UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

CATERPILLAR®

FORM 10-Q

[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

[ ] 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: 1-768

CATERPILLAR INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)	**37-0602744** (IRS Employer I.D. No.)
100 NE Adams Street, Peoria, Illinois (Address of principal executive offices)	**61629** (Zip Code)

Registrant's telephone number, including area code: **(309) 675-1000**

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 ☒ No ☐

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 ☒ No ☐

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

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

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. ☐

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

At June 30, 2017, 590,972,792 shares of common stock of the registrant were outstanding.

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* Item omitted because no answer is called for or item is not applicable.

Part I. FINANCIAL INFORMATION

Item 1. Financial Statements

Caterpillar Inc.
Consolidated Statement of Results of Operations
(Unaudited)
(Dollars in millions except per share data)

	Three Months Ended June 30	
	2017	**2016**
Sales and revenues:		
Sales of Machinery, Energy & Transportation	$ 10,639	$ 9,645
Revenues of Financial Products	692	697
Total sales and revenues	11,331	10,342
Operating costs:		
Cost of goods sold	7,769	7,419
Selling, general and administrative expenses	1,289	1,123
Research and development expenses	453	468
Interest expense of Financial Products	162	148
Other operating (income) expenses	407	399
Total operating costs	10,080	9,557
Operating profit	1,251	785
Interest expense excluding Financial Products	121	130
Other income (expense)	29	84
Consolidated profit before taxes	1,159	739
Provision (benefit) for income taxes	361	184
Profit of consolidated companies	798	555
Equity in profit (loss) of unconsolidated affiliated companies	5	(2)
Profit of consolidated and affiliated companies	803	553
Less: Profit (loss) attributable to noncontrolling interests	1	3
Profit [1]	$ 802	$ 550
Profit per common share	$ 1.36	$ 0.94
Profit per common share – diluted [2]	$ 1.35	$ 0.93
Weighted-average common shares outstanding (millions)		
– Basic	590.2	584.1
– Diluted [2]	595.4	588.6
Cash dividends declared per common share	$ 1.55	$ 1.54

[1] Profit attributable to common shareholders.
[2] Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Comprehensive Income
(Unaudited)
(Dollars in millions)

	Three Months Ended June 30	
	2017	**2016**
Profit of consolidated and affiliated companies	$ 803	$ 553
Other comprehensive income (loss), net of tax:		
Foreign currency translation, net of tax (provision)/benefit of: 2017 - $51; 2016 - $(20)	324	(103)
Pension and other postretirement benefits:		
Current year prior service credit (cost), net of tax (provision)/benefit of: 2017 - $0; 2016 - $0	—	(1)
Amortization of prior service (credit) cost, net of tax (provision)/benefit of: 2017 - $3; 2016 - $6	(4)	(9)
Derivative financial instruments:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - $0; 2016 - $11	—	(18)
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - $(14); 2016 - $(1)	26	1
Available-for-sale securities:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - $(3); 2016 - $(3)	10	10
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - $0; 2016 - $10	—	(20)
Total other comprehensive income (loss), net of tax	356	(140)
Comprehensive income	1,159	413
Less: comprehensive income attributable to the noncontrolling interests	(1)	(3)
Comprehensive income attributable to shareholders	$ 1,158	$ 410

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Results of Operations
(Unaudited)
(Dollars in millions except per share data)

	Six Months Ended June 30 2017	Six Months Ended June 30 2016
Sales and revenues:		
Sales of Machinery, Energy & Transportation	$ 19,769	$ 18,425
Revenues of Financial Products	1,384	1,378
Total sales and revenues	21,153	19,803
Operating costs:		
Cost of goods sold	14,527	14,241
Selling, general and administrative expenses	2,334	2,211
Research and development expenses	871	976
Interest expense of Financial Products	321	300
Other operating (income) expenses	1,432	796
Total operating costs	19,485	18,524
Operating profit	1,668	1,279
Interest expense excluding Financial Products	244	259
Other income (expense)	24	84
Consolidated profit before taxes	1,448	1,104
Provision (benefit) for income taxes	451	276
Profit of consolidated companies	997	828
Equity in profit (loss) of unconsolidated affiliated companies	—	(3)
Profit of consolidated and affiliated companies	997	825
Less: Profit (loss) attributable to noncontrolling interests	3	4
Profit [1]	$ 994	$ 821
Profit per common share	$ 1.69	$ 1.41
Profit per common share – diluted [2]	$ 1.67	$ 1.40
Weighted-average common shares outstanding (millions)		
– Basic	588.8	583.4
– Diluted [2]	594.4	588.2
Cash dividends declared per common share	$ 1.55	$ 1.54

1 Profit attributable to common shareholders.
2 Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Comprehensive Income
(Unaudited)
(Dollars in millions)

	Six Months Ended June 30	
	2017	**2016**
Profit of consolidated and affiliated companies	$ 997	$ 825
Other comprehensive income (loss), net of tax:		
Foreign currency translation, net of tax (provision)/benefit of: 2017 - $58; 2016 - $12	471	305
Pension and other postretirement benefits:		
Current year prior service credit (cost), net of tax (provision)/benefit of: 2017 - $(4); 2016 - $(69)	8	117
Amortization of prior service (credit) cost, net of tax (provision)/benefit of: 2017 - $4; 2016 - $11	(8)	(19)
Derivative financial instruments:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - $(5); 2016 - $5	10	(9)
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - $(36); 2016 - $(6)	66	10
Available-for-sale securities:		
Gains (losses) deferred, net of tax (provision)/benefit of: 2017 - $(9); 2016 - $(8)	18	16
(Gains) losses reclassified to earnings, net of tax (provision)/benefit of: 2017 - $(1); 2016 - $9	3	(18)
Total other comprehensive income (loss), net of tax	568	402
Comprehensive income	1,565	1,227
Less: comprehensive income attributable to the noncontrolling interests	(3)	(4)
Comprehensive income attributable to shareholders	$ 1,562	$ 1,223

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Financial Position
(Unaudited)
(Dollars in millions)

	June 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and short-term investments	$ 10,232	$ 7,168
Receivables – trade and other	6,675	5,981
Receivables – finance	8,920	8,522
Prepaid expenses and other current assets	1,776	1,682
Inventories	9,388	8,614
Total current assets	36,991	31,967
Property, plant and equipment – net	14,420	15,322
Long-term receivables – trade and other	940	1,029
Long-term receivables – finance	13,197	13,556
Noncurrent deferred and refundable income taxes	2,866	2,790
Intangible assets	2,232	2,349
Goodwill	6,142	6,020
Other assets	1,722	1,671
Total assets	$ 78,510	$ 74,704
Liabilities		
Current liabilities:		
Short-term borrowings:		
Machinery, Energy & Transportation	$ 5	$ 209
Financial Products	6,775	7,094
Accounts payable	5,778	4,614
Accrued expenses	3,211	3,003
Accrued wages, salaries and employee benefits	1,986	1,296
Customer advances	1,533	1,167
Dividends payable	461	452
Other current liabilities	1,787	1,635
Long-term debt due within one year:		
Machinery, Energy & Transportation	5	507
Financial Products	6,592	6,155
Total current liabilities	28,133	26,132
Long-term debt due after one year:		
Machinery, Energy & Transportation	8,815	8,436
Financial Products	15,000	14,382
Liability for postemployment benefits	9,248	9,357
Other liabilities	3,235	3,184
Total liabilities	64,431	61,491
Commitments and contingencies (Notes 10 and 13)		
Shareholders' equity		
Common stock of $1.00 par value:		
Authorized shares: 2,000,000,000 Issued shares: (6/30/17 and 12/31/16 – 814,894,624) at paid-in amount	5,316	5,277
Treasury stock (6/30/17 – 223,921,832 shares; 12/31/16 – 228,408,600 shares) at cost	(17,307)	(17,478)
Profit employed in the business	27,471	27,377
Accumulated other comprehensive income (loss)	(1,471)	(2,039)
Noncontrolling interests	70	76
Total shareholders' equity	14,079	13,213
Total liabilities and shareholders' equity	$ 78,510	$ 74,704

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Changes in Shareholders' Equity
(Unaudited)
(Dollars in millions)

	Common stock	Treasury stock	Profit employed in the business	Accumulated other comprehensive income (loss)	Noncontrolling interests	Total
Six Months Ended June 30, 2016						
Balance at December 31, 2015	$ 5,238	$ (17,640)	$ 29,246	$ (2,035)	$ 76	$ 14,885
Profit of consolidated and affiliated companies	—	—	821	—	4	825
Foreign currency translation, net of tax	—	—	—	305	—	305
Pension and other postretirement benefits, net of tax	—	—	—	98	—	98
Derivative financial instruments, net of tax	—	—	—	1	—	1
Available-for-sale securities, net of tax	—	—	—	(2)	—	(2)
Dividends declared	—	—	(900)	—	—	(900)
Distribution to noncontrolling interests	—	—	—	—	(9)	(9)
Common shares issued from treasury stock for stock-based compensation: 1,909,291	(108)	61	—	—	—	(47)
Stock-based compensation expense	146	—	—	—	—	146
Net excess tax benefits from stock-based compensation	(5)	—	—	—	—	(5)
Other	6	—	—	—	—	6
Balance at June 30, 2016	**$ 5,277**	**$ (17,579)**	**$ 29,167**	**$ (1,633)**	**$ 71**	**$ 15,303**
Six Months Ended June 30, 2017						
Balance at December 31, 2016	$ 5,277	$ (17,478)	$ 27,377	$ (2,039)	$ 76	$ 13,213
Adjustment to adopt stock-based compensation guidance[1]	—	—	15	—	—	15
Balance at January 1, 2017	$ 5,277	$ (17,478)	$ 27,392	$ (2,039)	$ 76	$ 13,228
Profit of consolidated and affiliated companies	—	—	994	—	3	997
Foreign currency translation, net of tax	—	—	—	471	—	471
Pension and other postretirement benefits, net of tax	—	—	—	—	—	—
Derivative financial instruments, net of tax	—	—	—	76	—	76
Available-for-sale securities, net of tax	—	—	—	21	—	21
Change in ownership from noncontrolling interests	4	—	—	—	(3)	1
Dividends declared	—	—	(915)	—	—	(915)
Distribution to noncontrolling interests	—	—	—	—	(6)	(6)
Common shares issued from treasury stock for stock-based compensation: 4,486,768	(88)	171	—	—	—	83
Stock-based compensation expense	117	—	—	—	—	117
Other	6	—	—	—	—	6
Balance at June 30, 2017	**$ 5,316**	**$ (17,307)**	**$ 27,471**	**$ (1,471)**	**$ 70**	**$ 14,079**

[1] See Note 2 for additional information.

See accompanying notes to Consolidated Financial Statements.

Caterpillar Inc.
Consolidated Statement of Cash Flow
(Unaudited)
(Millions of dollars)

	Six Months Ended June 30	
	2017	2016
Cash flow from operating activities:		
Profit of consolidated and affiliated companies	$ 997	$ 825
Adjustments for non-cash items:		
Depreciation and amortization	1,430	1,494
Other	487	368
Changes in assets and liabilities, net of acquisitions and divestitures:		
Receivables – trade and other	(442)	573
Inventories	(688)	305
Accounts payable	1,113	208
Accrued expenses	251	1
Accrued wages, salaries and employee benefits	641	(743)
Customer advances	322	93
Other assets – net	(280)	(127)
Other liabilities – net	90	(193)
Net cash provided by (used for) operating activities	3,921	2,804
Cash flow from investing activities:		
Capital expenditures – excluding equipment leased to others	(371)	(580)
Expenditures for equipment leased to others	(753)	(1,025)
Proceeds from disposals of leased assets and property, plant and equipment	563	383
Additions to finance receivables	(5,264)	(4,643)
Collections of finance receivables	5,508	4,466
Proceeds from sale of finance receivables	83	42
Investments and acquisitions (net of cash acquired)	(21)	(38)
Proceeds from sale of businesses and investments (net of cash sold)	91	—
Proceeds from sale of securities	187	195
Investments in securities	(207)	(243)
Other – net	5	(14)
Net cash provided by (used for) investing activities	(179)	(1,457)
Cash flow from financing activities:		
Dividends paid	(906)	(898)
Distribution to noncontrolling interests	(6)	—
Common stock issued, including treasury shares reissued	83	(47)
Proceeds from debt issued (original maturities greater than three months):		
Machinery, Energy & Transportation	361	1
Financial Products	4,507	2,840
Payments on debt (original maturities greater than three months):		
Machinery, Energy & Transportation	(505)	(7)
Financial Products	(3,720)	(3,324)
Short-term borrowings – net (original maturities three months or less)	(505)	391
Net cash provided by (used for) financing activities	(691)	(1,044)
Effect of exchange rate changes on cash	13	1
Increase (decrease) in cash and short-term investments	3,064	304
Cash and short-term investments at beginning of period	7,168	6,460
Cash and short-term investments at end of period	$ 10,232	$ 6,764

All short-term investments, which consist primarily of highly liquid investments with original maturities of three months or less, are considered to be cash equivalents.

See accompanying notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. A. Nature of operations

Information in our financial statements and related commentary are presented in the following categories:

Machinery, Energy & Transportation – Represents the aggregate total of Construction Industries, Resource Industries, Energy & Transportation and All Other operating segments and related corporate items and eliminations.

Financial Products – Primarily includes the company's Financial Products Segment. This category includes Caterpillar Financial Services Corporation (Cat Financial), Caterpillar Financial Insurance Services (Insurance Services) and their respective subsidiaries.

B. Basis of presentation

In the opinion of management, the accompanying unaudited financial statements include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of (a) the consolidated results of operations for the three and six months ended June 30, 2017 and 2016, (b) the consolidated comprehensive income for the three and six months ended June 30, 2017 and 2016, (c) the consolidated financial position at June 30, 2017 and December 31, 2016, (d) the consolidated changes in shareholders' equity for the six months ended June 30, 2017 and 2016 and (e) the consolidated cash flow for the six months ended June 30, 2017 and 2016. The financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America (U.S. GAAP) and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC).

Interim results are not necessarily indicative of results for a full year. The information included in this Form 10-Q should be read in conjunction with the audited financial statements and notes thereto included in our company's annual report on Form 10-K for the year ended December 31, 2016 (2016 Form 10-K).

The December 31, 2016 financial position data included herein is derived from the audited consolidated financial statements included in the 2016 Form 10-K but does not include all disclosures required by U.S. GAAP. Certain amounts for prior periods have been reclassified to conform to the current period financial statement presentation. See Note 2 for more information.

Unconsolidated Variable Interest Entities (VIEs)

We have affiliates, suppliers and dealers that are VIEs of which we are not the primary beneficiary. Although we have provided financial support, we do not have the power to direct the activities that most significantly impact the economic performance of each entity.

Our maximum exposure to loss from VIEs for which we are not the primary beneficiary was as follows:

(Millions of dollars)	June 30, 2017	December 31, 2016
Receivables - trade and other	$ 81	$ 55
Receivables - finance	178	174
Long-term receivables - finance	229	246
Investments in unconsolidated affiliated companies	38	31
Guarantees	207	210
Total	$ 733	$ 716

In addition, Cat Financial has end-user customers that are VIEs of which we are not the primary beneficiary. Although we have provided financial support to these entities and therefore have a variable interest, we do not have the power to direct the activities that most significantly impact their economic performance. Our maximum exposure to loss from our involvement with these VIEs is limited to the credit risk inherently present in the financial support that we have provided. These risks are evaluated and reflected in our financial statements as part of our overall portfolio of finance receivables and related allowance for credit losses.

2. New accounting guidance

Revenue recognition - In May 2014, the Financial Accounting Standards Board (FASB) issued new revenue recognition guidance to provide a single, comprehensive revenue recognition model for all contracts with customers. Under the new guidance, an entity will recognize revenue to depict the transfer of promised goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. A five step model has been introduced for an entity to apply when recognizing revenue. The new guidance also includes enhanced disclosure requirements, and is effective January 1, 2018. Entities have the option to apply the new guidance under a retrospective approach to each prior reporting period presented, or a modified retrospective approach with the cumulative effect of initially applying the new guidance recognized at the date of initial application within the Consolidated Statement of Changes in Shareholders' Equity. We will adopt the new guidance effective January 1, 2018. We have substantially completed our evaluation of the impact of the new standard. Under the new guidance, sales of certain turbine machinery units will change to a point-in-time recognition model. Under current guidance, we account for these sales under an over-time model following the percentage-of-completion method as the product is manufactured. In addition, under the new guidance we will begin to recognize an asset for the value of expected replacement part returns. At this time we have not identified any impacts to our financial statements that we believe will be material in the year of adoption. We are finalizing our evaluation of certain revenue streams within our Energy & Transportation and Resource Industries segments and expect that evaluation to be completed during the third quarter of 2017. Based on the current estimated impact to our financial statements, we plan to adopt the new guidance under the modified retrospective approach.

Simplifying the measurement of inventory – In July 2015, the FASB issued accounting guidance which requires that inventory be measured at the lower of cost or net realizable value. Prior to the issuance of the new guidance, inventory was measured at the lower of cost or market. Replacing the concept of market with the single measurement of net realizable value is intended to create efficiencies for preparers. Inventory measured using the last-in, first-out (LIFO) method and the retail inventory method are not impacted by the new guidance. The guidance was effective January 1, 2017, and was applied prospectively. The adoption did not have a material impact on our financial statements.

Recognition and measurement of financial assets and financial liabilities – In January 2016, the FASB issued accounting guidance that affects the accounting for equity investments, financial liabilities accounted for under the fair value option and the presentation and disclosure requirements for financial instruments. Under the new guidance, all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification for equity securities with readily determinable fair values. For financial liabilities when the fair value option has been elected, changes in fair value due to instrument-specific credit risk will be recognized separately in other comprehensive income. In addition, the FASB clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The new guidance is effective January 1, 2018, with the cumulative effect adjustment from initially applying the new guidance recognized in the Consolidated Statement of Financial Position as of the beginning of the year of adoption. The impact on our financial statements at the time of adoption will primarily be based on changes in the fair value of our available-for-sale equity securities subsequent to January 1, 2018, which will be recorded through earnings.

Lease accounting – In February 2016, the FASB issued accounting guidance that revises the accounting for leases. Under the new guidance, lessees are required to recognize a right-of-use asset and a lease liability for all leases. The new guidance will continue to classify leases as either financing or operating, with classification affecting the pattern of expense recognition. The accounting applied by a lessor under the new guidance will be substantially equivalent to current lease accounting guidance. The new guidance is effective January 1, 2019, with early adoption permitted. The new standard is required to be applied with a modified retrospective approach to each prior reporting period presented and provides for certain practical expedients. We are in the process of evaluating the effect of the new guidance on our financial statements.

Stock-based compensation – In March 2016, the FASB issued accounting guidance to simplify several aspects of the accounting for share-based payments. The new guidance changes how reporting entities account for certain aspects of share-based payments, including the accounting for income taxes and the classification of the tax impact on the Consolidated Statement of Cash Flow. Under the new guidance all excess tax benefits and deficiencies during the period are recognized in income (rather than equity) on a prospective basis. The guidance removes the requirement to delay recognition of excess tax benefits until it reduces income taxes currently payable. This change was required to be applied on a modified retrospective basis, resulting in a cumulative-effect adjustment to opening retained earnings in the period of adoption. In addition, Cash flows related to excess tax benefits are now included in Cash provided by operating activities and will no longer be separately classified as a financing activity. This change was adopted retrospectively. The guidance was effective January 1, 2017, and did not have a material impact on our financial statements.

Measurement of credit losses on financial instruments – In June 2016, the FASB issued accounting guidance to introduce a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. The new guidance will apply to loans, accounts receivable, trade receivables, other financial assets measured at amortized cost, loan commitments and other off-balance sheet credit exposures. The new guidance will also apply to debt securities and other financial assets measured at fair value through other comprehensive income. The new guidance is effective January 1, 2020, with early adoption permitted beginning January 1, 2019. We are in the process of evaluating the effect of the new guidance on our financial statements.

Classification for certain cash receipts and cash payments – In August 2016, the FASB issued accounting guidance related to the presentation and classification of certain transactions in the statement of cash flows where diversity in practice exists. The guidance is effective January 1, 2018, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

Tax accounting for intra-entity asset transfers – In October 2016, the FASB issued accounting guidance that will require the tax effects of intra-entity asset transfers to be recognized in the period when the transfer occurs. Under current guidance, the tax effects of intra-entity sales of assets are deferred until the transferred asset is sold to a third party or otherwise recovered through use. The new guidance does not apply to intra-entity transfers of inventory. The guidance is effective January 1, 2018, and is required to be applied on a modified retrospective basis through a cumulative effect adjustment to retained earnings as of the beginning of the period of adoption. Based on our current assessment, we do not expect the adoption to have a material impact on our financial statements.

Classification of restricted cash – In November 2016, the FASB issued accounting guidance related to the presentation and classification of changes in restricted cash on the statement of cash flows where diversity in practice exists. The new standard is required to be applied with a retrospective approach. The guidance is effective January 1, 2018, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

Clarification on the definition of a business – In January 2017, the FASB issued accounting guidance to clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance is effective January 1, 2018, with early adoption permitted. We adopted the guidance effective January 1, 2017, and the adoption did not have a material impact on our financial statements.

Simplifying the measurement for goodwill – In January 2017, the FASB issued guidance to simplify the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The new guidance will be applied prospectively and is effective January 1, 2020, with early adoption permitted beginning January 1, 2017. We adopted the guidance effective January 1, 2017. The adoption did not have a material impact on our financial statements.

Presentation of net periodic pension costs and net periodic postretirement benefit costs – In March 2017, the FASB issued accounting guidance that will require that an employer disaggregate the service cost component from the other components of net benefit cost. Service cost is required to be reported in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net periodic benefit cost are required to be reported outside the subtotal for income from operations. Additionally, only the service cost component of net benefit costs are eligible for capitalization. The guidance is effective January 1, 2018, with early adoption permitted. We will adopt this guidance on January 1, 2018, and apply the presentation changes retrospectively and the capitalization change prospectively. The impact on our financial statements at the time of adoption will primarily be reclassification of other components of net periodic benefit cost outside of Operating profit in the Consolidated Statement of Results of Operations.

Premium amortization on purchased callable debt securities – In March 2017, the FASB issued accounting guidance related to the amortization period for certain purchased callable debt securities held at a premium. Securities held at a premium will be required to be amortized to the earliest call date rather than the maturity date. The new standard is required to be applied with a modified retrospective approach through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The guidance is effective January 1, 2019, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

Clarification on stock-based compensation – In May 2017, the FASB issued accounting guidance to clarify which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The new standard is required to be applied prospectively. The guidance is effective January 1, 2018, with early adoption permitted. We do not expect the adoption to have a material impact on our financial statements.

3. Stock-based compensation

Accounting for stock-based compensation requires that the cost resulting from all stock-based payments be recognized in the financial statements based on the grant date fair value of the award. Our stock-based compensation primarily consists of stock options, restricted stock units (RSUs), performance-based restricted stock units (PRSUs) and stock-settled stock appreciation rights (SARs).

Upon separation from service, if the participant is 55 years of age or older with more than five years of service, the participant meets the criteria for a "Long Service Separation." Award terms for awards granted in 2016 allow for immediate vesting upon separation of all outstanding options and RSUs with no requisite service period for employees who meet the criteria for a "Long Service Separation." Compensation expense was fully recognized immediately on the grant date for these employees. Award terms for the 2017 grant allow for continued vesting as of each vesting date specified in the award document for employees who meet the criteria for a "Long Service Separation" and fulfill a requisite service period of six months. Compensation expense for eligible employees for the 2017 grant is recognized over the period from the grant date to the end date of the six-month requisite service period. For employees who become eligible for a "Long Service Separation" subsequent to the end date of the six-month requisite service period and prior to the completion of the vesting period, compensation expense is recognized over the period from the grant date to the date eligibility is achieved.

Prior to 2017, all outstanding PRSU awards granted to employees with a "Long Service Separation" may vest at the end of the performance period based upon achievement of the performance target. For PRSU awards granted in 2017, only a prorated number of shares may vest at the end of the performance period based upon achievement of the performance target, with the proration based upon the number of months of continuous employment during the three-year performance period. Employees with a "Long Service Separation" must also fulfill a six-month requisite service period in order to be eligible for the prorated vesting of outstanding PRSU awards granted in 2017.

During the second quarter of 2017, the 2014 Long-Term Incentive Plan (the Plan) was amended and restated. The Plan initially provided that up to 38,800,000 Common Shares would be reserved for future issuance under the Plan, subject to adjustment in certain events. Upon shareholder approval of the amendment and restatement of the Plan, an additional 36,000,000 Common Shares became available for all awards under the Plan.

We recognized pretax stock-based compensation expense of $68 million and $117 million for the three and six months ended June 30, 2017, respectively and $45 million and $146 million for the three and six months ended June 30, 2016, respectively. The change in stock-based compensation expense was primarily due to the change in award terms for participants that meet the criteria for a "Long Service Separation", as the establishment of the six-month requisite service period results in lower expense in the first quarter (period of grant) and higher expense over the following two quarters.

The following table illustrates the type and fair value of the stock-based compensation awards granted during the six months ended June 30, 2017 and 2016, respectively:

	Six Months Ended June 30, 2017			Six Months Ended June 30, 2016		
	Shares Granted	Weighted-Average Fair Value Per Share	Weighted-Average Grant Date Stock Price	Shares Granted	Weighted-Average Fair Value Per Share	Weighted-Average Grant Date Stock Price
Stock options	2,701,644	$ 25.01	$ 95.66	4,243,272	$ 20.64	$ 74.77
RSUs	906,068	$ 89.76	$ 95.63	1,085,505	$ 68.04	$ 74.77
PRSUs	437,385	$ 86.78	$ 95.66	614,347	$ 64.71	$ 74.77

The following table provides the assumptions used in determining the fair value of the stock-based awards for the six months ended June 30, 2017 and 2016, respectively:

	Grant Year	
	2017	2016
Weighted-average dividend yield	3.42%	3.23%
Weighted-average volatility	29.2%	31.1%
Range of volatilities	22.1-33.0%	22.5-33.4%
Range of risk-free interest rates	0.81-2.35%	0.62-1.73%
Weighted-average expected lives	8 years	8 years

As of June 30, 2017, the total remaining unrecognized compensation expense related to nonvested stock-based compensation awards was $236 million, which will be amortized over the weighted-average remaining requisite service periods of approximately 1.7 years.

4. Derivative financial instruments and risk management

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates, interest rates and commodity prices. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to prudently manage foreign currency exchange rate, interest rate and commodity price exposures. Our policy specifies that derivatives are not to be used for speculative purposes. Derivatives that we use are primarily foreign currency forward, option and cross currency contracts, interest rate contracts and commodity forward and option contracts. Our derivative activities are subject to the management, direction and control of our senior financial officers. Risk management practices, including the use of financial derivative instruments, are presented to the Audit Committee of the Board of Directors at least annually.

All derivatives are recognized on the Consolidated Statement of Financial Position at their fair value. On the date the derivative contract is entered into, we designate the derivative as (1) a hedge of the fair value of a recognized asset or liability (fair value hedge), (2) a hedge of a forecasted transaction or the variability of cash flow (cash flow hedge) or (3) an undesignated instrument. Changes in the fair value of a derivative that is qualified, designated and highly effective as a fair value hedge, along with the gain or loss on the hedged recognized asset or liability that is attributable to the hedged risk, are recorded in current earnings. Changes in the fair value of a derivative that is qualified, designated and highly effective as a cash flow hedge are recorded in Accumulated other comprehensive income (loss) (AOCI), to the extent effective, on the Consolidated Statement of Financial Position until they are reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Changes in the fair value of undesignated derivative instruments and the ineffective portion of designated derivative instruments are reported in current earnings. Cash flows from designated derivative financial instruments are classified within the same category as the item being hedged on the Consolidated Statement of Cash Flow. Cash flows from undesignated derivative financial instruments are included in the investing category on the Consolidated Statement of Cash Flow.

We formally document all relationships between hedging instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value hedges to specific assets and liabilities on the Consolidated Statement of Financial Position and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

We also formally assess, both at the hedge's inception and on an ongoing basis, whether the designated derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flow of hedged items. When a derivative is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable, we discontinue hedge accounting prospectively, in accordance with the derecognition criteria for hedge accounting.

Foreign Currency Exchange Rate Risk

Foreign currency exchange rate movements create a degree of risk by affecting the U.S. dollar value of sales made and costs incurred in foreign currencies. Movements in foreign currency rates also affect our competitive position as these changes may affect business practices and/or pricing strategies of non-U.S.-based competitors. Additionally, we have balance sheet positions denominated in foreign currencies, thereby creating exposure to movements in exchange rates.

Our Machinery, Energy & Transportation operations purchase, manufacture and sell products in many locations around the world. As we have a diversified revenue and cost base, we manage our future foreign currency cash flow exposure on a net basis. We use foreign currency forward and option contracts to manage unmatched foreign currency cash inflow and outflow. Our objective is to minimize the risk of exchange rate movements that would reduce the U.S. dollar value of our foreign currency cash flow. Our policy allows for managing anticipated foreign currency cash flow for up to five years. As of June 30, 2017, the maximum term of these outstanding contracts was approximately 51 months.

We generally designate as cash flow hedges at inception of the contract any Australian dollar, Brazilian real, British pound, Canadian dollar, Chinese yuan, euro, Indian rupee, Japanese yen, Mexican peso, Norwegian krona, Singapore dollar or Thailand baht forward or option contracts that meet the requirements for hedge accounting and the maturity extends beyond the current quarter-end. Designation is performed on a specific exposure basis to support hedge accounting. The remainder of Machinery, Energy & Transportation foreign currency contracts are undesignated.

As of June 30, 2017, $4 million of deferred net gains, net of tax, included in equity (AOCI in the Consolidated Statement of Financial Position), are expected to be reclassified to current earnings (Other income (expense) in the Consolidated Statement of Results of Operations) over the next twelve months when earnings are affected by the hedged transactions. The actual amount recorded in Other income (expense) will vary based on exchange rates at the time the hedged transactions impact earnings.

In managing foreign currency risk for our Financial Products operations, our objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions, and future transactions denominated in foreign currencies. Our policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between our assets and liabilities, and exchange rate risk associated with future transactions denominated in foreign currencies. Our foreign currency forward, option and cross currency contracts are primarily undesignated. We designate fixed-to-fixed cross currency contracts as cash flow hedges to protect against movements in exchange rates on foreign currency fixed rate assets and liabilities.

Interest Rate Risk

Interest rate movements create a degree of risk by affecting the amount of our interest payments and the value of our fixed-rate debt. Our practice is to use interest rate contracts to manage our exposure to interest rate changes.

Our Machinery, Energy & Transportation operations generally use fixed-rate debt as a source of funding. Our objective is to minimize the cost of borrowed funds. Our policy allows us to enter into fixed-to-floating interest rate contracts and forward rate agreements to meet that objective. We designate fixed-to-floating interest rate contracts as fair value hedges at inception of the contract, and we designate certain forward rate agreements as cash flow hedges at inception of the contract.

Financial Products operations has a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate) of Cat Financial's debt portfolio with the interest rate profile of their receivables portfolio within predetermined ranges on an ongoing basis. In connection with that policy, we use interest rate derivative instruments to modify the debt structure to match assets within the receivables portfolio. This matched funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move.

Our policy allows us to use fixed-to-floating, floating-to-fixed and floating-to-floating interest rate contracts to meet the match-funding objective. We designate fixed-to-floating interest rate contracts as fair value hedges to protect debt against changes in fair value due to changes in the benchmark interest rate. We designate most floating-to-fixed interest rate contracts as cash flow hedges to protect against the variability of cash flows due to changes in the benchmark interest rate.

We have, at certain times, liquidated fixed-to-floating and floating-to-fixed interest rate contracts at both Machinery, Energy & Transportation and Financial Products. The gains or losses associated with these contracts at the time of liquidation are amortized into earnings over the original term of the previously designated hedged item.

Commodity Price Risk

Commodity price movements create a degree of risk by affecting the price we must pay for certain raw material. Our policy is to use commodity forward and option contracts to manage the commodity risk and reduce the cost of purchased materials.

Our Machinery, Energy & Transportation operations purchase base and precious metals embedded in the components we purchase from suppliers. Our suppliers pass on to us price changes in the commodity portion of the component cost. In addition, we are subject to price changes on energy products such as natural gas and diesel fuel purchased for operational use.

Our objective is to minimize volatility in the price of these commodities. Our policy allows us to enter into commodity forward and option contracts to lock in the purchase price of a portion of these commodities within a five-year horizon. All such commodity forward and option contracts are undesignated.

The location and fair value of derivative instruments reported in the Consolidated Statement of Financial Position are as follows:

(Millions of dollars)	**Consolidated Statement of Financial Position Location**	**Asset (Liability) Fair Value**	
		June 30, 2017	**December 31, 2016**
Designated derivatives			
Foreign exchange contracts			
Machinery, Energy & Transportation	Receivables – trade and other	$ 15	$ 13
Machinery, Energy & Transportation	Accrued expenses	(9)	(93)
Machinery, Energy & Transportation	Other liabilities	(14)	(36)
Financial Products	Long-term receivables – trade and other	6	29
Financial Products	Accrued expenses	(22)	(3)
Interest rate contracts			
Financial Products	Long-term receivables – trade and other	3	4
Financial Products	Accrued expenses	(1)	(1)
		$ (22)	$ (87)
Undesignated derivatives			
Foreign exchange contracts			
Machinery, Energy & Transportation	Receivables – trade and other	$ 25	$ —
Machinery, Energy & Transportation	Accrued expenses	(4)	(30)
Financial Products	Receivables – trade and other	46	39
Financial Products	Accrued expenses	(16)	(4)
Commodity contracts			
Machinery, Energy & Transportation	Receivables – trade and other	6	10
Machinery, Energy & Transportation	Accrued expenses	(1)	—
		$ 56	$ 15

The total notional amounts of the derivative instruments are as follows:

(Millions of dollars)	June 30, 2017	December 31, 2016
Machinery, Energy & Transportation	$ 2,355	$ 2,530
Financial Products	$ 3,506	$ 2,626

The notional amounts of the derivative financial instruments do not represent amounts exchanged by the parties. The amounts exchanged by the parties are calculated by reference to the notional amounts and by other terms of the derivatives, such as foreign currency exchange rates, interest rates or commodity prices.

The effect of derivatives designated as hedging instruments on the Consolidated Statement of Results of Operations is as follows:

Fair Value Hedges

		Three Months Ended June 30, 2017		Three Months Ended June 30, 2016	
(Millions of dollars)	Classification	Gains (Losses) on Derivatives	Gains (Losses) on Borrowings	Gains (Losses) on Derivatives	Gains (Losses) on Borrowings
Interest rate contracts					
Financial Products	Other income (expense)	$ —	$ —	$ (3)	$ 3
		$ —	$ —	$ (3)	$ 3

		Six Months Ended June 30, 2017		Six Months Ended June 30, 2016	
	Classification	Gains (Losses) on Derivatives	Gains (Losses) on Borrowings	Gains (Losses) on Derivatives	Gains (Losses) on Borrowings
Interest rate contracts					
Financial Products	Other income (expense)	$ (1)	$ 1	$ —	$ (1)
		$ (1)	$ 1	$ —	$ (1)

Cash Flow Hedges

	Three Months Ended June 30, 2017			
		Recognized in Earnings		
(Millions of dollars)	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of Gains (Losses) Reclassified from AOCI to Earnings	Recognized in Earnings (Ineffective Portion)
Foreign exchange contracts				
Machinery, Energy & Transportation	$ 23	Other income (expense)	$ (14)	$ —
Financial Products	(23)	Other income (expense)	(27)	—
Interest rate contracts				
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(1)	—
Financial Products	—	Interest expense of Financial Products	2	—
	$ —		$ (40)	$ —

	Three Months Ended June 30, 2016			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of Gains (Losses) Reclassified from AOCI to Earnings	Recognized in Earnings (Ineffective Portion)
Foreign exchange contracts				
Machinery, Energy & Transportation	$ (22)	Other income (expense)	$ 6	$ —
Financial Products	(6)	Other income (expense)	(6)	—
Interest rate contracts				
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(1)	—
Financial Products	(1)	Interest expense of Financial Products	(1)	—
	$ (29)		$ (2)	$ —

	Six Months Ended June 30, 2017			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of Gains (Losses) Reclassified from AOCI to Earnings	Recognized in Earnings (Ineffective Portion)
Foreign exchange contracts				
Machinery, Energy & Transportation	$ 56	Other income (expense)	$ (53)	$ —
Financial Products	(41)	Other income (expense)	(49)	—
Interest rate contracts				
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(3)	—
Financial Products	—	Interest expense of Financial Products	3	—
	$ 15		$ (102)	$ —

	Six Months Ended June 30, 2016			
		Recognized in Earnings		
	Amount of Gains (Losses) Recognized in AOCI (Effective Portion)	Classification of Gains (Losses)	Amount of Gains (Losses) Reclassified from AOCI to Earnings	Recognized in Earnings (Ineffective Portion)
Foreign exchange contracts				
Machinery, Energy & Transportation	$ (6)	Other income (expense)	$ (4)	$ —
Financial Products	(6)	Other income (expense)	(6)	—
Interest rate contracts				
Machinery, Energy & Transportation	—	Interest expense excluding Financial Products	(3)	—
Financial Products	(2)	Interest expense of Financial Products	(3)	—

	$ (14)	$ (16)	$ —

The effect of derivatives not designated as hedging instruments on the Consolidated Statement of Results of Operations is as follows:

(Millions of dollars)	Classification of Gains (Losses)	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016
Foreign exchange contracts			
Machinery, Energy & Transportation	Other income (expense)	$ 39	$ —
Financial Products	Other income (expense)	17	(24)
Commodity contracts			
Machinery, Energy & Transportation	Other income (expense)	—	6
		$ 56	$ (18)

	Classification of Gains (Losses)	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
Foreign exchange contracts			
Machinery, Energy & Transportation	Other income (expense)	$ 52	$ 22
Financial Products	Other income (expense)	10	(28)
Commodity contracts			
Machinery, Energy & Transportation	Other income (expense)	1	6
		$ 63	$ —

We enter into International Swaps and Derivatives Association (ISDA) master netting agreements within Machinery, Energy & Transportation and Financial Products that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the company or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event.

Collateral is generally not required of the counterparties or of our company under the master netting agreements. As of June 30, 2017 and December 31, 2016, no cash collateral was received or pledged under the master netting agreements.

The effect of the net settlement provisions of the master netting agreements on our derivative balances upon an event of default or termination event is as follows:

June 30, 2017 (Millions of dollars)	Gross Amount of Recognized Assets	Gross Amounts Offset in the Statement of Financial Position	Net Amount of Assets Presented in the Statement of Financial Position	Gross Amounts Not Offset in the Statement of Financial Position: Financial Instruments	Gross Amounts Not Offset in the Statement of Financial Position: Cash Collateral Received	Net Amount of Assets
Derivatives						
Machinery, Energy & Transportation	$ 46	$ —	$ 46	$ (24)	$ —	$ 22
Financial Products	55	—	55	(14)	—	41
Total	$ 101	$ —	$ 101	$ (38)	$ —	$ 63

June 30, 2017 (Millions of dollars)	Gross Amount of Recognized Liabilities	Gross Amounts Offset in the Statement of Financial Position	Net Amount of Liabilities Presented in the Statement of Financial Position	Gross Amounts Not Offset in the Statement of Financial Position: Financial Instruments	Gross Amounts Not Offset in the Statement of Financial Position: Cash Collateral Pledged	Net Amount of Liabilities
Derivatives						
Machinery, Energy & Transportation	$ (28)	$ —	$ (28)	$ 24	$ —	$ (4)
Financial Products	(39)	—	(39)	14	—	(25)
Total	$ (67)	$ —	$ (67)	$ 38	$ —	$ (29)

December 31, 2016 (Millions of dollars)	Gross Amount of Recognized Assets	Gross Amounts Offset in the Statement of Financial Position	Net Amount of Assets Presented in the Statement of Financial Position	Gross Amounts Not Offset in the Statement of Financial Position: Financial Instruments	Gross Amounts Not Offset in the Statement of Financial Position: Cash Collateral Received	Net Amount of Assets
Derivatives						
Machinery, Energy & Transportation	$ 23	$ —	$ 23	$ (21)	$ —	$ 2
Financial Products	72	—	72	(7)	—	65
Total	$ 95	$ —	$ 95	$ (28)	$ —	$ 67

December 31, 2016 (Millions of dollars)	Gross Amount of Recognized Liabilities	Gross Amounts Offset in the Statement of Financial Position	Net Amounts of Liabilities Presented in the Statement of Financial Position	Gross Amounts Not Offset in the Statement of Financial Position: Financial Instruments	Gross Amounts Not Offset in the Statement of Financial Position: Cash Collateral Pledged	Net Amount of Liabilities
Derivatives						
Machinery, Energy & Transportation	$ (159)	$ —	$ (159)	$ 21	$ —	$ (138)
Financial Products	(8)	—	(8)	7	—	(1)
Total	$ (167)	$ —	$ (167)	$ 28	$ —	$ (139)

5. Inventories

Inventories (principally using the last-in, first-out (LIFO) method) are comprised of the following:

(Millions of dollars)	June 30, 2017	December 31, 2016
Raw materials	$ 2,540	$ 2,102
Work-in-process	1,954	1,719
Finished goods	4,690	4,576
Supplies	204	217
Total inventories	$ 9,388	$ 8,614

6. Investments in unconsolidated affiliated companies

Investments in unconsolidated affiliated companies, included in Other assets in the Consolidated Statement of Financial Position, were as follows:

(Millions of dollars)	June 30, 2017	December 31, 2016
Investments in equity method companies	$ 195	$ 192
Plus: Investments in cost method companies	33	57
Total investments in unconsolidated affiliated companies	$ 228	$ 249

In May 2017, we sold our equity interest in IronPlanet Holdings Inc. for $93 million. We recognized a pretax gain of $85 million (included in Other income (expense)) and derecognized the carrying value of our noncontrolling interest, which was included in Other assets in the Consolidated Statement of Financial Position. The gain on the disposal is included as a reconciling item between Segment profit and Consolidated profit before taxes.

7. Intangible assets and goodwill

A. Intangible assets

Intangible assets are comprised of the following:

(Millions of dollars)		June 30, 2017		
	Weighted Amortizable Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	15	$ 2,407	$ (1,026)	$ 1,381
Intellectual property	11	1,515	(769)	746
Other	13	188	(83)	105
Total finite-lived intangible assets	14	$ 4,110	$ (1,878)	$ 2,232
		December 31, 2016		
	Weighted Amortizable Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	15	$ 2,378	$ (934)	$ 1,444
Intellectual property	11	1,496	(706)	790
Other	14	192	(77)	115
Total finite-lived intangible assets	14	$ 4,066	$ (1,717)	$ 2,349

Amortization expense for the three and six months ended June 30, 2017 was $80 million and $159 million, respectively. Amortization expense for the three and six months ended June 30, 2016 was $82 million and $164 million, respectively. Amortization expense related to intangible assets is expected to be:

(Millions of dollars)

Remaining Six Months of 2017	2018	2019	2020	2021	Thereafter
$160	$315	$310	$298	$281	$868

B. Goodwill

No goodwill was impaired during the three or six months ended June 30, 2017 or 2016.

The changes in carrying amount of goodwill by reportable segment for the six months ended June 30, 2017 were as follows:

(Millions of dollars)	December 31, 2016	Other Adjustments [1]	June 30, 2017
Construction Industries			
Goodwill	$ 296	$ 8	$ 304
Impairments	(22)	—	(22)
Net goodwill	274	8	282
Resource Industries			
Goodwill	4,110	78	4,188
Impairments	(1,175)	—	(1,175)
Net goodwill	2,935	78	3,013
Energy & Transportation			
Goodwill	2,756	35	2,791
All Other [2]			
Goodwill	55	1	56
Consolidated total			
Goodwill	7,217	122	7,339
Impairments	(1,197)	—	(1,197)
Net goodwill	$ 6,020	$ 122	$ 6,142

[1] Other adjustments are comprised primarily of foreign currency translation.
[2] Includes All Other operating segments (See Note 15).

8. Investments in debt and equity securities

We have investments in certain debt and equity securities, primarily at Insurance Services, that have been classified as available-for-sale and recorded at fair value. In addition, Insurance Services has an equity security investment in a real estate investment trust (REIT) which is recorded at fair value based on the net asset value (NAV) of the investment. These investments are primarily included in Other assets in the Consolidated Statement of Financial Position. Unrealized gains and losses arising from the revaluation of debt and equity securities are included, net of applicable deferred income taxes, in equity (Accumulated other comprehensive income (loss) in the Consolidated Statement of Financial Position). Realized gains and losses on sales of investments are generally determined using the specific identification method for debt and equity securities and are included in Other income (expense) in the Consolidated Statement of Results of Operations.

The cost basis and fair value of debt and equity securities were as follows:

(Millions of dollars)	June 30, 2017 Cost Basis	June 30, 2017 Unrealized Pretax Net Gains (Losses)	June 30, 2017 Fair Value	December 31, 2016 Cost Basis	December 31, 2016 Unrealized Pretax Net Gains (Losses)	December 31, 2016 Fair Value
Government debt						
U.S. treasury bonds	$ 10	$ —	$ 10	$ 9	$ —	$ 9
Other U.S. and non-U.S. government bonds	46	—	46	60	—	60
Corporate bonds						
Corporate bonds	520	3	523	489	3	492
Asset-backed securities	82	—	82	90	—	90
Mortgage-backed debt securities						
U.S. governmental agency	233	(1)	232	225	(2)	223
Residential	9	—	9	10	—	10
Commercial	26	—	26	36	—	36
Equity securities						
Large capitalization value	282	55	337	280	32	312
Real estate investment trust (REIT)	93	4	97	77	2	79
Smaller company growth	41	20	61	41	15	56
Total	$ 1,342	$ 81	$ 1,423	$ 1,317	$ 50	$ 1,367

Available-for-sale investments in an unrealized loss position that are not other-than-temporarily impaired:

	June 30, 2017					
	Less than 12 months [1]		12 months or more [1]		Total	
(Millions of dollars)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds						
Corporate bonds	$ 146	$ 1	$ 11	$ —	$ 157	$ 1
Mortgage-backed debt securities						
U.S. governmental agency	142	2	34	1	176	3
Equity securities						
Large capitalization value	49	5	8	1	57	6
Small company growth	5	1	1	—	6	1
Total	$ 342	$ 9	$ 54	$ 2	$ 396	$ 11

	December 31, 2016					
	Less than 12 months [1]		12 months or more [1]		Total	
(Millions of dollars)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds						
Corporate bonds	$ 131	$ 1	$ 13	$ —	$ 144	$ 1
Mortgage-backed debt securities						
U.S. governmental agency	167	2	11	—	178	2
Equity securities						
Large capitalization value	68	6	11	2	79	8
Smaller company growth	10	1	3	1	13	2
Total	$ 376	$ 10	$ 38	$ 3	$ 414	$ 13

[1] Indicates length of time that individual securities have been in a continuous unrealized loss position.

Corporate Bonds. The unrealized losses on our investments in corporate bonds relate to changes in interest rates and credit-related yield spreads since time of purchase. We do not intend to sell the investments and it is not likely that we will be required to sell the investments before recovery of their amortized cost basis. We do not consider these investments to be other-than-temporarily impaired as of June 30, 2017.

Mortgage-Backed Debt Securities. The unrealized losses on our investments in U.S. government agency mortgage-backed securities relate to changes in interest rates and credit-related yield spreads since time of purchase. We do not intend to sell the investments and it is not likely that we will be required to sell the investments before recovery of their amortized cost basis. We do not consider these investments to be other-than-temporarily impaired as of June 30, 2017.

Equity Securities. The unrealized losses on our investments in equity securities relate to inherent risks of individual holdings and/or their respective sectors. We do not consider these investments to be other-than-temporarily impaired as of June 30, 2017.

The cost basis and fair value of the available-for-sale debt securities at June 30, 2017, by contractual maturity, is shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to prepay and creditors may have the right to call obligations.

	June 30, 2017	
(Millions of dollars)	**Cost Basis**	**Fair Value**
Due in one year or less	$ 198	$ 199
Due after one year through five years	406	407
Due after five years through ten years	28	28
Due after ten years	26	27
U.S. governmental agency mortgage-backed securities	233	232
Residential mortgage-backed securities	9	9
Commercial mortgage-backed securities	26	26
Total debt securities – available-for-sale	$ 926	$ 928

Sales of Securities:

	Three Months Ended June 30		Six Months Ended June 30	
(Millions of dollars)	**2017**	**2016**	**2017**	**2016**
Proceeds from the sale of available-for-sale securities	$ 98	$ 146	$ 187	$ 195
Gross gains from the sale of available-for-sale securities	$ 1	$ 32	$ 2	$ 33
Gross losses from the sale of available-for-sale securities	$ 1	$ 1	$ 2	$ 2

9. Postretirement benefits

A. Pension and postretirement benefit costs

In the first quarter of 2017, we announced the closure of our Gosselies, Belgium, facility. This announcement impacted certain employees that participate in a defined benefit pension plan and resulted in a curtailment and the recognition of termination benefits. In March 2017, we recognized a net loss of $20 million for the curtailment and termination benefits. In addition during the first quarter of 2017, we announced the decision to phase out production at our Aurora, Illinois, facility which resulted in termination benefits of $9 million for certain hourly employees that participate in our U.S. hourly defined benefit pension plan.

See Note 18 for more information on the Gosselies closure.

(Millions of dollars)	U.S. Pension Benefits June 30		Non-U.S. Pension Benefits June 30		Other Postretirement Benefits June 30	
	2017	2016	2017	2016	2017	2016
For the three months ended:						
Components of net periodic benefit cost:						
Service cost	$ 29	$ 29	$ 24	$ 23	$ 20	$ 21
Interest cost	131	130	25	30	32	32
Expected return on plan assets	(183)	(189)	(56)	(59)	(9)	(11)
Amortization of prior service cost (credit) [1]	—	—	(1)	—	(6)	(15)
Net periodic benefit cost (benefit)	(23)	(30)	(8)	(6)	37	27
Curtailments and termination benefits [2]	—	—	—	—	—	—
Total cost (benefit) included in operating profit	$ (23)	$ (30)	$ (8)	$ (6)	$ 37	$ 27
For the Six months ended:						
Components of net periodic benefit cost:						
Service cost	$ 58	$ 59	$ 47	$ 46	$ 39	$ 41
Interest cost	262	259	50	60	65	65
Expected return on plan assets	(367)	(378)	(113)	(117)	(18)	(22)
Amortization of prior service cost (credit) [1]	—	—	(1)	—	(11)	(30)
Net periodic benefit cost (benefit)	(47)	(60)	(17)	(11)	75	54
Curtailments and termination benefits [2]	9	—	20	—	—	(2)
Total cost (benefit) included in operating profit	$ (38)	$ (60)	$ 3	$ (11)	$ 75	$ 52
Weighted-average assumptions used to determine net cost:						
Discount rate used to measure service cost	4.2%	4.5%	2.3%	2.9%	3.9%	4.4%
Discount rate used to measure interest cost	3.3%	3.4%	2.3%	2.8%	3.3%	3.3%
Expected rate of return on plan assets	6.7%	6.9%	5.9%	6.1%	7.5%	7.5%
Rate of compensation increase	4.0%	4.0%	4.0%	3.5%	4.0%	4.0%

[1] Prior service cost (credit) for both pension and other postretirement benefits is generally amortized using the straight-line method over the average remaining service period of active employees expected to receive benefits from the plan. For pension plans in which all or almost all of the plan's participants are inactive and other postretirement benefit plans in which all or almost all of the plan's participants are fully eligible for benefits under the plan, prior service cost (credit) is amortized using the straight-line method over the remaining life expectancy of those participants.

[2] Curtailments and termination benefits were recognized in Other operating (income) expenses in the Consolidated Statement of Results of Operations.

We made $92 million and $198 million of contributions to our pension and other postretirement plans during the three and six months ended June 30, 2017. We currently anticipate full-year 2017 contributions of approximately $610 million. We made $84 million and $199 million of contributions to our pension and other postretirement plans during the three and six months ended June 30, 2016.

B. Defined contribution benefit costs

Total company costs related to our defined contribution plans were as follows:

(Millions of dollars)	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
U.S. Plans	$ 90	$ 67	$ 170	$ 152
Non-U.S. Plans	19	17	35	35
	$ 109	$ 84	$ 205	$ 187

10. Guarantees and product warranty

Caterpillar dealer performance guarantees

We have provided an indemnity to a third-party insurance company for potential losses related to performance bonds issued on behalf of Caterpillar dealers. The bonds have varying terms and are issued to insure governmental agencies against nonperformance by certain dealers. We also provided guarantees to third-parties related to the performance of contractual obligations by certain Caterpillar dealers. These guarantees have varying terms and cover potential financial losses incurred by the third-parties resulting from the dealers' nonperformance.

In 2016, we provided a guarantee to an end user related to the performance of contractual obligations by a Caterpillar dealer. Under the guarantee, which expires in 2025, non-performance by the Caterpillar dealer could require Caterpillar to satisfy the contractual obligations by providing goods, services or financial compensation to the end user up to an annual designated cap.

Customer loan guarantees

We provide loan guarantees to third-party lenders for financing associated with machinery purchased by customers. These guarantees have varying terms and are secured by the machinery. In addition, Cat Financial participates in standby letters of credit issued to third parties on behalf of their customers. These standby letters of credit have varying terms and beneficiaries and are secured by customer assets.

Supplier consortium performance guarantee

We have provided a guarantee to one of our customers in Brazil related to the performance of contractual obligations by a supplier consortium to which one of our Caterpillar subsidiaries is a member. The guarantee covers potential damages (some of them capped) incurred by the customer resulting from the supplier consortium's non-performance. The guarantee will expire when the supplier consortium performs all its contractual obligations, which is expected to be completed in 2025.

Third party logistics business lease guarantees

We have provided guarantees to third-party lessors for certain properties leased by a third party logistics business, formerly Caterpillar Logistics Services LCC, in which we sold our 35 percent equity interest in the first quarter of 2015. The guarantees are for the possibility that the third party logistics business would default on real estate lease payments. The guarantees were granted at lease inception and generally will expire at the end of the lease terms.

We have dealer performance guarantees and third party performance guarantees that do not limit potential payment to end users related to indemnities and other commercial contractual obligations. For these unlimited guarantees, we are unable to estimate a maximum potential amount of future payments that could result from claims made.

No significant loss has been experienced or is anticipated under any of these guarantees. At both June 30, 2017 and December 31, 2016, the related liability was $8 million. The maximum potential amount of future payments (undiscounted and without reduction for any amounts that may possibly be recovered under recourse or collateralized provisions) we could be required to make under the guarantees are as follows:

(Millions of dollars)	**June 30, 2017**	**December 31, 2016**
Caterpillar dealer performance guarantees	$ 1,425	$ 1,384
Customer loan guarantees	41	51
Supplier consortium performance guarantee	300	278
Third party logistics business lease guarantees	78	87
Other guarantees	86	56
Total guarantees	$ 1,930	$ 1,856

Cat Financial provides guarantees to repurchase certain loans of Caterpillar dealers from a special-purpose corporation (SPC) that qualifies as a variable interest entity. The purpose of the SPC is to provide short-term working capital loans to Caterpillar dealers. This SPC issues commercial paper and uses the proceeds to fund its loan program. Cat Financial has a loan purchase agreement with the SPC that obligates Cat Financial to purchase certain loans that are not paid at maturity. Cat Financial receives a fee for providing this guarantee, which provides a source of liquidity for the SPC. Cat Financial is the primary beneficiary of the SPC as its guarantees result in Cat Financial having both the power to direct the activities that most significantly impact the SPC's economic performance and the obligation to absorb losses, and therefore Cat Financial has consolidated the financial statements of the SPC. As of June 30, 2017 and December 31, 2016, the SPC's assets of $1,135 million and $1,088 million, respectively, were primarily comprised of loans to dealers and the SPC's liabilities of $1,135 million and $1,087 million, respectively, were primarily comprised of commercial paper. The assets of the SPC are not available to pay Cat Financial's creditors. Cat Financial may be obligated to perform under the guarantee if the SPC experiences losses. No loss has been experienced or is anticipated under this loan purchase agreement.

Our product warranty liability is determined by applying historical claim rate experience to the current field population and dealer inventory. Generally, historical claim rates are based on actual warranty experience for each product by machine model/engine size by customer or dealer location (inside or outside North America). Specific rates are developed for each product shipment month and are updated monthly based on actual warranty claim experience.

(Millions of dollars)		**2017**
Warranty liability, January 1	$	1,258
Reduction in liability (payments)		(401)
Increase in liability (new warranties)		488
Warranty liability, June 30	$	1,345

(Millions of dollars)		**2016**
Warranty liability, January 1	$	1,354
Reduction in liability (payments)		(909)
Increase in liability (new warranties)		813
Warranty liability, December 31	$	1,258

11. Profit per share

Computations of profit per share:	**Three Months Ended June 30**		**Six Months Ended June 30**	
(Dollars in millions except per share data)	**2017**	**2016**	**2017**	**2016**
Profit for the period (A) [1]	$ 802	$ 550	$ 994	$ 821
Determination of shares (in millions):				
Weighted-average number of common shares outstanding (B)	590.2	584.1	588.8	583.4
Shares issuable on exercise of stock awards, net of shares assumed to be purchased out of proceeds at average market price	5.2	4.5	5.6	4.8
Average common shares outstanding for fully diluted computation (C) [2]	595.4	588.6	594.4	588.2
Profit per share of common stock:				
Assuming no dilution (A/B)	$ 1.36	$ 0.94	$ 1.69	$ 1.41
Assuming full dilution (A/C) [2]	$ 1.35	$ 0.93	$ 1.67	$ 1.40
Shares outstanding as of June 30 (in millions)			591.0	584.2

[1] Profit attributable to common shareholders.

[2] Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

SARs and stock options to purchase 8,062,177 common shares were outstanding for the three and six months ended June 30, 2017, which were not included in the computation of diluted earnings per share because the effect would have been anti-dilutive. For the three and six months ended June 30, 2016, there were outstanding SARs and stock options to purchase 26,168,384 and 28,919,076 common shares which were anti-dilutive.

In January 2014, the Board authorized the repurchase of up to $10.0 billion of Caterpillar common stock, which will expire on December 31, 2018. As of June 30, 2017, approximately $4.5 billion of the $10.0 billion authorization was spent.

12. Accumulated other comprehensive income (loss)

Comprehensive income and its components are presented in the Consolidated Statement of Comprehensive Income. Changes in Accumulated other comprehensive income (loss), net of tax, included in the Consolidated Statement of Changes in Shareholders' Equity, consisted of the following:

(Millions of dollars)	Foreign currency translation	Pension and other postretirement benefits	Derivative financial instruments	Available-for-sale securities	Total
Three Months Ended June 30, 2017					
Balance at March 31, 2017	$ (1,823)	$ 18	$ (65)	$ 43	$ (1,827)
Other comprehensive income (loss) before reclassifications	324	—	—	10	334
Amounts reclassified from accumulated other comprehensive (income) loss	—	(4)	26	—	22
Other comprehensive income (loss)	324	(4)	26	10	356
Balance at June 30, 2017	$ (1,499)	$ 14	$ (39)	$ 53	$ (1,471)
Three Months Ended June 30, 2016					
Balance at March 31, 2016	$ (1,545)	$ 39	$ (32)	$ 45	$ (1,493)
Other comprehensive income (loss) before reclassifications	(103)	(1)	(18)	10	(112)
Amounts reclassified from accumulated other comprehensive (income) loss	—	(9)	1	(20)	(28)
Other comprehensive income (loss)	(103)	(10)	(17)	(10)	(140)
Balance at June 30, 2016	$ (1,648)	$ 29	$ (49)	$ 35	$ (1,633)

(Millions of dollars)	Foreign currency translation	Pension and other postretirement benefits	Derivative financial instruments	Available-for-sale securities	Total
Six Months Ended June 30, 2017					
Balance at December 31, 2016	$ (1,970)	$ 14	$ (115)	$ 32	$ (2,039)
Other comprehensive income (loss) before reclassifications	469	8	10	18	505
Amounts reclassified from accumulated other comprehensive (income) loss	2	(8)	66	3	63
Other comprehensive income (loss)	471	—	76	21	568
Balance at June 30, 2017	$ (1,499)	$ 14	$ (39)	$ 53	$ (1,471)
Six Months Ended June 30, 2016					
Balance at December 31, 2015	$ (1,953)	$ (69)	$ (50)	$ 37	$ (2,035)
Other comprehensive income (loss) before reclassifications	305	117	(9)	16	429
Amounts reclassified from accumulated other comprehensive (income) loss	—	(19)	10	(18)	(27)
Other comprehensive income (loss)	305	98	1	(2)	402
Balance at June 30, 2016	$ (1,648)	$ 29	$ (49)	$ 35	$ (1,633)

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The effect of the reclassifications out of Accumulated other comprehensive income (loss) on the Consolidated Statement of Results of Operations is as follows:

(Millions of dollars)	Classification of income (expense)	Three Months Ended June 30 2017	2016
Pension and other postretirement benefits:			
Amortization of prior service credit (cost)	Note 9 [1]	$ 7	$ 15
Tax (provision) benefit		(3)	(6)
Reclassifications net of tax		$ 4	$ 9
Derivative financial instruments:			
Foreign exchange contracts	Other income (expense)	$ (41)	$ —
Interest rate contracts	Interest expense excluding Financial Products	(1)	(1)
Interest rate contracts	Interest expense of Financial Products	2	(1)
Reclassifications before tax		(40)	(2)
Tax (provision) benefit		14	1
Reclassifications net of tax		$ (26)	$ (1)
Available-for-sale securities:			
Realized gain (loss)	Other income (expense)	$ —	$ 30
Tax (provision) benefit		—	(10)
Reclassifications net of tax		$ —	$ 20
Total reclassifications from Accumulated other comprehensive income (loss)		$ (22)	$ 28

[1] Amounts are included in the calculation of net periodic benefit cost. See Note 9 for additional information.

(Millions of dollars)	Classification of income (expense)	Six Months Ended June 30 2017	2016
Foreign currency translation			
Gain (loss) on foreign currency translation	Other income (expense)	$ (2)	$ —
Tax (provision) benefit		—	—
Reclassifications net of tax		$ (2)	$ —
Pension and other postretirement benefits:			
Amortization of prior service credit (cost)	Note 9 [1]	$ 12	$ 30
Tax (provision) benefit		(4)	(11)
Reclassifications net of tax		$ 8	$ 19
Derivative financial instruments:			
Foreign exchange contracts	Other income (expense)	$ (102)	$ (10)
Interest rate contracts	Interest expense excluding Financial Products	(3)	(3)
Interest rate contracts	Interest expense of Financial Products	3	(3)
Reclassifications before tax		(102)	(16)
Tax (provision) benefit		36	6
Reclassifications net of tax		$ (66)	$ (10)
Available-for-sale securities:			
Realized gain (loss)	Other income (expense)	$ (4)	$ 27
Tax (provision) benefit		1	(9)
Reclassifications net of tax		$ (3)	$ 18
Total reclassifications from Accumulated other comprehensive income (loss)		$ (63)	$ 27

[1]Amounts are included in the calculation of net periodic benefit cost. See Note 9 for additional information.

13. Environmental and legal matters

The Company is regulated by federal, state and international environmental laws governing our use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, the investigation, remediation, and operating and maintenance costs are accrued against our earnings. Costs are accrued based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly basis. The amount recorded for environmental remediation is not material and is included in Accrued expenses. We believe there is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

On January 7, 2015, the Company received a grand jury subpoena from the U.S. District Court for the Central District of Illinois. The subpoena requests documents and information from the Company relating to, among other things, financial information concerning U.S. and non-U.S. Caterpillar subsidiaries (including undistributed profits of non-U.S. subsidiaries and the movement of cash among U.S. and non-U.S. subsidiaries). The Company has received additional subpoenas relating to this investigation requesting additional documents and information relating to, among other things, the purchase and resale of replacement parts by Caterpillar Inc. and non-U.S. Caterpillar subsidiaries, dividend distributions of certain non-U.S. Caterpillar subsidiaries, and Caterpillar SARL and related structures. On March 2-3, 2017, agents with the Department of Commerce, the Federal Deposit Insurance Corporation and the Internal Revenue Service executed search and seizure warrants at three facilities of the Company in the Peoria, Illinois area, including its corporate headquarters. The warrants identify, and agents seized, documents and information related to, among other things, the export of products from the United States, the movement of products between the United States and Switzerland, the relationship between Caterpillar Inc. and Caterpillar SARL, and sales outside the United States. It is the Company’s understanding that the warrants, which concern both tax and export activities, are related to the ongoing grand jury investigation. The Company is continuing to cooperate with this investigation. The Company is unable to predict the outcome or reasonably estimate any potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company’s consolidated results of operations, financial position or liquidity.

On March 20, 2014, Brazil’s Administrative Council for Economic Defense (CADE) published a Technical Opinion which named 18 companies and over 100 individuals as defendants, including two subsidiaries of Caterpillar Inc., MGE - Equipamentos e Serviços Ferroviários Ltda. (MGE) and Caterpillar Brasil Ltda. The publication of the Technical Opinion opened CADE's official administrative investigation into allegations that the defendants participated in anticompetitive bid activity for the construction and maintenance of metro and train networks in Brazil. While companies cannot be held criminally liable for anticompetitive conduct in Brazil, criminal charges have been brought against two current employees of MGE and one former employee of MGE involving the same conduct alleged by CADE. The Company has responded to all requests for information from the authorities. The Company is unable to predict the outcome or reasonably estimate the potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

On October 24, 2013, Progress Rail received a grand jury subpoena from the U.S. District Court for the Central District of California. The subpoena requests documents and information from Progress Rail, United Industries Corporation, a wholly-owned subsidiary of Progress Rail, and Caterpillar Inc. relating to allegations that Progress Rail conducted improper or unnecessary railcar inspections and repairs and improperly disposed of parts, equipment, tools and other items. In connection with this subpoena, Progress Rail was informed by the U.S. Attorney for the Central District of California that it is a target of a criminal investigation into potential violations of environmental laws and alleged improper business practices. The Company is cooperating with the authorities and is currently in discussions regarding a potential resolution of the matter. Although the Company believes a loss is probable, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

In addition, we are involved in other unresolved legal actions that arise in the normal course of business. The most prevalent of these unresolved actions involve disputes related to product design, manufacture and performance liability (including claimed asbestos and welding fumes exposure), contracts, employment issues, environmental matters, intellectual property rights, and securities laws. The aggregate range of reasonably possible losses in excess of accrued liabilities, if any, associated with these unresolved legal actions is not material. In some cases, we cannot reasonably estimate a range of loss because there is insufficient information regarding the matter. However, we believe there is no more than a remote chance that any liability arising from these matters would be material. Although it is not possible to predict with certainty the outcome of these unresolved legal actions, we believe that these actions will not individually or in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

14. Income taxes

The provision for income taxes for the first six months of 2017 reflects an estimated annual tax rate of 32 percent, which excludes the discrete items discussed in the following paragraph, compared to 25 percent for the first six months of 2016. The increase is primarily due to higher non-U.S. restructuring costs in 2017 that are taxed at relatively lower non-U.S. tax rates along with other changes in the geographic mix of profits from a tax perspective. Under the terms of a manufacturing service agreement, Caterpillar SARL (CSARL) will bear substantially all of the restructuring costs related to the closure of our Gosselies, Belgium, facility, reducing CSARL's profits taxable in Switzerland.

In addition during the first six months of 2017, a tax benefit of $27 million was recorded for the settlement of stock-based compensation awards with tax deductions in excess of cumulative U.S. GAAP compensation expense. This benefit was partially offset by a $15 million increase to prior year taxes related to the Gosselies, Belgium, facility, restructuring costs.

In January 2015, we received a Revenue Agent's Report from the Internal Revenue Service (IRS) indicating the end of the field examination of our U.S. income tax returns for 2007 to 2009 including the impact of a loss carryback to 2005. The IRS field examination for 2010 to 2012 that began in 2015 is expected to be completed in 2017. In November 2016, we received notices of proposed adjustments from the IRS for the 2010 to 2012 exam. In both these audits, the IRS has proposed to tax in the United States profits earned from certain parts transactions by CSARL, based on the IRS examination team's application of the "substance-over-form" or "assignment-of-income" judicial doctrines. We are vigorously contesting the proposed increases to tax and penalties for these years of approximately $2 billion. We believe that the relevant transactions complied with applicable tax laws and did not violate judicial doctrines. We have filed U.S. income tax returns on this same basis for years after 2012. Based on the information currently available, we do not anticipate a significant increase or decrease to our unrecognized tax benefits for this matter within the next 12 months. We currently believe the ultimate disposition of this matter will not have a material adverse effect on our consolidated financial position, liquidity or results of operations.

Due to better than previously forecasted 2017 U.S. GAAP results in certain U.S. state jurisdictions, it is reasonably possible the valuation allowance for U.S. state deferred tax assets will decrease in the next twelve months.

15. Segment information

A. Basis for segment information

Our Executive Office is comprised of five Group Presidents, an Executive Vice President and a CEO. Group Presidents are accountable for a related set of end-to-end businesses that they manage. The Executive Vice President leads the Law and Public Policy Division. The CEO allocates resources and manages performance at the Group President level. As such, the CEO serves as our Chief Operating Decision Maker and operating segments are primarily based on the Group President reporting structure.

Three of our operating segments, Construction Industries, Resource Industries and Energy & Transportation are led by Group Presidents. One operating segment, Financial Products, is led by a Group President who also has responsibility for Corporate Services. Corporate Services is a cost center primarily responsible for the performance of certain support functions globally and to provide centralized services; it does not meet the definition of an operating segment. One Group President leads two smaller operating segments that are included in the All Other operating segments. The Law and Public Policy Division is a cost center and does not meet the definition of an operating segment.

B. Description of segments

We have six operating segments, of which four are reportable segments. Following is a brief description of our reportable segments and the business activities included in the All Other operating segments:

Construction Industries: A segment primarily responsible for supporting customers using machinery in infrastructure, forestry and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes backhoe loaders, small wheel loaders, small track-type tractors, skid steer loaders, multi-terrain loaders, mini excavators, compact wheel loaders, telehandlers, select work tools, small, medium and large track excavators, wheel excavators, medium wheel loaders, compact track loaders, medium track-type tractors, track-type loaders, motor graders, pipelayers, forestry and paving products and related parts. Inter-segment sales are a source of revenue for this segment.

Resource Industries: A segment primarily responsible for supporting customers using machinery in mining, quarry, waste, and material handling applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors, large mining trucks, hard rock vehicles, longwall miners, electric rope shovels, draglines, hydraulic shovels, track and rotary drills, highwall miners, large wheel loaders, off-highway trucks, articulated trucks, wheel tractor scrapers, wheel dozers, landfill compactors, soil compactors, material handlers, continuous miners, scoops and haulers, hardrock continuous mining systems, select work tools, machinery components, electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics and autonomous machine capabilities. Resource Industries also manages areas that provide services to other parts of the company, including integrated manufacturing and research and development. Inter-segment sales are a source of revenue for this segment.

Energy & Transportation: A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related parts across industries serving power generation, industrial, oil and gas and transportation applications, including marine and rail-related businesses. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support of turbines and turbine-related services, reciprocating engine powered generator sets, integrated systems used in the electric power generation industry, reciprocating engines and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines supplied to the industrial industry as well as Cat machinery; the remanufacturing of Cat engines and components and remanufacturing services for other companies; the business strategy, product design, product management and development, manufacturing, remanufacturing, leasing and service of diesel-electric locomotives and components and other rail-related products and services and product support of on-highway vocational trucks for North America. Inter-segment sales are a source of revenue for this segment.

Financial Products Segment: Provides financing alternatives to customers and dealers around the world for Caterpillar products, as well as financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. Financing plans include operating and finance leases, installment sale contracts, working capital loans and wholesale financing plans. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of our equipment.

All Other operating segments: Primarily includes activities such as: business strategy, product management and development, and manufacturing of filters and fluids, undercarriage, tires and rims, ground engaging tools, fluid transfer products, precision seals, and rubber sealing and connecting components primarily for Cat products; parts distribution; distribution services responsible for dealer development and administration including a wholly owned dealer in Japan, dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; digital investments for new customer and dealer solutions that integrate data analytics with state-of-the art digital technologies while transforming the buying experience. Results for the All Other operating segments are included as a reconciling item between reportable segments and consolidated external reporting.

C. Segment measurement and reconciliations

There are several methodology differences between our segment reporting and our external reporting. The following is a list of the more significant methodology differences:

- Machinery, Energy & Transportation segment net assets generally include inventories, receivables, property, plant and equipment, goodwill, intangibles, accounts payable, and customer advances. Liabilities other than accounts payable and customer advances are generally managed at the corporate level and are not included in segment operations. Financial Products Segment assets generally include all categories of assets.
- Segment inventories and cost of sales are valued using a current cost methodology.
- Goodwill allocated to segments is amortized using a fixed amount based on a 20 year useful life. This methodology difference only impacts segment assets; no goodwill amortization expense is included in segment profit. In addition, only a portion of goodwill for certain acquisitions made in 2011 or later has been allocated to segments.
- The present value of future lease payments for certain Machinery, Energy & Transportation operating leases is included in segment assets. The estimated financing component of the lease payments is excluded.
- Currency exposures for Machinery, Energy & Transportation are generally managed at the corporate level and the effects of changes in exchange rates on results of operations within the year are not included in segment profit. The net difference created in the translation of revenues and costs between exchange rates used for U.S. GAAP reporting and exchange rates used for segment reporting is recorded as a methodology difference.

- Stock-based compensation expense is not included in segment profit.

- Postretirement benefit expenses are split; segments are generally responsible for service and prior service costs, with the remaining elements of net periodic benefit cost included as a methodology difference.

- Machinery, Energy & Transportation segment profit is determined on a pretax basis and excludes interest expense and other income/expense items. Financial Products Segment profit is determined on a pretax basis and includes other income/expense items.

Reconciling items are created based on accounting differences between segment reporting and our consolidated external reporting. Please refer to pages 39 to 45 for financial information regarding significant reconciling items. Most of our reconciling items are self-explanatory given the above explanations. For the reconciliation of profit, we have grouped the reconciling items as follows:

- **Corporate costs:** These costs are related to corporate requirements primarily for compliance and legal functions for the benefit of the entire organization.

- **Restructuring costs:** Primarily costs for employee separation, long-lived asset impairments and contract terminations. These costs are included in Other Operating (Income) Expenses. Restructuring costs also include other exit-related costs primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management costs and also LIFO inventory decrement benefits from inventory liquidations at closed facilities (primarily included in Cost of goods sold). A table, Reconciliation of Restructuring costs on page 42, has been included to illustrate how segment profit would have been impacted by the restructuring costs. See Note 18 for more information.

- **Methodology differences:** See previous discussion of significant accounting differences between segment reporting and consolidated external reporting.

- **Timing:** Timing differences in the recognition of costs between segment reporting and consolidated external reporting. For example, certain costs are reported on the cash basis for segment reporting and the accrual basis for consolidated external reporting.

Reportable Segments
Three Months Ended June 30
(Millions of dollars)

2017

	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit	Segment assets at June 30	Capital expenditures
Construction Industries	$ 4,930	$ 29	$ 4,959	$ 100	$ 901	$ 4,475	$ 36
Resource Industries	1,759	77	1,836	130	97	6,584	31
Energy & Transportation	3,941	827	4,768	162	700	7,405	91
Machinery, Energy & Transportation	$ 10,630	$ 933	$ 11,563	$ 392	$ 1,698	$ 18,464	$ 158
Financial Products Segment	776	—	776	204	191	36,506	464
Total	$ 11,406	$ 933	$ 12,339	$ 596	$ 1,889	$ 54,970	$ 622

2016

	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit (loss)	Segment assets at December 31	Capital expenditures
Construction Industries	$ 4,426	$ 12	$ 4,438	$ 116	$ 550	$ 5,367	$ 40
Resource Industries	1,457	57	1,514	153	(163)	7,135	59
Energy & Transportation	3,750	658	4,408	169	602	7,791	96
Machinery, Energy & Transportation	$ 9,633	$ 727	$ 10,360	$ 438	$ 989	$ 20,293	$ 195
Financial Products Segment	759	—	759	213	202	35,224	612
Total	$ 10,392	$ 727	$ 11,119	$ 651	$ 1,191	$ 55,517	$ 807

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Reportable Segments
Six Months Ended June 30
(Millions of dollars)

	2017						
	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit	Segment assets at June 30	Capital expenditures
Construction Industries	$ 9,021	$ 38	$ 9,059	$ 202	$ 1,536	$ 4,475	$ 57
Resource Industries	3,429	168	3,597	257	255	6,584	52
Energy & Transportation	7,297	1,607	8,904	320	1,252	7,405	207
Machinery, Energy & Transportation	$ 19,747	$ 1,813	$ 21,560	$ 779	$ 3,043	$ 18,464	$ 316
Financial Products Segment	1,536	—	1,536	412	374	36,506	710
Total	$ 21,283	$ 1,813	$ 23,096	$ 1,191	$ 3,417	$ 54,970	$ 1,026

	2016						
	External sales and revenues	Inter-segment sales and revenues	Total sales and revenues	Depreciation and amortization	Segment profit (loss)	Segment assets at December 31	Capital expenditures
Construction Industries	$ 8,469	$ 20	$ 8,489	$ 229	$ 990	$ 5,367	$ 68
Resource Industries	2,906	128	3,034	308	(259)	7,135	94
Energy & Transportation	7,028	1,290	8,318	335	1,012	7,791	243
Machinery, Energy & Transportation	$ 18,403	$ 1,438	$ 19,841	$ 872	$ 1,743	$ 20,293	$ 405
Financial Products Segment	1,502	—	1,502	418	370	35,224	909
Total	$ 19,905	$ 1,438	$ 21,343	$ 1,290	$ 2,113	$ 55,517	$ 1,314

Reconciliation of Sales and revenues:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
Three Months Ended June 30, 2017				
Total external sales and revenues from reportable segments	$ 10,630	$ 776	$ —	$ 11,406
All Other operating segments	33	—	—	33
Other	(24)	17	(101) [1]	(108)
Total sales and revenues	$ 10,639	$ 793	$ (101)	$ 11,331
Three Months Ended June 30, 2016				
Total external sales and revenues from reportable segments	$ 9,633	$ 759	$ —	$ 10,392
All Other operating segments	41	—	—	41
Other	(29)	19	(81) [1]	(91)
Total sales and revenues	$ 9,645	$ 778	$ (81)	$ 10,342

[1] Elimination of Financial Products revenues from Machinery, Energy & Transportation.

Reconciliation of Sales and revenues:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
Six Months Ended June 30, 2017				
Total external sales and revenues from reportable segments	$ 19,747	$ 1,536	$ —	$ 21,283
All Other operating segments	70	—	—	70
Other	(48)	34	(186) [1]	(200)
Total sales and revenues	$ 19,769	$ 1,570	$ (186)	$ 21,153
Six Months Ended June 30, 2016				
Total external sales and revenues from reportable segments	$ 18,403	$ 1,502	$ —	$ 19,905
All Other operating segments	79	—	—	79
Other	(57)	35	(159) [1]	(181)
Total sales and revenues	$ 18,425	$ 1,537	$ (159)	$ 19,803

[1] Elimination of Financial Products revenues from Machinery, Energy & Transportation.

Reconciliation of Consolidated profit before taxes:

(Millions of dollars)	**Machinery, Energy & Transportation**	**Financial Products**	**Consolidated Total**
Three Months Ended June 30, 2017			
Total profit from reportable segments	$ 1,698	$ 191	$ 1,889
All Other operating segments	(20)	—	(20)
Cost centers	(11)	—	(11)
Corporate costs	(174)	—	(174)
Timing	(69)	—	(69)
Restructuring costs	(169)	—	(169)
Methodology differences:			
Inventory/cost of sales	(8)	—	(8)
Postretirement benefit expense	38	—	38
Stock-based compensation expense	(65)	(3)	(68)
Financing costs	(123)	—	(123)
Currency	(119)	—	(119)
Other income/expense methodology differences	21	—	21
Other methodology differences	(28)	—	(28)
Total consolidated profit before taxes	$ 971	$ 188	$ 1,159
Three Months Ended June 30, 2016			
Total profit from reportable segments	$ 989	$ 202	$ 1,191
All Other operating segments	(14)	—	(14)
Cost centers	14	—	14
Corporate costs	(149)	—	(149)
Timing	9	—	9
Restructuring costs	(137)	(2)	(139)
Methodology differences:			
Inventory/cost of sales	(16)	—	(16)
Postretirement benefit expense	56	—	56
Stock-based compensation expense	(43)	(2)	(45)
Financing costs	(132)	—	(132)
Currency	28	—	28
Other income/expense methodology differences	(54)	—	(54)
Other methodology differences	(11)	1	(10)
Total consolidated profit before taxes	$ 540	$ 199	$ 739

Reconciliation of Consolidated profit before taxes:

(Millions of dollars)	**Machinery, Energy & Transportation**	**Financial Products**	**Consolidated Total**
Six Months Ended June 30, 2017			
Total profit from reportable segments	$ 3,043	$ 374	$ 3,417
All Other operating segments	(33)	—	(33)
Cost centers	(4)	—	(4)
Corporate costs	(289)	—	(289)
Timing	(107)	—	(107)
Restructuring costs	(920)	(1)	(921)
Methodology differences:			
Inventory/cost of sales	(76)	—	(76)
Postretirement benefit expense	79	—	79
Stock-based compensation expense	(112)	(5)	(117)
Financing costs	(253)	—	(253)
Currency	(158)	—	(158)
Other income/expense methodology differences	(34)	—	(34)
Other methodology differences	(60)	4	(56)
Total consolidated profit before taxes	$ 1,076	$ 372	$ 1,448
Six Months Ended June 30, 2016			
Total profit from reportable segments	$ 1,743	$ 370	$ 2,113
All Other operating segments	(21)	—	(21)
Cost centers	39	—	39
Corporate costs	(308)	—	(308)
Timing	41	—	41
Restructuring costs	(296)	(4)	(300)
Methodology differences:			
Inventory/cost of sales	(19)	—	(19)
Postretirement benefit expense	111	—	111
Stock-based compensation expense	(140)	(6)	(146)
Financing costs	(267)	—	(267)
Currency	(12)	—	(12)
Other income/expense methodology differences	(110)	—	(110)
Other methodology differences	(23)	6	(17)
Total consolidated profit before taxes	$ 738	$ 366	$ 1,104

Reconciliation of Restructuring costs:

As noted above, restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes. Had we included the amounts in the segments' results, the profit would have been as shown below:

Reconciliation of Restructuring costs: (Millions of dollars)	**Segment profit (loss)**	**Restructuring costs**	**Segment profit (loss) with restructuring costs**
Three Months Ended June 30, 2017			
Construction Industries	$ 901	$ (27)	$ 874
Resource Industries	97	(111)	(14)
Energy & Transportation	700	(44)	656
Financial Products Segment	191	(1)	190
All Other operating segments	(20)	(13)	(33)
Total	$ 1,869	$ (196)	$ 1,673
Three Months Ended June 30, 2016			
Construction Industries	$ 550	$ (3)	$ 547
Resource Industries	(163)	(69)	(232)
Energy & Transportation	602	(55)	547
Financial Products Segment	202	(2)	200
All Other operating segments	(14)	(9)	(23)
Total	$ 1,177	$ (138)	$ 1,039

Reconciliation of Restructuring costs: (Millions of dollars)	**Segment profit (loss)**	**Restructuring costs**	**Segment profit (loss) with restructuring costs**
Six Months Ended June 30, 2017			
Construction Industries	$ 1,536	$ (694)	$ 842
Resource Industries	255	(170)	85
Energy & Transportation	1,252	(58)	1,194
Financial Products Segment	374	(2)	372
All Other operating segments	(33)	(19)	(52)
Total	$ 3,384	$ (943)	$ 2,441
Six Months Ended June 30, 2016			
Construction Industries	$ 990	$ (25)	$ 965
Resource Industries	(259)	(94)	(353)
Energy & Transportation	1,012	(155)	857
Financial Products Segment	370	(4)	366
All Other operating segments	(21)	(14)	(35)
Total	$ 2,092	$ (292)	$ 1,800

Reconciliation of Assets:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
June 30, 2017				
Total assets from reportable segments	$ 18,464	$ 36,506	$ —	$ 54,970
All Other operating segments	1,368	—	—	1,368
Items not included in segment assets:				
Cash and short-term investments	8,926	—	—	8,926
Intercompany receivables	1,662	—	(1,662)	—
Investment in Financial Products	4,169	—	(4,169)	—
Deferred income taxes	3,651	—	(886)	2,765
Goodwill and intangible assets	4,128	—	—	4,128
Property, plant and equipment – net and other assets	1,935	—	—	1,935
Operating lease methodology difference	(190)	—	—	(190)
Inventory methodology differences	(2,284)	—	—	(2,284)
Intercompany loan included in Financial Products' assets	—	—	(1,500)	(1,500)
Liabilities included in segment assets	8,890	—	—	8,890
Other	(454)	(14)	(30)	(498)
Total assets	$ 50,265	$ 36,492	$ (8,247)	$ 78,510
December 31, 2016				
Total assets from reportable segments	$ 20,293	$ 35,224	$ —	$ 55,517
All Other operating segments	1,381	—	—	1,381
Items not included in segment assets:				
Cash and short-term investments	5,257	—	—	5,257
Intercompany receivables	1,713	—	(1,713)	—
Investment in Financial Products	3,638	—	(3,638)	—
Deferred income taxes	3,648	—	(947)	2,701
Goodwill and intangible assets	3,883	—	—	3,883
Property, plant and equipment – net and other assets	1,645	—	—	1,645
Operating lease methodology difference	(186)	—	—	(186)
Inventory methodology differences	(2,373)	—	—	(2,373)
Liabilities included in segment assets	7,400	—	—	7,400
Other	(436)	(29)	(56)	(521)
Total assets	$ 45,863	$ 35,195	$ (6,354)	$ 74,704

Reconciliations of Depreciation and amortization:			
(Millions of dollars)	**Machinery, Energy & Transportation**	**Financial Products**	**Consolidated Total**
Three Months Ended June 30, 2017			
Total depreciation and amortization from reportable segments	$ 392	$ 204	$ 596
Items not included in segment depreciation and amortization:			
All Other operating segments	56	—	56
Cost centers	35	—	35
Other	24	9	33
Total depreciation and amortization	$ 507	$ 213	$ 720
Three Months Ended June 30, 2016			
Total depreciation and amortization from reportable segments	$ 438	$ 213	$ 651
Items not included in segment depreciation and amortization:			
All Other operating segments	53	—	53
Cost centers	38	—	38
Other	2	10	12
Total depreciation and amortization	$ 531	$ 223	$ 754

Reconciliations of Depreciation and amortization:			
(Millions of dollars)	**Machinery, Energy & Transportation**	**Financial Products**	**Consolidated Total**
Six Months Ended June 30, 2017			
Total depreciation and amortization from reportable segments	$ 779	$ 412	$ 1,191
Items not included in segment depreciation and amortization:			
All Other operating segments	110	—	110
Cost centers	70	—	70
Other	39	20	59
Total depreciation and amortization	$ 998	$ 432	$ 1,430
Six Months Ended June 30, 2016			
Total depreciation and amortization from reportable segments	$ 872	$ 418	$ 1,290
Items not included in segment depreciation and amortization:			
All Other operating segments	105	—	105
Cost centers	78	—	78
Other	1	20	21
Total depreciation and amortization	$ 1,056	$ 438	$ 1,494

Reconciliations of Capital expenditures:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
Three Months Ended June 30, 2017				
Total capital expenditures from reportable segments	$ 158	$ 464	$ —	$ 622
Items not included in segment capital expenditures:				
All Other operating segments	25	—	—	25
Cost centers	14	—	—	14
Timing	(9)	—	—	(9)
Other	(18)	(14)	(5)	(37)
Total capital expenditures	$ 170	$ 450	$ (5)	$ 615
Three Months Ended June 30, 2016				
Total capital expenditures from reportable segments	$ 195	$ 612	$ —	$ 807
Items not included in segment capital expenditures:				
All Other operating segments	51	—	—	51
Cost centers	16	—	—	16
Other	(23)	22	(8)	(9)
Total capital expenditures	$ 239	$ 634	$ (8)	$ 865

Reconciliations of Capital expenditures:

(Millions of dollars)	Machinery, Energy & Transportation	Financial Products	Consolidating Adjustments	Consolidated Total
Six Months Ended June 30, 2017				
Total capital expenditures from reportable segments	$ 316	$ 710	$ —	$ 1,026
Items not included in segment capital expenditures:				
All Other operating segments	45	—	—	45
Cost centers	23	—	—	23
Timing	79	—	—	79
Other	(84)	43	(8)	(49)
Total capital expenditures	$ 379	$ 753	$ (8)	$ 1,124
Six Months Ended June 30, 2016				
Total capital expenditures from reportable segments	$ 405	$ 909	$ —	$ 1,314
Items not included in segment capital expenditures:				
All Other operating segments	67	—	—	67
Cost centers	28	—	—	28
Timing	217	—	—	217
Other	(99)	95	(17)	(21)
Total capital expenditures	$ 618	$ 1,004	$ (17)	$ 1,605

16. Cat Financial financing activities

Allowance for credit losses

The allowance for credit losses is an estimate of the losses inherent in Cat Financial's finance receivable portfolio and includes consideration of accounts that have been individually identified as impaired, as well as pools of finance receivables where it is probable that certain receivables in the pool are impaired but the individual accounts cannot yet be identified. In identifying and measuring impairment, management takes into consideration past loss experience, known and inherent risks in the portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of underlying collateral and current economic conditions.

Accounts are identified for individual review based on past-due status and using information available about the customer, such as financial statements, news reports and published credit ratings, as well as general information regarding industry trends and the economic environment in which Cat Financial's customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated and determined to be impaired is based either on the present value of expected future cash flows discounted at the receivables' effective interest rate or the fair value of the collateral for collateral-dependent receivables, or the observable market price of the receivable. In determining collateral value, Cat Financial estimates the current fair market value of the collateral less selling costs. Cat Financial also considers credit enhancements such as additional collateral and contractual third-party guarantees. The allowance for credit losses attributable to the remaining accounts not yet individually identified as impaired is estimated based on loss forecast models utilizing probabilities of default, our estimate of the loss emergence period and the estimated loss given default. In addition, qualitative factors not able to be fully captured in the loss forecast models including industry trends, macroeconomic factors and model imprecision are considered in the evaluation of the adequacy of the allowance for credit losses. These qualitative factors are subjective and require a degree of management judgment.

Cat Financial's allowance for credit losses is segregated into two portfolio segments:

- Customer - Finance receivables with retail customers.
- Dealer - Finance receivables with Caterpillar dealers.

A portfolio segment is the level at which the company develops a systematic methodology for determining its allowance for credit losses.

Cat Financial further evaluates portfolio segments by the class of finance receivables, which is defined as a level of information (below a portfolio segment) in which the finance receivables have the same initial measurement attribute and a similar method for assessing and monitoring credit risk. Typically, Cat Financial's finance receivables within a geographic area have similar credit risk profiles and methods for assessing and monitoring credit risk. Cat Financial's classes, which align with management reporting for credit losses, are as follows:

- North America - Includes finance receivables originated in the United States or Canada.
- Europe - Includes finance receivables originated in Europe, Africa, Middle East and the Commonwealth of Independent States.
- Asia Pacific - Includes finance receivables originated in Australia, New Zealand, China, Japan and Southeast Asia.
- Mining - Includes finance receivables related to large mining customers worldwide and project financing in various countries.
- Latin America - Includes finance receivables originated in Central and South American countries and Mexico.
- Caterpillar Power Finance - Includes finance receivables related to marine vessels with Caterpillar engines worldwide and Caterpillar electrical power generation, gas compression and co-generation systems and non-Caterpillar equipment that is powered by these systems worldwide.

An analysis of the allowance for credit losses was as follows:

(Millions of dollars)	June 30, 2017		
Allowance for Credit Losses:	**Customer**	**Dealer**	**Total**
Balance at beginning of year	$ 331	$ 10	$ 341
Receivables written off	(62)	—	(62)
Recoveries on receivables previously written off	21	—	21
Provision for credit losses	31	—	31
Other	4	—	4
Balance at end of period	$ 325	$ 10	$ 335
Individually evaluated for impairment	$ 113	$ —	$ 113
Collectively evaluated for impairment	212	10	222
Ending Balance	$ 325	$ 10	$ 335
Recorded Investment in Finance Receivables:			
Individually evaluated for impairment	$ 898	$ —	$ 898
Collectively evaluated for impairment	18,101	3,423	21,524
Ending Balance	$ 18,999	$ 3,423	$ 22,422

(Millions of dollars)	December 31, 2016		
Allowance for Credit Losses:	**Customer**	**Dealer**	**Total**
Balance at beginning of year	$ 327	$ 9	$ 336
Receivables written off	(158)	—	(158)
Recoveries on receivables previously written off	35	—	35
Provision for credit losses	132	1	133
Other	(5)	—	(5)
Balance at end of year	$ 331	$ 10	$ 341
Individually evaluated for impairment	$ 85	$ —	$ 85
Collectively evaluated for impairment	246	10	256
Ending Balance	$ 331	$ 10	$ 341
Recorded Investment in Finance Receivables:			
Individually evaluated for impairment	$ 786	$ —	$ 786
Collectively evaluated for impairment	18,236	3,375	21,611
Ending Balance	$ 19,022	$ 3,375	$ 22,397

Credit quality of finance receivables

At origination, Cat Financial evaluates credit risk based on a variety of credit quality factors including prior payment experience, customer financial information, credit-rating agency ratings, loan-to-value ratios and other internal metrics. On an ongoing basis, Cat Financial monitors credit quality based on past-due status and collection experience as there is a meaningful correlation between the past-due status of customers and the risk of loss.

In determining past-due status, Cat Financial considers the entire recorded investment in finance receivables past due when any installment is over 30 days past due. The tables below summarize the recorded investment in finance receivables by aging category.

(Millions of dollars)	June 30, 2017 31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing
Customer							
North America	$ 57	$ 13	$ 52	$ 122	$ 7,856	$ 7,978	$ 7
Europe	23	8	57	88	2,533	2,621	8
Asia Pacific	23	12	12	47	1,701	1,748	4
Mining	—	—	52	52	1,726	1,778	—
Latin America	54	30	224	308	1,677	1,985	—
Caterpillar Power Finance	27	5	135	167	2,722	2,889	41
Dealer							
North America	—	—	—	—	2,033	2,033	—
Europe	—	—	—	—	140	140	—
Asia Pacific	—	—	—	—	543	543	—
Mining	—	—	—	—	3	3	—
Latin America	—	—	—	—	702	702	—
Caterpillar Power Finance	—	—	—	—	2	2	—
Total	$ 184	$ 68	$ 532	$ 784	$ 21,638	$ 22,422	$ 60

(Millions of dollars)	December 31, 2016 31-60 Days Past Due	61-90 Days Past Due	91+ Days Past Due	Total Past Due	Current	Recorded Investment in Finance Receivables	91+ Still Accruing
Customer							
North America	$ 50	$ 16	$ 59	$ 125	$ 7,938	$ 8,063	$ 5
Europe	16	12	39	67	2,388	2,455	6
Asia Pacific	17	7	15	39	1,435	1,474	4
Mining	3	2	63	68	1,756	1,824	2
Latin America	40	33	214	287	1,808	2,095	—
Caterpillar Power Finance	11	9	73	93	3,018	3,111	1
Dealer							
North America	—	—	—	—	1,916	1,916	—
Europe	—	—	—	—	161	161	—
Asia Pacific	—	—	—	—	541	541	—
Mining	—	—	—	—	3	3	—
Latin America	—	—	—	—	752	752	—
Caterpillar Power Finance	—	—	—	—	2	2	—
Total	$ 137	$ 79	$ 463	$ 679	$ 21,718	$ 22,397	$ 18

Impaired finance receivables

For all classes, a finance receivable is considered impaired, based on current information and events, if it is probable that Cat Financial will be unable to collect all amounts due according to the contractual terms. Impaired finance receivables include finance receivables that have been restructured and are considered to be troubled debt restructurings.

There were no impaired finance receivables as of June 30, 2017 or December 31, 2016, for the Dealer portfolio segment. Cat Financial's recorded investment in impaired finance receivables and the related unpaid principal balances and allowance for the Customer portfolio segment were as follows:

	June 30, 2017			December 31, 2016		
(Millions of dollars)	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**	**Recorded Investment**	**Unpaid Principal Balance**	**Related Allowance**
Impaired Finance Receivables With No Allowance Recorded						
North America	$ 13	$ 13	$ —	$ 10	$ 10	$ —
Europe	48	47	—	49	48	—
Asia Pacific	29	29	—	3	2	—
Mining	130	130	—	129	129	—
Latin America	68	67	—	68	68	—
Caterpillar Power Finance	158	162	—	271	271	—
Total	$ 446	$ 448	$ —	$ 530	$ 528	$ —
Impaired Finance Receivables With An Allowance Recorded						
North America	$ 49	$ 48	$ 20	$ 61	$ 60	$ 22
Europe	4	4	2	7	7	3
Asia Pacific	29	29	3	50	50	8
Mining	—	—	—	—	—	—
Latin America	107	119	43	93	104	34
Caterpillar Power Finance	263	261	45	45	44	18
Total	$ 452	$ 461	$ 113	$ 256	$ 265	$ 85
Total Impaired Finance Receivables						
North America	$ 62	$ 61	$ 20	$ 71	$ 70	$ 22
Europe	52	51	2	56	55	3
Asia Pacific	58	58	3	53	52	8
Mining	130	130	—	129	129	—
Latin America	175	186	43	161	172	34
Caterpillar Power Finance	421	423	45	316	315	18
Total	$ 898	$ 909	$ 113	$ 786	$ 793	$ 85

(Millions of dollars)	Three Months Ended June 30, 2017		Three Months Ended June 30, 2016	
	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
Impaired Finance Receivables With No Allowance Recorded				
North America	$ 11	$ —	$ 24	$ 1
Europe	48	1	44	—
Asia Pacific	30	1	3	—
Mining	130	3	80	—
Latin America	67	—	29	—
Caterpillar Power Finance	257	3	273	2
Total	$ 543	$ 8	$ 453	$ 3
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 52	$ 1	$ 25	$ —
Europe	5	—	12	—
Asia Pacific	30	—	36	1
Mining	—	—	13	—
Latin America	107	1	57	—
Caterpillar Power Finance	125	—	45	1
Total	$ 319	$ 2	$ 188	$ 2
Total Impaired Finance Receivables				
North America	$ 63	$ 1	$ 49	$ 1
Europe	53	1	56	—
Asia Pacific	60	1	39	1
Mining	130	3	93	—
Latin America	174	1	86	—
Caterpillar Power Finance	382	3	318	3
Total	$ 862	$ 10	$ 641	$ 5

(Millions of dollars)	Six Months Ended June 30, 2017 Average Recorded Investment	Six Months Ended June 30, 2017 Interest Income Recognized	Six Months Ended June 30, 2016 Average Recorded Investment	Six Months Ended June 30, 2016 Interest Income Recognized
Impaired Finance Receivables With No Allowance Recorded				
North America	$ 11	$ —	$ 19	$ 1
Europe	48	1	43	—
Asia Pacific	18	1	2	—
Mining	129	4	80	1
Latin America	70	1	29	—
Caterpillar Power Finance	258	6	262	5
Total	$ 534	$ 13	$ 435	$ 7
Impaired Finance Receivables With An Allowance Recorded				
North America	$ 56	$ 1	$ 20	$ —
Europe	6	—	12	—
Asia Pacific	38	1	35	2
Mining	—	—	12	—
Latin America	101	2	54	1
Caterpillar Power Finance	96	1	53	1
Total	$ 297	$ 5	$ 186	$ 4
Total Impaired Finance Receivables				
North America	$ 67	$ 1	$ 39	$ 1
Europe	54	1	55	—
Asia Pacific	56	2	37	2
Mining	129	4	92	1
Latin America	171	3	83	1
Caterpillar Power Finance	354	7	315	6
Total	$ 831	$ 18	$ 621	$ 11

Recognition of income is suspended and the finance receivable is placed on non-accrual status when management determines that collection of future income is not probable (generally after 120 days past due). Recognition is resumed and previously suspended income is recognized when the finance receivable becomes current and collection of remaining amounts is considered probable. Payments received while the finance receivable is on non-accrual status are applied to interest and principal in accordance with the contractual terms.

As of June 30, 2017 and December 31, 2016, there were no finance receivables on non-accrual status for the Dealer portfolio segment.

The recorded investment in customer finance receivables on non-accrual status was as follows:

(Millions of dollars)	June 30, 2017	December 31, 2016
North America	$ 57	$ 66
Europe	51	35
Asia Pacific	11	12
Mining	56	69
Latin America	284	307
Caterpillar Power Finance	244	90
Total	$ 703	$ 579

Troubled Debt Restructurings

A restructuring of a finance receivable constitutes a troubled debt restructuring (TDR) when the lender grants a concession it would not otherwise consider to a borrower experiencing financial difficulties. Concessions granted may include extended contract maturities, inclusion of interest only periods, below market interest rates, extended skip payment periods and reduction of principal and/or accrued interest.

As of June 30, 2017, there were no additional funds committed to lend to a borrower whose terms have been modified in a TDR. As of December 31, 2016, there was $11 million of additional funds committed to lend to a borrower whose terms have been modified in a TDR.

There were no finance receivables modified as TDRs during the three and six months ended June 30, 2017 or 2016 for the Dealer portfolio segment. Our recorded investment in finance receivables in the Customer portfolio segment modified as TDRs during the three and six months ended June 30, 2017 and 2016, were as follows:

	Three Months Ended June 30, 2017			Three Months Ended June 30, 2016		
(Millions of dollars)	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	17	$ 8	$ 7	2	$ 6	$ 6
Europe	—	—	—	3	11	8
Asia Pacific	1	—	—	—	—	—
Mining	—	—	—	1	10	5
Latin America	7	3	3	88	12	13
Caterpillar Power Finance[1]	48	243	237	26	144	137
Total	73	$ 254	$ 247	120	$ 183	$ 169

	Six Months Ended June 30, 2017			Six Months Ended June 30, 2016		
	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment	Number of Contracts	Pre-TDR Recorded Investment	Post-TDR Recorded Investment
North America	26	$ 9	$ 8	13	$ 16	$ 16
Europe	1	—	—	3	11	8
Asia Pacific	6	39	30	4	3	3
Mining	2	57	56	1	10	5
Latin America	14	5	5	90	12	13
Caterpillar Power Finance	54	268	261	30	183	164
Total	103	$ 378	$ 360	141	$ 235	$ 209

[1] In Caterpillar Power Finance, 42 contracts with a pre-TDR recorded investment of $175 million and a post-TDR recorded investment of $175 million are related to three customers.

17. Fair value disclosures

A. Fair value measurements

The guidance on fair value measurements defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. This guidance also specifies a fair value hierarchy based upon the observability of inputs used in valuation techniques. Observable inputs (highest level) reflect market data obtained from independent sources, while unobservable inputs (lowest level) reflect internally developed market assumptions. In accordance with this guidance, fair value measurements are classified under the following hierarchy:

- **Level 1** – Quoted prices for identical instruments in active markets.

- **Level 2** – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets.

- **Level 3** – Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

When available, we use quoted market prices to determine fair value, and we classify such measurements within Level 1. In some cases where market prices are not available, we make use of observable market based inputs to calculate fair value, in which case the measurements are classified within Level 2. If quoted or observable market prices are not available, fair value is based upon valuations in which one or more significant inputs are unobservable, including internally developed models that use, where possible, current market-based parameters such as interest rates, yield curves and currency rates. These measurements are classified within Level 3.

Fair value measurements are classified according to the lowest level input or value-driver that is significant to the valuation. A measurement may therefore be classified within Level 3 even though there may be significant inputs that are readily observable.

Fair value measurement includes the consideration of nonperformance risk. Nonperformance risk refers to the risk that an obligation (either by a counterparty or Caterpillar) will not be fulfilled. For financial assets traded in an active market (Level 1 and certain Level 2), the nonperformance risk is included in the market price. For certain other financial assets and liabilities (certain Level 2 and Level 3), our fair value calculations have been adjusted accordingly.

Investments in debt and equity securities
Investments in certain debt and equity securities, primarily at Insurance Services, have been classified as available-for-sale and recorded at fair value. Fair values for our U.S. treasury bonds and large capitalization value and smaller company growth equity securities are based upon valuations for identical instruments in active markets. Fair values for other government bonds, corporate bonds and mortgage-backed debt securities are based upon models that take into consideration such market-based factors as recent sales, risk-free yield curves and prices of similarly rated bonds.

In addition, Insurance Services has an equity investment in a real estate investment trust (REIT) which is recorded at fair value based on the net asset value (NAV) of the investment.

See Note 8 for additional information on our investments in debt and equity securities.

Derivative financial instruments
The fair value of interest rate contracts is primarily based on models that utilize the appropriate market-based forward swap curves and zero-coupon interest rates to determine discounted cash flows. The fair value of foreign currency and commodity forward, option and cross currency contracts is based on a valuation model that discounts cash flows resulting from the differential between the contract price and the market-based forward rate.

Assets and liabilities measured on a recurring basis at fair value, primarily related to Financial Products, included in our Consolidated Statement of Financial Position as of June 30, 2017 and December 31, 2016 are summarized below:

(Millions of dollars)	June 30, 2017			
	Level 1	Level 2	Level 3	Total Assets / Liabilities, at Fair Value
Assets				
Available-for-sale securities				
Government debt				
U.S. treasury bonds	$ 10	$ —	$ —	$ 10
Other U.S. and non-U.S. government bonds	—	46	—	46
Corporate bonds				
Corporate bonds	—	523	—	523
Asset-backed securities	—	82	—	82
Mortgage-backed debt securities				
U.S. governmental agency	—	232	—	232
Residential	—	9	—	9
Commercial	—	26	—	26
Equity securities				
Large capitalization value	337	—	—	337
Smaller company growth	61	—	—	61
Total available-for-sale securities	408	918	—	1,326
REIT	—	—	97	97
Derivative financial instruments, net	—	34	—	34
Total Assets	$ 408	$ 952	$ 97	$ 1,457

(Millions of dollars)	December 31, 2016			
	Level 1	Level 2	Level 3	Total Assets / Liabilities, at Fair Value
Assets				
Available-for-sale securities				
Government debt				
U.S. treasury bonds	$ 9	$ —	$ —	$ 9
Other U.S. and non-U.S. government bonds	—	60	—	60
Corporate bonds				
Corporate bonds	—	492	—	492
Asset-backed securities	—	90	—	90
Mortgage-backed debt securities				
U.S. governmental agency	—	223	—	223
Residential	—	10	—	10
Commercial	—	36	—	36
Equity securities				
Large capitalization value	312	—	—	312
Smaller company growth	56	—	—	56
Total available-for-sale securities	377	911	—	1,288
REIT	—	—	79	79
Total Assets	$ 377	$ 911	$ 79	$ 1,367
Liabilities				
Derivative financial instruments, net	$ —	$ 72	$ —	$ 72
Total Liabilities	$ —	$ 72	$ —	$ 72

The fair value of our REIT investment is measured based on NAV, which is considered a Level 3 input. A roll-forward for the six months ended June 30, 2017 of our REIT investment is as follows:

(Millions of dollars)	REIT
Balance at December 31, 2016	$ 79
Purchases of securities	16
Sale of securities	—
Gains (losses) included in Accumulated other comprehensive income (loss)	2
Balance at June 30, 2017	$ 97

In addition to the amounts above, Cat Financial impaired loans are subject to measurement at fair value on a nonrecurring basis and are classified as Level 3 measurements. A loan is considered impaired when management determines that collection of contractual amounts due is not probable. In these cases, an allowance for credit losses may be established based either on the present value of expected future cash flows discounted at the receivables' effective interest rate, or the fair value of the collateral for collateral-dependent receivables. In determining collateral value, Cat Financial estimates the current fair market value of the collateral less selling costs. Cat Financial had impaired loans with a fair value of $286 million and $137 million as of June 30, 2017 and December 31, 2016, respectively.

B. Fair values of financial instruments

In addition to the methods and assumptions we use to record the fair value of financial instruments as discussed in the Fair value measurements section above, we used the following methods and assumptions to estimate the fair value of our financial instruments:

Cash and short-term investments
Carrying amount approximated fair value.

Restricted cash and short-term investments
Carrying amount approximated fair value. Restricted cash and short-term investments are included in Prepaid expenses and other current assets in the Consolidated Statement of Financial Position.

Finance receivables
Fair value was estimated by discounting the future cash flows using current rates, representative of receivables with similar remaining maturities.

Wholesale inventory receivables
Fair value was estimated by discounting the future cash flows using current rates, representative of receivables with similar remaining maturities.

Short-term borrowings
Carrying amount approximated fair value.

Long-term debt
Fair value for fixed and floating rate debt was estimated based on quoted market prices.

Guarantees
The fair value of guarantees is based upon our estimate of the premium a market participant would require to issue the same guarantee in a stand-alone arms-length transaction with an unrelated party. If quoted or observable market prices are not available, fair value is based upon internally developed models that utilize current market-based assumptions.

Please refer to the table below for the fair values of our financial instruments.

(Millions of dollars)	June 30, 2017 Carrying Amount	June 30, 2017 Fair Value	December 31, 2016 Carrying Amount	December 31, 2016 Fair Value	Fair Value Levels	Reference
Assets						
Cash and short-term investments	$ 10,232	$ 10,232	$ 7,168	$ 7,168	1	
Restricted cash and short-term investments	$ 52	$ 52	$ 31	$ 31	1	
Investments in debt and equity securities	$ 1,423	$ 1,423	$ 1,367	$ 1,367	1, 2 & 3	Note 8
Finance receivables – net (excluding finance leases [1])	$ 15,719	$ 15,656	$ 16,172	$ 16,056	3	Note 16
Wholesale inventory receivables – net (excluding finance leases [1])	$ 1,419	$ 1,387	$ 1,500	$ 1,464	3	Note 16
Foreign currency contracts – net	$ 27	$ 27	$ —	$ —	2	Note 4
Interest rate contracts – net	$ 2	$ 2	$ 3	$ 3	2	Note 4
Commodity contracts – net	$ 5	$ 5	$ 10	$ 10	2	Note 4
Liabilities						
Short-term borrowings	$ 6,780	$ 6,780	$ 7,303	$ 7,303	1	
Long-term debt (including amounts due within one year)						
Machinery, Energy & Transportation	$ 8,820	$ 10,644	$ 8,943	$ 10,348	2	
Financial Products	$ 21,592	$ 21,821	$ 20,537	$ 20,724	2	
Foreign currency contracts – net	$ —	$ —	$ 85	$ 85	2	Note 4
Guarantees	$ 8	$ 8	$ 8	$ 8	3	Note 10

Fair Value of Financial Instruments

[1] Total excluded items have a net carrying value at June 30, 2017 and December 31, 2016 of $6,594 million and $6,111 million, respectively.

18. Restructuring costs

Our accounting for employee separations is dependent upon how the particular program is designed. For voluntary programs, eligible separation costs are recognized at the time of employee acceptance unless the acceptance requires explicit approval by the company. For involuntary programs, eligible costs are recognized when management has approved the program, the affected employees have been properly notified and the costs are estimable.

Restructuring costs for the three and six months ended June 30, 2017 and 2016 were as follows:

(Millions of dollars)	Three Months Ended June 30	
	2017	2016
Employee separations [1]	$ 42	$ 45
Contract terminations [1]	17	36
Long-lived asset impairments [1]	63	14
Other [2]	47	44
Total restructuring costs	$ 169	$ 139

	Six Months Ended June 30	
	2017	2016
Employee separations [1]	$ 506	$ 76
Contract terminations [1]	26	46
Long-lived asset impairments [1]	275	96
Defined benefit plan curtailments and termination benefits [1]	29	—
Other [2]	85	82
Total restructuring costs	$ 921	$ 300

[1] Recognized in Other operating (income) expenses.

[2] Represents costs related to our restructuring programs, primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management costs and also LIFO inventory decrement benefits from inventory liquidations at closed facilities (primarily included in Cost of goods sold).

In March 2017, Caterpillar informed Belgian authorities of the decision to proceed to a collective dismissal, which will lead to the closure of the Gosselies site, impacting about 2,000 employees. Production of Caterpillar products at the Gosselies site ended during the second quarter of 2017. The majority of the other operations and functions at the Gosselies site are expected to be gradually phased out by the end of 2017. We estimate restructuring costs incurred under this program to be about $700 million. For the first six months of 2017, we recognized $667 million of restructuring costs which included $444 million of employee separation costs, $199 million for long-lived asset impairments and $57 million of other costs partially offset by a $33 million LIFO inventory decrement benefit. The majority of the remaining costs are expected to be recognized in 2017. The remaining restructuring costs for the first six months of 2017 were related to other restructuring actions across the company.

The restructuring costs for the first six months of 2016 were related to our decision to discontinue production of on-highway vocational trucks, as discussed below, and other restructuring actions across the company.

Restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes. See Note 15 for more information.

The following table summarizes the 2016 and 2017 employee separation activity:

(Millions of dollars)	
Liability balance at December 31, 2015	$ 483
Increase in liability (separation charges)	297
Reduction in liability (payments)	(633)
Liability balance at December 31, 2016	$ 147
Increase in liability (separation charges)	506
Reduction in liability (payments)	(237)
Liability balance at June 30, 2017	$ 416

Most of the liability balance at June 30, 2017 is expected to be paid in 2017 and primarily includes employee separation payments related to closure of the Gosselies facility.

Restructuring costs for the year ended December 31, 2016 were $1,019 million. Throughout 2016, we initiated the following restructuring plans:

- In February 2016, we made the decision to discontinue production of on-highway vocational trucks. Based on the business climate in the truck industry and a thorough evaluation of the business, the company decided it would withdraw from this market. We recognized $104 million of restructuring costs, primarily related to long-lived asset impairments and sales discounts and expect to recognize the remaining $4 million for this restructuring plan in 2017.
- In the second half of 2016, we took additional restructuring actions in Resource Industries, including ending the production of track drills; pursuing strategic alternatives related to room and pillar products; consolidation of two product development divisions; and additional actions in response to ongoing weakness in the mining industry. For the year ended December 31, 2016, we incurred $369 million of restructuring costs for these plans primarily related to long-lived asset impairments, employee separation costs and inventory write-downs.

In September 2015, we announced a large scale restructuring plan (the Plan) including a voluntary retirement enhancement program for qualifying U.S. employees, several voluntary separation programs outside of the U.S., additional involuntary programs throughout the company and manufacturing facility consolidations and closures expected to occur through 2018. The largest action among those included in the Plan was related to our European manufacturing footprint, which led to the Gosselies facility closure as discussed above. In the first six months of 2017, we incurred $749 million of restructuring costs related to the Plan, and we incurred $281 million and $569 million in 2016 and 2015, respectively, for a total of $1,599 million through June 30, 2017. We expect to recognize approximately $160 million of additional restructuring costs related to the Plan in 2017.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Second-quarter 2017 sales and revenues were $11.331 billion, a 10 percent increase from second-quarter 2016 sales and revenues of $10.342 billion. While many of our end markets remain at low levels, sales increased across the company reflecting stronger end-user demand. The most significant increase was in ***Construction Industries***, primarily due to construction equipment sales in China. Sales also increased in ***Resource Industries*** and ***Energy & Transportation***, primarily due to higher sales for aftermarket parts. Profit per share for the second quarter of 2017 was $1.35, a 45 percent increase from second-quarter 2016 profit per share of $0.93. Profit was $802 million in the second quarter of 2017, an increase of 46 percent from $550 million in the second quarter of 2016. Profit increased primarily due to higher ***sales volume***, including a favorable mix of products. Improved ***price realization*** and lower ***variable manufacturing costs*** were about offset by higher ***period costs***.

Sales and revenues for the six months ended June 30, 2017, were $21.153 billion, up $1.350 billion, or 7 percent, from $19.803 billion for the six months ended June 30, 2016. Profit per share for the six months ended June 30, 2017, was $1.67, a 19 percent increase from profit per share of $1.40 for the same period last year. Profit was $994 million for the six months ended June 30, 2017, an increase of 21 percent from $821 million for the six months ended June 30, 2016.

Highlights for the second quarter of 2017 include:

- Second-quarter sales and revenues were $11.331 billion, compared with $10.342 billion in the second quarter of 2016. Sales increased in Construction Industries, Resource Industries and Energy & Transportation. Financial Products' revenues were about flat.
- Profit per share was $1.35 in the second quarter of 2017, compared with $0.93 in the second quarter of 2016. Excluding ***restructuring costs*** of $0.23 per share and a gain on the sale of an equity investment of $0.09 per share, second-quarter 2017 ***adjusted profit per share*** was $1.49, compared to second-quarter 2016 adjusted profit per share of $1.09.
- ***Machinery, Energy & Transportation (ME&T)*** operating cash flow was $2.029 billion in the second quarter of 2017, compared to $1.168 billion in the second quarter of 2016.
- ME&T ***debt-to-capital ratio*** was 38.6 percent at June 30, 2017, compared to 41.0 percent at the end of 2016.

Highlights for the six months ended June 30, 2017, include:

- Sales and revenues for the six months ended June 30, 2017, were $21.153 billion, compared with $19.803 billion for the six months ended June 30, 2016. Sales increased in Construction Industries, Resource Industries and Energy & Transportation. Financial Products' revenues were about flat.
- Restructuring costs were $921 million for the six months ended June 30, 2017, with an after-tax impact of $1.19 per share, compared with restructuring costs of $300 million for the six months ended June 30, 2016, with an after-tax impact of $0.33 per share.
- Profit per share was $1.67 for the six months ended June 30, 2017, compared with $1.40 in the six months ended June 30, 2016. Excluding restructuring costs of $1.19 per share and a gain on the sale of an equity investment of $0.09 per share, adjusted profit per share for the six months ended June 30, 2017 was $2.77, compared to $1.73 per share in the six months ended June 30, 2016.
- Machinery, Energy & Transportation (ME&T) operating cash flow was $3.553 billion for the six months ended June 30, 2017, compared to $1.387 billion for the six months ended June 30, 2016.

Restructuring Costs

In the second quarter of 2017, we continued our focus on structural cost reduction to help improve our long-term cost structure. Restructuring costs of $169 million, which had an impact of $0.23 per share, were primarily related to restructuring programs in Resource Industries and Energy & Transportation. During the first six months of 2017, we incurred $921 million of restructuring costs, which had an impact of $1.19 per share, primarily related to the closure of the facility in Gosselies, Belgium. For the full year of 2017, we anticipate restructuring costs of about $1.2 billion.

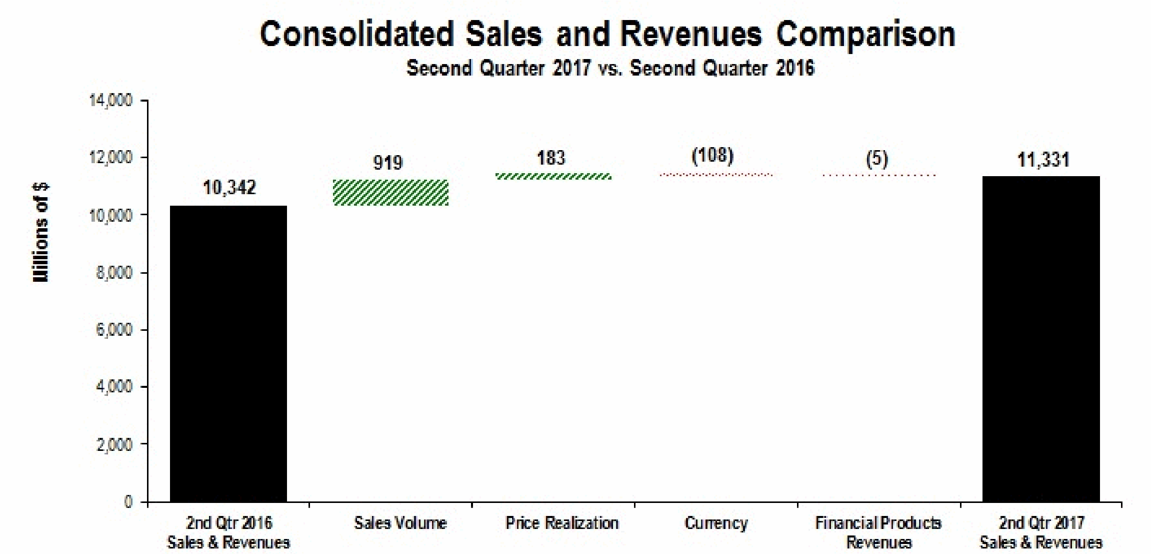
Notes:

- Glossary of terms is included on pages 73-75; first occurrence of terms shown in bold italics.
- Information on non-GAAP financial measures is included on page 81.

Consolidated Results of Operations

THREE MONTHS ENDED JUNE 30, 2017 COMPARED WITH THREE MONTHS ENDED JUNE 30, 2016

CONSOLIDATED SALES AND REVENUES



The chart above graphically illustrates reasons for the change in Consolidated Sales and Revenues between the second quarter of 2016 (at left) and the second quarter of 2017 (at right). Items favorably impacting sales and revenues appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting sales and revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees.

Sales and Revenues

Total sales and revenues were $11.331 billion in the second quarter of 2017, an increase of $989 million, or 10 percent, compared with $10.342 billion in the second quarter of 2016. The increase was primarily due to higher sales volume, with the largest increase in Construction Industries mostly due to higher end-user demand for construction equipment. Sales volume for Resource Industries increased due to improved end-user demand for aftermarket parts and the favorable impact of changes in dealer inventories. Energy & Transportation's sales were higher mostly due to increased demand for aftermarket parts for reciprocating engines. Favorable price realization in Construction Industries also contributed to the sales improvement. The unfavorable impact of ***currency*** was mostly the result of a weaker euro and British pound. ***Financial Products' segment*** revenues were about flat.

Sales increased in Asia/Pacific, North America and ***Latin America***, and were about flat in ***EAME***. Asia/Pacific sales increased 25 percent primarily due to an increase in construction equipment sales in China resulting from increased infrastructure and residential investment. In North America, sales increased 7 percent due to higher demand for aftermarket parts and construction equipment, partially offset by the unfavorable impact of changes in dealer inventories as dealers decreased inventories more in the second quarter of 2017 than in the second quarter of 2016. Sales increased 20 percent in Latin America primarily due to stabilizing economic conditions in several countries in the region that resulted in improved end-user demand from low levels.

Changes in dealer inventories had little impact on consolidated sales from the second quarter of 2016 to the second quarter of 2017. Dealer machine and engine inventories decreased about $300 million in the second quarter of 2017, compared to a decrease of about $400 million in the second quarter of 2016. However, changes in dealer inventory did have an impact on sales in certain segments and geographic regions. Dealers are independent, and there could be many reasons for changes in their inventory levels, including their expectations of future demand and product delivery times. Dealers' demand expectations take into account seasonal changes, macroeconomic conditions, machine rental rates and other factors. Delivery times can vary based on availability of product from Caterpillar factories and product distribution centers. We believe the level of dealer inventories at the end of 2017 will depend on dealer expectations for business in 2018.

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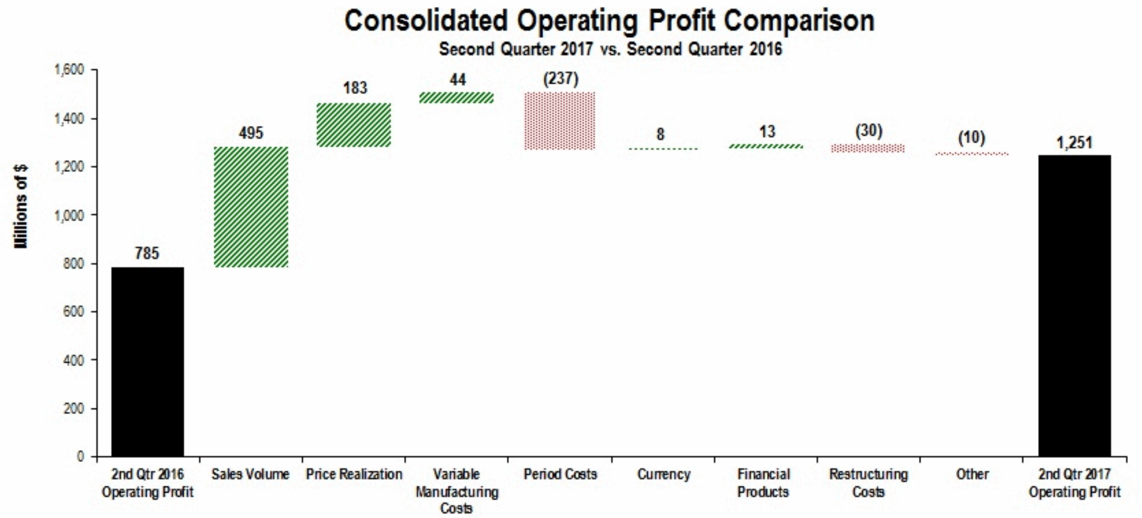
CONSOLIDATED OPERATING PROFIT



The chart above graphically illustrates reasons for the change in Consolidated Operating Profit between the second quarter of 2016 (at left) and the second quarter of 2017 (at right). Items favorably impacting operating profit appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting operating profit appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees. The bar entitled Other includes ***consolidating adjustments*** and ***Machinery, Energy & Transportation other operating (income) expenses***.

Operating profit for the second quarter of 2017 was $1.251 billion, compared with $785 million in the second quarter of 2016. The increase of $466 million was primarily due to higher sales volume, including a favorable mix of products. Improved price realization and lower variable manufacturing costs were about offset by higher period costs. Price realization was favorable in Construction Industries and about flat in Resource Industries and Energy & Transportation.

Variable manufacturing costs were lower primarily due to the favorable impact from cost absorption, partially offset by higher warranty expense. Cost absorption was favorable as inventory decreased in the second quarter of 2016 and increased in the second quarter of 2017.

Period costs increased primarily due to higher short-term incentive compensation expense, partially offset by the favorable impact of restructuring and cost reduction actions over the past year. These actions primarily impacted depreciation expense and research and development (R&D) expenses.

Restructuring costs of $169 million in the second quarter of 2017 were primarily related to restructuring programs in Resource Industries and Energy & Transportation, compared to $139 million in the second quarter of 2016.

Other Profit/Loss Items

- **Other income/expense** in the second quarter of 2017 was income of $29 million, compared with income of $84 million in the second quarter of 2016. The unfavorable change was a result of currency translation and hedging net losses during the second quarter of 2017, primarily due to the euro and British pound. The unfavorable change was partially offset by a pretax gain of $85 million on the sale of Caterpillar's equity investment in IronPlanet.

- **The provision for income taxes** in the second quarter of 2017 reflects an estimated annual tax rate of 32 percent, which excludes the discrete item discussed in the following paragraph, compared to 25 percent for the second quarter of 2016. The increase is primarily due to higher non-U.S. restructuring costs in 2017 that are taxed at relatively lower non-U.S. tax rates, along with other changes in the geographic mix of profits from a tax perspective. Under the terms of a manufacturing service agreement, Caterpillar SARL (CSARL) will bear substantially all of the restructuring costs related to the closure of our Gosselies, Belgium, facility, reducing CSARL's profits taxable in Switzerland.

  In addition, a tax benefit of $10 million was recorded for the settlement of stock-based compensation awards with tax deductions in excess of cumulative U.S. GAAP compensation expense.

Excluding restructuring costs, gain on sale of equity investment and discrete items, the 2017 estimated annual tax rate is expected to be 29 percent.

Segment Information

Sales and Revenues by Geographic Region

(Millions of dollars)	Total	% Change	North America	% Change	Latin America	% Change	EAME	% Change	Asia/ Pacific	% Change
Second Quarter 2017										
Construction Industries [1]	$ 4,930	11 %	$ 2,318	3 %	$ 364	31 %	$ 964	(5)%	$ 1,284	44 %
Resource Industries [2]	1,759	21 %	612	14 %	299	16 %	396	25 %	452	32 %
Energy & Transportation [3]	3,941	5 %	1,982	10 %	312	13 %	1,079	2 %	568	(6)%
All Other Segments [4]	33	(20)%	10	(29)%	1	(50)%	11	22 %	11	(31)%
Corporate Items and Eliminations	(24)		(22)		—		(2)		—	
Machinery, Energy & Transportation Sales	10,639	10 %	4,900	7 %	976	20 %	2,448	2 %	2,315	25 %
Financial Products Segment	776	2 %	505	7 %	79	(4)%	101	(2)%	91	(10)%
Corporate Items and Eliminations	(84)		(51)		(15)		(5)		(13)	
Financial Products Revenues	692	(1)%	454	3 %	64	(9)%	96	(2)%	78	(13)%
Consolidated Sales and Revenues	$11,331	10 %	$ 5,354	7 %	$ 1,040	18 %	$ 2,544	2 %	$ 2,393	23 %
Second Quarter 2016										
Construction Industries [1]	$ 4,426		$ 2,247		$ 277		$ 1,010		$ 892	
Resource Industries [2]	1,457		539		258		317		343	
Energy & Transportation [3]	3,750		1,809		277		1,062		602	
All Other Segments [4]	41		14		2		9		16	
Corporate Items and Eliminations	(29)		(25)		—		(2)		(2)	
Machinery, Energy & Transportation Sales	9,645		4,584		814		2,396		1,851	
Financial Products Segment	759		473		82		103		101	
Corporate Items and Eliminations	(62)		(34)		(12)		(5)		(11)	
Financial Products Revenues	697		439		70		98		90	
Consolidated Sales and Revenues	$10,342		$ 5,023		$ 884		$ 2,494		$ 1,941	

1 Does not include inter-segment sales of $29 million and $12 million in second quarter 2017 and 2016, respectively.
2 Does not include inter-segment sales of $77 million and $57 million in second quarter 2017 and 2016, respectively.
3 Does not include inter-segment sales of $827 million and $658 million in second quarter 2017 and 2016, respectively.
4 Does not include inter-segment sales of $105 million and $101 million in second quarter 2017 and 2016, respectively.

Sales and Revenues by Segment

(Millions of dollars)	Second Quarter 2016	Sales Volume	Price Realization	Currency	Other	Second Quarter 2017	$ Change	% Change
Construction Industries	$ 4,426	$ 374	$ 191	$ (61)	$ —	$ 4,930	$ 504	11 %
Resource Industries	1,457	313	(7)	(4)	—	1,759	302	21 %
Energy & Transportation	3,750	236	(3)	(42)	—	3,941	191	5 %
All Other Segments	41	(8)	—	—	—	33	(8)	(20)%
Corporate Items and Eliminations	(29)	4	2	(1)	—	(24)	5	
Machinery, Energy & Transportation Sales	9,645	919	183	(108)	—	10,639	994	10 %
Financial Products Segment	759	—	—	—	17	776	17	2 %
Corporate Items and Eliminations	(62)	—	—	—	(22)	(84)	(22)	
Financial Products Revenues	697	—	—	—	(5)	692	(5)	(1)%
Consolidated Sales and Revenues	$ 10,342	$ 919	$ 183	$ (108)	$ (5)	$ 11,331	$ 989	10 %

Operating Profit / (Loss) by Segment

(Millions of dollars)	Second Quarter 2017	Second Quarter 2016	$ Change	% Change
Construction Industries	$ 901	$ 550	$ 351	64 %
Resource Industries	97	(163)	260	n/a
Energy & Transportation	700	602	98	16 %
All Other Segments	(20)	(14)	(6)	(43)%
Corporate Items and Eliminations	(526)	(297)	(229)	
Machinery, Energy & Transportation	1,152	678	474	70 %
Financial Products Segment	191	202	(11)	(5)%
Corporate Items and Eliminations	(5)	(31)	26	
Financial Products	186	171	15	9 %
Consolidating Adjustments	(87)	(64)	(23)	
Consolidated Operating Profit / (Loss)	$ 1,251	$ 785	$ 466	59 %

Construction Industries

Construction Industries' sales were $4.930 billion in the second quarter of 2017, compared with $4.426 billion in the second quarter of 2016. The increase was due to higher sales volume and favorable price realization.

- Sales volume increased primarily due to higher end-user demand for construction equipment in Asia/Pacific and North America, partially offset by the unfavorable impact of changes in dealer inventories. A more significant decrease in North America dealer inventories in the second quarter of 2017 than in the second quarter of 2016 was partially offset by an increase in dealer inventories in Asia/Pacific in the second quarter of 2017.
- Although market conditions remain competitive, price realization was favorable due to a particularly weak pricing environment in the second quarter of 2016 and previously announced price increases impacting the second quarter of 2017.

Sales increased in Asia/Pacific and Latin America and were about flat in North America and EAME.

- Sales in Asia/Pacific were higher as a result of an increase in end-user demand, primarily in China, stemming from increased government support for infrastructure and strong residential investment. In addition, changes in dealer inventories in China favorably impacted sales as dealer inventories increased in the second quarter of 2017 and were about flat in the second quarter of 2016.
- Sales in Latin America were higher due to an increase in end-user demand and the favorable impact of changes in dealer inventories, which increased in the second quarter of 2017 and were about flat in the second quarter of 2016. Although construction activity remained weak across the region, end-user demand increased from low levels due to stabilizing economic conditions in several countries in the region.

- In North America, an increase in end-user demand and favorable price realization was mostly offset by an unfavorable impact from changes in dealer inventories. End-user demand was higher primarily due to improved residential and non-residential building construction activity, slightly offset by lower sales for infrastructure construction equipment. The unfavorable impact of changes in dealer inventories resulted from a more significant decrease in dealer inventories in the second quarter of 2017 than in the second quarter of 2016.
- Sales in EAME were about flat as lower end-user demand and the unfavorable impact of the weaker euro and British pound were mostly offset by favorable price realization. The decline in end-user demand was primarily in Africa/Middle East due to volatile financial and economic conditions, as well as continued tight construction spending in oil-producing countries.

Construction Industries' profit was $901 million in the second quarter of 2017, compared with $550 million in the second quarter of 2016. The increase in profit was primarily due to favorable price realization and higher sales volume, including a favorable mix of products. Period costs were about flat as higher short-term incentive compensation expense was mostly offset by the favorable impact of restructuring and cost reduction actions.

Resource Industries

Resource Industries' sales were $1.759 billion in the second quarter of 2017, an increase of $302 million, or 21 percent, from the second quarter of 2016. The increase was primarily due to higher sales volume for aftermarket parts and the favorable impact of changes in dealer inventories. Dealer inventories were about flat in the second quarter of 2017, compared with a decrease in the second quarter of 2016. Dealer deliveries for equipment were about flat. Increases in certain commodity prices over the past year, along with continued commodity consumption, have resulted in increased mining activity, driving the need for maintenance and rebuild activities. The company believes commodity prices need to stabilize at these higher levels for a longer duration to drive stronger activity and longer-term demand for equipment.

Resource Industries' profit was $97 million in the second quarter of 2017, compared with a loss of $163 million in the second quarter of 2016. The favorable change was due to higher sales volume, including a favorable mix of products, lower period costs and the favorable impact of cost absorption. These items were partially offset by higher warranty expense. Period costs were lower primarily due to the favorable impact of restructuring and cost reduction actions, partially offset by an increase in short-term incentive compensation expense. The favorable impact of cost absorption was a result of a decrease in inventory in the second quarter of 2016, compared to an increase in inventory in the second quarter of 2017.

Energy & Transportation

Energy & Transportation's sales were $3.941 billion in the second quarter of 2017, compared with $3.750 billion in the second quarter of 2016. The increase was primarily due to higher sales of aftermarket parts for reciprocating engines.

- **Oil and Gas** – Sales increased in North America due to higher demand for reciprocating engines used in gas compression as natural gas infrastructure build-out continues and for aftermarket parts as a result of strong rebuild activity in well servicing and gas compression applications. This was partially offset by a decrease in demand for equipment used in production applications in Asia/Pacific.
- **Industrial** – Sales were higher in all regions reflecting increased sales for aftermarket parts.
- **Power Generation** – Sales were about flat as a slight increase in North America was mostly offset by decreases in other regions.
- **Transportation** – Sales decreased in North America as the rail industry continues to have a significant number of idle locomotives. This was partially offset by an increase in sales for rail services as North American rail traffic has increased. Sales declined in marine applications mostly due to lower demand, primarily for offshore vessels.

Energy & Transportation's profit was $700 million in the second quarter of 2017, compared with $602 million in the second quarter of 2016. The increase was primarily due to higher sales volume and lower variable manufacturing costs, partially offset by higher period costs. Variable manufacturing costs were favorable primarily due to cost absorption and improved material costs. Cost absorption was favorable as inventory increased in the second quarter of 2017 and was about flat in the second quarter of 2016. The increase in period costs was primarily due to higher short-term incentive compensation expense.

Financial Products Segment

Financial Products' revenues were $776 million in the second quarter of 2017, an increase of $17 million, or 2 percent, from the second quarter of 2016. The increase was due to a favorable impact from intercompany lending activity in North America, higher average financing rates in North America and a favorable impact from returned or repossessed equipment in North America. These favorable impacts were partially offset by lower average ***earning assets*** in North America and lower average financing rates in Asia/Pacific.

Financial Products' profit was $191 million in the second quarter of 2017, compared with $202 million in the second quarter of 2016. The decrease was primarily due to the absence of gains on sales of securities at Insurance Services, an increase in SG&A expenses due to higher short-term incentive compensation expense and an unfavorable impact from lower average earning assets. These unfavorable impacts were partially offset by a decrease in the provision for credit losses at Cat Financial, increased intercompany lending activity and a favorable impact from returned or repossessed equipment.

At the end of the second quarter of 2017, past dues at Cat Financial were 2.71 percent, compared with 2.93 percent at the end of the second quarter of 2016. Write-offs, net of recoveries, were $26 million for the second quarter of 2017, compared with $33 million for the second quarter of 2016.

As of June 30, 2017, Cat Financial's allowance for credit losses totaled $338 million, or 1.25 percent of finance receivables, compared with $346 million, or 1.25 percent of finance receivables as of June 30, 2016. The allowance for credit losses at year-end 2016 was $343 million, or 1.29 percent of finance receivables.

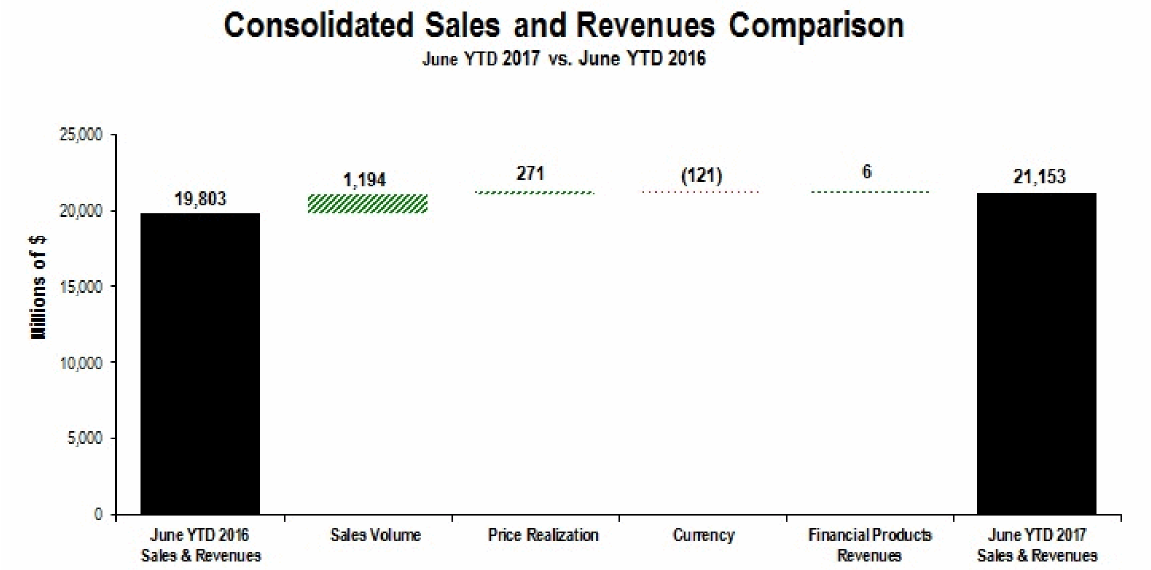
Corporate Items and Eliminations

Expense for corporate items and eliminations was $531 million in the second quarter of 2017, an increase of $203 million from the second quarter of 2016. Corporate items and eliminations include: restructuring costs; corporate-level expenses; timing differences, as some expenses are reported in segment profit on a cash basis; retirement benefit costs other than service cost; currency differences for ME&T, as segment profit is reported using annual fixed exchange rates; cost of sales methodology differences, as segments use a current cost methodology; and inter-segment eliminations.

The increase in expense from the second quarter of 2016 was primarily due to timing differences, an increase in restructuring costs, higher stock-based compensation expense and other methodology differences.

SIX MONTHS ENDED JUNE 30, 2017 COMPARED WITH SIX MONTHS ENDED JUNE 30, 2016

CONSOLIDATED SALES AND REVENUES



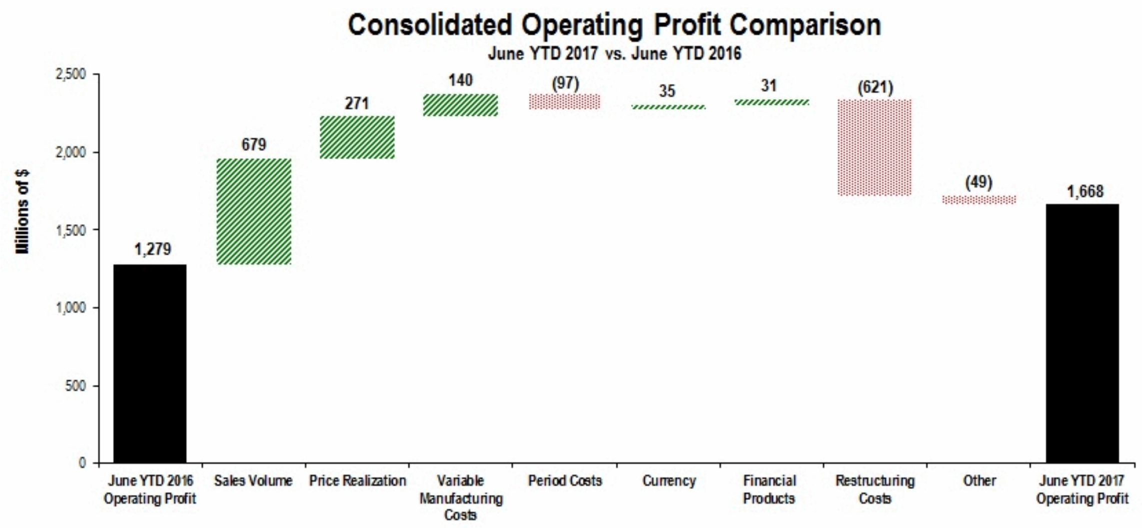
The chart above graphically illustrates reasons for the change in Consolidated Sales and Revenues between the six months ended June 30, 2016 (at left) and the six months ended June 30, 2017 (at right). Items favorably impacting sales and revenues appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting sales and revenues appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees.

Total sales and revenues were $21.153 billion in the six months ended June 30, 2017, an increase of $1.350 billion, or 7 percent, compared with $19.803 billion in the six months ended June 30, 2016. The increase was primarily due to higher sales volume, with the largest increase in Resource Industries due to improved end-user demand for aftermarket parts and the favorable impact of changes in dealer inventories. Energy & Transportation’s sales volume was higher mostly due to increased demand for aftermarket parts for reciprocating engines. Construction Industries’ sales volume increased mostly due to higher end-user demand for construction equipment. Favorable price realization in Construction Industries also contributed to the sales improvement while price realization in Resource Industries and Energy & Transportation was about flat. We believe the pricing environment will be competitive during the remainder of 2017 and expect price realization for the full year to be slightly positive. The unfavorable impact of currency was mostly the result of a weaker British pound. Financial Products’ segment revenues were about flat.

Sales increased in Asia/Pacific, North America, and Latin America and were about flat in EAME. Asia/Pacific sales increased 19 percent primarily due to an increase in construction equipment sales in China resulting from increased infrastructure and residential investment. In North America, sales increased 4 percent due to higher demand for aftermarket parts, mostly in Resource Industries and Energy & Transportation, and favorable price realization, mostly in Construction Industries. This increase was partially offset by the unfavorable impact of changes in dealer inventories as dealers in North America decreased inventories in the six months ended June 30, 2017, compared to an increase in the six months ended June 30, 2016. Sales increased 17 percent in Latin America primarily due to stabilizing economic conditions in several countries in the region that resulted in improved end-user demand for aftermarket parts and the favorable impact of changes in dealer inventories as inventories were about flat in the six months ended June 30, 2017, compared to a decrease in the six months ended June 30, 2016.

Dealer machine and engine inventories decreased about $100 million in both the six months ended June 30, 2017, and in the six months ended June 30, 2016. Dealers are independent, and there could be many reasons for changes in their inventory levels, including their expectations of future demand and product delivery times. Dealers’ demand expectations take into account seasonal changes, macroeconomic conditions, machine rental rates and other factors. Delivery times can vary based on availability of product from Caterpillar factories and product distribution centers. We believe the level of dealer inventories at the end of 2017 will depend on dealer expectations for business in 2018.

CONSOLIDATED OPERATING PROFIT



The chart above graphically illustrates reasons for the change in Consolidated Operating Profit between the six months ended June 30, 2016 (at left) and the six months ended June 30, 2017 (at right). Items favorably impacting operating profit appear as upward stair steps with the corresponding dollar amounts above each bar, while items negatively impacting operating profit appear as downward stair steps with dollar amounts reflected in parentheses above each bar. Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees. The bar entitled Other includes consolidating adjustments and Machinery, Energy & Transportation other operating (income) expenses.

Operating profit for the six months ended June 30, 2017, was $1.668 billion, compared with $1.279 billion for the six months ended June 30, 2016. The increase of $389 million was primarily due to higher sales volume, including a favorable mix of products. Improved price realization and lower variable manufacturing costs were more than offset by higher restructuring and period costs. Price realization was favorable in Construction Industries and about flat in Resource Industries and Energy & Transportation.

Variable manufacturing costs were lower primarily due to the favorable impact from cost absorption and improved material costs. Cost absorption was favorable as inventory increased during the six months ended June 30, 2017, and was about flat during the six months ended June 30, 2016. We expect favorable cost absorption in the second half of 2017 as inventories are expected to increase further to support higher production volumes. We expect material costs to be higher during the remainder of 2017, primarily due to anticipated increases in costs for steel.

Period costs increased primarily due to higher short-term incentive compensation expense, partially offset by the favorable impact of restructuring and cost reduction actions over the past year. These actions primarily impacted research and development (R&D) expenses and depreciation expense. During the second half of 2017, we anticipate higher period costs due to making targeted investments in initiatives that are important to our future competitiveness, including enhanced digital capabilities and accelerating technology updates to our products.

Restructuring costs of $921 million for the six months ended June 30, 2017, were primarily related to the closure of the facility in Gosselies, Belgium and restructuring programs in Resource Industries, compared to $300 million for the six months ended June 30, 2016.

Short-term incentive compensation expense is directly related to financial and operational performance, measured against targets set annually. Expense for the six months ended June 30, 2017, was about $650 million compared to about $215 million for the six months ended June 30, 2016. We expect that short-term incentive compensation expense will be significantly higher in 2017 than in 2016.

Other Profit/Loss Items

- **Other income/expense** for the six months ended June 30, 2017, was income of $24 million, compared with income of $84 million for the six months ended June 30, 2016. The unfavorable change was primarily a result of currency translation and hedging net losses during the six months ended June 30, 2017, which were mostly due to the euro, British pound and Japanese yen. The impact from currency translation and hedging was about flat during the six months ended June 30, 2016. The unfavorable change was partially offset by a pretax gain of $85 million on the sale of Caterpillar's equity investment in IronPlanet during the six months ended June 30, 2017.

- **The provision for income taxes** for the first six months of 2017 reflects an estimated annual tax rate of 32 percent, which excludes the discrete items discussed in the following paragraph, compared to 25 percent for the first six months of 2016. The increase is primarily due to higher non-U.S. restructuring costs in 2017 that are taxed at relatively lower non-U.S. tax rates along with other changes in the geographic mix of profits from a tax perspective. Under the terms of a manufacturing service agreement, Caterpillar SARL (CSARL) will bear substantially all of the restructuring costs related to the closure of our Gosselies, Belgium, facility, reducing CSARL's profits taxable in Switzerland.

  In addition during the first six months of 2017, a tax benefit of $27 million was recorded for the settlement of stock-based compensation awards with tax deductions in excess of cumulative U.S. GAAP compensation expense. This benefit was partially offset by a $15 million increase to prior year taxes related to the Gosselies, Belgium, facility, restructuring costs.

  Excluding restructuring costs, gain on sale of equity investment and discrete items, the 2017 estimated annual tax rate is expected to be 29 percent.

Segment Information

Sales and Revenues by Geographic Region

(Millions of dollars)	Total	% Change	North America	% Change	Latin America	% Change	EAME	% Change	Asia/ Pacific	% Change
Six Months Ended June 30, 2017										
Construction Industries [1]	$ 9,021	7 %	$ 4,231	(2)%	$ 614	21 %	$ 1,776	(4)%	$ 2,400	33 %
Resource Industries [2]	3,429	18 %	1,210	6 %	568	8 %	812	40 %	839	28 %
Energy & Transportation [3]	7,297	4 %	3,704	10 %	587	23 %	1,979	(3)%	1,027	(9)%
All Other Segments [4]	70	(11)%	18	(38)%	1	(67)%	27	50 %	24	(17)%
Corporate Items and Eliminations	(48)		(45)		—		(4)		1	
Machinery, Energy & Transportation Sales	19,769	7 %	9,118	4 %	1,770	17 %	4,590	2 %	4,291	19 %
Financial Products Segment	1,536	2 %	991	6 %	162	(4)%	201	— %	182	(9)%
Corporate Items and Eliminations	(152)		(89)		(29)		(9)		(25)	
Financial Products Revenues	1,384	— %	902	4 %	133	(7)%	192	— %	157	(12)%
Consolidated Sales and Revenues	$21,153	7 %	$ 10,020	4 %	$ 1,903	15 %	$ 4,782	2 %	$ 4,448	17 %
Six Months Ended June 30, 2016										
Construction Industries [1]	$ 8,469		$ 4,305		$ 508		$ 1,857		$ 1,799	
Resource Industries [2]	2,906		1,143		526		579		658	
Energy & Transportation [3]	7,028		3,375		477		2,044		1,132	
All Other Segments [4]	79		29		3		18		29	
Corporate Items and Eliminations	(57)		(49)		(1)		(4)		(3)	
Machinery, Energy & Transportation Sales	18,425		8,803		1,513		4,494		3,615	
Financial Products Segment	1,502		932		169		201		200	
Corporate Items and Eliminations	(124)		(68)		(26)		(9)		(21)	
Financial Products Revenues	1,378		864		143		192		179	
Consolidated Sales and Revenues	$19,803		$ 9,667		$ 1,656		$ 4,686		$ 3,794	

1 Does not include inter-segment sales of $38 million and $20 million for the six months ended June 30, 2017 and 2016, respectively.
2 Does not include inter-segment sales of $168 million and $128 million for the six months ended June 30, 2017 and 2016, respectively.
3 Does not include inter-segment sales of $1,607 million and $1,290 million for the six months ended June 30, 2017 and 2016, respectively.
4 Does not include inter-segment sales of $200 million and $193 million for the six months ended June 30, 2017 and 2016, respectively.

Sales and Revenues by Segment								
(Millions of dollars)	**Six Months Ended June 30, 2016**	**Sales Volume**	**Price Realization**	**Currency**	**Other**	**Six Months Ended June 30, 2017**	**$ Change**	**% Change**
Construction Industries	$ 8,469	$ 306	$ 314	$ (68)	$ —	$ 9,021	$ 552	7 %
Resource Industries	2,906	559	(39)	3	—	3,429	523	18 %
Energy & Transportation	7,028	329	(4)	(56)	—	7,297	269	4 %
All Other Segments	79	(9)	—	—	—	70	(9)	(11)%
Corporate Items and Eliminations	(57)	9	—	—	—	(48)	9	
Machinery, Energy & Transportation Sales	18,425	1,194	271	(121)	—	19,769	1,344	7 %
Financial Products Segment	1,502	—	—	—	34	1,536	34	2 %
Corporate Items and Eliminations	(124)	—	—	—	(28)	(152)	(28)	
Financial Products Revenues	1,378	—	—	—	6	1,384	6	— %
Consolidated Sales and Revenues	$ 19,803	$ 1,194	$ 271	$ (121)	$ 6	$ 21,153	$ 1,350	7 %

Operating Profit / (Loss) by Segment				
(Millions of dollars)	**Six Months Ended June 30, 2017**	**Six Months Ended June 30, 2016**	**$ Change**	**% Change**
Construction Industries	$ 1,536	$ 990	$ 546	55 %
Resource Industries	255	(259)	514	n/a
Energy & Transportation	1,252	1,012	240	24 %
All Other Segments	(33)	(21)	(12)	(57)%
Corporate Items and Eliminations	(1,556)	(654)	(902)	
Machinery, Energy & Transportation	1,454	1,068	386	36 %
Financial Products Segment	374	370	4	1 %
Corporate Items and Eliminations	(2)	(32)	30	
Financial Products	372	338	34	10 %
Consolidating Adjustments	(158)	(127)	(31)	
Consolidated Operating Profit / (Loss)	$ 1,668	$ 1,279	$ 389	30 %

Construction Industries

Construction Industries' sales were $9.021 billion in the six months ended June 30, 2017, compared with $8.469 billion in the six months ended June 30, 2016. The increase was due to favorable price realization and higher sales volume.

- Although market conditions remain competitive, price realization was favorable due to a particularly weak pricing environment in the six months ended June 30, 2016, and previously announced price increases impacting the six months ended June 30, 2017. We believe the pricing environment will remain competitive and expect price realization will be less favorable during the last six months of 2017 than during the first half of 2017.
- Sales volume increased due to higher end-user demand, primarily for equipment in Asia/Pacific. This increase was partially offset by the unfavorable impact of changes in dealer inventories resulting from a more significant increase in dealer inventories in the six months ended June 30, 2016, than in the six months ended June 30, 2017.

Sales increased in Asia/Pacific and Latin America and were about flat in North America and EAME.

- Sales in Asia/Pacific were higher as a result of an increase in end-user demand, primarily in China, stemming from increased government support for infrastructure and strong residential investment, which we expect to continue through the end of 2017.

This increase was slightly offset by an unfavorable impact from changes in dealer inventories, primarily in China, which decreased in the six months ended June 30, 2017, and were about flat in the six months ended June 30, 2016.

- Latin America sales were higher primarily due to an increase in end-user demand and the favorable impact of changes in dealer inventories, which increased slightly in the six months ended June 30, 2017, compared to a slight decrease in the six months ended June 30, 2016. Although construction activity remained weak across the region, end-user demand increased from low levels due to stabilizing economic conditions in several countries in the region.
- In North America, sales were about flat as an unfavorable impact from changes in dealer inventories was about offset by favorable price realization. The unfavorable impact of changes in dealer inventories resulted from a decrease in dealer inventories in the six months ended June 30, 2017, compared to an increase in inventories in the six months ended June 30, 2016.
- Sales in EAME were about flat as lower end-user demand was about offset by favorable price realization. The decline in end-user demand was primarily in Africa/Middle East due to volatile financial and economic conditions, as well as continued tight construction spending in oil producing countries.

Construction Industries' profit was $1.536 billion in the six months ended June 30, 2017, compared with $990 million in the six months ended June 30, 2016. The increase in profit was primarily due to favorable price realization and higher sales volume, including a favorable mix of products. Period costs were slightly lower as the favorable impact of restructuring and cost reduction actions was mostly offset by higher short-term incentive compensation expense.

Resource Industries

Resource Industries' sales were $3.429 billion in the six months ended June 30, 2017, an increase of $523 million, or 18 percent, from the six months ended June 30, 2016. The increase was primarily due to higher sales volume for aftermarket parts and the favorable impact of changes in dealer inventories, partially offset by a decrease in dealer deliveries for equipment. We believe that mining companies are beginning to increase capital spending from low levels and this is expected to favorably impact sales for new equipment in the second half of the year. Dealer inventories were about flat in the six months ended June 30, 2017, compared with a decrease in the six months ended June 30, 2016. Increases in certain commodity prices over the past year, along with continued commodity consumption, have resulted in increased mining activity driving the need for maintenance and rebuild activities. We believe a decrease in idle mining trucks on customer sites is also having a positive impact on end-user demand. The company believes commodity prices need to stabilize at these higher levels for a longer duration to drive stronger activity and longer-term demand for equipment.

Resource Industries' profit was $255 million in the six months ended June 30, 2017, compared with a loss of $259 million in the six months ended June 30, 2016. The favorable change was due to higher sales volume and lower period costs. Period costs were lower primarily due to the favorable impact of restructuring and cost reduction actions, partially offset by an increase in short-term incentive compensation expense.

Energy & Transportation

Energy & Transportation's sales were $7.297 billion in the six months ended June 30, 2017, compared with $7.028 billion in the six months ended June 30, 2016. The increase was primarily due to higher sales of aftermarket parts for reciprocating engines.

- **Oil and Gas** - Sales increased in North America due to higher sales of aftermarket parts as a result of strong rebuild activity in well servicing and gas compression applications and due to higher demand for reciprocating engines used in gas compression as natural gas infrastructure build-out continues. Sales for equipment used in gas compression applications in North America are expected to be higher in the second half of 2017. This was partially offset by a decrease in demand for equipment used in production and drilling applications in Asia/Pacific.
- **Industrial** - Sales were higher in Asia/Pacific and Latin America reflecting increased sales for aftermarket parts.
- **Power Generation** - Sales were about flat as a decrease in EAME was about offset by an increase in North America.
- **Transportation** - Sales decreased in North America as the rail industry continues to have a significant number of idle locomotives. This was partially offset by an increase in sales for rail services as North American rail traffic has increased. Sales declined in marine applications mostly due to lower demand, primarily for work boats and offshore vessels.

Energy & Transportation's profit was $1.252 billion in the six months ended June 30, 2017, compared with $1.012 billion in the six months ended June 30, 2016. The increase was primarily due to higher sales volume and lower variable manufacturing costs, partially offset by higher period costs. Variable manufacturing costs were lower primarily due to a favorable impact from cost absorption and improved material costs. Cost absorption was favorable as inventory increased more significantly in the six months ended June 30, 2017, than during the six months ended June 30, 2016. The increase in period costs was primarily due to higher short-term incentive compensation expense.

Financial Products Segment

Financial Products' revenues were $1.536 billion for the six months ended June 30, 2017, an increase of $34 million, or 2 percent, from the six months ended June 30, 2016. The increase was primarily due to higher average financing rates in North America, a favorable impact from increased intercompany lending activity in North America and a favorable impact from returned or repossessed equipment in Asia/Pacific and North America. These favorable impacts were partially offset by lower average earning assets in North America, Latin America and Asia/Pacific and lower average financing rates in Asia/Pacific.

Financial Products' profit was $374 million for the six months ended June 30, 2017, compared with $370 million for the six months ended June 30, 2016. The increase was primarily due to a decrease in the provision for credit losses at Cat Financial, a favorable impact from increased intercompany lending activity, an increase in net yield on average earning assets and a favorable impact from returned or repossessed equipment. These favorable impacts were mostly offset by the absence of gains on sales of securities at Insurance Services, an unfavorable impact from lower average earning assets and an increase in SG&A expenses due to higher short-term incentive compensation expense.

Corporate Items and Eliminations

Expense for corporate items and eliminations was $1.558 billion in the six months ended June 30, 2017, an increase of $872 million from the six months ended June 30, 2016. Corporate items and eliminations include: restructuring costs; corporate-level expenses; timing differences, as some expenses are reported in segment profit on a cash basis; retirement benefit costs other than service cost; currency differences for ME&T, as segment profit is reported using annual fixed exchange rates; cost of sales methodology differences, as segments use a current cost methodology; and inter-segment eliminations.

Restructuring costs in the six months ended June 30, 2017, were $921 million, $621 million higher than the six months ended June 30, 2016, primarily due to the announced closure of the facility in Gosselies, Belgium. Excluding restructuring costs, expense for corporate items and eliminations was $637 million, an increase of $251 million from the six months ended June 30, 2016, primarily due to timing and methodology differences.

RESTRUCTURING COSTS

Restructuring costs for the three and six months ended June 30, 2017 and 2016 were as follows:

(Millions of dollars)	Three Months Ended June 30	
	2017	2016
Employee separations [1]	$ 42	$ 45
Contract terminations [1]	17	36
Long-lived asset impairments [1]	63	14
Other [2]	47	44
Total restructuring costs	$ 169	$ 139

	Six Months Ended June 30	
	2017	2016
Employee separations [1]	$ 506	$ 76
Contract terminations [1]	26	46
Long-lived asset impairments [1]	275	96
Defined benefit plan curtailments and termination benefits [1]	29	—
Other [2]	85	82
Total restructuring costs	$ 921	$ 300

[1] Recognized in Other operating (income) expenses.

[2] Represents costs related to our restructuring programs, primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management costs and also ***LIFO inventory decrement benefits*** from inventory liquidations at closed facilities (primarily included in Cost of goods sold).

In March 2017, Caterpillar informed Belgian authorities of the decision to proceed to a collective dismissal, which will lead to the closure of the Gosselies site, impacting about 2,000 employees. Production of Caterpillar products at the Gosselies site ended during the second quarter of 2017. The majority of the other operations and functions at the Gosselies site are expected to be gradually phased out by the end of 2017. We estimate restructuring costs incurred under this program to be about $700 million. For the first six months of 2017, we recognized $667 million of restructuring costs which included $444 million of employee separation costs, $199 million for long-lived asset impairments and $57 million of other costs partially offset by a $33 million LIFO inventory decrement benefit. The majority of the remaining costs are expected to be recognized in 2017. The remaining restructuring costs for the first six months of 2017 were related to other restructuring actions across the company.

The restructuring costs for the first six months of 2016 were related to our decision to discontinue production of on-highway vocational trucks, as discussed below, and other restructuring actions across the company.

Restructuring costs are a reconciling item between Segment profit and Consolidated profit before taxes.

The following table summarizes the 2016 and 2017 employee separation activity:

(Millions of dollars)	
Liability balance at December 31, 2015	$ 483
Increase in liability (separation charges)	297
Reduction in liability (payments)	(633)
Liability balance at December 31, 2016	$ 147
Increase in liability (separation charges)	506
Reduction in liability (payments)	(237)
Liability balance at June 30, 2017	$ 416

Most of the liability balance at June 30, 2017 is expected to be paid in 2017 and primarily includes employee separation payments related to closure of the Gosselies facility.

Restructuring costs for the year ended December 31, 2016 were $1,019 million. Throughout 2016, we initiated the following restructuring plans:

- In February 2016, we made the decision to discontinue production of on-highway vocational trucks. Based on the business climate in the truck industry and a thorough evaluation of the business, the company decided it would withdraw from this market. We recognized $104 million of restructuring costs, primarily related to long-lived asset impairments and sales discounts and expect to recognize the remaining $4 million for this restructuring plan in 2017.
- In the second half of 2016, we took additional restructuring actions in Resource Industries, including ending the production of track drills; pursuing strategic alternatives related to room and pillar products; consolidation of two product development divisions; and additional actions in response to ongoing weakness in the mining industry. For the year ended December 31, 2016, we incurred $369 million of restructuring costs for these plans primarily related to long-lived asset impairments, employee separation costs and inventory write-downs.

In September 2015, we announced a large scale restructuring plan (the Plan) including a voluntary retirement enhancement program for qualifying U.S. employees, several voluntary separation programs outside of the U.S., additional involuntary programs throughout the company and manufacturing facility consolidations and closures expected to occur through 2018. The largest action among those included in the Plan was related to our European manufacturing footprint, which led to the Gosselies facility closure as discussed above. In the first six months of 2017, we incurred $749 million of restructuring costs related to the Plan, and we incurred $281 million and $569 million in 2016 and 2015, respectively, for a total of $1,599 million through June 30, 2017. We expect to recognize approximately $160 million of additional restructuring costs related to the Plan in 2017.

We expect 2017 restructuring costs will be approximately $1.2 billion, slightly lower than the previous estimate of about $1.25 billion. We expect that restructuring actions will result in a benefit to operating costs, primarily SG&A expenses and Cost of goods sold of about $400 million in 2017 compared with 2016.

GLOSSARY OF TERMS

1. **Adjusted Profit Per Share** - Profit per share excluding restructuring costs for 2017 and 2016. For 2017, adjusted profit per share also excludes a gain on the sale of an equity investment in IronPlanet recognized in the second quarter.
2. **All Other Segments** - Primarily includes activities such as: business strategy, product management and development, and manufacturing of filters and fluids, undercarriage, tires and rims, ground engaging tools, fluid transfer products, precision seals, and rubber sealing and connecting components primarily for Cat® products; parts distribution; distribution services responsible for dealer development and administration including a wholly owned dealer in Japan, dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; digital investments for new customer and dealer solutions that integrate data analytics with state-of-the art digital technologies while transforming the buying experience.
3. **Consolidating Adjustments** - Elimination of transactions between Machinery, Energy & Transportation and Financial Products.
4. **Construction Industries** - A segment primarily responsible for supporting customers using machinery in infrastructure, forestry and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes backhoe loaders, small wheel loaders, small track-type tractors, skid steer loaders, multi-terrain loaders, mini excavators, compact wheel loaders, telehandlers, select work tools, small, medium and large track excavators, wheel excavators, medium wheel loaders, compact track loaders, medium track-type tractors, track-type loaders, motor graders, pipelayers, forestry and paving products and related parts.
5. **Currency** - With respect to sales and revenues, currency represents the translation impact on sales resulting from changes in foreign currency exchange rates versus the U.S. dollar. With respect to operating profit, currency represents the net translation impact on sales and operating costs resulting from changes in foreign currency exchange rates versus the U.S. dollar. Currency includes the impact on sales and operating profit for the Machinery, Energy & Transportation lines of business only excluding restructuring costs; currency impacts on Financial Products' revenues and operating profit are included in the Financial Products' portions of the respective analyses. With respect to other income/expense, currency represents the effects of forward and option contracts entered into by the company to reduce the risk of fluctuations in exchange rates (hedging) and the net effect of changes in foreign currency exchange rates on our foreign currency assets and liabilities for consolidated results (translation).

6. **Debt-to-Capital Ratio** - A key measure of Machinery, Energy & Transportation's financial strength used by management. The metric is defined as Machinery, Energy & Transportation's short-term borrowings, long-term debt due within one year and long-term debt due after one year (debt) divided by the sum of Machinery, Energy & Transportation's debt and shareholders' equity. Debt also includes Machinery, Energy & Transportation's long-term borrowings from Financial Products.
7. **EAME** - A geographic region including Europe, Africa, the Middle East and the Commonwealth of Independent States (CIS).
8. **Earning Assets** - Assets consisting primarily of total finance receivables net of unearned income, plus equipment on operating leases, less accumulated depreciation at Cat Financial.
9. **Energy & Transportation** - A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related parts across industries serving power generation, industrial, oil and gas and transportation applications, including marine and rail-related businesses. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support of turbines and turbine-related services, reciprocating engine powered generator sets, integrated systems used in the electric power generation industry, reciprocating engines and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines supplied to the industrial industry as well as Cat machinery; the remanufacturing of Cat engines and components and remanufacturing services for other companies; the business strategy, product design, product management and development, manufacturing, remanufacturing, leasing and service of diesel-electric locomotives and components and other rail-related products and services and product support of on-highway vocational trucks for North America.
10. **Financial Products Segment** - Provides financing alternatives to customers and dealers around the world for Caterpillar products, as well as financing for vehicles, power generation facilities and marine vessels that, in most cases, incorporate Caterpillar products. Financing plans include operating and finance leases, installment sale contracts, working capital loans and wholesale financing plans. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of our equipment. Financial Products segment profit is determined on a pretax basis and includes other income/expense items.
11. **Latin America** - A geographic region including Central and South American countries and Mexico.
12. **LIFO Inventory Decrement Benefits** - A significant portion of Caterpillar's inventory is valued using the last-in, first-out (LIFO) method. With this method, the cost of inventory is comprised of "layers" at cost levels for years when inventory increases occurred. A LIFO decrement occurs when inventory decreases, depleting layers added in earlier, generally lower cost years. A LIFO decrement benefit represents the impact on operating profit of charging cost of goods sold with prior-year cost levels rather than current period costs.
13. **Machinery, Energy & Transportation (ME&T)** - Represents the aggregate total of Construction Industries, Resource Industries, Energy & Transportation and All Other Segments and related corporate items and eliminations.
14. **Machinery, Energy & Transportation Other Operating (Income) Expenses** - Comprised primarily of gains/losses on disposal of long-lived assets, gains/losses on divestitures and legal settlements and accruals. Restructuring costs classified as other operating expenses on the Results of Operations are presented separately on the Operating Profit Comparison.
15. **Period Costs** - Includes period manufacturing costs, ME&T selling, general and administrative (SG&A) and research and development (R&D) expenses excluding the impact of currency and exit-related costs that are included in restructuring costs (see definition below). Period manufacturing costs support production but are defined as generally not having a direct relationship to short-term changes in volume. Examples include machinery and equipment repair, depreciation on manufacturing assets, facility support, procurement, factory scheduling, manufacturing planning and operations management. SG&A and R&D costs are not linked to the production of goods or services and include marketing, legal and finance services and the development of new and significant improvements in products or processes.
16. **Price Realization** - The impact of net price changes excluding currency and new product introductions. Price realization includes geographic mix of sales, which is the impact of changes in the relative weighting of sales prices between geographic regions.
17. **Resource Industries** - A segment primarily responsible for supporting customers using machinery in mining, quarry, waste, and material handling applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors, large mining trucks, hard rock vehicles, longwall miners, electric rope shovels, draglines, hydraulic shovels, track and rotary drills, highwall miners, large wheel loaders, off-highway trucks, articulated trucks, wheel tractor scrapers, wheel dozers, landfill compactors, soil compactors, material handlers, continuous miners, scoops and haulers, hardrock continuous mining

systems, select work tools, machinery components, electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics and autonomous machine capabilities. Resource Industries also manages areas that provide services to other parts of the company, including integrated manufacturing and research and development.

18. **Restructuring Costs** - Primarily costs for employee separation, long-lived asset impairments and contract terminations. These costs are included in Other Operating (Income) Expenses. Restructuring costs also include other exit-related costs primarily for accelerated depreciation, inventory write-downs, equipment relocation and project management costs and also LIFO inventory decrement benefits from inventory liquidations at closed facilities (primarily included in Cost of goods sold).
19. **Sales Volume** - With respect to sales and revenues, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation as well as the incremental revenue impact of new product introductions, including emissions-related product updates. With respect to operating profit, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation combined with product mix as well as the net operating profit impact of new product introductions, including emissions-related product updates. Product mix represents the net operating profit impact of changes in the relative weighting of Machinery, Energy & Transportation sales with respect to total sales. The impact of sales volume on segment profit includes intersegment sales.
20. **Variable Manufacturing Costs** - Represents volume-adjusted costs excluding the impact of currency and restructuring costs (see definition above). Variable manufacturing costs are defined as having a direct relationship with the volume of production. This includes material costs, direct labor and other costs that vary directly with production volume such as freight, power to operate machines and supplies that are consumed in the manufacturing process.

LIQUIDITY AND CAPITAL RESOURCES

Sources of funds

We generate significant capital resources from operating activities, which are the primary source of funding for our ME&T operations. Funding for these businesses is also available from commercial paper and long-term debt issuances. Financial Products' operations are funded primarily from commercial paper, term debt issuances and collections from its existing portfolio. During the first half of 2017, we experienced favorable liquidity conditions globally in both our ME&T and Financial Products' operations. On a consolidated basis, we ended the first half of 2017 with $10.23 billion of cash, an increase of $3.06 billion from year-end 2016. We intend to maintain a strong cash and liquidity position.

Our cash balances are held in numerous locations throughout the world with approximately $8.7 billion held by our non-U.S. subsidiaries. If non-U.S. earnings were repatriated in excess of the amount previously taxed in the United States, U.S. tax would generally be payable net of any available foreign tax credits.

Consolidated operating cash flow for the first half of 2017 was $3.92 billion, up from $2.80 billion for the same period last year. The increase was primarily due to higher profit adjusted for non-cash expenses, including restructuring costs and short-term incentive compensation expense in the first half of 2017, compared with the first half of 2016. First-half 2017 restructuring costs were primarily for severance costs that have not yet been paid and for non-cash impairment charges. In addition, there were lower severance and short-term incentive compensation payments in the first half of 2017 versus the first half of 2016. Partially offsetting these items were unfavorable changes to working capital, primarily due to a decrease in working capital during the first half of 2016. See further discussion of operating cash flow under ME&T and Financial Products.

Total debt as of June 30, 2017 was $37.19 billion, an increase of $409 million from year-end 2016. Debt related to Financial Products increased $736 million, primarily due to the impact of lending activity with ME&T. Debt related to ME&T decreased $327 million in the first half of 2017, primarily due to the maturity of a long-term debt issuance.

We have three global credit facilities with a syndicate of banks totaling $10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and Cat Financial for general liquidity purposes. Based on management's allocation decision, which can be revised from time to time, the portion of the Credit Facility available to ME&T as of June 30, 2017 was $2.75 billion. Information on our three Global Credit Facilities is as follows:

- The 364-day facility of $3.15 billion (of which $0.82 billion is available to ME&T) expires in September 2017.
- The three-year facility of $2.73 billion (of which $0.72 billion is available to ME&T) expires in September 2019.
- The five-year facility of $4.62 billion (of which $1.21 billion is available to ME&T) expires in September 2021.

At June 30, 2017, Caterpillar's consolidated net worth was $14.07 billion, which was above the $9.00 billion required under the Credit Facility. The consolidated net worth is defined as the consolidated shareholders' equity including preferred stock but excluding the pension and other postretirement benefits balance within Accumulated other comprehensive income (loss).

At June 30, 2017, Cat Financial's covenant interest coverage ratio was 1.94 to 1. This is above the 1.15 to 1 minimum ratio calculated as (1) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (2) interest expense calculated at the end of each calendar quarter for the rolling four quarter period then most recently ended, required by the Credit Facility.

In addition, at June 30, 2017, Cat Financial's covenant leverage ratio was 7.46 to 1. This is below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event Caterpillar or Cat Financial does not meet one or more of their respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of Cat Financial's other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable, may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At June 30, 2017, there were no borrowings under the Credit Facility.

Our total credit commitments and available credit as of June 30, 2017 were:

	June 30, 2017		
(Millions of dollars)	**Consolidated**	**Machinery, Energy & Transportation**	**Financial Products**
Credit lines available:			
Global credit facilities	$ 10,500	$ 2,750	$ 7,750
Other external	4,309	5	4,304
Total credit lines available	14,809	2,755	12,054
Less: Commercial paper outstanding	(5,537)	—	(5,537)
Less: Utilized credit	(1,537)	(5)	(1,532)
Available credit	$ 7,735	$ 2,750	$ 4,985

The other external consolidated credit lines with banks as of June 30, 2017 totaled $4.31 billion. These committed and uncommitted credit lines, which may be eligible for renewal at various future dates or have no specified expiration date, are used primarily by our subsidiaries for local funding requirements. Caterpillar or Cat Financial may guarantee subsidiary borrowings under these lines.

We receive debt ratings from the major rating agencies. In December 2016, Moody's Investors Service downgraded our long-term ratings to A3 from A2, and short-term ratings to Prime-2 from Prime-1. The Moody's downgrade did not have a material impact on our borrowing costs or our overall financial health. A further downgrade of our credit ratings by Moody's or one of the other major credit rating agencies would result in increased borrowing costs and could make access to certain credit markets more difficult. In the event economic conditions deteriorate such that access to debt markets becomes unavailable, ME&T's operations would rely on cash flow from operations, use of existing cash balances, borrowings from Cat Financial and access to our Credit Facility. Our Financial Products' operations would rely on cash flow from its existing portfolio, existing cash balances, access to our Credit Facility and other credit line facilities of Cat Financial and potential borrowings from Caterpillar. In addition, we maintain a support agreement with Cat Financial, which requires Caterpillar to remain the sole owner of Cat Financial and may, under certain circumstances, require Caterpillar to make payments to Cat Financial should Cat Financial fail to maintain certain financial ratios.

Machinery, Energy & Transportation
Net cash provided by operating activities was $3.55 billion in the first half of 2017, compared with $1.39 billion for the same period in 2016. The increase was primarily due to higher profit adjusted for non-cash expenses, including restructuring costs and short-term incentive compensation expense in the first half of 2017, compared with the first half of 2016. First-half 2017 restructuring costs were primarily for severance costs that have not yet been paid and for non-cash impairment charges. In addition, there were lower severance and short-term incentive compensation payments in the first half of 2017 versus the first half of 2016.

Net cash used for investing activities in the first half of 2017 was $205 million, compared with net cash used of $1.44 billion in the first half of 2016. The change was primarily due to the absence of ME&T lending activity with Financial Products that occurred in the first half of 2016.

Net cash provided by financing activities during the first half of 2017 was $327 million, compared with $304 million in the same period of 2016. Higher borrowing activity with Financial Products and proceeds received related to a financing transaction in Japan in 2017 were offset by the maturity of a long-term debt issuance in 2017 as well as lower commercial paper borrowings in 2017 as compared to 2016.

Although our short-term priorities for the use of cash may vary from time to time as business needs and conditions dictate, our long-term cash deployment strategy remains unchanged: maintain a strong financial position in support of our credit rating, provide capital to support growth, appropriately fund employee benefit plans, pay dividends and repurchase common stock.

Strong financial position – A key measure of ME&T's financial strength used by management is ME&T's debt-to-capital ratio. Debt-to-capital is defined as short-term borrowings, long-term debt due within one year and long-term debt due after one year (debt) divided by the sum of debt and shareholders' equity. Debt also includes ME&T's long-term borrowings from Financial Products. The debt-to-capital ratio for ME&T was 38.6 percent at June 30, 2017, within our target range of 30 to 45 percent. ME&T's debt-to-capital ratio was 41.0 percent at December 31, 2016. The decrease in the debt-to-capital ratio was driven by an increase in equity, primarily due to favorable foreign currency translation adjustments, and a decrease in debt.

Capital to support growth – Capital expenditures were $379 million during the first half of 2017, compared to $618 million for the same period in 2016. We expect ME&T's capital expenditures in 2017 to be about the same as 2016.

Appropriately funded employee benefit plans – We made $198 million of contributions to our pension and other postretirement benefit plans during the first half of 2017. We currently anticipate full-year 2017 contributions of approximately $610 million. We made $199 million of contributions to our pension and other postretirement benefit plans during the first half of 2016. We believe we have adequate resources to fund our employee benefit plans.

Paying dividends – Dividends totaled $906 million in the first half of 2017, representing 77 cents per share paid. Each quarter, our Board of Directors reviews the company's dividend for the applicable quarter. The Board evaluates the financial condition of the company and considers the economic outlook, corporate cash flow, the company's liquidity needs, and the health and stability of global credit markets to determine whether to maintain or change the quarterly dividend. In June 2017, the Board announced an increase in the quarterly dividend rate to 78 cents per share.

Common stock repurchases – In January 2014, the Board of Directors approved an authorization to repurchase up to $10 billion of Caterpillar common stock (the 2014 Authorization), which will expire on December 31, 2018. We did not purchase any Caterpillar common stock in the first half of 2017. As of June 30, 2017, $5.47 billion remained available under the 2014 Authorization. Caterpillar's basic shares outstanding as of June 30, 2017 were approximately 591 million.

Financial Products
Financial Products' operating cash flow was $678 million in the first half of 2017, compared with $877 million for the same period a year ago. Net cash used for investing activities was $1.74 billion for the first half of 2017, compared with $1.31 billion for the same period in 2016. The change was primarily due to the impact of intercompany lending with ME&T. Net cash provided by financing activities was $438 million for the first half of 2017, compared with $484 million for the same period in 2016.

CRITICAL ACCOUNTING POLICIES

For a discussion of the Company's critical accounting policies, see Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2016 Annual Report on Form 10-K. Critical accounting policies that have been revised since our 2016 Annual Report on Form 10-K are as follows.

Fair values for goodwill impairment tests - We test goodwill for impairment annually, at the reporting unit level, and whenever events or circumstances make it likely that an impairment may have occurred, such as a significant adverse change in the business climate or a decision to sell all or a portion of a reporting unit. We perform our annual goodwill impairment test as of October 1 and monitor for interim triggering events on an ongoing basis.

Goodwill is reviewed for impairment utilizing either a qualitative assessment or a quantitative goodwill impairment test. If we choose to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. Beginning in 2017, for reporting units where we perform the quantitative goodwill impairment test, we compare the fair value of each reporting unit, which we primarily determine using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeds its carrying value, the goodwill is not considered impaired. If the carrying value is higher than the fair value, the difference is recognized as an impairment loss. Prior to 2017, a two-step process was used. For reporting units where we performed the two-step process, the first step required us to compare the fair value of each reporting unit, which we primarily determined using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeded its carrying value, the goodwill was not considered impaired. If the carrying value was higher than the fair value, there was an indication that an impairment may have existed and the second step was required. In step two, the implied fair value of goodwill was calculated as the excess of the fair value of a reporting unit over the fair values assigned to its assets and liabilities. If the implied fair value of goodwill was less than the carrying value of the reporting unit's goodwill, the difference was recognized as an impairment loss.

The impairment test process requires valuation of the respective reporting unit, which we primarily determine using an income approach based on a discounted five year forecasted cash flow with a year-five residual value. The residual value is computed using the constant growth method, which values the forecasted cash flows in perpetuity. The income approach is supported by a reconciliation of our calculated fair value for Caterpillar to the company's market capitalization. The assumptions about future cash flows and growth rates are based on each reporting unit's long-term forecast and are subject to review and approval by senior management. A reporting unit’s discount rate is a risk-adjusted weighted average cost of capital, which we believe approximates the rate from a market participant's perspective. The estimated fair value could be impacted by changes in market conditions, interest rates, growth rates, tax rates, costs, pricing and capital expenditures. The fair value determination is categorized as Level 3 in the fair value hierarchy due to its use of internal projections and unobservable measurement inputs.

An unfavorable change in our expectations for the financial performance of our reporting units, particularly long-term growth and profitability, would reduce the fair value of our reporting units. The demand for our equipment and related parts is highly cyclical and significantly impacted by commodity prices, although the impact may vary by reporting unit. The energy and mining industries are major users of our products, including the coal, iron ore, gold, copper, oil and natural gas industries. Decisions to purchase our products are dependent upon the performance of those industries, which in turn are dependent in part on commodity prices. Lower commodity prices or industry specific circumstances that have a negative impact to the valuation assumptions may reduce the fair value of our reporting units. Should such events occur and it becomes more likely than not that a reporting unit's fair value has fallen below its carrying value, we will perform an interim goodwill impairment test(s), in addition to the annual impairment test. Future impairment tests may result in a goodwill impairment, depending on the outcome of the quantitative impairment test. A goodwill impairment would be reported as a non-cash charge to earnings.

Stock-based compensation - We use a lattice-based option-pricing model to calculate the fair value of our stock options and SARs. The calculation of the fair value of the awards using the lattice-based option-pricing model is affected by our stock price on the date of grant as well as assumptions regarding the following:

- Volatility is a measure of the amount by which the stock price is expected to fluctuate each year during the expected term of the award and is based on historical Caterpillar stock price movement and current implied volatilities from traded options on Caterpillar stock. The implied volatilities from traded options are impacted by changes in market conditions. An increase in the volatility would result in an increase in our expense.
- The expected term represents the period of time that awards granted are expected to be outstanding and is an output of the lattice-based option-pricing model. In determining the expected term of the award, future exercise and forfeiture patterns are estimated from Caterpillar employee historical exercise behavior. These patterns are also affected by the vesting conditions of the award. Changes in the future exercise behavior of employees or in the vesting period of the award could result in a change in the expected term. An increase in the expected term would result in an increase to our expense.
- The weighted-average dividend yield is based on Caterpillar's historical dividend yields. As holders of stock options and SARs do not receive dividend payments, this could result in employees retaining the award for a longer period of time if dividend yields decrease or exercising the award sooner if dividend yields increase. A decrease in the dividend yield would result in an increase in our expense.

- The risk-free interest rate is based on the U.S. Treasury yield curve in effect at time of grant. As the risk-free interest rate increases, the expected term increases, resulting in an increase in our expense.

The fair value of our RSUs and PRSUs is determined by reducing the stock price on the date of grant by the present value of the estimated dividends to be paid during the vesting period. The estimated dividends are based on Caterpillar's quarterly dividend per share at the time of grant. A decrease in the dividend per share would result in an increase in our expense.

Stock-based compensation expense is recognized based on the grant date fair value. Forfeitures are accounted for in the period they occur as a reduction to expense. Stock-based compensation expense for PRSUs is based on the probable number of shares expected to vest. Changes in the expected probability of achieving performance targets in future periods may result in an increase or decrease in our expense.

OTHER MATTERS

Environmental and Legal Matters

The Company is regulated by federal, state and international environmental laws governing our use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, the investigation, remediation, and operating and maintenance costs are accrued against our earnings. Costs are accrued based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly basis. The amount recorded for environmental remediation is not material and is included in Accrued expenses. We believe there is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

On January 7, 2015, the Company received a grand jury subpoena from the U.S. District Court for the Central District of Illinois. The subpoena requests documents and information from the Company relating to, among other things, financial information concerning U.S. and non-U.S. Caterpillar subsidiaries (including undistributed profits of non-U.S. subsidiaries and the movement of cash among U.S. and non-U.S. subsidiaries). The Company has received additional subpoenas relating to this investigation requesting additional documents and information relating to, among other things, the purchase and resale of replacement parts by Caterpillar Inc. and non-U.S. Caterpillar subsidiaries, dividend distributions of certain non-U.S. Caterpillar subsidiaries, and Caterpillar SARL and related structures. On March 2-3, 2017, agents with the Department of Commerce, the Federal Deposit Insurance Corporation and the Internal Revenue Service executed search and seizure warrants at three facilities of the Company in the Peoria, Illinois area, including its corporate headquarters. The warrants identify, and agents seized, documents and information related to, among other things, the export of products from the United States, the movement of products between the United States and Switzerland, the relationship between Caterpillar Inc. and Caterpillar SARL, and sales outside the United States. It is the Company’s understanding that the warrants, which concern both tax and export activities, are related to the ongoing grand jury investigation. The Company is continuing to cooperate with this investigation. The Company is unable to predict the outcome or reasonably estimate any potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company’s consolidated results of operations, financial position or liquidity.

On March 20, 2014, Brazil’s Administrative Council for Economic Defense (CADE) published a Technical Opinion which named 18 companies and over 100 individuals as defendants, including two subsidiaries of Caterpillar Inc., MGE - Equipamentos e Serviços Ferroviários Ltda. (MGE) and Caterpillar Brasil Ltda. The publication of the Technical Opinion opened CADE's official administrative investigation into allegations that the defendants participated in anticompetitive bid activity for the construction and maintenance of metro and train networks in Brazil. While companies cannot be held criminally liable for anticompetitive conduct in Brazil, criminal charges have been brought against two current employees of MGE and one former employee of MGE involving the same conduct alleged by CADE. The Company has responded to all requests for information from the authorities. The Company is unable to predict the outcome or reasonably estimate the potential loss; however, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

On October 24, 2013, Progress Rail received a grand jury subpoena from the U.S. District Court for the Central District of California. The subpoena requests documents and information from Progress Rail, United Industries Corporation, a wholly-owned subsidiary of Progress Rail, and Caterpillar Inc. relating to allegations that Progress Rail conducted improper or unnecessary railcar inspections and repairs and improperly disposed of parts, equipment, tools and other items. In connection with this subpoena, Progress Rail was informed by the U.S. Attorney for the Central District of California that it is a target of a criminal investigation into potential violations of environmental laws and alleged improper business practices. The Company is cooperating with the authorities and is currently in discussions regarding a potential resolution of the matter. Although the Company believes a loss is probable, we currently believe that this matter will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

In addition, we are involved in other unresolved legal actions that arise in the normal course of business. The most prevalent of these unresolved actions involve disputes related to product design, manufacture and performance liability (including claimed asbestos and welding fumes exposure), contracts, employment issues, environmental matters, intellectual property rights, and securities laws. The aggregate range of reasonably possible losses in excess of accrued liabilities, if any, associated with these unresolved legal actions is not material. In some cases, we cannot reasonably estimate a range of loss because there is insufficient information regarding the matter. However, we believe there is no more than a remote chance that any liability arising from these matters would be material. Although it is not possible to predict with certainty the outcome of these unresolved legal actions, we believe that these actions will not individually or in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

Order Backlog

The dollar amount of backlog believed to be firm was approximately $14.8 billion at June 30, 2017 and March 31, 2017. Resource Industries' order backlog increased about $300 million, Construction Industries' decreased about $300 million and Energy & Transportation was about flat. It is not uncommon for the construction order backlog to decline during the second-quarter selling season. Compared with the second quarter of 2016, the order backlog increased about $3.0 billion. The increase was across all segments, most significantly in Construction Industries and Resource Industries. Of the total backlog at June 30, 2017, approximately $3.0 billion was not expected to be filled in the following twelve months.

NON-GAAP FINANCIAL MEASURES

The following definitions are provided for the non-GAAP financial measures used in this report. These non-GAAP financial measures have no standardized meaning prescribed by U.S. GAAP and therefore are unlikely to be comparable to the calculation of similar measures for other companies. Management does not intend for these items to be considered in isolation or as a substitute for the related GAAP measures.

We believe it is important to separately quantify the profit impact of two special items in order for the company's results to be meaningful to readers.These items consist of restructuring costs, which are incurred in the current year to generate longer term benefits, and a gain on sale of an equity investment. We do not consider these items indicative of earnings from ongoing business activities and believe the non-GAAP measure will provide useful perspective on underlying business results and trends, and a means to assess the company's period-over-period results. Reconciliation of adjusted profit per share to the most directly comparable GAAP measure, profit per share - diluted are as follows:

	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Profit per share - diluted	$ 1.35	$ 0.93	$ 1.67	$ 1.40
Per share restructuring costs [1]	0.23	0.16	1.19	0.33
Per share gain on sale of equity investment[2]	$ (0.09)	$ —	$ (0.09)	$ —
Adjusted profit per share	$ 1.49	$ 1.09	$ 2.77	$ 1.73

[1] At estimated annual tax rate based on full-year outlook for per share restructuring costs at statutory tax rates. Three and six months ended June 30, 2017 at estimated annual rate of 22 percent. Six months ended June 30, 2017 also includes $15 million increase to prior year taxes related to non-U.S. restructuring costs recognized in the first quarter of 2017. Second-quarter 2017 includes a favorable interim adjustment of $0.01 per share and six months ended June 30, 2017 includes an unfavorable interim adjustment of $0.05 per share resulting from the difference in the estimated annual tax rate for consolidated reporting of 32 percent and the estimated annual tax rate for profit per share excluding restructuring costs, gain on sale of equity investment and discrete items of 29 percent.

[2] At U.S. statutory tax rate of 35 percent.

Supplemental Consolidating Data

We are providing supplemental consolidating data for the purpose of additional analysis. The data has been grouped as follows:

Consolidated – Caterpillar Inc. and its subsidiaries.

Machinery, Energy & Transportation – Caterpillar defines Machinery, Energy & Transportation as it is presented in the supplemental data as Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis. Machinery, Energy & Transportation information relates to the design, manufacturing and marketing of our products. Financial Products' information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment. The nature of these businesses is different, especially with regard to the financial position and cash flow items. Caterpillar management utilizes this presentation internally to highlight these differences. We also believe this presentation will assist readers in understanding our business.

Financial Products – Our finance and insurance subsidiaries, primarily Cat Financial and Insurance Services.

Consolidating Adjustments – Eliminations of transactions between Machinery, Energy & Transportation and Financial Products.

Pages 82 to 89 reconcile Machinery, Energy & Transportation with Financial Products on the equity basis to Caterpillar Inc. consolidated financial information.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Three Months Ended June 30, 2017
(Unaudited)
(Millions of dollars)

	Consolidated	Supplemental Consolidating Data: Machinery, Energy & Transportation [1]	Supplemental Consolidating Data: Financial Products	Supplemental Consolidating Data: Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	$ 10,639	$ 10,639	$ —	$ —
Revenues of Financial Products	692	—	793	(101) [2]
Total sales and revenues	11,331	10,639	793	(101)
Operating costs:				
Cost of goods sold	7,769	7,769	—	—
Selling, general and administrative expenses	1,289	1,154	139	(4) [3]
Research and development expenses	453	453	—	—
Interest expense of Financial Products	162	—	167	(5) [4]
Other operating (income) expenses	407	111	301	(5) [3]
Total operating costs	10,080	9,487	607	(14)
Operating profit	1,251	1,152	186	(87)
Interest expense excluding Financial Products	121	146	—	(25) [4]
Other income (expense)	29	(35)	2	62 [5]
Consolidated profit before taxes	1,159	971	188	—
Provision (benefit) for income taxes	361	303	58	—
Profit of consolidated companies	798	668	130	—
Equity in profit (loss) of unconsolidated affiliated companies	5	5	—	—
Equity in profit of Financial Products' subsidiaries	—	129	—	(129) [6]
Profit of consolidated and affiliated companies	803	802	130	(129)
Less: Profit (loss) attributable to noncontrolling interests	1	—	1	—
Profit [7]	$ 802	$ 802	$ 129	$ (129)

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.
3 Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.
4 Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.
5 Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.
6 Elimination of Financial Products' profit due to equity method of accounting.

7 Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Six Months Ended June 30, 2017
(Unaudited)
(Millions of dollars)

	Consolidated	Supplemental Consolidating Data: Machinery, Energy & Transportation [1]	Financial Products	Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	$ 19,769	$ 19,769	$ —	$ —
Revenues of Financial Products	1,384	—	1,570	(186) [2]
Total sales and revenues	21,153	19,769	1,570	(186)
Operating costs:				
Cost of goods sold	14,527	14,527	—	—
Selling, general and administrative expenses	2,334	2,078	265	(9) [3]
Research and development expenses	871	871	—	—
Interest expense of Financial Products	321	—	330	(9) [4]
Other operating (income) expenses	1,432	839	603	(10) [3]
Total operating costs	19,485	18,315	1,198	(28)
Operating profit	1,668	1,454	372	(158)
Interest expense excluding Financial Products	244	290	—	(46) [4]
Other income (expense)	24	(88)	—	112 [5]
Consolidated profit before taxes	1,448	1,076	372	—
Provision (benefit) for income taxes	451	337	114	—
Profit of consolidated companies	997	739	258	—
Equity in profit (loss) of unconsolidated affiliated companies	—	—	—	—
Equity in profit of Financial Products' subsidiaries	—	255	—	(255) [6]
Profit of consolidated and affiliated companies	997	994	258	(255)
Less: Profit (loss) attributable to noncontrolling interests	3	—	3	—
Profit [7]	$ 994	$ 994	$ 255	$ (255)

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.
3 Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.
4 Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.
5 Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.

6 Elimination of Financial Products' profit due to equity method of accounting.
7 Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Three Months Ended June 30, 2016
(Unaudited)
(Millions of dollars)

		Supplemental Consolidating Data		
	Consolidated	Machinery, Energy & Transportation [1]	Financial Products	Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	$ 9,645	$ 9,645	$ —	$ —
Revenues of Financial Products	697	—	778	(81) [2]
Total sales and revenues	10,342	9,645	778	(81)
Operating costs:				
Cost of goods sold	7,419	7,419	—	—
Selling, general and administrative expenses	1,123	981	147	(5) [3]
Research and development expenses	468	468	—	—
Interest expense of Financial Products	148	—	152	(4) [4]
Other operating (income) expenses	399	99	308	(8) [3]
Total operating costs	9,557	8,967	607	(17)
Operating profit	785	678	171	(64)
Interest expense excluding Financial Products	130	143	—	(13) [4]
Other income (expense)	84	5	28	51 [5]
Consolidated profit before taxes	739	540	199	—
Provision (benefit) for income taxes	184	122	62	—
Profit of consolidated companies	555	418	137	—
Equity in profit (loss) of unconsolidated affiliated companies	(2)	(2)	—	—
Equity in profit of Financial Products' subsidiaries	—	135	—	(135) [6]
Profit of consolidated and affiliated companies	553	551	137	(135)
Less: Profit (loss) attributable to noncontrolling interests	3	1	2	—
Profit [7]	$ 550	$ 550	$ 135	$ (135)

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.
3 Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.
4 Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.
5 Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.
6 Elimination of Financial Products' profit due to equity method of accounting.

7 Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Results of Operations
For the Six Months Ended June 30, 2016
(Unaudited)
(Millions of dollars)

		Supplemental Consolidating Data		
	Consolidated	Machinery, Energy & Transportation [1]	Financial Products	Consolidating Adjustments
Sales and revenues:				
Sales of Machinery, Energy & Transportation	$ 18,425	$ 18,425	$ —	$ —
Revenues of Financial Products	1,378	—	1,537	(159) [2]
Total sales and revenues	19,803	18,425	1,537	(159)
Operating costs:				
Cost of goods sold	14,241	14,241	—	—
Selling, general and administrative expenses	2,211	1,936	286	(11) [3]
Research and development expenses	976	976	—	—
Interest expense of Financial Products	300	—	307	(7) [4]
Other operating (income) expenses	796	204	606	(14) [3]
Total operating costs	18,524	17,357	1,199	(32)
Operating profit	1,279	1,068	338	(127)
Interest expense excluding Financial Products	259	283	—	(24) [4]
Other income (expense)	84	(47)	28	103 [5]
Consolidated profit before taxes	1,104	738	366	—
Provision (benefit) for income taxes	276	162	114	—
Profit of consolidated companies	828	576	252	—
Equity in profit (loss) of unconsolidated affiliated companies	(3)	(3)	—	—
Equity in profit of Financial Products' subsidiaries	—	249	—	(249) [6]
Profit of consolidated and affiliated companies	825	822	252	(249)
Less: Profit (loss) attributable to noncontrolling interests	4	1	3	—
Profit [7]	$ 821	$ 821	$ 249	$ (249)

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' revenues earned from Machinery, Energy & Transportation.
3 Elimination of net expenses recorded by Machinery, Energy & Transportation paid to Financial Products.
4 Elimination of interest expense recorded between Financial Products and Machinery, Energy & Transportation.
5 Elimination of discount recorded by Machinery, Energy & Transportation on receivables sold to Financial Products and of interest earned between Machinery, Energy & Transportation and Financial Products.

6 Elimination of Financial Products' profit due to equity method of accounting.
7 Profit attributable to common shareholders.

Caterpillar Inc.
Supplemental Data for Financial Position
At June 30, 2017
(Unaudited)
(Millions of dollars)

	Consolidated	Machinery, Energy & Transportation [1]	Financial Products	Consolidating Adjustments	
		Supplemental Consolidating Data			
Assets					
Current assets:					
Cash and short-term investments	$ 10,232	$ 8,926	$ 1,306	$ —	
Receivables – trade and other	6,675	4,015	1,835	825	2,3
Receivables – finance	8,920	—	12,906	(3,986)	3
Prepaid expenses and other current assets	1,776	927	851	(2)	4
Inventories	9,388	9,388	—	—	
Total current assets	36,991	23,256	16,898	(3,163)	
Property, plant and equipment – net	14,420	10,071	4,349	—	
Long-term receivables – trade and other	940	166	145	629	2,3
Long-term receivables – finance	13,197	—	13,855	(658)	3
Investments in Financial Products subsidiaries	—	4,169	—	(4,169)	5
Noncurrent deferred and refundable income taxes	2,866	3,651	101	(886)	6
Intangible assets	2,232	2,227	5	—	
Goodwill	6,142	6,125	17	—	
Other assets	1,722	600	1,122	—	
Total assets	$ 78,510	$ 50,265	$ 36,492	$ (8,247)	
Liabilities					
Current liabilities:					
Short-term borrowings	$ 6,780	$ 5	$ 6,775	$ —	
Short-term borrowings with consolidated companies	—	1,500	1,600	(3,100)	7
Accounts payable	5,778	5,673	166	(61)	8
Accrued expenses	3,211	2,902	309	—	
Accrued wages, salaries and employee benefits	1,986	1,951	35	—	
Customer advances	1,533	1,533	—	—	
Dividends payable	461	461	—	—	
Other current liabilities	1,787	1,291	498	(2)	6,9
Long-term debt due within one year	6,597	5	6,592	—	
Total current liabilities	28,133	15,321	15,975	(3,163)	
Long-term debt due after one year	23,815	8,844	15,000	(29)	7
Liability for postemployment benefits	9,248	9,248	—	—	
Other liabilities	3,235	2,773	1,348	(886)	6
Total liabilities	64,431	36,186	32,323	(4,078)	
Commitments and contingencies					
Shareholders' equity					
Common stock	5,316	5,316	918	(918)	5
Treasury stock	(17,307)	(17,307)	—	—	
Profit employed in the business	27,471	27,471	3,840	(3,840)	5
Accumulated other comprehensive income (loss)	(1,471)	(1,471)	(720)	720	5
Noncontrolling interests	70	70	131	(131)	5
Total shareholders' equity	14,079	14,079	4,169	(4,169)	
Total liabilities and shareholders' equity	$ 78,510	$ 50,265	$ 36,492	$ (8,247)	

[1] Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
[2] Elimination of receivables between Machinery, Energy & Transportation and Financial Products.
[3] Reclassification of Machinery, Energy & Transportation's trade receivables purchased by Financial Products and Financial Products' wholesale inventory receivables.
[4] Elimination of Machinery, Energy & Transportation's insurance premiums that are prepaid to Financial Products.
[5] Elimination of Financial Products' equity which is accounted for by Machinery, Energy & Transportation on the equity basis.

[6] Reclassification reflecting required netting of deferred tax assets / liabilities by taxing jurisdiction.
[7] Elimination of debt between Machinery, Energy & Transportation and Financial Products.
[8] Elimination of payables between Machinery, Energy & Transportation and Financial Products.
[9] Elimination of prepaid insurance in Financial Products' other liabilities.

Caterpillar Inc.
Supplemental Data for Financial Position
At December 31, 2016
(Unaudited)
(Millions of dollars)

	Consolidated	Supplemental Consolidating Data: Machinery, Energy & Transportation [1]	Supplemental Consolidating Data: Financial Products	Supplemental Consolidating Data: Consolidating Adjustments
Assets				
Current assets:				
Cash and short-term investments	$ 7,168	$ 5,257	$ 1,911	$ —
Receivables – trade and other	5,981	3,910	377	1,694 [2,3]
Receivables – finance	8,522	—	11,934	(3,412) [3]
Prepaid expenses and other current assets	1,682	764	926	(8) [4]
Inventories	8,614	8,614	—	—
Total current assets	31,967	18,545	15,148	(1,726)
Property, plant and equipment – net	15,322	10,899	4,423	—
Long-term receivables – trade and other	1,029	177	138	714 [2,3]
Long-term receivables – finance	13,556	—	14,300	(744) [3]
Investments in Financial Products subsidiaries	—	3,638	—	(3,638) [5]
Noncurrent deferred and refundable income taxes	2,790	3,648	89	(947) [6]
Intangible assets	2,349	2,344	5	—
Goodwill	6,020	6,003	17	—
Other assets	1,671	609	1,075	(13) [4]
Total assets	$ 74,704	$ 45,863	$ 35,195	$ (6,354)
Liabilities				
Current liabilities:				
Short-term borrowings	$ 7,303	$ 209	$ 7,094	$ —
Short-term borrowings with consolidated companies	—	—	1,637	(1,637) [7]
Accounts payable	4,614	4,506	189	(81) [8]
Accrued expenses	3,003	2,744	259	—
Accrued wages, salaries and employee benefits	1,296	1,268	28	—
Customer advances	1,167	1,167	—	—
Dividends payable	452	452	—	—
Other current liabilities	1,635	1,245	399	(9) [6,9]
Long-term debt due within one year	6,662	507	6,155	—
Total current liabilities	26,132	12,098	15,761	(1,727)
Long-term debt due after one year	22,818	8,466	14,382	(30) [7]
Liability for postemployment benefits	9,357	9,357	—	—
Other liabilities	3,184	2,729	1,414	(959) [6,9]
Total liabilities	61,491	32,650	31,557	(2,716)
Commitments and contingencies				
Shareholders' equity				
Common stock	5,277	5,277	918	(918) [5]
Treasury stock	(17,478)	(17,478)	—	—
Profit employed in the business	27,377	27,377	3,585	(3,585) [5]
Accumulated other comprehensive income (loss)	(2,039)	(2,039)	(990)	990 [5]
Noncontrolling interests	76	76	125	(125) [5]
Total shareholders' equity	13,213	13,213	3,638	(3,638)
Total liabilities and shareholders' equity	$ 74,704	$ 45,863	$ 35,195	$ (6,354)

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of receivables between Machinery, Energy & Transportation and Financial Products.
3 Reclassification of Machinery, Energy & Transportation's trade receivables purchased by Financial Products and Financial Products' wholesale inventory receivables.
4 Elimination of Machinery, Energy & Transportation's insurance premiums that are prepaid to Financial Products.
5 Elimination of Financial Products' equity which is accounted for by Machinery, Energy & Transportation on the equity basis.

[6] Reclassification reflecting required netting of deferred tax assets / liabilities by taxing jurisdiction.
[7] Elimination of debt between Machinery, Energy & Transportation and Financial Products.
[8] Elimination of payables between Machinery, Energy & Transportation and Financial Products.
[9] Elimination of prepaid insurance in Financial Products' other liabilities.

Caterpillar Inc.
Supplemental Data for Cash Flow
For the Six Months Ended June 30, 2017
(Unaudited)
(Millions of dollars)

	Consolidated	Supplemental Consolidating Data: Machinery, Energy & Transportation [1]	Supplemental Consolidating Data: Financial Products	Supplemental Consolidating Data: Consolidating Adjustments
Cash flow from operating activities:				
Profit of consolidated and affiliated companies	$ 997	$ 994	$ 258	$ (255) [2]
Adjustments for non-cash items:				
Depreciation and amortization	1,430	998	432	—
Undistributed profit of Financial Products	—	(255)	—	255 [3]
Other	487	453	(87)	121 [4]
Changes in assets and liabilities, net of acquisitions and divestitures:				
Receivables - trade and other	(442)	(54)	63	(451) [4, 5]
Inventories	(688)	(688)	—	—
Accounts payable	1,113	1,145	(52)	20 [4]
Accrued expenses	251	234	17	—
Accrued wages, salaries and employee benefits	641	634	7	—
Customer advances	322	322	—	—
Other assets – net	(280)	(152)	(48)	(80) [4]
Other liabilities – net	90	(78)	88	80 [4]
Net cash provided by (used for) operating activities	3,921	3,553	678	(310)
Cash flow from investing activities:				
Capital expenditures - excluding equipment leased to others	(371)	(367)	(4)	—
Expenditures for equipment leased to others	(753)	(12)	(749)	8 [4]
Proceeds from disposals of leased assets and property, plant and equipment	563	87	481	(5) [4]
Additions to finance receivables	(5,264)	—	(6,240)	976 [5]
Collections of finance receivables	5,508	—	6,602	(1,094) [5]
Net intercompany purchased receivables	—	—	(425)	425 [5]
Proceeds from sale of finance receivables	83	—	83	—
Net intercompany borrowings	—	44	(1,500)	1,456 [6]
Investments and acquisitions (net of cash acquired)	(21)	(21)	—	—
Proceeds from sale of businesses and investments (net of cash sold)	91	91	—	—
Proceeds from sale of securities	187	9	178	—
Investments in securities	(207)	(11)	(196)	—
Other – net	5	(25)	30	—
Net cash provided by (used for) investing activities	(179)	(205)	(1,740)	1,766
Cash flow from financing activities:				
Dividends paid	(906)	(906)	—	—
Distribution to noncontrolling interests	(6)	(6)	—	—
Common stock issued, including treasury shares reissued	83	83	—	—
Net intercompany borrowings	—	1,500	(44)	(1,456) [6]
Proceeds from debt issued (original maturities greater than three months)	4,868	361	4,507	—
Payments on debt (original maturities greater than three months)	(4,225)	(505)	(3,720)	—
Short-term borrowings – net (original maturities three months or less)	(505)	(200)	(305)	—
Net cash provided by (used for) financing activities	(691)	327	438	(1,456)
Effect of exchange rate changes on cash	13	(6)	19	—
Increase (decrease) in cash and short-term investments	3,064	3,669	(605)	—
Cash and short-term investments at beginning of period	7,168	5,257	1,911	—
Cash and short-term investments at end of period	$ 10,232	$ 8,926	$ 1,306	$ —

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' profit after tax due to equity method of accounting.
3 Elimination of non-cash adjustment for the undistributed earnings from Financial Products.
4 Elimination of non-cash adjustments and changes in assets and liabilities related to consolidated reporting.
5 Reclassification of Financial Products' cash flow activity from investing to operating for receivables that arose from the sale of inventory.

[6] Elimination of net proceeds and payments to/from Machinery, Energy & Transportation and Financial Products.

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Caterpillar Inc.
Supplemental Data for Cash Flow
For the Six Months Ended June 30, 2016
(Unaudited)
(Millions of dollars)

	Consolidated	Supplemental Consolidating Data: Machinery, Energy & Transportation [1]	Financial Products	Consolidating Adjustments
Cash flow from operating activities:				
Profit of consolidated and affiliated companies	$ 825	$ 822	$ 252	$ (249) [2]
Adjustments for non-cash items:				
Depreciation and amortization	1,494	1,056	438	—
Undistributed profit of Financial Products	—	(242)	—	242 [3]
Other	368	257	9	102 [4]
Changes in assets and liabilities, net of acquisitions and divestitures:				
Receivables - trade and other	573	45	19	509 [4, 5]
Inventories	305	309	—	(4) [4]
Accounts payable	208	284	(16)	(60) [4]
Accrued expenses	1	8	(7)	—
Accrued wages, salaries and employee benefits	(743)	(726)	(17)	—
Customer advances	93	93	—	—
Other assets – net	(127)	(187)	82	(22) [4]
Other liabilities – net	(193)	(332)	117	22 [4]
Net cash provided by (used for) operating activities	2,804	1,387	877	540
Cash flow from investing activities:				
Capital expenditures - excluding equipment leased to others	(580)	(577)	(3)	—
Expenditures for equipment leased to others	(1,025)	(41)	(1,001)	17 [4]
Proceeds from disposals of leased assets and property, plant and equipment	383	49	344	(10) [4]
Additions to finance receivables	(4,643)	—	(6,026)	1,383 [5]
Collections of finance receivables	4,466	—	6,007	(1,541) [5]
Net intercompany purchased receivables	—	—	396	(396) [5]
Proceeds from sale of finance receivables	42	—	42	—
Net intercompany borrowings	—	(832)	(1,000)	1,832 [6]
Investments and acquisitions (net of cash acquired)	(38)	(38)	—	—
Proceeds from sale of securities	195	17	178	—
Investments in securities	(243)	(15)	(228)	—
Other – net	(14)	(1)	(20)	7 [8]
Net cash provided by (used for) investing activities	(1,457)	(1,438)	(1,311)	1,292
Cash flow from financing activities:				
Dividends paid	(898)	(898)	(7)	7 [7]
Common stock issued, including treasury shares reissued	(47)	(47)	7	(7) [8]
Net intercompany borrowings	—	1,000	832	(1,832) [6]
Proceeds from debt issued (original maturities greater than three months)	2,841	1	2,840	—
Payments on debt (original maturities greater than three months)	(3,331)	(7)	(3,324)	—
Short-term borrowings – net (original maturities three months or less)	391	255	136	—
Net cash provided by (used for) financing activities	(1,044)	304	484	(1,832)
Effect of exchange rate changes on cash	1	(14)	15	—
Increase (decrease) in cash and short-term investments	304	239	65	—
Cash and short-term investments at beginning of period	6,460	5,340	1,120	—
Cash and short-term investments at end of period	$ 6,764	$ 5,579	$ 1,185	$ —

1 Represents Caterpillar Inc. and its subsidiaries with Financial Products accounted for on the equity basis.
2 Elimination of Financial Products' profit after tax due to equity method of accounting.
3 Elimination of non-cash adjustment for the undistributed earnings from Financial Products.
4 Elimination of non-cash adjustments and changes in assets and liabilities related to consolidated reporting.
5 Reclassification of Financial Products' cash flow activity from investing to operating for receivables that arose from the sale of inventory.
6 Elimination of net proceeds and payments to/from Machinery, Energy & Transportation and Financial Products.
7 Elimination of dividend from Financial Products to Machinery, Energy & Transportation.
8 Elimination of change in investment and common stock related to Financial Products.

Forward-looking Statements

Certain statements in this Form 10-Q relate to future events and expectations and are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “believe,” “estimate,” “will be,” “will,” “would,” “expect,” “anticipate,” “plan,” “project,” “intend,” “could,” “should” or other similar words or expressions often identify forward-looking statements. All statements other than statements of historical fact are forward-looking statements, including, without limitation, statements regarding our outlook, projections, forecasts or trend descriptions. These statements do not guarantee future performance and speak only as of the date they are made, and we do not undertake to update our forward-looking statements.

Caterpillar’s actual results may differ materially from those described or implied in our forward-looking statements based on a number of factors, including, but not limited to: (i) global and regional economic conditions and economic conditions in the industries we serve; (ii) commodity price changes, material price increases, fluctuations in demand for our products or significant shortages of material; (iii) government monetary or fiscal policies; (iv) political and economic risks, commercial instability and events beyond our control in the countries in which we operate; (v) our ability to develop, produce and market quality products that meet our customers’ needs; (vi) the impact of the highly competitive environment in which we operate on our sales and pricing; (vii) information technology security threats and computer crime; (viii) additional restructuring costs or a failure to realize anticipated savings or benefits from past or future cost reduction actions; (ix) failure to realize all of the anticipated benefits from initiatives to increase our productivity, efficiency and cash flow and to reduce costs; (x) inventory management decisions and sourcing practices of our dealers and our OEM customers; (xi) a failure to realize, or a delay in realizing, all of the anticipated benefits of our acquisitions, joint ventures or divestitures; (xii) union disputes or other employee relations issues; (xiii) adverse effects of unexpected events including natural disasters; (xiv) disruptions or volatility in global financial markets limiting our sources of liquidity or the liquidity of our customers, dealers and suppliers; (xv) failure to maintain our credit ratings and potential resulting increases to our cost of borrowing and adverse effects on our cost of funds, liquidity, competitive position and access to capital markets; (xvi) our Financial Products segment’s risks associated with the financial services industry; (xvii) changes in interest rates or market liquidity conditions; (xviii) an increase in delinquencies, repossessions or net losses of Cat Financial’s customers; (xix) currency fluctuations; (xx) our or Cat Financial’s compliance with financial and other restrictive covenants in debt agreements; (xxi) increased pension plan funding obligations; (xxii) alleged or actual violations of trade or anti-corruption laws and regulations; (xxiii) international trade policies and their impact on demand for our products and our competitive position; (xxiv) additional tax expense or exposure; (xxv) significant legal proceedings, claims, lawsuits or government investigations; (xxvi) new regulations or changes in financial services regulations; (xxvii) compliance with environmental laws and regulations; and (xxviii) other factors described in more detail in Caterpillar’s Forms 10-Q, 10-K and other filings with the Securities and Exchange Commission.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The information required by this Item is incorporated by reference from Note 4 – “Derivative financial instruments and risk management” included in Part I, Item 1 and Management’s Discussion and Analysis included in Part I, Item 2 of this Form 10-Q.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

An evaluation was performed under the supervision and with the participation of the company’s management, including the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the company’s disclosure controls and procedures, as that term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this quarterly report. Based on that evaluation, the CEO and CFO concluded that the company’s disclosure controls and procedures are effective as of the end of the period covered by this quarterly report.

Changes in internal control over financial reporting

During the second quarter of 2017, there has been no change in the company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The information required by this Item is incorporated by reference from Note 13 – "Environmental and legal matters" included in Part I, Item 1 of this Form 10-Q.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities

No shares were repurchased during the second quarter of 2017.

Other Purchases of Equity Securities

Period	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased Under the Program	Approximate Dollar Value of Shares that may yet be Purchased under the Program
April 1-30, 2017	3,949	$ 101.31	N/A	N/A
May 1-31, 2017	11,977	$ 102.19	N/A	N/A
June 1-30, 2017	—	$ —	N/A	N/A
Total	15,926	$ 101.97		

[1] Represents shares delivered back to issuer for the payment of taxes resulting from the vesting of restricted stock units for employees and Directors.

Non-U.S. Employee Stock Purchase Plans

As of June 30, 2017, we had 27 employee stock purchase plans (the "EIP Plans") that are administered outside the United States for our non-U.S. employees, which had approximately 12,000 active participants in the aggregate. During the second quarter of 2017, approximately 124,000 shares of Caterpillar common stock were purchased by the EIP Plans pursuant to the terms of such plans.

Item 6. Exhibits

10.1	Caterpillar Inc. 2014 Long-Term Incentive Plan, as amended and restated effective June 14, 2017 (incorporated by reference from the Company's Definitive Proxy Statement, filed April 26, 2017).
10.2	Caterpillar Inc. Supplemental Retirement Plan (formerly known as the Caterpillar Inc. Supplemental Pension Benefit Plan), amended and restated as of May 15, 2017.
10.3	Caterpillar Inc. Supplemental Employees' Investment Plan, amended and restated as of May 15, 2017.
10.4	Caterpillar Inc. Deferred Employees' Investment Plan, amended and restated as of May 15, 2017.
10.5	Caterpillar Inc. Supplemental Deferred Compensation Plan, amended and restated as of May 15, 2017.
11	Computations of Earnings per Share (included in Note 11 of this Form 10-Q filed for the quarter ended June 30, 2017).
31.1	Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32	Certification of D. James Umpleby III, Chief Executive Officer of Caterpillar Inc. and Bradley M. Halverson, Group President and Chief Financial Officer of Caterpillar Inc., as required pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CATERPILLAR INC.

August 2, 2017	*/s/ D. James Umpleby III* (D. James Umpleby III)	Chief Executive Officer
August 2, 2017	*/s/ Bradley M. Halverson* (Bradley M. Halverson)	Group President and Chief Financial Officer
August 2, 2017	*/s/ Suzette M. Long* (Suzette M. Long)	Interim Executive Vice President, Law and Public Policy & Corporate Secretary
August 2, 2017	*/s/ Jananne A. Copeland* (Jananne A. Copeland)	Chief Accounting Officer

EXHIBIT INDEX

Exhibit No.	Description
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Exhibit 10.2

CATERPILLAR INC.
SUPPLEMENTAL RETIREMENT PLAN

(formerly known as the Caterpillar Inc. Supplemental Pension Benefit Plan)

(As Amended and Restated Effective as of May 15, 2017)

CATERPILLAR INC.
SUPPLEMENTAL RETIREMENT PLAN

PREAMBLE

The Caterpillar Inc. Supplemental Retirement Plan (formerly known as the Caterpillar Inc. Supplemental Pension Benefit Plan and hereinafter referred to as the "Plan") was established as of January 1, 1976 by Caterpillar Inc. (the "Company") to provide additional pension benefits to individuals who participate in the Caterpillar Inc. Retirement Income Plan, as amended, or any successor(s) to such plan (not including the applicable supplement of the Caterpillar Inc. Retirement Income Plan that reflects the provisions and benefits of the Solar Turbines Incorporated Retirement Plan on and after the merger of the Solar Turbines Incorporated Retirement Plan with and into the Caterpillar Retirement Income Plan effective as of 11:59 PM CST on December 31, 2014) ("RIP"), but whose benefits are limited due to the application of Section 401(a)(17) and/or Section 415 of the Internal Revenue Code of 1986, as amended. The Plan also provides the benefits that would otherwise be payable pursuant to RIP but for (i) an individual's deferral of compensation under the Caterpillar Inc. Deferred Employees' Investment Plan, the Caterpillar Inc. Supplemental Employees' Investment Plan, or the Caterpillar Inc. Supplemental Deferred Compensation Plan or (ii) the exclusions from "Total Earnings" under RIP for an individual's lump sum discretionary awards and variable base pay. This amended and restated Plan is effective as of May 15, 2017.

For avoidance of doubt, all references in the Plan to RIP shall not include the applicable supplement of the Caterpillar Inc. Retirement Income Plan that reflects the provisions and benefits of the Solar Turbines Incorporated Retirement Plan on and after the merger of the Solar Turbines Incorporated Retirement Plan with and into the Caterpillar Retirement Income Plan effective as of 11:59 PM CST on December 31, 2014 and benefits under the Plan shall in no way be affected by benefits provided or not provided under such applicable supplement.

ARTICLE I
DEFINITIONS

1.1 General. When a word or phrase appears in the Plan with the initial letter capitalized, and the word or phrase does not begin a sentence, the word or phrase shall generally be a term defined in this Article I. The following words and phrases used in the Plan with the initial letter capitalized shall have the meanings set forth in this Article I, unless a clearly different meaning is required by the context in which the word or phrase is used or the word or phrase is defined for a limited purpose elsewhere in the Plan document:

(a) "Adopting Affiliate" means any Affiliate that has been authorized by the Company to adopt the Plan and which has adopted the Plan in accordance with Section 2.5. All Affiliates that adopted the Plan on or before the Effective Date and that had not terminated such adoption shall continue to be Adopting Affiliates of the Plan.

(b) "Affiliate" means a parent business that controls, or a subsidiary business that is controlled by, the Company.

(c) "Beneficiary" means, with respect to a Participant, the person or persons entitled to receive distributions of the Participant's death benefits under RIP.

(d) "**Benefit Determination Date**" means the following:

(i) **On or After January 1, 2005, But Prior to January 1, 2009**. On or after January 1, 2005, but prior to January 1, 2009, a Participant's Benefit Determination Date shall be the date as of which the Participant has elected to commence benefits under RIP.

(ii) **On or After January 1, 2009**. On or after January 1, 2009, a Participant's Benefit Determination Date shall be the date determined under (1) or (2) below:

(i) With respect to (x) a Participant's PEP Benefit (as defined in Section 3.2(b)), (y) a Choice Participant's benefits under this Plan, or (z) a Participant's Traditional Benefit (as defined in Section 3.2(a)) where the Participant satisfies the requirements under Section 5.2(d)(1)(i), (ii), (iii), (iv), or (v) as of the Participant's Separation from Service, the Participant's Benefit Determination Date shall be the first day of the month following the Participant's Separation from Service.

(ii) With respect to a Participant's Traditional Benefit (as defined in Section 3.2(a)) for a Participant other than a Choice Participant where the Participant does not satisfy the requirements under Section 5.2(d)(1)(i), (ii), (iii), (iv), or (v) as of the Participant's Separation from Service, the Participant's Benefit Determination Date shall be the first day of the month following the date that the Participant first satisfies the requirements under Section 5.2(d)(1)(i), (ii), (iii), (iv), or (v).

(e) "Benefit Payment Date" means the date as of which the Participant's benefit amounts under the Plan shall be payable, as determined in accordance with Section 5.2(d).

(f) "Board" means the Board of Directors of the Company, or any authorized committee of the Board.

(g) "**Choice Participant**" means a Participant who (i) has a "frozen traditional benefit" under RIP as a result of the election made by such Participant to cease accruing a benefit under the traditional benefit formula of RIP and to begin accruing a benefit under the pension equity formula of RIP and (ii) had accrued a Traditional Benefit (as defined in Section 3.2(a)) under this Plan as of June 30, 2003.

(h) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder.

(i) "Company" means Caterpillar Inc., and, to the extent provided in Section 8.8 below, any successor corporation or other entity resulting from a merger or consolidation into or with the Company or a transfer or sale of substantially all of the assets of the Company.

(j) "DEIP" means the Caterpillar Inc. Deferred Employees' Investment Plan, as amended.

(k) "Director" means the Company's Director of Compensation + Benefits.

(l) "**Disability**" or "**Disabled**" means that a Participant is determined to be totally disabled by the United States Social Security Administration.

(m) "Effective Date" means May 15, 2017.

(n) "ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time, and any regulations promulgated thereunder.

(o) "GSCS" means Caterpillar Logistics Services LLC (f/k/a Caterpillar Logistics Services, Inc.).

(p) "GSCS Closing Date" means the date on which the sale of GSCS to an entity that is not an Affiliate is completed.

(q) "GSCS Participant" means a Participant who is employed by GSCS upon the closing of the sale of GSCS to an entity that is not an Affiliate.

(r) "**Lump Sum Discretionary Award**" means a lump sum discretionary award paid to a Participant in accordance with the established pay practices of the Company and Adopting Affiliates and designated with earnings code 208 or 212 in the Company's payroll system (or the equivalent earnings code for Adopting Affiliates that do not use the Company's payroll system).

(s) "Participant" means an employee of the Company or any Adopting Affiliate who satisfies the eligibility requirements for participation in the Plan.

(t) "Plan" means the Caterpillar Inc. Supplemental Retirement Plan, as set forth herein and as it may be amended from time to time.

(u) "Plan Administrator" means the Director.

(v) "Plan Year" means the calendar year.

(w) "RIP" means the Caterpillar Inc. Retirement Income Plan, as amended or any successor(s) to such plan, other than the applicable supplement of the Caterpillar Inc. Retirement Income Plan that reflects the provisions and benefits of the Solar Turbines Incorporated Retirement Plan on and after the merger of the Solar Turbines Incorporated Retirement Plan with and into the Caterpillar Retirement Income Plan effective as of 11:59 PM CST on December 31, 2014.

(x) "SDCP" means the Caterpillar Inc. Supplemental Deferred Compensation Plan, as amended or any successor(s) to such plan.

(y) **"SEIP"** means the Caterpillar Inc. Supplemental Employees' Investment Plan, as amended.

(z) **"Separation from Service"** means separation from service as determined in accordance with any regulations, rulings or other guidance issued by the Department of the Treasury pursuant to Section 409A(a)(2)(A)(i) of the Code, as it may be amended or replaced from time to time.

(aa) **"Specified Employee"** means a "key employee" as defined in Section 416(i) of the Code without regard to Section 416(i)(5) and determined in accordance with Section 409A(a)(2)(B)(i) of the Code.

(bb) **"Sunset Participant"** means a Participant who is classified as a "Sunset Participant" under the terms of RIP.

(cc) **"Unforeseeable Emergency"** means a severe financial hardship to the Participant resulting from an illness or accident of the Participant, the Participant's spouse, or a dependent (as defined in Section 152(a) of the Code) of the Participant, loss of the Participant's property due to casualty, or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant. For purposes of the Plan, an "Unforeseeable Emergency" shall not include a Participant's need to send his or her child to college or a Participant's desire to purchase a home. Any determination as to whether a Participant has incurred an Unforeseeable Emergency shall be made in the sole discretion of the Plan Administrator in accordance with rules prescribed pursuant to Section 409A of the Code.

(dd) "**Variable Base Pay**" means the variable base pay paid to a Participant as determined in accordance with the established pay practices of the Company and Adopting Affiliates.

1.2 **Construction**. The masculine gender, when appearing in the Plan, shall include the feminine gender (and vice versa), and the singular shall include the plural, unless the Plan clearly states to the contrary. Headings and subheadings are for the purpose of reference only and are not to be considered in the construction of the Plan. If any provision of the Plan is determined to be for any reason invalid or unenforceable, the remaining provisions shall continue in full force and effect. All of the provisions of the Plan shall be construed and enforced according to the laws of the State of Illinois without regard to conflict of law principles and shall be administered according to the laws of such state, except as otherwise required by ERISA, the Code, or other Federal law.

ARTICLE II
ELIGIBILITY; ADOPTION BY AFFILIATES

2.1 **Eligible Employees**. The purpose of the Plan is to provide supplemental retirement benefits to a select group of management or highly compensated employees. This group of employees is sometimes referred to as a "top hat group." The Plan constitutes an unfunded supplemental retirement plan and is fully exempt from Parts 2, 3, and 4 of Title I of ERISA. The Plan shall be governed and construed in accordance with Title I of ERISA.

2.2 **Existing Participants**. Each individual who was a Participant in the Plan as of the date of execution of this plan document shall continue as such, subject to the provisions hereof.

2.3 **New Participants**. An employee shall participate in the Plan if the employee is receiving, is eligible to receive, or is accruing retirement benefits pursuant to RIP; and

(a) the employee's RIP benefits are limited by application of Section 401(a)(17) of the Code;

(b) the employee's RIP benefits are limited by application of Section 415(b) of the Code;

(c) the employee's RIP benefits are decreased due to the employee's deferral of salary or incentive compensation under SEIP, DEIP or SDCP; or

(d) the employee's RIP benefits are limited due to the exclusions from "Total Earnings" (as defined under RIP) for the employee's Lump Sum Discretionary Awards and Variable Base Pay.

2.4 **Discontinuance of Participation**. As a general rule, once an individual is a Participant, he will continue as such for all future Plan Years until his retirement or other termination of employment. In addition, prior to retirement or other termination of employment, the Plan Administrator shall discontinue an individual's participation in the Plan if the Plan Administrator concludes, in the exercise of his discretion, that the individual is no longer properly included in the top hat group. If an individual's participation is discontinued, the individual will no longer be eligible to accrue a benefit under the Plan. The individual will not be entitled to receive a distribution, however, until the occurrence of another event (e.g., death or Separation from Service) that entitles the individual to receive a distribution.

2.5 **Adoption by Affiliates**. An employee of an Affiliate may not become a Participant in the Plan unless the Affiliate has previously adopted the Plan. An Affiliate of the Company may adopt the Plan only with the approval of the Company. By adopting the Plan, the Affiliate shall be deemed to have agreed to assume the obligations and liabilities imposed upon it by the Plan, agreed to comply with all of the other terms and provisions of the Plan, delegated to the Plan Administrator the power and responsibility to administer the Plan with respect to the Affiliate's employees, and delegated to the Company the full power to amend or terminate the Plan with respect to the Affiliate's employees. Notwithstanding the foregoing, an Affiliate that has previously adopted the Plan may terminate its participation in the Plan in accordance with such rules and procedures that are promulgated by the Company.

ARTICLE III
DETERMINATION OF BENEFIT

3.1 **General**. Benefit amounts payable under the Plan shall be determined pursuant to Section 3.2 and, if applicable, adjusted pursuant to Section 3.4. Such determinations shall be made by reference to (a) the benefit amounts that would be payable to the Participant under RIP if SEIP, DEIP and SDCP deferrals and any Lump Sum Discretionary Awards or Variable Base Pay were taken into account in determining the Participant's benefits thereunder and (b) without regard to the applicable limitations under Sections 401(a)(17) and 415 of the Code. For avoidance of doubt, effective January 1, 2011, any Participant who is not a Sunset Participant shall not receive any additional benefit accruals under this Article III, and any Sunset Participant shall not receive any additional benefit accruals under this Article III effective as of the earlier of: (1) the date he is no longer a Sunset Participant or (2) January 1, 2020.

3.2 Amount of Benefit Payable to Participant. The monthly benefit payable to the Participant by the Plan shall be equal to the sum of the Participant's "Traditional Benefit" and "PEP Benefit" amounts (both as defined below), if any, determined under subsections (a) and (b) below as of the Participant's Benefit Determination Date:

(a) "Traditional Benefit". Any benefit payable to the Participant by the Plan under the "traditional benefit" provisions of RIP, as it may be amended from time to time, shall be determined as follows:

(1) **Step One**. The Plan Administrator shall determine the benefit that would be payable to the Participant pursuant to RIP if SEIP, DEIP and SDCP deferrals and any Lump Sum Discretionary Awards or Variable Base Pay were taken into account and without regard to the applicable limitations under Sections 401(a)(17) and 415 of the Code. For purposes of this Section 3.2(a)(1), the parenthetical phrase of Section 5.2 of RIP reading "(2% for Participants in salary grades 30 or 31, 2.25% for Participants in salary grade 32, 2.4% for Participants in salary grades 33 or higher)" shall be disregarded.

(2) **Step Two**. The Plan Administrator shall determine the Participant's benefit that would be payable pursuant to RIP (as calculated as of the Participant's Benefit Determination Date).

(3) **Step Three**. The amount determined pursuant to paragraph (2) above shall be subtracted from the amount determined pursuant to paragraph (1) above to determine the benefit payable to the Participant pursuant to this Section 3.2(a) of the Plan (herein referred to as a Participant's "Traditional Benefit").

(b) "PEP Benefit". Any benefit payable by the Plan to the Participant under the "pension equity formula" provisions of RIP, as it may be amended from time to time, shall be determined as follows:

(1) **Step One**. The Plan Administrator shall determine the single sum amount that would be payable to the Participant pursuant to RIP if SEIP, DEIP and SDCP deferrals and any Lump Sum Discretionary Awards or Variable Base Pay were taken into account and without regard to the applicable limitations under Sections 401(a)(17) and 415 of the Code.

(2) **Step Two**. The Plan Administrator shall determine the Participant's single sum amount that would be payable pursuant to RIP (as calculated as of the Participant's Benefit Determination Date).

(3) **Step Three**. The amount determined pursuant to paragraph (2) above shall be subtracted from the amount determined pursuant to paragraph (1) above to determine the single sum amount payable to the Participant pursuant to this Section 3.2(b) of the Plan (herein referred to as a Participant's "PEP Benefit").

3.3 Survivor Benefits. In the event a Participant dies after becoming vested under the Plan pursuant to Section 4.1 but prior to commencing his benefits under the Plan pursuant to Article V, a survivor benefit shall be payable as follows:

(a) Traditional Benefit. With respect to a Participant's Traditional Benefit, if any, determined under Section 3.2(a) (and, if applicable, adjusted under Section 3.4), the Participant's surviving spouse, if any, shall be entitled to a monthly survivor benefit payable during the spouse's lifetime and terminating with the payment for the month in which such spouse's death occurs. The monthly benefit payable to the surviving spouse shall be the portion of the amount determined under Section 3.2(a) (and, if applicable, adjusted under Section 3.4) as of the Participant's Benefit Determination Date that the surviving spouse would have been entitled to receive under this Plan if the Participant had separated from service on the date of his death, commenced benefits in accordance with Article V in the form of a 50% joint and survivor annuity, and then died immediately thereafter. A surviving spouse who was not married to the deceased Participant for at least one year at the date of death shall not be eligible for the monthly survivor benefit pursuant to this Section 3.3.

(b) PEP Benefit. With respect to a Participant's PEP Benefit, if any, determined under Section 3.2(b), such benefit shall be paid to the Participant's Beneficiary in a single sum amount as soon as administratively feasible after the Benefit Determination Date.

(c) Certain Choice Participant Benefits. Notwithstanding the provisions of (a) and (b) above, with respect to a Choice Participant who does not make a contrary election pursuant to Section 5.2(c)(3), such Participant's Beneficiary shall receive a single sum amount equal to the actuarial equivalent present value (using the actuarial assumptions under RIP applicable to the Participant as of his or her Benefit Determination Date) of the Participant's Traditional Benefit and PEP Benefit calculated as of the date specified in Section 5.2(d)(1)(i), and as further adjusted by using the actuarial assumptions under RIP applicable to the Beneficiary as of the Participant's Benefit Determination Date. Notwithstanding the foregoing, if a Choice Participant makes an election pursuant to Section 5.2(c)(3) to receive his or her benefits under the Plan in the form of monthly annuity payments, his or her Beneficiary, in lieu of the single sum amount described in the preceding sentence, shall receive a monthly benefit paid for the remainder of the Beneficiary's life; provided that, the Beneficiary's monthly benefit shall be equal to the actuarially equivalent monthly benefit of such single sum amount (using the actuarial assumptions under RIP applicable to the Beneficiary as of the Participant's Benefit Determination Date); provided further that, in no event shall the Beneficiary's monthly benefit be less than the monthly survivor benefit determined under Section 3.3(a) that, but for this Section 3.3(c), would have been payable to the Participant's surviving spouse (or, if there is no surviving spouse, would have been payable under Section 3.3(a) had the Participant died with a surviving spouse). Any single sum amount or monthly benefit determined under this Section 3.3(c) shall be payable to the Participant's Beneficiary as soon as administratively feasible after the date of the Participant's death.

3.4 Early Retirement Reductions.

(a) General. Benefits determined pursuant to this Article III shall be subject to the same reductions for early commencement as applicable under RIP.

(b) CEO. Notwithstanding Section 3.4(a) or anything else herein to the contrary, if the employment of the person who occupied the position of Chief Executive Officer of the Company on December 10. 2015 (the "CEO") terminates for any reason other than death or Disability prior to the attainment of age 65, the benefit determined pursuant to this Article III shall be reduced in accordance with the early retirement provisions of RIP but substituting age 65 for age 62. Upon termination of the CEO's employment due to death or Disability, the benefits determined pursuant to this Article III for the CEO shall be subject to the same reductions for early retirement as applicable under RIP.

3.5 Future Adjustments. Any benefit amounts payable under this Plan may be adjusted to take into account future amendments to RIP and increases in retirement income that are granted under RIP due to cost-of-living increases. Any benefit amounts payable under this Plan shall be adjusted to take into account future factors and adjustments made by the Secretary of the Treasury (in regulations or otherwise) to the limitations under Sections 401(a)(17) and 415 of the Code.

ARTICLE IV
VESTING

4.1 Vesting. Subject to Section 8.1, each Participant shall be vested in his or her benefit, if any, that becomes payable under Article V of the Plan to the same extent that the Participant is vested in his or her benefit accrued under RIP. Notwithstanding the foregoing provisions of this Section 4.1, each GSCS Participant shall be fully vested at all times from and after the GSCS Closing Date in his or her benefit payable under the Plan.

ARTICLE V
PAYMENT OF BENEFIT

5.1 Payments on or After January 1, 2005, But Prior to January 1, 2009. In accordance with the transitional guidance issued by the Internal Revenue Service and the Department of Treasury in Section 3 of IRS Notice 2007-86, any payment of benefits to a Participant or his Beneficiary commencing on or after January 1, 2005, but prior to January 1, 2009 shall be made pursuant to the Participant's applicable payment election or the applicable pre-retirement survivor provisions under RIP.

5.2 Payments on or After January 1, 2009. Any payment of benefits to a Participant commencing on or after January 1, 2009 shall be determined in accordance with this Section 5.2.

(a) <u>Limitation on Right to Receive Distribution</u>. A Participant shall not be entitled to receive a distribution prior to the first to occur of the following events:

(1) The Participant's Separation from Service, or in the case of a Participant who is a Specified Employee, the date which is six months after the Participant's Separation from Service;

(2) The date the Participant becomes Disabled;

(3) The Participant's death;

(4) A specified time (or pursuant to a fixed schedule) specified at the date of deferral of compensation;

(5) An Unforeseeable Emergency; or

(6) To the extent provided by the Secretary of the Treasury, a change in the ownership or effective control of the Company or an Adopting Affiliate or in the ownership of a substantial portion of the assets of the Company or an Adopting Affiliate.

This Section 5.2(a) restates the restrictions on distributions set forth in Section 409A of the Code and is intended to impose restrictions on distributions pursuant to the Plan accordingly. This Section 5.2(a) does not describe the instances in which distributions will be made. Rather, distributions will be made only if and when permitted both by this Section 5.2(a) and another provision of the Plan.

(b) <u>General Right to Receive Distribution</u>. Following a Participant's termination of employment or death, the Participant's benefit amounts will be paid to the Participant in the manner and at the time provided in Sections 5.2(c) and 5.2(d), as applicable. A transfer of a Participant from the Company or any Affiliate to any other Affiliate or the Company shall not be deemed to be a termination of employment for purposes of this Section 5.2(b).

(c) <u>Form of Payment</u>.

(1) **<u>Traditional Benefit</u>**. Any monthly benefit payable to a Participant under Section 3.2(a) (and, if applicable, adjusted under Section 3.4) shall be paid in the form of annuity payments as follows:

(i) **<u>Unmarried Participants</u>**. The benefits of an unmarried Participant shall be paid in the form of a single life annuity for the Participant's life. No payments shall be made after the Participant dies. Notwithstanding the foregoing, in accordance with uniform rules and procedures as may be adopted by the Plan Administrator from time to time, an unmarried Participant may elect, in lieu of a single life annuity, to have his or her benefits paid in any actuarially equivalent form of annuity permitted under RIP.

(ii) **<u>Married Participants</u>**. Subject to Section 3.3, the benefits of a married Participant shall be paid in the form of a joint and survivor annuity in a reduced monthly benefit for the Participant's life (as determined in accordance with the applicable actuarial assumptions in effect under RIP) and then, if the Participant's spouse is still alive, a benefit equal to 50% of the Participant's monthly benefit is paid to the spouse for the remainder of his or her life. If the Participant's spouse is not alive when the Participant dies, no further payments shall be made. Notwithstanding the foregoing, in accordance with uniform rules and procedures as may be adopted by the Plan Administrator from time to time, a married Participant may, with the written consent of the Participant's spouse, elect to waive the joint and survivor annuity of this subparagraph (ii) and instead elect a single life annuity or any actuarially equivalent form of annuity permitted under RIP.

In addition, if the Participant's Benefit Payment Date, as described in clauses (i)-(v) of Section 5.2(d)(1), is delayed pursuant to the last sentence of Section 5.2(d)(1), then any monthly benefit amounts that would have been paid if not for such last sentence will be credited with interest at five percent (5%) per annum through the Participant's Benefit Payment Date. Such delayed monthly benefit amounts and interest shall be paid in a single sum amount as soon as administratively feasible after such Benefit Payment Date.

(2) **PEP Benefit**. Any benefit payable to a Participant determined under Section 3.2(b) shall be paid in a single sum amount. In addition, if the Participant's Benefit Payment Date, as described in Section 5.2(d)(2), is delayed pursuant to the first sentence of Section 5.2(d)(2), then any single sum amount that would have been paid if not for such first sentence will be credited with interest at five percent (5%) per annum through the Participant's Benefit Payment Date. Such interest shall be paid in a single sum amount as soon as administratively feasible after such Benefit Payment Date.

(3) **Special One-Time Election for Choice Participants**. Pursuant to the transitional guidance issued by the Internal Revenue Service and the Department of Treasury, the Plan Administrator shall provide a special one-time election to Choice Participants whose benefits have not commenced as of December 31, 2008, to elect to have their benefits paid other than in the forms otherwise described in (1) and (2) above, subject to such procedures as are established by the Plan Administrator; provided that, if a Choice Participant does not make such an election, any benefit amounts under the Plan that become payable to such Choice Participant shall be paid in the forms described in (1) and (2) above, as applicable. In addition, if the Participant's Benefit Payment Date, as described in Section 5.2(d)(3), is delayed pursuant to Section 5.2(d)(3), then any monthly benefit amounts or single sum amounts that would have been paid if not for such delay will be credited with interest at five percent (5%) per annum through the Participant's Benefit Payment Date in accordance with the applicable provisions of (1) and (2) above. Such delayed monthly benefit amounts or single sum amounts and interest shall be paid in a single sum amount as soon as administratively feasible after such Benefit Payment Date.

(d) Timing of Payment.

(1) **Traditional Benefit.** Except as provided below, any benefit determined under Section 3.2(a) (and, if applicable, adjusted under Section 3.4) that becomes payable to the Participant following Separation from Service shall commence on the first day of the month following the earliest of the following:

(i) the Participant's attainment of age 65 or, if later, the Participant's fifth anniversary of the date he or she commenced participation under RIP;

(ii) the Participant's attainment of age 55 with the number of the Participant's years of vesting service plus his or her age equaling at least 85;

(iii) the Participant's attainment of age 60 after completing at least 10 years of vesting service;

(iv) the Participant's attainment of age 55 after completing at least 15 years of vesting service; or

(v) the Participant's completing at least 30 years of vesting service.

For purposes of (ii), (iii), (iv) or (v) above, the Plan Administrator shall determine the Participant's "years of vesting service" by reference to the applicable terms under RIP in existence as of the date the Participant first commenced participation under this Plan.

Notwithstanding the foregoing provisions of this Section 5.2(d)(1), in no event shall any benefit payable to a Participant under Section 3.2(a) (and, if applicable, adjusted under Section 3.4) commence earlier than the first day of the month coincident with or next following a date that is at least six months after the Participant's Separation from Service, except in the event of the Participant's death, in which case any benefit payable to the Participant's Beneficiary shall commence as of the applicable date specified in Section 3.3(a).

(2) **PEP Benefit.** Any benefit determined under Section 3.2(b) that becomes payable to the Participant following Separation from Service shall be paid on the first day of the month that is at least six months after the Participant's Separation from Service. Notwithstanding the foregoing, in the event of the Participant's death, any benefit payable to the Participant's Beneficiary will be paid as soon as administratively feasible after the date of the Participant's death.

(3) **Certain Choice Participant Benefits**. Any benefits that become payable to a Choice Participant following Separation from Service shall be paid on the first day of the month that is at least six months after the Participant's Separation from Service. Notwithstanding the foregoing, in the event of the Participant's death, any benefit payable to the Participant's Beneficiary will be paid as soon as administratively feasible after the date of the Participant's death.

5.3 Automatic Lump Sum Distributions. Notwithstanding any provision of the Plan to the contrary:

(a) Certain Distributions on or After January 1, 2005, But Prior to January 1, 2009. Effective as of January 1, 2005, but prior to January 1, 2009, if the actuarial equivalent present value of an individual's benefit amounts payable under this Plan (as determined in accordance with the applicable actuarial assumptions in effect under RIP as of the individual's

Benefit Determination Date) is less than or equal to $10,000, the individual's benefit amounts under the Plan shall be distributed in a single sum amount as soon as administratively feasible on or after such Benefit Determination Date.

(b) **Certain Distributions on or After January 1, 2009**. Effective January 1, 2009, if the sum of (i) the actuarial equivalent present value of an individual's benefit amounts payable under this Plan (as determined in accordance with the applicable actuarial assumptions in effect under RIP as of the individual's Benefit Determination Date) and (ii) the interest, if any, credited on such amounts through the individual's Benefit Payment Date (as determined in accordance with the applicable provisions of Section 5.2(c)) is less than or equal to the dollar limitation under Section 402(g)(1)(B) of the Code in effect for the calendar year in which the individual's Benefit Payment Date occurs, the individual's benefit amounts under the Plan shall be distributed in a single sum amount equal to the sum of (i) and (ii) above as soon as administratively feasible on or after such Benefit Payment Date.

5.4 **Withholding**. All distributions will be subject to all applicable tax and withholding requirements.

5.5 **Ban on Acceleration of Benefits**. Neither the time nor the schedule of any payment under the Plan may be accelerated except as permitted in regulations or other guidance issued by the Internal Revenue Service or the Department of the Treasury and as incorporated herein.

ARTICLE VI
ADMINISTRATION OF THE PLAN

6.1 **General Powers and Duties.** The following list of powers and duties is not intended to be exhaustive, and the Plan Administrator shall, in addition, exercise such other powers and perform such other duties as he may deem advisable in the administration of the Plan, unless such powers or duties are expressly assigned to another pursuant to the provisions of the Plan.

6.2 **General**. The Plan Administrator shall perform the duties and exercise the powers and discretion given to him in the Plan document and by applicable law and his decisions and actions shall be final and conclusive as to all persons affected thereby. The Company and the Adopting Affiliates shall furnish the Plan Administrator with all data and information that the Plan Administrator may reasonably require in order to perform his functions. The Plan Administrator may rely without question upon any such data or information.

(a) **Disputes**. Any and all disputes that may arise involving Participants or beneficiaries shall be referred to the Plan Administrator and his decision shall be final. Furthermore, if any question arises as to the meaning, interpretation or application of any provisions of the Plan, the decision of the Plan Administrator shall be final.

(b) **Agents**. The Plan Administrator may engage agents, including recordkeepers, to assist him and he may engage legal counsel who may be counsel for the Company. The Plan Administrator shall not be responsible for any action taken or omitted to be taken on the advice of such counsel, including written opinions or certificates of any agent, counsel, actuary or physician.

(c) **Insurance**. At the Director's request, the Company shall purchase liability insurance to cover the Director in his activities as the Plan Administrator.

(d) **Allocations**. The Plan Administrator is given specific authority to allocate responsibilities to others and to revoke such allocations. When the Plan Administrator has allocated authority pursuant to this paragraph, the Plan Administrator is not to be liable for the acts or omissions of the party to whom such responsibility has been allocated.

(e) **Records**. The Plan Administrator shall supervise the establishment and maintenance of records by his agents, the Company and each Adopting Affiliate containing all relevant data pertaining to any person affected hereby and his or her rights under the Plan.

(f) **Interpretations**. The Plan Administrator, in his sole discretion, shall interpret and construe the provisions of the Plan (and any underlying documents or policies).

(g) **Electronic Administration**. The Plan Administrator shall have the authority to employ alternative means (including, but not limited to, electronic, internet, intranet, voice response or telephonic) by which Participants may submit elections, directions and forms required for participation in, and the administration of, the Plan. If the Plan Administrator chooses to use these alternative means, any elections, directions or forms submitted in accordance with the rules and procedures promulgated by the Plan Administrator will be deemed to satisfy any provision of the Plan calling for the submission of a written election, direction or form.

(h) **Delegation**. The Plan Administrator may delegate his authority hereunder, in whole or in part, in his sole and absolute discretion.

6.3 **Claims Procedures.** Benefit claims under the Plan shall be resolved in accordance with Code Section 409A and uniform and nondiscriminatory procedures adopted by the Plan Administrator in accordance with Section 503 of ERISA.

ARTICLE VII
AMENDMENT

7.1 **Amendment**. The Company reserves the right at any time to amend, modify or suspend any or all of the provisions of this Plan, in whole or in part, at any time as designated by a written instrument duly adopted on behalf of the Company.

7.2 **Effect of Amendment**. Any amendment of the Plan shall not directly or indirectly reduce the benefits previously accrued by the Participant.

7.3 **Termination**. The Company expressly reserves the right to terminate the Plan.

(a) **General.** In the event of termination, the Company shall specify whether termination will change the time at which distributions are made; provided that any acceleration of a distribution is consistent with Section 409A of the Code. In the absence of such specification, the timing of distributions shall be unaffected by termination.

(b) GSCS Termination. Pursuant to the Company's authority to terminate the Plan, the Plan is irrevocably terminated with respect to all GSCS Participants upon the GSCS Closing Date and no GSCS Participant shall accrue any benefits under the Plan for any purpose after the GSCS Closing Date. Pursuant to termination of the Plan with respect to GSCS Participants pursuant to this Section 7.3(b), the present value of each GSCS Participant's benefit amounts payable under the Plan shall be distributed to the GSCS Participant in a single sum amount as soon as practicable after the GSCS Closing Date, but in no event later than December 31 next following the GSCS Closing Date. Termination of the Plan with respect to GSCS Participants will change the time at which distributions are made to GSCS Participants. Payments to GSCS Participants pursuant to this Section 7.3(b) are intended to comply with section 409A of the Code and applicable guidance issued thereunder.

ARTICLE VIII
GENERAL PROVISIONS

8.1 Participant's Rights Unsecured. The Plan at all times shall be entirely unfunded and no provision shall at any time be made with respect to segregating any assets of the Company for payment of any distributions hereunder. The right of a Participant or his or her Beneficiary to receive benefits hereunder shall be an unsecured claim against the general assets of the Company, and neither the Participant nor his Beneficiary shall have any rights in or against any specific assets of the Company. All amounts accrued by Participants hereunder shall constitute general assets of the Company and may be disposed of by the Company at such time and for such purposes as it may deem appropriate. Nothing in this Section shall preclude the Company from establishing a "Rabbi Trust," but the assets in the Rabbi Trust must be available to pay the claims of the Company's general creditors in the event of the Company's insolvency.

8.2 No Guaranty of Benefits. Nothing contained in the Plan shall constitute a guaranty by the Company or any other person or entity that the assets of the Company will be sufficient to pay any benefit hereunder.

8.3 No Enlargement of Employee Rights. No Participant shall have any right to receive a distribution from the Plan except in accordance with the terms of the Plan. Participation in the Plan shall not be construed to give any Participant the right to be retained in the service of the Company or an Adopting Affiliate.

8.4 Section 409A Compliance. The Company intends that the Plan meet the requirements of Section 409A of the Code and the guidance issued thereunder. The Plan shall be administered, construed and interpreted in a manner consistent with that intention.

8.5 Spendthrift Provision. No interest of any person or entity in, or right to receive a distribution under, the Plan shall be subject in any manner to sale, transfer, assignment, pledge, attachment, garnishment, or other alienation or encumbrance of any kind; nor shall any such interest or right to receive a distribution be taken, either voluntarily or involuntarily, for the satisfaction of the debts of, or other obligations or claims against, such person or entity, including claims in bankruptcy proceedings. This Section shall not preclude arrangements for the withholding of taxes from deferrals, credits, or benefit payments, arrangements for the recovery of benefit overpayments, arrangements for the transfer of benefit rights to another plan, or arrangements for direct deposit of benefit payments to an account in a bank, savings and loan association or credit union (provided that such arrangement is not part of an arrangement constituting an assignment or alienation).

8.6 **Domestic Relations Orders**. Notwithstanding any provision of the Plan to the contrary, and to the extent permitted by law, the amounts payable pursuant to the Plan may be assigned or alienated pursuant to a "Domestic Relations Order" (as such term is defined in Section 414(p)(1)(B) of the Code), subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time.

8.7 **Incapacity of Recipient**. If the Plan Administrator is served with a court order holding that a person entitled to a distribution under the Plan is incapable of personally receiving and giving a valid receipt for such distribution, the Plan Administrator shall postpone payment until such time as a claim therefore shall have been made by a duly appointed guardian or other legal representative of such person. The Plan Administrator is under no obligation to inquire or investigate as to the competency of any person entitled to a distribution. Any payment to an appointed guardian or other legal representative under this Section shall be a payment for the account of the incapacitated person and a complete discharge of any liability of the Company and the Plan therefor.

8.8 **Successors**. The Plan shall be binding upon the successors and assigns of the Company and upon the heirs, beneficiaries and personal representatives of the individuals who become Participants hereunder.

8.9 **Limitations on Liability**. Notwithstanding any of the preceding provisions of the Plan, neither the Plan Administrator, the Director, or the Company, nor any individual acting as the Plan Administrator's, the Director's, or the Company's employee, agent, or representative shall be liable to any Participant, former Participant, Beneficiary or other person for any claim, loss, liability or expense incurred in connection with the Plan.

8.10 **Overpayments**. If it is determined that the benefits under the Plan should not have been paid or should have been paid in a lesser amount, written notice thereof shall be given to the recipient of such benefits (or his legal representative) and he shall repay the amount of overpayment to the Company. If he fails to repay such amount of overpayment promptly, the Company shall arrange to recover for the Plan the amount of the overpayment by making an appropriate deduction or deductions from any future benefit payment or payments payable to that person (or his survivor or beneficiary) under the Plan or from any other benefit plan of the Company.

8.11 **Plan Frozen.** As a result of the freeze of RIP, participation and benefit accruals are frozen under the Plan. This Section 8.11 provides clarification regarding the freeze of the Plan.

(a) **Participation Frozen.** The Plan is frozen to (1) all employees hired after November 30, 2010 and (2) all employees rehired after December 31, 2010. Any employee hired or rehired after the applicable date in the preceding sentence shall not be eligible for the Plan and, in the case of a rehire, shall accrue no additional benefits under the Plan for any period of employment after such date. Similarly, the Plan is frozen to all individuals hired or rehired by the Company or any Affiliate thereof prior to the applicable date in the first sentence who, as of such date, were not Participants in the Plan and therefore such individuals will never become eligible to participate in the Plan.

(b) Benefits Frozen – Non-Sunset Participants. Effective January 1, 2011, the Plan is frozen with respect to any Participant who is not classified as a Sunset Participant on December 31, 2010. Any Participant who was not a Sunset Participant on December 31, 2010 shall no longer accrue any additional benefits under the Plan for periods of employment on or after January 1, 2011.

(c) Benefits Frozen – Sunset Participants.

(1) The Plan is frozen with respect to any Participant who is a Sunset Participant on December 31, 2010, but who later loses his status as a Sunset Participant, on the date such Participant loses status as a Sunset Participant.

(2) Effective January 1, 2020, the Plan is frozen for all employees including by way of example but not limitation, Sunset Participants.

(d) Plan Completely Frozen – January 1, 2020. For avoidance of doubt, no individual shall: (1) become a new Participant in the Plan after November 30, 2010 regardless of hire date or transfer date; and (2) accrue any benefits under the Plan for any period of employment on or after January 1, 2020.

(e) Vesting Service Continues. For avoidance of doubt, a Participant shall continue to receive vesting service for any period of employment on or after the applicable freeze date referenced in this Section 8.11 for purposes of determining his or her vesting under Section 4.1 and his or her eligibility to commence benefits under Section 5.2(d).

8.12 Special Rules for Participants With Same-Sex Domestic Partners.

(a) Generally. Effective January 1, 2013, except as specified under this Section 8.12 or as prohibited by applicable law, to the extent the Plan provides for any benefit, right, feature, restriction, or obligation relating to, or upon, a Participant's "spouse", "Beneficiary", "survivor", or "surviving spouse" (or any individual having a similar relationship to the Participant), the Plan Administrator shall also apply such benefit, right, feature, restriction, or obligation to a Participant's "same-sex domestic partner" (as defined in (b) below) in a uniform and non-discriminatory manner that is similar to how an opposite-gender spouse would be treated under the Plan.

(b) Definition of "Same-Sex Domestic Partner". For purposes of this Section 8.12, the term "same-sex domestic partner" means the sole, same-sex person who is in a civil union, domestic partnership, or legal relationship similar thereto, with the Participant as recognized under the laws of the federal government or a state government of the United States of America, including its territories and possessions and the District of Columbia (or, with respect to any other country, legally recognized by the equivalent government(s) thereof). The Plan shall continue to treat such relationship as a same-sex domestic partnership, regardless of whether the Participant and his same-sex domestic partner remain in the jurisdiction where the relationship was legally entered into. In the event more than one person meets this definition for a given Participant, then the "same-sex domestic partner" shall be the person who first met the criteria in this definition. Notwithstanding anything herein to the contrary, if a Participant has a spouse recognized for purposes of federal law, no person will qualify as the Participant's same-sex domestic partner unless such Participant's marriage to such spouse is first lawfully dissolved. Except with respect to determining the length of time the same-sex domestic partner has satisfied the definition of same-sex domestic partner under the Plan, a Participant shall be considered to have a same-sex domestic partner only with respect to periods beginning on or after January 1, 2013, regardless of when such same-sex partnership was created.

(c) Exceptions.

(1) **Determination of Status as a "married Participant".** For purposes of Section 5.2(c)(1), a Participant shall be considered a "married Participant" only if the Participant has a spouse recognized for purposes of federal law. For avoidance of doubt, a Participant with a same-sex domestic partner is considered to be an "unmarried Participant" and is not required to obtain the same-sex domestic partner's consent for the election of any form of payment provided under the Plan, and the normal form of benefit for purposes of Section 5.2(c)(1) for any such Participant shall be a single life annuity for the Participant's life.

(2) **Determination of Unforeseeable Emergency.** Only a spouse recognized for purposes of federal law shall be considered a "spouse" for purposes of applying the definition of "Unforeseeable Emergency" in Section 1.1(cc).

(3) **Domestic Relations Orders.** Only a spouse recognized for purposes of federal law or another "alternate payee" (as defined under Section 414(p) of the Code) may enforce a domestic relations order against the Plan or a Participant's interests hereunder pursuant to Section 8.6.

8.13 Determination of "spouse". The term "spouse" means the person who is the Participant's spouse for federal tax purposes.

Exhibit 10.3

CATERPILLAR INC.
SUPPLEMENTAL EMPLOYEES' INVESTMENT PLAN

(Amended and Restated as of May 15, 2017)

CATERPILLAR INC.
SUPPLEMENTAL EMPLOYEES' INVESTMENT PLAN

PREAMBLE

Effective October 14, 1987, Caterpillar Inc. (the "Company") established the Caterpillar Inc. Supplemental Employees' Investment Plan (the "Plan"). The Plan has been amended and restated on a number of occasions. By the execution of this document, the Company hereby amends and restates the Plan in its entirety, effective as of May 15, 2017. This document only incorporates non-material changes to the Plan and is not a material modification of the Plan.

In response to enactment of Section 409A of the Code and pursuant to Internal Revenue Service Notice 2005-1 and other applicable guidance, the Company now desires to: (1) freeze the Plan to new participants; (2) cease Deferral Credits and Matching Credits under the Plan; (3) spin-off the amounts deferred by Participants on and after January 1, 2005 (including the related Matching credits and the related earnings/losses) to the Caterpillar Inc. Supplemental Deferred Compensation Plan, a plan designed to comply with the requirements of Section 409A of the Code; and (4) clarify certain provisions of the Plan as in effect on October 3, 2004.

ARTICLE I
DEFINITIONS

1.1 General. When a word or phrase appears in the Plan with the initial letter capitalized, and the word or phrase does not begin a sentence, the word or phrase shall be a term defined in this Article I, unless a clearly different meaning is required by the context in which the word or phrase is used or the word or phrase is defined for a limited purpose elsewhere in the Plan document:

(a) "401(k) Plan" means the Caterpillar 401(k) Plan, as amended or any successor to such plan.

(b) "Adopting Affiliate" means any Affiliate that has been authorized by the Company to adopt the Plan and which has adopted the Plan. All Affiliates that adopted the Plan on or before the Effective Date and that had not terminated such adoption shall continue to be Adopting Affiliates but no Affiliate that was not an Adopting Affiliate as of the Effective Date shall be permitted to adopt the Plan.

(c) "Affiliate" means a parent business that controls, or a subsidiary business that is controlled by, the Company.

(d) "Base Pay" means the base salary paid to a Participant as determined in accordance with the established pay practices of the Company and Adopting Affiliates. Base Pay shall include any lump-sum base salary adjustment and any variable base pay.

(e) "BFC" means the Benefit Funds Committee of the Company, which is the committee formed by resolution of the Board of Directors of the Company, and which has the responsibility and authority to ensure the proper operation and management of the financial aspects of the 401(k) Plan.

(f) **"Board"** means the Board of Directors of the Company, or any authorized committee of the Board.

(g) **"Code"** means the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder.

(h) **"Company"** means Caterpillar Inc., and, to the extent provided in Section 10.8 (Successors) below, any successor corporation or other entity resulting from a merger or consolidation into or with the Company or a transfer or sale of substantially all of the assets of the Company.

(i) **"Company Stock"** means common stock issued by the Company.

(j) **"Company Stock Fund"** means the Investment Fund described in Section 5.3 (Special Company Stock Fund Provisions).

(k) "**Deferral Credits"** means the deferral credits allocated to a Participant in accordance with Section 3.2 (Deferral Credits).

(l) **"Director"** means the Company's Director of Compensation + Benefits.

(m) **"Disability" or "Disabled"** means that a Participant is "totally and permanently disabled" and eligible to receive long-term disability benefits pursuant to the terms and provisions of the long-term disability plan sponsored by the Company or an Affiliate in which the Participant participates.

(n) **"Effective Date"** means May 15, 2017.

(o) **"Eligible Pay"** means Base Pay minus any deferral credits made pursuant to the Caterpillar Inc. Deferred Employees' Investment Plan.

(p) **"ERISA"** means the Employee Retirement Income Security Act of 1974, as amended from time to time, and any regulations promulgated thereunder.

(q) **"GSCS"** means Caterpillar Logistics Services LLC (f/k/a Caterpillar Logistics Services, Inc.).

(r) **"GSCS Closing Date"** means the date on which the sale of GSCS to an entity that is not an Affiliate is completed.

(s) **"GSCS Participant"** means a Participant who is employed by GSCS upon the closing of the sale of GSCS to an entity that is not an Affiliate.

(t) **"Investment Fund"** means the notional investment funds established by the terms of the Plan pursuant to Article V (Investment of Accounts).

(u) **"Matching Credits"** means the matching credits allocated to a Participant in accordance with Section 3.3 (Matching Credits).

(v) **"Participant"** means an employee of the Company or any Adopting Affiliate who had satisfied the eligibility requirements for participation in the Plan as of the Effective Date and who, as of such date, has amounts credited to his accounts under this Plan.

(w) **"Plan"** means the Caterpillar Inc. Supplemental Employees' Investment Plan, as set forth herein and as it may be amended from time to time.

(x) "**Plan Administrator**" means the Director.

(y) **"Plan Year"** means the calendar year.

(z) **"Post-1996 Deferrals"** means the Deferral Credits made by a Participant on and after January 1, 1997 and before January 1, 2005 (including the earnings/losses thereon).

(aa) **"Post-2004 Deferrals"** means the Deferral Credits and Matching Credits made by a Participant on and after January 1, 2005 determined pursuant to Section 7.2 (Amounts Spun-Off).

(bb) **"SDCP"** means the Caterpillar Inc. Supplemental Deferred Compensation Plan, as amended.

(cc) **"Valuation Date"** means each day of the Plan Year on which the New York Stock Exchange is open for trading.

1.2 Construction. The masculine gender, when appearing in the Plan, shall include the feminine gender (and vice versa), and the singular shall include the plural, unless the Plan clearly states to the contrary. Headings and subheadings are for the purpose of reference only and are not to be considered in the construction of the Plan. If any provision of the Plan is determined to be for any reason invalid or unenforceable, the remaining provisions shall continue in full force and effect. All of the provisions of the Plan shall be construed and enforced according to the laws of the State of Illinois without regard to conflict of law principles and shall be administered according to the laws of such state, except as otherwise required by ERISA, the Code, or other Federal law.

ARTICLE II
ELIGIBILITY AND PARTICIPATION

2.1 Existing Participants. Each individual who was a Participant in the Plan as of the Effective Date shall continue as such, subject to the provisions hereof.

2.2 New Participants. No individual shall become eligible to participate in the Plan after March 25, 2007.

ARTICLE III
DEFERRAL CREDITS AND MATCHING CREDITS

3.1 Credits Ceased. Effective as of March 26, 2007, all credits (other than credits associated with the adjustment of accounts pursuant to Section 5.1 (Adjustment of Accounts) to the Plan ceased. Participants shall not be permitted to make Deferral Credits and the Plan Administrator shall no longer allocate Matching Credits to Participants' accounts.

3.2 Deferral Credits. Immediately prior to March 26, 2007, Participants were permitted to defer the receipt of 6% of the Eligible Pay otherwise payable to the Participant by the Company or an Adopting Affiliate in any Plan Year. A Participant's election to make Deferral Credits only applied to the Eligible Pay that was in excess of the dollar limit imposed by Section 401(a)(17) of the Code during that Plan Year. The deferrals made prior to March 26, 2007 were subject to the provisions of the Plan as in effect at the time the deferral election was made and such uniform and non-discriminatory rules as were adopted by the Plan Administrator in that regard.

3.3 Matching Credits. For periods ending on or before March 25, 2007, the Plan Administrator allocated matching credits to the Participant's accounts in an amount equal to 100% of the Participant's Deferral Credits.

ARTICLE IV
VESTING

4.1 Vesting. Subject to Section 10.1 (Participant's Rights Unsecured), each Participant shall at all times be fully vested in all amounts credited to or allocable to his accounts hereunder and his rights and interest therein shall not be forfeitable.

ARTICLE V
INVESTMENT OF ACCOUNTS

5.1 Adjustment of Accounts. Except as otherwise provided elsewhere in the Plan, as of each Valuation Date, each Participant's accounts will be adjusted to reflect the positive or negative rate of return on the Investment Funds selected by the Participant pursuant to Section 5.2(b) (Investment Direction - Participant Directions). The rate of return will be determined by the Plan Administrator pursuant to Section 5.2(f) (Investment Direction – Investment Performance) and will be credited or charged in accordance with policies applied uniformly to all Participants.

5.2 Investment Direction.

(a) Investment Funds. Each Participant may direct the notional investment of amounts credited to his Plan accounts in one or more of the Investment Funds. The Investment Funds shall, at all times, be notional funds that track the returns of the investment funds selected by the BFC for purposes of the 401(k) Plan and made available to 401(k) Plan participants. In addition, the Investment Funds shall, at all times, include a Company Stock Fund as described in Section 5.3 (Special Company Stock Fund Provisions). Neither the Company, each Adopting Affiliate, the Plan Administrator, the BFC, nor any other party shall have any responsibility, duty of care (whether express or implied) or liability to any Participant in regards to designation of the Investment Funds as set forth in this Section 5.2(a).

(b) Participant Directions. Each Participant may direct that all of the amounts attributable to his accounts be invested in a single Investment Fund or may direct that whole percentage increments of his accounts be invested in such fund or funds as he shall desire in accordance with such procedures as may be established by the Plan Administrator. Unless the Plan Administrator prescribes otherwise, such procedures generally shall mirror the procedures established under the 401(k) Plan for participant investment direction.

(c) Changes and Intra-Fund Transfers. Participant investment directions may be changed, and amounts may be transferred from one Investment Fund to another, in accordance with the procedures established by the Plan Administrator. The designation will remain in effect until changed by the timely submission of a new designation by the Participant.

(d) Default Selection. In the absence of a designation by the Participant, such Participant will be deemed to have directed the notional investment of his accounts in the Investment Fund that tracks the return of the 401(k) Plan investment fund that is designated by the BFC as the "default" investment fund for purposes of the 401(k) Plan.

(e) Impact of Election. The Participant's selection of Investment Funds shall serve only as a measurement of the value of the Participant's Accounts pursuant to Section 5.1 (Adjustment of Accounts) and this Section 5.2. None of the Company, the BFC, or the Plan Administrator are required to actually invest a Participant's accounts in accordance with the Participant's selections.

(f) Investment Performance. Accounts shall be adjusted on each Valuation Date to reflect investment gains and losses as if the accounts were invested in the Investment Funds selected by the Participants in accordance with this Section 5.2 and charged with any and all reasonable expenses as provided in paragraph (g) below. The earnings and losses determined by the Plan Administrator in good faith and in his discretion pursuant to this Section 5.2 shall be binding and conclusive on the Participant, the Participant's beneficiary and all parties claiming through them.

(g) Charges. The Plan Administrator may (but is not required to) charge Participants' accounts for the reasonable expenses of administration including, but not limited to, carrying out and/or accounting for investment instructions directly related to such accounts.

5.3 Special Company Stock Fund Provisions.

(a) General. A Participant's interest in the Company Stock Fund shall be expressed in whole and fractional notional units of the Company Stock Fund. The Company Stock Fund shall track an investment in Company Stock in the same manner as the 401(k) Plan's company stock fund. Accordingly, the value of a unit in the Plan's Company Stock Fund shall be the same as the value of a unit in the 401(k) Plan's company stock fund. Notwithstanding the foregoing, if and to the extent that a company stock fund is no longer maintained under the 401(k) Plan, the Plan

Administrator shall establish such rules and procedures as are necessary to maintain the Company Stock Fund hereunder.

(b) **Investment Directions**. A Participant's ability to direct investments into or out of the Company Stock Fund shall be subject to such procedures as the Plan Administrator may prescribe from time to time to assure compliance with Rule 16b-3 promulgated under Section 16(b) of the Securities Exchange Act of 1934, as amended, and other applicable requirements. Such procedures also may limit or restrict a Participant's ability to make (or modify previously made) deferral and distribution elections pursuant to Articles III (Deferral Credits and Matching Credits) and VI (Distributions), respectively. In furtherance, and not in limitation, of the foregoing, to the extent a Participant acquires any interest in an equity security under the Plan for purposes of Section 16(b), the Participant shall not dispose of that interest within six months, unless specifically exempted by Section 16(b) or any rules or regulations promulgated thereunder.

(c) **Compliance with Securities Laws**. Any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all applicable securities law requirements, including but not limited to the last sentence of paragraph (b) above and Rule 16b-3 promulgated by the Securities Exchange Commission. To the extent that any election violates any securities law requirement or the Company's stock trading policies and procedures, the election shall be void.

(d) **Compliance with Company Trading Policies and Procedures**. Any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all Company Stock trading policies promulgated by the Company. To the extent that any election violates any such trading policy or procedures, the election shall be void.

5.4 **Application to Beneficiaries**. Following the death of a Participant, the term "Participant" in this Article V shall refer to the Participant's beneficiary described in Section 6.5 (Payment Upon Death).

ARTICLE VI
DISTRIBUTIONS

6.1 **General Right to Receive Distribution**. Following termination of employment with the Company, death or Disability, the Participant's accounts will be distributed in the manner and at the time provided in Sections 6.3 (Form of Distribution) and 6.4 (Timing of Distribution) or Section 6.5 (Payment Upon Death), as applicable. A transfer of a Participant from the Company or any Affiliate to any other Affiliate or the Company shall not be deemed to be a termination of employment with the Company for purposes of this Article VI.

6.2 **Amount of Distribution**. The amount distributed to a Participant shall be based on the vested amounts credited to the Participant's accounts as of the Valuation Date immediately preceding the date of the distribution. Amounts shall be valued at the fair market value on the relevant Valuation Date determined pursuant to uniform and non-discriminatory procedures established by the Plan Administrator.

6.3 Form of Distribution.

(a) Default Form of Distribution. Accounts shall be distributed in cash in a single lump-sum payment.

(b) Optional Form of Distribution. A Participant may elect to receive his distribution in the form of quarterly, semi-annual or annual cash installments for a period of up to fifteen years by filing an election with the Plan Administrator before the last Company business day of November of the second year that precedes the year the distribution is scheduled to commence pursuant to Section 6.4 (Timing of Distribution). If an election pursuant to this paragraph (b) of this Section 6.3 cannot be honored because it was not timely filed, distributions shall be made in accordance with the most recent valid election made by the Participant that precedes the invalid election. If no such election exists, distributions shall be made in a single Lump-Sum in accordance with paragraph (a) of this Section 6.3.

(c) Change of Election. A Participant may change an installment distribution election by filing a new installment distribution election with the Plan Administrator before the last Company business day of November of the second year that precedes the year the distribution is scheduled to commence pursuant to Section 6.4 (Timing of Distribution). There shall be no limitation on the number of times that a Participant may change his election in accordance with this paragraph (c).

6.4 Timing of Distribution.

(a) Default Timing of Distribution. Accounts shall be distributed within an administratively reasonable period of time following the Participant's termination of employment, death or Disability.

(b) Deferral of Distribution. A Participant may elect to defer the distribution of his accounts beyond his termination of employment, death or Disability by filing an election with the Plan Administrator: (1) while the Participant is employed by the Company or an Affiliate and (2) before the last Company business day of November in the year prior to the year during which the Participant's termination of employment, death or Disability occurs. If an election pursuant to this paragraph (b) cannot be honored because it was not timely filed, distributions shall be made in accordance with the most recent valid election made by the Participant that precedes the invalid election. If no such election exists, distributions shall be made within an administratively reasonable period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4.

(c) Change of Election. An election made pursuant to paragraph (b) of this Section 6.4 or election made effective as a result of paragraph (e)(1) of this Section 6.4 may be changed by the Participant by filing a new election with the Plan Administrator: (1) while the Participant is employed by the Company or an Adopting Affiliate and (2) before the last Company business day of November in the year prior to the year during which the Participant's termination of employment, death or Disability occurs. There shall be no limitation on the number of times that a Participant may change his election in accordance with this paragraph (c).

(d) Date Elected By Participant. The date elected by a Participant pursuant to paragraphs (b) or (c) of this Section 6.4 must be the first day of any calendar quarter. Notwithstanding the foregoing, if as of the Effective Date, a Participant had made an election whereby the date of distribution elected is not the first day of a calendar quarter, such election shall be honored unless and until the Participant initiates a change to the timing of distribution pursuant to this Section 6.4 or the form of distribution pursuant to Section 6.3 (Form of Distribution).

(e) Revocation of Election.

(1) Automatic Revocation. If, as of the distribution date elected by the Participant pursuant to paragraphs (b) or (c) of this Section 6.4 the Participant, is: (i) employed by the Company or an Affiliate and (ii) not Disabled, such election shall be automatically revoked and distributions shall be made within an administratively reasonable period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4. Notwithstanding the foregoing, if the distribution date is automatically revoked pursuant to this paragraph (e)(1) and the distribution was to be made in the form of cash installments pursuant to Section 6.3 (Form of Distribution), the date of distribution shall be the first day of the next calendar quarter that is within an administratively feasible period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4. Nothing contained in this paragraph (e)(1) shall prevent a Participant from changing his election pursuant to paragraph (c) of this Section 6.4.

(2) Election Irrevocable Following Termination of Employment. At all times following the Participant's termination of employment with the Company or an Affiliate, the Participant's elections made pursuant to this Section 6.4 shall be irrevocable.

6.5 Payment Upon Death.

(a) Beneficiary Designation. If a Participant should die before receiving a full distribution of his Plan accounts, distribution shall be made to the beneficiary designated by the Participant, in accordance with such uniform rules and procedures as may be adopted by the Plan Administrator from time to time. If a Participant has not designated a beneficiary, or if no designated beneficiary is living on the date of distribution, then the Participant's beneficiary shall be that person or persons entitled to receive distributions of the Participant's accounts under the 401(k) Plan.

(b) Timing and Form of Payment to Beneficiary.

(1) Payments Commenced at Time of Death. If, at the time of the Participant's death, installment payments of the Participant's accounts have commenced pursuant to this Article VI, such payments shall continue to the Participant's beneficiary in the same time and the same form as if the Participant has remained alive until the last installment payment was scheduled to be made.

(2) Payments Not Commenced at Time of Death.

(i) Default. If, at the time of the Participant's death, payments of the Participant's accounts have not commenced pursuant to this Article VI, the distributions made pursuant to this Section 6.5 shall be made to the Participant's beneficiary in accordance with the then current and valid distribution elections (as to timing and form) made by the Participant (or, in the absence of such distribution elections, in accordance with the "default" provisions of this Article VI).

(ii) **Separate Election**. Notwithstanding the foregoing or anything herein to the contrary, a Participant may make separate elections regarding the timing and form of payments to his beneficiary upon his death. Such separate beneficiary elections shall be valid only if they meet the requirements of Section 6.3 (Form of Distribution) and Section 6.4 (Timing of Distribution). In addition, such separate beneficiary elections may be changed or revoked in accordance with Section 6.3 (Form of Distribution) and Section 6.4 (Timing of Distribution).

(3) **No Changes Permitted by Beneficiary**. In no event shall a beneficiary be permitted to change the time and/or form of payment relating to a Participant's accounts following such Participant's death either prior to or following such Participant's death.

6.6 **Scheduled Distributions.** The Plan as in effect prior to March 25, 2007 permitted a Participant to elect, at the time the Participant elected to make Deferral Credits, to schedule a distribution date for all or a portion of such Deferral Credits provided: (a) the distribution date scheduled by the Participant was the first day of any calendar quarter and (b) the distribution date scheduled by the Participant was at least four years later than the last day of the Plan Year that includes the Deferral Credits to which the election relates. As of March 25, 2007, no Participant had such a scheduled distribution election on file with the Plan Administrator. Because Deferral Credits have ceased pursuant to Section 3.1 (Credits Ceased) and because there are no scheduled distribution elections on file, the scheduled distribution provisions of the Plan as in effect prior March 25, 2007 are now without effect.

6.7 **Unscheduled Distributions.** Notwithstanding anything herein to the contrary, a Participant may elect to receive a lump-sum cash distribution of his Plan accounts at any time while employed by the Company or an Affiliate in accordance with this Section 6.7 and the uniform and non-discriminatory procedures adopted by the Plan Administrator.

(a) **Amount of Distribution**. A Participant may elect to receive five percent to one hundred percent (designated in whole percentages by the Participant) of his Post-1996 Deferrals. Notwithstanding the foregoing, in no event shall the amount of the distribution made pursuant to this Section 6.7 be less than $10,000.00 (determined prior to the application of the forfeiture described in paragraph (b) below).

(b) **Forfeiture**. Any distribution made pursuant to this Section 6.7 shall be subject to a forfeiture equal to 10% of the amount elected.

(c) **Election Applies to DEIP**. An election for an unscheduled distribution pursuant to this Section 6.7 shall also apply as an election for an unscheduled distribution pursuant to the terms and provisions of the Caterpillar Inc. Deferred Employees' Investment Plan.

6.8 **Withholding**. All distributions will be subject to all applicable tax and withholding requirements.

ARTICLE VII
SPIN-OFF TO SDCP

7.1 <u>General</u>. In response to the enactment of Section 409A of the Code and pursuant to transitional guidance issued by the Internal Revenue Service and the Department of Treasury, Deferrals Credits and Matching Credits have been frozen and all amounts deferred and vested on and before December 31, 2004 are "grandfathered" and thus are not subject to the requirements of Section 409A. The Deferral Credits and Matching Credits made pursuant to the Plan from January 1, 2005 through March 25, 2007 (including the earnings/losses thereon) were spun-off to SDCP as provided in this Article VII.

7.2 <u>Amounts Spun-Off</u>. All amounts credited to participant accounts pursuant to this Plan on or after January 1, 2005 and through March 25, 2007 and not fully distributed on or before April 1, 2007 were spun-off and allocated to Plan accounts as provided in Section 7.3 (<u>Allocation of Amounts</u>). The amounts deferred prior to January 1, 2005 were determined in accordance with Q&A-17 of I.R.S. Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury.

7.3 <u>Allocation of Amounts</u>. A Participant's Post-2004 Deferrals were allocated to the Participant's accounts in SDCP as provided therein.

7.4 <u>Deferral Elections</u>. Deferral elections made by participants pursuant to the Plan for amounts to be deferred in 2007 following March 25, 2007 applied to SDCP as provided therein.

7.5 <u>Effective Date of Spin-Off</u>. The spin-off described in this Article VII was effective as of 11:59:59 P.M. on March 25, 2007.

ARTICLE VIII
ADMINISTRATION OF THE PLAN

8.1 <u>General Powers and Duties</u>. The following list of powers and duties is not intended to be exhaustive, and the Plan Administrator shall, in addition, exercise such other powers and perform such other duties as he may deem advisable in the administration of the Plan, unless such powers or duties are expressly assigned to another pursuant to the provisions of the Plan.

(a) <u>General</u>. The Plan Administrator shall perform the duties and exercise the powers and discretion given to him in the Plan document and by applicable law and his decisions and actions shall be final and conclusive as to all persons affected thereby. The Company and the Adopting Affiliates shall furnish the Plan Administrator with all data and information that the Plan Administrator may reasonably require in order to perform his functions. The Plan Administrator may rely without question upon any such data or information.

(b) <u>Disputes</u>. Any and all disputes that may arise involving Participants or beneficiaries shall be referred to the Plan Administrator and his decision shall be final. Furthermore, if any question arises as to the meaning, interpretation or application of any provisions of the Plan, the decision of the Plan Administrator shall be final.

(c) Agents. The Plan Administrator may engage agents, including recordkeepers, to assist him and he may engage legal counsel who may be counsel for the Company. The Plan Administrator shall not be responsible for any action taken or omitted to be taken on the advice of such counsel, including written opinions or certificates of any agent, counsel, actuary or physician.

(d) Insurance. At the Director's request, the Company shall purchase liability insurance to cover the Director in his activities as the Plan Administrator.

(e) Allocations. The Plan Administrator is given specific authority to allocate responsibilities to others and to revoke such allocations. When the Plan Administrator has allocated authority pursuant to this paragraph, the Plan Administrator is not to be liable for the acts or omissions of the party to whom such responsibility has been allocated.

(f) Records. The Plan Administrator shall supervise the establishment and maintenance of records by its agents, the Company and each Adopting Affiliate containing all relevant data pertaining to any person affected hereby and his or her rights under the Plan.

(g) Interpretations. The Plan Administrator, in his sole discretion, shall interpret and construe the provisions of the Plan (and any underlying documents or policies).

(h) Electronic Administration. The Plan Administrator shall have the authority to employ alternative means (including, but not limited to, electronic, internet, intranet, voice response or telephonic) by which Participants may submit elections, directions and forms required for participation in, and the administration of, the Plan. If the Plan Administrator chooses to use these alternative means, any elections, directions or forms submitted in accordance with the rules and procedures promulgated by the Plan Administrator will be deemed to satisfy any provision of the Plan calling for the submission of a written election, direction or form.

(i) Accounts. The Plan Administrator shall combine the various accounts of a Participant if he deems such action appropriate. Furthermore, the Plan Administrator shall divide a Participant's accounts into sub-accounts if he deems such action appropriate.

(j) Delegation. The Plan Administrator may delegate his authority hereunder, in whole or in part, in his sole and absolute discretion.

8.2 Certain Exercise of Discretion Prohibited. Notwithstanding anything herein to the contrary, the Plan Administrator (or any other individual or entity to whom the power to exercise discretion hereunder is granted) shall not exercise the discretion granted in a manner that would create a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) to the Plan as it was in effect on October 3, 2004.

8.3 Claims Procedures. Benefit claims under the Plan shall be resolved in accordance with uniform and nondiscriminatory procedures adopted by the Plan Administrator in accordance with Section 503 of ERISA.

ARTICLE IX
AMENDMENT

9.1 **Amendment**. The Company reserves the right at any time to amend, modify or suspend any or all of the provisions of this Plan, in whole or in part, at any time as designated by a written instrument duly adopted on behalf of the Company.

9.2 **Effect of Amendment**. Any amendment of the Plan shall not directly or indirectly reduce the balance of any Plan account as of the effective date of such amendment. Notwithstanding the foregoing or anything in this Plan to the contrary, any amendment to the Plan effective on or after October 3, 2004 that creates a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) shall only be effective if such amendment expressly states an intent by the Company to materially modify the Plan (and thus subject it to Section 409A of the Code).

9.3 **Termination**. To the extent permitted by applicable law, the Company expressly reserves the right to terminate the Plan at any time. Pursuant to the foregoing and the provisions of Sections 9.1 and 9.2, the Plan was irrevocably terminated with respect to all GSCS Participants upon the GSCS Closing Date and no GSCS Participant shall accrue any benefits under the Plan for any purpose after the GSCS Closing Date. Pursuant to termination of the Plan with respect to GSCS Participants pursuant to this Section 9.3, the balance in each GSCS Participant's account under the Plan was distributed to the GSCS Participant in a single lump-sum payment as soon as practicable after the GSCS Closing Date, but in no event later than December 31 next following the GSCS Closing Date. For purposes of the preceding sentence, the balance in each GSCS Participant's account was determined as of the Valuation Date occurring coincident with or next preceding the date of distribution.

ARTICLE X
GENERAL PROVISIONS

10.1 **Participant's Rights Unsecured**. The Plan at all times shall be entirely unfunded and no provision shall at any time be made with respect to segregating any assets of the Company for payment of any distributions hereunder. The right of a Participant or his or her designated beneficiary to receive a distribution hereunder shall be an unsecured claim against the general assets of the Company, and neither the Participant nor a designated beneficiary shall have any rights in or against any specific assets of the Company. All amounts credited to a Participant's accounts hereunder shall constitute general assets of the Company and may be disposed of by the Company at such time and for such purposes as it may deem appropriate. Nothing in this Section shall preclude the Company from establishing a "Rabbi Trust," but the assets in the Rabbi Trust must be available to pay the claims of the Company's general creditors in the event of the Company's insolvency.

10.2 **No Guaranty of Benefits**. Nothing contained in the Plan shall constitute a guaranty by the Company or any other person or entity that the assets of the Company will be sufficient to pay any benefit hereunder.

10.3 No Enlargement of Employee Rights. No Participant shall have any right to receive a distribution from the Plan except in accordance with the terms of the Plan. Participation in the Plan shall not be construed to give any Participant the right to be retained in the service of the Company or an Adopting Affiliate.

10.4 Section 409A.

(a) Material Modification. Notwithstanding anything contained herein to the contrary, this amendment and restatement of the Plan does not, and is not intended to, create a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) to the Plan as it was in effect on October 3, 2004 which would subject the Plan to the requirements of Section 409A of the Code. This document shall be construed and interpreted in a manner consistent with that intention.

(b) Good Faith Compliance. The Deferral Credits and Matching Credits made from January 1, 2005 through March 25, 2007 (including the earnings/losses thereon) have been administered pursuant to the Plan in "good faith" compliance with Section 409A of the Code pursuant to transitional guidance issued by the Internal Revenue Service and the Department of Treasury.

10.5 Spendthrift Provision. No interest of any person or entity in, or right to receive a distribution under, the Plan shall be subject in any manner to sale, transfer, assignment, pledge, attachment, garnishment, or other alienation or encumbrance of any kind; nor shall any such interest or right to receive a distribution be taken, either voluntarily or involuntarily, for the satisfaction of the debts of, or other obligations or claims against, such person or entity, including claims in bankruptcy proceedings. This Section shall not preclude arrangements for the withholding of taxes from deferrals, credits, or benefit payments, arrangements for the recovery of benefit overpayments, arrangements for the transfer of benefit rights to another plan, or arrangements for direct deposit of benefit payments to an account in a bank, savings and loan association or credit union (provided that such arrangement is not part of an arrangement constituting an assignment or alienation).

10.6 Domestic Relations Orders. Notwithstanding any provision of the Plan to the contrary, and to the extent permitted by law, the Participant's accounts may be assigned or alienated pursuant to a "Domestic Relations Order" (as such term is defined in Section 414(p)(1)(B) of the Code), subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time.

10.7 Incapacity of Recipient. If the Plan Administrator is served with a court order holding that a person entitled to a distribution under the Plan is incapable of personally receiving and giving a valid receipt for such distribution, the Plan Administrator shall postpone payment until such time as a claim therefore shall have been made by a duly appointed guardian or other legal representative of such person. The Plan Administrator is under no obligation to inquire or investigate as to the competency of any person entitled to a distribution. Any payment to an appointed guardian or other legal representative under this Section shall be a payment for the account of the incapacitated person and a complete discharge of any liability of the Company and the Plan therefore.

10.8 Successors. The Plan shall be binding upon the successors and assigns of the Company and upon the heirs, beneficiaries and personal representatives of the individuals who become Participants hereunder.

10.9 Limitations on Liability. Notwithstanding any of the preceding provisions of the Plan, neither the Plan Administrator, the Company, nor any individual acting as the Plan Administrator's, or the Company's employee, agent, or representative shall be liable to any Participant, former Participant, beneficiary or other person for any claim, loss, liability or expense incurred in connection with the Plan.

10.10 Conflicts. If any person holds a position under the Plan through which he or she is charged with making a decision about the administration of his or her own (or any immediate family member's) Plan participation, including, without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, then such person shall be recused and the decision shall be made by the Plan Administrator. If a decision is required regarding the administration of the Plan Administrator's Plan participation, including without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, such decision shall be made by the Company's Vice President, Human Services Division**.** Nothing in this Section 10.10 shall be construed to limit a Participant's or the Plan Administrator's ability to make decisions or elections with regard to his or her participation in the Plan in the same manner as other Participants.

10.11 Special Rules for Participants With Same-Sex Domestic Partners.

(a) Generally. Effective January 1, 2013, except as specified under this Section 10.11 or as prohibited by applicable law, to the extent the Plan provides for any benefit, right, feature, restriction, or obligation relating to, or upon, a Participant's "spouse", "beneficiary", "survivor", or "family member" (or any individual having a similar relationship to the Participant), the Plan Administrator shall also apply such benefit, right, feature, restriction, or obligation to a Participant's "same-sex domestic partner" (as defined in (b) below) in a uniform and non-discriminatory manner that is similar to how an opposite-gender spouse would be treated under the Plan.

(b) Definition of "Same-Sex Domestic Partner". For purposes of this Section 10.11, the term "same-sex domestic partner" means the sole, same-sex person who is in a civil union, domestic partnership, or legal relationship similar thereto, with the Participant as recognized under the laws of the federal government or a state government of the United States of America, including its territories and possessions and the District of Columbia (or, with respect to any other country, legally recognized by the equivalent government(s) thereof). The Plan shall continue to treat such relationship as a same-sex domestic partnership, regardless of whether the Participant and his same-sex domestic partner remain in the jurisdiction where the relationship was legally entered into. In the event more than one person meets this definition for a given Participant, then the "same-sex domestic partner" shall be the person who first met the criteria in this definition. Notwithstanding anything herein to the contrary, if a Participant has a spouse recognized for purposes of federal law, no person will qualify as the Participant's same-sex domestic partner unless such Participant's marriage to such spouse is first lawfully dissolved. Except with respect to determining the length of time the same-sex domestic partner has satisfied the definition of same-sex domestic partner under the Plan, a Participant shall be considered to have a same-sex domestic partner only with respect to periods beginning on or after January 1, 2013, regardless of when such same-sex partnership was created.

(c) **<u>Domestic Relations Orders</u>.** Only a spouse recognized for purposes of federal law or another "alternate payee" (as defined under Section 414(p) of the Code) may enforce a domestic relations order against the Plan or a Participant's interests hereunder pursuant to Section 10.6.

10.12 **<u>Determination of "Spouse"</u>.** The term "spouse" means the person who is the Participant's spouse for federal tax purposes.

Exhibit 10.4

CATERPILLAR INC.
DEFERRED EMPLOYEES'
INVESTMENT PLAN

(Amended and Restated as of May 15, 2017)

CATERPILLAR INC.
DEFERRED EMPLOYEES' INVESTMENT PLAN

PREAMBLE

Effective June 30, 1995, Caterpillar Inc. (the "Company") established the Caterpillar Inc. Deferred Employees' Investment Plan (the "Plan"). The Plan has been amended and restated on a number of occasions. By the execution of this document, the Company hereby amends and restates the Plan in its entirety, effective as of May 15, 2017. This document only incorporates non-material changes to the Plan and is not a material modification of the Plan.

In response to enactment of Section 409A of the Code and pursuant to Internal Revenue Service Notice 2005-1 and other applicable guidance, the Company now desires to: (1) freeze the Plan to new participants; (2) cease Deferral Credits and Matching Credits under the Plan; (3) spin-off the amounts deferred by Participants on and after January 1, 2005 (including the related Matching credits and the related earnings/losses) to the Caterpillar Inc. Supplemental Deferred Compensation Plan, a plan designed to comply with the requirements of Section 409A of the Code; and (4) clarify certain provisions of the Plan as in effect on October 3, 2004.

ARTICLE I
DEFINITIONS

1.1 General. When a word or phrase appears in the Plan with the initial letter capitalized, and the word or phrase does not begin a sentence, the word or phrase shall be a term defined in this Article I, unless a clearly different meaning is required by the context in which the word or phrase is used or the word or phrase is defined for a limited purpose elsewhere in the Plan document:

(a) "401(k) Plan" means the Caterpillar 401(k) Plan, as amended or any successor to such plan.

(b) "Adopting Affiliate" means any Affiliate that has been authorized by the Company to adopt the Plan and which has adopted the Plan. All Affiliates that adopted the Plan on or before the Effective Date and that had not terminated such adoption shall continue to be Adopting Affiliates but no Affiliate that was not an Adopting Affiliate as of the Effective Date shall be permitted to adopt the Plan.

(c) "Affiliate" means a parent business that controls, or a subsidiary business that is controlled by, the Company.

(d) "Base Pay" means the base salary paid to a Participant as determined in accordance with the established pay practices of the Company and Adopting Affiliates. Base Pay shall include any lump-sum base salary adjustment and any variable base pay.

(e) "BFC" means the Benefit Funds Committee of the Company, which is the committee formed by resolution of the Board of Directors of the Company, and which has the responsibility and authority to ensure the proper operation and management of the financial aspects of the 401(k) Plan.

(f) **"Board"** means the Board of Directors of the Company, or any authorized committee of the Board.

(g) **"Code"** means the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder.

(h) **"Company"** means Caterpillar Inc., and, to the extent provided in Section 10.8 (Successors) below, any successor corporation or other entity resulting from a merger or consolidation into or with the Company or a transfer or sale of substantially all of the assets of the Company.

(i) **"Company Stock"** means common stock issued by the Company.

(j) **"Company Stock Fund"** means the Investment Fund described in Section 5.3 (Special Company Stock Fund Provisions).

(k) "**Deferral Credits"** means the deferral credits allocated to a Participant in accordance with Section 3.2 (Deferral Credits).

(l) **"Director"** means the Company's Director of Compensation + Benefits.

(m) **"Disability" or "Disabled"** means that a Participant is "totally and permanently disabled" and eligible to receive long-term disability benefits pursuant to the terms and provisions of the long-term disability plan sponsored by the Company or an Affiliate in which the Participant participates.

(n) **"Effective Date"** means May 15, 2017.

(o) **"EOAIP"** means the Caterpillar Inc. Executive Office Annual Incentive Plan, as amended or any predecessor or successor to such plan.

(p) **"ERISA"** means the Employee Retirement Income Security Act of 1974, as amended from time to time, and any regulations promulgated thereunder.

(q) **"GSCS"** means Caterpillar Logistics Services LLC (f/k/a Caterpillar Logistics Services, Inc.).

(r) **"GSCS Closing Date"** means the date on which the sale of GSCS to an entity that is not an Affiliate is completed.

(s) **"GSCS Participant"** means a Participant who is employed by GSCS upon the closing of the sale of GSCS to an entity that is not an Affiliate.

(t) "Incentive Compensation" means STIP Pay, SPP Pay and Lump-Sum Awards.

(u) "Investment Fund" means the notional investment funds established by the terms of the Plan pursuant to Article V (Investment of Accounts).

(v) "Lump-Sum Award" means the discretionary lump-sum cash awards paid to employees pursuant to the uniform and nondiscriminatory pay practices of the Company or an Affiliate and designated with earnings code 208 or 212 in the Company's payroll system (or the equivalent earnings code for Adopting Affiliates that do not use the Company's payroll system). In no event will a Lump-Sum Award include any lump-sum base salary adjustment.

(w) "Matching Credits" means the matching credits allocated to a Participant in accordance with Section 3.3 (Matching Credits).

(x) "Participant" means an employee of the Company or any Adopting Affiliate who had satisfied the eligibility requirements for participation in the Plan as of March 31, 2007 and who, as of such date, has amounts credited to his accounts under this Plan.

(y) "Plan" means the Caterpillar Inc. Deferred Employees' Investment Plan, as set forth herein and as it may be amended from time to time.

(z) "Plan Administrator" means the Director.

(aa) "Plan Year" means the calendar year.

(bb) "Post-1996 Deferrals" means the Deferral Credits made by a Participant on and after January 1, 1997 and before January 1, 2005 (including the earnings/losses thereon).

(cc) "Post-2004 Deferrals" means the Deferral Credits and Matching Credits made by a Participant on and after January 1, 2005 determined pursuant to Section 7.2 (Amounts Spun-Off).

(dd) "SDCP" means the Caterpillar Inc. Supplemental Deferred Compensation Plan, as amended.

(ee) "SPP Pay" means the amounts designated by the Company as a cash-based performance award under the "Strategic Performance Plan" (previously known as the Long-Term Cash Performance Plan) and paid pursuant to the terms of the Caterpillar Inc. 2014 Long-Term Incentive Plan (or any predecessor or successor to such plan). Performance awards under the "Strategic Performance Plan" that are paid pursuant to the terms of the Caterpillar Inc. 2014 Long-Term Incentive Plan (or any predecessor or successor to such plan) in the form of Company Stock are not SPP Pay hereunder.

(ff) "STIP" means the Caterpillar Inc. Short-Term Incentive Plan, as amended or any successor to such plan.

(gg) **"STIP Pay"** means amounts paid to employees of the Company or an Adopting Affiliate pursuant to the terms of STIP and/or EOAIP.

(hh) **"Valuation Date"** means each day of the Plan Year on which the New York Stock Exchange is open for trading.

1.2 Construction. The masculine gender, when appearing in the Plan, shall include the feminine gender (and vice versa), and the singular shall include the plural, unless the Plan clearly states to the contrary. Headings and subheadings are for the purpose of reference only and are not to be considered in the construction of the Plan. If any provision of the Plan is determined to be for any reason invalid or unenforceable, the remaining provisions shall continue in full force and effect. All of the provisions of the Plan shall be construed and enforced according to the laws of the State of Illinois without regard to conflict of law principles and shall be administered according to the laws of such state, except as otherwise required by ERISA, the Code, or other Federal law.

ARTICLE II
ELIGIBILITY AND PARTICIPATION

2.1 Existing Participants. Each individual who was a Participant in the Plan as of the Effective Date shall continue as such, subject to the provisions hereof.

2.2 New Participants. No individual shall become eligible to participate in the Plan after March 25, 2007.

ARTICLE III
DEFERRAL CREDITS AND MATCHING CREDITS

3.1 Credits Ceased. Effective as of March 26, 2007, all credits (other than credits associated with adjustment of accounts pursuant to Section 5.1 (Adjustment of Accounts) to the Plan ceased. Participants shall not be permitted to make Deferral Credits and the Plan Administrator shall no longer allocate Matching Credits to Participants' accounts.

3.2 Deferral Credits. Immediately prior to March 26, 2007, Participants were permitted to elect to supplement the deferrals made pursuant to the 401(k) Plan by deferring the receipt of up to 70% (designated in whole percentages) of the Base Pay and Incentive Compensation otherwise payable to the Participant by the Company or an Adopting Affiliate in any Plan Year. The deferrals made prior to March 26, 2007 were subject to the provisions of the Plan as in effect at the time the deferral election was made and such uniform and non-discriminatory rules as were adopted by the Plan Administrator in that regard.

3.3 Matching Credits. For periods ending on or before the March 25, 2007, the Plan Administrator allocated matching credits to the Participant's accounts in an amount equal to: (a) 6% of the Base Pay deferred by the Participant as Deferral Credits and (b) 100% of the STIP Pay and Lump-Sum Awards deferred by the Participant as Deferral Credits (up to a maximum of 6% of the Participant's STIP Pay and Lump-Sum Awards for the relevant Plan Year). SPP Pay deferred by the Participant as Deferral Credits was not considered when determining Matching Credits.

ARTICLE IV
VESTING

4.1 Vesting. Subject to Section 10.1 (Participant's Rights Unsecured), each Participant shall at all times be fully vested in all amounts credited to or allocable to his accounts hereunder and his rights and interest therein shall not be forfeitable.

ARTICLE V
INVESTMENT OF ACCOUNTS

5.1 Adjustment of Accounts. Except as otherwise provided elsewhere in the Plan, as of each Valuation Date, each Participant's accounts will be adjusted to reflect the positive or negative rate of return on the Investment Funds selected by the Participant pursuant to Section 5.2(b) (Investment Direction - Participant Directions). The rate of return will be determined by the Plan Administrator pursuant to Section 5.2(f) (Investment Direction – Investment Performance) and will be credited or charged in accordance with policies applied uniformly to all Participants.

5.2 Investment Direction.

(a) Investment Funds. Each Participant may direct the notional investment of amounts credited to his Plan accounts in one or more of the Investment Funds. The Investment Funds shall, at all times, be notional funds that track the returns of the investment funds selected by the BFC for purposes of the 401(k) Plan and made available to 401(k) Plan participants. In addition, the Investment Funds shall, at all times, include a Company Stock Fund as described in Section 5.3 (Special Company Stock Fund Provisions). Neither the Company, each Adopting Affiliate, the Plan Administrator, the BFC, nor any other party shall have any responsibility, duty of care (whether express or implied) or liability to any Participant in regards to designation of the Investment Funds as set forth in this Section 5.2(a).

(b) Participant Directions. Each Participant may direct that all of the amounts attributable to his accounts be invested in a single Investment Fund or may direct that whole percentage increments of his accounts be invested in such fund or funds as he shall desire in accordance with such procedures as may be established by the Plan Administrator. Unless the Plan Administrator prescribes otherwise, such procedures generally shall mirror the procedures established under the 401(k) Plan for participant investment direction.

(c) Changes and Intra-Fund Transfers. Participant investment directions may be changed, and amounts may be transferred from one Investment Fund to another, in accordance with the procedures established by the Plan Administrator. The designation will remain in effect until changed by the timely submission of a new designation by the Participant.

(d) Default Selection. In the absence of a designation by the Participant, such Participant will be deemed to have directed the notional investment of his accounts in the Investment Fund that tracks the return of the 401(k) Plan investment fund that is designated by the BFC as the "default" investment fund for purposes of the 401(k) Plan.

(e) Impact of Election. The Participant's selection of Investment Funds shall serve only as a measurement of the value of the Participant's Accounts pursuant to Section 5.1 (Adjustment of Accounts) and this Section 5.2. None of the Company, the BFC, or the Plan Administrator are required to actually invest a Participant's accounts in accordance with the Participant's selections.

(f) Investment Performance. Accounts shall be adjusted on each Valuation Date to reflect investment gains and losses as if the accounts were invested in the Investment Funds selected by the Participants in accordance with this Section 5.2 and charged with any and all reasonable expenses as provided in paragraph (g) below. The earnings and losses determined by the Plan Administrator in good faith and in his discretion pursuant to this Section 5.2 shall be binding and conclusive on the Participant, the Participant's beneficiary and all parties claiming through them.

(g) Charges. The Plan Administrator may (but is not required to) charge Participants' accounts for the reasonable expenses of administration including, but not limited to, carrying out and/or accounting for investment instructions directly related to such accounts.

5.3 Special Company Stock Fund Provisions.

(a) General. A Participant's interest in the Company Stock Fund shall be expressed in whole and fractional notional units of the Company Stock Fund. The Company Stock Fund shall track an investment in Company Stock in the same manner as the 401(k) Plan's company stock fund. Accordingly, the value of a unit in the Plan's Company Stock Fund shall be the same as the value of a unit in the 401(k) Plan's company stock fund. Notwithstanding the foregoing, if and to the extent that a company stock fund is no longer maintained under the 401(k) Plan, the Plan Administrator shall establish such rules and procedures as are necessary to maintain the Company Stock Fund hereunder.

(b) Investment Directions. A Participant's ability to direct investments into or out of the Company Stock Fund shall be subject to such procedures as the Plan Administrator may prescribe from time to time to assure compliance with Rule 16b-3 promulgated under Section 16(b) of the Securities Exchange Act of 1934, as amended, and other applicable requirements. Such procedures also may limit or restrict a Participant's ability to make (or modify previously made) deferral and distribution elections pursuant to Articles III (Deferral Credits and Matching Credits) and VI (Distributions), respectively. In furtherance, and not in limitation, of the foregoing, to the extent a Participant acquires any interest in an equity security under the Plan for purposes of Section 16(b), the Participant shall not dispose of that interest within six months, unless specifically exempted by Section 16(b) or any rules or regulations promulgated thereunder.

(c) Compliance with Securities Laws. Any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all applicable securities law requirements, including but not limited to the last sentence of paragraph (b) above and Rule 16b-3 promulgated by the Securities Exchange Commission. To the extent that any election violates any securities law requirement or the Company's stock trading policies and procedures, the election shall be void.

(d) <u>Compliance with Company Trading Policies and Procedures</u>. Any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all Company Stock trading policies promulgated by the Company. To the extent that any election violates any such trading policy or procedures, the election shall be void.

5.4 <u>Application to Beneficiaries</u>. Following the death of a Participant, the term "Participant" in this Article V shall refer to the Participant's beneficiary described in Section 6.5 (<u>Payment Upon Death</u>).

ARTICLE VI
DISTRIBUTIONS

6.1 <u>General Right to Receive Distribution.</u> Following termination of employment with the Company, death or Disability, the Participant's accounts will be distributed in the manner and at the time provided in Sections 6.3 (<u>Form of Distribution</u>) and 6.4 (<u>Timing of Distribution</u>) or Section 6.5 (<u>Payment Upon Death</u>), as applicable. A transfer of a Participant from the Company or any Affiliate to any other Affiliate or the Company shall not be deemed to be a termination of employment with the Company for purposes of this Article VI.

6.2 <u>Amount of Distribution</u>. The amount distributed to a Participant shall be based on the vested amounts credited to the Participant's accounts as of the Valuation Date immediately preceding the date of the distribution. Amounts shall be valued at the fair market value on the relevant Valuation Date determined pursuant to uniform and non-discriminatory procedures established by the Plan Administrator.

6.3 <u>Form of Distribution</u>.

(a) <u>Default Form of Distribution</u>. Accounts shall be distributed in cash in a single lump-sum payment.

(b) <u>Optional Form of Distribution</u>. A Participant may elect to receive his distribution in the form of quarterly, semi-annual or annual cash installments for a period of up to fifteen years by filing an election with the Plan Administrator before the last Company business day of November of the second year that precedes the year the distribution is scheduled to commence pursuant to Section 6.4 (<u>Timing of Distribution</u>). If an election pursuant to this paragraph (b) of this Section 6.3 cannot be honored because it was not timely filed, distributions shall be made in accordance with the most recent valid election made by the Participant that precedes the invalid election. If no such election exists, distributions shall be made in a single Lump-Sum in accordance with paragraph (a) of this Section 6.3.

(c) <u>Change of Election</u>. A Participant may change an installment distribution election by filing a new installment distribution election with the Plan Administrator before the last Company business day of November of the second year that precedes the year the distribution is scheduled to commence pursuant to Section 6.4 (<u>Timing of Distribution</u>). There shall be no limitation on the number of times that a Participant may change his election in accordance with this paragraph (c).

6.4 Timing of Distribution.

(a) Default Timing of Distribution. Accounts shall be distributed within an administratively reasonable period of time following the Participant's termination of employment, death or Disability.

(b) Deferral of Distribution. A Participant may elect to defer the distribution of his accounts beyond his termination of employment, death or Disability by filing an election with the Plan Administrator: (1) while the Participant is employed by the Company or an Affiliate and (2) before the last Company business day of November in the year prior to the year during which the Participant's termination of employment, death or Disability occurs. If an election pursuant to this paragraph (b) cannot be honored because it was not timely filed, distributions shall be made in accordance with the most recent valid election made by the Participant that precedes the invalid election. If no such election exists, distributions shall be made within an administratively reasonable period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4.

(c) Change of Election. An election made pursuant to paragraph (b) of this Section 6.4 or election made effective as a result of paragraph (e)(1) of this Section 6.4 may be changed by the Participant by filing a new election with the Plan Administrator: (1) while the Participant is employed by the Company or an Adopting Affiliate and (2) before the last Company business day of November in the year prior to the year during which the Participant's termination of employment, death or Disability occurs. There shall be no limitation on the number of times that a Participant may change his election in accordance with this paragraph (c).

(d) Date Elected By Participant. The date elected by a Participant pursuant to paragraphs (b) or (c) of this Section 6.4 must be the first day of any calendar quarter. Notwithstanding the foregoing, if as of the Effective Date, a Participant had made an election whereby the date of distribution elected is not the first day of a calendar quarter, such election shall be honored unless and until the Participant initiates a change to the timing of distribution pursuant to this Section 6.4 or the form of distribution pursuant to Section 6.3 (Form of Distribution).

(e) Revocation of Election.

(1) Automatic Revocation. If, as of the distribution date elected by the Participant pursuant to paragraphs (b) or (c) of this Section 6.4 the Participant, is: (i) employed by the Company or an Affiliate and (ii) not Disabled, such election shall be automatically revoked and distributions shall be made within an administratively reasonable period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4. Notwithstanding the foregoing, if the distribution date is automatically revoked pursuant to this paragraph (e)(1) and the distribution was to be made in the form of cash installments pursuant to Section 6.3 (Form of Distribution), the date of distribution shall be the first day of the next calendar quarter that is within an administratively feasible period of time following the Participant's termination of employment, death or Disability in accordance with paragraph (a) of this Section 6.4. Nothing contained in this paragraph (e)(1) shall prevent a Participant from changing his election pursuant to paragraph (c) of this Section 6.4.

(2) **Election Irrevocable Following Termination of Employment**. At all times following the Participant's termination of employment with the Company or an Affiliate, the Participant's elections made pursuant to this Section 6.4 shall be irrevocable.

6.5 Payment Upon Death.

(a) Beneficiary Designation. If a Participant should die before receiving a full distribution of his Plan accounts, distribution shall be made to the beneficiary designated by the Participant, in accordance with such uniform rules and procedures as may be adopted by the Plan Administrator from time to time. If a Participant has not designated a beneficiary, or if no designated beneficiary is living on the date of distribution, then the Participant's beneficiary shall be that person or persons entitled to receive distributions of the Participant's accounts under the 401(k) Plan.

(b) Timing and Form of Payment to Beneficiary.

(1) Payments Commenced at Time of Death. If, at the time of the Participant's death, installment payments of the Participant's accounts have commenced pursuant to this Article VI, such payments shall continue to the Participant's beneficiary in the same time and the same form as if the Participant has remained alive until the last installment payment was scheduled to be made.

(2) Payments Not Commenced at Time of Death.

(i) Default. If, at the time of the Participant's death, payments of the Participant's accounts have not commenced pursuant to this Article VI, the distributions made pursuant to this Section 6.5 shall be made to the Participant's beneficiary in accordance with the then current and valid distribution elections (as to timing and form) made by the Participant (or, in the absence of such distribution elections, in accordance with the "default" provisions of this Article VI).

(ii) Separate Election. Notwithstanding the foregoing or anything herein to the contrary, a Participant may make separate elections regarding the timing and form of payments to his beneficiary upon his death. Such separate beneficiary elections shall be valid only if they meet the requirements of Section 6.3 (Form of Distribution) and Section 6.4 (Timing of Distribution). In addition, such separate beneficiary elections may be changed or revoked in accordance with Section 6.3 (Form of Distribution) and Section 6.4 (Timing of Distribution).

(3) No Changes Permitted by Beneficiary. In no event shall a beneficiary be permitted to change the time and/or form of payment relating to a Participant's accounts following such Participant's death either prior to or following such Participant's death.

6.6 Scheduled Distributions. The Plan as in effect prior to March 25, 2007 permitted a Participant to elect, at the time the Participant elected to make Deferral Credits, to schedule a distribution date for all or a portion of such Deferral Credits provided: (a) the distribution date scheduled by the Participant was the first day of any calendar quarter and (b) the distribution date scheduled by the Participant was at least four years later than the last day of the Plan Year that includes the Deferral Credits to which the election relates. As of March 25, 2007, no Participant had such a scheduled distribution election on file with the Plan Administrator. Because Deferral Credits have ceased pursuant to Section 3.1 (Credits Ceased) and because there are no scheduled distribution elections on file, the scheduled distribution provisions of the Plan as in effect prior to March 25, 2007 are now without effect.

6.7 Unscheduled Distributions. Notwithstanding anything herein to the contrary, a Participant may elect to receive a lump-sum cash distribution of his Plan accounts at any time while employed by the Company or an Affiliate in accordance with this Section 6.7 and the uniform and non-discriminatory procedures adopted by the Plan Administrator.

6.8 Amount of Distribution. A Participant may elect to receive five percent to one hundred percent (designated in whole percentages by the Participant) of his Post-1996 Deferrals. Notwithstanding the foregoing, in no event shall the amount of the distribution made pursuant to this Section 6.8 be less than $10,000.00 (determined prior to the application of the forfeiture described in paragraph (b) below).

(a) Forfeiture. Any distribution made pursuant to this Section 6.8 shall be subject to a forfeiture equal to 10% of the amount elected.

(b) Election Applies to SEIP. An election for an unscheduled distribution pursuant to this Section 6.8 shall also apply as an election for an unscheduled distribution pursuant to the terms and provisions of the Caterpillar Inc. Supplemental Employees' Investment Plan.

6.9 Withholding. All distributions will be subject to all applicable tax and withholding requirements.

ARTICLE VII
SPIN-OFF TO SDCP

7.1 General. In response to the enactment of Section 409A of the Code and pursuant to transitional guidance issued by the Internal Revenue Service and the Department of Treasury, Deferrals Credits and Matching Credits have been frozen and all amounts deferred and vested on and before December 31, 2004 are "grandfathered" and thus are not subject to the requirements of Section 409A. The Deferral Credits and Matching Credits made pursuant to the Plan from January 1, 2005 through the March 25, 2007 (including the earnings/losses thereon) were spun-off to SDCP as provided in this Article VII.

7.2 Amounts Spun-Off. All amounts credited to participant accounts pursuant to this Plan on or after January 1, 2005 and through March 25, 2007 and not fully distributed on or before April 1, 2007 were spun-off and allocated to Plan accounts as provided in Section 7.3 (Allocation of Amounts). The amounts deferred prior to January 1, 2005 were determined in accordance with Q&A-17 of I.R.S. Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury.

7.3 Allocation of Amounts. A Participant's Post-2004 Deferrals were allocated to the Participant's accounts in SDCP as provided therein.

7.4 Deferral Elections. Deferral elections made by participants pursuant to the Plan for amounts to be deferred in 2007 following March 25, 2007 applied to SDCP as provided therein.

7.5 Effective Date of Spin-Off. The spin-off described in this Article VII was effective as of 11:59:59 P.M. on March 25, 2007.

ARTICLE VIII
ADMINISTRATION OF THE PLAN

8.1 General Powers and Duties. The following list of powers and duties is not intended to be exhaustive, and the Plan Administrator shall, in addition, exercise such other powers and perform such other duties as he may deem advisable in the administration of the Plan, unless such powers or duties are expressly assigned to another pursuant to the provisions of the Plan.

(a) General. The Plan Administrator shall perform the duties and exercise the powers and discretion given to him in the Plan document and by applicable law and his decisions and actions shall be final and conclusive as to all persons affected thereby. The Company and the Adopting Affiliates shall furnish the Plan Administrator with all data and information that the Plan Administrator may reasonably require in order to perform his functions. The Plan Administrator may rely without question upon any such data or information.

(b) Disputes. Any and all disputes that may arise involving Participants or beneficiaries shall be referred to the Plan Administrator and his decision shall be final. Furthermore, if any question arises as to the meaning, interpretation or application of any provisions of the Plan, the decision of the Plan Administrator shall be final.

(c) Agents. The Plan Administrator may engage agents, including recordkeepers, to assist him and he may engage legal counsel who may be counsel for the Company. The Plan Administrator shall not be responsible for any action taken or omitted to be taken on the advice of such counsel, including written opinions or certificates of any agent, counsel, actuary or physician.

(d) Insurance. At the Director's request, the Company shall purchase liability insurance to cover the Director in his activities as the Plan Administrator.

(e) Allocations. The Plan Administrator is given specific authority to allocate responsibilities to others and to revoke such allocations. When the Plan Administrator has allocated authority pursuant to this paragraph, the Plan Administrator is not to be liable for the acts or omissions of the party to whom such responsibility has been allocated.

(f) Records. The Plan Administrator shall supervise the establishment and maintenance of records by its agents, the Company and each Adopting Affiliate containing all relevant data pertaining to any person affected hereby and his or her rights under the Plan.

(g) Interpretations. The Plan Administrator, in his sole discretion, shall interpret and construe the provisions of the Plan (and any underlying documents or policies).

(h) Electronic Administration. The Plan Administrator shall have the authority to employ alternative means (including, but not limited to, electronic, internet, intranet, voice response or telephonic) by which Participants may submit elections, directions and forms required for participation in, and the administration of, the Plan. If the Plan Administrator chooses to use these alternative means, any elections, directions or forms submitted in accordance with the rules and procedures promulgated by the Plan Administrator will be deemed to satisfy any provision of the Plan calling for the submission of a written election, direction or form.

(i) Accounts. The Plan Administrator shall combine the various accounts of a Participant if he deems such action appropriate. Furthermore, the Plan Administrator shall divide a Participant's accounts into sub-accounts if he deems such action appropriate.

(j) Delegation. The Plan Administrator may delegate his authority hereunder, in whole or in part, in his sole and absolute discretion.

8.2 Certain Exercise of Discretion Prohibited. Notwithstanding anything herein to the contrary, the Plan Administrator (or any other individual or entity to whom the power to exercise discretion hereunder is granted) shall not exercise the discretion granted in a manner that would create a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) to the Plan as it was in effect on October 3, 2004.

8.3 Claims Procedures. Benefit claims under the Plan shall be resolved in accordance with uniform and nondiscriminatory procedures adopted by the Plan Administrator in accordance with Section 503 of ERISA.

ARTICLE IX
AMENDMENT

9.1 Amendment. The Company reserves the right at any time to amend, modify or suspend any or all of the provisions of this Plan, in whole or in part, at any time as designated by a written instrument duly adopted on behalf of the Company.

9.2 Effect of Amendment. Any amendment of the Plan shall not directly or indirectly reduce the balance of any Plan account as of the effective date of such amendment. Notwithstanding the foregoing or anything in this Plan to the contrary, any amendment to the Plan effective on or after October 3, 2004 that creates a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) shall only be effective if such amendment expressly states an intent by the Company to materially modify the Plan (and thus subject it to Section 409A of the Code).

9.3 Termination. To the extent permitted by applicable law, the Company expressly reserves the right to terminate the Plan at any time. Pursuant to the foregoing and the provisions of Sections 9.1 and 9.2, the Plan was irrevocably terminated with respect to all GSCS Participants upon the GSCS Closing Date and no GSCS Participant shall accrue any benefits under the Plan for any purpose after the GSCS Closing Date. Pursuant to termination of the Plan with respect to GSCS Participants pursuant to this Section 9.3, the balance in each GSCS Participant's account under the Plan was distributed to the GSCS Participant in a single lump-sum payment as soon as practicable after the GSCS Closing Date, but in no event later than December 31 next following the GSCS Closing Date. For purposes of the preceding sentence, the balance in each GSCS Participant's account was determined as of the Valuation Date occurring coincident with or next preceding the date of distribution.

ARTICLE X
GENERAL PROVISIONS

10.1 <u>Participant's Rights Unsecured</u>. The Plan at all times shall be entirely unfunded and no provision shall at any time be made with respect to segregating any assets of the Company for payment of any distributions hereunder. The right of a Participant or his or her designated beneficiary to receive a distribution hereunder shall be an unsecured claim against the general assets of the Company, and neither the Participant nor a designated beneficiary shall have any rights in or against any specific assets of the Company. All amounts credited to a Participant's accounts hereunder shall constitute general assets of the Company and may be disposed of by the Company at such time and for such purposes as it may deem appropriate. Nothing in this Section shall preclude the Company from establishing a "Rabbi Trust," but the assets in the Rabbi Trust must be available to pay the claims of the Company's general creditors in the event of the Company's insolvency.

10.2 <u>No Guaranty of Benefits</u>. Nothing contained in the Plan shall constitute a guaranty by the Company or any other person or entity that the assets of the Company will be sufficient to pay any benefit hereunder.

10.3 <u>No Enlargement of Employee Rights</u>. No Participant shall have any right to receive a distribution from the Plan except in accordance with the terms of the Plan. Participation in the Plan shall not be construed to give any Participant the right to be retained in the service of the Company or an Adopting Affiliate.

10.4 Section 409A.

(a) Material Modification. Notwithstanding anything contained herein to the contrary, this amendment and restatement of the Plan does not, and is not intended to, create a "material modification" (as determined pursuant to Notice 2005-1 and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury) to the Plan as it was in effect on October 3, 2004 which would subject the Plan to the requirements of Section 409A of the Code. This document shall be construed and interpreted in a manner consistent with that intention.

(b) Good Faith Compliance. The Deferral Credits and Matching Credits made from January 1, 2005 through March 25, 2007 (including the earnings/losses thereon) were administered pursuant to the Plan in "good faith" compliance with Section 409A of the Code pursuant to transitional guidance issued by the Internal Revenue Service and the Department of Treasury.

10.5 Spendthrift Provision. No interest of any person or entity in, or right to receive a distribution under, the Plan shall be subject in any manner to sale, transfer, assignment, pledge, attachment, garnishment, or other alienation or encumbrance of any kind; nor shall any such interest or right to receive a distribution be taken, either voluntarily or involuntarily, for the satisfaction of the debts of, or other obligations or claims against, such person or entity, including claims in bankruptcy proceedings. This Section shall not preclude arrangements for the withholding of taxes from deferrals, credits, or benefit payments, arrangements for the recovery of benefit overpayments, arrangements for the transfer of benefit rights to another plan, or arrangements for direct deposit of benefit payments to an account in a bank, savings and loan association or credit union (provided that such arrangement is not part of an arrangement constituting an assignment or alienation).

10.6 Domestic Relations Orders. Notwithstanding any provision of the Plan to the contrary, and to the extent permitted by law, the Participant's accounts may be assigned or alienated pursuant to a "Domestic Relations Order" (as such term is defined in Section 414(p)(1)(B) of the Code), subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time.

10.7 Incapacity of Recipient. If the Plan Administrator is served with a court order holding that a person entitled to a distribution under the Plan is incapable of personally receiving and giving a valid receipt for such distribution, the Plan Administrator shall postpone payment until such time as a claim therefore shall have been made by a duly appointed guardian or other legal representative of such person. The Plan Administrator is under no obligation to inquire or investigate as to the competency of any person entitled to a distribution. Any payment to an appointed guardian or other legal representative under this Section shall be a payment for the account of the incapacitated person and a complete discharge of any liability of the Company and the Plan therefore.

10.8 Successors. The Plan shall be binding upon the successors and assigns of the Company and upon the heirs, beneficiaries and personal representatives of the individuals who become Participants hereunder.

10.9 Limitations on Liability. Notwithstanding any of the preceding provisions of the Plan, neither the Plan Administrator, the Company, nor any individual acting as the Plan

Administrator's, or the Company's employee, agent, or representative shall be liable to any Participant, former Participant, beneficiary or other person for any claim, loss, liability or expense incurred in connection with the Plan.

10.10 **Conflicts**. If any person holds a position under the Plan through which he or she is charged with making a decision about the administration of his or her own (or any immediate family member's) Plan participation, including, without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, then such person shall be recused and the decision shall be made by the Plan Administrator. If a decision is required regarding the administration of the Plan Administrator's Plan participation, including without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, such decision shall be made by the Company's Vice President, Human Services Division**.** Nothing in this Section 10.10 shall be construed to limit a Participant's or the Plan Administrator's ability to make decisions or elections with regard to his or her participation in the Plan in the same manner as other Participants.

10.11 **Special Rules for Participants With Same-Sex Domestic Partners.**

(a) **Generally.** Effective January 1, 2013, except as specified under this Section 10.11 or as prohibited by applicable law, to the extent the Plan provides for any benefit, right, feature, restriction, or obligation relating to, or upon, a Participant's "spouse", "beneficiary", "survivor", or "family member" (or any individual having a similar relationship to the Participant), the Plan Administrator shall also apply such benefit, right, feature, restriction, or obligation to a Participant's "same-sex domestic partner" (as defined in (b) below) in a uniform and non-discriminatory manner that is similar to how an opposite-gender spouse would be treated under the Plan.

(b) **Definition of "Same-Sex Domestic Partner".** For purposes of this Section 10.11, the term "same-sex domestic partner" means the sole, same-sex person who is in a civil union, domestic partnership, or legal relationship similar thereto, with the Participant as recognized under the laws of the federal government or a state government of the United States of America, including its territories and possessions and the District of Columbia (or, with respect to any other country, legally recognized by the equivalent government(s) thereof). The Plan shall continue to treat such relationship as a same-sex domestic partnership, regardless of whether the Participant and his same-sex domestic partner remain in the jurisdiction where the relationship was legally entered into. In the event more than one person meets this definition for a given Participant, then the "same-sex domestic partner" shall be the person who first met the criteria in this definition. Notwithstanding anything herein to the contrary, if a Participant has a spouse recognized for purposes of federal law, no person will qualify as the Participant's same-sex domestic partner unless such Participant's marriage to such spouse is first lawfully dissolved. Except with respect to determining the length of time the same-sex domestic partner has satisfied the definition of same-sex domestic partner under the Plan, a Participant shall be considered to have a same-sex domestic partner only with respect to periods beginning on or after January 1, 2013, regardless of when such same-sex partnership was created.

(c) **Domestic Relations Orders.** Only a spouse recognized for purposes of federal law or another "alternate payee" (as defined under Section 414(p) of the Code) may enforce a domestic relations order against the Plan or a Participant's interests hereunder pursuant to Section 10.6.

10.12 <u>Determination of "Spouse".</u> The term "spouse" means the person who is the Participant's spouse for federal tax purposes.

Exhibit 10.5

CATERPILLAR INC.
SUPPLEMENTAL DEFERRED
COMPENSATION PLAN

(As Amended and Restated Generally Effective May 15, 2017)

CATERPILLAR INC.
SUPPLEMENTAL DEFERRED COMPENSATION PLAN

PREAMBLE

By a document executed March 21, 2007, Caterpillar Inc. (the "Company") established the Caterpillar Inc. Supplemental Deferred Compensation Plan (the "Plan"), effective January 1, 2005. The purpose of the Plan is to provide additional income deferral and investment opportunities to a select group of management or highly compensated employees who are eligible to participate in certain tax-qualified 401(k) plans sponsored by the Company. Subsequent to the establishment of the Plan, final regulations were promulgated under Section 409A of the Code, necessitating changes to the Plan retroactive to its adoption which were reflected in a document executed by the Company on December 17, 2007. The Plan was further amended and restated effective January 1, 2011. The Company now desires to amend and restate the Plan to incorporate all amendments since its January 1, 2011 amendment and restatement and to make other clarifying changes. By execution of this document, the Company hereby amends and restates the Plan in its entirety generally effective as of May 15, 2017.

ARTICLE I
DEFINITIONS

1.1 General. When a word or phrase appears in the Plan with the initial letter capitalized, and the word or phrase does not begin a sentence, the word or phrase shall generally be a term defined in this Article I. The following words and phrases used in the Plan with the initial letter capitalized shall have the meanings set forth in this Article I, unless a clearly different meaning is required by the context in which the word or phrase is used or the word or phrase is defined for a limited purpose elsewhere in the Plan document:

(a) "401(k) Plan" means either: the 401(k) Retirement Plan or the 401(k) Savings Plan depending upon which plan the Participant is eligible to make elective deferrals (without regard to the limitations of Sections 402(g) or 401(a)(17) of the Code) or to receive Company non-elective contributions as of the date the Participant's corresponding credits under this Plan are determined.

(b) "401(k) Plan Compensation" means the Base Pay and Incentive Compensation taken into account for purposes of the Company non-elective contributions under the 401(k) Plan.

(c) "401(k) Retirement Plan" means the Caterpillar 401(k) Retirement Plan, as such plan may be amended or any successor to such plan.

(d) "401(k) Savings Plan" means the Caterpillar 401(k) Savings Plan, as such plan may be amended or any successor to such plan.

(e) "Adopting Affiliate" means any Affiliate that has been authorized by the Company to adopt the Plan and which has adopted the Plan in accordance with Section 2.4. All Affiliates that adopted the Plan on or before the Effective Date and that had not terminated such adoption shall continue to be Adopting Affiliates of the Plan.

(f) "Affiliate" means a parent business that controls, or a subsidiary business that is controlled by, the Company.

(g) "Base Pay" means the base salary paid to a Participant as determined in accordance with the established pay practices of the Company and Adopting Affiliates. Base Pay shall include any lump-sum base salary adjustment and any variable base pay.

(h) "BFC" means the Benefit Funds Committee of the Company, which is the committee formed by resolution of the Board of Directors of the Company, and which has the responsibility and authority to ensure the proper operation and management of the financial aspects of the 401(k) Plan.

(i) "Board" means the Board of Directors of the Company, or any authorized committee of the Board.

(j) "Code" means the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder.

(k) "Company" means Caterpillar Inc., and, to the extent provided in Section 10.8 below, any successor corporation or other entity resulting from a merger or consolidation into or with the Company or a transfer or sale of substantially all of the assets of the Company.

(l) "Company Stock" means common stock issued by the Company.

(m) "Company Stock Fund" means the Investment Fund described in Section 5.3.

(n) "Deferral Agreement" means the deferral agreement(s) described in Section 3.1 that are entered into by a Participant pursuant to the Plan.

(o) "DEIP" means the Caterpillar Inc. Deferred Employees' Investment Plan, as amended.

(p) "Director" means the Company's Director of Compensation + Benefits.

(q) "Disability" or "Disabled" means that a Participant is determined to be totally disabled by the United States Social Security Administration.

(r) "Distribution Election Form" means the election form by which a Participant elects the time and manner in which his accounts shall be distributed pursuant to Sections 6.4 and 6.5. The Plan Administrator may, in his sole discretion, require two separate Distribution

Election Forms for purposes of making distributions regarding the time and manner in which accounts will be distributed, respectively.

(s) **"Effective Date"** means May 15, 2017, except as otherwise provided herein.

(t) **"Eligible Pay"** means Base Pay minus any Supplemental Deferrals of Base Pay.

(u) **"EOAIP"** means the Caterpillar Inc. Executive Office Annual Incentive Plan, as amended or any predecessor or successor to such plan.

(v) **"Excess Deferral Account"** means the bookkeeping account maintained pursuant to the Plan to record amounts deferred under Section 3.3(b).

(w) **"ERISA"** means the Employee Retirement Income Security Act of 1974, as amended from time to time, and any regulations promulgated thereunder.

(x) **"Excess Deferrals"** means the deferrals allocated to a Participant's Excess Deferral Account in accordance with Section 3.3(b).

(y) **"Excess Matching Credit Account"** means the bookkeeping account maintained pursuant to the Plan to record the amounts credited to a Participant in accordance with Section 3.4(b).

(z) **"Excess Matching Credits"** means the matching credits allocated to a Participant's Excess Matching Credit Account in accordance with Section 3.4(b).

(aa) **"GSCS"** means Caterpillar Logistics Services LLC (f/k/a Caterpillar Logistics Services, Inc.).

(bb) **"GSCS Closing Date"** means the date on which the sale of GSCS to an entity that is not an Affiliate is completed.

(cc) **"GSCS Participant"** means a Participant who is employed by GSCS upon the closing of the sale of GSCS to an entity that is not an Affiliate.

(dd) **"Incentive Compensation"** means STIP Pay, SPP Pay and Lump-Sum Awards.

(ee) **"Investment Fund"** means the notional investment funds established by the terms of the Plan pursuant to Article V.

(ff) **"Lump-Sum Award"** means the discretionary lump-sum cash awards paid to employees pursuant to the uniform and nondiscriminatory pay practices of the Company or an Affiliate and designated with earnings code 208 or 212 in the Company's payroll system (or the equivalent earnings code for Adopting Affiliates that do not use the Company's payroll system). In no event will a Lump-Sum Award include any lump-sum base salary adjustment.

(gg) "**Maximum Matching Contribution Percentage**" means 100% if the Participant participates in the 401(k) Retirement Plan and 50% if the Participant participates in the 401(k) Savings Plan. For purposes of this Section 1.1(gg), an individual participates in a plan if such individual is eligible to make elective deferrals under such plan (without regard to the limitations of Sections 402(g) or 401(a)(17) of the Code).

(hh) "**NEC Eligible Pay**" means the sum of Base Pay and Incentive Compensation minus the sum of SPP Pay and 401(k) Plan Compensation. The Plan Administrator shall determine NEC Eligible Pay for all Participants in a uniform and non-discriminatory manner. Notwithstanding any provision of the Plan to the contrary, NEC Eligible Pay paid to a Participant after the Participant's Separation from Service but within a time period identified by the Plan Administrator in its sole discretion and in a uniform and non-discriminatory manner, which time period shall not exceed two and one-half months from the date of the Participant's Separation from Service.

(ii) "**Non-Elective Contribution Account**" means the bookkeeping account maintained pursuant to the Plan to record amounts credited under Section 3.5.

(jj) "**Non-Elective Contribution Credits**" means the non-elective contribution credits allocated to a Participant's Non-Elective Contribution Account in accordance with Section 3.5.

(kk) "**Participant**" means an employee of the Company or any Adopting Affiliate who satisfies the eligibility requirements for participation in the Plan and who affirmatively elects to participate in the Plan pursuant to Section 2.1, or who becomes a Participant pursuant to Section 3.2(c)(2) or Section 3.9(c).

(ll) "**Plan**" means the Caterpillar Inc. Supplemental Deferred Compensation Plan, as set forth herein and as it may be amended from time to time.

(mm) "**Plan Administrator**" means the Director.

(nn) "**Plan Year**" means the calendar year.

(oo) "**Points**" means "Points" as such term is defined under the 401(k) Plan.

(pp) "**Qualified Military Service**" means service by a Participant or employee in the armed forces of the United States of a character that entitles the Participant or employee to re-employment under the Uniformed Services Employment and Reemployment Rights Act of 1994, but only if the Participant or employee is re-employed during the period following such service in which his right of re-employment is protected by such Act.

(qq) "**SEIP**" means the Caterpillar Inc. Supplemental Employees' Investment Plan, as amended.

(rr) "**Separation from Service**" means separation from service as determined in accordance with any regulations, rulings or other guidance issued by the Department of the

Treasury pursuant to Section 409A(a)(2)(A)(i) of the Code, as it may be amended or replaced from time to time.

(ss) **"Specified Employee"** means a "key employee" as defined in Section 416(i) of the Code without regard to Section 416(i)(5) and determined in accordance with Section 409A(a)(2)(B)(i) of the Code.

(tt) **"SPP Pay"** means the amounts designated by the Company as a cash-based performance award under the "Strategic Performance Plan" (previously known as the Long-Term Cash Performance Plan) and paid pursuant to the terms of the Caterpillar Inc. 2014 Long-Term Incentive Plan (or any predecessor or successor to such plan). Performance awards under the "Strategic Performance Plan" that are paid pursuant to the terms of the Caterpillar Inc. 2014 Long-Term Incentive Plan (or any predecessor or successor to such plan) in the form of Company Stock are not SPP Pay hereunder.

(uu) **"Supplemental Deferral Account"** means the bookkeeping account maintained pursuant to the Plan to record amounts deferred under Section 3.3(a).

(vv) **"Supplemental Deferrals"** means the deferrals allocated to a Participant's Supplemental Deferral Account in accordance with Section 3.3(a).

(ww) **"Supplemental Matching Credit Account"** means the bookkeeping account maintained pursuant to the Plan to record the amounts credited to a Participant in accordance with Section 3.4(a).

(xx) **"Supplemental Matching Credits"** means the matching credits allocated to a Participant's Supplemental Matching Credit Account in accordance with Section 3.4(a).

(yy) **"STIP"** means the Caterpillar Inc. Short-Term Incentive Plan, as amended or any successor to such plan.

(zz) **"STIP Pay"** means amounts paid to employees of the Company or an Adopting Affiliate pursuant to the terms of STIP and/or EOAIP.

([[) **"Unforeseeable Emergency"** means a severe financial hardship to the Participant resulting from an illness or accident of the Participant, the Participant's spouse, or a dependent (as defined in Section 152(a) of the Code) of the Participant, loss of the Participant's property due to casualty, or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant. For purposes of the Plan, an "Unforeseeable Emergency" shall not include a Participant's need to send his or her child to college or a Participant's desire to purchase a home. Any determination as to whether a Participant has incurred an Unforeseeable Emergency shall be made in the sole discretion of the Plan Administrator in accordance with rules prescribed pursuant to Section 409A of the Code.

(aaa) **"Valuation Date"** means each day of the Plan Year on which the New York Stock Exchange is open for trading.

1.2 Construction. The masculine gender, when appearing in the Plan, shall include the feminine gender (and vice versa), and the singular shall include the plural, unless the Plan clearly states to the contrary. Headings and subheadings are for the purpose of reference only and are not to be considered in the construction of the Plan. If any provision of the Plan is determined to be for any reason invalid or unenforceable, the remaining provisions shall continue in full force and effect. All of the provisions of the Plan shall be construed and enforced according to the laws of the State of Illinois without regard to conflict of law principles and shall be administered according to the laws of such state, except as otherwise required by ERISA, the Code, or other Federal law.

ARTICLE II
ELIGIBILITY; ADOPTION BY AFFILIATES

2.1 Eligibility and Participation. An employee shall be eligible to participate in the Plan as of the first day of the first pay period that commences in the month next following the date that he (a) is in salary grade 28 or higher pursuant to the Company's standard salary grades; and (b) is eligible to make elective deferrals to either the 401(k) Retirement Plan or the 401(k) Savings Plan, provided, that, (i) for an employee first promoted to salary grade 28 or higher, clause (a) shall be satisfied after the employee's supervisor has completed all administrative requirements to effect such promotion; and (ii) clause (b) shall not apply if he had already made elective deferrals equal to or in excess of the applicable dollar amount for purposes of Section 402(g) of the Code and (if applicable) catch-up contributions equal to or in excess of the applicable dollar amount for purposes of Sections 402(g) and 414(v)(2)(B) of the Code or he had already received compensation in excess of the applicable dollar limitation under Section 401(a)(17) of the Code, for such calendar year. Notwithstanding the foregoing, if an employee is employed in a division of the Company or by an Affiliate that does not use the Company's standard salary grades, such employee shall be eligible to participate in the Plan if he (1) is in a salary grade that is considered in all respects to be the equivalent of a salary grade 28 or higher pursuant to the Company's standard salary grades; and (2) is eligible to make elective deferrals to either the 401(k) Retirement Plan or the 401(k) Savings Plan, provided, that, clauses (1) and (2) shall be subject to the rules described in clauses (a) and (b) of this Section 2.1. The Plan Administrator shall determine in a uniform and nondiscriminatory manner whether a salary grade is equivalent for this purpose.

2.2 Discontinuance of Participation. The Plan Administrator shall discontinue an individual's active participation in the Plan if the individual is no longer in a salary grade of 28 or higher (or the equivalent, as described above), or no longer is eligible to make elective deferrals to either the 401(k) Retirement Plan or the 401(k) Savings Plan (other than by reason of the individual's elective deferrals during a calendar year reaching the applicable dollar limitation under Section 402(g)(1) of the Code or the individual's receiving compensation for the calendar year in excess of the applicable dollar limitation under Section 401(a)(17) of the Code). If an individual's active participation is discontinued, the individual's Deferral Agreements shall be cancelled and the individual will not be entitled to make Deferrals or to receive Matching Credits or Non-Elective Contribution Credits under the Plan. The individual will not be entitled to receive a distribution, however, until the occurrence of another event *(e.g.,* death or Separation from Service) that entitles the Participant to receive a distribution. The Participant's accounts will continue to be adjusted to reflect investment earnings or losses in accordance with Section 5.1 until the accounts are distributed.

2.3 Resumption of Participation. With respect to an individual whose participation in the Plan was discontinued and who subsequently meets the eligibility requirements to resume active participation in the Plan, such employee shall (1) be permitted to complete a new Deferral Agreement during the annual election period described in Section 3.1(a) in accordance with procedures established by the Plan Administrator, subject to the applicable restrictions in Sections 3.1 and 3.2, and (2) be entitled to receive Non-Elective Contribution Credits subject to Section 3.5 with respect to NEC Eligible Pay for services to be performed beginning as of the first day of the month next following the date that the individual meets the eligibility requirements to resume active participation in the Plan.

2.4 Adoption by Affiliates. An employee of an Affiliate may not become a Participant in the Plan unless the Affiliate has previously adopted the Plan. An Affiliate of the Company may adopt the Plan only with the approval of the Company. By adopting the Plan, the Affiliate shall be deemed to have agreed to assume the obligations and liabilities imposed upon it by the Plan, agreed to comply with all of the other terms and provisions of the Plan, delegated to the Plan Administrator (and the BFC as applicable) the power and responsibility to administer the Plan with respect to the Affiliate's employees, and delegated to the Company the full power to amend or terminate the Plan with respect to the Affiliate's employees. Notwithstanding the foregoing, an Affiliate that has previously adopted the Plan may terminate its participation in the Plan in accordance with such rules and procedures that are promulgated by the Company.

ARTICLE III
DEFERRALS, MATCHING AND NON-ELECTIVE CONTRIBUTION CREDITS

3.1 Deferral Agreement.

(a) General. In order to make Supplemental Deferrals and/or Excess Deferrals, a Participant must complete a Deferral Agreement in the form and during the election period prescribed by the Plan Administrator. In the Deferral Agreement, the Participant shall agree to reduce his compensation in exchange for Supplemental Deferrals and/or Excess Deferrals. The Deferral Agreement shall be delivered to the Plan Administrator by the time specified in Section 3.2. At the end of the election period prescribed by the Plan Administrator, an election made by a Participant pursuant to a Deferral Agreement shall be irrevocable with respect to the Plan Year covered by the election.

(b) Initial Deferral Agreement.

(1) Deferrals Prior to March 26, 2007. Except as otherwise provided in paragraph (b)(2) below, a Participant shall not be permitted to make Supplemental Deferrals and/or Excess Deferrals pursuant to this Plan prior to March 26, 2007.

(2) SEIP and DEIP. The deferral elections made pursuant to SEIP and DEIP relating to amounts to be deferred in 2007 on and after March 26, 2007 shall apply to the Plan as provided in Section 7.4.

(c) Revocation. The Plan Administrator shall terminate a Participant's election to make Supplemental Deferrals and/or Excess Deferrals if the Participant has made a withdrawal due to Unforeseeable Emergency as provided in Section 6.10, but only to the extent that terminating the election would help the Participant to meet the related emergency need; provided that, any such Participant shall be permitted to complete a new Deferral Agreement during the annual election period described in Section 3.l(a), subject to the applicable restrictions in this Section 3.1 and Section 3.2. Similarly, a Participant shall terminate an election to make Supplemental Deferrals and/or Excess Deferrals if such termination is required for the Participant to obtain a hardship distribution from the 401(k) Plan and permitted under Section 409A of the Code; provided that, (1) notwithstanding the foregoing, such termination shall apply only to the Participant's Supplemental Deferrals and/or Excess Deferrals that would have been made during the six-month period following receipt of the hardship distribution, and (2) following such termination, unless the Participant makes a different deferral election during the annual election period described in Section 3.l(a), the Plan Administrator shall automatically reinstate the Participant's deferral election to make Supplemental Deferrals and/or Excess Deferrals in effect immediately prior to receipt of the hardship distribution as soon as administratively practicable after the end of such six-month period.

3.2 Timing of Deferral Elections and Automatic Participation.

(a) Deferral of Base Pay. Except as provided in Section 3.2(c), Deferral Agreements that relate to the deferral of Base Pay (including Supplemental Deferrals pursuant to Section 3.3(a) and Excess Deferrals pursuant to Section 3.3(b)) shall be completed by the Participant and delivered to the Plan Administrator prior to the beginning of the Plan Year in which the Base Pay to be deferred is otherwise payable to the Participant. The Deferral Agreement will remain in effect from year-to-year until changed by the Participant in accordance with the preceding sentence. The Plan Administrator, in his discretion, may require an earlier time by which the election to defer Base Pay must be completed. Notwithstanding any provision of the Plan to the contrary, a Deferral Agreement shall also apply to Base Pay paid to a Participant after the Participant's Separation from Service but within a time period identified by the Plan Administrator in its sole discretion and in a uniform and non-discriminatory manner, which time period shall not exceed two and one-half months from the date of the Participant's Separation from Service.

(b) Deferral of Incentive Compensation. Deferral Agreements that relate to the deferral of Incentive Compensation shall be completed by the Participant and delivered to the Plan Administrator prior to the date that is six months before the end of the performance period to which the Incentive Compensation relates. The Deferral Agreement will remain in effect with respect to all future Incentive Compensation until changed by the Participant in accordance with the preceding sentence. The Plan Administrator, in his discretion, may require an earlier time by which the election to defer Incentive Compensation must be completed. In addition, the Plan Administrator, in his discretion, may require that Participants make separate elections for one or more different types of Incentive Compensation (*e.g.,* STIP Pay, SPP Pay and Lump-Sum Awards). Notwithstanding any provision of the Plan to the contrary, a Deferral Agreement shall also apply to Incentive Compensation paid to a Participant after the Participant's Separation from Service but within a time period identified by the Plan Administrator in its sole discretion and in a uniform and non-discriminatory manner, which time period shall not exceed two and one-half months from the date of the Participant's Separation from Service.

(c) Initial Deferral Election.

(1) General. For the Plan Year in which an eligible employee first becomes eligible to participate in the Plan (but only if the eligible employee has never been eligible to participate in another "account balance plan," other than a separation pay plan, of the Company or an Affiliate that is aggregated with the Plan under Section 409A of the Code), the Participant may elect to make Supplemental Deferrals and Excess Deferrals by completing and delivering a Deferral Agreement within 28 days commencing with the date the Participant first becomes eligible to participate in the Plan pursuant to Section 2.1. Any such Deferral Agreement shall take effect with respect to compensation for services to be performed beginning as of the first day of the first pay period commencing after the 28-day enrollment period.

(2) Automatic Participation and Default Elections for Certain Eligible Employees. Any eligible employee described in paragraph (1) of this Section 3.2(c) who does not complete and deliver a Deferral Agreement within 28 days commencing with the date that the employee first becomes eligible to participate in the Plan pursuant to Section 2.1 will become a Participant as of the first day of the first pay period commencing after the 28-day enrollment period. Any such Participant will be eligible for Non-Elective Contribution Credits under Section 3.5 but will not make Deferrals under Section 3.3 or receive Matching Credits under Section 3.4 until such Participant makes an election in accordance with Section 3.2(a) or 3.2(b), as applicable. The investment elections and distribution elections of any such Participant shall be determined pursuant to the applicable provisions of Sections 5.2 and Article VI, respectively. The provisions of this Section shall also apply to an employee who became eligible to participate in the Plan from September 26, 2010 through December 31, 2010 who failed to complete and deliver a Deferral Agreement within 30 days commencing with the date the employee first became eligible under the terms of the Plan in effect immediately prior to January 1, 2011.

(3) Re-Employment. The provisions of this paragraph (c) permitting an eligible employee to elect to make Supplemental Deferrals and Excess Deferrals shall not apply to a Participant who: (i) incurs a Separation from Service; (ii) is subsequently re-employed by the Company or an Affiliate; and (iii) at any time during such period of re-employment meets the eligibility requirements for active participation in the Plan pursuant to Section 2.1. However, an eligible employee described in this paragraph (c) will be permitted to, within the applicable period described in this paragraph (c), make a distribution election in accordance with Article VI.

(d) Deferral Elections Upon Re-Employment. A Participant who: (1) incurs a Separation from Service; (2) is subsequently re-employed by the Company or an Affiliate; and (3) at any time during such period of re-employment meets the eligibility requirements for active participation in the Plan pursuant to Section 2.1 shall be only permitted to make a deferral election of Base Pay (including Supplemental Deferrals pursuant to Section 3.3(a) and Excess Deferrals pursuant to Section 3.3(b)) or a deferral election of Incentive Compensation during such period of re-employment by completing a Deferral Agreement in accordance with procedures established by the Plan Administrator, subject to the applicable restrictions in Section 3.1 and this Section 3.2.

3.3 Deferrals.

(a) Supplemental Deferrals. Any Participant may elect to supplement the deferrals made pursuant to the 401(k) Plan by deferring, pursuant to a Deferral Agreement, the receipt of up to 70% (designated in whole percentages) of the Base Pay and/or up to 70% (designated in whole percentages) of the Incentive Compensation, otherwise payable to the Participant by the Company or an Adopting Affiliate in any Plan Year. The amount deferred pursuant to this paragraph (a) shall be allocated to the Supplemental Deferral Account maintained for the Participant.

(b) Excess Deferrals. Any Participant may elect to defer, pursuant to a Deferral Agreement, the receipt of 6% of the Eligible Pay otherwise payable to him by the Company or an Adopting Affiliate in any Plan Year. A Participant's election to receive Excess Deferrals shall only apply to the Eligible Pay not recognized in 401(k) Plan Compensation during the Plan Year. The amount deferred pursuant to this paragraph (b) shall be allocated to the Excess Deferral Account maintained for the Participant.

3.4 Matching Credits. As soon as administratively practicable following the last day of each Plan Year (or more frequently in the sole discretion of the Plan Administrator), the Plan Administrator shall allocate matching credits to the Participant's accounts for that Plan Year as follows:

(a) Supplemental Matching Credit. The Supplemental Matching Credit shall be in an amount equal to: (1) 6% times the Maximum Matching Contribution Percentage of Base Pay deferred by the Participant as Supplemental Deferrals and (2) the Maximum Matching Contribution Percentage of the STIP Pay and Lump- Sum Awards deferred by the Participant as Supplemental Deferrals (up to the a maximum deferral of 6% of the Participant's STIP Pay and Lump-Sum Awards for the Plan Year). SPP Pay deferred by the Participant as Supplemental Deferrals shall not be considered when determining Supplemental Matching Credits. The amount credited pursuant to this paragraph (a) shall be allocated to the Supplemental Matching Credit Account maintained for the Participant.

(b) Excess Matching Credit. The Excess Matching Credit shall be in an amount equal to the Maximum Matching Contribution Percentage of the Participant's Excess Deferrals. The amount credited pursuant to this paragraph (b) shall be allocated to the Excess Matching Credit Account maintained for the Participant.

3.5 Non-Elective Contribution Credits.

(a) Amount and Eligibility Requirements for Non-Elective Contribution Credits. If the Participant is eligible to receive the Company non-elective contributions under the 401(k) Plan (i.e., the 3%/4%/5% non-elective contributions under the 401(k) Plan), then as soon as administratively practicable following the last day of each Plan Year (or more frequently in the sole discretion of the Plan Administrator), the Plan Administrator shall allocate non-elective contribution credits to the Participant's accounts for that Plan Year based on the Participant's Points in an amount equal to the product of the applicable percentage specified below multiplied by the Participant's NEC Eligible Pay:

Points	Applicable Percentage
44 or less	3%
45 to 64	4%
65 or more	5%

A Participant shall only receive a Non-Elective Contribution Credit for a Plan Year if: (a) such Participant is employed by the Company or an Affiliate on the last day of the plan year for which the Company non-elective contributions are made under the 401(k) Plan, including employed by way of a leave-of-absence or part-time employment that otherwise resulted in a Separation from Service during the Plan Year, and (2) such Participant is credited with a "Year of Benefit Service" (as such term is defined under the 401(k) Plan) during the Plan Year. Notwithstanding any provision of the Plan, each GSCS Participant who is entitled to receive Company non-elective contributions under the 401(k) Plan for the Plan Year in which the GSCS Closing Date occurs shall receive a Non-Elective Contribution Credit based on (1) the NEC Eligible Pay earned by such GSCS Participant prior to the GSCS Closing Date during the Plan Year in which the GSCS Closing Date occurs, and (2) such GSCS Participant's Points determined as of the GSCS Closing Date.

(b) **Non-Elective Contribution Credits Upon Re-Employment**. A Participant who is eligible to receive the Company non-elective contributions under the 401(k) Plan (i.e., the 3%/4%/5% non-elective contributions under the 401(k) Plan) and who: (1) incurs a Separation from Service; (2) is subsequently re-employed by the Company or an Affiliate; and (3) at any time during such period of re-employment meets the eligibility requirements for active participation in the Plan pursuant to Section 2.1 shall be entitled to receive Non-Elective Contribution Credits with respect to NEC Eligible Pay for services to be performed beginning as of the first day of the first pay period commencing after the date that the individual meets the eligibility requirements to resume active participation in the Plan.

3.6 **Certain Deferrals and Matching Credits.** Supplemental Deferrals, Excess Deferrals, Supplemental Matching Credits and Excess Matching Credits allocated to Participants for the 2005, 2006 and 2007 Plan Years prior to the Spin-Off described in Article VII shall have been made initially to SEIP and DEIP but shall be transferred to this Plan and become subject hereto by virtue of such Spin-Off. For periods beginning on and after such Spin-Off, Supplemental Deferrals, Excess Deferrals, Supplemental Matching Credits and Excess Matching Credits shall be made pursuant to the terms of this Article III.

3.7 **Allocation Among Affiliates.** Each Adopting Affiliate may be required to bear the costs and expenses of providing benefits accrued by Participants that are currently or were previously employees of such Adopting Affiliate. Such costs and expenses will be allocated among the Adopting Affiliates in accordance with (a) agreements entered into between the Company and any Adopting Affiliate, or (b) in the absence of such an agreement, reasonable procedures adopted by the Company.

3.8 Deferrals Attributable to Qualified Military Service. An employee who was, or was eligible to become, a Participant immediately before commencing Qualified Military Service and who is re-employed following such Qualified Military Service shall, upon his returning from Qualified Military Service, have the right to elect additional Supplemental Deferrals and/or Excess Deferrals ("Additional Deferrals") in accordance with Section 3.1, over a period of time equal to the lesser of (a) three times the length of his Qualified Military Service, or (b) five years. Such Participant shall also be entitled to receive Supplemental Matching Credits and/or Excess Matching Credits ("Additional Credits") attributable to such Additional Deferrals, in accordance with Section 3.4, in the amount he would have received had such Additional Deferrals been made during his period of Qualified Military Service. All such Additional Deferrals and Additional Credits shall be deemed to have been received during the period of Qualified Military Service for purposes of applying all limitations under this Plan, but shall otherwise be subject to the terms of the Plan, including but not limited to the provisions of Section 3.1, Section 3.2, Section 3.3, and Section 3.4. For purposes of this Section 3.8, a Participant shall be deemed to have received Base Pay and Incentive Compensation during his period of Qualified Military Service based on the rate of Base Pay and Incentive Compensation he would have received had he been an employee during such period or, if such rate cannot be determined with reasonable accuracy, based on his average Base Pay and Incentive Compensation received during the 12-month period (or his entire period of employment, if shorter) immediately prior to the period of military service. The provisions of this Section 3.8 shall be interpreted and applied in accordance with Section 414(u) of the Code.

3.9 Additional Deferral Election Period in 2010. In anticipation of the changes to the Plan effective January 1, 2011, an additional deferral election period, as permitted by Sections 3.1 and 3.2 and as described in this Section 3.9, was held.

(a) Election Period. The election period described in this Section 3.9 began on October 26, 2010 and ended on November 30, 2010, but could be extended to a later date by the Plan Administrator in a uniform and non-discriminatory manner. In no event, however, could such special election period extend beyond December 31, 2010.

(b) Application of Election Period. The deferral election period described in this Section 3.9 applied to: (1) all Participants and (2) those eligible employees as of September 25, 2010 who were not yet Participants and, who as a result, never (i) made Supplemental Deferrals or Excess Deferrals under the Plan and, thus, never submitted Distribution Election Forms hereunder or (ii) otherwise participated in another "account balance plan" other than a separation pay plan, of the Company or an Affiliate that is aggregated with the Plan under Section 409A of the Code.

(c) Default Provisions. If an individual identified in clause (2) of paragraph (b) above failed to make a deferral election during the special election period, the applicable provisions of Section 3.2(c)(2) shall apply.

ARTICLE IV
VESTING

4.1 Vesting of Non-Elective Contribution Account. Subject to Section 10.1, amounts credited to or allocable to a Participant's Non-Elective Contribution Account shall become fully vested and the rights and interests therein shall not be forfeitable to the same extent that the Participant is vested in his or her Company non-elective contributions, if any, under the 401(k) Plan. To the extent any amounts are forfeited pursuant to this Section 4.1, such amounts shall be subject to restoration to the Participant's Non-Elective Contribution Account in a similar manner to which Company non-elective contributions forfeited under the 401(k) Plan are subject to restoration. Notwithstanding the foregoing provisions of this Section 4.1, amounts credited to or allocable to a GSCS Participant's Non-Elective Contribution Account shall be fully vested at all times from and after the GSCS Closing Date and, from and after the GSCS Closing Date, the GSCS Participant's rights and interests therein shall not be forfeitable.

4.2 **Vesting of All Other Accounts** . Subject to Section 10.1, amounts credited to or allocable to a Participant's Supplemental Deferral Account, Excess Deferral Account, Supplemental Matching Credit Account, and Excess Matching Credit Account shall be fully vested at all times and the rights and interests therein shall not be forfeitable

ARTICLE V
INVESTMENT OF ACCOUNTS

5.1 **Adjustment of Accounts.** Except as otherwise provided elsewhere in the Plan, as of each Valuation Date, each Participant's accounts will be adjusted to reflect credits under Article III and the positive or negative rate of return on the Investment Funds selected by the Participant pursuant to Section 5.2(b). The rate of return will be determined by the Plan Administrator pursuant to Section 5.2(f) and will be credited or charged in accordance with policies applied uniformly to all Participants.

5.2 **Investment Direction.**

(a) **Investment Funds.** Each Participant may direct the notional investment of amounts credited to his Plan accounts in one or more of the Investment Funds. The Investment Funds shall, at all times, be notional funds that track the returns of the investment funds selected by the BFC for purposes of the 401(k) Retirement Plan and made available to 401(k) Retirement Plan participants. In addition, the Investment Funds shall, at all times, include a Company Stock Fund as described in Section 5.3. Neither the Company, each Adopting Affiliate, the Plan Administrator, the BFC, nor any other party shall have any responsibility, duty of care (whether express or implied) or liability to any Participant in regards to designation of the Investment Funds as set forth in Section 5.2(a).

(b) **Participant Directions.**

(1) **General.** Each Participant may direct that all of the amounts attributable to his accounts be invested in a single Investment Fund or may direct that whole percentage increments of his accounts be invested in such fund or funds as he shall desire in accordance with such procedures as may be established by the Plan Administrator. Unless the Plan Administrator prescribes otherwise, such procedures generally shall mirror the procedures established under the 401(k) Retirement Plan for participant investment direction.

(2) Spin-Off from SEIP and DEIP. Each Participant who became a Participant in the Plan as a result of the Spin-Off described in Article VII or by reason of Section 3.1(b)(2) shall be conclusively deemed to have directed the Plan Administrator to invest all of the amounts attributable to his accounts in the same manner as the Participant's accounts were invested in SEIP and/or DEIP as of the effective date of the Spin-Off and, in the absence of an affirmative direction by the Spin-Off Participant regarding future deferrals pursuant to paragraph (b)(l) above, such Participant shall be conclusively deemed to have directed the Plan Administrator to invest such deferrals in the same manner as the Participant's deferrals were directed to be invested in SEIP and/or DEIP as of the effective date of the Spin-Off. If a Participant participated in both SEIP and DEIP as of the effective date of the Spin-Off and his investment elections for future deferrals were different among plans, the Participant shall be conclusively deemed to have directed the Plan Administrator to invest future deferrals in the same manner as the Participant's deferral elections pursuant to DEIP. The Participant may change his directions at any time in accordance with the provisions of the Plan.

(c) Changes and Intra-Fund Transfers. Participant investment directions may be changed, and amounts may be transferred from one Investment Fund to another, in accordance with the procedures established by the Plan Administrator. The designation will remain in effect until changed by the timely submission of a new designation by the Participant.

(d) Default Selection. In the absence of a designation by the Participant, such Participant will be deemed to have directed the notional investment of his accounts in the Investment Fund that tracks the return of the 401(k) Retirement Plan investment fund that is designated by the BFC as the "default" investment fund for purposes of the 401(k) Retirement Plan.

(e) Impact of Election. The Participant's selection of Investment Funds shall serve only as a measurement of the value of the Participant's Accounts pursuant to Section 5.1 and this Section 5.2. None of the Company, the BFC, or the Plan Administrator are required to actually invest a Participant's accounts in accordance with the Participant's selections.

(f) Investment Performance. Accounts shall be adjusted on each Valuation Date to reflect investment gains and losses as if the accounts were invested in the Investment Funds selected by the Participants in accordance with this Section 5.2 and charged with any and all reasonable expenses as provided in paragraph (g) below. The earnings and losses determined by the Plan Administrator in good faith and in his discretion pursuant to this Section shall be binding and conclusive on the Participant, the Participant's beneficiary and all parties claiming through them,

(g) Charges. The Plan Administrator may (but is not required to) charge Participants' accounts for the reasonable expenses of administration including, but not limited to, carrying out and/or accounting for investment instructions directly related to such accounts.

(h) Investment of Matching Credits. Supplemental Matching Credits and Excess Matching Credits allocated to a Participant's Supplemental Matching Credit Account and/or Excess Matching Credit Account during the period beginning on June 1, 2009 and ending on October 14, 2010 were notionally invested in the Company Stock Fund. A Participant may diversify the Supplemental Matching Credits and/or Excess Matching Credits that were notionally invested in the Company Stock Fund as described in this Section 5.2(h) by directing the notional investment of the value of such matching credits to any other Investment Fund as permitted by Section 5.2(b)(1). If a Participant fails to diversify the value of the Supplemental Matching Credits and/or Excess Matching Credits notionally invested in the Company Stock Fund as described in this Section 5.2(h), he shall be deemed to have directed the notional investment of such matching credits in the Company Stock Fund.

5.3 Special Company Stock Fund Provisions.

(a) General. A Participant's interest in the Company Stock Fund shall be expressed in whole and fractional notional units of the Company Stock Fund. The Company Stock Fund shall track an investment in Company Stock in the same manner as the 401(k) Retirement Plan's company stock fund. Accordingly, the value of the unit in the Plan's Company Stock Fund shall be the same as the value of a unit in the 401(k) plan's company stock fund. Notwithstanding the foregoing, if and to the extent that a company stock fund is no longer maintained under the 401(k) Retirement Plan, the Plan Administrator shall establish such rules and procedures as are necessary to maintain the Company Stock Fund hereunder.

(b) Investment Directions. A Participant's ability to direct investments into or out of the Company Stock Fund shall be subject to such procedures as the Plan Administrator may prescribe from time to time to assure compliance with Rule 16b-3 promulgated under Section 16(b) of the Securities Exchange Act of 1934, as amended, and other applicable requirements. Such procedures also may limit or restrict a Participant's ability to make (or modify previously made) deferral and distribution elections pursuant to Articles III and VI, respectively. In furtherance, and not in limitation, of the foregoing, to the extent a Participant acquires any interest in an equity security under the Plan for purposes of Section 16(b), the Participant shall not dispose of that interest within six months, unless specifically exempted by Section 16(b) or any rules or regulations promulgated thereunder.

(c) Compliance with Securities Laws. Any election by a Participant to hypothetically invest any amount in the Company Stock Fund, and any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all applicable securities law requirements, including but not limited to the last sentence of paragraph (b) above and Rule 16b-3 promulgated by the Securities Exchange Commission. To the extent that any election violates any securities law requirement or the Company's stock trading policies and procedures, the election shall be void.

(d) Compliance with Company Trading Policies and Procedures. Any election by a Participant to hypothetically invest any amount in the Company Stock Fund, and any elections to transfer amounts from or to the Company Stock Fund to or from any other Investment Fund, shall be subject to all Company Stock trading policies promulgated by the Company. To the extent that any election violates any such trading policy or procedures, the election shall be void.

5.4 Application to Beneficiaries. Following the death of a Participant, the term "Participant" in this Article V shall refer to the Participant's beneficiary described in Section 6.9.

ARTICLE VI
DISTRIBUTIONS

6.1 <u>Limitation on Right to Receive Distribution</u>. A Participant shall not be entitled to receive a distribution prior to the first to occur of the following events:

(a) The Participant's Separation from Service, or in the case of a Participant who is a Specified Employee, the date which is six months after the Participant's Separation from Service;

(b) The date the Participant becomes Disabled;

(c) The Participant's death;

(d) A specified time (or pursuant to a fixed schedule) specified at the date of deferral of compensation;

(e) An Unforeseeable Emergency; or

(f) To the extent provided by the Secretary of the Treasury, a change in the ownership or effective control of the Company or an Adopting Affiliate or in the ownership of a substantial portion of the assets of the Company or an Adopting Affiliate.

This Section 6.1 restates the restrictions on distributions set forth in Section 409A of the Code and is intended to impose restrictions on distributions pursuant to the Plan accordingly. This Section 6.1 does not describe the instances in which distributions actually will be made. Rather, distributions will be made only if and when permitted both by this Section 6.1 and another provision of the Plan.

6.2 <u>General Right to Receive Distribution</u>. Following a Participant's termination of employment or death, the Participant's Plan accounts will be distributed to the Participant in the manner and at the time provided in Sections 6.4 and 6.5 or Section 6.9, as applicable. A transfer of a Participant from the Company or any Affiliate to any other Affiliate or the Company shall not be deemed to be a termination of employment for purposes of this Section 6.2.

6.3 <u>Amount of Distribution</u>. The amount distributed to a Participant shall be based on the vested amounts credited to the Participant's accounts as of the Valuation Date immediately preceding the date of the distribution. Amounts shall be valued at the fair market value on the relevant Valuation Date determined pursuant to uniform and non-discriminatory rules established by the Plan Administrator.

6.4 <u>Form of Distribution</u>. Accounts shall be distributed in cash in a single lump-sum payment or in quarterly, semi-annual or annual installments. Distributions shall be subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time, consistent with Section 409A of the Code. The form of payment shall be selected by the Participant in the initial Distribution Election Form (which may be contained in and be a part of a Deferral Agreement) submitted by the Participant to the Plan Administrator on entry into the Plan. A Participant may change his election by filing a new Distribution Election Form with the Plan Administrator in accordance with Section 6.6. If a revised Distribution Election Form is not honored because it was not timely filed, distributions shall be made in the form specified in the most recent valid Distribution Election Form filed by the Participant. If no valid Distribution Election Form exists, the Participant's accounts will be distributed in a single lump-sum.

6.5 **Timing of Distribution.** Except as provided in the next sentence, funds will be distributed within an administratively reasonable period of time following the six-month anniversary of the Participant's Separation from Service. Notwithstanding the foregoing, a Participant may elect to further defer the distribution of his accounts by filing a Distribution Election with the Plan Administrator in accordance with Section 6.6. If a revised Distribution Election Form is not honored because it was not timely filed, distributions shall be made pursuant to the most recent valid Distribution Election Form filed by the Participant. If no valid Distribution Election Form exists, the Participant's accounts will be distributed in accordance with the first sentence of this Section 6.5. If a Participant's Separation from Service is caused by his death, or a Participant dies after Separation from Service, then funds will be distributed as described in Section 6.9.

6.6 **Changes in Time and Form of Distribution.** A new Distribution Election Form that delays the time of a payment elected by a Participant or the form of payment selected by a Participant may be filed with the Plan Administrator at any time, will be subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time, and only will be honored in accordance with the following:

(a) The new form will not take effect until at least 12 months after the date on which the new form is filed with the Plan Administrator; and

(b) The election may not be made less than 12 months prior to the date the payment is scheduled to be made, is commenced or otherwise would be made; and

(c) The first payment with respect to which the election is made must be deferred for a period of not less than five years from the date such payment would otherwise be made.

The provisions of this Section 6.6 are intended to comply with Section 409A(a)(4)(C) of the Code and shall be interpreted in a manner consistent with the requirements of such section and any regulations, rulings or other guidance issued pursuant thereto.

6.7 **Special Election Period for 2007.** Pursuant to the transitional guidance issued by the Internal Revenue Service and the Department of Treasury in Section 3.02 of IRS Notice 2006-79, Participants could make distribution elections in regards to their Plan accounts in accordance with this Section 6.7.

(a) **Election Period.** The election period described in this Section 6.7 began on April 1, 2007 and ended on May 7, 2007 but could be extended to a later date by the Plan Administrator in a uniform and non-discriminatory manner, in his sole discretion. In no event, however, could such special election period extend beyond December 31, 2007.

(b) **Application of Election Period.** The special election period described in this Section 6.7 applied to Participants as provided in this paragraph (b).

(1) Participants to Whom Election Period Applies. The special election periods only applied to the following Participants:

(i) Active Participants. Individuals who were Participants in the Plan by reason of the Spin-Off described in Article VII or by reason of Section 3.1(b)(2) and who, as of the first day of the special election period, had not incurred a Separation of Service, had not died and were not Disabled;

(ii) Separated Participants. Individuals who were Participants in the Plan by reason of the Spin-Off described in Article VII and who, as of the first day of the special election period, had incurred a Separation from Service and distributions pursuant to the Plan had not yet commenced; and

(iii) Beneficiaries. Beneficiaries described in Section 6.9 of Participants who, as of the first day of the special election period had deceased if, as of such date, distributions pursuant to the Plan had not yet commenced with respect to the Participant.

(2) Participants to Whom Election Period Does Not Apply. The special election period did not apply to the following Participants:

(i) Participants in Pay Status. Individuals who were Participants in the Plan by reason of the Spin-Off described in Article VII and who, as of the first day of the special election period, were receiving distributions pursuant to the Plan;

(ii) Other Participants. Any other Participants not described in paragraphs (b)(l) and (b)(2)(i) of this Section 6.7; and

(iii) Beneficiaries. Any beneficiary not described in paragraph (b)(l)(iii) of this Section 6.7.

(c) Default Provisions. If a Participant to whom the special election period applied failed to make a distribution election during the special election period the following rules shall apply:

(1) Active Participants. If a Participant identified in paragraph (b)(l)(i) above failed to make an election during the special election period, the default provisions of Section 6.4 and Section 6.5 shall apply (subject to the Participant's ability to change his distribution elections pursuant to Section 6.6).

(2) Separated Participants and Beneficiaries. If a Participant identified in paragraph (b)(l)(ii) above or a beneficiary described in paragraph (b)(l)(iii) above failed to affirmatively make an election during the special election period, such individual shall be deemed to have made an election pursuant to the Plan that is identical to the distribution elections made pursuant to SEIP and/or DEIP in good faith compliance with Section 409A of the Code (subject to the individual's ability to change his distribution elections pursuant to Section 6.6).

(d) April 1, 2007 Commencements. Notwithstanding anything in this Section 6.7 to the contrary, the special election period did not apply to a Participant or beneficiary described in Section 6.9 who had previously made an election (and, therefore, for whom a default election was not in effect) pursuant to SEIP and/or DEIP whereby a lump-sum distribution or installment payments were scheduled to commence as of April 1, 2007. In the case of these Participants and beneficiaries, such lump sum distribution or installment payments commenced as of April 1, 2007 as previously elected (i.e., in accordance with the distribution elections made pursuant to SEIP and/or DEIP in good faith compliance with Section 409A of the Code).

6.8 Default Provisions for Certain Participants Relating to 2010 Election Period. If an individual identified in clause (2) of Section 3.9(b) failed to complete an initial Distribution Election Form during the election period described Section 3.9, the default provisions of Section 6.4 and Section 6.5 shall apply to such individual's Plan accounts (subject to the ability to change distribution elections pursuant to Section 6.6).

6.9 Payment Upon Death.

(a) Beneficiary Designation. If a Participant should die before receiving a full distribution of his Plan accounts, distribution shall be made to the beneficiary designated by the Participant, in accordance with such uniform rules and procedures as may be adopted by the Plan Administrator from time to time. If a Participant has not designated a beneficiary, or if no designated beneficiary is living on the date of distribution, then the Participant's beneficiary shall be that person or persons entitled to receive distributions of the Participant's accounts under the 401(k) Plan.

(b) Timing and Form of Payment to Beneficiary.

(1) Payments Commenced at Time of Death. If, at the time of the Participant's death, installment payments of the Participant's accounts have commenced pursuant to this Article VI, such payments shall continue to the Participant's beneficiary in the same time and the same form as if the Participant has remained alive until the last installment payment was scheduled to be made. Notwithstanding the foregoing, a beneficiary may take a withdrawal upon an Unforeseeable Emergency pursuant to Section 6.10, applying the provisions of such Section by substituting the term "beneficiary" for "Participant."

(2) Payments Not Commenced at Time of Death. If, at the time of the Participant's death, payments of the Participant's accounts has not commenced pursuant to this Article VI, the distributions made pursuant to this Section 6.9 shall be made to the Participant's beneficiary in accordance with the then current and valid distribution election made by the Participant (or, in the absence of such a distribution election, in accordance with the "default" provisions of Section 6.4). If the distribution election applicable to the Participant provided for payment to commence within an administratively reasonable period of time following the six-month anniversary of the Participant's Separation from Service, this six-month anniversary shall be disregarded in the event of the Participant's death, and payments shall commence within an administratively reasonable period of time following the Participant's death. Notwithstanding the foregoing, a beneficiary may take a withdrawal upon an Unforeseeable Emergency pursuant to Section 6.10 or change the timing and form of payment pursuant to Section 6.6 applying the provisions of such Sections by substituting the term “beneficiary” for “Participant” as the context requires, thereunder.

6.10 Payment Upon Unforeseeable Emergency.

(a) General. Notwithstanding any provision of the Plan to the contrary, if a Participant incurs an Unforeseeable Emergency, the Participant may elect to make a withdrawal from the Participant’s account (even after distribution of the Participants accounts has commenced pursuant to Section 6.2. A withdrawal on account of Unforeseeable Emergency may be made if, as determined under regulations of the Secretary of the Treasury, the amounts withdrawn with respect to an emergency do not exceed the amounts necessary to satisfy such emergency plus amounts necessary to pay taxes reasonably anticipated as a result of the withdrawal, after taking into account the extent to which such hardship is or may be relieved: (1) through reimbursement or compensation by insurance or otherwise; (2) by liquidation of the Participant’s assets, to the extent the liquidation of such assets would not itself cause severe financial hardship; or (3) by cessation of deferrals under the Plan.

(b) Information Required. A Participant who wishes to receive a distribution pursuant to this Section 6.10 shall apply for such distribution to the Plan Administrator and shall provide information to the Plan Administrator reasonably necessary to permit the Plan Administrator to determine whether an Unforeseeable Emergency exists and the amount of the distribution reasonably needed to satisfy the emergency need.

6.11 Payment Upon Re-Employment. This Section 6.11 shall apply to an individual who incurs a Separation from Service (if, at the time of such Separation from Service, such individual is a Participant), who is subsequently re-employed by the Company or an Affiliate and with respect to whom all amounts allocated to such Participant’s accounts have not been paid out at the time of re-employment. Distributions of the amounts allocated to such Participant’s accounts with respect to the Participant’s participation before such re-employment shall be made in accordance with the distribution elections in effect immediately prior to such re-employment without regard to any subsequent Separation from Service, subject to the other provisions of this Article VI. If, pursuant to Section 3.2(d) or Section 3.5(b), a Participant elects to make Deferrals or is eligible to receive Non-Elective Contribution Credits following such re-employment, such post re-employment Deferrals and Non-Elective Contribution Credits shall be subject to their own distribution elections made in accordance with Section 3.2(c)(3) and this Article VI.

6.12 Withholding. All distributions will be subject to all applicable tax and withholding requirements.

6.13 Ban on Acceleration of Benefits. Neither the time nor the schedule of any payment under the Plan may be accelerated except as permitted in regulations or other guidance issued by the Internal Revenue Service or the Department of the Treasury and as incorporated herein.

ARTICLE VII
SPIN-OFF FROM SEIP AND DEIP

7.1 General. In response to the enactment of Section 409A of the Code and pursuant to transitional guidance issued by the Internal Revenue Service and the Department of Treasury, deferrals and matching credits under SEIP and DEIP have been frozen and all amounts deferred and vested in those plans prior to January 1, 2005 have been "grandfathered" and thus are not subject to the requirements of Section 409A. The deferrals and matching credits made pursuant to SEIP and DEIP from January 1, 2005 through March 25, 2007, (and the earnings/losses thereon) were spun-off to the Plan as provided in this Article VII.

7.2 Amounts Spun-Off. All amounts credited to participant accounts in SEIP and DEIP on or after January 1, 2005 through March 25, 2007 and not fully distributed on or before April 1, 2007 were spun-off and allocated to Plan accounts, and were invested, as provided in Section 7.3. The amounts deferred prior to January 1, 2005 were determined in accordance with Q&A- 17 of IRS Notice 2005-1, proposed and final regulations, and any other applicable guidance issued by the Internal Revenue Service or the Department of Treasury.

7.3 Allocation and Investment of SEIP and DEIP Amounts. Amounts spun-off from SEIP and DEIP are allocated to accounts under the Plan in accordance with this Section 7.3.

(a) SEIP. Amounts deferred by participants under SEIP are allocated to the Participant's Excess Deferral Account in the Plan. Matching credits made by the Company under SEIP are allocated to the Participant's Excess Matching Credit Account in the Plan.

(b) DEIP. Amounts deferred by participants under DEIP are allocated to the Participant's Supplemental Deferral Account in the Plan. Matching credits made by the Company under DEIP are allocated to the Participant's Supplemental Matching Credit Account in the Plan.

(c) Investments. The amounts spun-off to the Plan in accordance with Section 7.2 are invested in accordance with Section 5.2(b)(2).

7.4 Deferral Elections. Deferral elections made by participants in DEIP and SEIP for amounts deferred in 2007 on and after March 26, 2007 shall apply to the Plan as provided in this Section 7.4.

(a) SEIP. Elections to defer Eligible Pay in 2007 under SEIP are considered Excess Deferral elections pursuant to the Plan, provided such elections otherwise comply with Section 409A of the Code and any transitional guidance issued by the Internal Revenue Service or the Department of Treasury.

(b) DEIP. Elections to defer Base Pay in 2007 and elections to defer Incentive Compensation paid in 2007 for any performance periods ending between May 15, 2006 and December 31, 2006 under DEIP are considered Supplemental Deferral elections pursuant to the Plan, provided such elections otherwise comply with Section 409A of the Code and any transitional guidance issued by the Internal Revenue Service or the Department of Treasury.

(c) Investments. The amounts deferred in accordance with this Section 7.4 are invested in accordance with Section 5.2(b)(2).

7.5 Distribution Elections.

(a) Participants in Pay Status. The distribution elections made pursuant to SEIP and/or DEIP in good faith compliance with Section 409A by the Participants identified in Section 6.7(b)(2)(i) shall continue to apply.

(b) Other Participants. All other individuals whom become Participants by virtue of the Spin-Off described in this Article VII shall make elections regarding the timing and form of distributions in accordance with Section 6.7.

7.6 Effective Date of Spin-Off. The Spin-Off described in this Article VII shall be effective as of 11:59:59 P.M. on March 25, 2007.

ARTICLE VIII
ADMINISTRATION OF THE PLAN

8.1 General Powers and Duties. The following list of powers and duties is not intended to be exhaustive, and the Plan Administrator shall, in addition, exercise such other powers and perform such other duties as he may deem advisable in the administration of the Plan, unless such powers or duties are expressly assigned to another pursuant to the provisions of the Plan.

(a) General. The Plan Administrator shall perform the duties and exercise the powers and discretion given to him in the Plan document and by applicable law and his decisions and actions shall be final and conclusive as to all persons affected thereby. The Company and the Adopting Affiliates shall furnish the Plan Administrator with all data and information that the Plan Administrator may reasonably require in order to perform his functions. The Plan Administrator may rely without question upon any such data or information.

(b) Disputes. Any and all disputes that may arise involving Participants or beneficiaries shall be referred to the Plan Administrator and his decision shall be final. Furthermore, if any question arises as to the meaning, interpretation or application of any provisions of the Plan, the decision of the Plan Administrator shall be final.

(c) Agents. The Plan Administrator may engage agents, including recordkeepers, to assist him and he may engage legal counsel who may be counsel for the Company. The Plan Administrator shall not be responsible for any action taken or omitted to be taken on the advice of such counsel, including written opinions or certificates of any agent, counsel, actuary or physician.

(d) Insurance. At the Director's request, the Company shall purchase liability insurance to cover the Director in his activities as the Plan Administrator.

(e) Allocations. The Plan Administrator is given specific authority to allocate responsibilities to others and to revoke such allocations. When the Plan Administrator has allocated authority pursuant to this paragraph, the Plan Administrator is not to be liable for the acts or omissions of the party to whom such responsibility has been allocated.

(f) Records. The Plan Administrator shall supervise the establishment and maintenance of records by its agents, the Company and each Adopting Affiliate containing all relevant data pertaining to any person affected hereby and his or her rights under the Plan.

(g) Interpretations. The Plan Administrator, in his sole discretion, shall interpret and construe the provisions of the Plan (and any underlying documents or policies).

(h) Electronic Administration. The Plan Administrator shall have the authority to employ alternative means (including, but not limited to, electronic, internet, intranet, voice response or telephonic) by which Participants may submit elections, directions and forms required for participation in, and the administration of, the Plan. If the Plan Administrator chooses to use these alternative means, any elections, directions or forms submitted in accordance with the rules and procedures promulgated by the Plan Administrator will be deemed to satisfy any provision of the Plan calling for the submission of a written election, direction or form.

(i) Accounts. The Plan Administrator shall combine the various accounts of a Participant if he deems such action appropriate. Furthermore, the Plan Administrator shall divide a Participant's accounts into sub-accounts if he deems such action appropriate.

(j) Delegation. The Plan Administrator may delegate his authority hereunder, in whole or in part, in his sole and absolute discretion.

8.2 Claims Procedures. Benefit claims under the Plan shall be resolved in accordance with Code Section 409A and uniform and nondiscriminatory procedures adopted by the Plan Administrator in accordance with Section 503 of ERISA.

ARTICLE IX
AMENDMENT

9.1 Amendment. The Company reserves the right at any time to amend, modify or suspend any or all of the provisions of this Plan, in whole or in part, at any time as designated by a written instrument duly adopted on behalf of the Company.

9.2 Effect of Amendment. Any amendment of the Plan shall not directly or indirectly reduce the balance of any Plan account as of the effective date of such amendment.

9.3 Termination. The Company expressly reserves the right to terminate the Plan.

(a) General. In the event of termination, the Company shall specify whether termination will change the time at which distributions are made; provided that any acceleration of a distribution is consistent with Section 409A of the Code. In the absence of such specification, the timing of distributions shall be unaffected by termination.

(b) GSCS Termination. Pursuant to the Company's authority to terminate the Plan, the Plan was irrevocably terminated with respect to all GSCS Participants upon the GSCS Closing Date and no GSCS Participant shall accrue any benefits under the Plan for any purpose after the GSCS Closing Date. Pursuant to termination of the Plan with respect to GSCS Participants pursuant to this Section 9.3, the balance in each GSCS Participant's account under the Plan was distributed to the GSCS Participant in a single lump-sum payment as soon as practicable after the GSCS Closing Date, but in no event later than December 31 next following the GSCS Closing Date. For purposes of the preceding sentence, the balance in each GSCS Participant's account was determined as of the Valuation Date occurring coincident with or next preceding the date of distribution. Termination of the Plan with respect to GSCS Participants changed the time at which distributions are made to GSCS Participants. Payments to GSCS Participants pursuant to this Section 9.3(b) are intended to comply with section 409A of the Code and applicable guidance issued thereunder.

ARTICLE X
GENERAL PROVISIONS

10.1 __Participant's Rights Unsecured__. The Plan at all times shall be entirely unfunded and no provision shall at any time be made with respect to segregating any assets of the Company for payment of any distributions hereunder. The right of a Participant or his or her designated beneficiary to receive a distribution hereunder shall be an unsecured claim against the general assets of the Company, and neither the Participant nor a designated beneficiary shall have any rights in or against any specific assets of the Company. All amounts credited to a Participant's accounts hereunder shall constitute general assets of the Company and may be disposed of by the Company at such time and for such purposes as it may deem appropriate. Nothing in this Section shall preclude the Company from establishing a "Rabbi Trust," but the assets in the Rabbi Trust must be available to pay the claims of the Company's general creditors in the event of the Company's insolvency.

10.2 __No Guaranty of Benefits__. Nothing contained in the Plan shall constitute a guaranty by the Company or any other person or entity that the assets of the Company will be sufficient to pay any benefit hereunder.

10.3 __No Enlargement of Employee Rights__. No Participant shall have any right to receive a distribution from the Plan except in accordance with the terms of the Plan. Participation in the Plan shall not be construed to give any Participant the right to be retained in the service of the Company or an Adopting Affiliate.

10.4 __Section 409A Compliance__. The Company intends that the Plan meet the requirements of Section 409A of the Code and the guidance issued thereunder. The Plan shall be administered, construed and interpreted in a manner consistent with that intention.

10.5 __Spendthrift Provision__. No interest of any person or entity in, or right to receive a distribution under, the Plan shall be subject in any manner to sale, transfer, assignment, pledge, attachment, garnishment, or other alienation or encumbrance of any kind; nor shall any such interest or right to receive a distribution be taken, either voluntarily or involuntarily, for the satisfaction of the debts of, or other obligations or claims against, such person or entity, including claims in bankruptcy proceedings. This Section shall not preclude arrangements for the withholding of taxes from deferrals, credits, or benefit payments, arrangements for the recovery of benefit overpayments, arrangements for the transfer of benefit rights to another plan, or arrangements for direct deposit of benefit payments to an account in a bank, savings and loan association or credit union (provided that such arrangement is not part of an arrangement constituting an assignment or alienation).

10.6 Domestic Relations Orders. Notwithstanding any provision of the Plan to the contrary, and to the extent permitted by law, a Participant's accounts may be assigned or alienated pursuant to a "Domestic Relations Order" (as such term is defined in Section 414(p)(1)(B) of the Code), subject to such uniform rules and procedures as may be adopted by the Plan Administrator from time to time. Any amount subject to a Domestic Relations Order shall be distributed as soon as practicable.

10.7 Incapacity of Recipient. If the Plan Administrator is served with a court order holding that a person entitled to a distribution under the Plan is incapable of personally receiving and giving a valid receipt for such distribution, the Plan Administrator shall postpone payment until such time as a claim therefore shall have been made by a duly appointed guardian or other legal representative of such person. The Plan Administrator is under no obligation to inquire or investigate as to the competency of any person entitled to a distribution. Any payment to an appointed guardian or other legal representative under this Section shall be a payment for the account of the incapacitated person and a complete discharge of any liability of the Company and the Plan therefor.

10.8 Successors. The Plan shall be binding upon the successors and assigns of the Company and upon the heirs, beneficiaries and personal representatives of the individuals who become Participants hereunder.

10.9 Limitations on Liability. Notwithstanding any of the preceding provisions of the Plan, neither the Plan Administrator, the Director, or the Company, nor any individual acting as the Plan Administrator's, the Director's, or the Company's employee, agent, or representative shall be liable to any Participant, former Participant, beneficiary or other person for any claim, loss, liability or expense incurred in connection with the Plan.

10.10 Conflicts. If any person holds a position under the Plan through which he or she is charged with making a decision about the administration of his or her own (or any immediate family member's) Plan participation, including, without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, then such person shall be recused and the decision shall be made by the Plan Administrator. If a decision is required regarding the administration of the Plan Administrator's Plan participation, including without limitation, decisions regarding eligibility, or account valuation, or the administration of his or her Plan investments, such decision shall be made by the Company's Vice President, Human Services Division. Nothing in this Section 10.10 shall be construed to limit a Participant's or the Plan Administrator's ability to make decisions or elections with regard to his or her participation in the Plan in the same manner as other Participants.

10.11 Overpayments. If it is determined that a distribution under the Plan should not have been paid or should have been paid in a lesser amount, written notice thereof shall be given to the recipient of such distribution (or his legal representative) and he shall repay the amount of overpayment to the Company. If he fails to repay such amount of overpayment promptly, the Company shall arrange to recover for the Plan the amount of the overpayment by making an appropriate deduction or deductions from any future benefit payment or payments payable to that person (or his survivor or beneficiary) under the Plan or from any other benefit plan of the Company.

10.12 Special Rules for Participants With Same-Sex Domestic Partners.

(a) Generally. Effective January 1, 2013, except as specified under this Section 10.12 or as prohibited by applicable law, to the extent the Plan provides for any benefit, right, feature, restriction, or obligation relating to, or upon, a Participant's "spouse", "beneficiary", "survivor", or "family member" (or any individual having a similar relationship to the Participant), the Plan Administrator shall also apply such benefit, right, feature, restriction, or obligation to a Participant's "same-sex domestic partner" (as defined in (b) below) in a uniform and non-discriminatory manner that is similar to how an opposite-gender spouse would be treated under the Plan.

(b) Definition of "Same-Sex Domestic Partner". For purposes of this Section 10.12, the term "same-sex domestic partner" means the sole, same-sex person who is in a civil union, domestic partnership, or legal relationship similar thereto, with the Participant as recognized under the laws of the federal government or a state government of the United States of America, including its territories and possessions and the District of Columbia (or, with respect to any other country, legally recognized by the equivalent government(s) thereof). The Plan shall continue to treat such relationship as a same-sex domestic partnership, regardless of whether the Participant and his same-sex domestic partner remain in the jurisdiction where the relationship was legally entered into. In the event more than one person meets this definition for a given Participant, then the "same-sex domestic partner" shall be the person who first met the criteria in this definition. Notwithstanding anything herein to the contrary, if a Participant has a spouse recognized for purposes of federal law, no person will qualify as the Participant's same-sex domestic partner unless such Participant's marriage to such spouse is first lawfully dissolved. Except with respect to determining the length of time the same-sex domestic partner has satisfied the definition of same-sex domestic partner under the Plan, a Participant shall be considered to have a same-sex domestic partner only with respect to periods beginning on or after January 1, 2013, regardless of when such same-sex partnership was created.

(c) Exceptions.

(1) Determination of Unforeseeable Emergency. Only a spouse recognized for purposes of federal law shall be considered a "spouse" for purposes of applying the definition of "Unforeseeable Emergency" in Section 1.1(aaa).

(2) Domestic Relations Orders. Only a spouse recognized for purposes of federal law or another "alternate payee" (as defined under Section 414(p) of the Code) may enforce a domestic relations order against the Plan or a Participant's interests hereunder pursuant to Section 10.6.

10.13 Determination of "Spouse". The term "spouse" means the person who is the Participant's spouse for federal tax purposes.

EXHIBIT 31.1

SECTION 302 CERTIFICATION

I, D. James Umpleby III, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Caterpillar Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 2, 2017	*/s/ D. James Umpleby III*	Chief Executive Officer
	(D. James Umpleby III)	

EXHIBIT 31.2

SECTION 302 CERTIFICATION

I, Bradley M. Halverson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Caterpillar Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

    a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 2, 2017	*/s/ Bradley M. Halverson*	Group President and Chief Financial Officer
	(Bradley M. Halverson)	

EXHIBIT 32

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Caterpillar Inc. (the “Company”) on Form 10-Q for the period ending June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 2, 2017	*/s/ D. James Umpleby III*	Chief Executive Officer
	(D. James Umpleby III)	
August 2, 2017	*/s/ Bradley M. Halverson*	Group President and Chief Financial Officer
	(Bradley M. Halverson)	

A signed original of this written statement required by Section 906 has been provided to Caterpillar Inc. and will be retained by Caterpillar Inc. and furnished to the Securities and Exchange Commission or its staff upon request.