

CVR Energy Reports First Quarter 2021 Results

SUGAR LAND, Texas (May 3, 2021) – CVR Energy, Inc. ("CVR Energy") (NYSE: CVI) today announced a net loss of \$39 million, or 39 cents per diluted share, on net sales of \$1.5 billion for the first quarter of 2021, compared to net loss of \$87 million, or 87 cents per diluted share, on net sales of \$1.1 billion for the first quarter of 2020. First quarter 2021 EBITDA was less than \$1 million, compared to a first quarter 2020 EBITDA loss of \$38 million.

"CVR Energy's first quarter 2021 results were influenced by exorbitant Renewable Identification Number (RIN) pricing, unrealized derivative losses and impacts from Winter Storm Uri," said Dave Lamp, CVR Energy's Chief Executive Officer. "We were able to quickly recover from the storm-related shutdowns, and with the increase in Group 3 crack spreads, our refining business in March experienced its best results since the height of the COVID-19 pandemic despite high RIN prices.

"CVR Partners was able to successfully minimize the impacts of Winter Storm Uri by reducing throughput and selling contracted natural gas at significantly higher prices at its East Dubuque facility while also maintaining operations at its Coffeyville facility," Lamp said. "In addition, the nitrogen fertilizer industry reached an inflection point during the first quarter of 2021, where improved farmer economics translated into increased demand for nitrogen fertilizer as well as much higher pricing."

Petroleum

The Petroleum Segment reported a first quarter 2021 operating loss of \$115 million on net sales of \$1.4 billion, compared to an operating loss of \$127 million on net sales of \$1.1 billion in the first quarter of 2020.

Refining margin per total throughput barrel was \$3.05 in the first quarter of 2021, compared to \$1.52 during the same period in 2020. Increased crack spreads and an increase in throughput volumes contributed to the improvement in refining margins during the first quarter of 2021. Adding to these impacts, crude oil prices rose during the quarter, which led to a favorable inventory valuation impact of \$66 million, or \$3.93 per total throughout barrel, compared to an unfavorable inventory valuation impact of \$136 million, including a \$58 million loss on the value of inventory to reflect its net realizable value, or \$9.54 per total throughput barrel during the first quarter of 2020. The Petroleum Segment also recognized a first quarter 2021 derivative loss of \$32 million, or \$1.90 per total throughput barrel, compared to a derivative gain of \$46 million, or \$3.20 per total throughput barrel, for the first quarter of 2020. Included in this derivative loss for the first

quarter of 2021 was a \$43 million unrealized loss, compared to an unrealized gain of \$12 million for the first quarter of 2020.

First quarter 2021 combined total throughput was approximately 186,000 barrels per day (bpd), compared to approximately 157,000 bpd of combined total throughput for the first quarter of 2020. This increase was primarily attributable to the turnaround at our Coffeyville refinery in 2020, which began in late February.

The Nitrogen Fertilizer Segment reported an operating loss of \$14 million on net sales of \$61 million for the first quarter of 2021, compared to an operating loss of \$5 million on net sales of \$75 million for the first quarter of 2020.

First quarter 2021 average realized gate prices for urea ammonia nitrate (UAN) showed a reduction over the prior year, down 4 percent to \$159 per ton, and ammonia was up 14 percent over the prior year to \$300 per ton. Average realized gate prices for UAN and ammonia were \$166 per ton and \$264 per ton, respectively, for the first quarter of 2020.

CVR Partners' fertilizer facilities produced a combined 188,000 tons of ammonia during the first quarter of 2021, of which 70,000 net tons were available for sale while the rest was upgraded to other fertilizer products, including 272,000 tons of UAN. During the first quarter 2020, the fertilizer facilities produced 201,000 tons of ammonia, of which 78,000 net tons were available for sale while the remainder was upgraded to other fertilizer products, including 317,000 tons of UAN.

Corporate

The Company reported an income tax benefit of \$42 million, or 43.3 percent of loss before income taxes, for the three months ended March 31, 2021, compared to an income tax benefit of \$36 million, or 26.6 percent of loss before income taxes, for the three months ended March 31, 2020. The change in income tax benefit was due primarily to changes in pretax loss and an increase in the effective income tax rate. The year-over-year increase in effective income tax rate is due primarily to the relationship between pretax results, losses attributable to noncontrolling interest and state income tax credits generated.

Cash, Debt and Dividend

Consolidated cash and cash equivalents was \$707 million at March 31, 2021, an increase of \$40 million from December 31, 2020. Consolidated total debt and finance lease obligations was \$1.7 billion at March 31, 2021, including \$637 million held by the Nitrogen Fertilizer Segment.

CVR Energy will not pay a cash dividend and CVR Partners will not pay a cash distribution for the 2021 first quarter.

First Quarter 2021 Earnings Conference Call

CVR Energy previously announced that it will host its first quarter 2021 Earnings Conference Call on Tuesday, May 4, at 1 p.m. Eastern. The Earnings Conference Call may also include discussion of Company developments, forward-looking information and other material information about business and financial matters.

The first quarter 2021 Earnings Conference Call will be webcast live and can be accessed on the Investor Relations section of CVR Energy's website at www.CVREnergy.com. For investors or analysts who want to participate during the call, the dial-in number is (877) 407-8291. The webcast will be archived and available for 14 days at https://edge.media-server.com/mmc/p/wo6z7ooe. A repeat of the call also can be accessed for 14 days by dialing (877) 660-6853, conference ID 13718881.

Forward-Looking Statements

This news release may contain 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. Statements concerning current estimates, expectations and projections about future results, performance, prospects, opportunities, plans, actions and events and other statements, concerns, or matters that are not historical facts are "forward-looking statements," as that term is defined under the federal securities laws. These forward-looking statements include, but are not limited to, statements regarding future: Renewable Identification Number pricing and the impact thereof on results; derivatives activities and gains or losses associated therewith; impacts from Winter Storm Uri; ability to recover from storm-related shutdowns; crack spreads, including the increase thereof; farmer economics including improvement thereof; nitrogen fertilizer demand and pricing, including the increase thereof; throughput volumes and crude oil prices, including increases thereof; inventory valuation impacts; ammonia production, including volumes upgraded to other fertilizer products including UAN; tax benefits and rates, including impact of pretax loss, noncontrolling interest and state income tax credits thereon; balance sheet cash levels and debt and finance lease obligations; dividends and distributions, including the timing, payment and amount (if any) thereof; total throughput, direct operating expenses, capital expenditures, depreciation and amortization and turnaround expense; continued safe and reliable operations; and other matters. You can generally identify forward-looking statements by our use of forward-looking terminology such as "outlook," "anticipate," "believe," "continue," "could," "estimate," "expect," "explore," "evaluate," "intend," "may," "might," "plan," "potential," "predict," "seek," "should," or "will," or the negative thereof or other variations thereon or comparable terminology. These forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond our control. Investors are cautioned that various factors may affect these forward-looking statements, including the health and economic effects of COVID-19, the rate of any economic improvement, demand for fossil fuels, price volatility of crude oil, other feedstocks and refined products (among others); the ability of the Company to pay cash dividends and CVR Partners to make cash distributions; potential operating hazards; costs of compliance with existing, or compliance with new, laws and regulations and potential liabilities arising therefrom; impacts of planting season on CVR Partners; general economic and business conditions; and other risks. For additional discussion of risk factors which may affect our results, please see the risk factors and other disclosures included in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q and our other SEC filings. These and other risks may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied by these forward-looking statements. Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements included in this news release are made only as of the date hereof. CVR Energy disclaims any intention or obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by law.

About CVR Energy, Inc.

Headquartered in Sugar Land, Texas, CVR Energy is a diversified holding company primarily engaged in the petroleum refining and marketing business through its interest in CVR Refining and the nitrogen fertilizer manufacturing business through its interest in CVR Partners, LP. CVR Energy subsidiaries serve as the general partner and own 36 percent of the common units of CVR Partners.

Investors and others should note that CVR Energy may announce material information using SEC filings, press releases, public conference calls, webcasts, and the Investor Relations page of its website. CVR Energy may use these channels to distribute material information about the company and to communicate important information about the company, corporate initiatives and other matters. Information that CVR Energy posts on its website could be deemed material; therefore, CVR Energy encourages investors, the media, its customers, business partners and others interested in the company to review the information posted on its website.

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Non-GAAP Measures

Our management uses certain non-GAAP performance measures, and reconciliations to those measures, to evaluate current and past performance and prospects for the future to supplement our GAAP financial information presented in accordance with U.S. GAAP. These non-GAAP financial measures are important factors in assessing our operating results and profitability and include the performance and liquidity measures defined below.

The following are non-GAAP measures we present for the period ended March 31, 2021:

EBITDA - Consolidated net income (loss) before (i) interest expense, net, (ii) income tax expense (benefit) and (iii) depreciation and amortization expense.

Petroleum EBITDA and Nitrogen Fertilizer EBITDA - Segment net income (loss) before segment (i) interest expense, net, (ii) income tax expense (benefit), and (iii) depreciation and amortization.

Refining Margin - The difference between our Petroleum Segment net sales and cost of materials and other.

Refining Margin, adjusted for Inventory Valuation Impacts - Refining Margin adjusted to exclude the impact of current period market price and volume fluctuations on crude oil and refined product inventories purchased in prior periods and lower of cost or net realizable value adjustments, if applicable. We record our commodity inventories on the first-in-first-out basis. As a result, significant current period fluctuations in market prices and the volumes we hold in inventory can have favorable or unfavorable impacts on our refining margins as compared to similar metrics used by other publicly-traded companies in the refining industry.

Refining Margin and Refining Margin adjusted for Inventory Valuation Impacts, per Throughput Barrel - Refining Margin and Refining Margin adjusted for Inventory Valuation Impacts divided by the total throughput barrels during the period, which is calculated as total throughput barrels per day times the number of days in the period.

Direct Operating Expenses per Throughput Barrel - Direct operating expenses for our Petroleum Segment divided by total throughput barrels for the period, which is calculated as total throughput barrels per day times the number of days in the period.

Adjusted (Loss) Earnings per Share - (Loss) Earnings per share adjusted for inventory valuation impacts and other significant non-cash items on an after-tax basis.

Net Debt and Finance Lease Obligations - Net debt and finance lease obligations is total debt and finance lease obligations reduced for cash and cash equivalents.

Total Debt and Net Debt and Finance Lease Obligations to EBITDA Exclusive of Nitrogen Fertilizer - Total debt and net debt and finance lease obligations is calculated as the consolidated debt and net debt and finance lease obligations less the Nitrogen Fertilizer Segment's debt and net debt and finance lease obligations as of the most recent period ended divided by EBITDA exclusive of the Nitrogen Fertilizer Segment for the most recent twelve-month period.

Free Cash Flow - Net cash provided by (used in) operating activities less capital expenditures and capitalized turnaround expenditures.

We present these measures because we believe they may help investors, analysts, lenders and ratings agencies analyze our results of operations and liquidity in conjunction with our U.S. GAAP results, including but not limited to our operating performance as compared to other publicly-traded companies in the refining and fertilizer industries, without regard to historical cost basis or financing methods and our ability to incur and service debt and fund capital expenditures. Non-GAAP measures have important limitations as analytical tools, because they exclude some, but not all, items that affect net earnings and operating income. These measures should not be considered substitutes for their most directly comparable U.S. GAAP financial measures.

See "Non-GAAP Reconciliations" included herein for reconciliation of these amounts. Due to rounding, numbers presented within this section may not add or equal to numbers or totals presented elsewhere within this document.

Factors Affecting Comparability of Our Financial Results

Our historical results of operations for the periods presented may not be comparable with prior periods or to our results of operations in the future for the reasons discussed below.

Petroleum Segment

Coffeyville Refinery - Beginning in the first quarter of 2020, the Coffeyville Refinery had a planned, full facility turnaround, during which we capitalized \$127 million.

Wynnewood Refinery - The Petroleum Segment's next planned turnaround is at the Wynnewood Refinery, where pre-planning expenditures are currently underway. During the first quarter of 2021, approximately \$1 million has been capitalized related to these pre-planning activities.

CVR Energy, Inc.

(all information in this release is unaudited)

Financial and Operational Data

	Three Months Ended March 31,			nded
(in millions, except per share data)		2021		2020
Consolidated Statement of Operations Data				
Net sales	\$	1,463	\$	1,130
Operating costs and expenses:				
Cost of materials and other		1,369		1,058
Direct operating expenses (exclusive of depreciation and amortization)		136		119
Depreciation and amortization		63		62
Cost of sales		1,568		1,239
Selling, general and administrative expenses (exclusive of depreciation and amortization)		27		24
Depreciation and amortization		3		2
Operating loss		(135)		(135)
Other (expense) income:				
Interest expense, net		(31)		(35)
Investment income on marketable securities		62		31
Other income, net		7		2
Loss before income tax benefit		(97)		(137)
Income tax benefit		(42)		(36)
Net loss		(55)		(101)
Less: Net loss attributable to noncontrolling interest		(16)		(14)
Net loss attributable to CVR Energy stockholders	\$	(39)	\$	(87)
Desir and diluted lase non-shore	C	(0.20)	¢.	(0.97)
Basic and diluted loss per share	\$	(0.39)	\$	(0.87)
Dividends declared per share	\$	_	\$	0.80
EBITDA*	\$	_	\$	(38)
Weighted-average common shares outstanding - basic and diluted		100.5		100.5

^{*} See "Non-GAAP Reconciliations" section below.

Selected Balance Sheet Data

(in millions)	Marc	March 31, 2021		March 31, 2021 December		nber 31, 2020
Cash and cash equivalents	\$	707	\$	667		
Working capital		602		743		
Total assets		4,188		3,978		
Total debt and finance lease obligations, including current portion		1,691		1,691		
Total liabilities		3,024		2,759		
Total CVR stockholders' equity		981		1,019		

Selected Cash Flow Data

		Three Months Ended March 31,					
(in millions)	2021		2020				
Net cash flow provided by (used in):							
Operating activities	\$	6 \$	(58)				
Investing activities	(5	4)	(196)				
Financing activities		2)	407				
Net increase in cash and cash equivalents	\$ 4	\$	153				
Free cash flow*	\$	51 \$	(115)				

^{*} See "Non-GAAP Reconciliations" section below.

Selected Segment Data

(in millions)	Pe	etroleum	itrogen ertilizer	Со	nsolidated
Three Months Ended March 31, 2021					
Net sales	\$	1,404	\$ 61	\$	1,463
Operating loss		(115)	(14)		(135)
Net loss		(110)	(25)		(55)
EBITDA*		(61)	5		_
Capital expenditures (1)					
Maintenance capital expenditures	\$	10	\$ 2	\$	12
Growth capital expenditures			1		56
Total capital expenditures	\$	10	\$ 3	\$	68

(in millions)	P	etroleum	itrogen ertilizer	Co	nsolidated
Three Months Ended March 31, 2020					
Net sales	\$	1,057	\$ 75	\$	1,130
Operating loss		(127)	(5)		(135)
Net loss		(130)	(21)		(101)
EBITDA*		(77)	11		(38)
Capital expenditures (1)					
Maintenance capital expenditures	\$	37	\$ 4	\$	43
Growth capital expenditures		3	 2		5
Total capital expenditures	\$	40	\$ 6	\$	48

^{*} See "Non-GAAP Reconciliations" section below.

⁽¹⁾ Capital expenditures are shown exclusive of capitalized turnaround expenditures and capitalized software costs.

Selected Balance Sheet Data

(in millions)	Po	etroleum	Nitrogen Tertilizer	Co	nsolidated
March 31, 2021					
Cash and cash equivalents (1)	\$	475	\$ 53	\$	707
Total assets		3,207	1,032		4,188
Total debt and finance lease obligations, including current portion (2)		59	637		1,691
December 31, 2020					
Cash and cash equivalents (1)	\$	429	\$ 31	\$	667
Total assets		2,991	1,033		3,978
Total debt and finance lease obligations, including current portion (2)		61	636		1,691

⁽¹⁾ Corporate cash and cash equivalents consisted of \$179 million and \$207 million at March 31, 2021 and December 31, 2020, respectively.

Petroleum Segment

Key Operating Metrics per Total Throughput Barrel

		Three Months Ended March 31,				
	 2021	2020				
Refining margin *	\$ 3.05	\$	1.52			
Refining margin adjusted for inventory valuation impacts *	(0.88)		11.06			
Direct operating expenses *	5.89		5.87			

^{*} See "Non-GAAP Reconciliations" section below.

Throughput Data by Refinery

	Three Mont <u>March</u>	
(in bpd)	2021	2020
Coffevville		
Regional crude	29,232	38,874
WTI	52,936	29,461
Condensate	7,051	4,687
Heavy Canadian	_	2,549
Other crude oil	16,733	_
Other feedstocks and blendstocks	8,725	7,701
Wynnewood		
Regional crude	55,159	51,822
WTL	3,535	5,971
Midland WTI	_	2,019
Condensate	9,540	9,429
Other feedstocks and blendstocks	3,182	4,005
Total throughput	186,093	156,518

⁽²⁾ Corporate total debt and finance lease obligations, including current portion consisted of \$995 million and \$994 million at March 31, 2021 and December 31, 2020, respectively.

Production Data by Refinery

	Three Months March 3	
(in bpd)	2021	2020
Coffeyville		
Gasoline	61,664	44,519
Distillate	46,542	33,261
Other liquid products	4,107	3,717
Solids	3,397	2,719
Wynnewood		
Gasoline	37,456	39,505
Distillate	29,164	28,755
Other liquid products	2,947	2,454
Solids		25
Total production	185,298	154,955
		_
Light product yield (as % of crude throughput) (1)	100.4 %	100.8 %
Liquid volume yield (as % of total throughput) (2)	97.7 %	97.2 %
Distillate yield (as % of crude throughput) (3)	43.5 %	42.8 %

⁽¹⁾ Total Gasoline and Distillate divided by total Regional crude, WTI, WTL, Midland WTI, Condensate, and Heavy Canadian throughput.

⁽³⁾ Total Distillate divided by total Regional crude, WTI, WTL, Midland WTI, Condensate, and Heavy Canadian throughput.

	Three Months Ended March 31,		
_	2021		2020
Market Indicators (dollars per barrel)			
West Texas Intermediate (WTI) NYMEX	58.14	\$	45.78
Crude Oil Differentials to WTI:			
Brent	3.18		5.04
WCS (heavy sour)	(11.82)		(17.77)
Condensate	(0.22)		(1.14)
Midland Cushing	0.87		(0.06)
NYMEX Crack Spreads:			
Gasoline	16.43		10.37
Heating Oil	15.26		18.98
NYMEX 2-1-1 Crack Spread	15.84		14.67
PADD II Group 3 Basis:			
Gasoline	(1.22)		(3.12)
Ultra Low Sulfur Diesel	2.20		(1.80)
PADD II Group 3 Product Crack Spread:			
Gasoline	15.20		7.25
Ultra Low Sulfur Diesel	17.46		17.18
PADD II Group 3 2-1-1	16.33		12.21

⁽²⁾ Total Gasoline, Distillate, and Other liquid products divided by total throughput.

Nitrogen Fertilizer Segment:

Key Operating Data:

Ammonia Utilization (3)	Two Years Ended March 31,			
(capacity utilization)	2021	2020		
Consolidated	96 %	93 %		
Coffeyville Facility	94 %	93 %		
East Dubuque Facility	97 %	93 %		

⁽¹⁾ Reflects ammonia utilization rates on a consolidated basis and at each of the Nitrogen Fertilizer facilities. Utilization is an important measure used by management to assess operational output at each of the facilities. Utilization is calculated as actual tons produced divided by capacity. The Nitrogen Fertilizer Segment presents utilization on a two-year rolling average to take into account the impact of current turnaround cycles on any specific period. The two-year rolling average is a more useful presentation of the long-term utilization performance of our plants. Additionally, we present utilization solely on ammonia production rather than each nitrogen product as it provides a comparative baseline against industry peers and eliminates the disparity of plant configurations for upgrade of ammonia into other nitrogen products. With the Nitrogen Fertilizer Segments' efforts being primarily focused on ammonia upgrade capabilities, this measure provides a meaningful view of how well the facilities operate.

Sales and Production Data

	Three Months Ended March 31,			nded
		2021		2020
Consolidated sales (thousand tons):				
Ammonia		32		54
UAN		239		284
Consolidated product pricing at gate (dollars per ton) (1):				
Ammonia	\$	300	\$	264
UAN		159		166
Consolidated production volume (thousand tons):				
Ammonia (gross produced) (2)		188		201
Ammonia (net available for sale) (2)		70		78
UAN		272		317
Feedstock:				
Petroleum coke used in production (thousand tons)		128		125
Petroleum coke (dollars per ton)	\$	42.91	\$	44.68
Natural gas used in production (thousands of MMBtu) (3)		1,882		2,141
Natural gas used in production (dollars per MMBtu) (3)	\$	3.10	\$	2.42
Natural gas in cost of materials and other (thousands of MMBtus) (3)		940		1,418
Natural gas in cost of materials and other (dollars per MMBtu) (3)	\$	2.94	\$	2.80

⁽¹⁾ Product pricing at gate represents sales less freight revenue divided by product sales volume in tons and is shown in order to provide a pricing measure that is comparable across the fertilizer industry.

⁽²⁾ Gross tons produced for ammonia represent total ammonia produced, including ammonia produced that was upgraded into other fertilizer products. Net tons available for sale represent ammonia available for sale that was not upgraded into other fertilizer products.

⁽³⁾ The feedstock natural gas shown above does not include natural gas used for fuel. The cost of fuel natural gas is included in direct operating expense.

Key Market Indicators

		Months I March 31,	
	2021		2020
Ammonia — Southern Plains (dollars per ton)	\$ 43	3 7 \$	272
Ammonia — Corn belt (dollars per ton)	49	7	364
UAN — Corn belt (dollars per ton)	2:	56	169
Natural gas NYMEX (dollars per MMBtu)	\$ 2.	12 \$	1.87

Q2 2021 Outlook

The table below summarizes our outlook for certain operational statistics and financial information for the second quarter of 2021. See "Forward-Looking Statements" above.

	 Q2 2021				
	 Low		High		
Petroleum Segment					
Total throughput (bpd)	200,000		220,000		
Direct operating expenses (1) (in millions)	\$ 75	\$	85		
Nitrogen Fertilizer Segment					
Ammonia utilization rates (2)					
Consolidated	95 %		100 %		
Coffeyville Facility	95 %	100 %			
East Dubuque Facility	95 %		100 %		
Direct operating expenses (1) (in millions)	\$ 35	\$	40		
Capital Expenditures (3) (in millions)					
Petroleum	\$ 6	\$	12		
Renewables (4)	65		70		
Nitrogen Fertilizer	4		7		
Other	 		1		
Total capital expenditures	\$ 75	\$	90		

⁽¹⁾ Direct operating expenses are shown exclusive of depreciation and amortization and, for the Nitrogen Fertilizer segment, turnaround expenses and inventory valuation impacts.

⁽²⁾ Ammonia utilization rates exclude the impact of turnarounds.

⁽³⁾ Capital expenditures are disclosed on an accrual basis.

⁽⁴⁾ Renewables reflects spending on the Wynnewood RDU project. Amounts spent in 2020 were previously reported under Other. Upon completion and meeting of certain criteria under accounting rules, Renewables is expected to be a new reportable segment. As of March 31, 2021, Renewables does not the meet the definition of an operating segment as defined under ASC 280.

Non-GAAP Reconciliations:

Reconciliation of Net Loss to EBITDA

			onths Ended ch 31,		
(in millions)		21		2020	
Net loss	\$	(55)	\$	(101)	
Add:					
Interest expense, net		31		35	
Income tax benefit		(42)		(36)	
Depreciation and amortization		66		64	
EBITDA	<u>\$</u>		\$	(38)	

Reconciliation of Net Cash Provided By (Used In) Operating Activities to Free Cash Flow

	Three Months Ended March 31,			
	2	2021		2020
Net cash provided by (used in) operating activities	\$	96	\$	(58)
Less:				
Capital expenditures		(34)		(35)
Capitalized turnaround expenditures		(1)		(22)
Free cash flow	\$	61	\$	(115)

Reconciliation of Petroleum Segment Net Loss to EBITDA and EBITDA Adjusted for Inventory Valuation Impacts

	March 31,					
(in millions)	2021		2020			
Petroleum net loss	\$	(110)	\$	(130)		
Add:						
Interest (income) expense, net		(2)		5		
Depreciation and amortization		51		48		
Petroleum EBITDA		(61)		(77)		
Inventory valuation impacts, (favorable) unfavorable (1) (2)		(66)		136		
Petroleum EBITDA adjusted for inventory valuation impacts	\$	(127)	\$	59		

Reconciliation of Petroleum Segment Gross Loss to Refining Margin and Refining Margin Adjusted for Inventory Valuation Impacts

	Three Months Ended March 31,				
(in millions)		2021	2020		
Net sales	\$	1,404	\$	1,057	
Cost of materials and other		1,353		1,035	
Direct operating expenses (exclusive of depreciation and amortization)		99		84	
Depreciation and amortization		51		48	
Gross loss		(99)		(110)	
Add:					
Direct operating expenses (exclusive of depreciation and amortization)		99		84	
Depreciation and amortization		51		48	
Refining margin		51		22	
Inventory valuation impacts, (favorable) unfavorable (1) (2)		(66)		136	
Refining margin adjusted for inventory valuation impacts	\$	(15)	\$	158	

⁽¹⁾ The Petroleum Segment's basis for determining inventory value under GAAP is FIFO. Changes in crude oil prices can cause fluctuations in the inventory valuation of crude oil, work in process and finished goods, thereby resulting in a favorable inventory valuation impact when crude oil prices increase and an unfavorable inventory valuation impact when crude oil prices decrease. The inventory valuation impact is calculated based upon inventory values at the beginning of the accounting period and at the end of the accounting period. In order to derive the inventory valuation impact per total throughput barrel, we utilize the total dollar figures for the inventory valuation impact and divide by the number of total throughput barrels for the period.

Reconciliation of Petroleum Segment Total Throughput Barrels

	Three Mor	nths Ended ch 31,
	2021	2020
Total throughput barrels per day	186,093	156,518
Days in the period	90	91
Total throughput barrels	16,748,383	14,263,161

Reconciliation of Petroleum Segment Refining Margin per Total Throughput Barrels

	March 31,			ueu		
(in millions, except for per throughput barrel data)	2021		2021		2020	
Refining margin	\$	51	\$	22		
Divided by: total throughput barrels		17		14		
Refining margin per total throughput barrel	\$	3.05	\$	1.52		

Three Months Ended

⁽²⁾ Includes an inventory valuation charge of \$58 million recorded in the first quarter of 2020, as inventories were reflected at the lower of cost or net realizable value. No adjustment was necessary for the first quarter of 2021.

Reconciliation of Petroleum Segment Refining Margin Adjusted for Inventory Valuation Impacts per Total Throughput Barrel

	Three Months Ended March 31,			ıded
(in millions, except for throughput barrel data)		2021		2020
Refining margin adjusted for inventory valuation impacts	\$	(15)	\$	158
Divided by: total throughput barrels		17		14
Refining margin adjusted for inventory valuation impacts per total throughput barrel	\$	(0.88)	\$	11.06

Reconciliation of Petroleum Segment Direct Operating Expenses per Total Throughput Barrel

	 I hree Months Ended March 31,					
(in millions, except for throughput barrel data)	 2021		2020			
Direct operating expenses (exclusive of depreciation and amortization)	\$ 99	\$	84			
Divided by: total throughput barrels	 17		14			
Direct operating expenses per total throughput barrel	\$ 5.89	\$	5.87			

Reconciliation of Nitrogen Fertilizer Segment Net Loss to EBITDA

		Three Months Ended March 31,					
(in millions)		2021		2020			
Nitrogen fertilizer net loss	\$	(25)	\$	(21)			
Add:							
Interest expense, net		16		16			
Depreciation and amortization		14		16			
Nitrogen Fertilizer EBITDA	_\$	5	\$	11			

Reconciliation of Basic and Diluted Loss per Share to Adjusted Loss per Share

	Three Months Ended March 31,				
		2021	2020		
Basic and diluted loss per share	\$	(0.39)	\$	(0.87)	
Adjustments:					
Inventory valuation impacts (1)		(0.48)		1.00	
Unrealized gain on marketable securities (1)		(0.46)		(0.22)	
Adjusted loss per share	\$	(1.33)	\$	(0.09)	

⁽¹⁾ Amounts are shown after-tax, using the Company's marginal tax rate, and are presented on a per share basis using the weighted average shares outstanding for each period.

Reconciliation of Total Debt and Net Debt and Finance Lease Obligations to EBITDA Exclusive of Nitrogen Fertilizer

	Twelve Months Ended March 31, 2021			
Total debt and finance lease obligations (1)	\$	1,691		
Less:				
Nitrogen Fertilizer debt and finance lease obligations (1)	\$	637		
Total debt and finance lease obligations exclusive of Nitrogen Fertilizer		1,054		
EBITDA exclusive of Nitrogen Fertilizer	\$	(6)		
Total debt and finance lease obligations to EBITDA exclusive of Nitrogen Fertilizer		(175.67)		
Consolidated cash and cash equivalents	\$	707		
Less:				
Nitrogen Fertilizer cash and cash equivalents		53		
Cash and cash equivalents exclusive of Nitrogen Fertilizer		654		
Net debt and finance lease obligations exclusive of Nitrogen Fertilizer (2)	\$	400		
Net debt and finance lease obligations to EBITDA exclusive of Nitrogen Fertilizer (2)		(66.67)		

⁽¹⁾ Amounts are shown inclusive of the current portion of long-term debt and finance lease obligations.

⁽²⁾ Net debt represents total debt and finance lease obligations exclusive of cash and cash equivalents.

	Three Months Ended							Twelve Months			
		June 30, 2020		September 30, 2020		December 31, 2020		March 31, 2021		Ended March 31, 2021	
Consolidated											
Net loss	\$	(32)	\$	(108)	\$	(78)	\$	(55)	\$	(273)	
Add:											
Interest expense, net		31		31		32		31		125	
Income tax benefit		(5)		(31)		(23)		(42)		(101)	
Depreciation and amortization		74		69		70		66		279	
EBITDA	\$	68	\$	(39)	\$	1	\$	_	\$	30	
Nitrogen Fertilizer											
Net loss	\$	(42)	\$	(19)	\$	(17)	\$	(25)		(103)	
Add:											
Interest expense, net		16		16		16		16		64	
Depreciation and amortization		24		18		19		14		75	
EBITDA	\$	(2)	\$	15	\$	18	\$	5	\$	36	
EBITDA exclusive of Nitrogen Fertilizer	\$	70	\$	(54)	\$	(17)	\$	(5)	\$	(6)	