Fiscal 2019
Fourth Quarter Results




November 7, 2019

The power behind **your mission**

Johnson Controls

Forward Looking/Cautionary Statements & Non-GAAP Financial Information

Johnson Controls International plc Cautionary Statement Regarding Forward-Looking Statements

Johnson Controls International plc has made statements in this communication that are forward-looking and therefore are subject to risks and uncertainties. All statements in this document other than statements of historical fact are, or could be, “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. In this communication, statements regarding Johnson Controls’ future financial position, sales, costs, earnings, cash flows, other measures of results of operations, synergies and integration opportunities, capital expenditures and debt levels are forward-looking statements. Words such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe,” “should,” “forecast,” “project” or “plan” and terms of similar meaning are also generally intended to identify forward-looking statements. However, the absence of these words does not mean that a statement is not forward-looking. Johnson Controls cautions that these statements are subject to numerous important risks, uncertainties, assumptions and other factors, some of which are beyond Johnson Controls’ control, that could cause Johnson Controls’ actual results to differ materially from those expressed or implied by such forward-looking statements, including, among others, risks related to: any delay or inability of Johnson Controls to realize the expected benefits and synergies of recent portfolio transactions such as the merger with Tyco and the spin-off of Adient, changes in tax laws (including but not limited to the recently enacted Tax Cuts and Jobs Act), regulations, rates, policies or interpretations, the loss of key senior management, the tax treatment of recent portfolio transactions, significant transaction costs and/or unknown liabilities associated with such transactions, the outcome of actual or potential litigation relating to such transactions, the risk that disruptions from recent transactions will harm Johnson Controls’ business, the strength of the U.S. or other economies, changes to laws or policies governing foreign trade, including increased tariffs or trade restrictions, mix and schedules, energy and commodity prices, the availability of raw materials and component products, currency rates and cancellation of or changes to commercial arrangements, and with respect to the disposition of the Power Solutions business, whether the strategic benefits of the Power Solutions transaction can be achieved. A detailed discussion of risks related to Johnson Controls’ business is included in the section entitled “Risk Factors” in Johnson Controls’ Annual Report on Form 10-K for the 2018 fiscal year filed with the SEC on November 20, 2018, and its Quarterly Reports on Form 10-Q for the quarterly periods ended December 31, 2018, March 31, 2019 and June 30, 2019, filed with the SEC on February 1, 2019, May 3, 2019 and August 1, 2019, respectively, which are available at www.sec.gov and www.johnsoncontrols.com under the “Investors” tab. Shareholders, potential investors and others should consider these factors in evaluating the forward-looking statements and should not place undue reliance on such statements. The forward-looking statements included in this communication are made only as of the date of this document, unless otherwise specified, and, except as required by law, Johnson Controls assumes no obligation, and disclaims any obligation, to update such statements to reflect events or circumstances occurring after the date of this communication.

Non-GAAP Financial Information

The Company's press release contains financial information regarding adjusted earnings per share, which is a non-GAAP performance measure. The adjusting items include net mark-to-market adjustments, transaction/integration costs, restructuring and impairment costs, Scott Safety gain on sale, tax indemnification reserve release, environmental reserve, loss on extinguishment of debt, Power Solutions gain on sale (net of transaction and other costs), the impact of ceasing the depreciation/amortization expense for the Power Solutions business as the business is held for sale and discrete tax items. Financial information regarding organic sales, adjusted segment EBITA, adjusted organic segment EBITA, adjusted segment EBITA margin, adjusted free cash flow, adjusted free cash flow conversion and net debt are also presented, which are non-GAAP performance measures. Adjusted segment EBITA excludes special items such as transaction/integration costs, environmental reserve, and Scott Safety gain on sale because these costs are not considered to be directly related to the underlying operating performance of its business units. Management believes that, when considered together with unadjusted amounts, these non-GAAP measures are useful to investors in understanding period-over-period operating results and business trends of the Company. Management may also use these metrics as guides in forecasting, budgeting and long-term planning processes and for compensation purposes. These metrics should be considered in addition to, and not as replacements for, the most comparable GAAP measure.

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2019 In Review

- Completed sale of Power Solutions business
- Executed disciplined capital allocation
  - Reduced debt by $3.7 billion
  - $6.0 billion of share buybacks
- Executive leadership appointments
- Delivered all target metrics

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Delivering On Our Commitments*

	Original Target	FY19 Results	
▪ Field orders	+MSD	**+5%**	✓
▪ Organic Service growth	+MSD	**+4%**	✓
▪ Organic revenue growth	+4%-6%	**+5%**	✓
▪ EBIT margin expansion	+50 to +70bps	**+60bps**	✓
▪ Synergy and productivity savings	~$200M	**$196M**	✓
▪ Free Cash Flow conversion	~95%	**99%**	✓

*Non-GAAP excludes special items. See footnotes for reconciliation.

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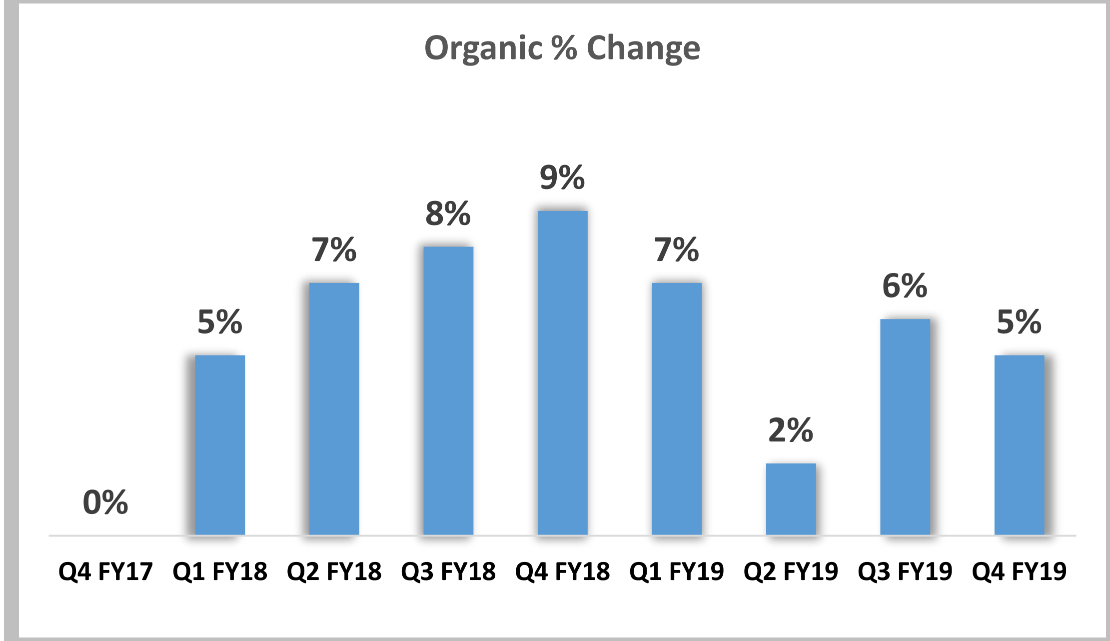
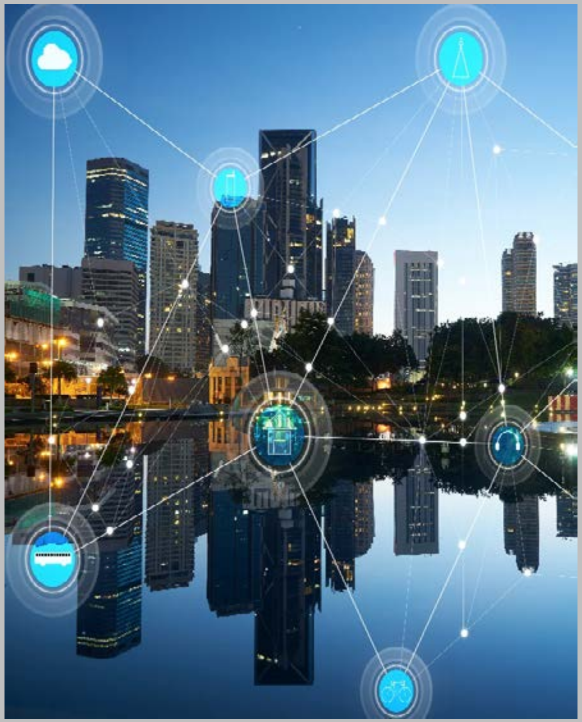
Field Order Growth

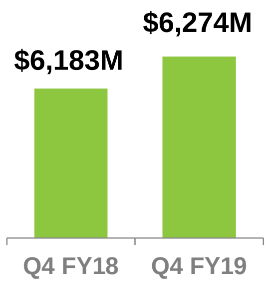




Backlog Up 8% to $8.9B – Solid Visibility Into FY20

Q4 FY19 Financial Summary* (continuing operations)

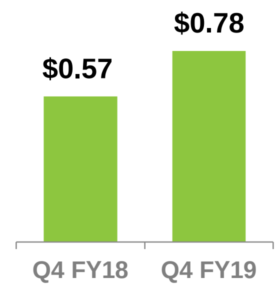
ADJUSTED NET SALES



+1%
Reported

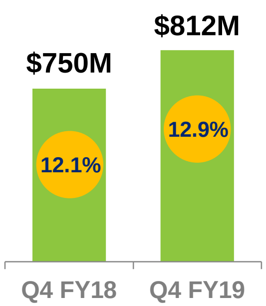
+3%
Organic

ADJUSTED EPS



+37%
Reported

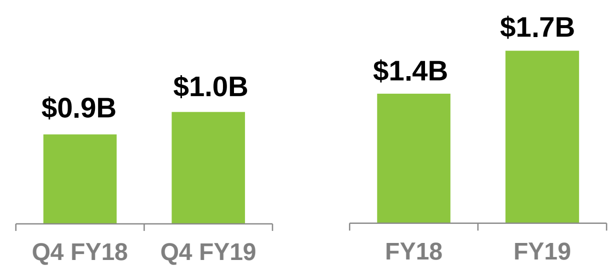
ADJUSTED EBIT & MARGIN



80bps
Reported

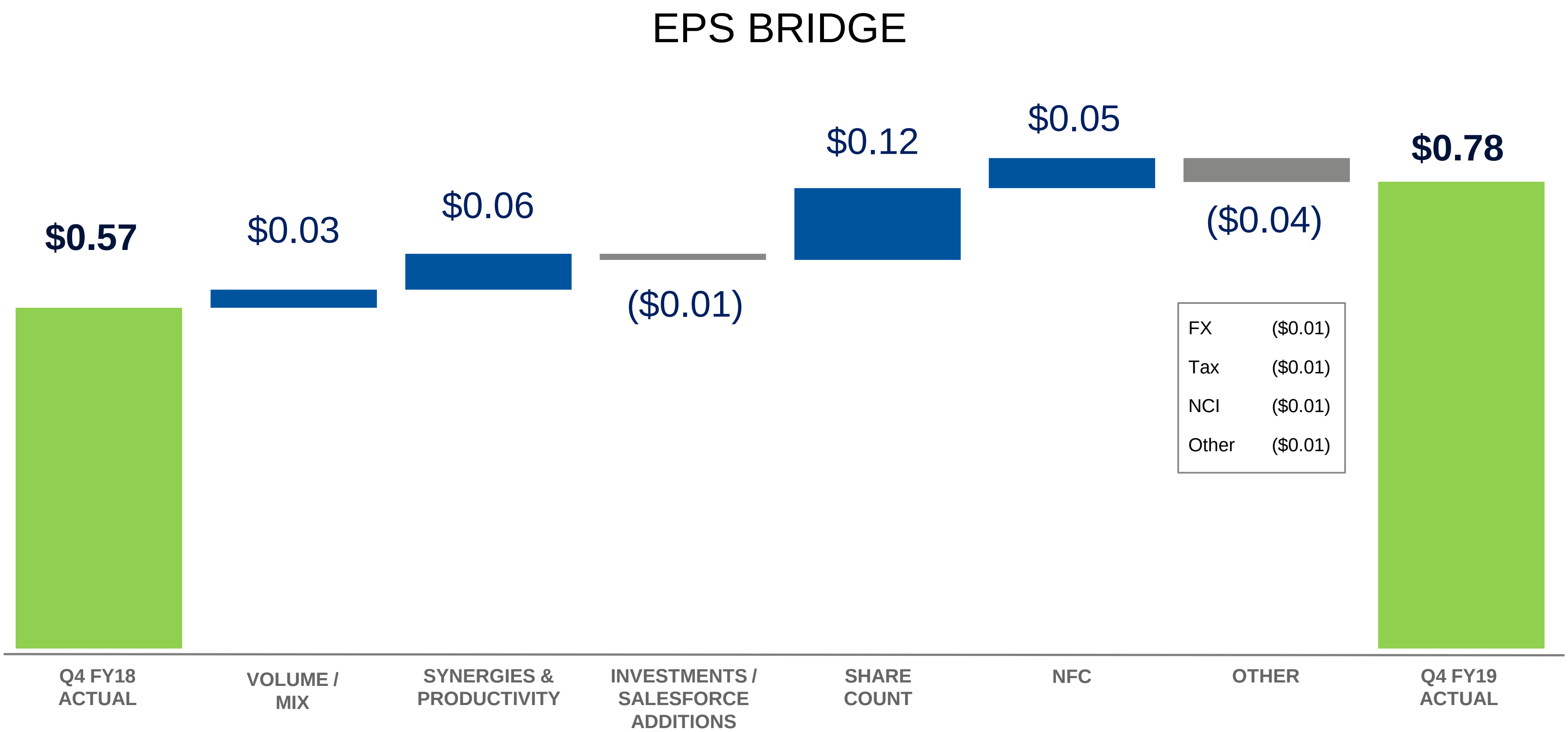
80bps
Organic

ADJUSTED FCF



*Non-GAAP excludes special items. See footnotes for reconciliation.

Q4 FY19 Results vs. Prior Year* (continuing operations)

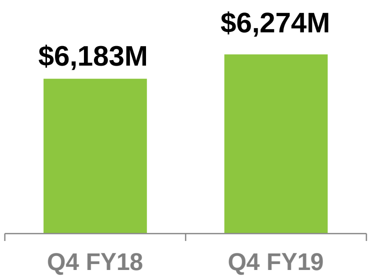


*Non-GAAP excludes special items. See footnotes for reconciliation.

Segment Results*

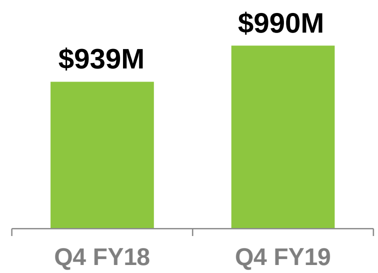
Sales

+3% Organic



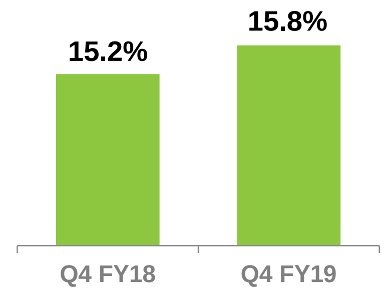
Segment EBITA

+7% Organic

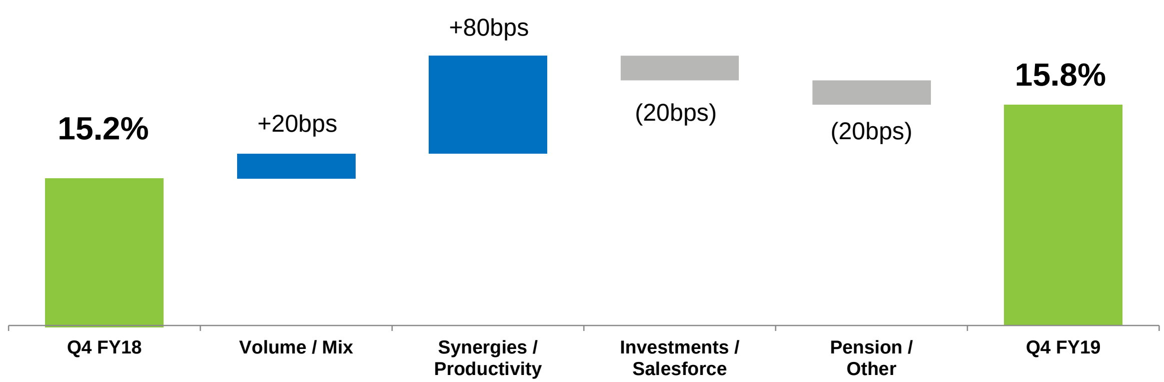


EBITA Margin

+60bps Organic

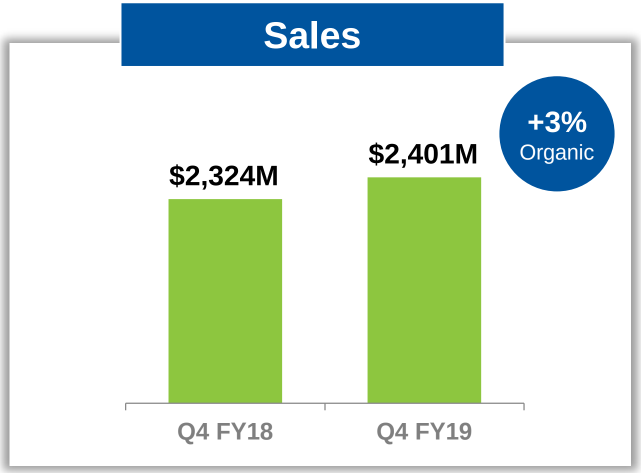


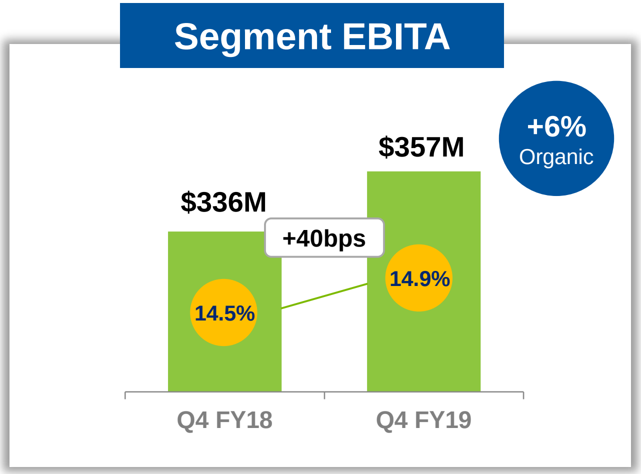
EBITA Margin



*Non-GAAP excludes special items. See footnotes for reconciliation.

Segment Results: Building Solutions North America*

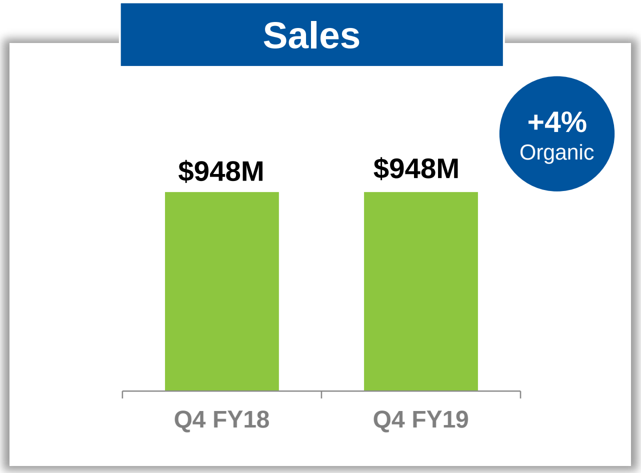


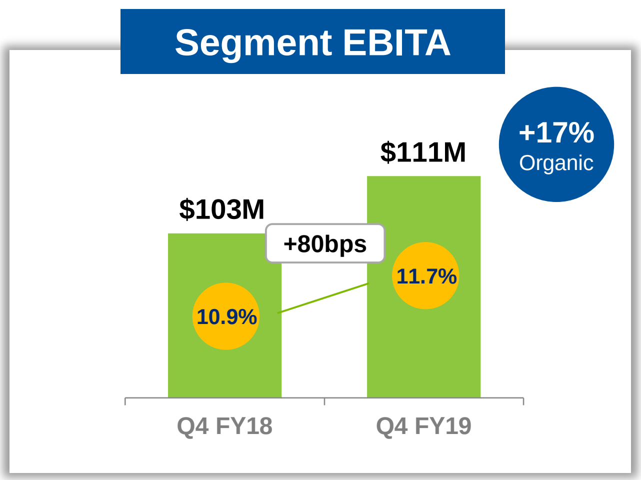


- Organic sales up 3%
  - Install up 3% / Service up 4%
  - HVAC & Controls up high-single digits
  - Fire & Security up low-single digits
  - Performance Solutions down mid-teens
- EBITA margin up 40bps
  - Favorable volume leverage
  - Productivity savings and cost synergies
- Orders increased 7% organically
- Backlog of $5.8 billion increased 8% organically

*Non-GAAP excludes special items. See footnotes for reconciliation.

Segment Results: Building Solutions EMEA/LA*

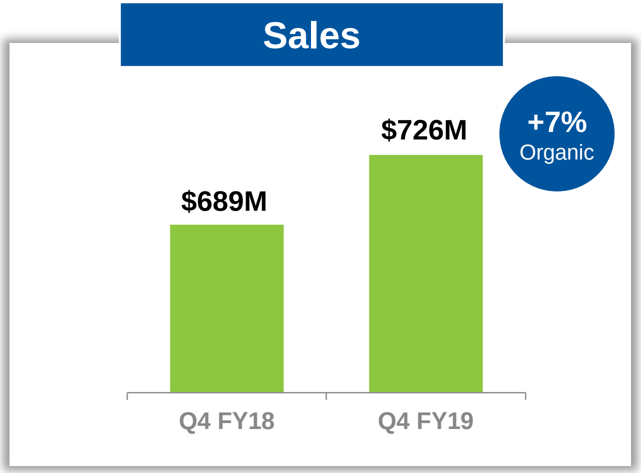


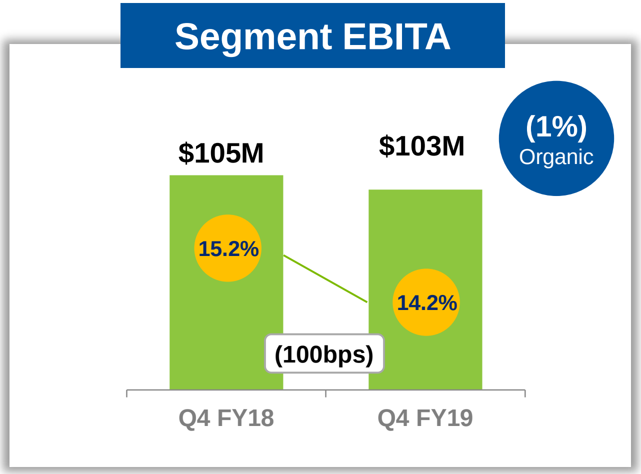


- Organic sales up 4%
  - Install up 5% / Service up 4%
  - Europe – up mid-single digits led by Industrial Refrigeration
  - Middle East & Africa – down mid-single digits driven by weakness in HVAC and Fire & Security
  - Latin America – up mid-teens led by Fire & Security
- EBITA margin up 80bps
  - Up 120bps, ex-foreign currency
  - Favorable volume leverage
  - Productivity savings and cost synergies
  - Run-rate salesforce additions
- Orders increased 3% organically
- Backlog of $1.6 billion increased 10% organically

*Non-GAAP excludes special items. See footnotes for reconciliation.

Segment Results: Building Solutions Asia Pacific*

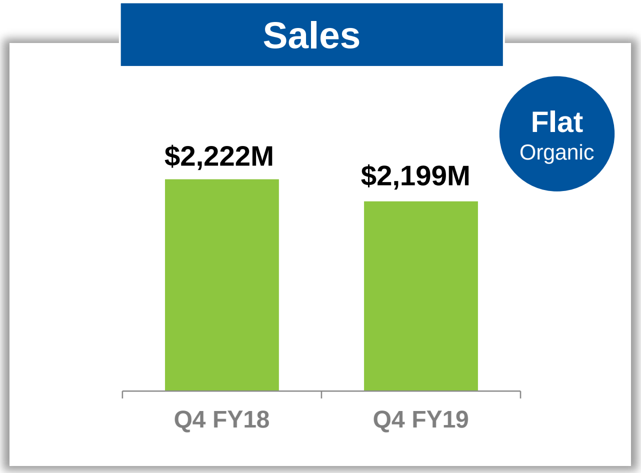


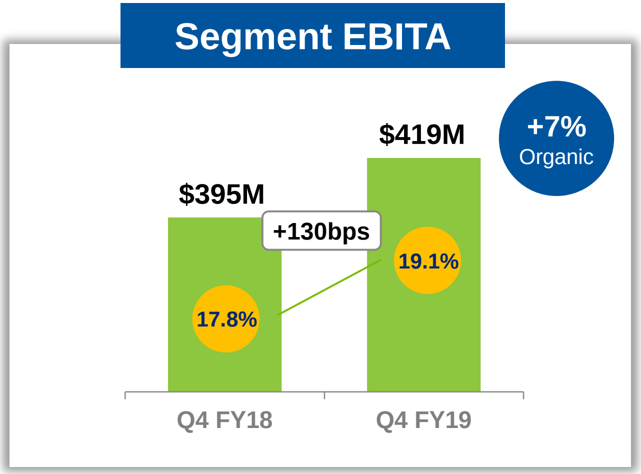


- Organic sales up 7%
  - Install up 9% / Service up 4%
  - Strong growth in HVAC and Building Management Systems
  - China up low-double digits
- EBITA margin down 100bps
  - Favorable volume leverage
  - Unfavorable mix
  - Expected underlying margin pressure
- Orders flat organically
- Backlog of $1.5 billion increased 4% organically

*Non-GAAP excludes special items. See footnotes for reconciliation.

Segment Results: Building Solutions Global Products*



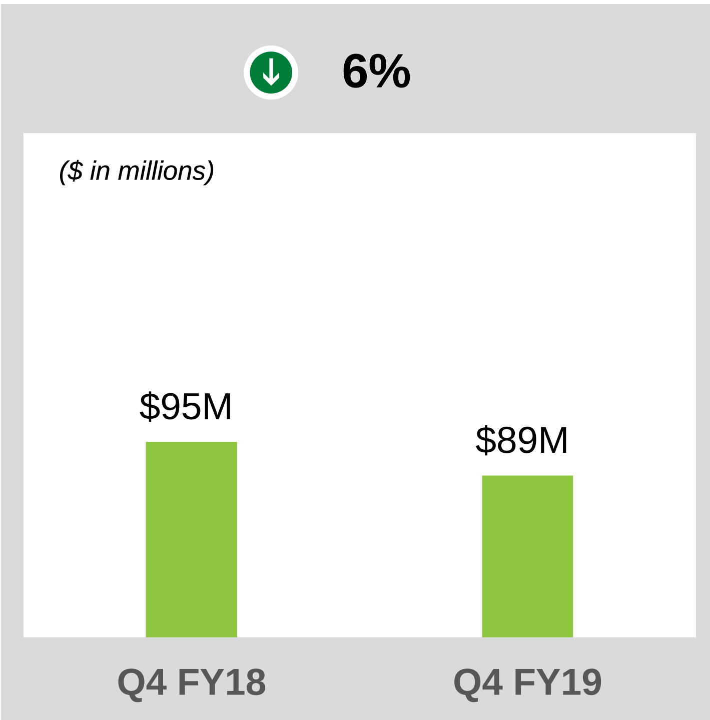


- Organic sales flat
  - Building Management Systems up low-single digits, led by Controls and Fire Detection
  - HVAC & Refrigeration Equipment down slightly
    - Global Resi HVAC down low-double digits; NA Resi HVAC down low-teens, as expected
    - Light commercial up high-single digits; NA up mid-single digits
    - Industrial Refrigeration down mid-single digits
    - VRF up low-double digits
    - Applied Parts & Equipment up high-single digits
  - Specialty Products up mid-single digits

- EBITA margin up 130bps
  - Volume de-leverage
  - Positive price / cost
  - Productivity savings and cost synergies
  - Product and salesforce investments

*Non-GAAP excludes special items. See footnotes for reconciliation.

Corporate Expense* (continuing operations)



- Realization of cost synergies and productivity savings
- Ongoing cost reductions related to Power Solutions sale

*Non-GAAP excludes special items. See footnotes for reconciliation.

Free Cash Flow* (continuing operations)

(in $ billions)	Q4 FY18	Q4 FY19	FY18	FY19
Cash provided by operating activities	$0.8	$1.0	$1.5	$1.7
Capital expenditures	(0.2)	(0.2)	(0.6)	(0.6)
Reported free cash flow**	**$0.7**	**$0.8**	**$0.9**	**$1.2**
Restructuring costs	-	-	0.2	0.1
Integration/transaction costs	0.1	0.1	0.3	0.3
Nonrecurring tax payments	0.1	0.1	-	0.1
Adjustments	**$0.2**	**$0.2**	**$0.5**	**$0.5**
Adjusted FCF	**$0.9**	**$1.0**	**$1.4**	**$1.7**

- Q4 adjusted free cash flow from continuing operations of $1.0 billion
- FY adjusted free cash flow $1.7 billion, up 25% YoY
- 99% FCF conversion
- Expect FY20 adjusted free cash flow conversion of ~95%
  - Excludes one-time cash outflows of ~$0.3 billion
  - Excludes ~$0.6 billion tax refund expected in 1H FY20

*Non-GAAP excludes special items. See footnotes for reconciliation.

**May not sum due to rounding

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Balance Sheet

Capital Structure	Q3 FY19	Q4 FY19
Short-term debt and current portion of long-term debt	$521	$511
Long-term debt	6,804	6,708
Total debt	**7,325**	**7,219**
Less: cash and cash equivalents	3,685	2,805
Net debt	**$3,640**	**$4,414**

Share repurchases	**~$4,122M***	**~$861M**

*Includes equity tender of 102.4M shares @ $39.25/share for a total cost of $4.0B (excluding fees and expenses related to the tender), completed June 5, 2019.

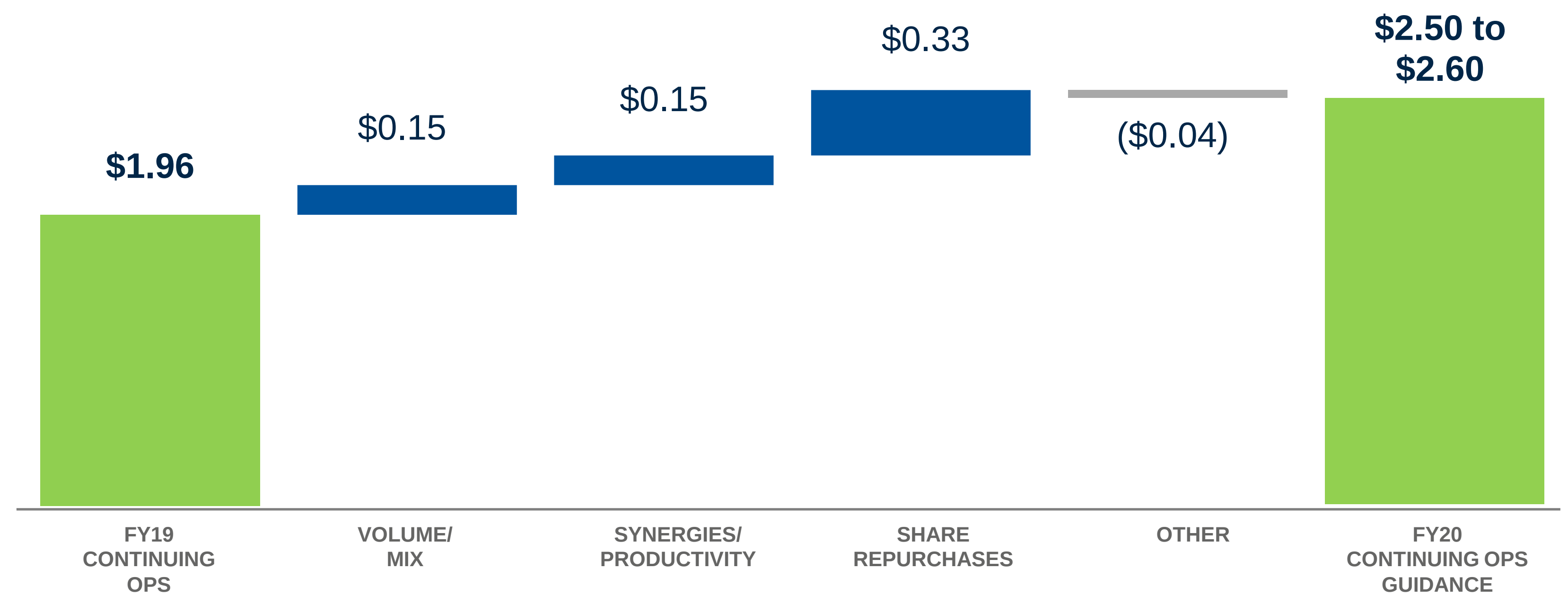
Other Items

Significant Q4 Special Items

	Cash Impact
▪ Net mark-to-market adjustments – $626M pre-tax loss	Non-cash
▪ Tax audit reserve adjustments – $586M benefit	Non-cash

Fiscal 2020 Continuing Operations Guidance*

FY20 EPS WALK



FY20 EPS Growth of 28% to 33%

*Non-GAAP excludes special items.

Fiscal 2020 Continuing Operations Guidance*

Consolidated

Sales

$24.3 - $24.7B
+2% to +3% reported
Low to Mid-single Digit Organic Growth

EBIT Margin

11.0% - 11.2%
+60 to +80 bps

Tax rate

~13.5%

EPS

$2.50 - $2.60
+28% to +33%

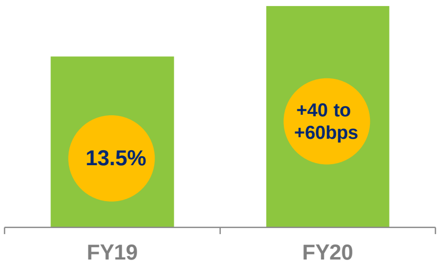
Adjusted Free Cash Flow Conversion

~95%

Sales Headwinds

- FX impact (~$75M)
- Net divestitures (~$210M)

Segment EBITA Margin

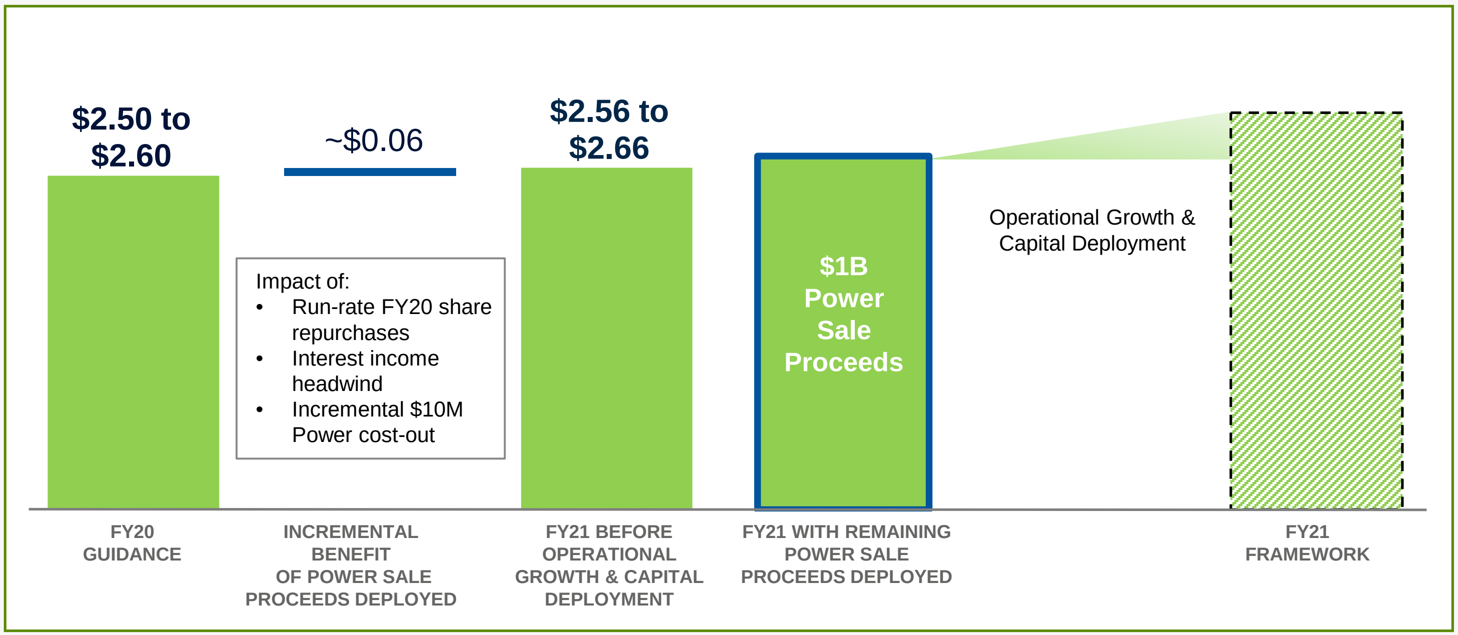


Other Items

- Corporate expense of $330M to $340M
- Amortization expense of $385M to $395M
- Net financing charges of $245M to $255M
  - Debt paydown in FY19
  - Headwind from lower interest income
- Non-controlling interest of $210M to $220M
- Weighted average diluted share count of ~760M
  - Includes ~$2.2B of share repurchases

* Non-GAAP excludes special items.

FY21 EPS Framework* (continuing operations)



* Non-GAAP excludes special items.

Appendix:
Supplemental Information

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FY19 Fourth Quarter
Financial Results (continuing operations)

($ in millions, except earnings per share)	**Q4 FY18** GAAP	**Q4 FY19** GAAP	**Q4 FY18*** NON-GAAP	**Q4 FY19*** NON-GAAP	**% Change** NON-GAAP
Sales	$6,183	$6,274	$6,183	$6,274	1%
Gross profit	2,057	1,980	2,062	2,108	2%
% of sales	*33.3%*	*31.6%*	*33.3%*	*33.6%*	
SG&A expenses	1,392	1,960	1,360	1,351	(1%)
Restructuring & impairment costs	101	-	-	-	
Equity income	48	55	48	55	15%
EBIT	612	75	750	812	8%
EBIT margin	***9.9%***	***1.2%***	***12.1%***	***12.9%***	
Net financing charges	97	48	97	48	(51%)
Income before income taxes	515	27	653	764	17%
Income tax provision (benefit)	(117)	(627)	79	103	30%
Net income	632	654	574	661	15%
Income attributable to noncontrolling interests	40	42	40	46	15%
Net income attributable to JCI	$592	$612	$534	$615	15%
Diluted EPS	**$0.64**	**$0.77**	**$0.57**	**$0.78**	37%

*Non-GAAP excludes special items. See footnotes for reconciliation.

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Special Items (continuing operations)

$ In millions, except EPS

Q4 FY19	Pre-tax Income (Expense)	Tax (Expense) Benefit	NCI (Expense) Income	After-tax Income (Expense)	EPS Impact
Transaction costs	$(4)	$-	$-	$(4)	$ (0.01)
Integration costs	(107)	12	-	(95)	(0.12)
Net mark-to-market adjustments	(626)	132	4	(490)	(0.62)
Tax audit reserve adjustments	-	586	-	586	0.74
Total*	**$(737)**	**$730**	**$4**	**$(3)**	**$(0.00)**

Q4 FY18	Pre-tax Income (Expense)	Tax (Expense) Benefit	NCI (Expense) Benefit	After-tax Income (Expense)	EPS Impact
Transaction costs	$(4)	$2	$-	$(2)	$(0.00)
Integration costs	(57)	3	-	(54)	(0.06)
Restructuring & impairment costs	(101)	13	-	(88)	(0.09)
Net mark-to-market adjustments	24	(1)	-	23	0.02
Discrete tax items	-	179	-	179	0.19
Total*	**$(138)**	**$196**	**$-**	**$58**	**$0.06**

* May not sum due to rounding.

Recasted Financial Information* (continuing operations)

	Q1FY18	Organic	Q2FY18	Organic	Q3FY18	Organic	Q4FY18	Organic	FY18	Organic
BT&S - North America	2,012	3.1%	2,097	0.6%	2,246	4.8%	2,324	7.7%	8,679	4.1%
BT&S - EMEA/LA	915	4.0%	907	-3.3%	926	0.4%	948	5.7%	3,696	1.8%
BT&S - APAC	597	2.5%	586	-1.6%	681	4.5%	689	4.1%	2,553	2.5%
Global Products	1,781	5.8%	2,040	6.2%	2,429	7.3%	2,222	9.5%	8,472	7.3%
Sales	5,305	4.1%	5,630	1.7%	6,282	5.1%	6,183	7.6%	23,400	4.7%
		Margin		**Margin**		**Margin**		**Margin**		**Margin**
BT&S - North America	236	11.7%	244	11.6%	318	14.2%	336	14.5%	1,134	13.1%
BT&S - EMEA/LA	71	7.8%	78	8.6%	98	10.6%	103	10.9%	350	9.5%
BT&S - APAC	74	12.4%	71	12.1%	97	14.2%	105	15.2%	347	13.6%
Global Products	178	10.0%	237	11.6%	441	18.2%	395	17.8%	1,251	14.8%
Segment EBITA	559	10.5%	630	11.2%	954	15.2%	939	15.2%	3,082	13.2%
Amortization of intangibles	(92)		(92)		(98)		(94)		(376)	
Corporate	(105)		(113)		(103)		(95)		(416)	
EBIT	**362**	**6.8%**	**425**	**7.5%**	**753**	**12.0%**	**750**	**12.1%**	**2,290**	**9.8%**
Net Financing Charges	(102)		(107)		(95)		(97)		(401)	
Income Before Tax	260		318		658		653		1,889	
Tax	(32)		(38)		(80)		(79)		(229)	
Tax Rate	12.1%		12.1%		12.1%		12.1%		12.1%	
Noncontrolling Interest	(28)		(34)		(72)		(40)		(174)	
Net Income	**200**		**246**		**506**		**534**		**1,486**	
EPS	**$ 0.21**		**$ 0.26**		**$ 0.54**		**$ 0.57**		**$ 1.59**	
Shares	933.3		932.5		930.7		930.5		931.7	

*Supplemental unaudited selected historical information for the fiscal year ending September 30, 2018, as well as for each quarterly period of fiscal 2018, which reflects the continuing operations of the Company as if the Power Solutions business was reported as a discontinued operation as of October 1, 2018. Non-GAAP excludes special items see reconciliation filed on Form 8-K on November 13, 2018.

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JOHNSON CONTROLS INTERNATIONAL PLC

CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(in millions, except per share data; unaudited)

	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018
Net sales	$ 6,274	$ 6,183
Cost of sales	4,294	4,126
Gross profit	1,980	2,057
Selling, general and administrative expenses	(1,960)	(1,392)
Restructuring and impairment costs	-	(101)
Net financing charges	(48)	(97)
Equity income	55	48
Income from continuing operations before income taxes	27	515
Income tax benefit	(627)	(117)
Income from continuing operations	654	632
Income from discontinued operations, net of tax	-	193
Net income	654	825
Less: Income from continuing operations attributable to noncontrolling interests	42	40
Less: Income from discontinued operations attributable to noncontrolling interests	-	14
Net income attributable to JCI	$ 612	$ 771
Income from continuing operations	$ 612	$ 592
Income from discontinued operations	-	179
Net income attributable to JCI	$ 612	$ 771
Diluted earnings per share from continuing operations	$ 0.77	$ 0.64
Diluted earnings per share from discontinued operations	-	0.19
Diluted earnings per share	$ 0.77	$ 0.83
Diluted weighted average shares	791.7	930.5
Shares outstanding at period end	777.6	925.0

JOHNSON CONTROLS INTERNATIONAL PLC

CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(in millions, except per share data; unaudited)

	Twelve Months Ended September 30, 2019	2018
Net sales	$ 23,968	$ 23,400
Cost of sales	16,275	15,733
Gross profit	7,693	7,667
Selling, general and administrative expenses	(6,244)	(5,642)
Restructuring and impairment costs	(235)	(255)
Net financing charges	(350)	(401)
Equity income	192	177
Income from continuing operations before income taxes	1,056	1,546
Income tax provision (benefit)	(233)	197
Income from continuing operations	1,289	1,349
Income from discontinued operations, net of tax	4,598	1,034
Net income	5,887	2,383
Less: Income from continuing operations attributable to noncontrolling interests	189	174
Less: Income from discontinued operations attributable to noncontrolling interests	24	47
Net income attributable to JCI	$ 5,674	$ 2,162
Income from continuing operations	$ 1,100	$ 1,175
Income from discontinued operations	4,574	987
Net income attributable to JCI	$ 5,674	$ 2,162
Diluted earnings per share from continuing operations	$ 1.26	$ 1.26
Diluted earnings per share from discontinued operations	5.23	1.06
Diluted earnings per share	$ 6.49	$ 2.32
Diluted weighted average shares	874.3	931.7
Shares outstanding at period end	777.6	925.0

JOHNSON CONTROLS INTERNATIONAL PLC

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(in millions; unaudited)

	September 30, 2019	September 30, 2018
ASSETS		
Cash and cash equivalents	$ 2,805	$ 185
Accounts receivable - net	5,770	5,622
Inventories	1,814	1,819
Assets held for sale	98	3,015
Other current assets	1,906	1,182
Current assets	12,393	11,823
Property, plant and equipment - net	3,348	3,300
Goodwill	18,178	18,381
Other intangible assets - net	5,632	6,187
Investments in partially-owned affiliates	853	848
Noncurrent assets held for sale	60	5,188
Other noncurrent assets	1,823	3,070
Total assets	$ 42,287	$ 48,797
LIABILITIES AND EQUITY		
Short-term debt and current portion of long-term debt	$ 511	$ 1,307
Accounts payable and accrued expenses	4,535	4,428
Liabilities held for sale	44	1,791
Other current liabilities	3,980	3,724
Current liabilities	9,070	11,250
Long-term debt	6,708	9,623
Other noncurrent liabilities	5,680	5,259
Noncurrent liabilities held for sale	-	207
Shareholders' equity attributable to JCI	19,766	21,164
Noncontrolling interests	1,063	1,294
Total liabilities and equity	$ 42,287	$ 48,797

JOHNSON CONTROLS INTERNATIONAL PLC

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions; unaudited)

	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018
Operating Activities		
Net income attributable to JCI from continuing operations	$ 612	$ 592
Income from continuing operations attributable to noncontrolling interests	42	40
Net income from continuing operations	654	632
Adjustments to reconcile net income from continuing operations to cash provided by operating activities:		
Depreciation and amortization	200	175
Pension and postretirement benefit expense (income)	600	(62)
Pension and postretirement contributions	(2)	(3)
Equity in earnings of partially-owned affiliates, net of dividends received	(40)	(44)
Deferred income taxes	230	(661)
Non-cash restructuring and impairment costs	-	8
Other - net	16	-
Changes in assets and liabilities, excluding acquisitions and divestitures:		
Accounts receivable	182	(21)
Inventories	217	108
Other assets	(37)	74
Restructuring reserves	(37)	56
Accounts payable and accrued liabilities	92	72
Accrued income taxes	(1,043)	489
Cash provided by operating activities from continuing operations	1,032	823
Investing Activities		
Capital expenditures	(185)	(164)
Acquisition of businesses, net of cash acquired	(9)	3
Business divestitures, net of cash divested	-	101
Other - net	24	27
Cash used in investing activities from continuing operations	(170)	(33)
Financing Activities		
Decrease in short and long-term debt - net	(10)	(962)
Stock repurchases	(861)	(45)
Payment of cash dividends	(208)	(240)
Proceeds from the exercise of stock options	60	27
Employee equity-based compensation withholding	(5)	(4)
Other - net	5	-
Cash used in financing activities from continuing operations	(1,019)	(1,224)
Discontinued Operations		
Net cash provided by (used in) operating activities	(658)	429
Net cash provided by (used in) investing activities	31	(60)
Net cash provided by financing activities	-	-
Net cash flows provided by (used in) discontinued operations	(627)	369
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(96)	(22)
Changes in cash held for sale	-	1
Decrease in cash, cash equivalents and restricted cash	$ (880)	$ (86)

JOHNSON CONTROLS INTERNATIONAL PLC

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions; unaudited)

	Twelve Months Ended September 30,	
	2019	2018
Operating Activities		
Net income attributable to JCI from continuing operations	$ 1,100	$ 1,175
Income from continuing operations attributable to noncontrolling interests	189	174
Net income from continuing operations	1,289	1,349
Adjustments to reconcile net income from continuing operations to cash provided by operating activities:		
Depreciation and amortization	825	824
Pension and postretirement benefit expense (income)	515	(170)
Pension and postretirement contributions	(53)	(56)
Equity in earnings of partially-owned affiliates, net of dividends received	(34)	(128)
Deferred income taxes	612	(739)
Non-cash restructuring and impairment costs	235	36
Gain on Scott Safety business divestiture	-	(114)
Other - net	124	71
Changes in assets and liabilities, excluding acquisitions and divestitures:		
Accounts receivable	(312)	(475)
Inventories	(72)	(103)
Other assets	(99)	(171)
Restructuring reserves	(121)	1
Accounts payable and accrued liabilities	56	340
Accrued income taxes	(1,222)	855
Cash provided by operating activities from continuing operations	1,743	1,520
Investing Activities		
Capital expenditures	(586)	(645)
Acquisition of businesses, net of cash acquired	(25)	(21)
Business divestitures, net of cash divested	12	2,202
Other - net	66	32
Cash provided by (used in) investing activities from continuing operations	(533)	1,568
Financing Activities		
Decrease in short and long-term debt - net	(3,629)	(2,472)
Debt financing costs	-	(4)
Stock repurchases	(5,983)	(300)
Payment of cash dividends	(920)	(954)
Proceeds from the exercise of stock options	171	66
Dividends paid to noncontrolling interests	(132)	(43)
Employee equity-based compensation withholding	(31)	(42)
Other - net	5	-
Cash used in financing activities from continuing operations	(10,519)	(3,749)
Discontinued Operations		
Net cash provided by (used in) operating activities	(541)	996
Net cash provided by (used in) investing activities	12,611	(372)
Net cash used in financing activities	(35)	(3)
Net cash flows provided by discontinued operations	12,035	621
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(120)	(106)
Changes in cash held for sale	15	14
Increase (decrease) in cash, cash equivalents and restricted cash	$ 2,621	$ (132)

FOOTNOTES

1. Financial Summary

The Company evaluates the performance of its business units primarily on segment earnings before interest, taxes and amortization (EBITA), which represents income from continuing operations before income taxes and noncontrolling interests, excluding general corporate expenses, intangible asset amortization, net financing charges, restructuring and impairment costs, and the net mark-to-market adjustments related to restricted asbestos investments and pension and postretirement plans. In the first quarter of fiscal 2019, the Company began reporting the Power Solutions business as a discontinued operation, which required retrospective application to previously reported financial information. As a result, the financial results shown below are for continuing operations and exclude the Power Solutions business.

(in millions; unaudited)	Three Months Ended September 30,				Twelve Months Ended September 30,			
	2019		2018		2019		2018	
	Actual	Adjusted Non-	Actual	Adjusted Non-	Actual	Adjusted Non-	Actual	Adjusted Non-
Net sales								
Building Solutions North America	$ 2,401	$ 2,401	$ 2,324	$ 2,324	$ 9,031	$ 9,031	$ 8,679	$ 8,679
Building Solutions EMEA/LA	948	948	948	948	3,655	3,655	3,696	3,696
Building Solutions Asia Pacific	726	726	689	689	2,658	2,658	2,553	2,553
Global Products	2,199	2,199	2,222	2,222	8,624	8,624	8,472	8,472
Net sales	$ 6,274	$ 6,274	$ 6,183	$ 6,183	$ 23,968	$ 23,968	$ 23,400	$ 23,400
Segment EBITA (1)								
Building Solutions North America	$ 346	$ 357	$ 329	$ 336	$ 1,153	$ 1,179	$ 1,109	$ 1,134
Building Solutions EMEA/LA	110	111	102	103	368	372	344	350
Building Solutions Asia Pacific	101	103	105	105	341	343	347	347
Global Products	405	419	389	395	1,179	1,349	1,338	1,251
Segment EBITA	962	990	925	939	3,041	3,243	3,138	3,082
Corporate expenses (2)	(172)	(89)	(142)	(95)	(405)	(376)	(584)	(416)
Amortization of intangible assets	(89)	(89)	(94)	(94)	(377)	(377)	(376)	(376)
Net mark-to-market adjustments (3)	(626)	-	24	-	(618)	-	24	-
Restructuring and impairment costs (4)	-	-	(101)	-	(235)	-	(255)	-
EBIT (5)	75	812	612	750	1,406	2,490	1,947	2,290
EBIT margin	1.2%	12.9%	9.9%	12.1%	5.9%	10.4%	8.3%	9.8%
Net financing charges (6)	(48)	(48)	(97)	(97)	(350)	(290)	(401)	(401)
Income from continuing operations before income taxes	27	764	515	653	1,056	2,200	1,546	1,889
Income tax benefit (provision) (7)	627	(103)	117	(79)	233	(297)	(197)	(229)
Income from continuing operations	654	661	632	574	1,289	1,903	1,349	1,660
Income from continuing operations attributable to noncontrolling interests	(42)	(46)	(40)	(40)	(189)	(193)	(174)	(174)
Net income from continuing operations attributable to JCI	$ 612	$ 615	$ 592	$ 534	$ 1,100	$ 1,710	$ 1,175	$ 1,486

(1) The Company's press release contains financial information regarding adjusted segment EBITA and adjusted segment EBITA margins, which are non-GAAP performance measures. The Company's definition of adjusted segment EBITA excludes special items because these costs are not considered to be directly related to the underlying operating performance of its businesses. Management believes these non-GAAP measures are useful to investors in understanding the ongoing operations and business trends of the Company.

The following is the three months ended September 30, 2019 and 2018 reconciliation of segment EBITA and segment EBITA margin as reported to adjusted segment EBITA and adjusted segment EBITA margin (unaudited):

(in millions)	Building Solutions North America		Building Solutions EMEA/LA		Building Solutions Asia Pacific		Global Products		Consolidated JCI plc	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Segment EBITA as reported	$ 346	$ 329	$ 110	$ 102	$ 101	$ 105	$ 405	$ 389	$ 962	$ 925
Segment EBITA margin as reported	14.4%	14.2%	11.6%	10.8%	13.9%	15.2%	18.4%	17.5%	15.3%	15.0%
Adjusting items:										
Integration costs	11	7	1	1	2	-	14	6	28	14
Adjusted segment EBITA	$ 357	$ 336	$ 111	$ 103	$ 103	$ 105	$ 419	$ 395	$ 990	$ 939
Adjusted segment EBITA margin	14.9%	14.5%	11.7%	10.9%	14.2%	15.2%	19.1%	17.8%	15.8%	15.2%

The following is the twelve months ended September 30, 2019 and 2018 reconciliation of segment EBITA and segment EBITA margin as reported to adjusted segment EBITA and adjusted segment EBITA margin (unaudited):

(in millions)	Building Solutions North America		Building Solutions EMEA/LA		Building Solutions Asia Pacific		Global Products		Consolidated JCI plc	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Segment EBITA as reported	$ 1,153	$ 1,109	$ 368	$ 344	$ 341	$ 347	$ 1,179	$ 1,338	$ 3,041	$ 3,138
Segment EBITA margin as reported	12.8%	12.8%	10.1%	9.3%	12.8%	13.6%	13.7%	15.8%	12.7%	13.4%
Adjusting items:										
Integration costs	26	25	4	6	2	-	30	27	62	58
Scott Safety gain on sale	-	-	-	-	-	-	-	(114)	-	(114)
Environmental reserve (8)	-	-	-	-	-	-	140	-	140	-
Adjusted segment EBITA	$ 1,179	$ 1,134	$ 372	$ 350	$ 343	$ 347	$ 1,349	$ 1,251	$ 3,243	$ 3,082
Adjusted segment EBITA margin	13.1%	13.1%	10.2%	9.5%	12.9%	13.6%	15.6%	14.8%	13.5%	13.2%

(2) Adjusted Corporate expenses for the three months ended September 30, 2019 excludes $79 million of integration costs and $4 million of transaction costs. Adjusted Corporate expenses for the twelve months ended September 30, 2019 excludes $244 million of integration costs and $11 million of transaction costs, partially offset by $226 million of income as a result of a tax indemnification reserve release. Adjusted Corporate expenses for the three months ended September 30, 2018 excludes $43 million of integration costs and $4 million of transaction costs. Adjusted Corporate expenses for the twelve months ended September 30, 2018 excludes $154 million of integration costs and $14 million of transaction costs.

(3) On October 1, 2018, the Company adopted Accounting Standards Update (ASU) No. 2016-01, "Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities." ASU No. 2016-01 amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments, including marketable securities. The new standard requires the mark-to-market of marketable securities investments previously recorded within accumulated other comprehensive income on the statement of financial position be recorded in the statement of income on a prospective basis beginning as of the adoption date. As these restricted investments do not relate to the underlying operating performance of its businesses, the Company's definition of adjusted segment EBITA and adjusted EBIT excludes the mark-to-market adjustments effective October 1, 2018. The three months ended September 30, 2019 exclude the net mark-to-market adjustments on restricted investments and pension and postretirement plans of $626 million. The twelve months ended September 30, 2019 exclude the net mark-to-market adjustments on restricted investments and pension and postretirement plans of $618 million. The three and twelve months ended September 30, 2018 exclude the net mark-to-market adjustments on pension and postretirement plans of $24 million.

(4) Restructuring and impairment costs for the twelve months ended September 30, 2019 of $235 million are excluded from the adjusted non-GAAP results. Restructuring and impairment costs for the three and twelve months ended September 30, 2018 of $101 million and $255 million, respectively, are excluded from the adjusted non-GAAP results. The restructuring actions and impairment costs for the twelve months ended September 30, 2019 result from the impairment of a Global Products business classified as held for sale. The restructuring and impairment costs for the twelve months ended September 30, 2018 are related primarily to workforce reductions, plant closures and asset impairments in the Building Technologies & Solutions business and at Corporate.

(5) Management defines earnings before interest and taxes (EBIT) as income from continuing operations before net financing charges, income taxes and noncontrolling interests.

(6) Adjusted net financing charges for the twelve months ended September 30, 2019 exclude a loss on debt extinguishment of $60 million.

(7) Adjusted income tax provision for the three months ended September 30, 2019 excludes tax benefits primarily related to tax audit reserve adjustments of $586 million, net mark-to-market adjustments of $132 million and integration costs of $12 million. Adjusted income tax provision for the twelve months ended September 30, 2019 excludes the tax benefits primarily related to tax audit reserve adjustments of $586 million, net mark-to-market adjustments of $130 million, restructuring and impairment charges of $53 million, integration costs of $34 million, an environmental reserve of $28 million and transaction costs of $1 million, partially offset by tax provisions primarily related to new U.S. tax regulations of $226 million and valuation allowance adjustments of $76 million as a result of changes in U.S. tax law. Adjusted income tax provision for the three months ended September 30, 2018 excludes the tax benefits for changes in entity tax status of $139 million, net tax provision changes related to the U.S. Tax Reform legislation of $96 million, restructuring and impairment costs of $13 million, integration costs of $3 million and transaction costs of $2 million, partially offset by tax provisions related to valuation allowance adjustments of $56 million and net mark-to-market adjustments of $1 million. Adjusted income tax provision for the twelve months ended September 30, 2018 excludes the tax benefits for changes in entity tax status of $139 million, restructuring and impairment costs of $36 million, tax audit settlements of $25 million, integration costs of $24 million and transaction costs of $3 million, partially offset by net tax provisions related to the U.S. Tax Reform legislation of $108 million, valuation allowance adjustments of $56 million, Scott Safety gain on sale of $30 million and net mark-to-market adjustments of $1 million.

(8) An environmental charge for the twelve months ended September 30, 2019 of $140 million is excluded from the adjusted non-GAAP results. The $140 million is related to remediation efforts to be undertaken to address contamination at our facilities in Marinette, Wisconsin. A substantial portion of the reserve relates to the remediation of fire-fighting foams containing PFAS compounds at or near our Fire Technology Center in Marinette.

2. Diluted Earnings Per Share Reconciliation

The Company's press release contains financial information regarding adjusted earnings per share, which is a non-GAAP performance measure. The adjusting items include transaction/integration costs, gain on sale of the Scott Safety business, net mark-to-market adjustments, restructuring and impairment costs, tax indemnification reserve release, environmental reserve, loss on extinguishment of debt, gain on sale of Power Solutions business, net of transaction and other costs, impact of ceasing the depreciation / amortization expense for the Power Solutions business as the business is held for sale and discrete tax items. The Company excludes these items because they are not considered to be directly related to the underlying operating performance of the Company. Management believes these non-GAAP measures are useful to investors in understanding the ongoing operations and business trends of the Company.

A reconciliation of diluted earnings per share as reported to adjusted diluted earnings per share for the respective periods is shown below (unaudited):

	Net Income Attributable to JCI plc		Net Income Attributable to JCI plc from Continuing Operations		Net Income Attributable to JCI plc		Net Income Attributable to JCI plc from Continuing Operations	
	Three Months Ended September 30,		Three Months Ended September 30,		Twelve Months Ended September 30,		Twelve Months Ended September 30,	
	2019	2018	2019	2018	2019	2018	2019	2018
Earnings per share as reported for JCI plc	$ 0.77	$ 0.83	$ 0.77	$ 0.64	$ 6.49	$ 2.32	$ 1.26	$ 1.26
Adjusting items:								
Transaction costs	0.01	0.01	0.01	-	0.01	0.02	0.01	0.02
Integration costs	0.14	0.06	0.14	0.06	0.35	0.23	0.35	0.23
Related tax impact	(0.02)	-	(0.02)	-	(0.04)	(0.03)	(0.04)	(0.03)
Scott Safety gain on sale	-	-	-	-	-	(0.12)	-	(0.12)
Related tax impact	-	-	-	-	-	0.03	-	0.03
Net mark-to-market adjustments	0.79	(0.01)	0.79	(0.03)	0.71	(0.01)	0.71	(0.03)
Related tax impact	(0.17)	-	(0.17)	-	(0.15)	-	(0.15)	-
Restructuring and impairment costs	-	0.12	-	0.11	0.27	0.29	0.27	0.27
Related tax impact	-	(0.02)	-	(0.01)	(0.06)	(0.04)	(0.06)	(0.04)
Tax indemnification reserve release	-	-	-	-	(0.26)	-	(0.26)	-
Environmental reserve	-	-	-	-	0.16	-	0.16	-
Related tax impact	-	-	-	-	(0.03)	-	(0.03)	-
Loss on extinguishment of debt	-	-	-	-	0.07	-	0.07	-
Power Solutions gain on sale, net of transaction and other costs	-	-	-	-	(5.95)	-	-	-
Related tax impact	-	-	-	-	1.43	-	-	-
Cease of Power Solutions depreciation / amortization expense	-	-	-	-	(0.13)	-	-	-
Related tax impact	-	-	-	-	0.03	-	-	-
Discrete tax items	(0.74)	(0.05)	(0.74)	(0.19)	(0.24)	0.14	(0.32)	-
Adjusted earnings per share for JCI plc*	$ 0.78	$ 0.93	$ 0.78	$ 0.57	$ 2.65	$ 2.83	$ 1.96	$ 1.59

* May not sum due to rounding

The following table reconciles the denominators used to calculate basic and diluted earnings per share for JCI plc (in millions; unaudited):

	Three Months Ended September 30,		Twelve Months Ended September 30,	
	2019	2018	2019	2018
Weighted average shares outstanding for JCI plc				
Basic weighted average shares outstanding	786.7	924.8	870.2	925.7
Effect of dilutive securities:				
Stock options, unvested restricted stock and unvested performance share awards	5.0	5.7	4.1	6.0
Diluted weighted average shares outstanding	791.7	930.5	874.3	931.7

The Company has presented forward-looking statements regarding adjusted EPS from continuing operations, organic net sales growth, organic adjusted EBITA growth, organic adjusted EBIT growth, adjusted segment EBITA margin, adjusted EBIT margin and adjusted free cash flow conversion for the full fiscal year of 2020, which are non-GAAP financial measures. These non-GAAP financial measures are derived by excluding certain amounts, expenses, income or cash flows from the corresponding financial measures determined in accordance with GAAP. The determination of the amounts that are excluded from these non-GAAP financial measures are a matter of management judgment and depends upon, among other factors, the nature of the underlying expense or income amounts recognized in a given period, including but not limited to the high variability of the net mark-to-market adjustments and the effect of foreign currency exchange fluctuations. Our fiscal 2020 outlook for organic net sales and adjusted EBITA and EBIT growth also excludes the effect of acquisitions, divestitures and foreign currency. We are unable to present a quantitative reconciliation of the aforementioned forward-looking non-GAAP financial measures to their most directly comparable forward-looking GAAP financial measures because such information is not available and management cannot reliably predict all of the necessary components of such GAAP measures without unreasonable effort or expense. The unavailable information could have a significant impact on the Company's full year 2020 GAAP financial results.

3. Organic Growth Reconciliation

The components of the changes in net sales for the three months ended September 30, 2019 versus the three months ended September 30, 2018, including organic growth, is shown below (unaudited):

(in millions)	Net Sales for the Three Months Ended September 30, 2018	Base Year Adjustments - Acquisitions and Divestitures		Adjusted Base Net Sales for the Three Months Ended September 30, 2018	Foreign Currency		Organic Growth		Net Sales for the Three Months Ended September 30 , 2019	
Building Solutions North America	$ 2,324	$ -	-	$ 2,324	$ (3)	-	$ 80	3%	$ 2,401	3%
Building Solutions EMEA/LA	948	(1)	-	947	(40)	-4%	41	4%	948	-
Building Solutions Asia Pacific	689	1	-	690	(11)	-2%	47	7%	726	5%
Total field	3,961	-	-	3,961	(54)	-1%	168	4%	4,075	3%
Global Products	2,222	(25)	-1%	2,197	(3)	-	5	-	2,199	-
Total net sales	$ 6,183	$ (25)	-	$ 6,158	$ (57)	-1%	$ 173	3%	$ 6,274	2%

The components of the changes in net sales for the twelve months ended September 30, 2019 versus the twelve months ended September 30, 2018, including organic growth, is shown below (unaudited):

(in millions)	Net Sales for the Twelve Months Ended September 30, 2018	Base Year Adjustments - Acquisitions and Divestitures		Adjusted Base Net Sales for the Twelve Months Ended September 30, 2018	Foreign Currency		Organic Growth		Net Sales for the Twelve Months Ended September 30, 2019	
Building Solutions North America	$ 8,679	$ -	-	$ 8,679	$ (28)	-	$ 380	4%	$ 9,031	4%
Building Solutions EMEA/LA	3,696	-	-	3,696	(206)	-6%	165	4%	3,655	-1%
Building Solutions Asia Pacific	2,553	1	-	2,554	(86)	-3%	190	7%	2,658	4%
Total field	14,928	1	-	14,929	(320)	-2%	735	5%	15,344	3%
Global Products	8,472	(151)	-2%	8,321	(143)	-2%	446	5%	8,624	4%
Total net sales	$ 23,400	$ (150)	-1%	$ 23,250	$ (463)	-2%	$ 1,181	5%	$ 23,968	3%

The components of the changes in segment EBITA and EBIT for the three months ended September 30, 2019 versus the three months ended September 30, 2018, including organic growth, is shown below (unaudited):

(in millions)	Adjusted Segment EBITA / EBIT for the Three Months Ended September 30, 2018	Base Year Adjustments - Acquisitions and Divestitures		Adjusted Base Segment EBITA / EBIT for the Three Months Ended September 30, 2018	Foreign Currency		Organic Growth		Adjusted Segment EBITA / EBIT for the Three Months Ended September 30, 2019	
Building Solutions North America	$ 336	$ -	-	$ 336	$ -	-	$ 21	6%	$ 357	6%
Building Solutions EMEA/LA	103	-	-	103	(9)	-9%	17	17%	111	8%
Building Solutions Asia Pacific	105	-	-	105	(1)	-1%	(1)	-1%	103	-2%
Total field	544	-	-	544	(10)	-2%	37	7%	571	5%
Global Products	395	(3)	-1%	392	(1)	-	28	7%	419	7%
Total adjusted segment EBITA	939	(3)	-	936	$ (11)	-1%	$ 65	7%	990	6%
Corporate expenses	(95)	-		(95)					(89)	6%
Amortization of intangible assets	(94)	-		(94)					(89)	5%
Total adjusted EBIT	$ 750	$ (3)		$ 747					$ 812	9%

The components of the changes in segment EBITA and EBIT for the twelve months ended September 30, 2019 versus the twelve months ended September 30, 2018, including organic growth, is shown below (unaudited):

(in millions)	Adjusted Segment EBITA / EBIT for the Twelve Months Ended September 30, 2018	Base Year Adjustments - Acquisitions and Divestitures		Adjusted Base Segment EBITA / EBIT for the Twelve Months Ended September 30, 2018	Foreign Currency		Organic Growth		Adjusted Segment EBITA / EBIT for the Twelve Months Ended September 30, 2019	
Building Solutions North America	$ 1,134	$ -	-	$ 1,134	$ (2)	-	$ 47	4%	$ 1,179	4%
Building Solutions EMEA/LA	350	1	-	351	(35)	-10%	56	16%	372	6%
Building Solutions Asia Pacific	347	-	-	347	(8)	-2%	4	1%	343	-1%
Total field	1,831	1	-	1,832	(45)	-2%	107	6%	1,894	3%
Global Products	1,251	(19)	-2%	1,232	(20)	-2%	137	11%	1,349	9%
Total adjusted segment EBITA	3,082	(18)	-1%	3,064	$ (65)	-2%	$ 244	8%	3,243	6%
Corporate expenses	(416)	-		(416)					(376)	10%
Amortization of intangible assets	(376)	2		(374)					(377)	-1%
Total adjusted EBIT	$ 2,290	$ (16)		$ 2,274					$ 2,490	9%

4. Adjusted Free Cash Flow Reconciliation

The Company's press release contains financial information regarding free cash flow, adjusted free cash flow and adjusted free cash flow conversion, which are non-GAAP performance measures. Free cash flow is defined as cash provided by operating activities less capital expenditures. Adjusted free cash flow excludes special items, as included in the table below, because these cash flows are not considered to be directly related to its underlying businesses. Adjusted free cash flow conversion is defined as adjusted free cash flow divided by adjusted net income. Management believes these non-GAAP measures are useful to investors in understanding the strength of the Company and its ability to generate cash.

The following is the three months and twelve months ended September 30, 2019 and 2018 reconciliation of free cash flow, adjusted free cash flow and adjusted free cash flow conversion for continuing operations (unaudited):

(in billions)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Twelve Months Ended September 30, 2019	Twelve Months Ended September 30, 2018
Cash provided by operating activities from continuing operations	$ 1.0	$ 0.8	$ 1.7	$ 1.5
Capital expenditures	(0.2)	(0.2)	(0.6)	(0.6)
Reported free cash flow *	0.8	0.7	1.2	0.9
Adjusting items:				
Transaction/integration costs	0.1	0.1	0.3	0.3
Restructuring payments	-	-	0.1	0.2
Nonrecurring tax payments, net of refunds	0.1	0.1	0.1	-
Total adjusting items	0.2	0.2	0.5	0.5
Adjusted free cash flow	$ 1.0	$ 0.9	$ 1.7	$ 1.4
Adjusted net income from continuing operations attributable to JCI	$ 0.6	$ 0.5	$ 1.7	$ 1.5
Adjusted free cash flow conversion	167%	180%	99%	93%

* May not sum due to rounding

5. Net Debt to Capitalization

The Company provides financial information regarding net debt as a percentage of total capitalization, which is a non-GAAP performance measure. The Company believes the percentage of total net debt to total capitalization is useful to understanding the Company's financial condition as it provides a review of the extent to which the Company relies on external debt financing for its funding and is a measure of risk to its shareholders. The following is the September 30, 2019 and September 30, 2018 calculation of net debt as a percentage of total capitalization (unaudited):

(in millions)	September 30, 2019	September 30, 2018
Short-term debt and current portion of long-term debt	$ 511	$ 1,307
Long-term debt	6,708	9,623
Total debt	7,219	10,930
Less: cash and cash equivalents	2,805	185
Total net debt	4,414	10,745
Shareholders' equity attributable to JCI	19,766	21,164
Total capitalization	$ 24,180	$ 31,909
Total net debt as a % of total capitalization	18.3%	33.7%

6. Divestitures

On November 13, 2018, the Company entered into a definitive agreement to sell its Power Solutions business to BCP Acquisitions LLC for approximately $13.2 billion. BCP Acquisitions LLC is a newly-formed entity controlled by investment funds managed by Brookfield Capital Partners LLC. The transaction closed on April 30, 2019 with net cash proceeds of $11.6 billion after tax and transaction-related expenses, and the Company recorded a gain, net of transaction and other costs, of $5.2 billion ($4.0 billion after tax).

On March 16, 2017, the Company announced that it signed a definitive agreement to sell its Scott Safety business to 3M for approximately $2.0 billion. The transaction closed on October 4, 2017. Net cash proceeds from the transaction approximated $1.9 billion and the Company recorded a net gain of $114 million ($84 million after tax). Scott Safety is a leader in the design, manufacture and sale of high performance respiratory protection, gas and flame detection, thermal imaging and other critical products for fire services, law enforcement, industrial, oil and gas, chemical, armed forces, and homeland defense end markets.

7. Income Taxes

The Company's effective tax rate from continuing operations before consideration of transaction/integration costs, gain on sale of the Scott Safety business, net mark-to-market adjustments, environmental reserve, tax indemnification reserve release, restructuring and impairment costs, loss on extinguishment of debt and discrete tax items for the three and twelve months ending September 30, 2019 is approximately 13.5%, and for the three and twelve months ending September 30, 2018 is approximately 12.1%.

8. Restructuring and Impairment Costs

The twelve months ended September 30, 2019 include restructuring and impairment costs of $235 million related to the impairment of a Global Products business classified as held for sale. The three and twelve months ended September 30, 2018 include restructuring and impairment costs of $101 million and $255 million, respectively, related primarily to workforce reductions, plant closures and asset impairments in the Building Technologies & Solutions business and at Corporate.