					2023							
Millions of dollars		Q1		Q2		Q3		Q4		Total		Q1
Sales and other operating revenues:												
Olefins & Polyolefins - Americas	\$	2,808	\$	2,727	\$	2,881	\$	2,864	\$	11,280	\$	2,871
Olefins & Polyolefins - EAI		2,892		2,729		2,446		2,412		10,479		2,745
Intermediates & Derivatives		2,682		2,662		3,081		2,661		11,086		2,586
Advanced Polymer Solutions		997		960		899		842		3,698		965
Refining		2,190		2,459		2,665		2,400		9,714		2,090
Technology		139		154		218		152		663		192
Other/Eliminations		(1,461)		(1,385)		(1,565)		(1,402)		(5,813)		(1,524)
Total sales and other operating revenues	\$	10,247	\$	10,306	\$	10,625	\$	9,929	\$	41,107	\$	9,925
Operating income (loss):												
Olefins & Polyolefins - Americas	\$	371	\$	524	\$	326	\$	444	\$	1,665	\$	356
Olefins & Polyolefins - EAI		21		54		(95)		(140)		(160)		(11)
Intermediates & Derivatives		320		361		611		(30)		1,262		212
Advanced Polymer Solutions		(247)		9		(6)		(17)		(261)		13
Refining		186		(3)		51		(13)		221		24
Technology		61		70		134		69		334		109
Other		1		(4)		(7)		2		(8)		1
Total operating income	\$	713	\$	1,011	\$	1,014	\$	315	\$	3,053	\$	704
Depreciation and amortization:												
Olefins & Polyolefins - Americas	\$	144	\$	144	\$	147	\$	152	\$	587	\$	151
Olefins & Polyolefins - EAI		48		47		53		59		207		52
Intermediates & Derivatives		110		117		106		110		443		100
Advanced Polymer Solutions		22		24		24		28		98		20
Refining		61		49		25		23		158		31
Technology		11		10		12		8		41		11
Total depreciation and amortization	\$	396	\$	391	\$	367	\$	380	\$	1,534	\$	365
EBITDA: ^(a)												
Olefins & Polyolefins - Americas	\$	541	\$	679	\$	479	\$	604	\$	2,303	\$	521
Olefins & Polyolefins - EAI		77		84		(45)		(125)		(9)		14
Intermediates & Derivatives		426		472		708		73		1,679		312
Advanced Polymer Solutions		(226)		34		18		12		(162)		35
Refining		246		47		76		10		379		55
Technology		73		79		146		77		375		118
Other		(6)		(12)		(26)		(12)		(56)		(8)
Total EBITDA ^(a)	\$	1,131	\$	1,383	\$	1,356	\$	639	\$	4,509	\$	1,047
Capital expenditures for PPE:												
Olefins & Polyolefins - Americas	\$	82	\$	102	\$	156	\$	140	\$	480	\$	177
Olefins & Polyolefins - EAI		54		65		67		87		273		87
Intermediates & Derivatives		179		104		120		187		590		140
Advanced Polymer Solutions		17		14		18		26		75		23
Refining		2		—		10		20		32		25
Technology		17		15		18		19		69		24
Other		1		1		5		5		12		7
Total capital expenditures for PPE	¢	352	\$	301	\$	394	\$	484	\$	1,531	\$	483

(a) See Table 6 for the reconciliation of net income to EBITDA, including and excluding identified items.

Table 1 - Reconciliation of Segment Information to Consolidated Financial Information

Table 2 - Selected Segment Operating Information

		2023				
	Q1	Q2	Q3	Q4	Total	Q1
Olefins and Polyolefins - Americas						
Volumes (kilotons)						
Ethylene produced	1,132	1,305	1,187	1,265	4,889	1,062
Propylene produced	285	241	299	306	1,131	252
Polyethylene sold	759	748	756	849	3,112	733
Polypropylene sold	250	262	288	252	1,052	262
Benchmark Market Prices						
West Texas Intermediate crude oil (USD per barrel)	76.11	73.78	82.49	78.36	77.69	77.07
Brent crude oil (USD per barrel)	82.22	78.01	85.95	82.69	82.22	81.84
Houston Ship Channel natural gas (USD per million BTUs)	2.10	1.96	2.43	2.24	2.18	1.91
U.S. weighted average cost of ethylene production (USD per metric ton)	322	262	360	286	308	258
U.S. ethylene (USD per metric ton)	678	619	671	658	657	639
U.S. polyethylene [high density] (USD per metric ton)	1,213	1,205	1,168	1,198	1,196	1,190
U.S. propylene (USD per metric ton)	1,110	889	797	1,021	954	1,205
U.S. polypropylene [homopolymer] (USD per metric ton)	1,484	1,264	1,172	1,396	1,329	1,536
Olefins and Polyolefins - Europe, Asia, International						
<u>Volumes (kilotons)</u>						
Ethylene produced	411	421	388	350	1,570	434
Propylene produced	224	238	223	206	891	244
Polyethylene sold	733	726	757	675	2,891	743
Polypropylene sold	829	783	772	707	3,091	779
<u>Benchmark Market Prices (€ per metric ton)</u>						
Western Europe weighted average cost of ethylene production	711	573	708	646	660	767
Western Europe ethylene	1,242	1,217	1,145	1,220	1,206	1,198
Western Europe polyethylene [high density]	1,379	1,320	1,243	1,319	1,315	1,375
Western Europe propylene	1,138	1,108	1,020	1,083	1,087	1,072
Western Europe polypropylene [homopolymer]	1,378	1,337	1,231	1,294	1,310	1,327

Source: LyondellBasell, IHS Markit and Platts

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

			2023			2024
	Q1	Q2	Q3	Q4	Total	Q1
Intermediates and Derivatives						
Volumes Sold (kilotons)						
Propylene oxide and derivatives	371	346	408	377	1,502	398
Intermediate Chemicals:						
Ethylene oxide and derivatives	121	117	116	121	475	89
Styrene monomer	408	427	357	386	1,578	437
Acetyls	263	266	211	234	974	217
Oxyfuels and Related Products:						
TBA intermediates	128	122	97	130	477	122
MTBE/ETBE	843	1,077	1,191	1,098	4,209	895
Benchmark Market Margins (USD per metric ton)						
MTBE - Northwest Europe	403	520	704	543	543	383
Advanced Polymer Solutions						
Volumes Sold (kilotons)						
Compounding & Solutions	383	370	369	356	1,478	397
Refining						
Volumes (thousands of barrels per day)						
Heavy crude oil processing rates	226	245	248	230	237	212
Benchmark Market Margins						
Brent - 2-1-1	29.44	25.11	32.19	16.09	25.71	21.41
Brent - Maya differential	19.39	14.34	8.53	10.79	13.26	12.29

Source: LyondellBasell, IHS Markit and Platts

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

Table 3 - Unaudited Income Statement Information

			2023			2024
Millions of dollars	Q1	Q2	Q3	Q4	Total	Q1
Sales and other operating revenues	\$ 10,247	\$ 10,306	\$ 10,625	\$ 9,929	\$ 41,107	\$ 9,925
Cost of sales	8,864	8,868	9,177	8,940	35,849	8,763
Impairments ^(a)	252	_	25	241	518	_
Selling, general and administrative expenses	385	395	378	399	1,557	426
Research and development expenses	33	32	31	34	130	32
Operating income	713	1,011	1,014	315	3,053	704
Income (loss) from equity investments	17	(12)	6	(31)	(20)	(27)
Interest expense, net	(93)	(87)	(88)	(80)	(348)	(86)
Other income (expense), net	5	(7)	(31)	(25)	(58)	5
Income from continuing operations before income taxes	642	905	901	179	2,627	596
Provision for (benefit from) income taxes	167	188	153	(7)	501	122
Income from continuing operations	475	717	748	186	2,126	474
Loss from discontinued operations, net of tax	(1)	(2)	(1)	(1)	(5)	(1)
Net income	474	715	747	185	2,121	473
Dividends on redeemable non-controlling interests	(2)	(1)	(2)	(2)	(7)	(2)
Net income attributable to Company shareholders	\$ 472	\$ 714	\$ 745	\$ 183	\$ 2,114	\$ 471

(a) The year ended December 31, 2023 reflects non-cash impairment charges of \$518 million, which includes a non-cash goodwill impairment charge of \$252 million in our Advanced Polymer Solutions segment, recognized in the first quarter of 2023, and \$192 million related to Dutch PO/SM joint venture assets in our Intermediates & Derivatives segment, recognized in the fourth quarter of 2023.

Table 4 - Unaudited Cash Flow Information

			2023			 2024
Millions of dollars	Q1	 Q2	Q3	 Q4	Total	Q1
Net cash provided by (used in) operating activities	\$ 482	\$ 1,290	\$ 1,666	\$ 1,504	\$ 4,942	\$ (114)
Net cash used in investing activities	(371)	(371)	(429)	(606)	(1,777)	(510)
Net cash used in financing activities	(477)	(224)	(844)	(405)	(1,950)	(412)

Table 5 - Unaudited Balance Sheet Information

Millions of dollars	Ν	larch 31, 2023	ne 30, 023	Sep	otember 30, 2023	ember 31, 2023	M	arch 31, 2024
Cash and cash equivalents	\$	1,790	\$ 2,468	\$	2,833	\$ 3,390	\$	2,314
Restricted cash		14	26		11	15		17
Accounts receivable, net		3,901	3,811		3,841	3,507		4,191
Inventories		5,158	5,195		4,911	4,765		4,853
Prepaid expenses and other current assets		1,161	 1,193		1,632	 1,475		1,500
Total current assets		12,024	 12,693		13,228	 13,152		12,875
Operating lease assets		1,677	1,564		1,509	1,529		1,481
Property, plant and equipment, net		15,401	15,408		15,194	15,547		15,532
Equity investments		4,266	4,152		4,056	3,907		3,845
Goodwill		1,605	1,610		1,604	1,647		1,628
Intangible assets, net		651	633		642	641		631
Other assets		631	 623		642	577		632
Total assets	\$	36,255	\$ 36,683	\$	36,875	\$ 37,000	\$	36,624
Current maturities of long-term debt	\$	432	\$ 1,206	\$	781	\$ 782	\$	7
Short-term debt		343	130		112	117		164
Accounts payable		3,572	3,517		3,574	3,815		3,972
Accrued and other current liabilities		2,166	2,164		2,533	2,436		1,944
Total current liabilities		6,513	 7,017		7,000	7,150		6,087
Long-term debt		10,601	10,276		10,213	10,333		11,023
Operating lease liabilities		1,507	1,437		1,397	1,409		1,380
Other liabilities		1,899	1,989		2,003	2,164		2,157
Deferred income taxes		2,886	2,905		2,929	2,886		2,870
Redeemable non-controlling interests		114	114		114	114		114
Shareholders' equity		12,721	12,931		13,205	12,930		12,979
Non-controlling interests		14	 14		14	 14		14
Total liabilities, redeemable non-controlling interests and equity	\$	36,255	\$ 36,683	\$	36,875	\$ 37,000	\$	36,624

Table 6 - Reconciliations of Net Income to Net Income Excluding Identified Items and to EBITDA Including and Excluding Identified Items

				Three Mc	onths Ended		Year Ended	e Months Ended
Millions of dollars	March 3 2023	1,	J	une 30, 2023	September 30, 2023	mber 31, 2023	December 31, 2023	arch 31, 2024
Net income	\$ 4	174	\$	715	\$ 747	\$ 185	\$ 2,121	\$ 473
add: Identified items								
Impairments, pre-tax ^(a)		252		_	25	241	518	_
Refinery exit costs, pre-tax ^(b)		124		111	49	50	334	36
Benefit from income taxes related to identified items		(28)		(25)	(17)	(65)	(135)	(8)
Net income excluding identified items	\$ 8	322	\$	801	\$ 804	\$ 411	\$ 2,838	\$ 501
Net income	\$ 4	174	\$	715	\$ 747	\$ 185	\$ 2,121	\$ 473
Loss from discontinued operations, net of tax		1		2	1	1	5	 1
Income from continuing operations	2	175		717	748	186	2,126	474
Provision for (benefit from) income taxes		167		188	153	(7)	501	122
Depreciation and amortization ^(c)	:	396		391	367	380	1,534	365
Interest expense, net		93		87	88	80	348	86
add: Identified items								
Impairments ^(a)		252		_	25	241	518	_
Refinery exit costs ^(d)		69		67	29	 30	195	 16
EBITDA excluding identified items	1,4	152		1,450	1,410	910	5,222	1,063
less: Identified items								
Impairments ^(a)	(2	252)		—	(25)	(241)	(518)	—
Refinery exit costs ^(d)		(69)		(67)	(29)	(30)	(195)	(16)
EBITDA	\$ <u>1,</u>	131	\$	1,383	\$ 1,356	\$ 639	\$ 4,509	\$ 1,047

(a) The year ended December 31, 2023 reflects non-cash impairment charges of \$518 million, which includes a non-cash goodwill impairment charge of \$252 million in our Advanced Polymer Solutions segment, recognized in the first quarter of 2023, and \$192 million related to Dutch PO/SM joint venture assets in our Intermediates & Derivatives segment, recognized in the fourth quarter of 2023.

(b) Refinery exit costs include accelerated lease amortization costs, personnel related costs, accretion of asset retirement obligations and depreciation of asset retirement costs. See Table 17 for additional detail on refinery exit costs.

(c) Depreciation and amortization includes depreciation of asset retirement costs in connection with exiting the Refining business. See Table 17 for additional detail on refinery exit costs.

(d) Refinery exit costs include accelerated lease amortization costs, personnel related costs and accretion of asset retirement obligations. See Table 17 for additional detail on refinery exit costs.

Table 7 - Reconciliation of Diluted EPS to Diluted EPS Excluding Identified Items

		Three	Year Ended	Т	hree Months Ended			
	rch 31, 2023	ine 30, 2023	September 30, 2023	Dec	cember 31, 2023	December 31, 2023		March 31, 2024
Diluted earnings per share	\$ 1.44	\$ 2.18	\$ 2.29	\$	0.56	\$ 6.46	\$	1.44
add: Identified items								
Impairments	0.77	—	0.05		0.59	1.41		_
Refinery exit costs	0.29	 0.26	0.12		0.11	0.78		0.09
Diluted earnings per share excluding identified items	\$ 2.50	\$ 2.44	\$ 2.46	\$	1.26	\$ 8.65	\$	1.53

Table 8 - Reconciliation of EBITDA to EBITDA Excluding Identified Items by Segment

				Three M	Ionths Ended		Year Ended	Three Months Ended
Millions of dollars	М	arch 31, 2023		une 30, 2023	September 30, 2023	December 31, 2023	December 31, 2023	March 31, 2024
EBITDA:		2023		2023	2023	2023	2023	2024
Olefins & Polyolefins - Americas	\$	541	\$	679	\$ 479	\$ 604	\$ 2,303	\$ 521
Olefins & Polyolefins - EAI	Ŷ	77	Ψ	84	(45)			¢ 021 14
Intermediates & Derivatives		426		472	708	73	1,679	312
Advanced Polymer Solutions		(226)		34	18	12	(162)	35
Refining		246		47	76	10	379	55
Technology		73		79	146	77	375	118
Other		(6)		(12)	(26)			(8)
EBITDA	\$	1,131	\$	1,383				
add: Identified items								
Impairments:								
Olefins & Polyolefins - Americas	\$	_	\$		\$ 25	\$ —	\$ 25	\$ —
Olefins & Polyolefins - EAI		_			_	38	38	_
Intermediates & Derivatives		_			_	192	192	_
Advanced Polymer Solutions		252			_	_	252	_
Refining		_			_	11	11	_
Refinery exit costs:								
Refining		69		67	29	30	195	16
Total Identified items	\$	321	\$	67	\$ 54	\$ 271	\$ 713	\$ 16
EBITDA excluding Identified items:								
Olefins & Polyolefins - Americas	\$	541	\$	679	\$ 504	\$ 604	\$ 2,328	\$ 521
Olefins & Polyolefins - EAI		77		84	(45)	(87)	29	14
Intermediates & Derivatives		426		472	708	265	1,871	312
Advanced Polymer Solutions		26		34	18	12	90	35
Refining		315		114	105	51	585	71
Technology		73		79	146	77	375	118
Other		(6)		(12)	(26)	(12)	(56)	(8)
EBITDA excluding Identified items	\$	1,452	\$	1,450	\$ 1,410	\$ 910	\$ 5,222	\$ 1,063

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

Millions of dollars	Decembe 2023	31,	M	larch 31, 2024
Cash and cash equivalents and restricted cash	\$ 3	,405	\$	2,331
Short-term investments		_		
Cash and liquid investments	\$ 3	,405	\$	2,331
add:				
Availability under Senior Revolving Credit Facility				3,250
Availability under U.S. Receivables Facility				900
Total liquidity			\$	6,481

Table 10 - Reconciliation of Net Cash Provided by (Used in) Operating Activities to Free Operating Cash Flow

		Year E	nded Decen	nber 31,			Three Mor	iths E	nded	L	ast Twelve Months
Millions of dollars	2019	2020	2021	2022	2023	Ν	larch 31, 2023	M	arch 31, 2024		March 31, 2024
Net cash provided by (used in) operating activities	\$ 4,961	\$ 3,404	\$ 7,695	\$ 6,119	\$ 4,942	\$	482	\$	(114)	\$	4,346
less:											
Sustaining (maintenance and HSE) capital expenditures	1,024	793	758	959	1,086		187		396		1,295
Free operating cash flow	\$ 3,937	\$ 2,611	\$ 6,937	\$ 5,160	\$ 3,856	\$	295	\$	(510)	\$	3,051

Table 11 - Calculation of LTM Cash Conversion

	Year Ended Three Mont					Ended		ast Twelve Months		
Millions of dollars	December 31, 2023 March 31, 2023									
Net cash provided by (used in) operating activities	\$	4,942	\$	482	\$	(114)	\$	4,346		
divided by: EBITDA excluding LCM and impairment ^(a)	\$	5,027	\$	1,383	\$	1,047	\$	4,691		
Cash conversion		98 %		35 %		(11)%		93 %		

(a) See Table 13 for a reconciliation of net cash provided by (used in) operating activities to EBITDA including and excluding LCM and impairments.

Table 12 - Reconciliation of Total Debt to Net Debt and Calculation of LTM Net Debt to EBITDA excluding Identified Items

Millions of dollars	arch 31, 2024
Current maturities of long-term debt	\$ 7
Short-term debt	164
Long-term debt	 11,023
Total debt	 11,194
less:	
Cash and cash equivalents	2,314
Restricted cash	17
Short-term investments	
Net debt	\$ 8,863
divided by:	
LTM EBITDA excluding identified items ^(a)	\$ 4,833
LTM Net Debt to EBITDA excluding identified items ^(a)	 1.8

(a) See Table 13 for a reconciliation of net cash provided by (used in) operating activities to EBITDA including and excluding identified items.

	Year En	ded	Three Mor	Last Twelve Months		
Millions of dollars	Decembe 2023		March 31, 2023	March 31, 2024	March 31, 2024	
Net cash provided by (used in) operating activities	\$ 4	4,942	\$ 482	\$ (114)	\$ 4,346	
Adjustments:						
Depreciation and amortization ^(a)	(*	1,534)	(396)	(365)	(1,503)	
Impairments ^(b)		(518)	(252)	_	(266)	
Amortization of debt-related costs		(9)	(3)	(2)	(8)	
Share-based compensation		(91)	(24)	(34)	(101)	
Equity loss, net of distributions of earnings		(189)	(5)	(28)	(212)	
Deferred income tax (provision) benefit		(43)	(6)	9	(28)	
Changes in assets and liabilities that (provided) used cash:						
Accounts receivable		(110)	279	717	328	
Inventories		(18)	319	108	(229)	
Accounts payable		(141)	(40)	(196)	(297)	
Other, net		(168)	120	378	90	
Net income	2	2,121	474	473	2,120	
Loss from discontinued operations, net of tax		5	1	1	5	
Income from continuing operations	2	2,126	475	474	2,125	
Provision for income taxes		501	167	122	456	
Depreciation and amortization ^(a)		1,534	396	365	1,503	
Interest expense, net		348	93	86	341	
add: LCM charges		—	—	—	—	
add: Impairments ^(b)		518	252		266	
EBITDA excluding LCM and impairments	Ę	5,027	1,383	1,047	4,691	
add: Refinery exit costs ^(c)		195	69	16	142	
EBITDA excluding identified items	Ę	5,222	1,452	1,063	4,833	
less: LCM charges		—	—	—	—	
less: Impairments ^(b)		(518)	(252)	—	(266)	
less: Refinery exit costs ^(c)		(195)	(69)	(16)	(142)	
EBITDA	\$ 4	4,509	\$ 1,131	\$ 1,047	\$ 4,425	

(a) Depreciation and amortization includes depreciation of asset retirement costs in connection with exiting the Refining business. See Table 17 for additional detail on refinery exit costs.

(b) The year ended December 31, 2023 reflects non-cash impairment charges of \$518 million, which includes a non-cash goodwill impairment charge of \$252 million in our Advanced Polymer Solutions segment, recognized in the first quarter of 2023, and \$192 million related to Dutch PO/SM joint venture assets in our Intermediates & Derivatives segment, recognized in the fourth quarter of 2023.

(c) Refinery exit costs include accelerated lease amortization costs, personnel related costs and accretion of asset retirement obligations. See Table 17 for additional detail on refinery exit costs.

Table 14 - Calculation of LTM Dividends and Share Repurchases

	Yea	rs Ended	Three Months Ended					ist Twelve Months	
Millions of dollars		ember 31, 2023	March 31, 2023					N	/arch 31, 2024
Dividends - common stock	\$	1,610	\$	389	\$	408	\$	1,629	
Repurchases of Company ordinary shares		211		70		_		141	
Dividends and share repurchases	\$	1,821	\$	459	\$	408	\$	1,770	

Table 15 - Reconciliation of Net Income to Recurring Annual EBITDA for the Value Enhancement Program

	Current Target		Current Target
Millions of dollars		2024	2025
Net income ^(a)	\$	445	\$ 750
Provision for income taxes		110	185
Depreciation and amortization		45	65
Interest expense, net		_	_
Recurring annual EBITDA ^(a)	\$	600	\$ 1,000

(a) Year-end run rate based on 2017-2019 mid-cycle margins and modest inflation relative to 2021 baseline.

Table 16 - Calculation of LTM Return on Invested Capital

					т	hree Mon	ths En	ded				st Twelve Months		
Millions of dollars	Ма	March 31, June 30, September 30, December 31, 2023 2023 2023 2023		March 31, June 30, September 30, December 31, March 31, 2023 2023 2023 2024		March 31, 2023	June 30, September 30, 2023 2023			June 30, September 30, December 31, 2023 2023 2023	March 31, 2024		М	arch 31, 2024
Net income			\$	715	\$	747	\$	185	\$	473	\$	2,120		
Loss from discontinued operations, net of tax				2		1		1		1		5		
Income from continuing operations			\$	717	\$	748	\$	186	\$	474	\$	2,125		
add:														
Interest expense, net				87		88		80		86		341		
Tax effect				(14)		(15)		(15)		(17)		(61)		
Interest expense, net, after tax				73		73		65		69		280		
Identified items effecting comparability:														
Impairments, pre-tax ^(a)				_		25		241				266		
Refinery exit costs, pre-tax ^(b)				111		49		50		36		246		
Benefit from income taxes related to identified items				(25)		(17)		(65)		(8)		(115)		
Total identified items effecting comparability, after tax				86		57		226		28		397		
Adjusted income from continuing operations			\$	876	\$	878	\$	477	\$	571	\$	2,802		
divided by:														
Average adjusted invested capital:														
Shareholders' equity		12,721								12,979				
Long-term debt		10,601								11,023				
Long-term operating lease liabilities		1,507								1,380				
Current operating lease liabilities		350								349				
Current debt:														
Current maturities of long-term debt		432								7				
Short-term debt		343								164				
Invested capital	\$	25,954							\$	25,902				
Cumulative effect of identified items effecting comparability, after tax ^(c)		1,488								1,885				
Adjusted invested capital	\$	27,442							\$	27,787				
2-Yr average adjusted invested capital											\$	27,615		
LTM Return on invested capital												10 %		

(a) Includes a non-cash impairment charge of \$192 million related to Dutch PO/SM joint venture assets in our Intermediates & Derivatives segment, recognized in the fourth quarter of 2023.

(b) Refinery exit costs include accelerated lease amortization costs, personnel related costs, accretion of asset retirement obligations and depreciation of asset retirement costs. See Table 17 for additional detail on refinery exit costs.

(c) Cumulative effect of identified items effecting comparability, after tax, includes impairments, after tax, of \$446 million, \$69 million and \$460 million recognized in 2020, 2021, 2022 and 2023, respectively, and refinery exit costs, after tax, recognized in 2022, 2023 and 2024.

Note: Last twelve months March 31, 2024 is calculated as the sum of the quarters ended June 30, 2023, September 30, 2023, December 31, 2023 and March 31, 2024.

Table 17 - Refinery Exit Costs

			Three	Mon	ths Ended		Year Ended	Three Months Ended
Millions of dollars	March 31, June 30, September 30, December 31, 2023 2023 2023 2023			December 31, 2023	March 31, 2024			
Refinery exit costs:								
Accelerated lease amortization costs	\$ 51	\$	38	\$	11	\$ 10	\$ 110	\$8
Personnel costs	16		27		16	17	76	6
Asset retirement obligation accretion	2		2		2	3	9	2
Asset retirement cost depreciation	 55		44		20	20	139	20
Total refinery exit costs	\$ 124	\$	111	\$	49	\$ 50	\$ 334	\$ 36