UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the Quarterly Period Ended June 30, 2023

OR

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

Commission file number: **001-11625**

PENTAIR

Pentair plc

(Exact name of Registrant as specified in its charter)

Ireland	**98-1141328**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Regal House, 70 London Road, Twickenham, London, TW13QS United Kingdom

(Address of principal executive offices)

Registrant’s telephone number, including area code: **44-74-9421-6154**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary Shares, nominal value $0.01 per share	PNR	New York Stock Exchange

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, every Interactive Data File required to be submitted 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 such files). Yes ☑ No ☐

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

Large accelerated filer	☑	Accelerated filer	☐	Non-accelerated filer	☐	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 ☑

On June 30, 2023, 165,113,324 shares of Registrant’s common stock were outstanding.

Pentair plc and Subsidiaries

PART I FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Operations and Comprehensive Income (Unaudited)

	Three months ended		Six months ended	
In millions, except per-share data	**June 30, 2023**	**June 30, 2022**	**June 30, 2023**	**June 30, 2022**
Net sales	$ 1,082.5	$ 1,064.2	$ 2,111.1	$ 2,063.8
Cost of goods sold	683.0	704.7	1,329.8	1,372.1
Gross profit	399.5	359.5	781.3	691.7
Selling, general and administrative expenses	165.1	145.6	338.4	309.7
Research and development expenses	25.9	23.1	50.8	45.4
Operating income	208.5	190.8	392.1	336.6
Other (income) expense				
Net interest expense	31.8	9.2	64.2	14.9
Other (income) expense	(4.8)	0.1	(4.1)	0.2
Income from continuing operations before income taxes	181.5	181.5	332.0	321.5
Provision for income taxes	27.3	28.5	49.3	50.0
Net income from continuing operations	154.2	153.0	282.7	271.5
Loss from discontinued operations, net of tax	(1.3)	(0.1)	(0.1)	(1.0)
Net income	$ 152.9	$ 152.9	$ 282.6	$ 270.5
Comprehensive income, net of tax				
Net income	$ 152.9	$ 152.9	$ 282.6	$ 270.5
Changes in cumulative translation adjustment	(2.2)	(46.8)	9.9	(54.2)
Changes in market value of derivative financial instruments, net of tax	(0.3)	31.4	(7.5)	38.0
Comprehensive income	$ 150.4	$ 137.5	$ 285.0	$ 254.3
Earnings (loss) per ordinary share				
Basic				
Continuing operations	$ 0.94	$ 0.93	$ 1.71	$ 1.65
Discontinued operations	(0.01)	—	—	(0.01)
Basic earnings per ordinary share	$ 0.93	$ 0.93	$ 1.71	$ 1.64
Diluted				
Continuing operations	$ 0.93	$ 0.92	$ 1.70	$ 1.64
Discontinued operations	(0.01)	—	—	(0.01)
Diluted earnings per ordinary share	$ 0.92	$ 0.92	$ 1.70	$ 1.63
Weighted average ordinary shares outstanding				
Basic	165.0	164.8	164.9	165.0
Diluted	166.1	165.5	165.9	166.0

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)

In millions, except per-share data	June 30, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	$ 141.6	$ 108.9
Accounts receivable, net of allowances of $10.9 and $10.8, respectively	527.2	531.5
Inventories	753.9	790.0
Other current assets	147.3	128.1
Total current assets	1,570.0	1,558.5
Property, plant and equipment, net	349.9	344.5
Other assets		
Goodwill	3,265.5	3,252.6
Intangibles, net	1,068.4	1,094.6
Other non-current assets	254.5	197.3
Total other assets	4,588.4	4,544.5
Total assets	$ 6,508.3	$ 6,447.5
Liabilities and Equity		
Current liabilities		
Accounts payable	$ 329.7	$ 355.0
Employee compensation and benefits	106.1	106.0
Other current liabilities	624.8	602.1
Total current liabilities	1,060.6	1,063.1
Other liabilities		
Long-term debt	2,114.7	2,317.3
Pension and other post-retirement compensation and benefits	69.8	70.8
Deferred tax liabilities	41.8	43.3
Other non-current liabilities	286.1	244.9
Total liabilities	3,573.0	3,739.4
Commitments and contingencies (Note 16)		
Equity		
Ordinary shares $0.01 par value, 426.0 authorized, 165.1 and 164.5 issued at June 30, 2023 and December 31, 2022, respectively	1.7	1.7
Additional paid-in capital	1,569.8	1,554.9
Retained earnings	1,600.4	1,390.5
Accumulated other comprehensive loss	(236.6)	(239.0)
Total equity	2,935.3	2,708.1
Total liabilities and equity	$ 6,508.3	$ 6,447.5

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Cash Flows (Unaudited)

In millions	Six months ended June 30, 2023	Six months ended June 30, 2022
Operating activities		
Net income	$ 282.6	$ 270.5
Loss from discontinued operations, net of tax	0.1	1.0
Adjustments to reconcile net income from continuing operations to net cash provided by (used for) operating activities		
Equity income of unconsolidated subsidiaries	(0.8)	(0.9)
Depreciation	29.4	26.5
Amortization	27.7	12.9
Deferred income taxes	(31.9)	(16.9)
Share-based compensation	14.1	13.2
Asset impairment and write-offs	4.4	—
Amortization of bridge financing fees	—	7.7
Gain on sale of assets	(3.4)	(2.3)
Changes in assets and liabilities, net of effects of business acquisitions		
Accounts receivable	7.4	31.4
Inventories	33.6	(144.1)
Other current assets	(16.7)	(31.7)
Accounts payable	(25.8)	(10.0)
Employee compensation and benefits	(1.2)	(35.7)
Other current liabilities	22.1	60.4
Other non-current assets and liabilities	(1.5)	(5.7)
Net cash provided by operating activities of continuing operations	340.1	176.3
Net cash used for operating activities of discontinued operations	(1.6)	(1.0)
Net cash provided by operating activities	338.5	175.3
Investing activities		
Capital expenditures	(35.4)	(40.1)
Proceeds from sale of property and equipment	5.0	2.9
Settlement of net investment hedges	—	8.8
Acquisitions, net of cash acquired	0.2	(1.4)
Other	4.1	—
Net cash used for investing activities	(26.1)	(29.8)
Financing activities		
Net (repayments) borrowings of revolving long-term debt	(204.3)	19.8
Debt issuance costs	—	(8.9)
Shares issued to employees, net of shares withheld	0.8	(5.4)
Repurchases of ordinary shares	—	(50.0)
Dividends paid	(72.5)	(69.5)
Receipts upon the maturity of cross currency swaps	—	0.2
Net cash used for financing activities	(276.0)	(113.8)
Effect of exchange rate changes on cash and cash equivalents	(3.7)	8.9
Change in cash and cash equivalents	32.7	40.6
Cash and cash equivalents, beginning of period	108.9	94.5
Cash and cash equivalents, end of period	$ 141.6	$ 135.1

See accompanying notes to condensed consolidated financial statements.

Pentair plc and Subsidiaries
Condensed Consolidated Statements of Changes in Equity (Unaudited)

In millions	Ordinary shares Number	Ordinary shares Amount	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance - December 31, 2022	164.5	$ 1.7	$ 1,554.9	$ 1,390.5	$ (239.0)	$ 2,708.1
Net income	—	—	—	129.7	—	129.7
Other comprehensive income, net of tax	—	—	—	—	4.9	4.9
Dividends declared, $0.22 per share	—	—	—	(36.3)	—	(36.3)
Exercise of options, net of shares tendered for payment	0.1	—	2.5	—	—	2.5
Issuance of restricted shares, net of cancellations	0.5	—	(2.3)	—	—	(2.3)
Shares surrendered by employees to pay taxes	(0.1)	—	(4.3)	—	—	(4.3)
Share-based compensation	—	—	7.2	—	—	7.2
Balance - March 31, 2023	165.0	$ 1.7	$ 1,558.0	$ 1,483.9	$ (234.1)	$ 2,809.5
Net income	—	—	—	152.9	—	152.9
Other comprehensive loss, net of tax	—	—	—	—	(2.5)	(2.5)
Dividends declared, $0.22 per share	—	—	—	(36.4)	—	(36.4)
Exercise of options, net of shares tendered for payment	0.1	—	6.3	—	—	6.3
Shares surrendered by employees to pay taxes	—	—	(1.4)	—	—	(1.4)
Share-based compensation	—	—	6.9	—	—	6.9
Balance - June 30, 2023	165.1	$ 1.7	$ 1,569.8	$ 1,600.4	$ (236.6)	$ 2,935.3

In millions	Ordinary shares Number	Ordinary shares Amount	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance - December 31, 2021	165.1	$ 1.7	$ 1,582.7	$ 1,051.4	$ (213.9)	$ 2,421.9
Net income	—	—	—	117.6	—	117.6
Other comprehensive loss, net of tax	—	—	—	—	(0.8)	(0.8)
Dividends declared, $0.21 per share	—	—	—	(36.4)	—	(36.4)
Exercise of options, net of shares tendered for payment	—	—	0.5	—	—	0.5
Issuance of restricted shares, net of cancellations	0.4	—	(2.2)	—	—	(2.2)
Shares surrendered by employees to pay taxes	(0.1)	—	(3.6)	—	—	(3.6)
Share-based compensation	—	—	6.9	—	—	6.9
Balance - March 31, 2022	165.4	$ 1.7	$ 1,584.3	$ 1,132.6	$ (214.7)	$ 2,503.9
Net income	—	—	—	152.9	—	152.9
Other comprehensive loss, net of tax	—	—	—	—	(15.4)	(15.4)
Dividends declared, $0.21 per share	—	—	—	(34.6)	—	(34.6)
Share repurchases	(0.9)	—	(50.0)	—	—	(50.0)
Exercise of options, net of shares tendered for payment	—	—	0.2	—	—	0.2
Shares surrendered by employees to pay taxes	—	—	(0.3)	—	—	(0.3)
Share-based compensation	—	—	6.3	—	—	6.3
Balance - June 30, 2022	164.5	$ 1.7	$ 1,540.5	$ 1,250.9	$ (230.1)	$ 2,563.0

See accompanying notes to condensed consolidated financial statements.

1. Basis of Presentation and Responsibility for Interim Financial Statements

The accompanying unaudited condensed consolidated financial statements of Pentair plc and its subsidiaries ("we," "us," "our," "Pentair," or the "Company") have been prepared following the requirements of the United States ("U.S.") Securities and Exchange Commission for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by accounting principles generally accepted in the United States of America ("GAAP") can be condensed or omitted.

We are responsible for the unaudited condensed consolidated financial statements included in this document. The financial statements include all normal recurring adjustments that are considered necessary for the fair presentation of our financial position and operating results. As these are condensed financial statements, one should also read our consolidated financial statements and notes thereto, which are included in our Annual Report on Form 10-K for the year ended December 31, 2022.

Revenues, expenses, cash flows, assets and liabilities can and do vary during each quarter of the year. Therefore, the results and trends in these interim financial statements may not be indicative of those for a full year.

Our fiscal year ends on December 31. We report our interim quarterly periods on a calendar quarter basis.

2. Revenue

We disaggregate our revenue from contracts with customers by segment, geographic location and vertical market, as we believe these best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors. Refer to Note 15 for revenue disaggregated by segment.

Geographic net sales information, based on geographic destination of the sale, was as follows:

	Three months ended		Six months ended	
In millions	**June 30, 2023**	**June 30, 2022**	**June 30, 2023**	**June 30, 2022**
U.S.	$ 757.6	$ 757.0	$ 1,473.4	$ 1,463.0
Western Europe	119.5	115.9	247.3	233.8
Developing [(1)]	142.5	127.4	263.6	238.0
Other Developed [(2)]	62.9	63.9	126.8	129.0
Consolidated net sales	$ 1,082.5	$ 1,064.2	$ 2,111.1	$ 2,063.8

[(1)] Developing includes China, Eastern Europe, Latin America, the Middle East and Southeast Asia.
[(2)] Other Developed includes Australia, Canada and Japan.

Vertical market net sales information was as follows:

	Three months ended		Six months ended	
In millions	**June 30, 2023**	**June 30, 2022**	**June 30, 2023**	**June 30, 2022**
Residential	$ 536.0	$ 730.3	$ 1,102.4	$ 1,413.1
Commercial	344.8	161.9	618.1	311.6
Industrial	201.7	172.0	390.6	339.1
Consolidated net sales	$ 1082.5	$ 1,064.2	$ 2,111.1	$ 2,063.8

Performance obligations

On June 30, 2023, we had $121.4 million of remaining performance obligations on contracts with an original expected duration of one year or more. We expect to recognize the majority of our remaining performance obligations on these contracts within the next 12 to 18 months.

Contract assets and liabilities
Contract assets and liabilities consisted of the following:

In millions	June 30, 2023	December 31, 2022	$ Change	% Change
Contract assets	$ 57.8	$ 48.4	$ 9.4	19.4 %
Contract liabilities	61.3	58.1	3.2	5.5 %
Net contract liabilities	$ (3.5)	$ (9.7)	$ 6.2	(63.9)%

The $6.2 million decrease in net contract liabilities from December 31, 2022 to June 30, 2023 was primarily the result of timing of milestone payments. Approximately 80% of our contract liabilities at December 31, 2022 were recognized in revenue in the first half of 2023.

3. Acquisitions

In July 2022, as part of our Water Solutions reporting segment, we acquired the issued and outstanding equity securities of certain subsidiaries of Welbilt, Inc. ("Welbilt") and certain other assets, rights, and properties, and assumed certain liabilities, comprising Welbilt's Manitowoc Ice business ("Manitowoc Ice"), for approximately $1.6 billion in cash.

Manitowoc Ice is a designer, manufacturer and distributor of commercial ice machines. The acquisition of Manitowoc Ice allows us to enhance and deliver our total water management offerings to an expanded network of channel partners and customers.

The purchase price has been preliminarily allocated based on the estimated fair value of assets acquired and liabilities assumed at the date of the Manitowoc Ice acquisition. The preliminary purchase price allocation is subject to further refinement and may require significant adjustments to arrive at the final purchase price allocation. These changes will primarily relate to income tax-related items. We expect the final purchase price allocation to be completed by the third quarter of 2023. There can be no assurance that such finalization will not result in material changes from the preliminary purchase price allocation.

The following table summarizes our preliminary estimates of the fair values of the assets acquired and liabilities assumed in the Manitowoc Ice acquisition as previously reported as of December 31, 2022 and revised as of June 30, 2023:

In millions	As Previously Reported	As Revised
Cash	$ 33.8	$ 33.8
Accounts receivable	36.7	36.7
Inventories	66.5	66.8
Other current assets	3.9	3.9
Property, plant and equipment	21.6	21.6
Identifiable intangible assets	728.3	728.3
Goodwill	790.5	791.0
Other assets	1.8	1.8
Current liabilities	(66.5)	(67.5)
Other liabilities	(3.3)	(3.3)
Purchase price	$ 1,613.3	$ 1,613.1

The excess of purchase price over tangible net assets and identified intangible assets acquired has been preliminarily allocated to goodwill in the amount of $791.0 million, all of which is expected to be deductible for income tax purposes. Goodwill recognized from the Manitowoc Ice acquisition primarily reflects the future economic benefit resulting from synergies of our combined operations.

Identifiable intangible assets acquired as part of the Manitowoc Ice acquisition include $78.4 million of indefinite-lived trade name intangible assets, $588.4 million of definite-lived customer relationships with a weighted-average estimated useful life of 20 years, $47.1 million of definite-lived proprietary technology intangible assets with a weighted-average estimated useful life of 10 years and $14.4 million of other definite-lived intangible assets with a weighted-average estimated useful life of four months. The fair values of trade names and proprietary technology acquired in the acquisition were determined using a relief-from-royalty method, and customer relationships and other definite-lived intangible assets acquired were determined using a multi-period excess earnings method. These methods utilize unobservable inputs that are significant to these fair value measurements and thus classified as Level 3 of the fair value hierarchy described in Note 11.

The following table presents unaudited pro forma financial information as if the Manitowoc Ice acquisition had occurred on January 1, 2021:

In millions, except per share data	**Three months ended June 30, 2022**	**Six months ended June 30, 2022**
Pro forma net sales	$ 1,166.7	$ 2,241.1
Pro forma net income from continuing operations	162.9	286.0
Pro forma earnings per ordinary share - continuing operations		
Basic	$ 0.99	$ 1.73
Diluted	0.98	1.72

The unaudited pro forma net income from continuing operations includes Manitowoc Ice's identifiable intangible asset amortization expense of $8.5 million for the three months ended June 30, 2022, and $17.1 million for the six months ended June 30, 2022. The unaudited pro forma net income from continuing operations for the three and six months ended June 30, 2022 excludes the impact of $6.6 million and $15.5 million, respectively, of transaction-related charges and acquisition-related bridge financing costs.

The pro forma condensed consolidated financial information has been prepared for comparative purposes only and includes certain adjustments, as noted above. The adjustments are estimates based on currently available information and actual amounts may differ materially from these estimates. They do not reflect the effect of costs or synergies that would have been expected to result from the integration of the Manitowoc Ice acquisition. The pro forma information does not purport to be indicative of the results of operations that actually would have resulted had the Manitowoc Ice acquisition occurred on January 1, 2021.

4. Share Plans

Total share-based compensation expense for the three and six months ended June 30, 2023 and 2022 was as follows:

	Three months ended		Six months ended	
In millions	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Restricted stock units	$ 3.7	$ 3.3	$ 7.4	$ 6.9
Stock options	1.0	0.9	2.1	1.9
Performance share units	2.2	2.1	4.6	4.4
Total share-based compensation expense	$ 6.9	$ 6.3	$ 14.1	$ 13.2

In the first quarter of 2023, we issued our annual share-based compensation grants under the Pentair plc 2020 Share and Incentive Plan to eligible employees. The total number of awards issued was approximately 0.9 million, of which 0.3 million were restricted stock units ("RSUs"), 0.4 million were stock options and 0.2 million were performance share units ("PSUs"). The weighted-average grant date fair value of the RSUs, stock options and PSUs issued was $51.11, $14.03, and $46.39, respectively.

We estimated the fair value of each stock option award issued in the annual share-based compensation grant using a Black-Scholes option pricing model, modified for dividends and using the following assumptions:

	2023 Annual Grant
Risk-free interest rate	4.00 %
Expected dividend yield	2.02 %
Expected share price volatility	30.40 %
Expected term (years)	6.1

These estimates require us to make assumptions based on historical results, observance of trends in our share price, changes in option exercise behavior, future expectations and other relevant factors. If other assumptions had been used, share-based compensation expense, as calculated and recorded under the accounting guidance, could have been affected. We based the expected life assumption on historical experience as well as the terms and vesting periods of the options granted. For purposes of determining expected share price volatility, we considered a rolling average of historical volatility measured over a period approximately equal to the expected option term. The risk-free interest rate for periods that coincide with the expected life of the options is based on the U.S. Treasury Department yield curve in effect at the time of grant.

5. Restructuring and Transformation Program

In 2021, we launched and committed resources to a program designed to accelerate growth and drive margin expansion through transformation of our business model to drive operational excellence, reduce complexity and streamline our processes (the "Transformation Program"). The Transformation Program is structured in multiple phases and is expected to empower us to work more efficiently and optimize our business to better serve our customers while meeting our financial objectives.

During the six months ended June 30, 2023, we initiated and continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business. In addition, we have continued to execute certain initiatives associated with the Transformation Program. These initiatives included a reduction in hourly and salaried headcount of approximately 220 employees during the six months ended June 30, 2023.

Restructuring and transformation-related costs included within *Cost of goods sold* and *Selling, general and administrative expenses* in the Condensed Consolidated Statements of Operations and Comprehensive Income included the following:

	Three months ended		Six months ended	
In millions	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Restructuring Initiatives				
Severance and related costs	$ 0.9	$ 0.8	$ 3.4	$ 2.7
Other restructuring costs and related adjustments [1]	(0.1)	0.2	0.5	0.2
Total restructuring costs	0.8	1.0	3.9	2.9
Transformation Program				
Severance and related costs	0.3	—	2.2	—
Other transformation costs [2]	5.7	5.2	12.3	10.7
Total transformation costs	6.0	5.2	14.5	10.7
Total restructuring and transformation costs	$ 6.8	$ 6.2	$ 18.4	$ 13.6

(1) Other restructuring costs and related adjustments primarily consist of certain accruals, various contract termination costs, asset impairments and inventory write-offs associated with business and product line exits.

(2) Other transformation costs primarily consist of professional services and project management and related costs, partially offset by gain on sale of assets.

Restructuring and transformation costs by reportable segment were as follows:

	Three months ended		Six months ended	
In millions	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Industrial & Flow Technologies	$ 0.8	$ 0.6	$ 1.2	$ 1.2
Water Solutions	(2.6)	0.1	(1.1)	0.4
Pool	1.9	0.4	5.2	1.4
Other	6.7	5.1	13.1	10.6
Consolidated	$ 6.8	$ 6.2	$ 18.4	$ 13.6

Activity related to accrued severance and related costs recorded in *Other current liabilities* in the Condensed Consolidated Balance Sheets is summarized as follows for the six months ended June 30, 2023:

In millions	June 30, 2023
Beginning balance	$ 23.2
Costs incurred	5.6
Cash payments and other	(15.7)
Ending balance	$ 13.1

6. Earnings Per Share

Basic and diluted earnings per share were calculated as follows:

	Three months ended				Six months ended			
In millions, except per-share data		June 30, 2023		June 30, 2022		June 30, 2023		June 30, 2022
Net income	$	152.9	$	152.9	$	282.6	$	270.5
Net income from continuing operations	$	154.2	$	153.0	$	282.7	$	271.5
Weighted average ordinary shares outstanding								
Basic		165.0		164.8		164.9		165.0
Dilutive impact of stock options, restricted stock units and performance share units		1.1		0.7		1.0		1.0
Diluted		166.1		165.5		165.9		166.0
Earnings (loss) per ordinary share								
Basic								
Continuing operations	$	0.94	$	0.93	$	1.71	$	1.65
Discontinued operations		(0.01)		—		—		(0.01)
Basic earnings per ordinary share	$	0.93	$	0.93	$	1.71	$	1.64
Diluted								
Continuing operations	$	0.93	$	0.92	$	1.70	$	1.64
Discontinued operations		(0.01)		—		—		(0.01)
Diluted earnings per ordinary share	$	0.92	$	0.92	$	1.70	$	1.63
Anti-dilutive stock options excluded from the calculation of diluted earnings per share		0.3		0.9		0.6		0.7

7. Accounts Receivable

All trade receivables are reported on our Condensed Consolidated Balance Sheets at the outstanding principal amount adjusted for any allowance for credit losses and write-offs, net of recoveries. We record an allowance for credit losses, reducing our receivables balance to an amount we estimate is collectible from our customers. Estimates used in determining the allowance for credit losses are based on current trends, aging of accounts receivable, periodic credit evaluations of our customers' financial condition, and historical collection experience as well as reasonable and supportable forecasts of future economic conditions. Write-offs are recorded at the time all collection efforts have been exhausted. We generally do not require collateral. We review our allowance for credit losses on a quarterly basis.

Activity related to our allowance for credit losses is summarized as follows for the six months ended June 30, 2023:

In millions		June 30, 2023
Beginning balance	$	10.8
Bad debt expense (benefit)		(0.9)
Write-offs, net of recoveries		(0.3)
Other [(1)]		1.3
Ending balance	$	10.9

[(1)] Other amounts are primarily the effects of changes in currency translation and the impact of allowance for credits.

8. Supplemental Balance Sheet Information

In millions	June 30, 2023	December 31, 2022
Inventories		
Raw materials and supplies	$ 396.2	$ 404.1
Work-in-process	102.3	95.6
Finished goods	255.4	290.3
Total inventories	$ 753.9	$ 790.0
Other current assets		
Cost in excess of billings	$ 57.8	$ 48.4
Prepaid expenses	83.3	74.8
Other current assets	6.2	4.9
Total other current assets	$ 147.3	$ 128.1
Property, plant and equipment, net		
Land and land improvements	$ 31.9	$ 32.3
Buildings and leasehold improvements	223.9	200.7
Machinery and equipment	643.3	639.2
Capitalized software	71.2	68.8
Construction in progress	50.9	60.6
Total property, plant and equipment	1,021.2	1,001.6
Accumulated depreciation and amortization	671.3	657.1
Total property, plant and equipment, net	$ 349.9	$ 344.5
Other non-current assets		
Right-of-use lease assets	$ 96.5	$ 78.6
Deferred income taxes	54.3	26.0
Deferred compensation plan assets	24.1	21.7
Other non-current assets	79.6	71.0
Total other non-current assets	$ 254.5	$ 197.3
Other current liabilities		
Dividends payable	$ 36.4	$ 36.2
Accrued warranty	67.7	63.1
Accrued rebates and incentives	212.6	200.1
Accrued freight	36.5	39.4
Billings in excess of cost	51.4	43.8
Current lease liability	26.1	29.3
Income taxes payable	39.3	21.8
Accrued restructuring	13.1	23.2
Interest payable	29.5	32.9
Other current liabilities	112.2	112.3
Total other current liabilities	$ 624.8	$ 602.1
Other non-current liabilities		
Long-term lease liability	$ 73.9	$ 52.4
Income taxes payable	34.4	35.1
Self-insurance liabilities	51.6	52.1
Deferred compensation plan liabilities	24.1	21.7
Foreign currency contract liabilities	70.1	52.2
Other non-current liabilities	32.0	31.4
Total other non-current liabilities	$ 286.1	$ 244.9

9. Goodwill and Other Identifiable Intangible Assets

The changes in the carrying amount of goodwill by reportable segment were as follows:

In millions	December 31, 2022	Purchase Accounting Adjustments	Foreign Currency Translation	June 30, 2023
Industrial & Flow Technologies	$ 747.6	$ —	$ 10.9	$ 758.5
Water Solutions	1,398.1	0.5	1.5	1,400.1
Pool	1,106.9	—	—	1,106.9
Total goodwill	$ 3,252.6	$ 0.5	$ 12.4	$ 3,265.5

Identifiable intangible assets consisted of the following:

	June 30, 2023			December 31, 2022		
In millions	Cost	Accumulated amortization	Net	Cost	Accumulated amortization	Net
Definite-life intangibles						
Customer relationships	$ 1,103.2	$ (335.2)	$ 768.0	$ 1,100.9	$ (308.9)	$ 792.0
Proprietary technology and patents	89.4	(39.4)	50.0	89.3	(35.6)	53.7
Other	—	—	—	14.4	(14.4)	—
Total definite-life intangibles	1,192.6	(374.6)	818.0	1,204.6	(358.9)	845.7
Indefinite-life intangibles						
Trade names	250.4	—	250.4	248.9	—	248.9
Total intangibles	$ 1,443.0	$ (374.6)	$ 1,068.4	$ 1,453.5	$ (358.9)	$ 1,094.6

Identifiable intangible asset amortization expense was $13.9 million and $6.3 million for the three months ended June 30, 2023 and 2022 and $27.7 million and $12.9 million for the six months ended June 30, 2023 and 2022, respectively.

Estimated future amortization expense for identifiable intangible assets during the remainder of 2023 and the next five years is as follows:

	Q3-Q4 2023	2024	2025	2026	2027	2028
Estimated amortization expense	$ 27.3	$ 54.1	$ 54.1	$ 52.8	$ 51.5	$ 49.0

10. Debt

Debt and the average interest rates on debt outstanding were as follows:

In millions	Average interest rate as of June 30, 2023	Maturity Year	June 30, 2023	December 31, 2022
Revolving credit facility (Senior Credit Facility)	6.303%	2026	$ 115.7	$ 320.0
Term Loan Facility	6.461%	2023 - 2027	1,000.0	1,000.0
Term loans (Senior Credit Facility)	6.443%	2024	200.0	200.0
Senior notes - fixed rate [1]	4.650%	2025	19.3	19.3
Senior notes - fixed rate [1]	4.500%	2029	400.0	400.0
Senior notes - fixed rate [1]	5.900%	2032	400.0	400.0
Unamortized debt issuance costs and discounts	N/A	N/A	(20.3)	(22.0)
Total debt			$ 2,114.7	$ 2,317.3

[1] Senior notes are guaranteed as to payment by Pentair plc.

Pentair, Pentair Finance S.à r.l (“PFSA“) and Pentair, Inc. are parties to a credit agreement (the “Senior Credit Facility”), with Pentair as guarantor and PFSA and Pentair, Inc. as borrowers, which was amended and restated in December 2021 and further amended in December 2022, providing for a $900.0 million senior unsecured revolving credit facility and a $200.0 million senior unsecured term loan facility. The revolving credit facility has a maturity date of December 16, 2026 and the term loan facility has a maturity date of December 16, 2024. Borrowings under the Senior Credit Facility bear interest at a rate equal to an alternate base rate, adjusted term secured overnight financing rate, adjusted euro interbank offered rate, adjusted daily simple secured overnight financing rate or central bank rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA’s election, Pentair’s leverage level or PFSA’s public credit rating.

As of June 30, 2023, total availability under the Senior Credit Facility was $784.3 million. In addition, PFSA has the option to request to increase the revolving credit facility and/or to enter into one or more additional tranches of term loans in an aggregate amount of up to $300.0 million, subject to customary conditions, including the commitment of the participating lenders.

In March 2022, in contemplation of the acquisition of Manitowoc Ice, Pentair and PFSA entered into a Loan Agreement among PFSA, as borrower, Pentair, as guarantor, and the lenders and agents party thereto, providing for a $600.0 million senior unsecured term loan facility (the “Term Loan Facility”). In June 2022, the Term Loan Facility was amended to increase the facility by $400.0 million to an aggregate principal amount of $1.0 billion. The Term Loan Facility has a maturity date of July 28, 2027, with required quarterly installment payments of $6.3 million beginning on the last day of the third quarter of 2023 and increasing to $12.5 million beginning with the last day of the third quarter of 2024. The Term Loan Facility bears interest at a rate equal to an alternate base rate, adjusted term secured overnight financing rate, or adjusted daily simple secured overnight financing rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA’s election, Pentair’s leverage level or PFSA’s public credit rating.

In July 2022, in contemplation of the acquisition of Manitowoc Ice, Pentair, as guarantor, and PFSA, as issuer, completed a public offering of $400.0 million aggregate principal amount of 5.900% Senior Notes due 2032 (“2032 Senior Notes”).

We used the net proceeds from the Term Loan Facility and the issuance of the 2032 Senior Notes to finance a portion of the Manitowoc Ice acquisition purchase price and to pay related fees and expenses.

Our debt agreements contain various financial covenants, but the most restrictive covenants are contained in the Senior Credit Facility and the Term Loan Facility. The Senior Credit Facility and the Term Loan Facility contain covenants requiring us not to permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash and cash equivalents in excess of $5.0 million but not to exceed $250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense (“EBITDA”) on the last day of any period of four consecutive fiscal quarters (each, a “testing period”) to exceed 3.75 to 1.00 (or, at PFSA’s election and subject to certain conditions, 4.25 to 1.00 for four testing periods in connection with certain material acquisitions) (the “Leverage Ratio”) and (ii) the ratio of our EBITDA to our consolidated interest expense, for the same period to be less than 3.00 to 1.00 as of the end of each fiscal quarter. For purposes of the Leverage Ratio, the Senior Credit Facility and the Term

Loan Facility provide for the calculation of EBITDA giving pro forma effect to certain acquisitions, divestitures and liquidations during the period to which such calculation relates.

In addition to the Senior Credit Facility and the Term Loan Facility, we have various other credit facilities with an aggregate availability of $20.8 million, of which there were no outstanding borrowings at June 30, 2023. Borrowings under these credit facilities bear interest at variable rates.

We have $25.0 million of Term Loan Facility payments due in the next twelve months. We classified this debt as long-term as of June 30, 2023 as we have the intent and ability to refinance such obligation on a long-term basis under the revolving credit facility under the Senior Credit Facility.

Debt outstanding, excluding unamortized issuance costs and discounts, at June 30, 2023 matures on a calendar year basis as follows:

In millions	Q3-Q4 2023	2024	2025	2026	2027	2028	Thereafter	Total
Contractual debt obligation maturities	$ 12.5	$ 237.5	$ 69.3	$ 165.7	$ 850.0	$ —	$ 800.0	$ 2,135.0

11. Derivatives and Financial Instruments

Derivative financial instruments

We are exposed to market risk related to changes in foreign currency exchange rates and interest rates on our variable rate indebtedness. To manage the volatility related to these exposures, we periodically enter into a variety of derivative financial instruments. Our objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign currency exchange rates or variable interest rates. The derivative contracts contain credit risk to the extent that our bank counterparties may be unable to meet the terms of the agreements. The amount of such credit risk is generally limited to the unrealized gains, if any, in such contracts. Such risk is minimized by limiting those counterparties to major financial institutions of high credit quality.

Foreign currency contracts

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies in relation to our reporting currency, the U.S. dollar. We manage our economic and transaction exposure to certain market-based risks through the use of foreign currency derivative financial instruments. Our objective in holding these derivatives is to reduce the volatility of net earnings and cash flows associated with changes in foreign currency exchange rates. The majority of our foreign currency contracts have an original maturity date of less than one year.

At June 30, 2023 and December 31, 2022, we had outstanding foreign currency derivative contracts with gross notional U.S. dollar equivalent amounts of $23.5 million and $9.4 million, respectively. The impact of these contracts on the Condensed Consolidated Statements of Operations and Comprehensive Income was not material for any period presented.

Cross currency swaps

At June 30, 2023 and December 31, 2022, we had outstanding cross currency swap agreements with a combined notional amount of $763.9 million and $746.3 million, respectively. The agreements are accounted for as either cash flow hedges, to hedge foreign currency fluctuations on certain intercompany debt, or as net investment hedges to manage our exposure to fluctuations in the Euro-U.S. Dollar exchange rate. We had deferred foreign currency losses of $47.9 million and $40.3 million at June 30, 2023 and December 31, 2022, respectively, recorded in *Accumulated other comprehensive loss* associated with our cross currency swap activity. The periodic interest settlements related to our cross currency swap agreements are classified as operating activities. The cash flows that relate to principal balances are classified as financing activities for the cash flow hedges on intercompany debt and investing activities for the net investment hedges.

Hedging of variable interest rates

On March 31, 2023, we entered into floating-to-fixed interest rate swap agreements to hedge the interest rate variability related to a portion of our Senior Credit Facility and Term Loan Facility referenced in Note 10. The swaps have a combined notional amount of $300.0 million and an average fixed one-month U.S. Dollar secured overnight financing rate (“SOFR”) of 3.795%. They have an effective date of April 4, 2023 and settle monthly through April 2026.

On April 3, 2023, we entered into five-year interest rate collar agreements with a combined notional value of $200.0 million to hedge the cash flows related to the interest rate variability on our Senior Credit Facility and Term Loan Facility referenced in Note 10. In these collar agreements, the Company and counterparty financial institutions agreed to a one-month U.S. Dollar SOFR floor of 1.875% and a cap of 5.000%. The collars have an effective date of April 4, 2023 and settle monthly through April 2028.

The interest rate swaps and the collars were designated as cash flow hedges. Unrealized gains and losses related to the fair value of the interest rate swaps are recorded in *Accumulated other comprehensive loss* on our Condensed Consolidated Balance Sheets. We had a gain of $6.4 million at June 30, 2023 recorded in *Accumulated other comprehensive loss* associated with our interest rate swap and collar activity. The periodic interest settlements related to our interest rate swaps and collars are classified as operating activities.

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date:

Level 1: Valuation is based on observable inputs such as quoted market prices (unadjusted) for identical assets or liabilities in active markets.

Level 2: Valuation is based on inputs such as quoted market prices for similar assets or liabilities in active markets or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3: Valuation is based upon other unobservable inputs that are significant to the fair value measurement.

In making fair value measurements, observable market data must be used when available. When inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement.

Fair value of financial instruments

The following methods were used to estimate the fair values of each class of financial instrument:

- *short-term financial instruments (cash and cash equivalents, accounts and notes receivable, accounts payable and variable-rate debt)* — recorded amount approximates fair value because of the short maturity period;

- *long-term fixed-rate debt, including current maturities* — fair value is based on market quotes available for issuance of debt with similar terms, which are inputs that are classified as Level 2 in the valuation hierarchy defined above;

- *foreign currency contracts, interest rate swap and collar agreements* — fair values are determined through the use of models that consider various assumptions, including time value, yield curves, as well as other relevant economic measures, which are inputs that are classified as Level 2 in the valuation hierarchy defined above; and

- *deferred compensation plan assets (mutual funds, common/collective trusts and cash equivalents for payment of certain non-qualified benefits for retired, terminated and active employees)* — fair value of mutual funds and cash equivalents are based on quoted market prices in active markets that are classified as Level 1 in the valuation hierarchy defined above; fair value of common/collective trusts are valued at net asset value ("NAV"), which is based on the fair value of the underlying securities owned by the fund and divided by the number of shares outstanding.

The recorded amounts and estimated fair values of total debt, excluding unamortized issuance costs and discounts, were as follows:

	June 30, 2023		December 31, 2022	
In millions	Recorded Amount	Fair Value	Recorded Amount	Fair Value
Variable rate debt	$ 1,315.7	$ 1,315.7	$ 1,520.0	$ 1,520.0
Fixed rate debt	819.3	798.4	819.3	789.3
Total debt	$ 2,135.0	$ 2,114.1	$ 2,339.3	$ 2,309.3

Financial assets and liabilities measured at fair value on a recurring and nonrecurring basis were as follows:

	June 30, 2023				
In millions	Level 1	Level 2	Level 3	NAV	Total
Recurring fair value measurements					
Interest rate contract assets	$ —	$ 6.4	$ —	$ —	$ 6.4
Foreign currency contract liabilities	—	(70.1)	—	—	(70.1)
Deferred compensation plan assets	11.3	—	—	12.8	24.1
Total recurring fair value measurements	$ 11.3	$ (63.7)	$ —	$ 12.8	$ (39.6)

	December 31, 2022				
In millions	Level 1	Level 2	Level 3	NAV	Total
Recurring fair value measurements					
Foreign currency contract liabilities	$ —	$ (52.2)	$ —	$ —	$ (52.2)
Deferred compensation plan assets	10.5	—	—	11.2	21.7
Total recurring fair value measurements	$ 10.5	$ (52.2)	$ —	$ 11.2	$ (30.5)

12. Income Taxes

We manage our affairs so that we are centrally managed and controlled in the United Kingdom (“U.K.”) and therefore have our tax residency in the U.K. The provision for income taxes consists of provisions for the U.K. and international income taxes. We operate in an international environment with operations in various locations outside the U.K. Accordingly, the consolidated income tax rate is a composite rate reflecting the earnings in the various locations and the applicable rates.

The effective income tax rate for the six months ended June 30, 2023 was 14.8%, compared to 15.6% for the six months ended June 30, 2022. We continue to actively pursue initiatives to reduce our effective tax rate. The tax rate in any quarter can be affected positively or negatively by the mix of global earnings or adjustments that are required to be reported in the specific quarter of resolution.

The total gross liability for uncertain tax positions was $37.0 million and $39.6 million at June 30, 2023 and December 31, 2022, respectively. We record penalties and interest related to unrecognized tax benefits in *Provision for income taxes* and *Net interest expense*, respectively, on the Condensed Consolidated Statements of Operations and Comprehensive Income, which is consistent with our past practices.

13. Benefit Plans

Components of net periodic benefit expense for our pension plans for the three and six months ended June 30, 2023 and 2022 were as follows:

	Three months ended		Six months ended	
In millions	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Service cost	$ 0.4	$ 0.6	$ 0.8	$ 1.2
Interest cost	1.0	0.6	2.0	1.2
Expected return on plan assets	(0.2)	(0.1)	(0.4)	(0.2)
Net periodic benefit expense	$ 1.2	$ 1.1	$ 2.4	$ 2.2

Components of net periodic benefit expense for our other post-retirement plans for the three and six months ended June 30, 2023 and 2022 were not material.

14. Shareholders' Equity

Share repurchases

In December 2020, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $750.0 million. The authorization expires on December 31, 2025. During the three and six months ended June 30, 2023, no ordinary shares were repurchased. As of June 30, 2023, we had $600.0 million available for share repurchases under this authorization.

Dividends payable

On May 8, 2023, the Board of Directors declared a quarterly cash dividend of $0.22 per share, payable on August 4, 2023 to shareholders of record at the close of business on July 21, 2023. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was $36.4 million at June 30, 2023, compared to $36.2 million at December 31, 2022.

15. Segment Information

Effective January 1, 2023, we reorganized our reporting segments to reflect how we are managing our business and to help us accelerate our efforts to improve customer experience, differentiate our products and drive profitability for our shareholders. All prior period amounts related to the segment change have been retrospectively reclassified to conform to the new presentation. As part of this reorganization, the legacy Consumer Solutions segment was divided into a Pool segment and a Water Solutions segment. The Industrial & Flow Technologies segment remains the same. We classify our operations into the following reporting segments:

- ***Industrial & Flow Technologies*** — The focus of this segment is to deliver water where it is needed, when it is needed and more efficiently and transforming waste into value. This segment designs, manufactures and sells a variety of fluid treatment and pump products and systems, including pressure vessels, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration, separation systems, water disposal pumps, water supply pumps, fluid transfer pumps, turbine pumps, solid handling pumps, and agricultural spray nozzles, while serving the global residential, commercial and industrial markets. These products and systems are used in a range of applications, fluid delivery, ion exchange, desalination, food and beverage, separation technologies for the oil and gas industry, residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, circulation and transfer, fire suppression, flood control, agricultural irrigation and crop spray.

- ***Water Solutions*** — The focus of this segment is to provide great tasting, higher-quality water and ice while helping end-users use water more productively. This segment designs, manufactures and sells commercial and residential water treatment products and systems including pressure tanks, control valves, activated carbon products, commercial ice machines, conventional filtration products, and point-of-entry and point-of-use water treatment systems. These water treatment products and systems are used in residential whole home water filtration, drinking water filtration and water softening solutions in addition to commercial total water management and filtration in foodservice operations. In addition, our water solutions business also provides installation and preventative services for water management solutions for commercial operators.

- ***Pool*** — The focus of this segment is to provide innovative, energy efficient pool solutions to help end-users more sustainably enjoy water. This segment designs, manufactures and sells a complete line of energy-efficient residential and commercial pool equipment and accessories including pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Applications for our pool products include residential and commercial pool maintenance, pool repair, renovation, service and construction and aquaculture solutions.

We evaluate performance based on net sales and segment income (loss) and use a variety of ratios to measure performance of our reporting segments. These results are not necessarily indicative of the results of operations that would have occurred had each segment been an independent, stand-alone entity during the periods presented. Segment income (loss) represents equity income of unconsolidated subsidiaries and operating income exclusive of intangible amortization, certain acquisition related expenses, costs of restructuring and transformation activities, impairments and other unusual non-operating items.

Financial information by reportable segment is as follows:

	Three months ended		Six months ended	
In millions	**June 30, 2023**	**June 30, 2022**	**June 30, 2023**	**June 30, 2022**
Net sales				
Industrial & Flow Technologies	$ 411.6	$ 377.4	$ 803.4	$ 735.5
Water Solutions	336.2	222.2	608.2	428.0
Pool	334.3	464.0	698.6	899.4
Other	0.4	0.6	0.9	0.9
Consolidated	$ 1,082.5	$ 1,064.2	$ 2,111.1	$ 2,063.8
Segment income (loss)				
Industrial & Flow Technologies	$ 74.8	$ 59.1	$ 139.8	$ 111.3
Water Solutions	74.8	32.5	127.2	54.7
Pool	105.1	136.7	221.3	253.0
Other	(20.5)	(22.4)	(43.1)	(41.0)
Consolidated	$ 234.2	$ 205.9	$ 445.2	$ 378.0

The following table presents a reconciliation of consolidated segment income to consolidated income from continuing operations before income taxes:

	Three months ended		Six months ended	
In millions	**June 30, 2023**	**June 30, 2022**	**June 30, 2023**	**June 30, 2022**
Segment income	$ 234.2	$ 205.9	$ 445.2	$ 378.0
Deal-related costs and expenses	—	(1.6)	—	(8.0)
Asset impairment and write-offs	(0.5)	—	(4.4)	—
Restructuring and other	(0.6)	(1.1)	(3.5)	(3.2)
Transformation costs	(6.0)	(5.2)	(14.5)	(10.7)
Intangible amortization	(13.9)	(6.3)	(27.7)	(12.9)
Russia business exit impact	—	—	—	(5.9)
Legal accrual adjustments and settlements	(4.1)	(0.5)	(2.2)	0.2
Interest expense, net	(31.8)	(9.2)	(64.2)	(14.9)
Other income (expense)	4.2	(0.5)	3.3	(1.1)
Income from continuing operations before income taxes	$ 181.5	$ 181.5	$ 332.0	$ 321.5

16. Commitments and Contingencies

Warranties

We provide service and warranty policies on our products. Liability under service and warranty policies is based upon a review of historical warranty and service claim experience. Adjustments are made to accruals as claim data and historical experience warrant.

The changes in the carrying amount of service and product warranties from continuing operations for the six months ended June 30, 2023 were as follows:

In millions		**June 30, 2023**
Beginning balance	$	63.1
Service and product warranty provision		43.1
Payments		(38.5)
Ending balance	$	67.7

Stand-by letters of credit, bank guarantees and bonds

In the ordinary course of business, we are required to commit to bonds, letters of credit and bank guarantees that require payments to our customers for any non-performance. The outstanding face value of these instruments fluctuates with the value of our projects in process and in our backlog. In addition, we issue financial stand-by letters of credit primarily to secure our performance to third parties under self-insurance programs.

As of June 30, 2023 and December 31, 2022, the outstanding value of bonds, letters of credit and bank guarantees totaled $100.4 million and $99.7 million, respectively.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-looking Statements

This report contains statements that we believe to be "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, are forward-looking statements. Without limitation, any statements preceded or followed by or that include the words "targets," "plans," "believes," "expects," "intends," "will," "likely," "may," "anticipates," "estimates," "projects," "should," "would," "could," "positioned," "strategy," or "future" or words, phrases, or terms of similar substance or the negative thereof are forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, assumptions and other factors, some of which are beyond our control, which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These factors include the overall global economic and business conditions impacting our business, including the strength of housing and related markets and conditions relating to the conflict between Russia and Ukraine and related sanctions; supply, demand, logistics, competition and pricing pressures related to and in the markets we serve; the ability to achieve the benefits of our restructuring plans, cost reduction initiatives and the Transformation Program; the impact of raw material, logistics and labor costs and other inflation; volatility in currency exchange rates and interest rates; failure of markets to accept new product introductions and enhancements; the ability to successfully identify, finance, complete and integrate acquisitions; risks associated with operating foreign businesses; the impact of seasonality of sales and weather conditions; our ability to comply with laws and regulations; the impact of changes in laws, regulations and administrative policy, including those that limit U.S. tax benefits or impact trade agreements and tariffs; the outcome of litigation and governmental proceedings; and the ability to achieve our long-term strategic operating and ESG goals. Additional information concerning these and other factors is contained in our filings with the U.S. Securities and Exchange Commission, including this Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2022. All forward-looking statements speak only as of the date of this report. Pentair assumes no obligation, and disclaims any obligation, to update the information contained in this report.

Overview

The terms "us," "we," "our" or "Pentair" refer to Pentair plc and its consolidated subsidiaries. At Pentair, we believe the health of our world depends on reliable access to clean water. We deliver a comprehensive range of smart, sustainable water solutions to homes, businesses and industries around the world. Our industry-leading and proven portfolio of solutions enables our customers to access clean, safe water; reduce water consumption; and recover and reuse water. Whether it's improving, moving or helping people enjoy water, we help manage the world's most precious resource. We are comprised of three reporting segments: Industrial & Flow Technologies, Water Solutions and Pool. For the first six months of 2023, the Industrial & Flow Technologies, Water Solutions and Pool segments represented approximately 38%, 29% and 33% of total revenues, respectively. We classify our operations into reporting segments based primarily on types of products offered and markets served:

- ***Industrial & Flow Technologies*** — The focus of this segment is to deliver water where it is needed, when it is needed and more efficiently and transforming waste into value. This segment designs, manufactures and sells a variety of fluid treatment and pump products and systems, including pressure vessels, gas recovery solutions, membrane bioreactors, wastewater reuse systems and advanced membrane filtration, separation systems, water disposal pumps, water supply pumps, fluid transfer pumps, turbine pumps, solid handling pumps, and agricultural spray nozzles, while serving the global residential, commercial and industrial markets. These products and systems are used in a range of applications, fluid delivery, ion exchange, desalination, food and beverage, separation technologies for the oil and gas industry, residential and municipal wells, water treatment, wastewater solids handling, pressure boosting, circulation and transfer, fire suppression, flood control, agricultural irrigation and crop spray.

- ***Water Solutions*** — The focus of this segment is to provide great tasting, higher-quality water and ice while helping end-users use water more productively. This segment designs, manufactures and sells commercial and residential water treatment products and systems including pressure tanks, control valves, activated carbon products, commercial ice machines, conventional filtration products, and point-of-entry and point-of-use water treatment systems. These water treatment products and systems are used in residential whole home water filtration, drinking water filtration and water softening solutions in addition to commercial total water management and filtration in foodservice operations. In addition, our water solutions business also provides installation and preventative services for water management solutions for commercial operators.

- ***Pool*** — The focus of this segment is to provide innovative, energy efficient pool solutions to help end-users more sustainably enjoy water. This segment designs, manufactures and sells a complete line of energy-efficient residential and commercial pool equipment and accessories including pumps, filters, heaters, lights, automatic controls, automatic cleaners, maintenance equipment and pool accessories. Applications for our pool products include residential and commercial pool maintenance, pool repair, renovation, service and construction and aquaculture solutions.

In July 2022, as part of our Water Solutions reporting segment, we acquired the issued and outstanding equity securities of certain subsidiaries of Welbilt, Inc. ("Welbilt") and certain other assets, rights, and properties, and assumed certain liabilities, comprising Welbilt's Manitowoc Ice business ("Manitowoc Ice"), for approximately $1.6 billion in cash.

Key Trends and Uncertainties Regarding Our Existing Business

The following trends and uncertainties affected our financial performance in the first six months of 2023 and are reasonably likely to impact our results in the future:

- During 2022 and the first six months of 2023, we executed certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business. We expect these actions to continue throughout the remainder of 2023 and to drive margin growth.

- In 2021, we created a transformation office and launched and committed resources to the Transformation Program designed to accelerate growth and drive margin expansion by driving operational excellence, reducing complexity and streamlining our processes. During 2022 and the first six months of 2023, we made strategic progress on our Transformation Program initiatives with a primary focus on three of our four key themes of pricing excellence, strategic sourcing and operations excellence. In addition, we built capabilities across all themes, including the final theme of organizational effectiveness. We expect to continue to execute on our key Transformation Program initiatives during 2023 to drive margin expansion and to continue to incur transformation costs throughout the remainder of 2023 and beyond.

- During the first six months of 2023, we continued to experience supply chain challenges and inflationary cost increases of certain raw materials due to availability constraints and high demand. While we have taken pricing actions and implemented transformation initiatives that we expect to improve productivity and offset these cost increases, we expect supply chain pressures and inflationary cost increases to continue for the remainder of 2023, which may continue thereafter and could negatively impact our results of operations.

- During the second half of 2022 and the first six months of 2023, we have seen inventory correcting within our residential distributor channels. We anticipate channel inventories to normalize to more historical levels by the end of the third quarter of 2023.

- The Organization for Economic Co-operation and Development Pillar Two Model Rules ("Pillar Two") for a global 15.0% minimum tax are in the process of being adopted by a number of jurisdictions in which we operate. In particular, the United Kingdom has completed passage of legislation to comply with the Pillar Two framework which becomes effective beginning in 2024. Pillar Two could negatively impact our effective tax rate beginning in 2024. We are continuing to evaluate the impact of proposed and enacted legislative changes as new guidance becomes available.

- We have identified specific product and geographic market opportunities that we find attractive and continue to pursue, both within and outside the U.S. We are reinforcing that our businesses more effectively address these opportunities through research and development and additional sales and marketing resources. Unless we successfully penetrate these markets, our core sales growth will likely be limited or may decline.

In 2023, our operating objectives focus on delivering our core and building our future. We expect to execute these objectives by:

- Delivering profitable revenue growth and productivity for customers and shareholders;

- Continuing to focus on capital allocation through:

    - Committing to maintain our investment grade rating;

    - Focusing on reducing our long-term debt;

  - Returning cash to shareholders through dividends and share repurchases; and
  - Accelerating our performance with strategically aligned mergers and acquisitions;
- Focusing growth initiatives that accelerate our investments in digital, technology and services expansion;
- Continuing to implement our Transformation Program initiatives that will drive operational excellence, reduce complexity and improve our organizational structure; and
- Building a high-performance growth culture and delivering on our commitments while living our Win Right values.

CONSOLIDATED RESULTS OF OPERATIONS

The consolidated results of operations for the three months ended June 30, 2023 and 2022 were as follows:

In millions	Three months ended June 30, 2023	Three months ended June 30, 2022	$ Change	% / Point Change
Net sales	$ 1,082.5	$ 1,064.2	$ 18.3	1.7 %
Cost of goods sold	683.0	704.7	(21.7)	(3.1) %
Gross profit	399.5	359.5	40.0	11.1 %
% of net sales	*36.9 %*	*33.8 %*		*3.1 pts*
Selling, general and administrative	165.1	145.6	19.5	13.4 %
% of net sales	*15.3 %*	*13.7 %*		*1.6 pts*
Research and development	25.9	23.1	2.8	12.1 %
% of net sales	*2.4 %*	*2.2 %*		*0.2 pts*
Operating income	208.5	190.8	17.7	9.3 %
% of net sales	*19.3 %*	*17.9 %*		*1.4 pts*
Other (income) expense	(4.8)	0.1	(4.9)	N.M.
Net interest expense	31.8	9.2	22.6	N.M.
Income from continuing operations before income taxes	181.5	181.5	—	— %
Provision for income taxes	27.3	28.5	(1.2)	(4.2) %
Effective tax rate	*15.0 %*	*15.7 %*		*(0.7) pts*

N.M. Not Meaningful

The consolidated results of operations for the six months ended June 30, 2023 and June 30, 2022 were as follows:

	Six months ended			
In millions	June 30, 2023	June 30, 2022	$ Change	% / Point Change
Net sales	$ 2,111.1	$ 2,063.8	$ 47.3	2.3 %
Cost of goods sold	1,329.8	1,372.1	(42.3)	(3.1) %
Gross profit	781.3	691.7	89.6	13.0 %
% of net sales	*37.0 %*	*33.5 %*		*3.5 pts*
Selling, general and administrative expenses	338.4	309.7	28.7	9.3 %
% of net sales	*16.0 %*	*15.0 %*		*1.0 pts*
Research and development expenses	50.8	45.4	5.4	11.9 %
% of net sales	*2.4 %*	*2.2 %*		*0.2 pts*
Operating income	392.1	336.6	55.5	16.5 %
% of net sales	*18.6 %*	*16.3 %*		*2.3 pts*
Other (income) expense	(4.1)	0.2	(4.3)	N.M.
Net interest expense	64.2	14.9	49.3	N.M.
Income from continuing operations before income taxes	332.0	321.5	10.5	3.3 %
Provision for income taxes	49.3	50.0	(0.7)	(1.4) %
Effective tax rate	*14.8 %*	*15.6 %*		*(0.8) pts*

N.M. Not Meaningful

Net sales

The components of the consolidated net sales change from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	Six months ended June 30, 2023 over the prior year period
Volume	(14.5)%	(13.3)%
Price	7.5	8.4
Core growth	(7.0)	(4.9)
Acquisition/Divestitures	8.9	7.8
Currency	(0.2)	(0.6)
Total	1.7 %	2.3 %

The 1.7 and 2.3 percent increases in net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increases in selling prices to mitigate a rise in inflationary costs;
- increased sales within our Water Solutions segment from the acquisition of Manitowoc Ice, which was completed in the third quarter of 2022;
- higher sales volume in our commercial business within our Water Solutions segment driven by higher demand and easing of supply chain pressures which allowed increased production and delivery to market; and

- increased sales volume in our commercial flow and industrial solutions businesses within our Industrial & Flow Technologies segment compared to the prior year.

These increases were partially offset by:

- sales volume decreases in our Pool segment primarily due to weather challenges in the U.S., higher channel inventory and lower demand compared to the prior year;
- sales volume decreases in our residential business within our Water Solutions segment driven by lower demand compared to the prior year and certain business exits announced in the second half of 2022; and
- unfavorable foreign currency effects compared to the prior year.

Gross profit
The 3.1 and 3.5 percentage point increases in gross profit as a percentage of net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increases in selling prices to mitigate impacts of inflation;
- increased productivity within our Water Solutions segment as a result of certain transformation and restructuring initiatives; and
- increased productivity in our Industrial & Flow Technologies segment mainly driven by manufacturing leverage and transformation initiatives.

These increases were partially offset by:

- inflationary cost increases related to labor costs and certain raw materials;
- decreased productivity in our Pool segment due to decreased sales volume compared to the prior year; and
- asset impairments and write-offs of $3.9 million recorded in the first half of 2023.

Selling, general and administrative expenses ("SG&A")
The 1.6 and 1.0 percentage point increases in SG&A as a percentage of net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increased identifiable intangible asset amortization expense of $8.5 million in the second quarter of 2023 and $17.1 million in the first six months of 2023 related to the addition of Manitowoc Ice's definite-lived intangible assets in the third quarter of 2022;
- transformation costs of $6.0 million in the second quarter of 2023, compared to $5.2 million in the second quarter of 2022, and $14.5 million in the first half of 2023, compared to $10.7 million in the first half of 2022; and
- inflationary cost increases including higher employee labor costs in the first half of 2023.

These increases were partially offset by:

- a charge of $4.2 million recorded in the first quarter of 2022 for the write-off of uncollectible accounts receivable and other costs incurred in light of our exiting of business activity and sales in Russia that did not recur in the first six months of 2023; and
- deal-related costs and expenses of $1.6 million in the second quarter of 2022 and $8.0 million in the first half of 2022, compared to none in the second quarter or first half of 2023.

Net interest expense
The increases in net interest expense in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increased debt due to the acquisition of Manitowoc Ice in the third quarter of 2022; and

- increased variable interest rates compared to the same periods of the prior year.

These *increases were partially offset by:*

- the amortization of debt issuance costs of $5.1 million during the second quarter of 2022 and $7.7 million during the first half of 2022 related to financing commitments for a bridge loan facility established in connection with the acquisition of Manitowoc Ice that did not recur in the first six months of 2023.

Provision for income taxes
The 0.7 and 0.8 percentage point decreases in the effective tax rate in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- the favorable mix of global earnings.

SEGMENT RESULTS OF OPERATIONS
The summary that follows provides a discussion of the results of operations of our three reportable segments (Industrial & Flow Technologies, Water Solutions and Pool). Each of these segments is comprised of various product offerings that serve multiple end users.

We evaluate performance based on net sales and segment income and use a variety of ratios to measure performance of our reporting segments. Segment income represents equity income of unconsolidated subsidiaries and operating income exclusive of intangible amortization, certain acquisition related expenses, costs of restructuring and transformation activities, impairments, legal accrual adjustments and settlements and other unusual non-operating items.

Industrial & Flow Technologies

The net sales and segment income for Industrial & Flow Technologies were as follows:

	Three months ended			**Six months ended**		
In millions	**June 30, 2023**	**June 30, 2022**	**% / Point Change**	**June 30, 2023**	**June 30, 2022**	**% / Point Change**
Net sales	$ 411.6	$ 377.4	9.1%	$ 803.4	$ 735.5	9.2%
Segment income	74.8	59.1	26.6%	139.8	111.3	25.6%
% of net sales	*18.2 %*	*15.7 %*	*2.5 pts*	17.4 %	15.1 %	*2.3 pts*

Net sales
The components of the change in Industrial & Flow Technologies net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	**Six months ended June 30, 2023 over the prior year period**
Volume	(0.9)%	0.1 %
Price	10.0	10.1
Core growth	9.1	10.2
Currency	—	(1.0)
Total	9.1 %	9.2 %

The 9.1 and 9.2 percent increases in net sales for Industrial & Flow Technologies in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increases in selling prices to mitigate inflationary cost increases; and
- increased sales volume in our commercial flow and industrial solutions businesses compared to the prior year.

These increases were partially offset by:

- decreased sales volume in our residential flow business compared to the prior year; and
- unfavorable foreign currency effects compared to the first half of the prior year.

Segment income

The components of the change in Industrial & Flow Technologies segment income as a percentage of net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	Six months ended June 30, 2023 over the prior year period
Growth/Price	7.5 pts	7.8 pts
Currency	(0.1)	(0.1)
Inflation	(5.5)	(6.1)
Productivity	0.6	0.7
Total	2.5 pts	2.3 pts

The 2.5 and 2.3 percentage point increases in segment income for Industrial & Flow Technologies as a percentage of net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increases in selling prices to mitigate impacts of inflation; and
- increased productivity mainly driven by manufacturing leverage and transformation initiatives.

These increases were partially offset by:

- inflationary cost increases related to labor costs and certain raw materials.

Water Solutions

The net sales and segment income for Water Solutions were as follows:

	Three months ended			Six months ended		
In millions	June 30, 2023	June 30, 2022	% / Point Change	June 30, 2023	June 30, 2022	% / Point Change
Net sales	$ 336.2	$ 222.2	51.3%	$ 608.2	$ 428.0	42.1%
Segment income	74.8	32.5	130.2%	127.2	54.7	132.5%
% of net sales	*22.2 %*	*14.6 %*	*7.6 pts*	*20.9 %*	*12.8 %*	*8.1 pts*

Net sales

The components of the change in Water Solutions net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	Six months ended June 30, 2023 over the prior year period
Volume	6.3 %	1.8 %
Price	2.9	3.8
Core growth	9.2	5.6
Acquisition/Divestitures	42.6	37.5
Currency	(0.5)	(1.0)
Total	51.3 %	42.1 %

The 51.3 and 42.1 percent increases in net sales for Water Solutions in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increased sales as a result of the acquisition of Manitowoc Ice, which was completed in the third quarter of 2022;
- higher sales volume in our commercial business driven by higher demand and easing of supply chain pressures which allowed increased production and delivery to market; and
- increases in selling prices to mitigate inflationary cost increases.

These increases were partially offset by:

- decreased sales volume in our residential business driven by lower demand compared to the prior year and certain business exits announced in the second half of 2022; and
- unfavorable foreign currency effects compared to the prior year.

Segment income

The components of the change in Water Solutions segment income as a percentage of net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period		Six months ended June 30, 2023 over the prior year period	
Growth/Price/Acquisition/Divestitures	10.1	pts	11.6	pts
Currency	(0.4)		(0.5)	
Inflation	(5.6)		(5.6)	
Productivity	3.5		2.6	
Total	7.6	pts	8.1	pts

The 7.6 and 8.1 percentage point increases in segment income for Water Solutions as a percentage of net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increased sales as a result of the Manitowoc Ice acquisition;
- increases in selling prices to mitigate impacts of inflation; and
- increased productivity in the residential business as a result of certain transformation and restructuring initiatives.

These increases were partially offset by:

- inflationary cost increases related to labor costs and certain raw materials; and
- unfavorable foreign currency effects compared to the prior year.

Pool

The net sales and segment income for Pool were as follows:

	Three months ended			Six months ended		
In millions	June 30, 2023	June 30, 2022	% / Point Change	June 30, 2023	June 30, 2022	% / Point Change
Net sales	$ 334.3	$ 464.0	(28.0)%	$ 698.6	$ 899.4	(22.3)%
Segment income	105.1	136.7	(23.1)%	221.3	253.0	(12.5)%
% of net sales	31.4 %	29.5 %	*1.9 pts*	31.7 %	28.1 %	*3.6 pts*

Net sales

The components of the change in Pool net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	Six months ended June 30, 2023 over the prior year period
Volume	(35.5)%	(31.4)%
Price	7.6	9.2
Core growth	(27.9)	(22.2)
Currency	(0.1)	(0.1)
Total	(28.0)%	(22.3)%

The 28.0 and 22.3 percent decreases in net sales for Pool in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- sales volume decreases primarily due to weather challenges in the U.S., higher channel inventory and lower demand compared to the prior year; and
- unfavorable foreign currency effects compared to the prior year.

These decreases were partially offset by:

- increases in selling prices to mitigate inflationary cost increases.

Segment income

The components of the change in Pool segment income as a percentage of net sales from the prior period were as follows:

	Three months ended June 30, 2023 over the prior year period	Six months ended June 30, 2023 over the prior year period
Growth/Price	5.1 pts	7.3 pts
Inflation	(1.1)	(2.7)
Productivity	(2.1)	(1.0)
Total	1.9 pts	3.6 pts

The 1.9 and 3.6 percentage point increases in segment income for Pool as a percentage of net sales in the second quarter and first half, respectively, of 2023 from 2022 were primarily driven by:

- increases in selling prices to mitigate impacts of inflation;
- positive impact to margin associated with benefits realized from our transformation initiatives; and
- cost management initiatives associated with decreased sales volume.

These increases were partially offset by:

- decreased leverage due to lower sales volume compared to the prior year; and
- inflationary cost increases related to labor costs and certain raw materials.

BACKLOG OF ORDERS BY SEGMENT

In millions	June 30, 2023	December 31, 2022	$ Change	% Change
Industrial & Flow Technologies	$ 434.2	$ 512.1	$ (77.9)	(15.2)%
Water Solutions	190.0	193.5	(3.5)	(1.8)%
Pool	55.6	289.6	(234.0)	(80.8)%
Total	$ 679.8	$ 995.2	$ (315.4)	(31.7)%

The majority of our backlog is short cycle in nature with shipments within one year from when a customer places an order and a substantial portion of our revenues has historically resulted from orders received and products delivered in the same month. A portion of our backlog, particularly from orders for major capital projects, can take more than one year from order to delivery depending on the size and type of order. We record, as part of our backlog, all orders from external customers, which represent firm commitments, and are supported by a purchase order or other legitimate contract. Our backlog of orders is dependent upon when customers place orders and is not necessarily an indicator of our expected results for our 2023 net sales.

The decrease in our overall backlog from December 31, 2022 was primarily driven by our Pool segment's backlog trending down to more historical levels as a result of increased manufacturing capacity, improved lead times and customers balancing the need to place new orders with market demand and channel inventory levels.

LIQUIDITY AND CAPITAL RESOURCES

We generally fund cash requirements for working capital, capital expenditures, equity investments, acquisitions, debt repayments, dividend payments and share repurchases from cash generated from operations, availability under existing committed revolving credit facilities and in certain instances, public and private debt and equity offerings. Our primary revolving credit facility has generally been adequate for these purposes, although we have negotiated additional credit facilities or completed debt and equity offerings as needed to allow us to complete acquisitions.

We experience seasonal cash flows primarily due to seasonal demand in a number of markets. Consistent with historical trends, we experienced seasonal cash usage in the first quarter of 2023 and drew on our revolving credit facility to fund our operations. This cash usage reversed in the second quarter as the seasonality of our businesses peaked and generated significant cash to fund our operations.

End-user demand for pool and certain pumping equipment follows warm weather trends and historically is at seasonal highs from April to August. The magnitude of the sales spike typically is partially mitigated by employing some advance sale "early buy" programs (generally including extended payment terms and/or additional discounts). Demand for residential and agricultural water systems is also impacted by weather patterns, particularly by temperature, heavy flooding and droughts.

We expect to continue to have sufficient cash and borrowing capacity to support working capital needs and capital expenditures, to pay interest and service debt and to pay dividends to shareholders quarterly. We believe our existing liquidity position, coupled with our currently anticipated operating cash flows, will be sufficient to meet our cash needs arising in the ordinary course of business for the next twelve months.

Summary of cash flows

	Six months ended	
In millions	June 30, 2023	June 30, 2022
Net cash provided by (used for):		
Operating activities of continuing operations	$ 340.1	$ 176.3
Investing activities	(26.1)	(29.8)
Financing activities	(276.0)	(113.8)

Operating activities
The $340.1 million in net cash provided by operating activities of continuing operations in the first six months of 2023 primarily reflects $344.2 million of net income from continuing operations, net of non-cash depreciation, definite-lived intangible amortization and asset impairment.

The $176.3 million in net cash provided by operating activities of continuing operations in the first six months of 2022 primarily reflects $310.9 million of net income from continuing operations, net of non-cash depreciation and definite-lived intangible amortization. Additionally, we had a cash outflow of $129.7 million as a result of changes in net working capital, primarily due to increased inventory balances and lower employee compensation and benefits accruals compared to December 31, 2021. The inventory balance was higher due to inflationary impacts and continued supply chain inefficiencies. The lower employee compensation and benefits accruals were attributable to the payment of employee incentive compensation in the first quarter.

Investing activities
Net cash used for investing activities in the first six months of 2023 primarily reflects capital expenditures of $35.4 million, partially offset by proceeds from the sale of property and equipment of $5.0 million.

Net cash used for investing activities in the first six months of 2022 primarily reflects capital expenditures of $40.1 million, partially offset by cash received upon the settlement of net investment hedges of $8.8 million.

Financing activities
Net cash used for financing activities in the first six months of 2023 primarily relates to net repayments of revolving long-term debt of $204.3 million and dividend payments of $72.5 million.

Net cash used for financing activities in the first six months of 2022 primarily relates to dividend payments of $69.5 million, share repurchases of $50.0 million and payments of debt issuance costs of $8.9 million, partially offset by net borrowings of revolving long-term debt of $19.8 million.

Free cash flow
In addition to measuring our cash flow generation or usage based upon operating, investing and financing classifications included in the Consolidated Statements of Cash Flows, we also measure our free cash flow. We have a long-term goal to consistently generate free cash flow that is equal to 100 percent conversion of net income. Free cash flow is a non-U.S. GAAP financial measure that we use to assess our cash flow performance. We believe free cash flow is an important measure of liquidity because it provides us and our investors a measurement of cash generated from operations that is available to pay dividends, repurchase shares and repay debt. In addition, free cash flow is used as a criterion to measure and pay compensation-based incentives. Our measure of free cash flow may not be comparable to similarly titled measures reported by other companies.

The following table is a reconciliation of free cash flow:

	Six months ended	
In millions	**June 30, 2023**	**June 30, 2022**
Net cash provided by operating activities of continuing operations	$ 340.1	$ 176.3
Capital expenditures of continuing operations	(35.4)	(40.1)
Proceeds from sale of property and equipment of continuing operations	5.0	2.9
Free cash flow from continuing operations	309.7	139.1
Net cash used for operating activities of discontinued operations	(1.6)	(1.0)
Free cash flow	$ 308.1	$ 138.1

Debt and capital

Pentair, Pentair Finance S.à r.l ("PFSA") and Pentair, Inc. are parties to a credit agreement (the "Senior Credit Facility"), with Pentair as guarantor and PFSA and Pentair, Inc. as borrowers, which was amended and restated in December 2021 and further amended in December 2022, providing for a $900.0 million senior unsecured revolving credit facility and a $200.0 million senior unsecured term loan facility. The revolving credit facility has a maturity date of December 16, 2026 and the term loan facility has a maturity date of December 16, 2024. Borrowings under the Senior Credit Facility bear interest at a rate equal to an alternate base rate, adjusted term secured overnight financing rate, adjusted euro interbank offered rate, adjusted daily simple secured overnight financing rate or central bank rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA's election, Pentair's leverage level or PFSA's public credit rating.

As of June 30, 2023, total availability under the Senior Credit Facility was $784.3 million. In addition, PFSA has the option to request to increase the revolving credit facility and/or to enter into one or more additional tranches of term loans in an aggregate amount of up to $300.0 million, subject to customary conditions, including the commitment of the participating lenders.

In March 2022, in contemplation of the acquisition of Manitowoc Ice, Pentair and PFSA entered into a Loan Agreement among PFSA, as borrower, Pentair, as guarantor, and the lenders and agents party thereto, providing for a $600.0 million senior unsecured term loan facility (the "Term Loan Facility"). In June 2022, the Term Loan Facility was amended to increase the facility by $400.0 million to an aggregate principal amount of $1.0 billion. The Term Loan Facility has a maturity date of July 28, 2027, with required quarterly installment payments of $6.3 million beginning on the last day of the third quarter of 2023 and increasing to $12.5 million beginning with the last day of the third quarter of 2024. The Term Loan Facility bears interest at a rate equal to an alternate base rate, adjusted term secured overnight financing rate, or adjusted daily simple secured overnight financing rate, plus, in each case, an applicable margin. The applicable margin is based on, at PFSA's election, Pentair's leverage level or PFSA's public credit rating.

In July 2022, in contemplation of the acquisition of Manitowoc Ice, Pentair, as guarantor, and PFSA, as issuer, completed a public offering of $400.0 million aggregate principal amount of 5.900% Senior Notes due 2032 ("2032 Senior Notes").

We used the net proceeds from the Term Loan Facility and the issuance of the 2032 Senior Notes to finance a portion of the Manitowoc Ice acquisition purchase price and to pay related fees and expenses.

Our debt agreements contain various financial covenants, but the most restrictive covenants are contained in the Senior Credit Facility and the Term Loan Facility. The Senior Credit Facility and the Term Loan Facility contain covenants requiring us not to permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash and cash equivalents in excess of $5.0 million but not to exceed $250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense ("EBITDA") on the last day of any period of four consecutive fiscal quarters (each, a "testing period") to exceed 3.75 to 1.00 (or, at PFSA's election and subject to certain conditions, 4.25 to 1.00 for four testing periods in connection with certain material acquisitions) (the "Leverage Ratio") and (ii) the ratio of our EBITDA to our consolidated interest expense, for the same period to be less than 3.00 to 1.00 as of the end of each fiscal quarter. For purposes of the Leverage Ratio, the Senior Credit Facility and the Term Loan Facility provide for the calculation of EBITDA giving pro forma effect to certain acquisitions, divestitures and liquidations during the period to which such calculation relates.

In addition to the Senior Credit Facility and the Term Loan Facility, we have various other credit facilities with an aggregate availability of $20.8 million, of which there were no outstanding borrowings at June 30, 2023. Borrowings under these credit facilities bear interest at variable rates.

We have $25.0 million of Term Loan Facility payments due in the next twelve months. We classified this debt as long-term as of June 30, 2023 as we have the intent and ability to refinance such obligation on a long-term basis under the revolving credit facility under the Senior Credit Facility.

As of June 30, 2023, we had $117.6 million of cash held in certain countries in which the ability to repatriate is limited due to local regulations or significant potential tax consequences.

Share repurchases
In December 2020, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $750.0 million. The authorization expires on December 31, 2025. During the three and six months ended June 30, 2023, no ordinary shares were repurchased. As of June 30, 2023, we had $600.0 million available for share repurchases under this authorization.

Dividends payable
On May 8, 2023, the Board of Directors declared a quarterly cash dividend of $0.22 per share, payable on August 4, 2023 to shareholders of record at the close of business on July 21, 2023. As a result, the balance of dividends payable included in *Other current liabilities* on our Condensed Consolidated Balance Sheets was $36.4 million at June 30, 2023, compared to $36.2 million at December 31, 2022.

We paid dividends in the first six months of 2023 of $72.5 million, or $0.44 per ordinary share compared with $69.5 million, or $0.42 per ordinary share, in the prior year period.

Under Irish law, the payment of future cash dividends and repurchases of shares may be paid only out of Pentair plc's "distributable reserves" on its statutory balance sheet. Pentair plc is not permitted to pay dividends out of share capital, which includes share premiums. Distributable reserves may be created through the earnings of the Irish parent company and through a reduction in share capital approved by the Irish High Court. Distributable reserves are not linked to a U.S. generally accepted accounting principles ("GAAP") reported amount (e.g., retained earnings). Our distributable reserve balance was $7.1 billion as of December 31, 2022.

Supplemental guarantor information
Pentair plc (the "Parent Company Guarantor"), fully and unconditionally, guarantees the senior notes of PFSA (the "Subsidiary Issuer"). The Subsidiary Issuer is a Luxembourg private limited liability company and 100 percent-owned subsidiary of the Parent Company Guarantor.

The Parent Company Guarantor is a holding company established to own directly and indirectly substantially all of its operating and other subsidiaries. The Subsidiary Issuer is a holding company formed to own directly and indirectly substantially all of its operating and other subsidiaries and to issue debt securities, including the senior notes. The Parent Company Guarantor's principal source of cash flow, including cash flow to make payments on the senior notes pursuant to the guarantees, is dividends from its subsidiaries. The Subsidiary Issuer's principal source of cash flow is interest income from its subsidiaries. None of the subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer is under any direct obligation to pay or otherwise fund amounts due on the senior notes or the guarantees, whether in the form of dividends, distributions, loans or other payments. In addition, there may be statutory and regulatory limitations on the payment of dividends from certain subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer. If such subsidiaries are unable to transfer funds to the Parent Company Guarantor or the Subsidiary Issuer and sufficient cash or liquidity is not otherwise available, the Parent Company Guarantor or the Subsidiary Issuer may not be able to make principal and interest payments on their outstanding debt, including the senior notes or the guarantees.

The following table presents summarized financial information as of June 30, 2023 and December 31, 2022 for the Parent Company Guarantor and Subsidiary Issuer on a combined basis after elimination of (i) intercompany transactions and balances among the guarantors and issuer and (ii) equity in earnings from and investments in any subsidiary that is a non-guarantor or issuer.

In millions	June 30, 2023	December 31, 2022
Current assets [(1)]	$ 2.4	$ 2.4
Noncurrent assets [(2)]	2,688.0	2,677.4
Current liabilities [(3)]	1,397.3	1,068.6
Noncurrent liabilities [(4)]	2,420.3	2,640.3

[(1)] No assets due from non-guarantor subsidiaries were included as of June 30, 2023 and December 31, 2022, respectively.

[(2)] Includes assets due from non-guarantor subsidiaries of $2,668.8 million and $2,664.7 million as of June 30, 2023 and December 31, 2022, respectively.

[(3)] Includes liabilities due to non-guarantor subsidiaries of $1,323.4 million and $989.8 million as of June 30, 2023 and December 31, 2022, respectively.

[(4)] Includes liabilities due to non-guarantor subsidiaries of $263.9 million and $259.8 million as of June 30, 2023 and December 31, 2022, respectively.

The Parent Company Guarantor and Subsidiary Issuer do not have material results of operations on a combined basis.

CRITICAL ACCOUNTING POLICIES

We have adopted various accounting policies to prepare the consolidated financial statements in accordance with GAAP. Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. In our Annual Report on Form 10-K for the year ended December 31, 2022, we identified the critical accounting policies that affect our more significant estimates and assumptions used in preparing our consolidated financial statements. There have been no material changes to our critical accounting policies and estimates from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our market risk during the quarter ended June 30, 2023. For additional information refer to Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

We maintain a system of disclosure controls and procedures designed to provide reasonable assurance as to the reliability of our published financial statements and other disclosures included in this report. Our management evaluated, with the participation of our Chief Executive Officer and our Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the quarter ended June 30, 2023 pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934 (the “Exchange Act”). Based upon their evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective, at the reasonable assurance level, as of the end of the quarter ended June 30, 2023 to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms, and to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosures.

(b) Changes in Internal Control over Financial Reporting

As part of our ongoing integration activities associated with the Manitowoc Ice acquisition, which was completed in July 2022, we are reviewing the internal controls and procedures of Manitowoc Ice and working to augment our company-wide controls to reflect the risks inherent in the acquisition. There was no other change in our internal control over financial reporting that occurred during the quarter ended June 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We have been, and in the future may be, made parties to a number of actions filed or have been, and in the future may be, given notice of potential claims relating to the conduct of our business, including those relating to commercial, contractual or regulatory disputes with suppliers, customers, authorities or parties to acquisitions and divestitures; intellectual property matters; environmental, asbestos, safety and health matters; product liability claims; claims relating to the use or installation of our products; consumer and consumer protection matters; and employment and labor matters.

ITEM 1A. RISK FACTORS

There have been no material changes from the risk factors previously disclosed in Item 1A. of our Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table provides information with respect to purchases we made of our ordinary shares during the second quarter of 2023:

Period	(a) Total number of shares purchased	(b) Average price paid per share	(c) Total number of shares purchased as part of publicly announced plans or programs	(d) Dollar value of shares that may yet be purchased under the plans or programs
April 1 - April 29	751	$ 53.58	—	$ 600,002,203
April 30 - May 27	2,564	58.18	—	600,002,203
May 28 - June 30	22,511	56.36	—	600,002,203
Total	25,826		—	

(a) The purchases in this column include 751 shares for the period April 1 - April 29, 2,564 shares for the period April 30 - May 27 and 22,511 shares for the period May 28 - June 30 deemed surrendered to us by participants in our equity incentive plans to satisfy the exercise price or withholding of tax obligations related to the exercise of stock options and vesting of restricted and performance shares.

(b) The average price paid in this column includes shares deemed surrendered to us by participants in our equity incentive plans to satisfy the exercise price for the exercise price of stock options and withholding tax obligations due upon stock option exercises and vesting of restricted and performance shares.

(c) The number of shares in this column represents the number of shares repurchased as part of our publicly announced plans to repurchase our ordinary shares up to the maximum dollar limit authorized by the Board of Directors, discussed below.

(d) In December 2020, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $750.0 million. The authorization expires on December 31, 2025. As of June 30, 2023, we had $600.0 million available for share repurchases under this authorization. From time to time, we may enter into a Rule 10b5-1 trading plan for the purpose of repurchasing shares under this authorization.

ITEM 5. OTHER INFORMATION

(c) During the second quarter of 2023, none of our directors or executive officers adopted or terminated any “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement” (as each term is defined in Item 408(a) of Regulation S-K).

ITEM 6. EXHIBITS

The exhibits listed in the following Exhibit Index are filed as part of this Quarterly Report on Form 10-Q.

Exhibit Index to Form 10-Q for the Period Ended June 30, 2023

22	List of Guarantors and Subsidiary Issuers of Guaranteed Securities. (Incorporated by reference to Exhibit 22 to the Quarterly Report on Form 10-Q of Pentair plc for the quarter ended September 30, 2022 (File No. 001-11625)).
31.1	Certification of Chief Executive Officer.
31.2	Certification of Chief Financial Officer.
32.1	Certification of Chief Executive Officer, Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer, Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from Pentair plc's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 are filed herewith, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Operations and Comprehensive Income for the three and six months ended June 30, 2023 and 2022, (ii) the Condensed Consolidated Balance Sheets as of June 30, 2023 and December 31, 2022, (iii) the Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2023 and 2022, (iv) the Condensed Consolidated Statements of Changes in Equity for the three and six months ended June 30, 2023 and 2022, and (v) Notes to Condensed Consolidated Financial Statements. The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

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, on July 27, 2023.

Pentair plc
Registrant

By /s/ Robert P. Fishman
Robert P. Fishman
Executive Vice President, Chief Financial Officer and Chief Accounting Officer

Exhibit 31.1

Certification

I, John L. Stauch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pentair plc;

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 functions):

   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.

Date: July 27, 2023

/s/ John L. Stauch
John L. Stauch
President and Chief Executive Officer

Exhibit 31.2

Certification

I, Robert P. Fishman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pentair plc;

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 functions):

   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.

Date: July 27, 2023

/s/ Robert P. Fishman

Robert P. Fishman

Executive Vice President, Chief Financial Officer and Chief Accounting Officer

Exhibit 32.1

Certification of CEO 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 Pentair plc (the “Company”) on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, John L. Stauch, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that based on my 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 result of operations of the Company.

Date: July 27, 2023	/s/ John L. Stauch
	John L. Stauch
	President and Chief Executive Officer

Exhibit 32.2

Certification of CFO 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 Pentair plc (the "Company") on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert P. Fishman, Executive Vice President, Chief Financial Officer and Chief Accounting Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that based on my 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 result of operations of the Company.

Date: July 27, 2023	/s/ Robert P. Fishman
	Robert P. Fishman
	Executive Vice President, Chief Financial Officer and Chief Accounting Officer