million, respectively, for integration costs associated with our 2018 acquisition of A. Schulman.

Table 8 - Reconciliation of EBITDA to EBITDA Excluding LCM Adjustments by Segment

	Three Months Ended								Thr	ee Months Ended
	arch 31, 2019	Jı	une 30, 2019	September 30, 2019	Dec	ember 31, 2019		mber 31, 2019	M	arch 31, 2020
EBITDA:										
Olefins & Polyolefins - Americas	\$ 516	\$	635	\$ 653	\$	498	\$	2,302	\$	366
Olefins & Polyolefins - EAI	296		331	291		144		1,062		189
Intermediates & Derivatives	390		448	390		329		1,557		203
Advanced Polymer Solutions	148		120	102		54		424		113
Refining	(15)		(66)	(6)		22		(65)		(272)
Technology	83		107	83		138		411		56
Other	 10		4			(13)		1		(9)
Continuing Operations	\$ 1,428	\$	1,579	\$ 1,513	\$	1,172	\$	5,692	\$	646
Add: LCM Charges, pre-tax:										
Olefins & Polyolefins - Americas	\$ 	\$		\$	\$	25	\$	25	\$	111
Olefins & Polyolefins - EAI				_		_		_		36
Intermediates & Derivatives				_		_		_		78
Advanced Polymer Solutions	_		_	_		8		8		2
Refining	_		_	_		_		_		192
Technology	_		_	_		_		_		_
Other	 									
Continuing Operations	\$ 	\$		<u>\$</u>	\$	33	\$	33	\$	419
EBITDA excluding LCM adjustments:										
Olefins & Polyolefins - Americas	\$ 516	\$	635	\$ 653	\$	523	\$	2,327	\$	477
Olefins & Polyolefins - EAI	296		331	291		144		1,062		225
Intermediates & Derivatives	390		448	390		329		1,557		281
Advanced Polymer Solutions	148		120	102		62		432		115
Refining	(15)		(66)	(6)		22		(65)		(80)
Technology	83		107	83		138		411		56
Other	 10		4			(13)		1		(9)
Continuing Operations	\$ 1,428	\$	1,579	\$ 1,513	\$	1,205	\$	5,725	\$	1,065

Table 9 - Reconciliation of Ratio of Total Debt to Last Twelve Months (LTM) EBITDA Excluding LCM

Millions of Dollars	M	arch 31, 2020
Current maturities of long-term debt	\$	3
Short-term debt		1,493
Long-term debt		12,159
Total debt	\$	13,655
Divided by:		
Q1 2020 LTM EBITDA excluding LCM (a)	\$	5,362
Ratio of total debt to Q1 2020 LTM EBITDA excluding LCM	_	2.5

⁽a) LTM EBITDA excluding LCM see Table 7 Reconciliation of Net Income to EBITDA, including and excluding LCM

Table 10 - Reconciliation of Diluted EPS to Diluted EPS Excluding LCM

	Three Months Ended										
		ch 31,)19		ber 31,)19		ch 31, 020					
Diluted earnings per share	\$	2.19	\$	1.83	\$	0.42					
Add: LCM charges		_		0.07		1.05					
Diluted earnings per share excluding LCM	\$	2.19	\$	1.90	\$	1.47					

Table 11 - Components of Cash and Liquid Investments and Total Liquidity

Millions of dollars	arch 31, 2020
Cash and cash equivalents and restricted cash	\$ 1,633
Short-term investments	 199
Cash and liquid investments	1,832
Availability under Senior Revolving Credit Facility	1,206
Availability under U.S. Receivables Facility	151
Total liquidity	\$ 3,189

Table 12 - Reconciliation of Free Operating Cash Flow to Net Cash Provided by Operating Activities and Ratio of LTM Cash Provided by Operating Activities to LTM EBITDA Ex LCM

Years Ended December 31,												hree Mo	nths E	anded	Last Twelve Months	
Millions of dollars		2015		2016		2017		2018	2019			rch 31, 2019	March 31, 2020		M	arch 31, 2020
Free operating cash flow	\$	5,027	\$	4,497	\$	4,187	\$	4,419	\$	3,937	\$	426	\$	292	\$	3,803
Add:																
Sustaining (maintenance and HSE) capital expenditures		815		1,109		1,019		1,052		1,024		231		250		1,043
Net cash provided by operating activities	\$	5,842	\$	5,606	\$	5,206	\$	5,471	\$	4,961	\$	657	\$	542	\$	4,846
Divided by:																
Q1 2020 LTM EBITDA excluding LCM (a)															\$	5,362
Ratio of Q1 2020 LTM cash provided by operating activities to Q1 2020 LTM EBITDA excluding LCM																90 %

⁽a) LTM EBITDA excluding LCM see Table 7 Reconciliation of Net Income to EBITDA, including and excluding LCM