



CVR Energy Reports Fourth Quarter and Full-Year 2019 Results and Announces Cash Dividend of 80 Cents

- **Achieved year-over-year environmental, health and safety improvements.**
- **Completed Wynnewood's BenFree repositioning project.**
- **Received Board approval for Wynnewood's Isomerization project.**
- **Increased cash dividend to \$3.20 per share annualized for an industry-leading dividend yield.**

SUGAR LAND, Texas (Feb. 19, 2020) – CVR Energy, Inc. (NYSE: CVI) today announced fourth quarter 2019 net income of \$44 million, or 44 cents per diluted share, on net sales of \$1.6 billion, compared to net income of \$73 million, or 73 cents per diluted share, on net sales of \$1.7 billion for the fourth quarter of 2018. Fourth quarter 2019 EBITDA was \$142 million, compared to fourth quarter 2018 EBITDA of \$202 million.

For full-year 2019, the Company reported net income of \$380 million, or \$3.78 per diluted share, on net sales of \$6.4 billion, compared to net income for full-year 2018 of \$259 million, or \$2.80 per diluted share, on net sales of \$7.1 billion. Full-year 2019 EBITDA was \$880 million, compared to \$821 million for 2018.

“CVR Energy delivered solid 2019 full-year and fourth quarter results, led by continuous improvement in our core values of environmental, health and safety across both our petroleum and nitrogen fertilizer segments,” said Dave Lamp, CVR Energy’s Chief Executive Officer. “Our petroleum business again posted increased earnings year-over-year, driven by higher throughput rates, increased capture rates and higher refining margins despite lower crack spreads. In addition, we began our multi-year approach intended to improve crude oil optionality, market capture and reliability at our refineries.

“CVR Partners achieved year-over-year increases in net income and EBITDA and benefited from higher fertilizer sales volumes and stronger product pricing in 2019,” Lamp said. “As a result, CVR Partners distributed a total of 40 cents per unit during 2019 despite poor weather during the year, which impacted market conditions. Looking forward, we anticipate strong demand for spring nitrogen fertilizer application and currently expect 92 million to 95 million acres of corn to be planted this year.”

Petroleum

The Petroleum Segment reported fourth quarter 2019 operating income of \$82 million, on net sales of \$1.5 billion, compared to operating income of \$122 million, on net sales of \$1.6 billion in the fourth quarter of 2018.

Refining margin per total throughput barrel was \$12.47 in the fourth quarter 2019, compared to \$13.67 during the same period in 2018. Crude oil pricing during the quarter led to a favorable inventory valuation impact of \$12 million, or 61 cents per total throughput barrel, compared to an unfavorable impact of \$77 million, or \$3.80 per total throughput barrel, in the fourth quarter of 2018. The Petroleum Segment also recognized a fourth quarter 2019 derivative loss of \$19 million, or 99 cents per total throughput barrel, compared to a gain of \$70 million, or \$3.45 per total throughput barrel, for the fourth quarter of 2018.

Included in the total derivative loss for the fourth quarter of 2019 was an unrealized loss of \$24 million, compared to an unrealized gain of \$37 million for the fourth quarter of 2018.

Fourth quarter 2019 combined total throughput was approximately 213,000 barrels per day (bpd), compared to approximately 221,000 bpd of combined total throughput for the fourth quarter 2018.

For full-year 2019, operating income was \$574 million, on net sales of \$6.0 billion, compared to operating income of \$544 million, on net sales of \$6.8 billion for the year ended 2018.

The Petroleum Segment's refining margin per total throughput barrel for 2019 was \$15.26, compared to \$15.18 for 2018. This year-over-year increase was driven in part by lower renewable identification number (RIN) expenses resulting from a reduction in market prices. In addition, operating income in the Petroleum segment was positively impacted by a \$9 million gain on sale of the Cushing, Oklahoma, crude oil terminal. Combined total throughput increased to approximately 216,000 bpd, compared to approximately 213,000 bpd in the year ended 2018.

Nitrogen Fertilizer

The Nitrogen Fertilizer Segment reported an operating loss of \$9 million on net sales of \$86 million for the fourth quarter of 2019, compared to operating income of \$8 million on net sales of \$98 million for the fourth quarter of 2018.

Fourth quarter 2019 average realized gate prices for urea ammonia nitrate (UAN) decreased compared to the prior year, down 2 percent to \$176 per ton, while ammonia was flat at \$324 per ton. Average realized gate prices for UAN and ammonia were \$180 per ton and \$324 per ton, respectively, for the fourth quarter of 2018.

CVR Partners' fertilizer facilities produced a combined 180,000 tons of ammonia during the fourth quarter of 2019, of which 55,000 net tons were available for sale while the rest was upgraded to other fertilizer products, including 286,000 tons of UAN. During the fourth quarter 2018, the fertilizer facilities produced 209,000 tons of ammonia, of which 59,000 net tons were available for sale while the remainder was upgraded to other fertilizer products, including 357,000 tons of UAN.

For full-year 2019, operating income was \$27 million on net sales of \$404 million, compared to operating income of \$6 million on net sales of \$351 million for the year ended 2018.

The average realized gate price for UAN increased 15 percent to \$199 per ton, coupled with a 20 percent increase in ammonia to \$392 per ton for full-year 2019. Average realized gate prices for UAN and ammonia were \$173 per ton and \$328 per ton, respectively, for the year ended 2018. In 2019, our fertilizer facilities produced a combined 766,000 tons of ammonia, of which 223,000 tons were available for sale, while the rest was upgraded to other fertilizer products, including 1,255,000 tons of UAN. For the year ended 2018, the fertilizer facilities produced 794,000 tons of ammonia, of which 246,000 net tons were available for sale while the remainder was upgraded to other fertilizer products, including 1,276,000 tons of UAN.

Cash, Debt and Dividend

Consolidated cash and cash equivalents was \$652 million at Dec. 31, 2019. Consolidated total debt was \$1.2 billion at Dec. 31, 2019, with no debt other than the Petroleum and Nitrogen Fertilizer segments' debt.

CVR Energy announced a fourth quarter 2019 cash dividend of 80 cents per share. The dividend, as declared by CVR Energy's Board of Directors, will be paid on March 9, 2020, to stockholders of record as of the

close of market on March 2, 2020. CVR Energy's fourth quarter cash dividend brings the cumulative cash dividends declared for the 2019 full year to \$3.10 per share.

CVR Partners will not pay a cash distribution for the 2019 fourth quarter.

Fourth Quarter 2019 Earnings Conference Call

CVR Energy previously announced that it will host its fourth quarter and full-year 2019 Earnings Conference Call on Thursday, Feb. 20, at 1 p.m. Eastern. This Earnings Conference Call may also include discussion of Company developments, forward-looking information and other material information about business and financial matters.

The fourth quarter and full-year 2019 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/9nek858g>. A repeat of the call can be accessed for 14 days by dialing (877) 660-6853, conference ID 13698196.

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: dividends and distributions including the timing, payment and amount (if any) thereof; improvement of crude oil optionality, market capture and reliability at our refineries; demand for spring nitrogen fertilizer application; planted corn acres; refinery throughput, direct operating expenses, capital expenditures, depreciation and amortization and turnaround expense; continued safe and reliable operations; ammonia utilization rates including impact of turnarounds; inventory adjustments; and other matters. You can generally identify forward-looking statements by our use of forward-looking terminology such as "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 (among others) price volatility of crude oil, other feedstocks and refined products; the ability of 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 34 percent of the common units of CVR Partners.

For further information, please contact:

Investor Contact:

Richard Roberts

CVR Energy, Inc.

(281) 207-3205

InvestorRelations@CVREnergy.com

Media Relations:

Brandee Stephens

CVR Energy, Inc.

(281) 207-3516

MediaRelations@CVREnergy.com

Non-GAAP Measures

Our management uses certain non-GAAP performance 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.

Effective January 1, 2019, the Company revised its accounting policy method for the costs of planned major maintenance activities (turnarounds) specific to the Petroleum Segment from being expensed as incurred (the direct expensing method) to the deferral method. Refer to the 10-K for a further discussion of the impacts of this change in accounting policy. As a result of this change in accounting policy, the non-GAAP measures of Adjusted EBITDA, Petroleum Adjusted EBITDA, Nitrogen Fertilizer Adjusted EBITDA, Adjusted Net Income (Loss), and Direct Operating Expenses per Total Throughput Barrel net of Turnaround Expense are no longer being presented.

The following are non-GAAP measures that continue to be presented for the year ended December 31, 2019:

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 recognized in prior periods. 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 divided by the total throughput barrels during 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.

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 industry, 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*” section 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.

Items or Events Impacting Comparability

Refer to the “Non-GAAP Measures” section above for discussion of the changes made to the Company’s definition of certain non-GAAP measures.

Petroleum Segment

Coffeyville Refinery - During the fourth quarter of 2019, our Coffeyville Refinery incurred costs of \$15 million related to preparations for the planned turnaround scheduled to be completed in the spring of 2020. During the first quarter of 2018, our Coffeyville Refinery experienced an outage with its fluid catalytic cracking unit (“FCCU”) lasting 48 days. The FCCU outage had a significant negative impact on production and sales during that period.

Wynnewood Refinery - The second phase of our Wynnewood Refinery’s planned facility turnaround was completed in the first quarter of 2019 at a cost of \$24 million.

Nitrogen Fertilizer Segment

During the fourth quarter of 2018, the Partnership recognized a \$6 million business interruption insurance recovery associated with an outage at its Coffeyville Fertilizer Facility during 2017. The recovery is recorded in Other income, net.

Coffeyville Fertilizer Facility - During 2018, the Coffeyville Fertilizer Facility had a planned, full facility turnaround lasting 15 days and incurred approximately \$6 million in turnaround expense in the second quarter of 2018.

East Dubuque Fertilizer Facility - During 2019, the East Dubuque Fertilizer Facility had a planned, full facility turnaround lasting 32 days and cost approximately \$10 million in the third and fourth quarters of 2019.

CVR Energy, Inc.
(unaudited)

	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
(in millions, except per share amounts)				
Consolidated Statement of Operations Data				
Net sales	\$ 1,569	\$ 1,738	\$ 6,364	\$ 7,124
Operating costs and expenses:				
Cost of materials and other	1,262	1,388	4,851	5,683
Direct operating expenses (exclusive of depreciation and amortization as reflected below)	136	127	533	517
Depreciation and amortization	70	69	278	263
Cost of sales	1,468	1,584	5,662	6,463
Selling, general and administrative expenses (exclusive of depreciation and amortization as reflected below)	30	28	117	112
Depreciation and amortization	1	2	9	11
Loss (gain) on asset disposal	1	—	(4)	6
Operating income	69	124	580	532
Other income (expense):				
Interest expense, net	(24)	(22)	(102)	(102)
Other income, net	2	7	13	15
Income before income taxes	47	109	491	445
Income tax expense	19	14	129	79
Net income	28	95	362	366
Less: Net (loss) income attributable to noncontrolling interest	(16)	22	(18)	107
Net income attributable to CVR Energy stockholders	\$ 44	\$ 73	\$ 380	\$ 259
Basic and diluted earnings per share	\$ 0.44	\$ 0.73	\$ 3.78	\$ 2.80
Dividends declared per share	\$ 0.80	\$ 0.75	\$ 3.05	\$ 2.50
EBITDA *	\$ 142	\$ 202	\$ 880	\$ 821
Weighted-average common shares outstanding - basic and diluted	100.5	100.5	100.5	92.5

* See "Non-GAAP Reconciliations" section below.

Selected Balance Sheet Data:

	December 31, 2019	December 31, 2018
(in millions)		
Cash and cash equivalents	\$ 652	\$ 668
Working capital	695	797
Total assets	3,905	4,000
Total debt and finance lease obligations	1,195	1,170
Total liabilities	2,237	2,057
Total CVR stockholders' equity	1,393	1,286

Selected Cash Flow Data:

(in millions)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Net cash flow provided by (used in):				
Operating activities	\$ 94	\$ 102	\$ 747	\$ 628
Investing activities	(48)	(34)	(121)	(108)
Financing activities	(86)	(102)	(642)	(334)
Net cash flow	<u>\$ (40)</u>	<u>\$ (34)</u>	<u>\$ (16)</u>	<u>\$ 186</u>

Selected Segment Data:

(in millions)	Petroleum	Nitrogen Fertilizer	Consolidated
Three Months Ended December 31, 2019			
Net sales	\$ 1,485	\$ 86	\$ 1,569
Operating income (loss)	82	(9)	69
Net income (loss)	81	(25)	28
EBITDA *	135	11	142

Capital Expenditures (1)

Maintenance	\$ 20	\$ 7	\$ 28
Growth	3	1	4
Total capital expenditures	<u>\$ 23</u>	<u>\$ 9</u>	<u>\$ 33</u>

Year Ended December 31, 2019

Net sales	\$ 5,968	\$ 404	\$ 6,364
Operating income	574	27	580
Net income (loss)	559	(35)	362
EBITDA *	788	107	880

Capital Expenditures (1)

Maintenance	\$ 79	\$ 18	\$ 102
Growth	10	2	12
Total capital expenditures	<u>\$ 89</u>	<u>\$ 20</u>	<u>\$ 114</u>

(in millions)	<u>Petroleum</u>		<u>Nitrogen Fertilizer</u>		<u>Consolidated</u>	
Three Months Ended December 31, 2018						
Net sales	\$	1,641	\$	98	\$	1,738
Operating income		122		8		124
Net income (loss)		115		(1)		95
EBITDA *		172		33		202

Capital Expenditures (1)

Maintenance	\$	29	\$	4	\$	34
Growth		6		—		6
Total capital expenditures	\$	35	\$	4	\$	40

Year Ended December 31, 2018

Net sales	\$	6,780	\$	351	\$	7,124
Operating income		544		6		532
Net income (loss)		511		(50)		366
EBITDA *		748		84		821

Capital Expenditures (1)

Maintenance	\$	70	\$	16	\$	89
Growth		19		3		22
Total capital expenditures	\$	89	\$	19	\$	111

* See “Non-GAAP Reconciliations” section below.

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

(in millions)	<u>Petroleum</u>		<u>Nitrogen Fertilizer</u>		<u>Consolidated</u>	
December 31, 2019						
Cash and cash equivalents	\$	583	\$	37	\$	652
Total assets		3,187		1,138		3,905
Total debt and finance lease obligations		563		632		1,195

December 31, 2018

Cash and cash equivalents	\$	353	\$	62	\$	668
Total assets		2,453		1,254		4,000
Total debt and finance lease obligations		541		629		1,170

Petroleum Segment:

Key Operating Metrics per Total Throughput Barrel

(in millions)	<u>Three Months Ended December 31,</u>		<u>Year Ended December 31,</u>					
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>				
Refining Margin *	\$	12.47	\$	13.67	\$	15.26	\$	15.18
Refining Margin, excluding Inventory Valuation Impacts *		11.86		17.47		14.71		15.60
Direct Operating Expenses *		4.63		4.41		4.56		4.62

* See “Non-GAAP Reconciliations” section below.

Throughput Data by Refinery

(in bpd)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Coffeyville				
Regional crude	63,501	35,855	49,093	31,350
WTI	46,784	72,468	67,382	66,952
WTL	1,875	—	473	—
Midland WTI	709	18,506	3,888	15,893
Condensate	6,534	672	4,331	4,992
Heavy Canadian	3,264	7,629	4,711	5,302
Other feedstocks and blendstocks	10,798	12,033	9,160	8,369
Wynnewood				
Regional crude	57,107	51,959	53,848	54,746
WTI	—	—	3	2,354
WTL	2,649	—	668	—
Midland WTI	6,808	7,776	10,995	10,332
Condensate	8,431	8,808	7,666	7,237
Heavy Canadian	—	—	—	—
Other feedstocks and blendstocks	4,269	5,775	3,753	5,068
Total throughput	212,729	221,481	215,971	212,595

Production Data by Refinery

(in bpd)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Coffeyville				
Gasoline	73,814	78,290	71,817	67,091
Distillate	53,222	60,080	57,549	56,307
Other liquid products	2,850	4,834	5,810	5,737
Solids	3,643	5,682	4,573	5,190
Wynnewood				
Gasoline	39,429	39,033	38,864	40,291
Distillate	33,496	30,568	32,380	33,442
Other liquid products	3,697	2,992	3,223	4,025
Solids	27	27	30	41
Total production	210,178	221,506	214,246	212,124
Liquid volume yield (as % of total throughput)	97.1 %	97.0 %	97.1 %	97.3 %

Key Market Indicators

(dollars per barrel)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
West Texas Intermediate (WTI) NYMEX	\$ 56.87	\$ 59.34	\$ 57.04	\$ 64.90
Crude Oil Differentials to WTI:				
Brent	5.55	9.26	7.12	6.79
WCS (heavy sour)	(18.98)	(33.86)	(13.72)	(26.35)
Condensate	(0.10)	(0.65)	(0.76)	(0.46)
Midland Cushing	0.94	(5.96)	(0.69)	(7.20)
NYMEX Crack Spreads:				
Gasoline	12.14	9.81	15.43	15.69
Heating Oil	24.82	27.74	24.43	23.15
NYMEX 2-1-1 Crack Spread	18.48	18.78	19.93	19.42
PADD II Group 3 Product Basis:				
Gasoline	(1.27)	(0.35)	(1.74)	(1.58)
Ultra Low Sulfur Diesel	(2.41)	(0.25)	(1.68)	0.01
PADD II Group 3 Product Crack Spread:				
Gasoline	10.88	9.46	13.69	14.11
Ultra Low Sulfur Diesel	22.41	27.49	22.75	23.16
PADD II Group 3 2-1-1	16.65	18.48	18.22	18.63

Q1 2020 Petroleum Segment Outlook

The table below summarizes our outlook for certain refining statistics and financial information for the first quarter of 2020. See “Forward-Looking Statements” above.

	Q1 2020	
	Low	High
Total throughput (bpd)	155,000	165,000
Direct operating expenses (1) (in millions)	\$ 85	\$ 95
Total capital expenditures (in millions)	\$ 45	\$ 55
Total turnaround expenditures (in millions)	\$ 115	\$ 125

(1) Direct operating expenses are shown exclusive of depreciation and amortization.

Nitrogen Fertilizer Segment

Ammonia Utilization Rates (2)

(percent of capacity utilization)	Two Years Ended December 31,	
	2019	2018
Consolidated	93 %	95 %
Coffeyville	94 %	95 %
East Dubuque	91 %	95 %

(2) 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 December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Consolidated sales (thousand tons):				
Ammonia	62	46	241	202
UAN	293	364	1,261	1,289
Consolidated product pricing at gate (dollars per ton) (1):				
Ammonia	\$ 324	\$ 324	\$ 392	\$ 328
UAN	\$ 176	\$ 180	\$ 199	\$ 173
Consolidated production volume (thousand tons):				
Ammonia (gross produced) (2)	180	209	766	794
Ammonia (net available for sale) (2)	55	59	223	246
UAN	286	357	1,255	1,276
Feedstock:				
Petroleum coke used in production (thousand tons)	131	139	535	463
Petroleum coke used in production (dollars per ton)	\$ 39.90	\$ 41.34	\$ 37.47	\$ 28.41
Natural gas used in production (thousands of MMBtus) (3)	1,646	2,000	6,856	7,933
Natural gas used in production (dollars per MMBtu) (3)	\$ 2.87	\$ 4.06	\$ 2.88	\$ 3.28
Natural gas in cost of materials and other (thousands of MMBtus) (3)	1,474	1,854	6,961	7,122
Natural gas in cost of materials and other (dollars per MMBtu) (3)	\$ 2.58	\$ 3.50	\$ 3.08	\$ 3.15

- (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

	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Ammonia — Southern plains (dollars per ton)	\$ 288	\$ 423	\$ 348	\$ 370
Ammonia — Corn belt (dollars per ton)	385	479	435	424
UAN — Corn belt (dollars per ton)	189	255	210	219
Natural gas NYMEX (dollars per MMBtu)	\$ 2.40	\$ 3.75	\$ 2.54	\$ 3.08

Q1 2020 Nitrogen Fertilizer Segment Outlook

The table below summarizes our outlook for certain operational statistics and financial information for the first quarter of 2020. See “Forward-Looking Statements” above.

	Q1 2020	
	Low	High
Ammonia utilization rates (1)		
Consolidated	95 %	100 %
Coffeyville	95 %	100 %
East Dubuque	95 %	100 %
Direct operating expenses (2) (in millions)	\$ 35	\$ 40
Total capital expenditures (in millions)	\$ 4	\$ 7

(1) Ammonia utilization rates exclude the impact of Turnarounds.

(2) Direct operating expenses are shown exclusive of depreciation and amortization, turnaround expenses, and impacts of inventory adjustments.

Non-GAAP Reconciliations

Reconciliation of Consolidated Net Income to EBITDA

(in millions)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Net income	\$ 28	\$ 95	\$ 362	\$ 366
Add:				
Interest expense, net	24	22	102	102
Income tax expense	19	14	129	79
Depreciation and amortization	71	71	287	274
EBITDA	<u>142</u>	<u>202</u>	<u>880</u>	<u>821</u>

Reconciliation of Petroleum Segment Net Income to EBITDA

(in millions)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Net income (loss)	\$ 81	\$ 115	\$ 559	\$ 511
Add:				
Interest expense, net	4	9	27	41
Depreciation and amortization	50	48	202	196
Petroleum EBITDA	<u>135</u>	<u>172</u>	<u>788</u>	<u>748</u>

Reconciliation of Petroleum Segment Gross Profit to Refining Margin and Refining Margin Adjusted for Inventory Valuation Impact

(in millions)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Net sales	\$ 1,485	\$ 1,641	\$ 5,968	\$ 6,780
Cost of materials and other	1,241	1,362	4,765	5,602
Direct operating expenses (exclusive of depreciation and amortization and turnaround expenses as reflected below)	91	90	359	356
Depreciation and amortization	48	47	199	192
Gross profit	105	142	645	630
Add:				
Direct operating expenses (exclusive of depreciation and amortization and turnaround expenses as reflected below)	91	90	359	356
Depreciation and amortization	48	47	199	192
Refining margin	244	279	1,203	1,178
Inventory valuation impact, (favorable) unfavorable (1)	(12)	77	(43)	33
Refining margin, excluding inventory valuation impacts	\$ 232	\$ 356	\$ 1,160	\$ 1,211

- (1) The Petroleum Segment's basis for determining inventory value under GAAP is First-In, First-Out ("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 Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Total throughput barrels per day	212,729	221,481	215,971	212,595
Days in the period	92	92	365	365
Total throughput barrels	19,571,068	20,376,252	78,829,441	77,597,175

Reconciliation of Petroleum Segment Refining Margin per Total Throughput Barrel

(in millions, except per total throughput barrel)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Refining margin	\$ 244	\$ 279	\$ 1,203	\$ 1,178
Divided by: total throughput barrels	20	20	79	78
Refining margin per total throughput barrel	\$ 12.47	\$ 13.67	\$ 15.26	\$ 15.18

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

(in millions, except per total throughput barrel)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Refining margin, excluding inventory valuation impacts	\$ 232	\$ 356	\$ 1,160	\$ 1,211
Divided by: total throughput barrels	20	20	79	78
Refining margin, excluding inventory valuation impacts, per total throughput barrel	\$ 11.86	\$ 17.47	\$ 14.71	\$ 15.60

Reconciliation of Petroleum Segment Direct Operating Expenses per Total Throughput Barrel

(in millions, except per total throughput barrel)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Direct operating expenses (exclusive of depreciation and amortization)	\$ 91	\$ 90	\$ 359	\$ 356
Divided by: total throughput barrels	20	20	79	78
Direct operating expense per total throughput barrel	<u>\$ 4.63</u>	<u>\$ 4.41</u>	<u>\$ 4.56</u>	<u>\$ 4.62</u>

Reconciliation of Nitrogen Fertilizer Segment Net Loss to EBITDA

(in millions)	Three Months Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018
Nitrogen fertilizer net loss	\$ (25)	\$ (1)	\$ (35)	\$ (50)
Add:				
Interest expense, net	16	15	62	62
Depreciation and amortization	20	19	80	72
Nitrogen fertilizer EBITDA	<u>\$ 11</u>	<u>\$ 33</u>	<u>\$ 107</u>	<u>\$ 84</u>