CF Industries Holdings, Inc.
Form 10-Q
August 03, 2017
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q
(Mark One)

x	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2017
OR

o	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to
Commission file number 001-32597
CF INDUSTRIES HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	20-2697511 (I.R.S. Employer Identification No.)
4 Parkway North, Suite 400 Deerfield, Illinois (Address of principal executive offices)	60015 (Zip Code)

(847) 405-2400
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o	Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

233,247,225 shares of the registrant's common stock, $0.01 par value per share, were outstanding at July 28, 2017.

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CF INDUSTRIES HOLDINGS, INC.
PART I—FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(in millions, except per share amounts)			
Net sales	$1,124	$1,134	$2,161	$2,138
Cost of sales	952	607	1,883	1,394
Gross margin	172	527	278	744
Selling, general and administrative expenses	49	52	95	97
Transaction costs	—	165	—	179
Other operating—net	10	63	16	124
Total other operating costs and expenses	59	280	111	400
Equity in losses of operating affiliates	(6)	(9)	(3)	(9)
Operating earnings	107	238	164	335
Interest expense	80	61	160	99
Interest income	(2)	(1)	(3)	(2)
Other non-operating—net	—	—	—	(2)
Earnings before income taxes	29	178	7	240
Income tax provision (benefit)	5	95	(8)	110
Net earnings	24	83	15	130
Less: Net earnings attributable to noncontrolling interests	21	36	35	57
Net earnings (loss) attributable to common stockholders	$3	$47	$(20)	$73
Net earnings (loss) per share attributable to common stockholders:				
Basic	$0.01	$0.20	$(0.09)	$0.31
Diluted	$0.01	$0.20	$(0.09)	$0.31
Weighted-average common shares outstanding:				
Basic	233.5	233.3	233.2	233.2
Diluted	233.7	233.5	233.2	233.5
Dividends declared per common share	$0.30	$0.30	$0.60	$0.60

See accompanying Notes to Unaudited Consolidated Financial Statements.

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CF INDUSTRIES HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(in millions)			
Net earnings	$24	$83	$15	$130
Other comprehensive income (loss):				
Foreign currency translation adjustment—net of taxes	52	(38)	72	10
Defined benefit plans—net of taxes	1	(3)	1	(3)
	53	(41)	73	7
Comprehensive income	77	42	88	137
Less: Comprehensive income attributable to noncontrolling interests	21	36	35	57
Comprehensive income attributable to common stockholders	$56	$6	$53	$80

See accompanying Notes to Unaudited Consolidated Financial Statements.

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CF INDUSTRIES HOLDINGS, INC.
CONSOLIDATED BALANCE SHEETS

	(Unaudited) June 30, 2017	December 31, 2016
	(in millions, except share and per share amounts)	
Assets		
Current assets:		
Cash and cash equivalents	$2,001	$ 1,164
Restricted cash	4	5
Accounts receivable—net	282	236
Inventories	325	339
Prepaid income taxes	34	841
Other current assets	29	70
Total current assets	2,675	2,655
Property, plant and equipment—net	9,441	9,652
Investments in affiliates	120	139
Goodwill	2,360	2,345
Other assets	340	340
Total assets	$14,936	$ 15,131
Liabilities and Equity		
Current liabilities:		
Accounts payable and accrued expenses	$616	$ 638
Income taxes payable	—	1
Customer advances	5	42
Current portion of long-term debt	797	—
Other current liabilities	23	5
Total current liabilities	1,441	686
Long-term debt	4,986	5,778
Deferred income taxes	1,632	1,630
Other liabilities	487	545
Equity:		
Stockholders' equity:		
Preferred stock—$0.01 par value, 50,000,000 shares authorized	—	—
Common stock—$0.01 par value, 500,000,000 shares authorized, 2017—233,232,669 shares issued and 2016—233,141,771 shares issued	2	2
Paid-in capital	1,388	1,380
Retained earnings	2,205	2,365
Treasury stock—at cost, 2017—386 shares and 2016—27,602 shares	—	(1)
Accumulated other comprehensive loss	(325)	(398)
Total stockholders' equity	3,270	3,348
Noncontrolling interests	3,120	3,144
Total equity	6,390	6,492
Total liabilities and equity	$14,936	$ 15,131

See accompanying Notes to Unaudited Consolidated Financial Statements.

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CF INDUSTRIES HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(Unaudited)

	Common Stockholders							
	$0.01 Par Value Common Stock	Treasury Stock	Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Noncontrolling Interests	Total Equity
	(in millions, except per share amounts)							
Balance as of December 31, 2015	$2	$(153)	$1,378	$3,058	$(250)	$4,035	$352	$4,387
Net earnings	—	—	—	73	—	73	57	130
Other comprehensive income:								
Foreign currency translation adjustment—net of taxes	—	—	—	—	10	10	—	10
Defined benefit plans—net of taxes	—	—	—	—	(3)	(3)	—	(3)
Comprehensive income						80	57	137
Issuance of $0.01 par value common stock under employee stock plans	—	3	(3)	—	—	—	—	—
Stock-based compensation expense	—	—	9	—	—	9	—	9
Cash dividends ($0.60 per share)	—	—	—	(140)	—	(140)	—	(140)
Issuance of noncontrolling interest in CF Industries Nitrogen, LLC (CFN)	—	—	—	—	—	—	2,792	2,792
Distributions declared to noncontrolling interest	—	—	—	—	—	—	(20)	(20)
Balance as of June 30, 2016	$2	$(150)	$1,384	$2,991	$(243)	$3,984	$3,181	$7,165
Balance as of December 31, 2016	$2	$(1)	$1,380	$2,365	$(398)	$3,348	$3,144	$6,492
Net (loss) earnings	—	—	—	(20)	—	(20)	35	15
Other comprehensive income:								
Foreign currency translation adjustment—net of taxes	—	—	—	—	72	72	—	72
Defined benefit plans—net of taxes	—	—	—	—	1	1	—	1
Comprehensive income						53	35	88
Issuance of $0.01 par value common stock under employee stock plans	—	1	(1)	—	—	—	—	—
Stock-based compensation expense	—	—	9	—	—	9	—	9
Cash dividends ($0.60 per share)	—	—	—	(140)	—	(140)	—	(140)
Distributions declared to noncontrolling interests	—	—	—	—	—	—	(59)	(59)
Balance as of June 30, 2017	$2	$—	$1,388	$2,205	$(325)	$3,270	$3,120	$6,390

See accompanying Notes to Unaudited Consolidated Financial Statements.

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CF INDUSTRIES HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six months ended June 30,	
	2017	2016
	(in millions)	
Operating Activities:		
Net earnings	$15	$130
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	422	327
Deferred income taxes	(8)	875
Stock-based compensation expense	8	9
Unrealized net loss (gain) on natural gas and foreign currency derivatives	71	(189)
Unrealized loss on embedded derivative	3	—
Loss on disposal of property, plant and equipment	1	4
Undistributed losses of affiliates—net of taxes	6	1
Changes in:		
Accounts receivable—net	(35)	24
Inventories	10	81
Accrued and prepaid income taxes	806	(673)
Accounts payable and accrued expenses	(12)	(67)
Customer advances	(37)	(149)
Other—net	(63)	73
Net cash provided by operating activities	1,187	446
Investing Activities:		
Additions to property, plant and equipment	(185)	(1,379)
Proceeds from sale of property, plant and equipment	12	2
Distributions received from unconsolidated affiliates	6	—
Proceeds from sale of auction rate securities	9	—
Withdrawals from restricted cash funds	1	16
Other—net	—	3
Net cash used in investing activities	(157)	(1,358)
Financing Activities:		
Proceeds from short-term borrowings	—	150
Payments of short-term borrowings	—	(150)
Financing fees	—	(5)
Dividends paid on common stock	(140)	(140)
Issuance of noncontrolling interest in CFN	—	2,800
Distributions to noncontrolling interests	(59)	(20)
Net cash (used in) provided by financing activities	(199)	2,635
Effect of exchange rate changes on cash and cash equivalents	6	(1)
Increase in cash and cash equivalents	837	1,722
Cash and cash equivalents at beginning of period	1,164	286
Cash and cash equivalents at end of period	$2,001	$2,008

See accompanying Notes to Unaudited Consolidated Financial Statements.

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CF INDUSTRIES HOLDINGS, INC.

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Background and Basis of Presentation

We are one of the largest manufacturers and distributors of nitrogen fertilizer and other nitrogen products in the world. Our principal customers are cooperatives, independent fertilizer distributors, farmers and industrial users. Our principal nitrogen fertilizer products are ammonia, granular urea, urea ammonium nitrate solution (UAN) and ammonium nitrate (AN). Our other nitrogen products include diesel exhaust fluid (DEF), urea liquor, nitric acid and aqua ammonia, which are sold primarily to our industrial customers, and compound fertilizer products (NPKs), which are solid granular fertilizer products for which the nutrient content is a combination of nitrogen, phosphorus, and potassium. Our manufacturing and distribution facilities are concentrated in the midwestern United States and other major agricultural areas of the United States, Canada and the United Kingdom. We also export nitrogen fertilizer products from our Donaldsonville, Louisiana and Yazoo City, Mississippi manufacturing facilities, and our United Kingdom manufacturing facilities in Billingham and Ince.

All references to "CF Holdings," "the Company," "we," "us" and "our" refer to CF Industries Holdings, Inc. and its subsidiaries, except where the context makes clear that the reference is only to CF Industries Holdings, Inc. itself and not its subsidiaries. All references to "CF Industries" refer to CF Industries, Inc., a 100% owned subsidiary of CF Industries Holdings, Inc.

The accompanying unaudited interim consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements for the year ended December 31, 2016, in accordance with U.S. generally accepted accounting principles (GAAP) for interim financial reporting. In the opinion of management, these statements reflect all adjustments, consisting only of normal and recurring adjustments, that are necessary for the fair representation of the information for the periods presented. The accompanying unaudited interim consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. Operating results for any period presented apply to that period only and are not necessarily indicative of results for any future period.

The accompanying unaudited interim consolidated financial statements should be read in conjunction with our audited consolidated financial statements and related disclosures included in our 2016 Annual Report on Form 10-K filed with the SEC on February 23, 2017. The preparation of the unaudited interim consolidated financial statements requires us to make use of estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the unaudited consolidated financial statements and the reported revenues and expenses for the periods presented. Significant estimates and assumptions are used for, but are not limited to, net realizable value of inventories, environmental remediation liabilities, environmental and litigation contingencies, the cost of customer incentives, useful lives of property and identifiable intangible assets, the assumptions used in the evaluation of potential impairments of property, investments, identifiable intangible assets and goodwill, income tax and valuation reserves, allowances for doubtful accounts receivable, the measurement of the fair values of investments for which markets are not active, assumptions used in the determination of the funded status and annual expense of defined benefit pension and other postretirement benefit plans and the assumptions used in the valuation of stock-based compensation awards granted to employees.

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2. New Accounting Standards

Recently Adopted Pronouncement

On January 1, 2017, we adopted Accounting Standards Update (ASU) No. 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory. ASU No. 2015-11 changes the inventory measurement principle for entities using the first-in, first out (FIFO) or average cost methods. For entities utilizing one of these methods, the inventory measurement principle changed from lower of cost or market to the lower of cost and net realizable value. We follow the FIFO or average cost methods and the adoption of this ASU did not have a material effect on our consolidated financial statements.

Recently Issued Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes the revenue recognition requirements in Accounting Standards Codification (ASC) Topic 605, Revenue Recognition. This ASU is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This ASU also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments. Additionally, the costs to obtain and fulfill a contract, including assets to be recognized, are to be capitalized and such capitalized costs should be disclosed. In 2016, the FASB issued additional ASUs that enhance the operability of the principal versus agent guidance in ASU No. 2014-09 by clarifying that an entity should consider the nature of each good or service promised to a customer at the individual good or service level, clarify that ASU No. 2014-09 should not be applied to immaterial performance obligations, and enhance the guidance around the treatment of shipping costs incurred to fulfill performance obligations. As modified by ASU No. 2015-14, Deferral of the Effective Date, the effective date of ASU No. 2014-09 is for interim and annual periods beginning after December 15, 2017, with early adoption permitted for interim and annual periods beginning after December 15, 2016. We continue to analyze the impact of ASU No. 2014-09 on our revenue contracts by comparing the revenue recognition that would have occurred from applying this ASU to revenue contracts that existed in 2015, 2016 and 2017. Based on analysis to date, we believe the adoption of ASU No. 2014-09 will not have a material impact on the revenue reported in our consolidated financial statements. We are also reviewing our business processes, systems, and controls to determine what changes are needed to support adoption, including the additional disclosures required under ASU No. 2014-09. We intend to adopt ASU No. 2014-09 effective January 1, 2018 using the modified retrospective approach.

In March 2017, the FASB issued ASU No. 2017-07, Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which will change the presentation of net benefit cost related to employer sponsored defined benefit plans and other postretirement benefits. Service cost will be included within the same income statement line item as other compensation costs arising from services rendered during the period, while other components of net benefit cost will be presented separately outside of operating income. Additionally, only service costs may be capitalized on the balance sheet. This ASU is effective for annual and interim periods beginning after December 15, 2017. The guidance will be applied retrospectively for the income statement classification requirements and prospectively for the capitalization guidance. Early adoption is permitted. We do not expect the provisions of this ASU will have a material effect on our consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory, which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, and should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Early adoption is permitted in the first interim period of an annual reporting period for which financial statements have not been issued. We are currently evaluating the impact of this ASU on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which supersedes the lease accounting requirements in ASC Topic 840, Leases. This ASU will require lessees to recognize the rights and obligations

resulting from virtually all leases (other than leases that meet the definition of a short-term lease) on their balance sheets as right-of-use (ROU) assets with corresponding lease liabilities. Extensive quantitative and qualitative disclosures, including significant judgments made by management, will be required to provide greater insight into the extent of income and expense recognized and expected to be recognized from existing contracts. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted, and requires the modified retrospective method of adoption. While we are continuing to evaluate the impact of the adoption of this ASU on our consolidated financial statements, we currently believe the most significant change relates to the recognition of new ROU assets and lease liabilities on our balance sheet for operating leases for certain property and equipment, including rail car leases and barge tow charters for the distribution of fertilizer.

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3. Net Earnings Per Share

Net earnings per share were computed as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(in millions, except per share amounts)			
Net earnings (loss) attributable to common stockholders	$3	$47	$(20)	$73
Basic earnings per common share:				
Weighted-average common shares outstanding	233.5	233.3	233.2	233.2
Net earnings (loss) attributable to common stockholders	$0.01	$0.20	$(0.09)	$0.31
Diluted earnings per common share:				
Weighted-average common shares outstanding	233.5	233.3	233.2	233.2
Dilutive common shares—stock options	0.2	0.2	—	0.3
Diluted weighted-average shares outstanding	233.7	233.5	233.2	233.5
Net earnings (loss) attributable to common stockholders	$0.01	$0.20	$(0.09)	$0.31

In the computation of diluted earnings per common share, potentially dilutive stock options are excluded if the effect of their inclusion is anti-dilutive. Shares for anti-dilutive stock options not included in the computation of diluted earnings per common share were 6.0 million and 6.6 million for the three and six months ended June 30, 2017, respectively, and 4.4 million and 4.3 million for the three and six months ended June 30, 2016, respectively.

4. Inventories

Inventories consist of the following:

	June 30, 2017	December 31, 2016
	(in millions)	
Finished goods	$276	$ 279
Raw materials, spare parts and supplies	49	60
Total inventories	$325	$ 339

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5. Property, Plant and Equipment—Net

Property, plant and equipment—net consists of the following:

	June 30, 2017	December 31, 2016
	(in millions)	
Land	$70	$ 69
Machinery and equipment	11,907	11,664
Buildings and improvements	879	878
Construction in progress	243	280
Property, plant and equipment[1]	13,099	12,891
Less: Accumulated depreciation and amortization	3,658	3,239
Property, plant and equipment—net	$9,441	$ 9,652

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(1) As of June 30, 2017 and December 31, 2016, we had property, plant and equipment that was accrued but unpaid of approximately$205 million and $225 million, respectively. These amounts included accruals related to our capacity expansion projects of $175 million and $185 million as of June 30, 2017 and December 31, 2016, respectively. As of June 30, 2016 and December 31, 2015, we had property, plant and equipment that was accrued but unpaid of $383 million and $543 million, respectively.

Depreciation and amortization related to property, plant and equipment was $208 million and $405 million for the three and six months ended June 30, 2017, respectively, and $146 million and $286 million for the three and six months ended June 30, 2016, respectively.

Plant turnarounds—Scheduled inspections, replacements and overhauls of plant machinery and equipment at our continuous process manufacturing facilities during a full plant shutdown are referred to as plant turnarounds. The expenditures related to turnarounds are capitalized in property, plant and equipment when incurred. The following is a summary of capitalized plant turnaround costs:

	Six months ended June 30, 2017	2016
	(in millions)	
Net capitalized turnaround costs:		
Beginning balance	$206	$220
Additions	73	14
Depreciation	(56)	(42)
Effect of exchange rate changes	3	3
Ending balance	$226	$195

Scheduled replacements and overhauls of plant machinery and equipment include the dismantling, repair or replacement and installation of various components including piping, valves, motors, turbines, pumps, compressors, heat exchangers and the replacement of catalysts when a full plant shutdown occurs. Scheduled inspections are also conducted during full plant shutdowns, including required safety inspections which entail the disassembly of various components such as steam boilers, pressure vessels and other equipment requiring safety certifications. Internal employee costs and overhead amounts are not considered turnaround costs and are not capitalized.

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6. Goodwill and Other Intangible Assets

The following table shows the carrying amount of goodwill by reportable segment as of June 30, 2017 and December 31, 2016:

	Ammonia	Granular Urea	UAN	AN	Other	Total
	(in millions)					
Balance as of December 31, 2016	$585	$ 828	$576	$286	$ 70	$2,345
Effect of exchange rate changes	1	—	—	12	2	15
Balance as of June 30, 2017	$586	$ 828	$576	$298	$ 72	$2,360

All of our identifiable intangible assets have definite lives and are presented in other assets on our consolidated balance sheets at gross carrying amount, net of accumulated amortization, as follows:

	June 30, 2017			December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
	(in millions)					
Intangible assets:						
Customer relationships	$129	$ (28)	$101	$125	$ (24)	$101
TerraCair brand	10	(10)	—	10	(10)	—
Trade names	31	(3)	28	29	(2)	27
Total intangible assets	$170	$ (41)	$129	$164	$ (36)	$128

Amortization expense of our identifiable intangible assets was $3 million and $5 million for the three and six months ended June 30, 2017, respectively, and $2 million and $4 million for the three and six months ended June 30, 2016, respectively.

Total estimated amortization expense for the remainder of 2017 and each of the five succeeding fiscal years is as follows:

	Estimated Amortization Expense
	(in millions)
Remainder of 2017	$ 4
2018	8
2019	8
2020	8
2021	8
2022	8

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7. Equity Method Investments

We have a 50% ownership interest in Point Lisas Nitrogen Limited (PLNL), which operates an ammonia production facility in the Republic of Trinidad and Tobago. We include our share of the net earnings from this equity method investment as an element of earnings from operations because PLNL provides additional production to our operations and is integrated with our other supply chain and sales activities in the ammonia segment.

As of June 30, 2017, the total carrying value of our equity method investment in PLNL of approximately $120 million was $62 million more than our share of PLNL's book value. The excess is attributable to the purchase accounting impact of our acquisition of the investment in PLNL and primarily reflects the revaluation of property, plant and equipment and the value of an exclusive natural gas contract. The increased basis for property, plant and equipment and the gas contract are being amortized over a remaining period of approximately 16 years and 1 year, respectively. Our equity in earnings of PLNL is different from our ownership interest in income reported by PLNL due to amortization of these basis differences. Our equity in losses of PLNL for both the three and six months ended June 30, 2016 of $9 million includes the impact of a planned maintenance activity in the second quarter of 2016 that resulted in the shutdown of the PLNL ammonia plant for approximately 45 days.

We have transactions in the normal course of business with PLNL reflecting our obligation to purchase 50% of the ammonia produced by PLNL at current market prices. Our ammonia purchases from PLNL totaled $24 million and $44 million for the three and six months ended June 30, 2017, respectively, and $18 million and $34 million for the three and six months ended June 30, 2016, respectively.

PLNL operates an ammonia plant that relies on natural gas supplied, under a Gas Sales Contract (the NGC Contract), by The National Gas Company of Trinidad and Tobago Limited (NGC). PLNL has experienced curtailments in the supply of natural gas from NGC, which have reduced the ammonia production at PLNL. In 2016, NGC communicated to PLNL that it does not recognize PLNL's exercise of its option to renew the NGC Contract for an additional five-year term beyond its current termination date in September 2018, and that any NGC commitment to supply gas beyond 2018 will need to be based on new agreements regarding volume and price. PLNL has initiated arbitration proceedings against NGC and asserted claims in connection with NGC’s failure to supply the contracted quantities of natural gas, and its refusal to recognize PLNL’s exercise of its option to extend the NGC Contract. PLNL is seeking declaratory and injunctive relief, as well as damages for past and ongoing curtailments. Although PLNL believes its claims against NGC to be meritorious, it is not possible to predict the outcome of the arbitration. There are significant assumptions in the future operations of the joint venture that are uncertain at this time, including the quantities of gas NGC will make available, the cost of such gas, the estimates that are used to determine the useful lives of fixed assets and the assumptions in the discounted cash flow models utilized for recoverability and impairment testing. As part of our impairment assessment of our equity method investment in PLNL during the fourth quarter of 2016, we determined the carrying value exceeded the fair value and recognized a $134 million impairment charge in 2016. The carrying value of our equity method investment in PLNL at June 30, 2017 is approximately $120 million. If NGC does not make sufficient quantities of natural gas available to PLNL at prices that permit profitable operations, PLNL may cease operating its facility and we would write off the remaining investment in PLNL.

The Trinidad tax authority (the Board of Inland Revenue) has issued a tax assessment against PLNL related to a dispute over whether tax depreciation must be claimed during a tax holiday period that was granted to PLNL under the Trinidad Fiscal Incentives Act. The tax holiday was granted as an incentive to construct PLNL’s ammonia plant. PLNL is appealing the assessment. Based on the facts and circumstances of this matter, PLNL recorded an unrecognized tax benefit in the second quarter of 2017, which reduced our equity in earnings of PLNL for both the three and six months ended June 30, 2017 by approximately $7 million reflecting our 50% ownership interest.

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8. Fair Value Measurements

Our cash and cash equivalents and other investments consist of the following:

	June 30, 2017			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(in millions)			
Cash	$93	$ —	$ —	$93
Cash equivalents:				
U.S. and Canadian government obligations	1,893	—	—	1,893
Other debt securities	15	—	—	15
Total cash and cash equivalents	$2,001	$ —	$ —	$2,001
Restricted cash	4	—	—	4
Nonqualified employee benefit trusts	18	1	—	19

	December 31, 2016			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(in millions)			
Cash	$89	$ —	$ —	$89
Cash equivalents:				
U.S. and Canadian government obligations	1,075	—	—	1,075
Total cash and cash equivalents	$1,164	$ —	$ —	$1,164
Restricted cash	5	—	—	5
Nonqualified employee benefit trusts	18	1	—	19

Under our short-term investment policy, we may invest our cash balances, either directly or through mutual funds, in several types of investment-grade securities, including notes and bonds issued by governmental entities or corporations. Securities issued by governmental entities include those issued directly by the U.S. and Canadian federal governments; those issued by state, local or other governmental entities; and those guaranteed by entities affiliated with governmental entities.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following tables present assets and liabilities included in our consolidated balance sheets as of June 30, 2017 and December 31, 2016 that are recognized at fair value on a recurring basis, and indicate the fair value hierarchy utilized to determine such fair value:

	June 30, 2017			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in millions)			
Cash equivalents	$1,908	$ 1,908	$ —	$ —
Restricted cash	4	4	—	—
Nonqualified employee benefit trusts	19	19	—	—
Derivative assets	2	—	2	—
Derivative liabilities	(23)	—	(23)	—
Embedded derivative liability	(29)	—	(29)	—

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	December 31, 2016			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in millions)			
Cash equivalents	$1,075	$ 1,075	$ —	$ —
Restricted cash	5	5	—	—
Nonqualified employee benefit trusts	19	19	—	—
Derivative assets	56	—	56	—
Derivative liabilities	(6)	—	(6)	—
Embedded derivative liability	(26)	—	(26)	—

Cash Equivalents

As of June 30, 2017 and December 31, 2016, our cash equivalents consisted primarily of U.S. and Canadian government obligations and money market mutual funds that invest in U.S. government obligations and other investment-grade securities.

Restricted Cash

We maintain a cash account for which the use of the funds is restricted. The restricted cash was put in place to satisfy certain requirements included in our engineering and procurement services contract for our capacity expansion projects. Under the terms of this contract, we were required to grant an affiliate of ThyssenKrupp Industrial Solutions a security interest in a restricted cash account and maintain a cash balance in that account equal to the cancellation fees for procurement services and equipment that would arise if we were to cancel the projects.

Nonqualified Employee Benefit Trusts

We maintain trusts associated with certain nonqualified supplemental pension plans. The investments are accounted for as available-for-sale securities. The fair values of the trust assets are based on daily quoted prices in an active market, which represents the net asset values of the shares held in the trusts. These trusts are included on our consolidated balance sheets in other assets.

Derivative Instruments

The derivative instruments that we use are primarily natural gas fixed price swaps and natural gas options traded in the over-the-counter (OTC) markets with multinational commercial banks, other major financial institutions or large energy companies. The natural gas derivative contracts represent anticipated natural gas needs for future periods and settlements are scheduled to coincide with anticipated natural gas purchases during those future periods. The natural gas derivative contracts settle using primarily NYMEX futures prices. To determine the fair value of these instruments, we use quoted market prices from NYMEX and standard pricing models with inputs derived from or corroborated by observable market data such as forward curves supplied by an industry-recognized independent third party. See Note 12—Derivative Financial Instruments for additional information.

Embedded Derivative Liability

Under the terms of our strategic venture with CHS Inc. (CHS), if our credit rating is reduced below certain levels by two of three specified credit rating agencies, we are required to make a non-refundable yearly payment of $5 million to CHS. In the fourth quarter of 2016, as a result of a reduction in our credit rating, we made a $5 million payment to CHS. The payment will continue on a yearly basis until the earlier of the date that our credit rating is upgraded to or above certain levels by two of the three specified credit rating agencies or February 1, 2026. This term of the strategic venture is recognized on our consolidated balance sheet as an embedded derivative. See Note 13—Noncontrolling Interests for additional information regarding our strategic venture with CHS.

During the six months ended June 30, 2017, we recorded adjustments to adjust the value of the embedded derivative liability by $3 million to $29 million. The inputs into the fair value measurement include the probability of future upgrades and downgrades of our credit rating based on historical credit rating movements of other public companies and the discount rates to be applied to potential annual payments based on applicable credit spreads of other public

companies at different credit rating levels. Based on these inputs, our fair value measurement is classified as Level 2. The charges to reflect the changes in fair value for the three and six months ended June 30, 2017, of $2 million and $3 million, respectively, are included in other

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operating—net in our consolidated statement of operations. As of June 30, 2017 and December 31, 2016, the embedded derivative liability of $29 million and $26 million, respectively, is included in other current liabilities and other liabilities on our consolidated balance sheets.

Financial Instruments

The carrying amount and estimated fair value of our financial instruments are as follows:

	June 30, 2017		December 31, 2016	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(in millions)			
Long-term debt	$5,783	$5,742	$5,778	$5,506

The fair value of our long-term debt was based on quoted prices for identical or similar liabilities in markets that are not active or valuation models in which all significant inputs and value drivers are observable and, as a result, they are classified as Level 2 inputs.

The carrying amounts of cash and cash equivalents, as well as instruments included in other current assets and other current liabilities that meet the definition of financial instruments, approximate fair values because of their short-term maturities.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

We also have assets and liabilities that may be measured at fair value on a nonrecurring basis; that is, the assets and liabilities are not measured at fair value on an ongoing basis, but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment, allocation of purchase price in an acquisition or when a new liability is being established that requires fair value measurement. These include long-lived assets, goodwill and other intangible assets and investments in unconsolidated subsidiaries which may be written down to fair value as a result of impairment. The fair value measurements related to each of these rely primarily on Company-specific inputs and the Company's assumptions about the use of the assets. Since certain of the Company's assumptions would involve inputs that are not observable, these fair values would reside within Level 3 of the fair value hierarchy.

Our equity method investment in the Republic of Trinidad and Tobago, PLNL, operates an ammonia plant that relies on natural gas supplied, under the NGC Contract, by NGC. As part of our impairment assessment of our equity method investment in PLNL during the fourth quarter of 2016, we determined the carrying value exceeded the fair value and recognized a $134 million impairment charge in 2016. See Note 7—Equity Method Investments for additional information.

9. Income Taxes

For the three months ended June 30, 2017, we recorded an income tax provision of $5 million on pre-tax income of $29 million, or an effective tax rate of 17.7%, compared to an income tax provision of $95 million on pre-tax income of $178 million, or an effective tax rate of 53.2%, for the three months ended June 30, 2016. Our effective tax rate excluding the earnings attributable to the noncontrolling interests for the three months ended June 30, 2017 is 63.3% as compared to an effective tax rate of 66.9% for the three months ended June 30, 2016.

Our effective tax rate in both periods is impacted by earnings attributable to noncontrolling interests in CF Industries Nitrogen, LLC (CFN) and Terra Nitrogen Company L.P. (TNCLP), as our consolidated income tax provision does not include a tax provision on the earnings attributable to the noncontrolling interests. As a result, earnings attributable to the noncontrolling interests of $21 million in the second quarter of 2017 and $36 million in the second quarter of 2016, which are included in pre-tax income, have the effect of reducing the effective tax rate in both periods. See Note 13—Noncontrolling Interests for additional information.

The effective tax rate for the three months ended June 30, 2017 is also impacted by the unrecognized tax benefit recorded by PLNL, which reduces our earnings before income taxes by $7 million but does not change our income tax provision as the adjustment is not tax effected. See Note 7—Equity Method Investments for additional information.

The effective tax rate for the three months ended June 30, 2016 was also higher than expected as a result of the impact of the reversal of prior period tax benefits from U.S. manufacturing profits deductions and an increase in our valuation allowance related to the realizability of Canadian deferred taxes, partially offset by the impact of certain transaction

costs capitalized in a prior tax year that became deductible as a result of the termination of our proposed combination transaction with OCI N.V.

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During the third quarter of 2016, one of our Canadian subsidiaries received a Notice of Reassessment from the Canada Revenue Agency (CRA) for tax years 2006 through 2009 asserting a disallowance of certain patronage allocations. The tax assessment of CAD $174 million (or approximately $134 million), including provincial taxes but excluding any interest or penalties, is the result of an audit that was initiated by the CRA in January 2010 and involves the sole issue of whether certain patronage allocations meet the requirements for deductibility under the Income Tax Act of Canada. The reassessment has been appealed and a letter of credit in the amount of CAD $87 million (or approximately $67 million) has been posted. We believe that it is more likely than not that the patronage allocation deduction will ultimately be sustained. In the event that we do not prevail in the appeal, we should be entitled to a U.S. foreign tax credit against any incremental Canadian tax paid. The competent authorities of Canada and the United States have been notified of the potential need for competent authority assistance.

As of June 30, 2017 and December 31, 2016, we had prepaid income taxes in the amount of $34 million and $841 million, respectively. In June 2017, we received a federal tax refund of approximately $815 million from the carryback of certain U.S. tax losses from 2016 to prior tax periods.

During the second quarter of 2017, the valuation allowance for the net operating losses of a subsidiary of the Company that were recorded in prior periods was reduced by $12 million as the result of a statutory income tax rate change.

On July 6, 2017, the State of Illinois enacted an income tax rate increase that will impact future tax assets and liabilities as recorded by the Company. The impact of this rate change is approximately $5 million and will be recorded in the period of enactment.

10. Interest Expense

Details of interest expense are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
	(in millions)			
Interest on borrowings[1]	$76	$75	$152	$151
Fees on financing agreements[1][2]	4	32	8	36
Interest on tax liabilities	—	—	1	1
Interest capitalized[3]	—	(46)	(1)	(89)
Total interest expense	$80	$61	$160	$99

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(1) See Note 11—Financing Agreements for additional information.

(2) Fees on financing agreements for both the three and six months ended June 30, 2016 includes $28 million of fees related to the termination of the tranche B commitment under the bridge credit agreement as a result of the termination of an agreement to combine between CF Holdings and OCI N.V.

(3) For the three and six months ended June 30, 2016, amounts include interest capitalized for our capacity expansion projects, which were completed as of December 31, 2016.

11. Financing Agreements

Revolving Credit Agreement

We have a senior secured revolving credit agreement (the Revolving Credit Agreement) providing for a revolving credit facility of up to $750 million with a maturity of September 18, 2020. The Revolving Credit Agreement includes a letter of credit sub-limit of $125 million. Borrowings under the Revolving Credit Agreement may be used for working capital and general corporate purposes. CF Industries may designate as borrowers one or more wholly owned subsidiaries that are organized in the United States or any state thereof or the District of Columbia.

Borrowings under the Revolving Credit Agreement may be denominated in dollars, Canadian dollars, euro and British pounds, and bear interest at a per annum rate equal to an applicable eurocurrency rate or base rate plus, in either case, a specified margin, and the borrowers are required to pay an undrawn commitment fee on the undrawn portion of the commitments under the Revolving Credit Agreement and customary letter of credit fees. The specified margin and the amount of the commitment fee depend on CF Holdings' credit rating at the time.

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As of June 30, 2017, we had excess borrowing capacity under the Revolving Credit Agreement of $695 million (net of outstanding letters of credit of $55 million). There were no borrowings outstanding under the Revolving Credit Agreement as of June 30, 2017 or December 31, 2016, or during the six months ended June 30, 2017. Maximum borrowings outstanding under the Revolving Credit Agreement during the six months ended June 30, 2016 were $150 million with a weighted-average annual interest rate of 1.85%.

The Revolving Credit Agreement contains representations and warranties and affirmative and negative covenants, including financial covenants. As of June 30, 2017, we were in compliance with all covenants under the Revolving Credit Agreement.

Letters of Credit

In addition to the letters of credit outstanding under the Revolving Credit Agreement, as described above, we have also entered into a bilateral agreement with capacity to issue letters of credit up to $75 million. As of June 30, 2017, approximately $70 million of letters of credit were outstanding under this agreement.

Senior Notes

Long-term debt presented on our consolidated balance sheets as of June 30, 2017 and December 31, 2016 consisted of the following Public Senior Notes (unsecured) and Senior Secured Notes:

		June 30, 2017		December 31, 2016	
	Effective Interest Rate	Principal	Carrying Amount [1]	Principal	Carrying Amount [1]
		(in millions)			
Public Senior Notes:					
6.875% due May 2018	7.344%	$800	$ 797	$800	$ 795
7.125% due May 2020	7.529%	800	792	800	791
3.450% due June 2023	3.562%	750	746	750	745
5.150% due March 2034	5.279%	750	739	750	739
4.950% due June 2043	5.031%	750	741	750	741
5.375% due March 2044	5.465%	750	741	750	741
Senior Secured Notes:					
3.400% due December 2021	3.782%	500	492	500	491
4.500% due December 2026	4.759%	750	735	750	735
Total long-term debt		$5,850	$ 5,783	$5,850	$ 5,778
Less: Current portion		800	797	—	—
Long-term debt		$5,050	$ 4,986	$5,850	$ 5,778

(1) Carrying amount is net of unamortized debt discount and deferred debt issuance costs. Total unamortized debt discount was $12 million as of both June 30, 2017 and December 31, 2016, and total deferred debt issuance costs were $55 million and $60 million as of June 30, 2017 and December 31, 2016, respectively.

Public Senior Notes

Under the indentures (including the applicable supplemental indentures) governing the senior notes due 2018, 2020, 2023, 2034, 2043 and 2044 identified in the table above (the Public Senior Notes), each series of Public Senior Notes is guaranteed by CF Holdings, and, in connection with the effectiveness of the November 2016 amendment to our Revolving Credit Agreement, CF Holdings' wholly owned subsidiaries CF Industries Enterprises, Inc. (CFE) and CF Industries Sales, LLC (CFS) became subsidiary guarantors of the Public Senior Notes.

Interest on the Public Senior Notes is payable semiannually, and the Public Senior Notes are redeemable at our option, in whole at any time or in part from time to time, at specified make-whole redemption prices.

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Senior Secured Notes

On November 21, 2016, CF Industries issued $500 million aggregate principal amount of 3.400% senior secured notes due 2021 (the 2021 Notes) and $750 million aggregate principal amount of 4.500% senior secured notes due 2026 (the 2026 Notes, and together with the 2021 Notes, the Senior Secured Notes). The net proceeds, after deducting discounts and offering expenses, from the issuance and sale of the Senior Secured Notes were approximately $1.23 billion. CF Industries used approximately $1.18 billion of the net proceeds for the prepayment (including payment of a make-whole amount of approximately $170 million and accrued interest) in full of the outstanding $1.0 billion aggregate principal amount of the senior notes due 2022, 2025 and 2027 (Private Senior Notes) issued by CF Industries on September 24, 2015.

Interest on the Senior Secured Notes is payable semiannually on December 1 and June 1 beginning on June 1, 2017, and the Senior Secured Notes are redeemable at our option, in whole at any time or in part from time to time, at specified make-whole redemption prices.

12. Derivative Financial Instruments

We use derivative financial instruments to reduce our exposure to changes in commodity prices and foreign currency exchange rates.

Commodity Price Risk Management

Natural gas is the largest and most volatile component of the manufacturing cost for nitrogen-based products. We manage the risk of changes in natural gas prices primarily through the use of derivative financial instruments. The derivatives that we use for this purpose are primarily natural gas fixed price swaps and natural gas options traded in the OTC markets. These natural gas derivatives settle using primarily a NYMEX futures price index, which represents the basis for fair value at any given time. We enter into natural gas derivative contracts with respect to natural gas to be consumed by us in the future, and settlements of those derivative contracts are scheduled to coincide with our anticipated purchases of natural gas used to manufacture nitrogen products during those future periods. We use natural gas derivatives as an economic hedge of natural gas price risk, but without the application of hedge accounting. As a result, changes in fair value of these contracts are recognized in earnings. As of June 30, 2017, we have natural gas derivative contracts covering periods through December 2018.

As of June 30, 2017 and December 31, 2016, we had open natural gas derivative contracts for 112.3 million MMBtus (millions of British thermal units) and 183.0 million MMBtus, respectively. For the six months ended June 30, 2017, we used derivatives to cover approximately 42% of our natural gas consumption.

Foreign Currency Exchange Rates

A portion of the costs for our capacity expansion projects at our Donaldsonville, Louisiana complex and Port Neal, Iowa complex were euro-denominated. In order to manage our exposure to changes in the euro to U.S. dollar currency exchange rates, we hedged our projected euro-denominated payments through the end of 2016 using foreign currency forward contracts.

As of June 30, 2017, accumulated other comprehensive loss (AOCL) includes $7 million of pre-tax gains related to foreign currency derivatives that were originally designated as cash flow hedges. The hedges were de-designated as of December 31, 2013. The remaining balance in AOCL is being reclassified into income over the depreciable lives of the property, plant and equipment associated with the capacity expansion projects.

The effect of derivatives in our consolidated statements of operations is shown in the table below.

	Gain (loss) recognized in income				
		Three months ended June 30,		Six months ended June 30,	
	Location	2017	2016	2017	2016
		(in millions)			
Natural gas derivatives	Cost of sales	$(18)	$211	$(71)	$190
Foreign exchange contracts	Other operating—net	—	(4)	—	(1)
Unrealized net (losses) gains recognized in income		(18)	207	(71)	189

Realized net losses	(3)	(59)	(2)	(115)
Net derivative (losses) gains	$(21)	$148	$(73)	$74

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The fair values of derivatives on our consolidated balance sheets are shown below. As of June 30, 2017 and December 31, 2016, none of our derivative instruments were designated as hedging instruments. See Note 8—Fair Value Measurements for additional information on derivative fair values.

	Asset Derivatives			Liability Derivatives		
	Balance Sheet Location	June 30, 2017	December 31, 2016	Balance Sheet Location	June 30, 2017	December 31, 2016
		(in millions)			(in millions)	
Natural gas derivatives	Other current assets	$ 2	$ 52	Other current liabilities	$ (18)	$ —
Natural gas derivatives	Other assets	—	4	Other liabilities	(5)	(6)
Total derivatives		$ 2	$ 56		$ (23)	$ (6)

Most of our International Swaps and Derivatives Association (ISDA) agreements contain credit-risk-related contingent features such as cross default provisions and credit support thresholds. In the event of certain defaults or a credit ratings downgrade, our counterparty may request early termination and net settlement of certain derivative trades or may require us to collateralize derivatives in a net liability position. The Revolving Credit Agreement, at any time when it is secured, provides a cross collateral feature for those of our derivatives that are with counterparties that are party to, or affiliates of parties to, the Revolving Credit Agreement so that no separate collateral would be required for those counterparties in connection with such derivatives. In the event the Revolving Credit Agreement becomes unsecured, separate collateral could be required in connection with such derivatives. As of June 30, 2017 and December 31, 2016, the aggregate fair value of the derivative instruments with credit-risk-related contingent features in net liability positions was $23 million and zero, respectively, which also approximates the fair value of the maximum amount of additional collateral that would need to be posted or assets needed to settle the obligations if the credit-risk-related contingent features were triggered at the reporting dates. At June 30, 2017, we had $100 thousand of cash collateral on deposit with one of our counterparties for derivative contracts. At December 31, 2016, we had no cash collateral on deposit with counterparties for derivative contracts. The credit support documents executed in connection with certain of our ISDA agreements generally provide us and our counterparties the right to set off collateral against amounts owing under the ISDA agreements upon the occurrence of a default or a specified termination event.

The following table presents amounts relevant to offsetting of our derivative assets and liabilities as of June 30, 2017 and December 31, 2016:

	Amounts presented in consolidated balance sheets[1]	Gross amounts not offset in consolidated balance sheets		
		Financial instruments	Cash collateral received (pledged)	Net amount
	(in millions)			
June 30, 2017				
Total derivative assets	$2	$ 2	$ —	$ —
Total derivative liabilities	(23)	(2)	—	(21)
Net derivative liabilities	$(21)	$ —	$ —	$ (21)
December 31, 2016				
Total derivative assets	$56	$ 6	$ —	$ 50
Total derivative liabilities	(6)	(6)	—	—
Net derivative assets	$50	$ —	$ —	$ 50

(1)

We report the fair values of our derivative assets and liabilities on a gross basis on our consolidated balance sheets. As a result, the gross amounts recognized and net amounts presented are the same.

We do not believe the contractually allowed netting, close-out netting or setoff of amounts owed to, or due from, the counterparties to our ISDA agreements would have a material effect on our financial position.

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13. Noncontrolling Interests

A reconciliation of the beginning and ending balances of noncontrolling interests and distributions payable to noncontrolling interests in our consolidated balance sheets is provided below.

	Six months ended June 30,					
	2017			2016		
	CFN	TNCLP	Total	CFN	TNCLP	Total
	(in millions)					
Noncontrolling interests:						
Beginning balance	$2,806	$ 338	$3,144	$—	$ 352	$352
Issuance of noncontrolling interest in CFN	—	—	—	2,792	—	2,792
Earnings attributable to noncontrolling interests	23	12	35	40	17	57
Declaration of distributions payable	(48)	(11)	(59)	—	(20)	(20)
Ending balance	$2,781	$ 339	$3,120	$2,832	$ 349	$3,181
Distributions payable to noncontrolling interests:						
Beginning balance	$—	$ —	$—	$—	$ —	$—
Declaration of distributions payable	48	11	59	—	20	20
Distributions to noncontrolling interests	(48)	(11)	(59)	—	(20)	(20)
Ending balance	$—	$ —	$—	$—	$ —	$—

CF Industries Nitrogen, LLC (CFN)

We commenced a strategic venture with CHS on February 1, 2016, at which time CHS purchased a minority equity interest in CFN, a subsidiary of CF Holdings, for $2.8 billion, which represented approximately 11% of the membership interest of CFN. We own the remaining membership interest. Under the terms of CFN's limited liability company agreement, each member's percentage membership interest will reflect, over time, the impact of the profitability of CFN and any member contributions made to, and distributions received from, CFN. For financial reporting purposes, the assets, liabilities and earnings of the strategic venture are consolidated into our financial statements. CHS' interest in the strategic venture is recorded in noncontrolling interests in our consolidated financial statements. On February 1, 2016, CHS also began receiving deliveries pursuant to a supply agreement under which CHS has the right to purchase annually from CFN up to approximately 1.1 million tons of granular urea and 580,000 tons of UAN at market prices. As a result of its minority equity interest in CFN, CHS is entitled to semi-annual cash distributions from CFN. We are also entitled to semi-annual cash distributions from CFN. The amounts of distributions from CFN to us and CHS are based generally on the profitability of CFN and determined based on the volume of granular urea and UAN sold by CFN to us and CHS pursuant to supply agreements, less a formula driven amount based primarily on the cost of natural gas used to produce the granular urea and UAN, and adjusted for the allocation of items such as operational efficiencies and overhead amounts.

In the third quarter of 2017, the CFN Board of Managers approved semi-annual distribution payments for the distribution period ended June 30, 2017 in accordance with the CFN limited liability company agreement. On July 31, 2017, CFN distributed $59 million to CHS for the distribution period ended June 30, 2017.

Additionally, under the terms of the strategic venture, if our credit rating is reduced below certain levels by two of three specified credit rating agencies, we are required to make a non-refundable yearly payment of $5 million to CHS. In the fourth quarter of 2016, as a result of a reduction in our credit rating, we made a $5 million payment to CHS. The payment will continue on a yearly basis until the earlier of the date that our credit rating is upgraded to or above certain levels by two of the three specified credit rating agencies or February 1, 2026. We recognized this term of the strategic venture as an embedded derivative. As of June 30, 2017 and December 31, 2016, the embedded derivative liability of $29 million and $26 million, respectively, is included in other current liabilities and other liabilities on our consolidated balance sheet. The $3 million charge to reflect the change in fair value for the six months ended June 30, 2017 is included in other operating—net in our consolidated statement of operations. See Note 8—Fair Value Measurements for additional information.

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Terra Nitrogen Company, L.P. (TNCLP)
TNCLP is a master limited partnership (MLP) that owns a nitrogen fertilizer manufacturing facility in Verdigris, Oklahoma. We own approximately 75.3% of TNCLP through general and limited partnership interests. Outside investors own the remaining approximately 24.7% of the limited partnership. For financial reporting purposes, the assets, liabilities and earnings of the partnership are consolidated into our financial statements. The outside investors' limited partnership interests in the partnership are recorded in noncontrolling interests in our consolidated financial statements. The noncontrolling interest represents the noncontrolling unitholders' interest in the earnings and equity of TNCLP. Affiliates of CF Industries are required to purchase all of TNCLP's fertilizer products at market prices as defined in the Amendment to the General and Administrative Services and Product Offtake Agreement, dated September 28, 2010.
TNCLP makes cash distributions to the general and limited partners based on formulas defined within its First Amended and Restated Agreement of Limited Partnership (as amended, the TNCLP Agreement of Limited Partnership). Cash available for distribution (Available Cash) is defined in the TNCLP Agreement of Limited Partnership generally as all cash receipts less all cash disbursements, less certain reserves (including reserves for future operating and capital needs) established as the general partner determines in its reasonable discretion to be necessary or appropriate. Changes in working capital affect Available Cash, as increases in the amount of cash invested in working capital items (such as increases in receivables or inventory and decreases in accounts payable) reduce Available Cash, while declines in the amount of cash invested in working capital items increase Available Cash. Cash distributions to the limited partners and general partner vary depending on the extent to which the cumulative distributions exceed certain target threshold levels set forth in the TNCLP Agreement of Limited Partnership.
In each of the first and second quarters of 2017 and 2016, the minimum quarterly distributions under the TNCLP Agreement of Limited Partnership were satisfied, which entitled Terra Nitrogen GP Inc. (TNGP), the general partner of TNCLP and an indirect wholly owned subsidiary of CF Holdings, to receive incentive distributions on its general partner interests (in addition to minimum quarterly distributions). TNGP has assigned its right to receive such incentive distributions to an affiliate of TNGP that is also an indirect wholly owned subsidiary of CF Holdings. The earnings attributed to our general partner interest in excess of the threshold levels for the six months ended June 30, 2017 and 2016, were $14 million and $47 million, respectively.
As of June 30, 2017, TNGP and its affiliates owned approximately 75.1% of TNCLP's outstanding common units. When not more than 25% of TNCLP's issued and outstanding common units are held by persons other than TNGP and its affiliates (collectively, non-affiliated persons), as was the case at June 30, 2017, TNCLP, at TNGP's sole discretion, may call or assign to TNGP or its affiliates, TNCLP's right to acquire all, but not less than all, such outstanding common units held by non-affiliated persons. If TNGP elects to acquire all outstanding common units, TNCLP is required to give at least 30 but not more than 60 days' notice of TNCLP's decision to purchase the outstanding common units, and the purchase price per unit would be the greater of (1) the average of the previous 20 trading days' closing prices as of the date five days before the purchase is announced or (2) the highest price paid by TNGP or any of its affiliates for any unit within the 90 days preceding the date the purchase is announced.
Internal Revenue Service Regulation Impacting Master Limited Partnerships
Currently, no federal income taxes are paid by TNCLP due to its MLP status. Partnerships are generally not subject to federal income tax, although publicly traded partnerships (such as TNCLP) are treated as corporations for federal income tax purposes (and therefore are subject to federal income tax), unless at least 90% of the partnership's gross income is "qualifying income" as defined in Section 7704 of the Internal Revenue Code of 1986, as amended, and the partnership is not required to register as an investment company under the Investment Company Act of 1940. Any change in the tax treatment of income from fertilizer-related activities as qualifying income could cause TNCLP to be treated as a corporation for federal income tax purposes. If TNCLP were taxed as a corporation, under current law, due to its current ownership interest, CF Industries would qualify for a partial dividends received deduction on the dividends received from TNCLP. Therefore, we would not expect a change in the tax treatment of TNCLP to have a material impact on the consolidated financial condition or results of operations of CF Holdings.

On January 19, 2017, the Internal Revenue Service (IRS) issued final regulations on the types of income and activities that constitute or generate qualifying income of a MLP. For calendar year MLPs, the effective date of the regulations is January 1, 2018. The regulations have the effect of limiting the types of income and activities that qualify under the MLP rules, subject to certain transition provisions. The regulations define the activities that generate qualifying income from certain processing or refining and transportation activities with respect to any mineral or natural resource (including fertilizer) as activities that generate qualifying income, but the regulations reserve on specifics regarding fertilizer-related activities. We continue to monitor these IRS regulatory activities.

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14. Defined Benefit Pension Plans

We contributed $69 million to our pension plans during the six months ended June 30, 2017, and expect to contribute an additional $12 million, or a total of approximately $81 million for the full year 2017. The contributions include a voluntary contribution of $59 million made to our U.S. pension plan in the second quarter.

15. Accumulated Other Comprehensive Income (Loss)

Changes to accumulated other comprehensive income (loss) are as follows:

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) on Securities	Unrealized Gain (Loss) on Derivatives	Defined Benefit Plans	Accumulated Other Comprehensive Income (Loss)
	(in millions)				
Balance as of December 31, 2015	$(198)	$ 1	$ 5	$(58)	$ (250)
Loss arising during the period	—	—	—	(3)	(3)
Effect of exchange rate changes and deferred taxes	10	—	—	—	10
Balance as of June 30, 2016	$(188)	$ 1	$ 5	$(61)	$ (243)
Balance as of December 31, 2016	$(272)	$ 1	$ 5	$(132)	$ (398)
Gain arising during the period	—	—	—	7	7
Effect of exchange rate changes and deferred taxes	72	—	—	(6)	66
Balance as of June 30, 2017	$(200)	$ 1	$ 5	$(131)	$ (325)

There were no amounts reclassified out of accumulated other comprehensive income (loss) to earnings during the six months ended June 30, 2017 and 2016.

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16. Contingencies
Litigation
West Fertilizer Co.
On April 17, 2013, there was a fire and explosion at the West Fertilizer Co. fertilizer storage and distribution facility in West, Texas. According to published reports, 15 people were killed and approximately 200 people were injured in the incident, and the fire and explosion damaged or destroyed a number of homes and buildings around the facility. Various subsidiaries of CF Industries Holdings, Inc. (the CF Entities) have been named as defendants along with other companies in lawsuits filed in 2013, 2014 and 2015 in the District Court of McLennan County, Texas by the City of West, individual residents of the County and other parties seeking recovery for damages allegedly sustained as a result of the explosion. The cases have been consolidated for discovery and pretrial proceedings in the District Court of McLennan County under the caption "In re: West Explosion Cases." The two-year statute of limitations expired on April 17, 2015. As of that date, over 400 plaintiffs had filed claims, including at least 9 entities, 325 individuals, and 80 insurance companies. Plaintiffs allege various theories of negligence, strict liability, and breach of warranty under Texas law. Although we do not own or operate the facility or directly sell our products to West Fertilizer Co., products that the CF Entities have manufactured and sold to others have been delivered to the facility and may have been stored at the West facility at the time of the incident.
The Court granted in part and denied in part the CF Entities' Motions for Summary Judgment in August 2015. Over one hundred forty cases have been resolved pursuant to confidential settlements that have been or we expect will be fully funded by insurance. The remaining cases are in various stages of discovery and pre-trial proceedings. The next trial is scheduled to begin on January 16, 2018. We believe we have strong legal and factual defenses and intend to continue defending the CF Entities vigorously in the pending lawsuits. The Company cannot provide a range of reasonably possible loss due to the lack of damages discovery for many of the remaining claims and the uncertain nature of this litigation, including uncertainties around the potential allocation of responsibility by a jury to other defendants or responsible third parties. The recognition of a potential loss in the future in the West Fertilizer Co. litigation could negatively affect our results in the period of recognition. However, based upon currently available information, including available insurance coverage, we do not believe that this litigation will have a material adverse effect on our consolidated financial position, results of operations or cash flows.
Other Litigation
From time to time, we are subject to ordinary, routine legal proceedings related to the usual conduct of our business, including proceedings regarding public utility and transportation rates, environmental matters, taxes and permits relating to the operations of our various plants and facilities. Based on the information available as of the date of this filing, we believe that the ultimate outcome of these routine matters will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.
Environmental
Louisiana Environmental Matters
Clean Air Act—Section 185 Fee
Our Donaldsonville nitrogen complex is located in a five-parish region near Baton Rouge, Louisiana that, as of 2005, was designated as being in "severe" nonattainment with respect to the national ambient air quality standard (NAAQS) for ozone (the 1-hour ozone standard) pursuant to the Federal Clean Air Act (the Act). Section 185 of the Act requires states, in their state implementation plans, to levy a fee (Section 185 fee) on major stationary sources (such as the Donaldsonville complex) located in a severe nonattainment area that did not meet the 1-hour ozone standard by November 30, 2005. The fee was to be assessed for each calendar year (beginning in 2006) until the area achieved compliance with the ozone NAAQS.
Prior to the imposition of Section 185 fees, the Environmental Protection Agency (EPA) adopted a new ozone standard (the 8-hour ozone standard) and rescinded the 1-hour ozone standard. The Baton Rouge area was designated as a "moderate" nonattainment area with respect to the 8-hour ozone standard. However, because Section 185 fees had never been assessed prior to the rescission of the 1-hour ozone standard (rescinded prior to the November 30, 2005 ozone attainment deadline), the EPA concluded in a 2004 rulemaking implementing the 8-hour ozone standard that the Act did not require states to assess Section 185 fees. As a result, Section 185 fees were not assessed against us and

other companies located in the Baton Rouge area.

In 2006, the federal D.C. Circuit Court of Appeals rejected the EPA's position and held that Section 185 fees were controls that must be maintained and fees should have been assessed under the Act. In January 2008, the U.S. Supreme Court declined to accept the case for review, making the appellate court's decision final.

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In July 2011, the EPA approved a revision to Louisiana's air pollution program that eliminated the requirement for Baton Rouge area companies to pay Section 185 fees, based on Baton Rouge's ultimate attainment of the 1-hour standard through permanent and enforceable emissions reductions. The EPA's approval of the Louisiana air program revision became effective on August 8, 2011. However, a July 2011 decision by the federal D.C. Circuit Court of Appeals struck down a similar, but perhaps distinguishable, EPA guidance document regarding alternatives to Section 185 fees. At this time, the viability of EPA's approval of Louisiana's elimination of Section 185 fees is uncertain. Regardless of the approach ultimately adopted by the EPA, we expect that it is likely to be challenged by the environmental community, the states, and/or affected industries. Therefore, the costs associated with compliance with the Act cannot be determined at this time, and we cannot reasonably estimate the impact on our consolidated financial position, results of operations or cash flows.

Since 2011, the area has seen significant reductions in ozone levels, attributable to federal and state regulations and community involvement. On December 15, 2016, the EPA redesignated the Baton Rouge Nonattainment Area as "attainment" with the 2008 8-hour ozone standard. However, based on 2013-2015 air quality monitoring data, the State of Louisiana has recommended that the EPA designate the Baton Rouge area as "non-attainment" pursuant to the updated 2015 8-hour ozone standard. Although the EPA was supposed to designate areas under the 2015 standard by October 2017, the EPA announced in June 2017 that it was extending the deadline to establish designations under the 2015 ozone standard until October 2018.

Clean Air Act Information Request

On February 26, 2009, we received a letter from the EPA under Section 114 of the Act requesting information and copies of records relating to compliance with New Source Review and New Source Performance Standards at our Donaldsonville facility. We have completed the submittal of all requested information. There has been no further contact from the EPA regarding this matter.

Other

CERCLA/Remediation Matters

From time to time, we receive notices from governmental agencies or third parties alleging that we are a potentially responsible party at certain cleanup sites under CERCLA or other environmental cleanup laws. In 2011, we received a notice from the Idaho Department of Environmental Quality (IDEQ) that alleged that we were a potentially responsible party for the cleanup of a former phosphate mine site we owned in the late 1950s and early 1960s located in Georgetown Canyon, Idaho. The current owner of the property and a former mining contractor received similar notices for the site. In 2014, we and the current property owner entered into a Consent Order with IDEQ and the U.S. Forest Service to conduct a remedial investigation and feasibility study of the site. In 2015, we and several other parties received a notice that the U.S. Department of the Interior and other trustees intend to undertake a natural resource damage assessment for a group of former phosphate mines in southeast Idaho, including the former Georgetown Canyon mine. We are not able to estimate at this time our potential liability, if any, with respect to the cleanup of the site or a possible claim for natural resource damages. However, based on currently available information, we do not expect the remedial or financial obligations to which we may be subject involving this or other cleanup sites will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

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17. Segment Disclosures

Our reportable segments consist of ammonia, granular urea, UAN, AN and Other. These segments are differentiated by products. Our management uses gross margin to evaluate segment performance and allocate resources. Total other operating costs and expenses (consisting of selling, general and administrative expenses and other operating—net) and non-operating expenses (interest and income taxes) are centrally managed and are not included in the measurement of segment profitability reviewed by management.

Our assets, with the exception of goodwill, are not monitored by or reported to our chief operating decision maker by segment; therefore, we do not present total assets by segment. Goodwill by segment is presented in Note 6—Goodwill and Other Intangible Assets.

Segment data for sales, cost of sales and gross margin for the three and six months ended June 30, 2017 and 2016 are presented in the tables below.

	Ammonia	Granular Urea(1)	UAN(1)	AN(1)	Other(1)	Consolidated
	(in millions)					
Three months ended June 30, 2017						
Net sales	$389	$ 259	$ 286	$112	$ 78	$ 1,124
Cost of sales	302	235	248	102	65	952
Gross margin	$87	$ 24	$ 38	$10	$ 13	172
Total other operating costs and expenses						59
Equity in losses of operating affiliates						(6)
Operating earnings						$ 107
Three months ended June 30, 2016						
Net sales	$358	$ 240	$ 370	$90	$ 76	$ 1,134
Cost of sales	152	118	197	90	50	607
Gross margin	$206	$ 122	$ 173	$—	$ 26	527
Total other operating costs and expenses						280
Equity in losses of operating affiliates						(9)
Operating earnings						$ 238

	Ammonia	Granular Urea(1)	UAN(1)	AN(1)	Other(1)	Consolidated
	(in millions)					
Six months ended June 30, 2017						
Net sales	$671	$ 497	$ 603	$237		