Table 1 - Reconciliation of Segment Information to Consolidated Financial Information

						2017								2018		
Millions of Dollars		Q1		Q2		Q3		Q4		Total		Q1		Q2		Total
Sales and other operating revenues:																
Olefins & Polyolefins - Americas	\$	2,604	\$	2,547	\$	2,449	\$	2,800	\$	10,400	\$	2,758	\$	2,667	\$	5,425
Olefins & Polyolefins - EAI		3,024		3,008		3,152		3,079		12,263		3,562		3,481		7,043
Intermediates & Derivatives		2,150		2,014		2,077		2,231		8,472		2,343		2,584		4,927
Refining		1,353		1,713		1,670		2,112		6,848		2,257		2,569		4,826
Technology		120		107		98		125		450		115		182		297
Other/Eliminations		(821)		(986)		(930)		(1,212)		(3,949)		(1,268)		(1,277)		(2,545)
Continuing Operations	\$	8,430	\$	8,403	\$	8,516	\$	9,135	\$	34,484	\$	9,767	\$	10,206	\$	19,973
Operating income (loss):																
Olefins & Polyolefins - Americas	\$	559	\$	738	\$	497	\$	667	\$	2,461	\$	651	\$	571	\$	1,222
Olefins & Polyolefins - EAI		401		549		460		224		1.634		373		329		702
Intermediates & Derivatives		269		270		329		334		1,202		408		569		977
Refining		(70)		(21)		10		59		(22)		15		58		73
Technology		50		39		36		58		183		46		100		146
Other		1		2		_		(1)		2		1		(1)		_
Continuing Operations	\$	1,210	\$	1,577	\$	1,332	\$	1,341	\$	5,460	\$	1,494	\$	1,626	\$	3,120
Depreciation and amortization:																
Olefins & Polyolefins - Americas	\$	118	\$	107	\$	105	\$	109	\$	439	\$	107	\$	110	\$	217
Olefins & Polyolefins - EAI		59		58		60		62		239		63		60		123
Intermediates & Derivatives		69		68		69		73		279		73		72		145
Refining		40		44		49		44		177		46		46		92
Technology		10		9		11		10		40		10		12		22
Continuing Operations	\$	296	\$	286	\$	294	\$	298	\$	1,174	\$	299	\$	300	\$	599
EBITDA: ^(a)																
Olefins & Polyolefins - Americas	\$	723	\$	859	\$	616	\$	784	\$	2,982	\$	780	\$	700	\$	1.480
Olefins & Polyolefins - EAI	Ψ	529	Ψ	699	Ψ	698	Ψ	356	Ψ	2,282	Ψ	518	φ	447	Ψ	965
Intermediates & Derivatives		339		339		402		410		1,490		486		642		1.128
Refining		(30)		25		58		104		157		63		104		167
Technology		60		48		47		68		223		56		113		169
Other		(4)						4				10		4		14
Continuing Operations	\$	1,617	\$	1,970	\$	1,821	\$	1,726	\$	7,134	\$	1,913	\$	2,010	\$	3,923
Capital, turnarounds and IT deferred spending:																
Olefins & Polyolefins - Americas	\$	202	\$	179	\$	165	\$	207	\$	753	\$	246	\$	312	\$	558
Olefins & Polyolefins - EAI	φ	47	φ	32	φ	44	φ	83	φ	206	φ	240 69	Φ	49	φ	118
Intermediates & Derivatives		47		107		44 79		69		332		68		49 80		148
Refining		84		79		21		29		213		36		45		81
Technology		84 7		6		21		11		32		8		45		17
Other		4		4		0		2		11		° 2		9		3
Continuing Operations	\$	421	\$	407	\$	318	\$	401	\$	1,547	\$	429	\$	496	\$	925

(a) See Table 8 for the reconciliation of EBITDA to net income.

Table 2 - Selected Segment Operating Information

			2017				2018	
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Total
Olefins and Polyolefins - Americas								
Volumes (million pounds)								
Ethylene produced	2,486	2,606	2,088	2,442	9,622	2,470	2,481	4,951
Propylene produced	597	821	671	724	2,813	617	601	1,218
Polyethylene sold	1,533	1,404	1,454	1,468	5,859	1,463	1,443	2,906
Polypropylene sold	644	634	624	591	2,493	612	638	1,250
Benchmark Market Prices								
West Texas Intermediate crude oil (USD per barrel)	51.78	48.15	48.20	55.30	50.85	62.94	67.99	65.47
Light Louisiana Sweet ("LLS") crude oil (USD per barrel)	53.39	50.17	51.67	60.94	54.02	65.84	73.14	69.58
Houston Ship Channel natural gas (USD per million BTUs)	2.96	3.14	2.92	2.87	2.97	3.12	2.88	3.00
U.S. weighted average cost of ethylene production (cents/pound)	11.8	12.5	16.1	16.2	14.2	14.8	15.5	15.1
U.S. ethylene (cents/pounds)	33.1	31.9	31.9	33.5	32.6	30.3	26.4	28.4
U.S. polyethylene [high density] (cents/pound)	57.3	59.0	60.7	67.5	61.1	62.7	63.0	62.8
U.S. propylene (cents/pound)	47.2	41.0	41.7	49.0	44.7	53.0	52.0	52.5
U.S. polypropylene [homopolymer] (cents/pound)	66.2	59.0	60.2	68.7	63.5	73.0	74.3	73.7
	00.2	57.0	00.2	00.7	05.5	75.0	74.5	15.1
Olefins and Polyolefins - Europe, Asia, International								
<u>Volumes (million pounds)</u>								
Ethylene produced	1,022	1,069	1,046	927	4,064	1,016	1,031	2,047
Propylene produced	598	632	620	557	2,407	608	632	1,240
Polyethylene sold	1,421	1,370	1,525	1,359	5,675	1,445	1,452	2,897
Polypropylene sold	1,714	1,530	1,738	1,520	6,502	1,802	1,729	3,531
Benchmark Market Prices (€0.01 per pound)								
Western Europe weighted average cost of ethylene production	22.7	17.6	18.9	25.3	21.1	22.4	28.9	25.6
Western Europe ethylene	46.2	47.1	44.2	47.0	46.1	48.3	50.0	49.1
Western Europe polyethylene [high density]	58.2	59.5	56.6	57.4	57.9	56.2	55.2	55.7
Western Europe propylene	37.0	39.3	36.4	39.5	38.1	41.9	44.0	42.9
Western Europe polypropylene [homopolymer]	56.3	60.1	57.4	59.1	58.2	59.3	58.8	59.1
	00.0	00.1	0,	07.1	00.2	07.0	2010	07.1
Intermediates and Derivatives								
Volumes (million pounds unless otherwise indicated)								
Propylene oxide and derivatives	786	748	793	830	3,157	798	850	1,648
Intermediate Chemicals:								
Ethylene oxide and derivatives	292	297	275	296	1,160	279	306	585
Styrene monomer	1,002	955	919	867	3,743	917	991	1,908
Acetyls	825	672	715	744	2,956	537	821	1,358
Oxyfuels and Related Products:								
TBA intermediates	383	332	359	378	1,452	412	403	815
MTBE/ETBE (million gallons)	239	263	289	293	1,084	253	293	546
Benchmark Market Margins (cents per gallon)					,			
MTBE - Northwest Europe	49.5	67.3	59.8	35.9	52.9	58.0	63.3	60.5
Refining								
<u>Volumes (thousands of barrels per day)</u>	102	2(5	240	245	226	252	250	255
Heavy crude oil processing rate	193	265	240	245	236	252	259	255
Benchmark Market Margins	11.07	12.26	1671	10.00	12 54	12 (2	15.02	12.02
Light crude oil - 2-1-1	11.86	13.26	16.71	12.30	13.54	12.62	15.03	13.83
Light crude oil - Maya differential	8.78	6.28	5.10	7.96	7.02	8.10	10.91	9.58

Source: LYB and third party consultants

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

Table 3 - Unaudited Income Statement Information

				2017					2018		
Millions of dollars	_	Q1	 Q2	 Q3	 Q4	 Total	_	Q1	 Q2		Total
Sales and other operating revenues	\$	8,430	\$ 8,403	\$ 8,516	\$ 9,135	\$ 34,484	\$	9,767	\$ 10,206	\$	19,973
Cost of sales		6,991	6,601	6,939	7,528	28,059		8,012	8,290		16,302
Selling, general and administrative expenses		204	200	218	237	859		233	261		494
Research and development expenses		25	 25	 27	 29	 106		28	 29		57
Operating income		1,210	1,577	1,332	1,341	5,460		1,494	1,626		3,120
Income from equity investments		81	78	81	81	321		96	68		164
Interest expense, net ^(a)		(201)	(91)	(89)	(86)	(467)		(80)	(76)		(156)
Other income, net ^(b)		30	 29	 114	 6	 179		24	 16		40
Income from continuing operations before income taxes ^{(a)(b)}		1,120	1,593	1,438	1,342	5,493		1,534	1,634		3,168
Provision for (benefit from) income taxes ^(c)		315	 459	 380	 (556)	 598		303	 (21)		282
Income from continuing operations ^(d)		805	1,134	1,058	1,898	4,895		1,231	1,655		2,886
Loss from discontinued operations, net of tax		(8)	 (4)	 (2)	 (4)	 (18)			 (1)		(1)
Net income ^(d)		797	1,130	1,056	1,894	4,877		1,231	1,654		2,885
Net loss attributable to non-controlling interests			 1	 1	 	 2			 		
Net income attributable to Company shareholders ^(d)	\$	797	\$ 1,131	\$ 1,057	\$ 1,894	\$ 4,879	\$	1,231	\$ 1,654	\$	2,885
										_	

(a) Includes pre-tax charges totaling \$113 million in the first quarter of 2017 related to the redemption of \$1,000 million aggregate principal amount of outstanding 5% Senior Notes due 2019.

(b) Includes a pre-tax gain of \$31 million in the first quarter of 2017 on the sale of our Lake Charles, Louisiana site, which was used as a logistics terminal, and a pre-tax gain of \$108 million in the third quarter of 2017 on the sale of our interest in Geosel.

(c) The fourth quarter of 2017 includes an \$819 million non-cash tax benefit related to the lower federal income tax rate resulting from the U.S. Tax Cuts and Jobs Act enacted in December 2017. The second quarter of 2018 includes a \$346 million benefit related to \$288 million of previously unrecognized tax benefits and the release of \$58 million of associated accrued interest.

(d) The first quarter of 2017 includes after-tax charges totaling \$106 million related to the redemption of \$1,000 million aggregate principal amount of our then outstanding 5% Senior Notes due 2019. The third quarter of 2017 includes a \$103 million after-tax gain on the sale of our interest in Geosel. The fourth quarter of 2017 includes an \$819 million non-cash tax benefit discussed above.

Table 4 - Charges (Benefits) Included in Net Income

			2017					2018		
Millions of Dollars (except share data)	 Q1	Q2	Q3	Q4	Т	otal	 Q1	Q2	Т	otal
Pretax charges (benefits):										
Tax benefit due to change in tax law from the U.S.Tax Cuts and Jobs Act	\$ 	\$ _	\$ 	\$ (819)	\$	(819)	\$ 	\$ _	\$	_
Tax benefit from release of previously unrecognized tax benefits and associated accrued interest		_	_	_		_	_	(346)		(346)
Charges and premiums related to redemption of debt	113			—		113	—	—		—
Gain on sale of interest in Geosel			(108)			(108)				_
Total pretax charges (benefits)	113		(108)	(819)		(814)		(346)		(346)
Provision for (benefit from) income taxes related to these items	(7)		5	_		(2)		_		_
After-tax effect of net charges (benefits)	\$ 106	\$ _	\$ (103)	\$ (819)	\$	(816)	\$ _	\$ (346)	\$	(346)
Effect on diluted earnings per share	\$ (0.26)	\$ _	\$ 0.26	\$ 2.07	\$	2.05	\$ _	\$ 0.88	\$	0.88

Table 5 - Unaudited Cash Flow Information

			2017				2018	
Millions of dollars	 Q1	 Q2	 Q3	 Q4	 Total	Q1	 Q2	 Total
Net cash provided by operating activities ^(a)	\$ 678	\$ 1,560	\$ 1,486	\$ 1,482	\$ 5,206	\$ 1,006	\$ 1,727	\$ 2,733
Net cash used in investing activities ^(b)	(541)	(513)	(200)	(502)	(1,756)	(189)	(400)	(589)
Net cash used in financing activities ^(a)	(537)	(822)	(832)	(668)	(2,859)	(520)	(745)	(1,265)

(a) In the second quarter of 2017, the early adoption of ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments resulted in the reclassification of cash flows related to debt extinguishment costs incurred in the first quarter of 2017 from operating to financing activities cash flows.

(b) Also in the second quarter of 2017, the early retrospective adoption of ASU 2016-18, *Statement of Cash Flows: Restricted Cash* requires the inclusion of restricted cash and restricted cash equivalents in the cash and cash equivalents balances in our Statement of Cash Flows.

Table 6 - Unaudited Balance Sheet Information

Millions of dollars	М	arch 31, 2017	J	une 30, 2017	Sej	ptember 30, 2017	Dec	ember 31, 2017	М	arch 31, 2018	J	une 30, 2018
Cash and cash equivalents	\$	485	\$	734	\$	1,204	\$	1,523	\$	1,840	\$	2,384
Restricted cash		1		6		7		5		_		2
Short-term investments		1,176		1,278		1,295		1,307		1,042		933
Accounts receivable, net		3,292		3,086		3,275		3,539		3,859		3,889
Inventories		3,875		4,007		4,177		4,217		4,257		4,096
Prepaid expenses and other current assets		852		964		1,104		1,147		1,070		1,045
Total current assets		9,681		10,075		11,062		11,738		12,068		12,349
Property, plant and equipment, net		10,361		10,551		10,737		10,997		11,249		11,310
Investments and long-term receivables:												
Investment in PO joint ventures		409		423		428		420		424		429
Equity investments		1,672		1,595		1,644		1,635		1,767		1,599
Other investments and long-term receivables		20		18		19		17		22		22
Goodwill		531		559		570		570		578		562
Intangible assets, net		517		499		480		568		567		528
Other assets		577		398		303		261		221		224
Total assets	\$	23,768	\$	24,118	\$	25,243	\$	26,206	\$	26,896	\$	27,023
Current maturities of long-term debt	\$	2	\$	2	\$	3	\$	2	\$	5	\$	974
Short-term debt		611		561		381		68		77		76
Accounts payable		2,627		2,317		2,735		2,895		3,010		3,095
Accrued liabilities		1,139		1,251		1,493		1,812	_	1,506		1,306
Total current liabilities		4,379		4,131		4,612		4,777		4,598		5,451
Long-term debt		8,419		8,496		8,531		8,549		8,531		7,490
Other liabilities		2,130		2,253		2,326		2,275		2,350		1,805
Deferred income taxes ^(a)		2,353		2,370		2,447		1,655		1,688		1,674
Stockholders' equity		6,462		6,866		7,326		8,949		9,728		10,602
Non-controlling interests		25		2		1		1		1		1
Total liabilities and stockholders' equity	\$	23,768	\$	24,118	\$	25,243	\$	26,206	\$	26,896	\$	27,023

(a) Deferred income taxes at December 31, 2017 reflects an \$819 million favorable adjustment related to the lower federal income tax rate resulting from the U.S. Tax Cuts and Jobs Act.

Non-GAAP Reconciliations

Table 7 - Reconciliation of Segment EBITDA to EBITDA

			Three	Mo	nths Ended					Tł	ree Mon	ths	Ended		Six Montl	ns F	Ended	t Twelve Ionths
Millions of dollars	arch 31, 2017	Jı	ıne 30, 2017	Se	ptember 30, 2017	De	ecember 31, 2017	Ye	ar Ended 2017		urch 31, 2018		une 30, 2018	r Ended 2017	June 30, 2017	J	une 30, 2018	une 30, 2018
EBITDA:																		
Olefins & Polyolefins - Americas	\$ 723	\$	859	\$	616	\$	784	\$	2,982	\$	780	\$	700	\$ 2,982	\$ (1,582)	\$	1,480	\$ 2,880
Olefins & Polyolefins - EAI	529		699		698		356		2,282		518		447	2,282	(1,228)		965	2,019
Intermediates & Derivatives	339		339		402		410		1,490		486		642	1,490	(678)		1,128	1,940
Refining	(30)		25		58		104		157		63		104	157	5		167	329
Technology	60		48		47		68		223		56		113	223	(108)		169	284
Other	 (4)						4			_	10		4		4		14	 18
Continuing	\$ 1,617	\$	1,970	\$	1,821	\$	1,726	\$	7,134	\$	1,913	\$	2,010	\$ 7,134	\$ (3,587)	\$	3,923	\$ 7,470
	 	-				-				-								

		Three	e Mon	ths Ended			Ye	ear Ended	T	hree Mont	ths l	Ended	Ye	ear Ended	Six Mont	hs E	Inded		st Twelve Months
Millions of dollars	arch 31, 2017	June 30, 2017	Sep	otember 30, 2017	De	cember 31, 2017	De	cember 31, 2017	M	arch 31, 2018		ne 30, 2018	De	cember 31, 2017	June 30, 2017		ıne 30, 2018	J	une 30, 2018
Net income ^{(a)(b)}	\$ 797	\$ 1,130	\$	1,056	\$	1,894	\$	4,877	\$	1,231	\$	1,654	\$	4,877	\$ (1,927)	\$	2,885	\$	5,835
Loss from discontinued operations, net of tax	8	4		2		4		18		_		1		18	(12)		1		7
Income from continuing operations ^{(a)(b)}	805	1,134		1,058		1,898		4,895		1,231		1,655		4,895	(1,939)		2,886		5,842
Provision for (benefit from) income taxes ^(b)	315	459		380		(556)		598		303		(21)		598	(774)		282		106
Depreciation and amortization	296	286		294		298		1,174		299		300		1,174	(582)		599		1,191
Interest expense, net ^(c)	201	91		89		86		467		80		76		467	(292)		156		331
EBITDA ^(d)	\$ 1,617	\$ 1,970	\$	1,821	\$	1,726	\$	7,134	\$	1,913	\$	2,010	\$	7,134	\$ (3,587)	\$	3,923	\$	7,470
									_									_	

(a) The third quarter of 2017 includes an after-tax gain of \$103 million on the sale of our interest in Geosel.

(b) The fourth quarter of 2017 includes an \$819 million non-cash tax benefit related to the lower federal income tax rate resulting from the U.S. Tax Cuts and Jobs Act enacted in December 2017. The second quarter of 2018 includes a \$346 million non-cash benefit from the release of unrecognized tax benefits and associated accrued interest.

(c) Includes pre-tax charges totaling \$113 million in the first quarter of 2017 related to the redemption of \$1,000 million aggregate principal amount of our then ourstanding 5% Senior Notes due 2019.

(d) Third quarter 2017 EBITDA includes a pre-tax gain of \$108 million on the sale of our interest in Geosel.

Table 9 - Components of Cash and Liquid Investments and Total Liquidity

Millions of dollars	June 30, 2017	М	arch 31, 2018	J	June 30, 2018
Cash and cash equivalents and restricted cash	\$ 740	\$	1,840	\$	2,386
Short-term investments	1,278		1,042		933
Repurchase agreements	 542		586		554
Cash and liquid investments	2,560		3,468		3,873
Availability under Senior Revolving Credit Facility	1,999		2,500		2,500
Availability under U.S. Receivables Facility	882		900		900
Total liquidity	\$ 5,441	\$	6,868	\$	7,273

Table 10 - Reconciliation of Free Cash Flow to Net Cash Provided by Operating Activities

		1	Years Ended	Dece	ember 31,		Ye	ar Ended	Six Mont	hs F	Inded		st Twelve Months
Millions of dollars	 2014		2015		2016	2017	Dec	cember 31, 2017	June 30, 2017		June 30, 2018	J	June 30, 2018
Free cash flow	\$ 4,549	\$	4,402	\$	3,363	\$ 3,659	\$	3,659	\$ (1,410)	\$	1,808	\$	4,057
Add:													
Capital expenditures	1,499		1,440		2,243	1,547		1,547	(828)		925		1,644
Net cash provided by operating activities	\$ 6,048	\$	5,842	\$	5,606	\$ 5,206	\$	5,206	\$ (2,238)	\$	2,733	\$	5,701

Table 11 - Schedule of Spending for Dividends and Share Repurchases

			Three M	Aontl	ns Ended			Ŋ	/ear Ended		Three Mo	iths	Ended	S	ix Months Ended
Millions of Dollars	urch 31, 2017	•	June 30, 2017	Se	ptember 30, 2017	D	ecember 31, 2017	D	ecember 31, 2017	I	March 31, 2018		June 30, 2018		June 30, 2018
Dividends	\$ 343	\$	361	\$	356	\$	355	\$	1,415	\$	395	\$	392	\$	787
Repurchases of ordinary shares	160		410		296				866		119		351		470
Total	\$ 503	\$	771	\$	652	\$	355	\$	2,281	\$	514	\$	743	\$	1,257

Table 12 - Reconciliation of Diluted EPS Excluding Certain Tax Adjustments to Diluted EPS

			Th	ree M	onths Ended			
	ne 30, 2017	Sej	ptember 30, 2017	De	cember 31, 2017	Ma	arch 31, 2018	ne 30, 2018
Diluted earnings per share from continuing operations excluding adjustments	\$ 2.81	\$	2.67	\$	4.79	\$	3.11	\$ 4.22
Less:								
Non-cash benefit due to change in tax law from the U.S. Tax Cuts and Jobs Act	_		_		2.07		_	_
Non-cash benefit from the settlement of prior-year tax positions	_		_		_		_	0.88
Diluted earnings per share from continuing operations	\$ 2.81	\$	2.67	\$	2.72	\$	3.11	\$ 3.34

Table 13 - Reconciliation of Ratio of Total Debt to Last Twelve Months (LTM) EBITDA

Millions of Dollars		Three Months Ended								Last Twelve Months	
	September 30, 2017		December 31, 2017		March 31, 2018		June 30, 2018		June 30, 2018		
Current maturities of long-term debt									\$	974	
Short-term debt										76	
Long-term debt										7,490	
Total debt as of June 30, 2018									\$	8,540	
Divided by:											
EBITDA	\$	1,821	\$	1,726	\$	1,913	\$	2,010	\$	7,470	
Ratio of total debt to LTM EBITDA										1.1	