Eaton Corporation plc

2017 Irish Statutory Accounts

Eaton Corporation plc

Directors' Report and Consolidated Financial Statements

For the Year Ended December 31, 2017

EATON CORPORATION plc

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DIRECTORS' REPORT

For the Year Ended December 31, 2017

Amounts are in millions of dollars or shares unless indicated otherwise (per share data assume dilution).

The directors present their report and financial statements of Eaton Corporation plc (Eaton or the Company) for the year ended December 31, 2017.

The directors have elected to prepare the consolidated financial statements in accordance with Section 279 of Part 6 of the Companies Act 2014, which provides that a true and fair view of the state of affairs and profit or loss may be given by preparing the financial statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP), as defined in Section 279 (1) of Part 6 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of that part of the Companies Act 2014.

BASIS OF PRESENTATION

The accompanying consolidated financial statements include the accounts of Eaton and its majority-owned subsidiaries or affiliated companies (Group) where Eaton has the ability to control the entity through voting or similar rights.

PRINCIPAL ACTIVITIES

Eaton Corporation plc is a power management company with 2017 net sales of $20.4 billion. The Company provides energy-efficient solutions that help its customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton has approximately 96,000 employees in 59 countries and sells products to customers in more than 175 countries.

Business Segment Information

Information by business segment and geographic region regarding principal products, principal markets, methods of distribution, net sales, operating profit and assets is presented in Note 18 of the Notes to the Consolidated Financial Statements. Additional information regarding Eaton's segments and business is presented below.

Electrical Products and Electrical Systems and Services

Principal methods of competition in these segments are performance of products and systems, technology, customer service and support, and price. Eaton has a strong competitive position in these segments and, with respect to many products, is considered among the market leaders. In normal economic cycles, sales of these segments are historically lower in the first quarter and higher in the third and fourth quarters of a year. In 2017, 21% of these segments' sales were made to six large distributors of electrical products and electrical systems and services.

Hydraulics

Principal methods of competition in this segment are product performance, geographic coverage, service, and price. Eaton has a strong competitive position in this segment and, with respect to many products, is considered among the market leaders. Sales of this segment are historically higher in the first and second quarters and lower in the third and fourth quarters of the year. In 2017, 9% of this segment's sales were made to three large original equipment manufacturers or distributors of agricultural, construction, and industrial equipment and parts.

Aerospace

Principal methods of competition in this segment are total cost of ownership, product and system performance, quality, design engineering capabilities, and timely delivery. Eaton has a strong competitive position in this segment and, with respect to many products and platforms, is considered among the market leaders. In 2017, 29% of this segment's sales were made to three large original equipment manufacturers of aircraft.

Vehicle

Principal methods of competition in this segment are product performance, technology, global service, and price. Eaton has a strong competitive position in this segment and, with respect to many products, is considered among the market leaders. In 2017, 69% of this segment's sales were made to nine large original equipment manufacturers of vehicles and related components.

Information Concerning Eaton's Business in General

Raw Materials

Eaton's major requirements for raw materials include iron, steel, copper, nickel, aluminum, brass, tin, silver, lead, titanium, rubber, plastic, electronic components, chemicals and fluids. Materials are purchased in various forms, such as extrusions, castings, powder metal, metal sheets and strips, forging billets, bar stock, and plastic pellets. Raw materials, as well as parts and other components, are purchased from many suppliers. Under normal circumstances, the Company has no difficulty obtaining its raw materials. In 2017, Eaton maintained appropriate levels of inventory to prevent shortages and did not experience any availability constraints.

Patents and Trademarks

Eaton considers its intellectual property, including without limitation patents, trade names, domain names, trademarks, confidential information, and trade secrets to be of significant value to its business as a whole. The Company's products are manufactured, marketed and sold under a portfolio of patents, trademarks, licenses, and other forms of intellectual property, some of which expire or are allowed to lapse at various dates in the future. Eaton develops and acquires new intellectual property on an ongoing basis and considers all of its intellectual property to be valuable. Based on the broad scope of the Company's product lines, management believes that the loss or expiration of any single intellectual property right would not have a material effect on Eaton's consolidated financial statements or its business segments. The Company's policy is to file applications and obtain patents for the majority of its novel and innovative new products including product modifications and improvements.

Order Backlog

A significant portion of open orders placed with Eaton are by original equipment manufacturers or distributors. These open orders are not considered firm as they have been historically subject to releases by customers. In measuring backlog orders, only the amount of orders to which customers are firmly committed are included. Using this criterion, total backlog at December 31, 2017 and 2016 was approximately $4.8 billion and $4.0 billion, respectively. Backlog should not be relied upon as being indicative of results of operations for future periods.

Research and Development

Research and development expenses for new products and improvement of existing products in 2017 and 2016 were $584 and $589, respectively. Over the past five years, the Company has invested approximately $3.1 billion in research and development.

Environmental Contingencies

Operations of the Company involve the use and disposal of certain substances regulated under environmental protection laws. Eaton continues to modify processes on an ongoing, regular basis in order to reduce the impact on the environment, including the reduction or elimination of certain chemicals used in, and wastes generated from, operations. Compliance with laws that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, are not expected to have a material adverse effect upon earnings or the competitive position of the Company. Eaton's estimated capital expenditures for environmental control facilities are not expected to be material for 2018 and 2019. Information regarding the Company's liabilities related to environmental matters is presented in Note 11 of the Notes to the Consolidated Financial Statements.

PRINCIPAL RISKS AND UNCERTAINTIES

Among the risks that could materially adversely affect Eaton's businesses, financial condition or results of operations are the following:

Volatility of end markets that Eaton serves.

Eaton's segment revenues, operating results, and profitability have varied in the past and may vary from quarter to quarter in the future. Profitability can be negatively impacted by volatility in the end markets that Eaton serves. The Company has undertaken measures to reduce the impact of this volatility through diversification of the markets it serves and expansion of the geographic regions in which it operates. Future downturns in any of the markets could adversely affect revenues, operating results, and profitability.

Eaton's operating results depend in part on continued successful research, development, and marketing of new and/or improved products and services, and there can be no assurance that Eaton will continue to successfully introduce new products and services.

The success of new and improved products and services depends on their initial and continued acceptance by Eaton's customers. The Company's businesses are affected, to varying degrees, by technological change and corresponding shifts in customer demand, which could result in unpredictable product transitions or shortened life cycles. Eaton may experience difficulties or delays in the research, development, production, or marketing of new products and services which may prevent Eaton from recouping or realizing a return on the investments required to bring new products and services to market.

Eaton's ability to attract, develop and retain executives and other qualified employees is crucial to the Company's results of operations and future growth.

Eaton depends on the continued services and performance of key executives, senior management, and skilled personnel, particularly professionals with experience in its industry and business. Eaton cannot be certain that any of these individuals will continue his or her employment with the Company. A lengthy period of time is required to hire and develop replacement personnel when skilled personnel depart. An inability to hire, develop, and retain a sufficient number of qualified employees could materially hinder the business by, for example, delaying Eaton's ability to bring new products to market or impairing the success of the Company's operations.

Eaton's operations depend on production facilities throughout the world, which subjects them to varying degrees of risk of disrupted production.

Eaton manages businesses with manufacturing facilities worldwide. The Company's manufacturing facilities and operations could be disrupted by a natural disaster, labor strike, war, political unrest, terrorist activity, economic upheaval, or public health concerns. Some of these conditions are more likely in certain geographic regions in which Eaton operates. Any such disruption could cause delays in shipments of products and the loss of sales and customers, and insurance proceeds may not adequately compensate for losses.

If Eaton is unable to protect its information technology infrastructure against service interruptions, data corruption, cyber-based attacks or network security breaches, operations could be disrupted or data confidentiality lost.

Eaton relies on information technology networks and systems, including the Internet, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities, including procurement, manufacturing, distribution, invoicing and collection. These technology networks and systems may be susceptible to damage, disruptions or shutdowns due to failures during the process of upgrading or replacing software, databases or components; power outages; hardware failures; or computer viruses. In addition, security breaches could result in unauthorized disclosure of confidential information. If these information technology systems suffer severe damage, disruption, breach, or shutdown, and business continuity plans do not effectively resolve the issues in a timely manner, there could be a negative impact on operating results or the Company may suffer financial or reputational damage. Further, Cyber-based risks could also include attacks targeting the security, integrity and/or reliability of the hardware, software and information installed, stored or transmitted in our products, including after the purchase of those products and when they are incorporated into third party products, facilities or infrastructure. Such attacks could result in disruptions to third party systems, unauthorized release of confidential or otherwise protected information and corruption of data (our own or that of third parties). Further, to a significant extent, the security of our customers' systems depends on how those systems are protected, configured, updated and monitored, all of which are typically outside our control.

Eaton's global operations subject it to economic risk as Eaton's results of operations may be adversely affected by changes in government legislation, regulations and policies and currency fluctuations.

Operating globally subjects Eaton to changes in government regulations and policies in a large number of jurisdictions around the world, including those related to tariffs and trade barriers, investments, property ownership rights, taxation, and exchange controls. Changes in the relative values of currencies occur from time to time and could affect Eaton's operating results. While the Company monitors exchange rate exposures and attempts to reduce these exposures through hedging activities, these risks could adversely affect operating results.

Further, existing free trade laws and regulations, such as the North American Free Trade Agreement, provide certain beneficial duties and tariffs for qualifying imports and exports, subject to compliance with the applicable classification and other requirements. Changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture products could have an impact on our business and financial results.

Eaton may be subject to risks relating to changes in its tax rates or exposure to additional income tax liabilities.

Eaton is subject to income taxes in many jurisdictions around the world. Income tax liabilities are subject to the allocation of income among various tax jurisdictions. The Company's effective tax rate could be affected by changes in the mix among earnings in countries with differing statutory tax rates, changes in the valuation allowance of deferred tax assets, or changes in tax laws. The amount of income taxes paid is subject to ongoing audits by tax authorities in the countries in which Eaton operates. If these audits result in assessments different from amounts reserved, future financial results may include unfavorable adjustments to the Company's tax liabilities.

Eaton uses a variety of raw materials and components in its businesses, and significant shortages, price increases, or supplier insolvencies could increase operating costs and adversely impact the competitive positions of Eaton's products.

Eaton's major requirements for raw materials are described above in Principal Activities “Raw Materials”. Significant shortages could affect the prices Eaton's businesses are charged and the competitive position of their products and services, all of which could adversely affect operating results.

Further, Eaton's suppliers of component parts may increase their prices in response to increases in costs of raw materials that they use to manufacture component parts. The Company may not be able to increase its prices commensurately with its increased costs, adversely affecting operating results.

Eaton may be unable to adequately protect its intellectual property rights, which could affect the Company's ability to compete.

Protecting Eaton's intellectual property rights is critical to its ability to compete and succeed. The Company owns a large number of patents and patent applications worldwide, as well as trademark and copyright registrations that are necessary, and contribute significantly, to the preservation of Eaton's competitive position in various markets. Although management believes that the loss or expiration of any single intellectual property right would not have a material effect on the results of operations or financial position of Eaton or its business segments, there can be no assurance that any one, or more, of these patents and other intellectual property will not be challenged, invalidated, or circumvented by third parties. Eaton enters into confidentiality and invention assignment agreements with the Company's employees, and into non-disclosure agreements with suppliers and appropriate customers, so as to limit access to and disclosure of proprietary information. These measures may not suffice to deter misappropriation or independent third party development of similar technologies.

Eaton is subject to litigation and environmental regulations that could adversely impact Eaton's businesses.

At any given time, Eaton may be subject to litigation, the disposition of which may have a material adverse effect on the Company's businesses, financial condition or results of operations. Information regarding current legal proceedings is presented in Note 11 and Note 12 of the Notes to the Consolidated Financial Statements.

RESULTS OF OPERATIONS

Summary of Results of Operations

During 2017, the Company's results of operations returned to solid growth as global end markets expanded, particularly in the second half of 2017. During the year, the Company completed its multi-year restructuring program that reduced its cost structure, which expanded operating margins.

On July 31, 2017, Eaton sold a 50% interest in its heavy-duty and medium-duty commercial vehicle automated transmission business for $600 in cash to Cummins, Inc. The Company recognized a pre-tax gain of $533 ($410 after-tax) in the Consolidated Profit and Loss Accounts related to the gain from the $600 proceeds from the sale, and an unrealized gain of $544 ($433 after-tax) in the Consolidated Statements of Comprehensive Income related to the Company’s remaining 50% investment in the joint venture being remeasured to fair value. Eaton accounts for its investment on the equity method of accounting.

The tax rate for 2017 includes a tax benefit of $62 related to the United States Tax Cuts and Jobs Act (“TCJA”), which was signed into law on December 22, 2017. The tax benefit of $62 related to the TCJA is comprised of a tax benefit of $79 for adjusting deferred tax assets and liabilities, offset by a tax expense of $17 for the taxation of unremitted earnings of non-U.S. subsidiaries owned directly or indirectly by U.S. subsidiaries of Eaton.

During 2016, the Company's results of operations were impacted by a decline in several of the Company's end markets. Further, the results of operations were negatively impacted by the strengthening in the value of the U.S. dollar. Despite the declining market conditions and unfavorable impact of currency translation, the Company generated solid operating margins and diluted net income per share.

During 2015, Eaton announced a multi-year restructuring initiative to reduce its cost structure and gain efficiencies in all business segments and at corporate in order to respond to declining market conditions. Restructuring charges in 2017 and 2016 were $116 and $211, respectively. These charges were primarily comprised of severance costs. The initiative concluded at the end of 2017 and the projected annualized savings from these restructuring actions are expected to be $518, when fully realized in 2018.

Additional information related to acquisitions and divestitures of businesses, and restructuring activities is presented in Note 2, Note 3, and Note 4, respectively, of the Notes to the Consolidated Financial Statements.

A summary of Eaton's Net sales, Net income attributable to Eaton ordinary shareholders, and Net income per share attributable to Eaton ordinary shareholders - diluted follows:

	2017	2016
Net sales	$ 20,404	$ 19,747
Net income attributable to Eaton ordinary shareholders	2,552	1,916
Net income per share attributable to Eaton ordinary shareholders - diluted	$ 5.71	$ 4.20

Non-GAAP Financial Measures

The following discussion of Consolidated Financial Results and Business Segment Results of Operations includes certain non-GAAP financial measures. These financial measures include adjusted earnings, adjusted earnings per ordinary share, and operating profit before acquisition integration charges for each business segment as well as corporate, each of which differs from the most directly comparable measure calculated in accordance with generally accepted accounting principles (GAAP). A reconciliation of adjusted earnings and adjusted earnings per ordinary share to the most directly comparable GAAP measure is included in the table below. Operating profit before acquisition integration charges is reconciled in the discussion of the operating results of each business segment, and excludes acquisition integration expense related to integration of Ephesus Lighting, Inc. in 2017 and 2016, Oxalis Group Ltd. in 2016, and primarily Cooper Industries plc in 2015. Management believes that these financial measures are useful to investors because they exclude certain transactions, allowing investors to more easily compare Eaton's financial performance period to period. Management uses this information in monitoring and evaluating the on-going performance of Eaton and each business segment. For additional information on acquisition integration charges, see Note 3 to the Consolidated Financial Statements.

Consolidated Financial Results

	2017	Change from 2016	2016
Net sales	$ 20,404	3%	$ 19,747
Gross profit	6,648	5%	6,338
Percent of net sales	32.6%		32.1%
Income before income taxes	2,824	33%	2,118
Net income	2,553	33%	1,919
Less net income for noncontrolling interests	(1)		(3)
Net income attributable to Eaton ordinary shareholders	2,552	33%	1,916
Excluding acquisition integration charges, after-tax (Note 3)	2		3
Adjusted earnings	$ 2,554	33%	$ 1,919
Net income per share attributable to Eaton ordinary shareholders - diluted	$ 5.71	36%	$ 4.20
Excluding per share impact of acquisition integration charges, after-tax (Note 3)	—		0.01
Adjusted earnings per ordinary share	$ 5.71	36%	$ 4.21

Net Sales

Net sales in 2017 increased by 3% compared to 2016 due to an increase of 3% in organic sales. The increase in organic sales in 2017 was primarily due to higher sales volumes in the Electrical Products, Hydraulics, and Vehicle business segments.

Gross Profit

Gross profit margin increased from 32.1% in 2016 to 32.6% in 2017. The increase in gross profit margin in 2017 was primarily due to higher sales volumes, savings from restructuring actions, and lower restructuring charges, partially offset by commodity inflation.

Income Taxes

During 2017, an income tax expense of $271 was recognized (an effective tax rate of 9.6%) compared to income tax expense of $199 for 2016 (an effective tax rate of 9.4%). The 2017 effective tax rate includes tax expense of $123 on the gain from the sale of the business discussed in Note 2, and a tax benefit of $62 related to the U.S. Tax Cuts and Jobs Act ("TCJA"). Excluding the gain and related tax impact on the sale of business, and the impact of the TCJA, the effective tax rate for 2017 was expense of 9.2%. The decrease from 9.4% for 2016 compared to 9.2% for 2017 was due to the resolution of tax contingencies in various tax jurisdictions and the excess tax benefits recognized for employee share-based payments pursuant to the adoption of ASU 2016-09 as discussed in Note 1.

Net Income

Net income attributable to Eaton ordinary shareholders of $2,552 in 2017 increased 33% compared to $1,916 in 2016. Net income in 2017 included $533 from the gain on the sale of the business discussed in Note 2, and $62 of income from the new U.S. tax bill discussed in Note 12. Excluding these items, the increase in 2017 was primarily due to higher sales volumes, savings from restructuring actions, and lower restructuring charges, partially offset by commodity inflation.

Net income per ordinary share in 2017 included $0.92 from the gain on the sale of business discussed in Note 2 and $0.14 income from the new U.S. tax bill discussed in Note 12. Net income per ordinary share increased by 36% to $5.71 in 2017 compared to $4.20 in 2016. The increase was due to higher Net income attributable to Eaton ordinary shareholders and the Company's share repurchases in 2017.

Adjusted Earnings

Adjusted earnings of $2,554 in 2017 increased 33% compared to Adjusted earnings of $1,919 in 2016. The increase was due to higher Net income attributable to Eaton ordinary shareholders.

Adjusted earnings per ordinary share increased to $5.71 in 2017 compared to $4.21 in 2016. The increase in Adjusted earnings per ordinary share in 2017 was due to higher Adjusted earnings and the Company's share repurchases in 2017.

Business Segment Results of Operations

The following is a discussion of Net sales, operating profit and operating profit margin by business segment, which includes a discussion of operating profit and operating profit margin before acquisition integration charges. For additional information related to acquisition integration charges, see Note 3 to the Consolidated Financial Statements.

Electrical Products

	2017	Change from 2016	2016
Net sales	$ 7,193	3%	$ 6,957
Operating profit	1,287	4%	1,240
Operating margin	17.9%		17.8%
Acquisition integration charges	$ 4		$ 3
Before acquisition integration charges			
Operating profit	$ 1,291	4%	$ 1,243
Operating margin	17.9%		17.9%

Net sales increased 3% in 2017 compared to 2016 due to an increase of 3% in organic sales. Organic sales growth in 2017 was driven by growth in the Americas and Europe.

Operating margin increased from 17.8% in 2016 to 17.9% in 2017. The increase in operating margin in 2017 was primarily due to higher sales volumes, savings from restructuring actions, and lower restructuring charges, partially offset by commodity inflation and the impact from natural disasters in 2017.

Operating margin before acquisition integration charges was flat at 17.9% for 2016 and 2017.

Electrical Systems and Services

	2017	Change from 2016	2016
Net sales	$ 5,666	—%	$ 5,662
Operating profit	770	8%	711
Operating margin	13.6%		12.6%
Acquisition integration charges	$ —		$ 1
Before acquisition integration charges			
Operating profit	$ 770	8%	$ 712
Operating margin	13.6%		12.6%

Net sales were broadly flat in 2017 compared to 2016.

Operating margin increased from 12.6% in 2016 to 13.6% in 2017. Operating margin increased in 2017 primarily due to savings from restructuring actions and lower restructuring charges, partially offset by commodity inflation.

Operating margin before acquisition integration charges increased from 12.6% in 2016 to 13.6% in 2017. The increase in operating margin before acquisition integration charges was primarily due an increase in operating margin.

Hydraulics

	2017	Change from 2016	2016
Net sales	$ 2,468	11%	$ 2,222
Operating profit	288	45%	198
Operating margin	11.7%		8.9%

Net sales in 2017 increased 11% compared to 2016 due to an increase in organic sales of 12% and a decrease of 1% from the impact of negative currency translation. The increase in organic sales in 2017 was due to strength in global mobile equipment markets.

Operating margin increased from 8.9% in 2016 to 11.7% in 2017. The increase in operating margin in 2017 was primarily due to higher sales volumes, lower restructuring charges, and savings from restructuring actions, partially offset by commodity inflation.

Aerospace

	2017	Change from 2016	2016
Net sales	$ 1,744	— %	$ 1,753
Operating profit	332	(1)%	335
Operating margin	19.0%		19.1%

Net sales were broadly flat in 2017 compared to 2016.

Operating margin decreased from 19.1% in 2016 to 19.0% in 2017. The decrease was primarily due to higher program development spending, partially offset by savings from restructuring actions.

Vehicle

	2017	Change from 2016	2016
Net sales	$ 3,333	6%	$ 3,153
Operating profit	537	13%	474
Operating margin	16.1%		15.0%

Net sales increased 6% in 2017 compared to 2016 due to an increase in organic sales of 5% and an increase of 2% from the impact of positive currency translation, partially offset by a decrease of 1% from the sale of the business discussed in Note 2. The increase in organic sales in 2017 was primarily due to growth in North America.

Operating margin increased from 15.0% in 2016 to 16.1% in 2017. The increase in operating margin in 2017 was primarily due to higher sales volumes, lower restructuring costs, and savings from restructuring actions, partially offset by commodity inflation and unfavorable product mix.

Corporate Expense

	2017	Change from 2016	2016
Amortization of intangible assets	$ 388	(1)%	$ 392
Interest expense	280	13 %	247
Interest income	(34)	143 %	(14)
Pension and other postretirement benefits expense	45	(25)%	60
Gain on sale of a business	(533)	NM	—
Other corporate expense - net	244	57 %	155
Total corporate expense	$ 390	(54)%	$ 840

Corporate results were expense of $390 in 2017 compared to $840 in 2016. The change in Total corporate expense in 2017 was primarily due to the gain on the sale of the business discussed in Note 2, partially offset by an increase in other corporate expense.

LIQUIDITY, CAPITAL RESOURCES AND CHANGES IN FINANCIAL CONDITION

Financial Condition and Liquidity

Eaton's objective is to finance its business through operating cash flow and an appropriate mix of equity and long-term and short-term debt. By diversifying its debt maturity structure, Eaton reduces liquidity risk. The Company maintains access to the commercial paper markets through a $2,000 commercial paper program. On November 17, 2017, Eaton refinanced a $500, four-year revolving credit facility with a $500, three-year revolving credit facility that will expire November 17, 2020 and also refinanced a $750, five-year revolving credit facility with a $750, five-year revolving credit facility that will expire November 17, 2022. Eaton also maintains a $750, five-year revolving credit facility that will expire October 14, 2021. These refinancings maintain long-term revolving credit facilities at a total of $2,000. The revolving credit facilities are used to support commercial paper borrowings and are fully and unconditionally guaranteed by Eaton and certain of its direct and indirect subsidiaries on an unsubordinated, unsecured basis. There were no borrowings outstanding under Eaton's revolving credit facilities at December 31, 2017 or 2016. The Company had available lines of credit of $741 from various banks primarily for the issuance of letters of credit, of which there was $297 outstanding at December 31, 2017. Over the course of a year, cash, short-term investments and short-term debt may fluctuate in order to manage global liquidity. Eaton believes it has the operating flexibility, cash flow, cash and short-term investment balances, and access to capital markets in excess of the liquidity necessary to meet future operating needs of the business as well as scheduled payments of long-term debt.

On September 15, 2017, a subsidiary of Eaton issued senior notes (the Notes) with a face amount of $1,000. The Notes are comprised of two tranches of $700 and $300 which mature in 2027 and 2047, respectively, with interest payable semi-annually at a respective rate of 3.1% and 3.9%. The issuer received proceeds totaling $993 from the issuance, net of financing costs.

On September 20, 2016, a subsidiary of Eaton issued Euro denominated notes (Euro Notes) with a face value of €550 ($615 based on the September 20, 2016 spot rate), in accordance with Regulation S promulgated under the Securities Act of 1933, as amended. The Euro Notes mature in 2024 with interest payable annually at a rate of 0.75%. After financing costs and discounts, the issuer received proceeds totaling €544 ($609 based on the September 20, 2016 spot rate) from the issuance.

For additional information on financing transactions and debt, see Note 9 to the Consolidated Financial Statements.

Eaton's credit facilities and indentures governing certain long-term debt contain various covenants, the violation of which would limit or preclude the use of the credit facilities for future borrowings, or might accelerate the maturity of the related outstanding borrowings covered by the indentures. At Eaton's present credit rating level, the most restrictive financial covenant provides that the ratio of secured debt (or lease payments due under a sale and leaseback transaction) to adjusted consolidated net worth (or consolidated net tangible assets, in each case as defined in the relevant credit agreement or indenture) may not exceed 10%. Eaton's actual ratios are substantially below the required threshold. In addition, Eaton is in compliance with each of its debt covenants for all periods presented.

Sources and Uses of Cash

Operating Cash Flow

Net cash provided by operating activities was $2,666 in 2017, an increase of $96 compared to $2,570 in 2016. The increase was driven by higher net income, and lower working capital balances compared to 2016, partially offset by higher pension contributions, including $350 of voluntary contributions to Eaton's U.S. qualified pension plans.

Investing Cash Flow

Net cash used in investing activities was $217 in 2017, a decrease in the use of cash of $312 compared to $529 in 2016. The decrease in 2017 was primarily driven by proceeds of $600 from the sale of the business discussed in Note 2, partially offset by purchases of short-term investments of $298 in 2017 compared to $40 in 2016. Capital expenditures were $520 in 2017 compared to $497 in 2016. Eaton expects approximately $575 in capital expenditures in 2018.

Financing Cash Flow

Net cash used in financing activities was $2,442 in 2017, an increase in the use of cash of $704 compared to $1,738 in 2016. The increase in the use of cash was primarily due to higher payments on borrowings of $1,554 in 2017 compared to $653 in 2016 and higher share repurchases of $850 in 2017 compared to $730 in 2016, partially offset by higher proceeds from borrowings of $1,000 in 2017 compared to $631 in 2016.

Credit Ratings

Eaton's debt has been assigned the following credit ratings:

Credit Rating Agency (long- /short-term rating)	Rating	Outlook
Standard & Poor's	A-/A-2	Negative outlook
Moody's	Baa1/P-2	Stable outlook
Fitch	BBB+/F2	Stable outlook

Defined Benefits Plans

Pension Plans

During 2017, the fair value of plan assets in the Company's employee pension plans increased $865 to $5,312 at December 31, 2017. The increase in plan assets was primarily due to better than expected return on plan assets, the Company's contributions to the pension plans, and the impact of positive currency translation. At December 31, 2017, the net unfunded position of $1,048 in pension liabilities consisted of $279 in the U.S. qualified pension plans, $925 in plans that have no minimum funding requirements, and $62 in all other plans that require minimum funding, partially offset by $218 in plans that are overfunded.

Funding requirements are a major consideration in making contributions to Eaton's pension plans. With respect to the Company's pension plans worldwide, the Company intends to contribute annually not less than the minimum required by applicable law and regulations. In 2017, $473 was contributed to the pension plans. The Company anticipates making $112 of contributions to certain pension plans during 2018. The funded status of the Company's pension plans at the end of 2018, and future contributions, will depend primarily on the actual return on assets during the year and the discount rate used to calculate certain benefits at the end of the year. Depending on these factors, and the resulting funded status of the pension plans, the level of future contributions could be materially higher or lower than in 2017.

Off-Balance Sheet Arrangements

Eaton does not have off-balance sheet arrangements or financings with unconsolidated entities or other persons. In the ordinary course of business, the Company leases certain real properties and equipment, as described in Note 11 to the Consolidated Financial Statements.

MARKET RISK DISCLOSURE

On a regular basis, Eaton monitors third-party depository institutions that hold its cash and short-term investments, primarily for safety of principal and secondarily for maximizing yield on those funds. The Company diversifies its cash and short-term investments among counterparties to minimize exposure to any one of these entities. Eaton also monitors the creditworthiness of its customers and suppliers to mitigate any adverse impact.

Eaton uses derivative instruments to manage exposure to volatility in raw material costs, currency, and interest rates on certain debt instruments. Derivative financial instruments used by the Company are straightforward and non-leveraged. The counterparties to these instruments are financial institutions with strong credit ratings. Eaton maintains control over the size of positions entered into with any one counterparty and regularly monitors the credit rating of these institutions. See Note 16 to the Consolidated Financial Statements for additional information about hedges and derivative financial instruments.

Eaton's ability to access the commercial paper market, and the related cost of these borrowings, is based on the strength of its credit rating and overall market conditions. The Company has not experienced any material limitations in its ability to access these sources of liquidity. At December 31, 2017, Eaton had $2,000 of long-term revolving credit facilities with banks in support of its commercial paper program. It has no borrowings outstanding under these credit facilities.

Interest rate risk can be measured by calculating the short-term earnings impact that would result from adverse changes in interest rates. This exposure results from short-term debt, which includes commercial paper at a floating interest rate, long-term debt that has been swapped to floating rates, and money market investments that have not been swapped to fixed rates. Based upon the balances of investments and floating rate debt at year end 2017, a 100 basis-point increase in short-term interest rates would have increased the Company's net, pretax interest expense by $30.

Eaton also measures interest rate risk by estimating the net amount by which the fair value of the Company's financial liabilities would change as a result of movements in interest rates. Based on Eaton's best estimate for a hypothetical, 100 basis point decrease in interest rates at December 31, 2017, the market value of the Company's debt and interest rate swap portfolio, in aggregate, would increase by $537.

The Company is exposed to currency risk associated with translating its functional currency financial statements into its reporting currency, which is the U.S. dollar. As a result, the Company is exposed to movements in the exchange rates of various currencies against the U.S. dollar. Eaton also monitors exposure to transactions denominated in currencies other than the functional currency of each country in which the Company operates, and regularly enters into forward contracts to mitigate that exposure. In the aggregate, Eaton's portfolio of forward contracts related to such transactions was not material to its Consolidated Financial Statements.

CONTRACTUAL OBLIGATIONS

A summary of contractual obligations as of December 31, 2017 follows:

	2018	2019 to 2020	2021 to 2022	Thereafter	Total
Long-term debt, including current portion[1]	$ 578	$ 581	$ 2,003	$ 4,549	$ 7,711
Interest expense related to long-term debt	284	497	453	1,965	3,199
Reduction of interest expense from interest rate swap agreements related to long-term debt	(19)	(14)	(12)	(46)	(91)
Operating leases	159	204	105	71	539
Purchase obligations	958	93	9	4	1,064
Other obligations	155	9	8	23	195
Total	$ 2,115	$ 1,370	$ 2,566	$ 6,566	$ 12,617

(1) Long-term debt excludes deferred gains and losses on derivatives related to debt, adjustments to fair market value, and premiums and discounts on long-term debentures.

Interest expense related to long-term debt is based on the fixed interest rate, or other applicable interest rate, related to the debt instrument. The reduction of interest expense due to interest rate swap agreements related to long-term debt is based on the difference in the fixed interest rate the Company receives from the swap, compared to the floating interest rate the Company pays on the swap. Purchase obligations are entered into with various vendors in the normal course of business. These amounts include commitments for purchases of raw materials, outstanding non-cancelable purchase orders, releases under blanket purchase orders, and commitments under ongoing service arrangements. Other long-term obligations principally include anticipated contributions of $112 to pension plans in 2018 and $45 of deferred compensation earned under various plans for which the participants have elected to receive disbursement at a later date.

The table above does not include future expected pension benefit payments or expected other postretirement benefits payments. Information related to the amounts of these future payments is described in Note 10 to the Consolidated Financial Statements. The table above also excludes the liability for unrecognized income tax benefits, since the Company cannot predict with reasonable certainty the timing of cash settlements with the respective taxing authorities. At December 31, 2017, the gross liability for unrecognized income tax benefits totaled $735 and interest and penalties were $80.

RESULTS FOR THE YEAR AND STATE OF AFFAIRS

The results for the year are set out in the Consolidated Profit and Loss Accounts. The balance to be transferred to reserves is $2,552.

DIVIDENDS

During 2017 and 2016, Eaton's Board of Directors declared and paid quarterly dividends of $1,068 and $1,037, respectively.

FUTURE DEVELOPMENTS

Eaton expects to continue to invest in research and development associated with initiatives that it believes will offer the greatest potential for near and long-term growth. The Company plans to invest in areas in which it can benefit from its core competencies and global infrastructure. Funds will be used to expand operations organically and through acquisitions.

ACCOUNTING RECORDS

The directors are responsible for ensuring that the Company and its subsidiary undertakings included in the consolidated financial statements keeps proper accounting records and appropriate accounting systems. On a periodic basis, regular reports, certifications and attestations on the Company’s financial matters, internal control and fraud are made to the Audit Committee of the Board of Directors, who in turn, briefs the full Board of Directors on these matters. These measures include the provision of appropriate resources to maintain adequate accounting records throughout the group, including the appointment of personnel with appropriate qualifications and experience to ensure compliance with the requirements of Sections 281 to 285 of the Companies Act 2014. The accounting records of Eaton Corporation plc are maintained at the Company’s principal executive offices located at Eaton House, 30 Pembroke Road, Dublin 4, Ireland D04 Y0C2.

SIGNIFICANT EVENTS SINCE YEAR END

Subsequent events have been evaluated through February 28, 2018, the date this report was approved by the Audit Committee of the Board of Directors and the Board of Directors. On February 28, 2018, Eaton's Board of Directors declared a quarterly dividend of $0.66 per ordinary share, a 10% increase over the dividend paid in the fourth quarter of 2017. The dividend is payable on March 23, 2018, to shareholders of record at the close of business on March 12, 2018.

DIRECTORS AND SECRETARIES

The present directors and secretaries are listed in the following table and, except as noted below, have served throughout the period to December 31, 2017 and since year end.

Ms. Linda A. Hill retired as a director on April 26, 2017.

AUDIT COMMITTEE

Eaton has an Audit Committee with responsibility for oversight of the financial reporting process, the audit process, the independence of the auditors, the system of internal controls, internal audit and risk management, and compliance with laws and regulations.

DIRECTORS' AND SECRETARIES' INTEREST IN SHARES

No director, the secretary, assistant secretary or any member of their immediate families had any interest in shares or debentures of any subsidiary. Directors' remuneration is set forth in Note 21 to the Consolidated Financial Statements. The interest of the directors and company secretaries in ordinary share capital of Eaton Corporation plc at December 31, 2017 and December 31, 2016 are as follows:

	December 31, 2017				December 31, 2016			
	Ordinary shares	Stock options	Restricted share units	Deferred Share Units	Ordinary shares	Stock options	Restricted share units	Deferred Share Units
Directors								
Craig Arnold [(1)(2)]	215,525	446,442	61,073	—	200,588	325,000	48,571	—
Todd M. Bluedorn	6,536	—	12,061	—	6,536	—	9,580	—
Christopher M. Connor	13,650	—	12,061	27,396	13,650	6,450	9,580	26,530
Michael J. Critelli	70,566	—	12,061	—	70,566	—	9,580	—
Richard H. Fearon	236,497	326,150	23,388	—	254,856	271,850	22,495	—
Charles E. Golden	18,103	—	12,061	9,967	15,964	6,450	9,580	9,652
Arthur E. Johnson	9,590	—	12,061	—	9,590	—	9,580	—
Deborah L. McCoy	39,936	—	12,061	29,102	44,936	6,450	9,580	28,182
Gregory R. Page	57,229	—	12,061	12,252	50,779	6,450	9,580	11,865
Sandra Pianalto	500	—	7,367	—	500	—	5,035	—
Gerald B. Smith	5,671	—	12,061	—	5,671	—	9,580	—
Dorothy C. Thompson	550	—	2,168	—	550	—	—	—
Secretary								
Thomas E. Moran [(3)(4)]	10,668	28,570	4,532	—	13,714	24,570	4,625	—
Assistant Secretaries								
Estelle Diggin	—	—	—	—	—	—	—	—
Nigel Crawford	—	—	650	—	—	—	—	—

(1) At December 31, 2017, Craig Arnold held 162.42 shares in Employee Stock Plan (ESP)

(2) At December 31, 2016, Craig Arnold held 157.85 shares in ESP

(3) At December 31, 2017, 600 shares were owned by Thomas E. Moran's spouse; 181.49 ordinary shares in ESP

(4) At December 31, 2016, 600 shares were owned by Thomas E. Moran's spouse; 176.39 ordinary shares in ESP

POLITICAL DONATIONS

No political contributions that require disclosure under Irish law were made during the year.

SUBSIDIARY COMPANIES AND BRANCHES

Information regarding subsidiary undertakings, included information regarding branches, is provided in Note 23 to the Consolidated Financial Statements.

GOING CONCERN

The directors have a reasonable expectation that Eaton has adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the financial statements.

DIRECTORS' RESPONSIBILITIES STATEMENT

Company law in the Republic of Ireland requires the Directors to prepare financial statements for each financial year which give a true and fair view of the state of the assets, liabilities and financial position of the Parent Company and of the Group and of the profit or loss of the Group for that period.

In preparing the financial statements of the Group, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- comply with applicable U.S. generally accepted accounting principles to the extent that the use of U.S. generally accepted accounting principles does not contravene any provision of the Companies Act 2014, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group will continue in business

The considerations set out above for the Group are also required to be addressed by the Directors in preparing the financial statements of the Parent Company (which are also set out in these statutory accounts), in respect of which the applicable accounting standards are those which are generally accepted in the Republic of Ireland.

The directors have elected to prepare the Parent Company's financial statements in accordance with accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland, including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (Generally Accepted Accounting Practice in Ireland).

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the assets, liabilities and financial position, of the group and parent company as at the end of the financial year, and the profit or loss for the group for the financial year, and otherwise comply with the Companies Act 2014.

The Directors are responsible for keeping accounting records which disclose with reasonable accuracy the assets, liabilities, financial position and profit and loss of the Parent Company and which enable them to ensure that the financial statements of the Group are prepared in accordance with applicable U.S. generally accepted accounting principles and comply with the provisions of the Companies Acts 2014. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

DIRECTORS' COMPLIANCE STATEMENT

As required by Section 225 of the Companies Act 2014 of Ireland, the Directors acknowledge that they are responsible for securing the Company's compliance with its relevant obligations (as defined in that legislation). The Directors further confirm that a compliance policy statement has been drawn up, and that appropriate arrangements and structures have been put in place that are, in the Directors' opinion, designed to secure material compliance with the relevant obligations. A review of those arrangements and structures has been conducted in the financial year to which this report relates.

DISCLOSURE OF INFORMATION TO THE AUDITOR

So far as each person who was a Director at the date of approving this report is aware, there is no relevant audit information, being information needed by the auditor in connection with preparing their report, of which the auditor is unaware. Having made inquiries of fellow Directors and the group’s auditor, each Director has taken all the steps that they are obliged to take as a director in order to make them aware of any relevant audit information and to establish that the auditor is aware of that information.

AUDITORS

Ernst & Young, Chartered Accountants, have expressed their willingness to continue in office in accordance with the Section 383(2) of the Companies Act 2014.

On behalf of the Directors:

Craig Arnold	Gerald B. Smith
Chairman of the Board of Directors	Director

February 28, 2018

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF EATON CORPORATION PLC

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Eaton Corporation plc (the 'Parent Company') and its subsidiaries (the 'Group') for the year ended 31 December 2017 which comprise the Consolidated Profit and Loss Account, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Statement of Cash Flows, the Consolidated Statement of Shareholders' Equity, the Parent Company Statement of Financial Position, the Parent Company Statement of Comprehensive Income, the Parent Company Statement of Changes in Equity, the related notes 1 to 23 in respect of the Group financial statements and the related notes 1 to 15 in respect to the Parent Company financial statements, including a summary of significant accounting policies as set out therein. The financial reporting framework that has been applied in the preparation of the Group financial statements is Irish law and U.S. Generally Accepted Accounting Principles (U.S. GAAP), as defined in section 279 of Part 6 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of that Part of the Companies Act 2014. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable Irish law and accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland), including FRS 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*.

In our opinion:

- the Group financial statements give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2017 and of the profit for the Group for the year then ended, and have been properly prepared in accordance with U.S. Generally Accepted Accounting Principles (U.S. GAAP), as defined in section 279 of Part 6 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of that Part of the Companies Act 2014;

- the Parent Company statement of financial position gives a true and fair view of the assets, liabilities and financial position of the Parent Company as at 31 December 2017, and has been properly prepared in accordance with Irish GAAP, including FRS 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*; and

- the financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Group and the Parent Company in accordance with ethical requirements that are relevant to our audit of financial statements in Ireland, including the Ethical Standard issued by the Irish Accounting and Auditing Supervisory Authority (IAASA), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISA 570 (Ireland) 'Going concern' requires us to report to you where:

- The directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate: or
- The directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group and Parent Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified. These matters include those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	**Our response to the risk**	**Key observations communicated to the Audit Committee**
Unrecognised Income Tax Benefits As more fully described in Note 12, related to its uncertain tax positions, the Group had gross unrecognised income tax benefits of $735 million at 31 December 2017. Unrecognised income tax benefits are recorded under the two-step recognition and measurement principles when a tax position does not meet the more likely than not standard, or if a tax position meets the more likely than not standard, but the financial statement tax benefit is reduced as part of the measurement step. The Group, as a matter of accounting policy, does not take any positions that do not meet the more likely than not standard. As such, the balance of unrecognised income tax benefits is comprised of uncertain tax positions which meet the more likely than not standard, but the financial statement tax benefit has been reduced as part of measuring the tax position. Auditing management's analysis of its uncertain tax positions and resulting unrecognised income tax benefits is significant because the amounts are material to the financial statements and the assessment process is complex and involves both significant judgment and estimation. Each tax position carries unique facts and circumstances that must be evaluated and ultimate resolution is dependent on uncontrollable factors such as the prospect of retroactive regulations, new case law, the willingness of the income tax authority to settle the issue, including the timing thereof, and other factors.	We tested controls that address the risks of material misstatement relating to uncertain tax positions. For example, we tested controls over management's application of the two-step recognition and measurement principles and management's review of the inputs and resultant calculations of all unrecognised income tax benefits, as well as the controls in place for the identification of uncertain tax positions. We also evaluated the Group's assessment of its uncertain tax positions. Our audit procedures included evaluating the assumptions used to develop its uncertain tax positions and related unrecognised income tax benefit amounts by jurisdiction and testing the completeness and accuracy of the underlying data used by the Group. For example, we compared the unrecognised income tax benefits recorded with similar positions taken in prior periods and assessed management's consideration of current tax controversy and litigation and trends in similar positions challenged by tax authorities. We also assessed the historical accuracy of management's estimates of its unrecognised income tax benefits with the resolution of those positions. In addition, we involved tax subject matter professionals to evaluate the application of relevant tax laws in the Group's recognition determination. We also tested the Group's release of previously recorded unrecognised income tax benefits, which along with the recording of additional unrecognised income tax benefits, impacts the calculation of its effective tax rate.	Our observations included an outline of the range of audit procedures performed and the results of our testing. We provided our assessment of the tax reserves in light of open tax authority examination periods, transfer pricing and various country matters. No significant matters were noted.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Valuation of Indefinite-Life Intangible Assets Indefinite-life intangible assets totalled approximately $1,654 million at 31 December 2017 and consisted of trademarks recognised as a result of prior business combinations. As explained in Note 1 of the consolidated financial statements, indefinite-life intangible assets are not amortised but rather are tested by management for impairment at least annually. Auditing the impairment tests was complex due to the significant measurement uncertainty in determining the fair value of the trademarks. In particular, the fair value estimates were sensitive to significant assumptions such as weighted average cost of capital, revenue growth rate, royalty rate and terminal value, which are affected by expected future economic or market conditions.	We tested relevant controls over the Group's process to determine the fair value of each trademark. For example, we tested controls over management's review of the valuation model (e.g., weighted average cost of capital, revenue growth rate, royalty rate and terminal value) and the significant assumptions used to develop the prospective financial information (PFI) (e.g., revenue growth rate, including historical results, primary market indicators and profitability expectations). We also tested management's controls to validate that the data used in the valuation was complete and accurate. To test the fair value of the Group's trademarks, our audit procedures included, among others, evaluating the Group's use of the income approach (the relief-from-royalty methodology), testing the significant assumptions discussed above used to develop the PFI and testing the completeness and accuracy of the underlying data. For example, we compared the significant assumptions to current industry, market and economic trends, to historical results of the Group's business and other guideline companies within the same industry and to other relevant factors. We performed a sensitivity analysis of the significant assumptions (e.g., weighted average cost of capital, revenue growth rate, royalty rate and terminal value) to evaluate the change in fair value of the trademarks resulting from changes in assumptions. We also assessed the historical accuracy of management's estimates. In addition, we involved a valuation specialist to help us evaluate the components of each trademark's weighted average cost of capital, which is a significant input to the fair value estimate.	Our observations included our assessment of the reasonableness of the Group using a discounted cash flow analysis under the relief-from-royalty method to assess indefinite lived intangible assets for impairment. We also provided our observations on the reasonableness of the discount rates used. No significant matters were noted.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Cummins Joint Venture Formation		
On 31 July 2017, the Group sold a 50% interest in its heavy-duty and medium-duty commercial vehicle automated transmission business for $600 million in cash to Cummins, Inc. (Cummins), as disclosed in Note 2 to the consolidated financial statements. The new joint venture is named Eaton Cummins Automated Transmission Technologies (ECATT). The Group recognized a pre-tax gain of $533 million ($410 million after-tax) in the Consolidated Profit and Loss Account related to the gain from the $600 million proceeds from the sale, and an unrealized gain of $544 million ($433 million after-tax) in the Consolidated Statement of Comprehensive Income related to the Group's remaining 50% investment in the joint venture being remeasured to fair value. The fair value is based on the price paid to Eaton for the 50% interest sold to Cummins, Inc. Auditing the Group's accounting for this transaction required additional judgement due to the application of complex technical accounting standards in evaluating the joint venture against the variable interest model and assessing considerations for deconsolidation (that resulted in the joint venture being accounted for under the equity method of accounting). It also required consideration of the nature of components included in the transaction gain calculation, including the estimated fair value of Eaton's 50% retained investment.	While the estimated fair value was based on the price paid to Eaton for the 50% interest sold to Cummins, the Group also engaged a third-party valuation firm to corroborate the fair value of the non-controlling interest retained by the Group using a discounted cash flow model. The significant considerations used in assessing the joint venture against the variable interest model and treatment under the equity method of accounting included the legal structure of ECATT as well as relative rights, obligations and voting interests of Eaton and Cummins in owning the joint venture. In addition to the purchase price, the significant assumptions used to corroborate the fair value of the non-controlling interest retained by the Group included discount rates, assumptions that form the basis of the forecasted cash flows (e.g., revenue growth rates) and an assessment as to whether a discount for lack of control was required. We tested relevant controls over the Group's accounting for the sale of its business and corresponding formation of the ECATT joint venture. For example, we tested controls over management's review of the accounting analysis it made in evaluating the joint venture against the variable interest model, and assessing considerations for deconsolidation and equity method of accounting treatment. We also tested controls over management's review of the transaction gain calculation as well as the third-party valuation and related projected financial information underlying the corroborative fair value calculation. We also evaluated management's controls to validate that the data used in the valuation was complete and accurate. We read the ECATT transaction agreement, vouched all cash receipts and evaluated the components of the gain calculation in consideration of applicable accounting guidance. We also evaluated the joint venture against the variable interest model, assessed the considerations for deconsolidation and treatment under the equity method of accounting (e.g., ownership and structure of joint venture as well as respective rights of Eaton and Cummins). Additionally, we evaluated the Group's use of the income approach (using a discounted cash flow model) and significant assumptions (e.g., discount rates, revenue growth rates) used in developing the corroborative fair value calculation. For example, we evaluated the forecasted results in conjunction with previous disclosures made by management to identify any contrary information. In addition, we involved a valuation specialist to evaluate the valuation methodology and certain significant inputs to the model, including the weighted average cost of capital and assessment of a discount for lack of control.	Our observations included our assessment of the consolidation and variable interest entity analysis prepared by management resulting in the Group accounting for their 50% interest in the joint venture under the equity method of accounting. We also provided observations related to the underlying valuation and the overall gain calculation. No significant matters were noted.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

Materiality is the magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group to be $110 million (2016: $100 million), which is approximately 5% of Group profit before tax (adjusted for non-recurring items). We believe that adjusted profit before tax is a key performance indicator for the Group. We therefore considered adjusted profit before tax to be the most appropriate performance metric on which to base our materiality calculation as we consider it to be the most relevant performance measure to the main stakeholders of the Group.

During the course of our audit, we reassessed initial materiality and the only change in final materiality was to reflect the actual reported performance of the Group in the year.

Performance materiality

Performance materiality is the application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality should be set at 75% of our planning materiality, namely $82 million (2016: $75 million). We have set performance materiality at this percentage due to our past history of a low number of misstatements, our ability to assess the likelihood of misstatements, both corrected and uncorrected, the effectiveness of the control environment and other factors affecting the entity and its financial reporting.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was $5.5 million to $62 million.

Reporting threshold

Reporting Threshold is the amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $5.5 million (2016: $5.0 million), which is set at approximately 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Audit Scope

- We performed an audit of the complete financial information of 27 full-scope components and performed audit procedures on specific balances for a further 41 components.
- The components where we performed either full or specific audit procedures accounted for 85% of the Group's profit before tax, 94% of the Group's Revenue and 74% of the Group's Total Assets.
- 'Components' represent business units across the Group considered for audit scoping purposes.

An overview of the scope of our audit
Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the Consolidated Financial Statements. We take into account size, risk profile, the organisation of the Group and effectiveness of group-wide controls and other factors when assessing the level of work to be performed at each entity.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we selected 68 components covering entities across the Americas, Asia, Europe, the Middle East, and Africa, which represent the principal business units within the Group.

Of the 68 (2016: 73) components selected, we performed an audit of the complete financial information of 27 (2016: 27) components ('full scope components') which were selected based on their size or risk characteristics. Of the 27 full scope components selected, 7 such components relate to U.S. Corporate Headquarters and other corporate entities, including shared service centres as well as the Group's treasury management and consolidation functions. For the remaining 41 (2016: 46) components ('specific scope components'), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile.

The reporting components where we performed audit procedures accounted for 85% (2016: 92%) of the Group's profit before tax, 94% (2016: 94%) of the Group's revenue and 74% (2016: 79%) of the Group's total assets. The change in coverage of Group profit before tax is due to rotation of certain components previously included within our Group audit scope.

For the current year, the full scope components contributed 48% (2016: 43%) of the Group's profit before tax, 94% (2016: 94%) of the Group's revenue and 71% (2016: 76%) of the Group's total assets. The specific scope components contributed 37% (2016: 49%) of the Group's profit before tax. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of significant accounts tested for the Group.

The remaining components together represent 15% of the Group's profit before tax with average revenues of $11.1m and average profit before tax of $0.4m. Included within the remaining components are entities selected for specified procedures over certain accounts, such as cash, income taxes, pension and other postretirement benefits and inventory. For these remaining components, we also performed other procedures, including testing the effectiveness of Group-wide controls, analytical reviews, testing of consolidation journals and intercompany eliminations and foreign currency translation recalculations to respond to any potential risks of material misstatement to the consolidated financial statements.

Other information

The directors are responsible for the other information. The other information comprises the information included in the Directors' Report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by the Companies Act 2014

In our opinion, based solely on the work undertaken in the course of the audit:

- the information given in the directors' report for the financial year for which the statutory financial statements are prepared is consistent with the statutory financial statements in respect of the financial year concerned; and
- the directors' report has been prepared in accordance with applicable legal requirements.

We have obtained all the information and explanations which we consider necessary for the purposes of our audit.

In our opinion the accounting records of the Parent Company were sufficient to permit the financial statements to be readily and properly audited and the Parent Company statement of financial position is in agreement with the accounting records.

Matters on which we are required to report by exception

Based on our knowledge and understanding of the Group and its environment obtained in the course of the audit, we have not identified material misstatements in the directors' report.

We have nothing to report in respect of Sections 305 to 312 of the Companies Act 2014 which require us to report to you if, in our opinion, the disclosures of directors' remuneration and transactions specified by law are not made.

Respective responsibilities
Responsibilities of directors for the financial statements

As explained more fully in the directors' responsibilities statement set on page 15, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or the Parent Company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the IAASA's website at:http://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Description_of_auditors_responsibilities_for_audit.pdf. This description forms part of our auditor's report.

The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Parent Company's members, as a body, in accordance with section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Parent Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Parent Company and the Parent Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Dermot Daly
For and on behalf of Ernst & Young
Chartered Accountants and Statutory Audit Firm

Dublin
28 February 2018

EATON CORPORATION plc
CONSOLIDATED PROFIT AND LOSS ACCOUNTS

(In millions except for per share data)	Note	Year ended December 31 2017	2016
Net sales	18	$ 20,404	$ 19,747
Cost of products sold		13,756	13,409
Gross profit		6,648	6,338
Selling and administrative expense		3,565	3,505
Research and development expense		584	589
Interest expense		280	247
Interest income		(34)	(14)
Gain on sale of business	2	(533)	—
Other expense		69	51
Other income		(107)	(158)
Income before income taxes	18	2,824	2,118
Income tax expense	12	271	199
Net income		2,553	1,919
Less net income for noncontrolling interests		(1)	(3)
Net income attributable to Eaton ordinary shareholders		$ 2,552	$ 1,916
Net income per share attributable to Eaton ordinary shareholders			
Diluted	13	$ 5.71	$ 4.20
Basic	13	5.74	4.21
Weighted-average number of ordinary shares outstanding			
Diluted	13	447.0	456.5
Basic	13	444.5	455.0
Cash dividends declared per ordinary share		$ 2.40	$ 2.28

The accompanying notes are an integral part of the consolidated financial statements.

EATON CORPORATION plc
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In millions)	Note	Year ended December 31 2017	2016
Net income		$ 2,553	$ 1,919
Less net income for noncontrolling interests		(1)	(3)
Net income attributable to Eaton ordinary shareholders		2,552	1,916
Other comprehensive income (loss), net of tax			
Currency translation and related hedging instruments	13	807	(570)
Unrealized gain on retained investment in sold business	13	433	—
Pensions and other postretirement benefits	13	241	(6)
Cash flow hedges	13	(4)	(9)
Other comprehensive income (loss) attributable to Eaton ordinary shareholders		1,477	(585)
Total comprehensive income attributable to Eaton ordinary shareholders		$ 4,029	$ 1,331

The accompanying notes are an integral part of the consolidated financial statements.

EATON CORPORATION plc
CONSOLIDATED BALANCE SHEETS

(In millions)	Note	December 31 2017		December 31 2016	
Assets					
Fixed assets					
Intangible assets - goodwill	6	$	13,568	$	13,201
Intangible assets - other	6		5,594		5,828
Property, plant and equipment, net	5		3,502		3,443
Investments in associate companies	2		756		117
Current assets					
Inventory	17		2,620		2,346
Debtors	7		5,710		5,090
Short-term investments	15		534		203
Cash			561		543
Total assets		$	32,845	$	30,771
Liabilities					
Shareholders' equity					
Called up share capital		$	4	$	5
Share premium			11,576		11,507
Profit and loss account			8,801		7,687
Other reserves	13		(3,125)		(4,242)
Shares held in trust			(3)		(3)
Total Eaton shareholders' equity			17,253		14,954
Noncontrolling interests			37		44
Total shareholders' equity			17,290		14,998
Provision for liabilities and charges					
Pension and other postretirement benefits	10		1,659		2,104
Deferred income taxes	12		760		616
Other provisions	11		487		534
Creditors					
Debt	9		7,751		8,277
Creditors	8		4,898		4,242
Total for provisions and creditors			15,555		15,773
Total liabilities		$	32,845	$	30,771

The accompanying notes are an integral part of the consolidated financial statements.

The Consolidated Financial Statements were approved by the Audit Committee of the Board of Directors and the Board of Directors on February 28, 2018 and signed on its behalf by:

Craig Arnold
Chairman of the Board of Directors

Gerald B. Smith
Director

EATON CORPORATION plc
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)	Year ended December 31 2017	2016
Operating activities		
Net income	$ 2,553	$ 1,919
Adjustments to reconcile to net cash provided by operating activities		
Depreciation and amortization	914	929
Deferred income taxes	(206)	(83)
Pension and other postretirement benefits expense	208	235
Contributions to pension plans	(473)	(262)
Contributions to other postretirement benefits plans	(20)	(30)
Gain on sale of businesses	(410)	—
Changes in working capital		
Accounts receivable - net	(231)	(170)
Inventory	(202)	34
Accounts payable	388	—
Accrued compensation	59	20
Accrued income and other taxes	(4)	30
Other current assets	2	(21)
Other current liabilities	(203)	(44)
Other - net	291	13
Net cash provided by operating activities	2,666	2,570
Investing activities		
Capital expenditures for property, plant and equipment	(520)	(497)
Proceeds from sale of business	607	—
Cash received from acquisitions of businesses, net of cash acquired	—	1
Purchases of short-term investments - net	(298)	(40)
Other - net	(6)	7
Net cash used in investing activities	(217)	(529)
Financing activities		
Proceeds from borrowings	1,000	631
Payments on borrowings	(1,554)	(653)
Cash dividends paid	(1,068)	(1,037)
Exercise of employee stock options	66	74
Repurchase of shares	(850)	(730)
Employees taxes paid from shares withheld	(22)	(18)
Other - net	(14)	(5)
Net cash used in financing activities	(2,442)	(1,738)
Effect of currency on cash	11	(28)
Total increase in cash	18	275
Cash at the beginning of the period	543	268
Cash at the end of the period	$ 561	$ 543

The accompanying notes are an integral part of the consolidated financial statements.

EATON CORPORATION plc
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In millions)	Called up share capital Shares	Called up share capital Dollars	Share premium	Profit and loss account	Other reserves	Shares held in trust	Total Eaton shareholders' equity (Note 13)	Noncontrolling interests	Total equity
Balance at January 1, 2016	458.8	$ 5	$ 11,431	$ 7,540	$ (3,724)	$ (3)	$ 15,249	$ 45	$ 15,294
Net income	—	—	—	1,916	—	—	1,916	3	1,919
Other comprehensive loss, net of tax					(585)		(585)	—	(585)
Cash dividends paid	—	—	—	(1,037)	—	—	(1,037)	(2)	(1,039)
Issuance of shares under equity-based compensation plans-net (net of income tax benefit of $1)	2.4	—	76	(2)	67	—	141	—	141
Changes in noncontrolling interest of consolidated subsidiaries, net	—	—	—	—	—	—	—	(2)	(2)
Repurchase and cancellation of ordinary shares	(11.8)	—	—	(730)	—	—	(730)	—	(730)
Balance at December 31, 2016	449.4	5	11,507	7,687	(4,242)	(3)	14,954	44	14,998
Cumulative-effect adjustment upon adoption of ASU 2016-09	—	—	—	48	—	—	48	—	48
Net income	—	—	—	2,552	—	—	2,552	1	2,553
Other comprehensive income, net of tax				433	1,044		1,477	—	1,477
Cash dividends paid	—	—	—	(1,068)	—	—	(1,068)	(5)	(1,073)
Issuance of shares under equity-based compensation plans	2.0	—	69	(2)	73	—	140	—	140
Changes in noncontrolling interest of consolidated subsidiaries, net	—	—	—	—	—	—	—	(3)	(3)
Repurchase and cancellation of ordinary shares	(11.5)	(1)	—	(849)	—	—	(850)	—	(850)
Balance at December 31, 2017	439.9	$ 4	$ 11,576	$ 8,801	$ (3,125)	$ (3)	$ 17,253	$ 37	$ 17,290

The accompanying notes are an integral part of the consolidated financial statements.

Amounts are in millions unless indicated otherwise (per share data assume dilution).

Note 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General Information

Eaton Corporation plc (Eaton or the Company) is a power management company with 2017 net sales of $20.4 billion. The Company provides energy-efficient solutions that help its customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. Eaton has approximately 96,000 employees in 59 countries and sells products to customers in more than 175 countries.

The consolidated financial statements of the Company have been prepared in accordance with Section 279 of the Companies Act 2014, which provides that a true and fair view of the assets, liabilities, financial position and profit or loss may be given by preparing the financial statements in accordance with generally accepted accounting principles in the United States (U.S. GAAP), as defined in Section 279 (1) of the Companies Act 2014, to the extent that the use of those principles in the preparation of the consolidated financial statements does not contravene any provision of Part 6 of the Companies Act 2014.

These consolidated financial statements were prepared in accordance with Irish Company Law, to present to the shareholders of the Company and file with the Companies Registration Office in Ireland. Accordingly, these consolidated financial statements include presentation, inventory valuation and additional disclosures required by the Republic of Ireland's Companies Act, 2014 (Companies Act) in addition to those disclosures required under U.S. GAAP. A reconciliation of the amounts reported herein to the comparable amounts reported in Eaton's Consolidated Financial Statements, as filed in its Annual Report on Form 10-K with the United States Securities and Exchange Commission, is included in Note 20.

Terminology typically utilized in a set of U.S. GAAP financial statements has been retained for the benefit of those users of these financial statements who also access our Form 10-K U.S. GAAP financial statements, rather than utilizing the terminology set out under Irish Company Law. Accordingly, references to net sales, cost of products sold, interest income, interest expense, income tax expense, net income, property, plant and equipment, net, inventory and cash have the same meaning as references to turnover, cost of sales, other interest receivable and similar income, interest payable and similar charges, tax on profit on ordinary activities, profit on ordinary activities after taxation, tangible assets, stocks and cash at bank and in hand under Irish Company Law.

Preparation of the consolidated financial statements requires management to make estimates and assumptions that affect amounts reported in the consolidated financial statements and notes. Actual results could differ from these estimates.

The consolidated financial statements include the accounts of Eaton and all subsidiaries and other entities it controls. Intercompany transactions and balances have been eliminated. The equity method of accounting is used for investments in associate companies where the Company has significant influence and generally a 20% to 50% ownership interest. Equity investments are evaluated for impairment whenever events or circumstances indicate the book value of the investment exceeds fair value. An impairment would exist if there is an other-than-temporary decline in value. Eaton does not have off-balance sheet arrangements or financings with unconsolidated entities. In the ordinary course of business, the Company leases certain real properties and equipment, as described in Note 11.

Eaton's functional currency is United States Dollars (USD). The functional currency for most subsidiaries is their local currency. Financial statements for these subsidiaries are translated at year-end exchange rates as to assets and liabilities and weighted-average exchange rates as to revenues and expenses. The resulting translation adjustments are recognized in Other reserves.

During 2017, the Company adopted Accounting Standards Update 2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, (ASU 2016-09). Upon adoption, the Company recorded deferred tax assets of $48 for all excess tax benefits that had not been previously recognized. This was accomplished through a cumulative-effect adjustment to Profit and loss reserve account. ASU 2016-09 also requires that all excess tax benefits and deficiencies generated in the current and future periods be recorded as income tax benefit or expense in the reporting period in which they occur. These excess tax benefits and deficiencies, which were previously required to be presented as financing activities on the Company’s Consolidated Statements of Cash Flows, are now classified as operating activities prospectively. The Company also reclassified $22 and $18 for 2017 and 2016, respectively, from operating activities to financing activities on the Company’s Consolidated Statements of Cash Flows for withholding payments made to taxing authorities from shares withheld from employees. The Company will continue to estimate forfeitures as part of recording equity-based compensation expense.

Revenue Recognition

Sales of products are recognized when a sales agreement is in place, products have been shipped to unaffiliated customers and title has transferred in accordance with shipping terms, the selling price is fixed and determinable and collectability is reasonably assured, all significant related acts of performance have been completed, and no other significant uncertainties exist. Shipping and handling costs billed to customers are included in Net sales and the related costs in Cost of products sold. Although the majority of the sales agreements contain standard terms and conditions, there are agreements that contain multiple elements or non-standard terms and conditions. As a result, judgment is required to determine the appropriate accounting, including whether the deliverables specified in these agreements should be treated as separate units of accounting for recognition purposes, and, if so, how the sales price should be allocated among the elements and when to recognize sales for each element. For delivered elements, sales generally are recognized only when the delivered elements have standalone value and there are no uncertainties regarding customer acceptance. Sales for service contracts generally are recognized as the services are provided.

Eaton records reductions to revenue for customer and distributor incentives, primarily comprised of rebates, at the time of the initial sale. Rebates are estimated based on sales terms, historical experience, trend analysis, and projected market conditions in the various markets served. The rebate programs offered vary across businesses due to the numerous markets Eaton serves, but the most common incentives relate to amounts paid or credited to customers for achieving defined volume levels.

Goodwill and Indefinite Life Intangible Assets

Irish Company Law requires that indefinite-lived intangible assets and goodwill be amortized. However, Eaton does not believe this gives a true and fair view because not all goodwill and intangible assets decline in value. In addition, since goodwill that does decline in value rarely does so on a straight-line basis, straight-line amortization of goodwill over an arbitrary period does not reflect the economic reality. Therefore, in order to present a true and fair view of the economic reality under U.S. GAAP, goodwill and certain other intangible assets are considered indefinite-lived and are not amortized. The company is not able to reliably estimate the impact on the financial statements on the basis that the useful economic life of goodwill cannot be predicted with a satisfactory level of reliability nor can the pattern in which goodwill diminishes be known. Goodwill and these intangible assets are subject to an annual impairment test.

Goodwill is evaluated annually for impairment as of July 1 using either a quantitative or qualitative analysis. Goodwill is tested for impairment at the reporting unit level, which is equivalent to Eaton's operating segments and based on the net assets for each segment, including goodwill and intangible assets. Goodwill is assigned to each operating segment, as this represents the lowest level that constitutes a business and is the level at which management regularly reviews the operating results. The Company performs a quantitative analysis using a discounted cash flow model and other valuation techniques, but may elect to perform a qualitative analysis. Additionally, goodwill is evaluated for impairment whenever an event occurs or circumstances change that would indicate that it is more likely than not that the fair value of an operating segment is less than its carrying amount.

Goodwill impairment testing in 2017 was performed using qualitative analysis, which is performed by assessing certain trends and factors, including projected market outlook and growth rates, forecasted and actual sales and operating profit margins, discount rates, industry data, and other relevant qualitative factors. These trends and factors are compared to, and based on, the assumptions used in the most recent quantitative assessment performed in 2016. The results of the qualitative analysis did not indicate a need to perform a quantitative analysis.

Goodwill impairment testing for 2016 was performed using a quantitative analysis under which the fair value for each reporting unit was estimated using a discounted cash flow model, which considered forecasted cash flows discounted at an estimated weighted-average cost of capital. The forecasted cash flows were based on the Company's long-term operating plan and a terminal value was used to estimate the operating segment's cash flows beyond the period covered by the operating plan. The weighted-average cost of capital is an estimate of the overall after-tax rate of return required by equity and debt market holders of a business enterprise. These analyses require the exercise of significant judgments, including judgments about appropriate discount rates, perpetual growth rates and the timing of expected future cash flows of the respective reporting unit. Sensitivity analyses were performed around these assumptions in order to assess the reasonableness of the assumptions and the resulting estimated fair values.

Based on a qualitative analysis performed in 2017 and a quantitative analysis performed in 2016, the fair value of Eaton's reporting units continue to substantially exceed their respective carrying amounts.

Indefinite life intangible assets consist of certain trademarks. They are evaluated annually for impairment as of July 1 using either a quantitative or qualitative analysis to determine whether their fair values exceed their respective carrying amounts. Indefinite life intangible asset impairment testing for 2017 and 2016 was performed using a quantitative analysis. The Company determines the fair value of these assets using a royalty relief methodology similar to that employed when the associated assets were acquired, but using updated estimates of future sales, cash flows and profitability. Additionally, indefinite life intangible assets are evaluated for impairment whenever an event occurs or circumstances change that would indicate that it is more likely than not that the asset is impaired. For 2017 and 2016, the fair value of indefinite lived intangible assets exceeded the respective carrying value.

For additional information about goodwill and other intangible assets, see Note 6.

Other Long-Lived Assets

Depreciation and amortization for property, plant and equipment, and intangible assets subject to amortization, are generally computed by the straight-line method and included in Cost of products sold, Selling and administrative expense, and Research and development expense, as appropriate. Cost of buildings are depreciated generally over 40 years and machinery and equipment over 3 to 10 years. At December 31, 2017, the weighted-average amortization period for intangible assets subject to amortization was 17 years for patents and technology, primarily as a result of the long life of aircraft platforms; 17 years for customer relationships; and 17 years for certain trademarks. Software is generally amortized up to a life of 15 years.

Other long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Upon indications of impairment, assets and liabilities are grouped at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. The asset group would be considered impaired when the estimated future net undiscounted cash flows generated by the asset group are less than its carrying value. Determining asset groups and underlying cash flows requires the use of significant judgment.

For additional information about property, plant and equipment see Note 5.

Retirement Benefits Plans

For the principal pension plans in the United States, Canada, Puerto Rico and the United Kingdom, the Company uses a market-related value of plan assets to calculate the expected return on assets used to determine net periodic benefit costs. The market-related value of plan assets is a calculated value that recognizes changes in the fair value of plan assets over a five year period. All other plans use fair value of plan assets.

Net actuarial gains or losses are amortized to expense on a plan-by-plan basis when they exceed the accounting corridor. The Company's corridors are set at either 8% or 10%, depending on the plan, of the greater of the plan assets or benefit obligations. Gains or losses outside of the corridor are subject to amortization over an average employee future service period that differs by plan, but is approximately 12 years on a weighted average basis. If most or all of the plan's participants are no longer actively accruing benefits, the average life expectancy is used.

Warranty Accruals

Product warranty accruals are established at the time the related sale is recognized through a charge to Cost of products sold. Warranty accrual estimates are based primarily on historical warranty claim experience and specific customer contracts. Provisions for warranty accruals are comprised of basic warranties for products sold, as well as accruals for product recalls and other events when they are known and estimable. See Note 11 for additional information about warranty accruals.

Asset Retirement Obligations

A conditional asset retirement obligation is recognized at fair value when incurred if the fair value of the liability can be reasonably estimated. Uncertainty about the timing or method of settlement of a conditional asset retirement obligation would be considered in the measurement of the liability when sufficient information exists. Eaton believes that for substantially all of its asset retirement obligations, there is an indeterminate settlement date because the range of time over which the Company may settle the obligation is unknown or cannot be estimated. A liability for these obligations will be recognized when sufficient information is available to estimate fair value.

Income Taxes

Deferred income tax assets and liabilities are determined based on the difference between the financial statement and tax basis of the respective assets and liabilities, using enacted tax rates in effect for the year when the differences are expected to reverse. Deferred income tax assets are recognized for income tax loss carryforwards and income tax credit carryforwards. Judgment is required in determining and evaluating income tax provisions and valuation allowances for deferred income tax assets. Eaton recognizes the income tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. Eaton evaluates and adjusts these accruals based on changing facts and circumstances. Eaton recognizes interest and penalties related to unrecognized income tax benefits in the provision for income tax expense. Penalties on unrecognized income tax benefits have been accrued for jurisdictions where penalties are automatically applied to any deficiency, regardless of the merit of the position. For additional information about income taxes, see Note 12.

Equity-Based Compensation

Eaton recognizes equity-based compensation expense based on the grant date fair value of the award. Awards with service conditions or both service and market conditions are expensed over the period during which an employee is required to provide service in exchange for the award. Awards with both service and performance conditions are expensed over the period an employee is required to provide service based on the number of units for which achievement of the performance objective is probable. Participants awarded restricted stock units (RSUs) in 2015 and 2016, do not receive dividends; therefore, their fair value is determined by reducing the closing market price of the Company's ordinary shares on the date of grant by the present value of the estimated dividends had they been paid. The fair value of RSUs awarded in 2017, restricted stock awards (RSAs) and performance stock units (PSUs) with performance conditions are determined based on the closing market price of the Company's ordinary shares at the date of grant. The Company uses a Monte Carlo simulation to estimate the fair value of PSUs with market conditions, which incorporates assumptions regarding expected stock price volatility and the risk-free interest rate. Stock options are granted with an exercise price equal to the closing market price of Eaton ordinary shares on the date of grant. The fair value of stock options is determined using a Black-Scholes option-pricing model, which incorporates assumptions regarding the expected stock price volatility, the expected option life, the risk-free interest rate, and the expected dividend yield. See Note 14 for additional information about equity-based compensation.

Derivative Financial Instruments and Hedging Activities

Eaton uses derivative financial instruments to manage the exposure to the volatility in raw material costs, currency, and interest rates on certain debt. These instruments are marked to fair value in the accompanying Consolidated Balance Sheets. Changes in the fair value of derivative assets or liabilities (i.e., gains or losses) are recognized depending upon the type of hedging relationship and whether an instrument has been designated as a hedge. For those instruments that qualify for hedge accounting, Eaton designates the hedging instrument, based upon the exposure being hedged, as a cash flow hedge, a fair value hedge, or a hedge of a net investment in a foreign operation. Changes in fair value of these instruments that do not qualify for hedge accounting are recognized immediately in net income. See Note 16 for additional information about hedges and derivative financial instruments.

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2014-09, Revenue from Contracts with Customers (ASU 2014-09). This accounting standard supersedes all existing U.S. GAAP revenue recognition guidance. Under ASU 2014-09, a company will recognize revenue when it transfers the control of promised goods or services to customers in an amount that reflects the consideration which the company expects to collect in exchange for those goods or services. ASU 2014-09 will require additional disclosures in the notes to the consolidated financial statements.

Eaton adopted the standard at the start of the first quarter of 2018 using the modified retrospective approach and recorded a cumulative effect adjustment to Profit and loss reserve account based on the current terms and conditions for open contracts as of January 1, 2018. The adoption of the standard did not have a material impact on the Company's Consolidated financial statements. While, certain revenue streams moved from point-in-time or multiple elements to over time because of the continuous transfer of control to customers, we do not expect these changes to be material. The Company implemented the appropriate changes to business processes and controls to support recognition and disclosure under the new standard, including the new qualitative and quantitative disclosures that will include information on the nature, amount, timing and significant judgments impacting revenue from contracts with customers.

In October 2016, the FASB issued Accounting Standards Update 2016-16, Intra-Entity Transfers of Assets Other Than Inventory (ASU 2016-16). This accounting standard requires companies to recognize the income tax effects of intercompany sales and transfers of assets other than inventory in the period in which the transfer occurs. The previous accounting standard required companies to defer the income tax effects of intercompany transfers of assets by recording a prepaid tax, until such assets were sold to an outside party or otherwise recognized. ASU 2016-16 is effective for annual and interim periods beginning after December 15, 2017. Upon adoption, ASU 2016-16 requires companies to write off any income tax amounts that had been deferred as prepaid taxes from past intercompany transactions, and record deferred tax balances for amounts that have not been recognized, through a cumulative-effect adjustment to retained earnings. The Company adopted ASU 2016-16 at the start of the first quarter of 2018 by recording a cumulative-effect adjustment of approximately $200 to reduce retained earnings.

In February 2016, the FASB issued Accounting Standards Update 2016-02, Leases (Topic 842), (ASU 2016-02). This accounting standard requires that a lessee recognize a lease asset and a lease liability on its balance sheet for all leases, including operating leases, with a term greater than 12 months. ASU 2016-02 will require additional disclosures in the notes to the consolidated financial statements and is effective for annual and interim reporting periods beginning after December 15, 2018. A project team has been formed to evaluate and implement the new standard. The project team is working to gather the data required to account for leases under the new standard, and validating the functionality of third-party lease accounting software. In addition, the Company is in the process of identifying and implementing the appropriate changes to business processes and controls to support recognition and disclosure under the new standard. Eaton plans to adopt the standard as of the first quarter of 2019. Eaton is evaluating the impact of ASU 2016-02 and an estimate of the impact to the consolidated financial statements cannot be made at this time.

Note 2. SALE OF BUSINESS

Sale of heavy-duty and medium-duty commercial vehicle automated transmission business

On July 31, 2017, Eaton sold a 50% interest in its heavy-duty and medium-duty commercial vehicle automated transmission business for $600 in cash to Cummins, Inc. The new joint venture is named Eaton Cummins Automated Transmission Technologies (ECATT). The Company recognized a pre-tax gain of $533 ($410 after-tax) in the Consolidated Profit and Loss Accounts related to the gain from the $600 proceeds from the sale, and an unrealized gain of $544 ($433 after-tax) in the Consolidated Statement of Comprehensive Income related to the Company's remaining 50% investment in the joint venture being remeasured to fair value. The fair value is based on the price paid to Eaton for the 50% interest sold to Cummins, Inc. and further supported by a discounted cash flow model. Eaton accounts for its investment on the equity method of accounting. The investment of $629 in ECATT is included in Investments in associate companies in the Consolidated Balance Sheet.

Note 3. ACQUISITION INTEGRATION CHARGES

Eaton incurs integration charges related to acquired businesses. A summary of these charges follows:

	2017	2016
Electrical Products	$ 4	$ 3
Electrical Systems and Services	—	1
Hydraulics	—	—
Total business segments	4	4
Corporate	—	—
Total acquisition integration charges before income taxes	4	4
Income taxes	2	1
Total after income taxes	$ 2	$ 3
Per ordinary share - diluted	$ —	$ 0.01

Business segment acquisition integration charges in 2017 related to the integration of Ephesus Lighting, Inc. (Ephesus). The charges associated with Ephesus were included in Selling and administrative expense. Business segment acquisition integration charges in 2016 related to the integration of Ephesus and Oxalis Group Ltd. (Oxalis). The charges associated with Ephesus were included in Cost of products sold and Selling and administrative expense, while the charges associated with Oxalis were included in Cost of products sold.

See Note 18 for additional information about business segments.

Note 4. RESTRUCTURING CHARGES

During 2015, Eaton announced its commitment to undertake actions to reduce its cost structure in all business segments and at corporate. Restructuring charges incurred under this plan were $116 and $211 in 2017 and 2016, respectively. The multi-year initiative concluded at the end of 2017.

A summary of restructuring charges by type follows:

	2017	2016
Workforce reductions	$ 57	$ 177
Plant closings and other	59	34
Total	$ 116	$ 211

A summary of restructuring charges by segment follows:

	2017	2016
Electrical Products	$ 29	$ 44
Electrical Systems & Services	16	49
Hydraulics	32	67
Aerospace	2	4
Vehicle	12	35
Corporate	25	12
Total	$ 116	$ 211

A summary of liabilities related to workforce reductions, plant closings and other associated costs announced in 2015 follows:

	Workforce reductions	Plant closing and other	Total
Balance at December 31, 2015	$ 54	$ —	$ 54
Liability recognized	177	34	211
Payments	(116)	(13)	(129)
Other adjustments	(2)	(20)	(22)
Balance at December 31, 2016	113	1	114
Liability recognized	57	59	116
Payments	(102)	(39)	(141)
Other adjustments	(1)	(16)	(17)
Balance at December 31, 2017	$ 67	$ 5	$ 72

These charges were included in Cost of products sold, Selling and administrative expenses or Other income-net, as appropriate. In Business Segment Information, the charges reduced Operating profit of the related business segment. See Note 18 for additional information about business segments.

Note 5. PROPERTY, PLANT AND EQUIPMENT

Changes in Property, plant and equipment follow:

	Land, buildings and improvements	Machinery and equipment	Construction in progress	Total
December 31, 2015				
Cost	$ 2,383	$ 5,201	$ 300	$ 7,884
Accumulated depreciation	(822)	(3,497)	—	(4,319)
Net book value	$ 1,561	$ 1,704	$ 300	$ 3,565
Capital expenditures and transfers	$ 85	$ 398	$ 14	$ 497
Depreciation expense	(84)	(402)	—	(486)
Retirements and disposals	(44)	(23)	—	(67)
Currency translation	(34)	(24)	(8)	(66)
December 31, 2016				
Cost	2,369	5,364	306	8,039
Accumulated depreciation	(885)	(3,711)	—	(4,596)
Net book value	$ 1,484	$ 1,653	$ 306	$ 3,443

	Land, buildings and improvements	Machinery and equipment	Construction in progress	Total
December 31, 2016				
Cost	$ 2,369	$ 5,364	$ 306	$ 8,039
Accumulated depreciation	(885)	(3,711)	—	(4,596)
Net book value	$ 1,484	$ 1,653	$ 306	$ 3,443
Capital expenditures and transfers	$ 88	$ 361	$ 71	$ 520
Depreciation expense	(79)	(397)	—	(476)
Retirements and disposals	(45)	(63)	—	(108)
Currency translation	59	53	11	123
December 31, 2017				
Cost	2,491	5,626	388	8,505
Accumulated depreciation	(984)	(4,019)	—	(5,003)
Net book value	$ 1,507	$ 1,607	$ 388	$ 3,502

Capital expenditures are expected to be approximately $575 in 2018. Projected expenditures for 2018 will focus on capacity expansions in developing markets, development of new products, replacement equipment, and cost reduction programs.

Note 6. GOODWILL AND OTHER INTANGIBLE ASSETS

Changes in the carrying amount of goodwill by segment follow:

	Electrical Products	Electrical Systems and Services	Hydraulics	Aerospace	Vehicle	Total
December 31, 2015	$ 6,642	$ 4,279	$ 1,259	$ 956	$ 343	$ 13,479
Translation adjustments	(145)	(76)	(38)	(18)	(1)	(278)
December 31, 2016	6,497	4,203	1,221	938	342	13,201
Goodwill written off from sale of business	—	(3)	—	—	(52)	(55)
Translation adjustments	262	111	36	9	4	422
December 31, 2017	$ 6,759	$ 4,311	$ 1,257	$ 947	$ 294	$ 13,568

A summary of other intangible assets follows:

	2017		2016	
	Historical cost	Accumulated amortization	Historical cost	Accumulated amortization
Intangible assets not subject to amortization				
Trademarks	$ 1,654		$ 1,637	
Intangible assets subject to amortization				
Customer relationships	$ 3,586	$ 1,475	$ 3,456	$ 1,199
Patents and technology	1,395	628	1,342	519
Software	826	497	755	441
Trademarks	1,137	473	1,104	378
Other	99	30	97	26
Total other intangible assets	$ 7,043	$ 3,103	$ 6,754	$ 2,563

Changes in Other intangibles follows:

	Indefinite lived trademarks	Customer relationships	Patents and technology	Software	Trademarks	Other	Total
December 31, 2015							
Cost	$ 1,661	$ 3,544	$ 1,447	$ 672	$ 1,113	$ 103	$ 8,540
Accumulated amortization	—	(1,010)	(511)	(385)	(311)	(22)	(2,239)
Net book value	$ 1,661	$ 2,534	$ 936	$ 287	$ 802	$ 81	$ 6,301
Additions	$ —	$ —	$ —	$ 78	$ —	$ —	$ 78
Acquisitions	—	(3)	2	—	—	1	—
Amortization expense	—	(217)	(91)	(51)	(79)	(5)	(443)
Other	(10)	—	—	2	10	—	2
Retirements and disposals	—	—	—	(1)	—	(2)	(3)
Currency translation	(14)	(57)	(24)	(1)	(7)	(4)	(107)
December 31, 2016							
Cost	1,637	3,456	1,342	755	1,104	97	8,391
Accumulated amortization	—	(1,199)	(519)	(441)	(378)	(26)	(2,563)
Net book value	$ 1,637	$ 2,257	$ 823	$ 314	$ 726	$ 71	$ 5,828

	Indefinite lived trademarks	Customer relationships	Patents and technology	Software	Trademarks	Other	Total
December 31, 2016							
Cost	$ 1,637	$ 3,456	$ 1,342	$ 755	$ 1,104	$ 97	$ 8,391
Accumulated amortization	—	(1,199)	(519)	(441)	(378)	(26)	(2,563)
Net book value	$ 1,637	$ 2,257	$ 823	$ 314	$ 726	$ 71	$ 5,828
Additions	$ —	$ —	$ —	$ 74	$ —	$ —	$ 74
Amortization expense	—	(217)	(84)	(55)	(78)	(4)	(438)
Retirements and disposals	—	—	—	(9)	(3)	(1)	(13)
Currency translation	17	71	28	5	18	4	143
December 31, 2017							
Cost	1,654	3,586	1,395	826	1,137	99	8,697
Accumulated amortization	—	(1,475)	(628)	(497)	(474)	(29)	(3,103)
Net book value	$ 1,654	$ 2,111	$ 767	$ 329	$ 663	$ 70	$ 5,594

Amortization expense related to intangible assets (excluding software) subject to amortization in 2017, and estimated amortization expense for each of the next five years, follows:

2017	$ 383
2018	369
2019	362
2020	357
2021	346
2022	336

Note 7. DEBTORS

Debtors	2017	2016
Amounts falling due within one year		
Accounts receivable - net	$ 3,943	$ 3,560
Deferred income taxes	298	398
Prepayments	679	381
	4,920	4,339
Amounts falling due after more than one year		
Deferred income taxes	177	222
Pension plan assets	218	67
Other debtors	395	462
	790	751
Total debtors	$ 5,710	$ 5,090

Note 8. CREDITORS

Creditors	2017	2016
Amounts falling due within one year		
Accounts payable	$ 2,166	$ 1,718
Accrued compensation	453	379
Other liabilities	1,516	1,400
	4,135	3,497
Amounts falling due after more than one year		
Other long-term liabilities	763	745
Total creditors	$ 4,898	$ 4,242

Note 9. DEBT

A summary of debt follows:

	2017	2016
5.30% notes due 2017 ($150 converted to floating rate by interest rate swap)	$ —	$ 250
6.10% debentures due 2017	—	289
1.50% senior notes due 2017 ($750 converted to floating rate by interest rate swap)	—	1,000
5.60% notes due 2018 ($415 converted to floating rate by interest rate swap)	450	450
4.215% Japanese yen notes due 2018	88	86
6.95% notes due 2019 ($300 converted to floating rate by interest rate swap)	300	300
3.875% debentures due 2020 ($150 converted to floating rate by interest rate swap)	239	239
3.47% notes due 2021 ($275 converted to floating rate by interest rate swap)	300	300
8.10% debentures due 2022 ($100 converted to floating rate by interest rate swap)	100	100
2.75% senior notes due 2022 ($1,400 converted to floating rate by interest rate swap)	1,600	1,600
3.68% notes due 2023 ($200 converted to floating rate by interest rate swap)	300	300
0.75% euro notes due 2024	659	580
6.50% debentures due 2025	145	145
3.10% senior notes due 2027	700	—
7.65% debentures due 2029 ($50 converted to floating rate by interest rate swap)	200	200
4.00% senior notes due 2032	700	700
5.45% debentures due 2034 ($25 converted to floating rate by interest rate swap)	136	136
5.80% notes due 2037	240	240
4.15% senior notes due 2042	1,000	1,000
3.92% senior notes due 2047	300	—
5.25% to 8.875% notes (maturities ranging from 2018 to 2035, including $50 converted to floating rate by interest rate swap)	239	239
Other	49	109
Total long-term debt	7,745	8,263
Short-term debt	6	14
Total debt	$ 7,751	$ 8,277

Substantially all these long-term debt instruments are fully and unconditionally guaranteed on an unsubordinated, unsecured basis by Eaton and certain of its direct and indirect subsidiaries (the Senior Notes). Further, all of these long-term debt instruments except the 4.215% Japanese yen notes due 2018, the 3.875% debentures due 2020, the 3.47% notes due 2021, the 3.68% notes due 2023, and the 0.75% Euro notes due 2024 are registered by Eaton Corporation under the Securities Act of 1933, as amended (the Registered Senior Notes).

On November 17, 2017, Eaton refinanced a $500, four-year revolving credit facility with a $500, three-year revolving credit facility that will expire November 17, 2020 and also refinanced a $750, five-year revolving credit facility with a $750, five-year revolving credit facility that will expire November 17, 2022. Eaton also maintains a $750, five-year revolving credit facility that will expire October 14, 2021. These refinancings maintain long-term revolving credit facilities at a total of $2,000. The revolving credit facilities are used to support commercial paper borrowings and are fully and unconditionally guaranteed by Eaton and certain of its direct and indirect subsidiaries on an unsubordinated, unsecured basis. There were no borrowings outstanding under Eaton's revolving credit facilities at December 31, 2017 or 2016. The Company had available lines of credit of $741 from various banks primarily for the issuance of letters of credit, of which there was $297 outstanding at December 31, 2017. Borrowings outside the United States are generally denominated in local currencies.

The Company repaid the 5.30% notes on March 15, 2017 for $250, the 6.10% debentures on June 29, 2017 for $289 and the 1.50% senior notes on November 2, 2017 for $1,000. The Company repaid the 2.375% debentures on January 15, 2016, for $240.

Short-term debt was $6 all of which was outside the United States as of December 31, 2017.

On September 15, 2017, a subsidiary of Eaton issued senior notes (the 2017 Senior Notes) with a face amount of $1,000. The 2017 Senior Notes are comprised of two tranches of $700 and $300, which mature in 2027 and 2047, respectively, with interest payable semi-annually at a respective rate of 3.1% and 3.9%. The issuer received proceeds totaling $993 from the issuance, net of financing costs. The 2017 Senior Notes are fully and unconditionally guaranteed on an unsubordinated, unsecured basis by Eaton and certain of its direct and indirect subsidiaries. The 2017 Senior Notes contain customary optional redemption and par call provisions. The 2017 Senior Notes also contain a change of control provision which requires the Company to make an offer to purchase all or any part of the 2017 Senior Notes at a purchase price of 101% of the principal amount plus accrued and unpaid interest. The capitalized deferred financing fees are amortized in Interest expense-net over the respective terms of the 2017 Senior Notes. The 2017 Senior Notes are subject to customary non-financial covenants.

On September 20, 2016, a subsidiary of Eaton issued euro denominated notes (Euro Notes) with a face value of €550 ($615 based on the September 20, 2016 spot rate), in accordance with Regulation S promulgated under the Securities Act of 1933, as amended. The Euro Notes mature in 2024 with interest payable annually at a rate of 0.75%. The issuer received proceeds totaling €544 ($609 based on the September 20, 2016 spot rate) from the issuance, net of financing costs and discounts. The senior Euro Notes are fully and unconditionally guaranteed on an unsubordinated, unsecured basis by Eaton and certain of its direct and indirect subsidiaries. The Euro Notes contain an optional redemption provision by which the Company may make an offer to purchase all or any part of the Euro Notes prior to June 20, 2024 at a purchase price of the greater of (a) 100% of the principal amount of the respective Euro Notes being redeemed, or (b) the sum of the present values of the respective remaining scheduled payments of principal and interest, discounted to the redemption date on an annual basis at the benchmark Bund Rate plus 20 basis points. In each case, the redemption price will include any accrued and unpaid interest on the Euro Notes being redeemed. At any time on or after June 20, 2024, the Company may redeem the Euro Notes, in whole or in part, at a redemption price equal to 100% of the principal amount to be redeemed plus accrued and unpaid interest. The Euro Notes also contain a change of control provision which requires the Company to make an offer to purchase all or any part of the Euro Notes at a purchase price of 101% of the principal amount plus accrued and unpaid interest. The capitalized deferred financing fees and discounts are amortized in Interest expense - net over the respective terms of the Euro Notes. The Euro Notes are subject to customary non-financial covenants.

Eaton is in compliance with each of its debt covenants for all periods presented.

Maturities of long-term debt for each of the next five years follow:

2018	$	578
2019		340
2020		241
2021		302
2022		1,701

Interest paid on debt follows:

2017	$	293
2016		266

Note 10. RETIREMENT BENEFITS PLANS

Eaton has defined benefit pension plans and defined contribution pension plans, covering substantially all U.S. employees and many employees at non-U.S. locations. Funding requirements are a major consideration in making contributions to Eaton's pension plans. With respect to the Company's pension plans worldwide, the Company intends to contribute annually not less than the minimum required by applicable law and regulations. The Company also has postretirement benefits plans for certain eligible employees, primarily in United States locations, which provide healthcare benefits and, in some instances, life insurance benefits. Additional other supplemental benefit plans are provided for officers and other key employees.

The Company utilizes qualified actuaries to value all of its material pension and other postretirement benefits plans. Amounts recognized in the financial statements as of December 31, 2017 were based on actuarial valuations carried out per the required respective statutory period. Actuarial valuation reports are available for inspection by the scheme members but not for public inspection.

Obligations and Funded Status

	United States pension liabilities		Non-United States pension liabilities		Other postretirement liabilities	
	2017	2016	2017	2016	2017	2016
Funded status						
Fair value of plan assets	$ 3,585	$ 2,969	$ 1,727	$ 1,478	$ 55	$ 74
Benefit obligations	(3,961)	(3,771)	(2,399)	(2,314)	(448)	(473)
Funded status	$ (376)	$ (802)	$ (672)	$ (836)	$ (393)	$ (399)
Amounts recognized in the Form 10-K Consolidated Balance Sheets						
Non-current assets	$ 82	$ 34	$ 136	$ 33	$ —	$ —
Current liabilities	(15)	(24)	(25)	(22)	(31)	(31)
Non-current liabilities	(443)	(812)	(783)	(847)	(362)	(368)
Total	$ (376)	$ (802)	$ (672)	$ (836)	$ (393)	$ (399)

At December 31, 2017 and 2016, non-current assets of $218 and $67, respectively, are classified within Debtors. All other amounts are classified within Pension and other postretirement benefits in the Consolidated Balance Sheet.

	United States pension liabilities		Non-United States pension liabilities		Other postretirement liabilities	
	2017	2016	2017	2016	2017	2016
Amounts recognized in Other reserves (pretax)						
Net actuarial loss	$ 1,059	$ 1,232	$ 596	$ 771	$ 19	$ 21
Prior service cost (credit)	4	3	8	8	(46)	(60)
Total	$ 1,063	$ 1,235	$ 604	$ 779	$ (27)	$ (39)

Change in Benefit Obligations

	United States pension liabilities		Non-United States pension liabilities		Other postretirement liabilities	
	2017	2016	2017	2016	2017	2016
Balance at January 1	$ 3,771	$ 3,829	$ 2,314	$ 2,175	$ 473	$ 575
Service cost	96	111	71	63	3	4
Interest cost	123	125	55	62	14	17
Actuarial (gain) loss	271	52	(148)	355	2	(72)
Gross benefits paid	(301)	(346)	(97)	(94)	(74)	(79)
Currency translation	—	—	223	(245)	3	1
Plan amendments	1	—	—	2	—	—
Other	—	—	(19)	(4)	27	27
Balance at December 31	$ 3,961	$ 3,771	$ 2,399	$ 2,314	$ 448	$ 473
Accumulated benefit obligation	$ 3,802	$ 3,620	$ 2,283	$ 2,189		

Change in Plan Assets

	United States pension liabilities		Non-United States pension liabilities		Other postretirement liabilities	
	2017	2016	2017	2016	2017	2016
Balance at January 1	$ 2,969	$ 2,934	$ 1,478	$ 1,472	$ 74	$ 93
Actual return on plan assets	543	221	131	212	8	3
Employer contributions	374	160	99	102	20	30
Gross benefits paid	(301)	(346)	(97)	(94)	(74)	(79)
Currency translation	—	—	135	(211)	—	—
Other	—	—	(19)	(3)	27	27
Balance at December 31	$ 3,585	$ 2,969	$ 1,727	$ 1,478	$ 55	$ 74

The components of pension plans with an accumulated benefit obligation in excess of plan assets at December 31 follow:

	United States pension liabilities		Non-United States pension liabilities	
	2017	2016	2017	2016
Projected benefit obligation	$ 3,540	$ 3,342	$ 966	$ 1,902
Accumulated benefit obligation	3,380	3,190	911	1,824
Fair value of plan assets	3,081	2,505	175	1,066

Changes in pension and other postretirement benefit liabilities recognized in Other reserves follow:

	United States pension liabilities		Non-United States pension liabilities		Other postretirement liabilities	
	2017	2016	2017	2016	2017	2016
Balance at January 1	$ 1,235	$ 1,327	$ 779	$ 653	$ (39)	$ 21
Prior service cost arising during the year	1	—	—	2	—	—
Net loss (gain) arising during the year	(28)	81	(185)	235	(2)	(69)
Currency translation	—	—	66	(75)	1	1
Less amounts included in expense during the year	(145)	(173)	(56)	(36)	13	8
Net change for the year	(172)	(92)	(175)	126	12	(60)
Balance at December 31	$ 1,063	$ 1,235	$ 604	$ 779	$ (27)	$ (39)

Benefits Expense

	United States pension benefit expense		Non-United States pension benefit expense		Other postretirement benefits expense	
	2017	2016	2017	2016	2017	2016
Service cost	$ 96	$ 111	$ 71	$ 63	$ 3	$ 4
Interest cost	123	125	55	62	14	17
Expected return on plan assets	(244)	(250)	(94)	(92)	(4)	(6)
Amortization	83	92	51	33	(13)	(9)
	58	78	83	66	—	6
Settlements and special termination benefits	62	81	5	3	—	1
Total expense	$ 120	$ 159	$ 88	$ 69	$ —	$ 7

The estimated pretax net amounts that will be recognized from Other reserves into net periodic benefit cost in 2018 follow:

	United States pension liabilities	Non-United States pension liabilities	Other postretirement liabilities
Actuarial loss	$ 146	$ 38	$ 1
Prior service cost (credit)	1	1	(14)
Total	$ 147	$ 39	$ (13)

Retirement Benefits Plans Assumptions

In 2016 and 2017, for purposes of determining liabilities related to pension plans and other postretirement benefits plans in the United States, the Company used 2014 mortality tables and generational improvement scales that are based on MP-2016 and MP-2017, respectively.

In 2016, the Company adopted a change in the method it uses to estimate the service and interest cost components of net periodic benefit cost for its defined benefit pension and other postretirement benefit plans. Prior to 2016, for the vast majority of its plans, the service and interest cost components were estimated using a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. Beginning in 2016, the Company used a spot rate approach by applying the specific spot rates along the yield curve to the relevant projected cash flows in the estimation of the service and interest components of benefit cost, resulting in a more precise measurement. This change does not affect the measurement of total benefit obligations. The change was accounted for as a change in estimate and, accordingly, was accounted for prospectively starting in 2016. The reductions in service cost and interest cost for 2016 associated with this change in estimate were $3 and $42, respectively.

Pension Plans

	United States pension plans		Non-United States pension plans	
	2017	2016	2017	2016
Assumptions used to determine benefit obligation at year-end				
Discount rate	3.64%	4.12%	2.62%	2.63%
Rate of compensation increase	3.15%	3.15%	3.11%	3.13%
Assumptions used to determine expense				
Discount rate used to determine benefit obligation	4.12%	4.22%	2.63%	3.46%
Discount rate used to determine service cost	4.31%	4.35%	3.38%	4.13%
Discount rate used to determine interest cost	3.40%	3.42%	2.34%	3.07%
Expected long-term return on plan assets	7.90%	8.50%	6.30%	6.62%
Rate of compensation increase	3.15%	3.18%	3.13%	3.12%

The expected long-term rate of return on pension assets was determined for each country and reflects long-term historical data taking into account each plan's target asset allocation. The expected long-term rates of return on pension assets for United States pension plans and Non-United States pension plans for 2018 are 7.52% and 6.40%, respectively. The discount rates were determined using appropriate bond data for each country.

Other Postretirement Benefits Plans

Substantially all of the obligation for other postretirement benefits plans relates to United States plans. Assumptions used to determine other postretirement benefits obligations and expense follow:

	Other postretirement benefits plans	
	2017	2016
Assumptions used to determine benefit obligation at year-end		
Discount rate	3.55%	3.96%
Health care cost trend rate assumed for next year	8.25%	7.35%
Ultimate health care cost trend rate	4.75%	4.75%
Year ultimate health care cost trend rate is achieved	2027	2026
Assumptions used to determine expense		
Discount rate used to determine benefit obligation	3.96%	4.04%
Discount rate used to determine service cost	4.11%	4.26%
Discount rate used to determine interest cost	3.18%	3.12%
Initial health care cost trend rate	7.35%	7.10%
Ultimate health care cost trend rate	4.75%	4.75%
Year ultimate health care cost trend rate is achieved	2026	2025

Assumed health care cost trend rates may have a significant effect on the amounts reported for the health care plans. A 1-percentage point change in the assumed health care cost trend rates would have the following effects:

	1% increase	1% decrease
Effect on total service and interest cost	$ 1	$ (1)
Effect on other postretirement liabilities	13	(12)

Employer Contributions to Retirement Benefits Plans

Contributions to pension plans that Eaton expects to make in 2018, and made in 2017 and 2016, follow:

	2018	2017	2016
United States plans	$ 16	$ 374	$ 160
Non-United States plans	96	99	102
Total contributions	$ 112	$ 473	$ 262

The following table provides the estimated pension and other postretirement benefit payments for each of the next five years, and the five years thereafter in the aggregate. For other postretirement benefits liabilities, the expected subsidy receipts related to the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 would reduce the gross payments listed below.

	Estimated United States pension payments	Estimated non-United States pension payments	Estimated other postretirement benefit payments: Gross	Estimated other postretirement benefit payments: Medicare prescription drug subsidy
2018	$ 291	$ 88	$ 47	$ (2)
2019	291	90	43	(2)
2020	292	93	39	(2)
2021	299	95	35	(1)
2022	298	99	35	—
2023 - 2027	1,478	548	141	(2)

Pension Plan Assets

Investment policies and strategies are developed on a country specific basis. The United States plans, representing 67% of worldwide pension assets, and the United Kingdom plans representing 26% of worldwide pension assets, are invested primarily for growth, as the majority of the assets are in plans with active participants and ongoing accruals. In general, the plans have their primary allocation to diversified global equities, primarily through index funds in the form of common collective and other trusts. The United States plans' target allocation is 28% United States equities, 28% non-United States equities, 9% real estate (primarily equity of real estate investment trusts), 31% debt securities and 4% other, including hedge funds, private equity and cash equivalents. The United Kingdom plans' target asset allocations are 61% equities and the remainder in debt securities, cash equivalents and real estate investments. The equity risk for the plans is managed through broad geographic diversification and diversification across industries and levels of market capitalization. The majority of debt allocations for these plans are longer duration government and corporate debt. The United States, United Kingdom and Canada pension plans are authorized to use derivatives to achieve more economically desired market exposures and to use futures, swaps and options to gain or hedge exposures.

Other Postretirement Benefits Plan Assets

The Voluntary Employee Benefit Association trust which holds U.S. other postretirement benefits plan assets has investment guidelines that include allocations to global equities and fixed income investments. The trust's 2017 target investment allocation is 43% diversified global equities and 57% fixed income securities held in a trust that invests primarily in exchange traded funds.

Fair Value Measurements

Financial instruments included in pension and other postretirement benefits plan assets are categorized into a fair value hierarchy of three levels, based on the degree of subjectivity inherent in the valuation methodology as follows:

- Level 1 - Quoted prices (unadjusted) for identical assets in active markets.
- Level 2 - Quoted prices for similar assets in active markets, and inputs that are observable for the asset, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 - Unobservable prices or inputs.

Certain investments that are measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy and are being presented in the tables to permit a reconciliation to total plan assets.

Pension Plans

A summary of the fair value of pension plan assets at December 31, 2017 and 2016, follows:

	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
2017				
Common collective trusts				
Non-United States equity and global equities	$ 741	$ —	$ 741	$ —
United States equity	86	—	86	—
Fixed income	478	—	478	—
Fixed income securities	709	—	709	—
United States treasuries	67	67	—	—
Bank loans	161	—	161	—
Real estate	239	220	—	19
Equity securities	139	139	—	—
Cash equivalents	86	51	35	—
Exchange traded funds	224	224	—	—
Other	81	—	8	73
Common collective and other trusts measured at net asset value	2,225			
Hedge funds measured at net asset value	67			
Money market funds measured at net asset value	9			
Total pension plan assets	$ 5,312	$ 701	$ 2,218	$ 92

	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
2016				
Common collective trusts				
Non-United States equity and global equities	$ 413	$ —	$ 413	$ —
United States equity	94	—	94	—
Fixed income	422	—	422	—
Fixed income securities	359	—	359	—
United States treasuries	123	123	—	—
Bank loans	150	—	150	—
Real estate	201	195	—	6
Equity securities	104	104	—	—
Cash equivalents	276	21	255	—
Exchange traded funds	55	55	—	—
Other	109	—	14	95
Common collective and other trusts measured at net asset value	2,038			
Hedge funds measured at net asset value	85			
Money market funds measured at net asset value	18			
Total pension plan assets	$ 4,447	$ 498	$ 1,707	$ 101

The fair value measurement of plan assets using significant unobservable inputs (Level 3) changed during 2016 and 2017 due to the following:

	Real estate	Other	Total
Balance at December 31, 2015	$ 7	$ 86	$ 93
Actual return on plan assets:			
Gains (losses) relating to assets still held at year-end	—	(6)	(6)
Purchases, sales, settlements - net	(1)	15	14
Transfers into or out of Level 3	—	—	—
Balance at December 31, 2016	6	95	101
Actual return on plan assets:			
Gains (losses) relating to assets still held at year-end	1	(5)	(4)
Purchases, sales, settlements - net	12	(17)	(5)
Transfers into or out of Level 3	—	—	—
Balance at December 31, 2017	$ 19	$ 73	$ 92

Other Postretirement Benefits Plans

A summary of the fair value of other postretirement benefits plan assets at December 31, 2017 and 2016, follows:

	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
2017				
Cash equivalents	$ 7	$ 7	$ —	$ —
Common collective and other trusts measured at net asset value	48			
Total other postretirement benefits plan assets	$ 55	$ 7	$ —	$ —
2016				
Cash equivalents	$ 8	$ 8	$ —	$ —
Common collective and other trusts measured at net asset value	66			
Total other postretirement benefits plan assets	$ 74	$ 8	$ —	$ —

Valuation Methodologies

Following is a description of the valuation methodologies used for pension and other postretirement benefits plan assets measured at fair value. There have been no changes in the methodologies used at December 31, 2017 and 2016.

Common collective and other trusts - Valued at the net unit value of units held by the trust at year end. The unit value is determined by the total value of fund assets divided by the total number of units of the fund owned. The equity investments in collective trusts are predominantly in index funds for which the underlying securities are actively traded in public markets based upon readily measurable prices. The investments in other trusts are predominantly in exchange traded funds for which the underlying securities are actively traded in public markets based upon readily measurable prices. Common collective and other trusts measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy and are being presented in the tables above to permit a reconciliation of the fair value hierarchy to the total plan assets.

Fixed income securities - These securities consist of publicly traded United States and non-United States fixed interest obligations (principally corporate and government bonds and debentures). The fair value of corporate and government debt securities is determined through third-party pricing models that consider various assumptions, including time value, yield curves, credit ratings, and current market prices. The Company verifies the results of trustees or custodians and evaluates the pricing classification of these securities by performing analyses using other third-party sources.

United States treasuries - Valued at the closing price of each security.

Bank loans - These securities consist of senior secured term loans of publicly traded and privately held United States and non-United States floating rate obligations (principally corporations of non-investment grade rating). The fair value is determined through third-party pricing models that primarily utilize dealer quoted current market prices. The Company verifies the results of trustees or custodians and evaluates the pricing classification of these securities by performing analyses using other third-party sources.

Equity securities - These securities consist of direct investments in the stock of publicly traded companies. Such investments are valued based on the closing price reported in an active market on which the individual securities are traded. As such, the direct investments are classified as Level 1.

Real estate - Consists of direct investments in the stock of publicly traded companies and investments in pooled funds that invest directly in real estate. The publicly traded companies are valued based on the closing price reported in an active market on which the individual securities are traded and as such are classified as Level 1. The pooled funds rely on appraisal based valuations and as such are classified as Level 3.

Cash equivalents - Primarily certificates of deposit, commercial paper, and repurchase agreements.

Exchange traded funds - Valued at the closing price of the exchange traded fund's shares.

Hedge funds - Consists of direct investments in hedge funds through limited partnership interests. Net asset values are based on the estimated fair value of the ownership interest in the investment as determined by the General Partner. The majority of the holdings of the hedge funds are in equity securities traded on public exchanges. The investment terms of the hedge funds allow capital to be redeemed quarterly given prior notice with certain limitations. Hedge funds measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy and are being presented in the tables above to permit a reconciliation of the fair value hierarchy to the total plan assets.

Money market funds - Money market funds measured at fair value using the net asset value per share practical expedient have not been categorized in the fair value hierarchy and are being presented in the tables above to permit a reconciliation of the fair value hierarchy to the total plan assets.

Other - Primarily insurance contracts for international plans and also futures contracts and over-the-counter options. These investments are valued based on the closing prices of future contracts or indices as available on Bloomberg or similar service, and private equity investments.

For additional information regarding fair value measurements, see Note 15.

Defined Contribution Plans

The Company has various defined contribution benefit plans, primarily consisting of the plans in the United States. The total contributions related to these plans are charged to expense and were as follows:

2017	$	114
2016		72

Note 11. OTHER PROVISIONS AND COMMITMENTS AND CONTINGENCIES

Changes in Other provisions follows:

	December 31, 2015	Provisions, net	Utilization	Other	December 31, 2016
Warranty accrual	$ 195	$ 117	$ (130)	$ (2)	$ 180
Legal liabilities	78	58	(92)	—	44
Environmental liabilities	131	6	(13)	—	124
Workers' compensation	72	14	(18)	—	68
Restructuring liabilities	72	211	(139)	(26)	118
	$ 548	$ 406	$ (392)	$ (28)	$ 534

	December 31, 2016	Provisions, net	Utilization	Other	December 31, 2017
Warranty accrual	$ 180	$ 163	$ (156)	$ 1	$ 188
Legal liabilities	44	59	(61)	—	42
Environmental liabilities	124	8	(14)	2	120
Workers' compensation	68	10	(14)	—	64
Restructuring liabilities	118	115	(143)	(17)	73
	$ 534	$ 355	$ (388)	$ (14)	$ 487

Legal Contingencies

Eaton is subject to a broad range of claims, administrative and legal proceedings such as lawsuits that relate to contractual allegations, tax audits, patent infringement, personal injuries, antitrust matters and employment-related matters. Eaton is also subject to asbestos claims from historic products which may have contained asbestos. Insurance may cover some of the costs associated with these claims and proceedings. Although it is not possible to predict with certainty the outcome or cost of these matters, the Company believes they will not have a material adverse effect on the consolidated financial statements. During the fourth quarter of 2016, the Company was able to resolve several insurance matters. In total, the income from insurance matters was $68.

In December 2011, Pepsi-Cola Metropolitan Bottling Company, Inc. ("Pepsi") filed an action against (a) Cooper Industries, LLC, Cooper Industries, Ltd., Cooper Holdings, Ltd., Cooper US, Inc., and Cooper Industries plc (collectively, "Cooper"), (b) M&F Worldwide Corp., Mafco Worldwide Corp., Mafco Consolidated Group LLC, and PCT International Holdings, Inc. (collectively, "Mafco"), and (c) the Pneumo Abex Asbestos Claims Settlement Trust (the "Trust") in Texas state court. Pepsi alleged that it was harmed by a 2011 settlement agreement ("2011 Settlement") among Cooper, Mafco, and Pneumo Abex, LLC ("Pneumo," which prior to the 2011 Settlement was a Mafco subsidiary), which settlement resolved litigation that Pneumo had previously brought against Cooper involving, among other things, a guaranty related to Pneumo's friction products business. In November 2015, after a Texas court ruled that Pepsi's claims should be heard in arbitration, Pepsi filed a demand for arbitration against Cooper, Mafco, the Trust, and Pneumo. Pepsi subsequently dropped claims against all parties except Cooper. An arbitration under the auspices of the American Arbitration Association commenced in October 2017. Pepsi's experts have opined, among other things, that the value contributed to the Trust for a release of the guaranty was approximately $440 below reasonably equivalent value, and that an inability of Pneumo to satisfy future liabilities may result in plaintiffs suing Pepsi under various theories. Cooper submitted various expert reports and, among other things, Cooper's experts opine that Pepsi has no basis to seek any damages and that Cooper paid reasonably equivalent value for the release of its indemnity obligations under the guaranty. The arbitration proceedings closed in December 2017. The parties are awaiting the issuance of a decision. The Company believes that the claims of Pepsi are without merit, and that the ultimate resolution of this matter will not have a material impact on the Company's consolidated financial statements.

In December 2010, a Brazilian court held that a judgment obtained by a Brazilian company, Raysul, against another Brazilian company, Saturnia, which was sold by Eaton in 2006, could be enforced against Eaton Ltda. The judgment was based on an alleged violation of an agency agreement between Raysul and Saturnia. At March 31, 2016, the Company had a total accrual of 100 Brazilian Reais related to this matter ($31 based on June 2016 exchange rates). In June 2016, Eaton signed a settlement agreement and resolved the matter, which did not have a material impact on the consolidated financial statements.

Environmental Contingencies

Eaton has established policies to ensure that its operations are conducted in keeping with good corporate citizenship and with a positive commitment to the protection of the natural and workplace environments. The Company's manufacturing facilities are required to be certified to ISO 14001, an international standard for environmental management systems. The Company routinely reviews EHS performance at each of its facilities and continuously strives to improve pollution prevention.

Eaton is involved in remedial response and voluntary environmental remediation at a number of sites, including certain of its currently-owned or formerly-owned plants. The Company has also been named a potentially responsible party under the United States federal Superfund law, or the state equivalents thereof, at a number of disposal sites. The Company became involved in these sites as a result of government action or in connection with business acquisitions. At the end of 2017, the Company was involved with a total of 118 sites worldwide, including the Superfund sites mentioned above, with none of these sites being individually significant to the Company.

Remediation activities, generally involving soil and/or groundwater contamination, include pre-cleanup activities such as fact finding and investigation, risk assessment, feasibility study, design and action planning, performance (where actions may range from monitoring, to removal of contaminants, to installation of longer-term remediation systems), and operation and maintenance of a remediation system. The extent of expected remediation activities and costs varies by site. A number of factors affect the cost of environmental remediation, including the number of parties involved at a particular site, the determination of the extent of contamination, the length of time the remediation may require, the complexity of environmental regulations, and the continuing advancement of remediation technology. Taking these factors into account, Eaton has estimated the costs of remediation, which will be paid over a period of years. The Company accrues an amount on an undiscounted basis, consistent with the estimates of these costs, when it is probable that a liability has been incurred. Actual results may differ from these estimates. At December 31, 2017 and 2016, the Company had an accrual totaling $120 and $124, respectively, for these costs.

Based upon Eaton's analysis and subject to the difficulty in estimating these future costs, the Company expects that any sum it may be required to pay in connection with environmental matters is not reasonably possible to exceed the recorded liability by an amount that would have a material effect on its financial position, results of operations or cash flows.

Lease Commitments

Eaton leases certain real properties and equipment. A summary of minimum rental commitments at December 31, 2017 under noncancelable operating leases, which expire at various dates and in most cases contain renewal options, for each of the next five years and thereafter in the aggregate, follow:

2018	$ 159
2019	119
2020	85
2021	63
2022	42
Thereafter	71
Total noncancelable lease commitments	$ 539

A summary of rental expense follows:

2017	$ 222
2016	220

Note 12. INCOME TAXES

Eaton Corporation plc is domiciled in Ireland. Income (loss) before income taxes and income tax (benefit) expense are summarized below based on the geographic location of the operation to which such earnings and income taxes are attributable.

	Income (loss) before income taxes	
	2017	2016
Ireland	$ (1,090)	$ (923)
Foreign	3,914	3,041
Total income before income taxes	$ 2,824	$ 2,118

	Income tax expense (benefit)	
	2017	2016
Current		
Ireland	$ 1	$ 2
Foreign		
United States	123	93
Non-United States	234	209
Total current income tax expense	358	304
Deferred		
Ireland	—	2
Foreign		
United States	(29)	(77)
Non-United States	(58)	(30)
Total deferred income tax expense (benefit)	(87)	(105)
Total income tax expense	$ 271	$ 199

Reconciliations of income taxes from the Ireland national statutory rate of 25% to the consolidated effective income tax rate follow:

	2017	2016
Income taxes at the applicable statutory rate	25.0 %	25.0 %
Ireland operations		
Ireland tax on trading income	— %	(0.3)%
Nondeductible interest expense	9.7 %	11.5 %
Foreign operations		
United States operations (earnings taxed at other than the applicable statutory rate)	1.1 %	0.1 %
U.S. federal tax rate change	(8.9)%	— %
U.S. tax on foreign earnings	5.7 %	— %
U.S. foreign tax credit	(4.6)%	0.6 %
Credit for research activities	(0.6)%	(0.8)%
U.S. Other - net	3.2 %	2.5 %
Non-U.S. operations (earnings taxed at other than the applicable statutory tax rate)	(24.9)%	(26.8)%
Non-U.S. operations - other items	0.5 %	0.9 %
Worldwide operations		
Adjustments to tax liabilities	(2.1)%	(2.5)%
Adjustments to valuation allowances	5.5 %	(0.8)%
Effective income tax expense rate	9.6 %	9.4 %

During 2017, income tax expense of $271 was recognized (an effective tax rate of 9.6%) compared to income tax expense of $199 for 2016 (an effective tax rate of 9.4%). The 2017 effective tax rate includes tax expense of $123 on the gain related to the sale of business discussed in Note 2 and a tax benefit of $62 related to the U.S. Tax Cuts and Jobs Act ("TCJA") which is discussed in further detail below. Excluding the gain and related tax impact on the sale of business, and the impact of the TCJA, the effective tax rate for 2017 was expense of 9.2%. The decrease from 9.4% for 2016 compared to 9.2% for 2017 was due to the resolution of tax contingencies in various tax jurisdictions and the excess tax benefits recognized for employee share-based payments pursuant to the adoption of Accounting Standards Update 2016-09, Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.

The U.S. Tax Cuts and Jobs Act was enacted on December 22, 2017. The TCJA reduces the U.S. federal corporate tax rate from 35% to 21% and requires a one-time transition tax on certain unremitted earnings of non-U.S. subsidiaries owned directly or indirectly by U.S. subsidiaries of the Company. For 2017, we have recorded a provisional tax benefit amount of $62 for the impact on our deferred tax balances and the one-time transition tax.

The Company remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, which is generally 21%. Additionally, given the significant changes included in the TCJA, the Company re-evaluated the realizability of certain deferred tax assets, including foreign tax credits and interest deferral, and determined that valuation allowances needed to be adjusted. The Company is still analyzing certain aspects of the TCJA, including interpretations by state and local tax authorities, and additional Treasury guidance may be issued which could potentially affect the measurement of these balances or give rise to new deferred tax amounts. The Company recorded a provisional $79 tax benefit for the remeasurement of deferred tax balances and related valuation allowances.

The one-time transition tax is based on post-1986 unremitted earnings and profits ("E&P") of non-U.S. subsidiaries owned directly or indirectly by U.S. subsidiaries of the Company which have been previously deferred from U.S. income taxes. The amount of the transition tax also depends on the amount of E&P held in cash or other specified assets. The Company recorded a provisional tax expense of $17 for the transition tax. This amount may change when Treasury issues additional guidance and the Company finalizes the calculation of E&P, including the amounts held in cash or other specified assets, and finalizes the calculation of available foreign tax credits.

No provision has been made for income taxes on undistributed earnings of foreign subsidiaries of approximately $22.1 billion at December 31, 2017, since it is the Company's intention to indefinitely reinvest undistributed earnings of its foreign subsidiaries. It is not practicable to estimate the additional income taxes and applicable withholding taxes that would be payable on the remittance of such undistributed earnings.

The Company expects to deploy capital to those markets which offer particularly attractive growth opportunities. The cash that is permanently reinvested is typically used to expand operations either organically or through acquisitions. In addition, the Company expects that minimal to no Irish tax would apply to dividends paid to the Irish parent due to the impact of the Irish foreign tax credit system. The Company's public dividends and share repurchases are funded primarily from Non-U.S. operations.

Worldwide income tax payments, net of tax refunds, follow:

2017	$	288
2016		272

Deferred Income Tax Assets and Liabilities

Components of current and long-term deferred income taxes follow:

	2017		2016	
	Assets and liabilities		Assets and liabilities	
Accruals and other adjustments				
Employee benefits	$	430	$	761
Depreciation and amortization		(1,324)		(1,823)
Other accruals and adjustments		380		761
Ireland income tax loss carryforwards		1		1
Foreign income tax loss carryforwards		1,962		1,796
Foreign income tax credit carryforwards		404		277
Valuation allowance for income tax loss and income tax credit carryforwards		(1,992)		(1,728)
Other valuation allowances		(146)		(41)
Total deferred income taxes	$	(285)	$	4

Changes in net deferred tax activity follows:

Balance at December 31, 2015	$	(66)
Provision - continuing operations		105
Charges to equity		(20)
Reclassifications and other		(15)
Balance at December 31, 2016	$	4
Balance at December 31, 2016	$	4
Provision - continuing operations		87
Charges to equity		(163)
Reclassifications and other		(213)
Balance at December 31, 2017	$	(285)

At December 31, 2017, Eaton Corporation plc and certain Irish subsidiaries had tax loss carryforwards that are available to reduce future taxable income or tax liabilities. These carryforwards and their respective expiration dates are summarized below:

	2018 through 2022	2023 through 2027	2028 through 2032	2033 through 2037	Not subject to expiration	Valuation allowance
Ireland income tax loss carryforwards	$ —	$ —	$ —	$ —	$ 8	$ —
Ireland deferred income tax assets for income tax loss carryforwards	—	—	—	—	1	(1)

At December 31, 2017, the Company's foreign subsidiaries, including all U.S. and non-U.S. subsidiaries, had income tax loss carryforwards and income tax credit carryforwards that are available to reduce future taxable income or tax liabilities. These carryforwards and their respective expiration dates are summarized below:

	2018 through 2022	2023 through 2027	2028 through 2032	2033 through 2037	Not subject to expiration	Valuation allowance
Foreign income tax loss carryforwards	$ 918	$ 7,528	$ 14	$ 545	$ 4,047	$ —
Foreign deferred income tax assets for income tax loss carryforwards	112	721	14	175	1,047	(1,830)
Foreign deferred income tax assets for income tax loss carryforwards after ASU 2013-11	101	715	14	86	1,047	(1,830)
Foreign income tax credit carryforwards	86	205	78	115	64	(161)
Foreign income tax credit carryforwards after ASU 2013-11	82	168	27	94	33	(161)

Recoverability of Deferred Income Tax Assets

Eaton is subject to the income tax laws in the jurisdictions in which it operates. In order to determine its income tax provision for financial statement purposes, Eaton must make significant estimates and judgments about its business operations in these jurisdictions. These estimates and judgments are also used in determining the deferred income tax assets and liabilities that have been recognized for differences between the financial statement and income tax basis of assets and liabilities, and income tax loss carryforwards and income tax credit carryforwards.

Management evaluates the realizability of deferred income tax assets for each of the jurisdictions in which it operates. If the Company experiences cumulative pretax income in a particular jurisdiction in the three-year period including the current and prior two years, management normally concludes that the deferred income tax assets will more likely than not be realizable and no valuation allowance is recognized, unless known or planned operating developments, or changes in tax laws, would lead management to conclude otherwise. However, if the Company experiences cumulative pretax losses in a particular jurisdiction in the three-year period including the current and prior two years, management then considers a series of factors in the determination of whether the deferred income tax assets can be realized. These factors include historical operating results, known or planned operating developments, the period of time over which certain temporary differences will reverse, consideration of the utilization of certain deferred income tax liabilities, tax law carryback capability in the particular country, prudent and feasible tax planning strategies, changes in tax laws, and estimates of future earnings and taxable income using the same assumptions as those used for the Company's goodwill and other impairment testing. After evaluation of these factors, if the deferred income tax assets are expected to be realized within the tax carryforward period allowed for that specific country, management would conclude that no valuation allowance would be required. To the extent that the deferred income tax assets exceed the amount that is expected to be realized within the tax carryforward period for a particular jurisdiction, management would establish a valuation allowance.

Applying the above methodology, valuation allowances have been established for certain deferred income tax assets to the extent they are not expected to be realized within the particular tax carryforward period.

Unrecognized Income Tax Benefits

A summary of gross unrecognized income tax benefits follows:

	2017	2016
Balance at January 1	$ 629	$ 584
Increases and decreases as a result of positions taken during prior years		
Transfers from valuation allowances	—	—
Other increases, including currency translation	10	21
Other decreases, including currency translation	(30)	(24)
Balances related to acquired businesses	—	—
Increases as a result of positions taken during the current year	162	90
Decreases relating to settlements with tax authorities	(10)	(19)
Decreases as a result of a lapse of the applicable statute of limitations	(26)	(23)
Balance at December 31	$ 735	$ 629

Eaton's long-term policy has been to enter into tax planning strategies only if it is more likely than not that the benefit would be sustained upon audit. For example, the Company does not enter into any of the United States Internal Revenue Service (IRS) Listed Transactions as set forth in Treasury Regulation 1.6011-4.

If all unrecognized tax benefits were recognized, the net impact on the provision for income tax expense would be $652.

As of December 31, 2017 and 2016, Eaton had accrued approximately $80 and $94, respectively, for the payment of worldwide interest and penalties, which are not included in the table of unrecognized income tax benefits above. Eaton recognizes interest and penalties related to unrecognized income tax benefits in the provision for income tax expense. The Company has accrued penalties in jurisdictions primarily where they are automatically applied to any deficiency, regardless of the merit of the position.

As part of Eaton's broader efforts to streamline operations, accelerate organic growth, and increase administrative efficiencies, the Company centralized certain activities and assets, which resulted in an increase in current income taxes payable, prepaid tax, and unrecognized tax benefits for 2017. These changes did not impact the Company's 2017 effective tax rate.

The resolution of the majority of Eaton's unrecognized income tax benefits is dependent upon uncontrollable factors such as the prospect of retroactive regulations; new case law; and the willingness of the income tax authority to settle the issue, including the timing thereof. Therefore, for the majority of unrecognized income tax benefits, it is not reasonably possible to estimate the increase or decrease in the next 12 months. For each of the unrecognized income tax benefits where it is possible to estimate the increase or decrease in the balance within the next 12 months, the Company does not anticipate any significant change.

Eaton or its subsidiaries file income tax returns in Ireland and many countries around the world. With only few exceptions, Irish and non-United States subsidiaries of Eaton are no longer subject to examinations for years before 2007.

The United States Internal Revenue Service ("IRS") has completed its examination of Eaton Corporation and Includible Subsidiaries' ("Eaton Corp.") United States income tax returns for 2005 through 2010 and has issued Statutory Notices of Deficiency (Notices) as discussed below. The statute of limitations on these tax years remains open until the matters are resolved. The IRS is currently examining tax years 2011 through 2013. The statute of limitations for tax years 2011 through 2013 is open until August 31, 2018. Tax years 2014 through 2016 are still subject to examination by the IRS.

Eaton is also under examination for the income tax filings in various states and localities of the United States. With only a few exceptions, Eaton Corp. is no longer subject to income tax examinations from states and localities within the United States for years before 2012. Income tax returns of states and localities within the United States will be reopened to the extent of United States federal income tax adjustments, if any, going back to 2005 when those audit years are finalized. Some states and localities may not limit their assessment to the United States federal adjustments, and may require the opening of the entire tax year. In addition, with only a few exceptions, BZ Holdings Inc. and Includible Subsidiaries (the former U.S. holding company for Cooper Industries) are no longer subject to United States state and local income tax examinations for years before 2012.

In 2011, the IRS issued a Notice for Eaton Corp. for the 2005 and 2006 tax years (the 2011 Notice). The 2011 Notice proposed assessments of $75 in additional taxes plus $52 in penalties related primarily to transfer pricing adjustments for products manufactured in the Company's facilities in Puerto Rico and the Dominican Republic and sold to affiliated companies located in the U.S.. Eaton Corp. has set its transfer prices for products sold between these affiliates at the same prices that Eaton Corp. sells such products to third parties as required by two successive Advance Pricing Agreements (APAs) Eaton Corp. entered into with the IRS that governed the 2005-2010 tax years. The Company has continued to apply the arms-length transfer pricing methodology for 2011 through the current reporting period. Immediately prior to the 2011 Notice being issued, the IRS sent a letter stating that it was retrospectively canceling the APAs. Eaton Corp. contested the proposed assessments in United States Tax Court. The case involved both whether the APAs should be enforced and, if not, the appropriate transfer pricing methodology. On July 26, 2017, the United States Tax Court issued a ruling in which it agreed with Eaton Corp. that the IRS must abide by the terms of the APAs for the tax years 2005-2006. The Tax Court's ruling on the APAs did not have a material impact on Eaton's consolidated financial statements.

In 2014, Eaton Corp. received a Notice from the IRS for the 2007 through 2010 tax years (the 2014 Notice) proposing assessments of $190 in additional taxes plus $72 in penalties, net of agreed credits and deductions, which the company has also contested in Tax Court. The proposed assessments pertain primarily to the same transfer pricing issues and APA for which the Tax Court has issued its ruling during 2017 as noted above. The Company believes that the Tax Court's ruling for tax years 2005-2006 will also be applicable to the 2007-2010 years. Following the issuance of the Tax Court's ruling, Eaton and the IRS recognized that the ruling on the enforceability of the APAs did not address a secondary issue regarding the transfer pricing for a certain royalty paid from 2006-2010. Eaton Corp. reported a consistent royalty rate for 2006-2010. The IRS has agreed to the royalty rate as reported by Eaton Corp. in 2006. Although the IRS has not proposed an alternative rate, it has not agreed to apply the same royalty rate in the 2007-2010 years.

The 2014 Notice also includes a separate proposed assessment involving the recognition of income for several of Eaton Corp.'s controlled foreign corporations. The Company believes that the proposed assessment is without merit. Eaton and the IRS have both moved for partial summary judgment on this issue. The Tax Court heard oral arguments on the motions in January 2018, following which the Court ordered further briefing.

During 2010, the Company received a tax assessment of $49 (translated at the December 31, 2017 exchange rate), plus interest and penalties, in Brazil for the tax years 2005 through 2008 that relates to the amortization of certain goodwill generated from the acquisition of third-party businesses and corporate reorganizations. The Company is contesting the assessment, which is under review at the administrative appeals level. During 2013, the Brazilian tax authorities began an audit of tax years 2009 through 2012. During 2014, the Company received a tax assessment of $37 (translated at the December 31, 2017 exchange rate), plus interest and penalties, for the 2009 through 2012 tax years (primarily relating to the same issues concerning the 2005 through 2008 tax years), which the Company is also contesting and is under review at the administrative appeals level. Multiple outside advisors have stated that Brazilian tax authorities are raising the issue for most clients with similar facts and that the matter is expected to require at least 10 years to resolve. The Company continues to believe that final resolution of the assessments will not have a material impact on its consolidated financial statements.

Note 13. EATON SHAREHOLDERS' EQUITY

There are 750 million Eaton ordinary shares authorized ($0.01 par value per share), 439.9 million and 449.4 million of which were issued and outstanding at December 31, 2017 and 2016, respectively. Eaton's Memorandum and Articles of Association authorized 40 thousand deferred ordinary shares (€1.00 par value per share) and 10 thousand preferred A shares ($1.00 par value per share), all of which were issued and outstanding at December 31, 2017 and 2016, and 10 million serial preferred shares ($0.01 par value per share), none of which is outstanding at December 31, 2017 and 2016. At December 31, 2017, there were 13,089 holders of record of Eaton ordinary shares. Additionally, 20,138 current and former employees were shareholders through participation in the Eaton Savings Plan, Eaton Personal Investment Plan, or the Eaton Puerto Rico Retirement Savings Plan.

On October 22, 2013, Eaton's Board of Directors adopted a share repurchase program (the 2013 Program). Under the 2013 Program, the ordinary shares were expected to be repurchased over time, depending on market conditions, the market price of ordinary shares, capital levels, and other considerations. During 2016, 1.5 million ordinary shares were repurchased under the 2013 Program in the open market at a total cost of $82. On February 24, 2016, the Board of Directors approved a new share repurchase program for share repurchases up to $2,500 of ordinary shares (2016 Program). Under the 2016 Program, the ordinary shares are expected to be repurchased over time, depending on market conditions, the market price of ordinary shares, capital levels, and other considerations. During 2017 and 2016, 11.5 million and 10.3 million shares, respectively, were purchased on the open market under the 2016 Program for a total cost of $850 and $648, respectively.

Eaton has deferral plans that permit certain employees and directors to defer a portion of their compensation. A trust contains $11 and $13 of ordinary shares and marketable securities at December 31, 2017 and 2016, respectively, to fund a portion of these liabilities. The marketable securities were included in Other assets and the ordinary shares were included in Shareholders' equity at historical cost.

On February 28, 2018, Eaton's Board of Directors declared a quarterly dividend of $0.66 per ordinary share, a 10% increase over the dividend paid in the fourth quarter of 2017. The dividend is payable on March 23, 2018, to shareholders of record at the close of business on March 12, 2018.

Comprehensive Income (Loss)

Comprehensive income (loss) consists primarily of net income, currency translation and related hedging instruments, changes in unrecognized costs of pension and other postretirement benefits, and changes in the effective portion of open derivative contracts designated as cash flow hedges. The following table summarizes the pre-tax and after-tax amounts recognized in Comprehensive income (loss):

	2017		2016	
	Pre-tax	After-tax	Pre-tax	After-tax
Currency translation and related hedging instruments	$ 800	$ 807	$ (562)	$ (570)
Unrealized gain on retained investment in sold business	544	433	—	—
Pensions and other postretirement benefits				
Prior service credit (cost) arising during the year	(1)	—	(2)	(2)
Net gain (loss) arising during the year	215	169	(247)	(197)
Currency translation	(67)	(53)	74	62
Other	—	(5)	—	(2)
Amortization of actuarial loss and prior service cost reclassified to earnings	188	130	201	133
	335	241	26	(6)
Cash flow hedges				
Gain (loss) on derivatives designated as cash flow hedges	(24)	(15)	(21)	(14)
Changes in cash flow hedges reclassified to earnings	17	11	8	5
Cash flow hedges, net of reclassification adjustments	(7)	(4)	(13)	(9)
Other comprehensive income (loss) attributable to Eaton ordinary shareholders	$ 1,672	$ 1,477	$ (549)	$ (585)

The changes in Other reserves follow:

	Currency translation and related hedging instruments		Pensions and other postretirement benefits		Cash flow hedges		Other		Total	
Balance at December 31, 2015	$	(2,492)	$	(1,374)	$	3	$	139	$	(3,724)
Other comprehensive loss before reclassifications		(570)		(139)		(14)		—		(723)
Amounts reclassified from Other reserves		—		133		5		—		138
Net current-period other comprehensive loss		(570)		(6)		(9)		—		(585)
Other equity-based compensation		—		—		—		67		67
Balance at December 31, 2016	$	(3,062)	$	(1,380)	$	(6)	$	206	$	(4,242)

	Currency translation and related hedging instruments		Pensions and other postretirement benefits		Cash flow hedges		Other		Total	
Balance at December 31, 2016	$	(3,062)	$	(1,380)	$	(6)	$	206	$	(4,242)
Other comprehensive income (loss) before reclassifications		807		111		(15)		—		903
Amounts reclassified from Other reserves		—		130		11		—		141
Net current-period other comprehensive income (loss)		807		241		(4)		—		1,044
Other equity-based compensation		—		—		—		73		73
Balance at December 31, 2017	$	(2,255)	$	(1,139)	$	(10)	$	279	$	(3,125)

The reclassifications out of Other reserves follow:

	December 31, 2017		Consolidated Profit and Loss Accounts
Amortization of defined benefit pension and other postretirement benefits items			
Actuarial loss and prior service cost	$	(188)	[1]
Tax benefit		58	
Total, net of tax		(130)	
Gains and (losses) on cash flow hedges			
Currency exchange contracts		(17)	Cost of products sold
Tax benefit		6	
Total, net of tax		(11)	
Total reclassifications for the period	$	(141)	

[1] These components of Other reserves are included in the computation of net periodic benefit cost. See Note 10 for additional information about defined benefit pension and other postretirement benefits items.

Net Income Per Share Attributable to Eaton Ordinary Shareholders

A summary of the calculation of net income per share attributable to Eaton ordinary shareholders follows:

(Shares in millions)	2017	2016
Net income attributable to Eaton ordinary shareholders	$ 2,552	$ 1,916
Weighted-average number of ordinary shares outstanding - diluted	447.0	456.5
Less dilutive effect of equity-based compensation	2.5	1.5
Weighted-average number of ordinary shares outstanding - basic	444.5	455.0
Net income per share attributable to Eaton ordinary shareholders		
Diluted	$ 5.71	$ 4.20
Basic	5.74	4.21

In 2017 and 2016, 0.4 million and 1.7 million stock options, respectively, were excluded from the calculation of diluted net income per share attributable to Eaton ordinary shareholders because the exercise price of the options exceeded the average market price of the ordinary shares during the period and their effect, accordingly, would have been antidilutive.

Note 14. EQUITY-BASED COMPENSATION

Restricted Stock Units and Awards

Restricted stock units (RSUs) and restricted stock awards (RSAs) have been issued to certain employees and directors. Participants awarded RSUs in 2015 and 2016 do not receive dividends; therefore, the fair value is determined by reducing the closing market price of the Company's ordinary shares on the date of grant by the present value of the estimated dividends had they been paid. The fair value of RSUs awarded in 2017 and RSAs are determined based on the closing market price of the Company's ordinary shares at the date of grant. The RSUs entitle the holder to receive one ordinary share for each RSU upon vesting, generally over three years. RSAs are issued and outstanding at the time of grant, but remain subject to forfeiture until vested, generally over three or four years. A summary of the RSU and RSA activity for 2017 follows:

(Restricted stock units and awards in millions)	Number of restricted stock units and awards	Weighted-average fair value per unit and award
Non-vested at January 1	2.6	$ 57.87
Granted	0.9	72.09
Vested	(0.9)	61.80
Forfeited	(0.2)	61.66
Non-vested at December 31	2.4	$ 62.24

Information related to RSUs and RSAs follows:

	2017	2016
Pretax expense for RSUs and RSAs	$ 66	$ 65
After-tax expense for RSUs and RSAs	43	42
Fair value of vested RSUs and RSAs	73	71

As of December 31, 2017, total compensation expense not yet recognized related to non-vested RSUs and RSAs was $79, and the weighted-average period in which the expense is expected to be recognized is 2.3 years. Excess tax benefit for RSUs and RSAs totaled $2 for 2017. There was no excess tax benefit for RSUs and RSAs in 2016.

Performance Share Units

In February 2017 and 2016, the Compensation and Organization Committee of the Board of Directors approved the grant of performance share units (PSUs) to certain employees that vest based on the satisfaction of a three-year service period and total shareholder return relative to that of a group of peers. Awards earned at the end of the three-year vesting period range from 0% to 200% of the targeted number of PSUs granted based on the ranking of total shareholder return of the Company, assuming reinvestment of all dividends, relative to a defined peer group of companies. Equity-based compensation expense for these PSUs is recognized over the period during which an employee is required to provide service in exchange for the award. Upon vesting, dividends that have accumulated during the vesting period are paid on earned awards.

The Company uses a Monte Carlo simulation to estimate the fair value of PSUs with market conditions. The principal assumptions utilized in valuing these PSUs include the expected stock price volatility (based on the most recent 3-year period as of the grant date) and the risk-free interest rate (an estimate based on the yield of United States Treasury zero coupon bonds with a 3-year maturity as of the grant date). A summary of the assumptions used in determining fair value of these PSUs follows:

	2017	2016
Expected volatility	24%	24%
Risk-free interest rate	1.46%	0.88%
Weighted-average fair value of PSUs granted	$ 80.07	$ 76.41

A summary of the 2017 activity for these PSUs follows:

(Performance share units in millions)	Number of performance share units	Weighted-average fair value per unit
Non-vested at January 1	0.5	$ 76.41
Granted[1]	0.4	80.07
Vested	—	—
Forfeited	(0.1)	77.90
Non-vested at December 31	0.8	$ 77.97

[1] Performance shares granted assuming the Company will perform at target relative to peers.

In February 2015 and 2016, performance share units were granted to certain employees that entitles the holder to receive one ordinary share for each PSU that vest based on the satisfaction of a three-year service period and the achievement of certain performance metrics over that same period. Upon vesting, PSU holders receive dividends that accumulate during the vesting period. The fair value of these PSUs is determined based on the closing market price of the Company's ordinary shares at the date of grant. Equity-based compensation expense is recognized over the period an employee is required to provide service based on the number of PSUs for which achievement of the performance objectives is probable. A summary of the 2017 activity for these PSUs follows:

(Performance share units in millions)	Number of performance share units	Weighted-average fair value per unit
Non-vested at January 1	0.7	$ 68.23
Granted	—	—
Vested	(0.1)	71.72
Forfeited	(0.5)	71.72
Non-vested at December 31	0.1	$ 56.55

Information related to PSUs follows:

	2017	2016
Pretax expense for PSUs	$ 22	$ 13
After-tax expense for PSUs	13	8

As of December 31, 2017, total compensation expense not yet recognized related to non-vested PSUs was $30 and the weighted average period in which the expense is to be recognized is 1.6 years. There was no excess tax benefit for PSUs in 2017 and 2016.

Stock Options

Under various plans, stock options have been granted to certain employees and directors to purchase ordinary shares at prices equal to fair market value on the date of grant. Substantially all of these options vest ratably during the three-year period following the date of grant and expire 10 years from the date of grant. Compensation expense is recognized for stock options based on the fair value of the options at the date of grant and amortized on a straight-line basis over the period the employee or director is required to provide service.

The Company uses a Black-Scholes option pricing model to estimate the fair value of stock options. The principal assumptions utilized in valuing stock options include the expected stock price volatility (based on the most recent historical period equal to the expected life of the option); the expected option life (an estimate based on historical experience); the expected dividend yield; and the risk-free interest rate (an estimate based on the yield of United States Treasury zero coupon with a maturity equal to the expected life of the option). A summary of the assumptions used in determining the fair value of stock options follows:

	2017	2016
Expected volatility	27%	27%
Expected option life in years	6.6	5.5
Expected dividend yield	2.8%	2.5%
Risk-free interest rate	1.8 to 2.1%	1.2 to 1.5%
Weighted-average fair value of stock options granted	$ 15.11	$ 11.80

A summary of stock option activity follows:

(Options in millions)	Weighted-average exercise price per option	Options	Weighted-average remaining contractual life in years	Aggregate intrinsic value
Outstanding at January 1, 2017	$ 56.75	5.5		
Granted	71.89	0.7		
Exercised	46.31	(1.5)		
Forfeited and canceled	59.23	(0.1)		
Outstanding at December 31, 2017	$ 62.43	4.6	6.3	$ 77.3
Exercisable at December 31, 2017	$ 61.06	2.9	5.1	$ 52.1
Reserved for future grants at December 31, 2017		15.0		

The aggregate intrinsic value in the table above represents the total excess of the $79.01 closing price of Eaton ordinary shares on the last trading day of 2017 over the exercise price of the stock option, multiplied by the related number of options outstanding and exercisable. The aggregate intrinsic value is not recognized for financial accounting purposes and the value changes based on the daily changes in the fair market value of the Company's ordinary shares.

Information related to stock options follows:

	2017	2016
Pretax expense for stock options	$ 11	$ 14
After-tax expense for stock options	8	9
Proceeds from stock options exercised	66	74
Income tax benefit related to stock options exercised		
Tax benefit classified in operating activities in the Consolidated Statements of Cash Flows	13	5
Excess tax benefit classified in financing activities in the Consolidated Statements of Cash Flows	—	1
Intrinsic value of stock options exercised	41	42
Total fair value of stock options vested	$ 11	$ 14
Stock options exercised, in millions of options	1.5	1.9

As of December 31, 2017, total compensation expense not yet recognized related to non-vested stock options was $8.8, and the weighted-average period in which the expense is expected to be recognized is 1.7 years.

Note 15. FAIR VALUE MEASUREMENTS

Fair value is measured based on an exit price, representing the amount that would be received to sell an asset or paid to satisfy a liability in an orderly transaction between market participants. Fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a fair value hierarchy is established, which categorizes the inputs used in measuring fair value as follows: (Level 1) observable inputs such as quoted prices in active markets; (Level 2) inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and (Level 3) unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

A summary of financial instruments recognized at fair value, and the fair value measurements used, follows:

	Total	Quoted prices in active markets for identical assets (Level 1)	Other observable inputs (Level 2)	Unobservable inputs (Level 3)
2017				
Cash	$ 561	$ 561	$ —	$ —
Short-term investments	534	534	—	—
Net derivative contracts	36	—	36	—
2016				
Cash	$ 543	$ 543	$ —	$ —
Short-term investments	203	203	—	—
Net derivative contracts	(3)	—	(3)	—

Eaton values its financial instruments using an industry standard market approach, in which prices and other relevant information is generated by market transactions involving identical or comparable assets or liabilities. No financial instruments were measured using unobservable inputs.

Other Fair Value Measurements

Long-term debt and the current portion of long-term debt had a carrying value of $7,745 and fair value of $8,048 at December 31, 2017 compared to $8,263 and $8,477, respectively, at December 31, 2016. The fair value of Eaton's debt instruments was estimated using prevailing market interest rates on debt with similar creditworthiness, terms and maturities and is considered a Level 2 fair value measurement.

As discussed in Note 2, on July 31, 2017 Eaton sold a 50% interest in its heavy-duty and medium-duty commercial vehicle automated transmission business to Cummins, Inc. Eaton's remaining 50% interest was remeasured to a fair value of $600 on July 31, 2017 using a discounted cash flow model which is considered a Level 3 fair value measurement. The model includes estimates of future cash flows, future growth rates, terminal value amounts, and the applicable weighted-average cost of capital used to discount those estimated cash flows. Eaton will account for its investment on the equity method of accounting.

Short-Term Investments

Eaton invests excess cash generated from operations in short-term marketable investments. For those investments classified as “available-for-sale”, Eaton marks these investments to fair value with the offset recognized in Other reserves. A summary of the carrying value of short-term investments follows:

	2017	2016
Time deposits, certificates of deposit and demand deposits with banks	$ 435	$ 149
Money market investments	99	54
Total short-term investments	$ 534	$ 203

Note 16. DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACTIVITIES

In the normal course of business, Eaton is exposed to certain risks related to fluctuations in interest rates, currency exchange rates and commodity prices. The Company uses various derivative and non-derivative financial instruments, primarily interest rate swaps, currency forward exchange contracts, currency swaps and, to a lesser extent, commodity contracts, to manage risks from these market fluctuations. The instruments used by Eaton are straightforward, non-leveraged instruments. The counterparties to these instruments are financial institutions with strong credit ratings. Eaton maintains control over the size of positions entered into with any one counterparty and regularly monitors the credit rating of these institutions. Such instruments are not purchased and sold for trading purposes.

Derivative financial instruments are accounted for at fair value and recognized as assets or liabilities in the Consolidated Balance Sheets. Accounting for the gain or loss resulting from the change in the fair value of the derivative financial instrument depends on whether it has been designated, and is effective, as part of a hedging relationship and, if so, as to the nature of the hedging activity. Eaton formally documents all relationships between derivative financial instruments accounted for as designated hedges and the hedged item, as well as its risk-management objective and strategy for undertaking the hedge transaction. This process includes linking derivative financial instruments to a recognized asset or liability, specific firm commitment, forecasted transaction, or net investment in a foreign operation. These financial instruments can be designated as:

- Hedges of the change in the fair value of a recognized fixed-rate asset or liability, or the firm commitment to acquire such an asset or liability (a fair value hedge); for these hedges, the gain or loss from the derivative financial instrument, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, are recognized in income during the period of change in fair value.
- Hedges of the variable cash flows of a recognized variable-rate asset or liability, or the forecasted acquisition of such an asset or liability (a cash flow hedge); for these hedges, the effective portion of the gain or loss from the derivative financial instrument is recognized in Other reserves and reclassified to income in the same period when the gain or loss on the hedged item is included in income.
- Hedges of the currency exposure related to a net investment in a foreign operation (a net investment hedge); for these hedges, the effective portion of the gain or loss from the derivative financial instrument is recognized in Other reserves and reclassified to income in the same period when the gain or loss related to the net investment in the foreign operation is included in income.

The gain or loss from a derivative financial instrument designated as a hedge that is effective is classified in the same line of the Consolidated Profit and Loss Accounts as the offsetting loss or gain on the hedged item. The change in fair value of a derivative financial instrument that is not effective as a hedge is immediately recognized in income. The cash flows resulting from these financial instruments are classified in operating activities on the Consolidated Statements of Cash Flows.

For derivatives that are not designated as a hedge, any gain or loss is immediately recognized in income. The majority of derivatives used in this manner relate to risks resulting from assets or liabilities denominated in a foreign currency and certain commodity contracts that arise in the normal course of business. During 2017 and 2016, Eaton recognized gains of $2 and $7, respectively, associated with these commodity hedge contracts. Gains and losses associated with commodity hedge contracts are classified in Cost of products sold.

Eaton uses certain of its debt denominated in foreign currency to hedge portions of its net investments in foreign operations against foreign currency exposure (net investment hedges). Foreign currency denominated debt designated as non-derivative net investment hedging instruments on an after-tax basis was $88 and $86 at December 31, 2017 and 2016, respectively, and designated on a pre-tax basis was $652 and $572 at December 31, 2017 and 2016, respectively. See Note 9 for additional information about debt.

Interest Rate Risk

Eaton has entered into fixed-to-floating interest rate swaps to manage interest rate risk of certain long-term debt. These interest rate swaps are accounted for as fair value hedges of certain long-term debt. The maturity of the swap corresponds with the maturity of the debt instrument as noted in the table of long-term debt in Note 9. Eaton also entered into several forward starting floating-to-fixed interest rate swaps to manage interest rate risk in anticipation of debt that was refinanced in 2017.

A summary of interest rate swaps outstanding at December 31, 2017, follows:

Fixed-to-Floating Interest Rate Swaps

Notional amount	Fixed interest rate received	Floating interest rate paid	Basis for contracted floating interest rate paid
$ 415	5.60%	4.59%	6 month LIBOR + 3.18%
300	6.95%	6.31%	3 month LIBOR + 5.07%
25	8.88%	5.24%	6 month LIBOR + 3.84%
150	3.88%	3.22%	1 month LIBOR + 2.12%
275	3.47%	2.84%	1 month LIBOR + 1.74%
100	8.10%	7.08%	1 month LIBOR + 5.90%
1,400	2.75%	1.66%	1 month LIBOR + 0.58%
200	3.68%	2.17%	1 month LIBOR + 1.07%
25	7.63%	3.87%	6 month LIBOR + 2.48%
50	7.65%	3.98%	6 month LIBOR + 2.57%
25	5.45%	1.68%	6 month LIBOR + 0.28%

Derivative Financial Statement Impacts

The fair value of derivative financial instruments recognized in the Consolidated Balance Sheets follows:

	Notional amount	Other current assets	Other noncurrent assets	Other current liabilities	Other noncurrent liabilities	Type of hedge	Term
December 31, 2017							
Derivatives designated as hedges							
Fixed-to-floating interest rate swaps	$ 2,965	$ 1	$ 41	$ —	$ 17	Fair value	6 months to 17 years
Currency exchange contracts	924	7	7	22	2	Cash flow	1 to 36 months
Total		$ 8	$ 48	$ 22	$ 19		
Derivatives not designated as hedges							
Currency exchange contracts	$ 3,719	$ 39		$ 19			1 to 12 months
Commodity contracts	13	1		—			1 to 12 months
Total		$ 40		$ 19			
December 31, 2016							
Derivatives designated as hedges							
Fixed-to-floating interest rate swaps	$ 3,765	$ 1	$ 65	$ —	$ 8	Fair value	3 months to 18 years
Forward starting floating-to-fixed interest rate swaps	450	—	19	—	1	Cash flow	11 years
Currency exchange contracts	802	11	1	22	17	Cash flow	1 to 36 months
Total		$ 12	$ 85	$ 22	$ 26		
Derivatives not designated as hedges							
Currency exchange contracts	$ 5,333	$ 31		$ 85			1 to 12 months
Commodity contracts	10	2		—			1 to 12 months
Total		$ 33		$ 85			

The currency exchange contracts shown in the table above as derivatives not designated as hedges are primarily contracts entered into to manage currency volatility or exposure on intercompany sales and loans. While Eaton does not elect hedge accounting treatment for these derivatives, Eaton targets managing 100% of the intercompany balance sheet exposure to minimize the effect of currency volatility related to the movement of goods and services in the normal course of its operations. This activity represents the great majority of these currency exchange contracts.

The impact of derivative instruments to the Consolidated Profit and Loss Accounts and Other reserves follow:

	Gain (loss) recognized in Other reserves		Location of gain (loss) reclassified from Other reserves	Gain (loss) reclassified from Other reserves	
	2017	2016		2017	2016
Derivatives designated as cash flow hedges					
Forward starting floating-to-fixed interest rate swaps	$ (15)	$ 18	Interest expense or Interest income	$ —	$ —
Interest rate locks	(9)	—	Interest expense or Interest income	—	—
Currency exchange contracts	—	(39)	Cost of products sold	(17)	(8)
Total	$ (24)	$ (21)		$ (17)	$ (8)

Amounts recognized in net income follow:

	2017	2016
Derivatives designated as fair value hedges		
Fixed-to-floating interest rate swaps	$ (33)	$ (36)
Related long-term debt converted to floating interest rates by interest rate swaps	33	36
	$ —	$ —

Gains and losses described above were recognized in Interest expense and Interest income, respectively.

Note 17. ACCOUNTS RECEIVABLE AND INVENTORY

Accounts Receivable

Eaton performs ongoing credit evaluation of its customers and maintains sufficient allowances for potential credit losses. The Company evaluates the collectability of its accounts receivable based on the length of time the receivable is past due and any anticipated future write-off based on historic experience. Accounts receivable balances are written off against an allowance for doubtful accounts after a final determination of uncollectability has been made. Accounts receivable are net of an allowance for doubtful accounts of $57 and $50 at December 31, 2017 and 2016.

Inventory

Inventory is carried at lower of cost or net realizable value, using the first-in, first-out (FIFO) method. Cost components include raw materials, purchased components, direct labor, indirect labor, utilities, depreciation, inbound freight charges, purchasing and receiving costs, inspection costs, warehousing costs, and costs of the distribution network.

The components of inventory follow:

	2017	2016
Raw materials	$ 953	$ 879
Work-in-process	471	395
Finished goods	1,196	1,072
Total inventory	$ 2,620	$ 2,346

Note 18. BUSINESS SEGMENT AND GEOGRAPHIC REGION INFORMATION

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated on a regular basis by the chief operating decision maker, or decision making group, in deciding how to allocate resources to an individual segment and in assessing performance. Eaton's segments are as follows:

Electrical Products and Electrical Systems and Services

The Electrical Products segment consists of electrical components, industrial components, residential products, single phase power quality, emergency lighting, fire detection, wiring devices, structural support systems, circuit protection, and lighting products. The Electrical Systems and Services segment consists of power distribution and assemblies, three phase power quality, hazardous duty electrical equipment, intrinsically safe explosion-proof instrumentation, utility power distribution, power reliability equipment, and services. The principal markets for these segments are industrial, institutional, governmental, utility, commercial, residential and information technology. These products are used wherever there is a demand for electrical power in commercial buildings, data centers, residences, apartment and office buildings, hospitals, factories, utilities, and industrial and energy facilities. The segments share several common global customers, but a large number of customers are located regionally. Sales are made directly to original equipment manufacturers, utilities, and certain other end users, as well as through distributors, resellers, and manufacturers' representatives.

Hydraulics

The Hydraulics segment is a global leader in hydraulics components, systems and services for industrial and mobile equipment. Eaton offers a wide range of power products including pumps, motors and hydraulic power units; a broad range of controls and sensing products including valves, cylinders and electronic controls; a full range of fluid conveyance products including industrial and hydraulic hose, fittings, and assemblies, thermoplastic hose and tubing, couplings, connectors, and assembly equipment; filtration systems solutions; industrial drum and disc brakes; and golf grips. The principal markets for the Hydraulics segment include renewable energy, marine, agriculture, oil and gas, construction, mining, forestry, utility, material handling, truck and bus, machine tools, molding, primary metals, and power generation. Key manufacturing customers in these markets and other customers are located globally. Products are sold and serviced through a variety of channels.

Aerospace

The Aerospace segment is a leading global supplier of aerospace fuel, hydraulics, and pneumatic systems for commercial and military use. Products include hydraulic power generation systems for aerospace applications including pumps, motors, hydraulic power units, hose and fittings, electro-hydraulic pumps; controls and sensing products including valves, cylinders, electronic controls, electromechanical actuators, sensors, aircraft flap and slat systems and nose wheel steering systems; fluid conveyance products, including hose, thermoplastic tubing, fittings, adapters, couplings, sealing and ducting; and fuel systems including fuel pumps, sensors, valves, adapters and regulators. The principal markets for the Aerospace segment are manufacturers of commercial and military aircraft and related after-market customers. These manufacturers and other customers operate globally. Products are sold and serviced through a variety of channels.

Vehicle

The Vehicle segment is a leader in the design, manufacture, marketing, and supply of: drivetrain, powertrain systems and critical components that reduce emissions and improve fuel economy, stability, performance, and safety of cars, light trucks and commercial vehicles. Products include transmissions, clutches, hybrid power systems, superchargers, engine valves and valve actuation systems, cylinder heads, locking and limited slip differentials, transmission controls, fuel vapor components, fluid connectors and conveyance products for the global vehicle industry. The principal markets for the Vehicle segment are original equipment manufacturers and aftermarket customers of heavy-, medium-, and light-duty trucks, SUVs, CUVs, passenger cars and agricultural equipment.

Other Information

No single customer represented greater than 10% of net sales in 2017 or 2016, respectively.

The accounting policies of the business segments are generally the same as the policies described in Note 1, except that operating profit only reflects the service cost component related to pensions and other postretirement benefits. Intersegment sales and transfers are accounted for at the same prices as if the sales and transfers were made to third parties. These intersegment sales are eliminated in consolidation. Operating profit includes the operating profit from intersegment sales.

For purposes of business segment performance measurement, the Company does not allocate items that are of a non-operating nature or are of a corporate or functional governance nature. Corporate expenses consist of transaction costs associated with the acquisition of certain businesses and corporate office expenses including compensation, benefits, occupancy, depreciation, and other administrative costs. Identifiable assets of the business segments exclude goodwill, other intangible assets, and general corporate assets, which principally consist of certain cash, short-term investments, deferred income taxes, certain accounts receivable, certain property, plant and equipment, and certain other assets.

Business Segment Information

	2017	2016
Net sales		
Electrical Products	$ 7,193	$ 6,957
Electrical Systems and Services	5,666	5,662
Hydraulics	2,468	2,222
Aerospace	1,744	1,753
Vehicle	3,333	3,153
Total net sales	$ 20,404	$ 19,747
Segment operating profit		
Electrical Products	$ 1,287	$ 1,240
Electrical Systems and Services	770	711
Hydraulics	288	198
Aerospace	332	335
Vehicle	537	474
Total segment operating profit	3,214	2,958
Corporate		
Amortization of intangible assets excluding software	(388)	(392)
Interest expense	(280)	(247)
Interest income	34	14
Pension and other postretirement benefits expense	(45)	(60)
Gain on sale of business	533	—
Other corporate expense	(244)	(155)
Income before income taxes	2,824	2,118
Income tax expense	271	199
Net income	2,553	1,919
Less net income for noncontrolling interests	(1)	(3)
Net income attributable to Eaton ordinary shareholders	$ 2,552	$ 1,916

Business segment operating profit was reduced by acquisition integration charges as follows:

	2017	2016
Electrical Products	$ 4	$ 3
Electrical Systems and Services	—	1
Hydraulics	—	—
Total	$ 4	$ 4

There were no corporate acquisition integration charges in 2017 and 2016. See Note 3 for additional information about acquisition integration charges.

	2017	2016
Identifiable assets		
Electrical Products	$ 2,570	$ 2,363
Electrical Systems and Services	2,141	2,222
Hydraulics	1,345	1,188
Aerospace	938	830
Vehicle	2,379	1,549
Total identifiable assets	9,373	8,152
Goodwill	13,568	13,201
Other intangible assets	5,594	5,828
Corporate	4,310	3,590
Total assets	$ 32,845	$ 30,771
Capital expenditures for property, plant and equipment		
Electrical Products	$ 134	$ 134
Electrical Systems and Services	83	78
Hydraulics	96	92
Aerospace	37	28
Vehicle	141	142
Total	491	474
Corporate	29	23
Total expenditures for property, plant and equipment	$ 520	$ 497
Depreciation of property, plant and equipment		
Electrical Products	$ 143	$ 141
Electrical Systems and Services	83	82
Hydraulics	61	64
Aerospace	26	27
Vehicle	109	109
Total	422	423
Corporate	54	63
Total depreciation of property, plant and equipment	$ 476	$ 486

Geographic Region Information

Net sales are measured based on the geographic destination of sales. Long-lived assets consist of property, plant and equipment - net.

	2017	2016
Net sales		
United States	$ 11,222	$ 10,937
Canada	942	898
Latin America	1,485	1,448
Europe	4,394	4,228
Asia Pacific	2,361	2,236
Total	$ 20,404	$ 19,747
Long-lived assets		
United States	$ 1,872	$ 1,924
Canada	20	19
Latin America	290	281
Europe	769	681
Asia Pacific	551	538
Total	$ 3,502	$ 3,443

Note 19. EMPLOYEES

The average number of persons employed by Eaton follow:

(In thousands)	2017	2016
Electrical Products and Electrical Systems and Services	58	60
Hydraulics	12	11
Aerospace	6	6
Vehicle	13	13
Corporate	7	5
Total average number of persons employed	96	95

Employee costs follow:

	2017	2016
Salaries and wages	$ 3,973	$ 3,900
Pension and other postretirement benefits	170	178
Share based compensation	99	92
Other benefits	1,158	1,086
Total employee costs	$ 5,400	$ 5,256

Note 20. RECONCILIATION TO AMOUNTS REPORTED IN EATON'S ANNUAL REPORT ON FORM 10-K FILED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION

As discussed in Note 1, these Consolidated Financial Statements are prepared using U.S. GAAP to the extent that the use of such principles does not contravene Irish Company Law. The Consolidated Financial Statements included in the Annual Report on Form 10-K as filed on February 28, 2018 with the Unites States Securities and Exchange Commission, are prepared using U.S. GAAP. The primary differences between these statutory financial statements and the Consolidated Financial Statements included on Form 10-K are the presentational format of the income statement and balance sheet, inclusion of certain additional disclosures, and the presentation of the $544 ($433 after-tax) gain related to the Company's remaining 50% investment in the ECATT joint venture being remeasured to fair value.

For purposes of the Consolidated Financial Statements included in Form 10-K, the unrealized $544 ($433 after-tax) gain was recognized in the Consolidated Statements of Income in accordance with U.S. GAAP. In accordance with Irish Company Law, these financial statements reflect the $544 ($433 after-tax) gain in the Consolidated Statements of Comprehensive Income as discussed in Note 2.

A reconciliation of the amounts reported herein to the comparable amounts reported in Eaton's Consolidated Financial Statements included in its Annual Report on Form 10-K as filed on February 28, 2018 with the United States Securities and Exchange Commission, follows:

	Net income attributable to Eaton ordinary shareholders	Other comprehensive income attributable to Eaton ordinary
For the year ended December 31, 2017		
U.S. GAAP amounts reported in Annual Report on Form 10-K	$ 2,985	$ 1,044
Adjustments	(433)	433
Amounts reported in these consolidated financial statements	$ 2,552	$ 1,477

Note 21. DIRECTORS' REMUNERATION

Directors' remuneration is set forth in the table below. Mr. Arnold, the Chairman of the Board of Directors is also the Chief Executive Officer of Eaton Corporation (a wholly owned subsidiary of the Company). He replaced Mr. Cutler as Chairman of the Board of Directors and Chief Executive Officer following Mr. Cutler's retirement on May 31, 2016. Mr. Fearon, a Director of Eaton Corporation plc, is also Chief Financial and Planning Officer of Eaton Corporation. The amounts below include compensation for Mr. Cutler's, Mr. Arnold's and Mr. Fearon's service as Chief Executive Officer, and Vice Chairman and Chief Financial and Planning Officer of Eaton Corporation, respectively, as well as compensation for all non-employee directors in their capacities as such.

	2017	2016
Aggregate emoluments in respect of qualifying services	$ 7	$ 7
Aggregate amount of the money or value of other assets under long term incentive plans in respect of qualifying services	5	3
Aggregate gains on the exercise of share options granted in respect of qualifying services	1	8
Total	$ 13	$ 18

Note 22. AUDITORS' REMUNERATION

Fees paid to Ernst & Young for services provided follow:

	2017	2016
Audit fees	$ 19	$ 20
Audit-related fees	—	—
Tax fees		
Tax compliance services	1	1
Tax advisory services	3	1
Reimbursement of auditor's expenses	1	1
Total	$ 24	$ 23

The fees paid to Ernst & Young Ireland in respect of the audit of the group accounts were $0.2 in each of 2017 and 2016. In addition, Ernst & Young Ireland received fees of $0.5 and $0.3 for other assurance services in 2017 and 2016, respectively. Ernst & Young Ireland did not receive any fees for non-audit services in 2017 or 2016. Ernst & Young Ireland received fees of $0.1 for tax advisory services in each of 2017 and 2016.

Note 23. SUBSIDIARY AND AFFILIATED UNDERTAKINGS

The principal subsidiaries of Eaton or affiliated companies where Eaton has an ownership of 20% or more are listed below:

Consolidated subsidiaries and equity accounted affiliates	Nature of business	Registered address	Percent ownership
Abeiron III Unlimited Company	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
ADF Systemes SARL	Operations	82, Avenue Raymond Aron, 91300 Massy, France	22%
Aeroquip do Brasil Ltda.	Operations	Rodovia Prefeito Aristeu Vieira Vilela, 2755, Km 181, Rio Comprido, Guaratinguetá, São Paulo, 12522-010, Brazil	100%
Aeroquip Financial Ltd.	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Aeroquip Iberica S.L.	Operations	Via Compultense 109, Alcara de Henares, 28805, Madrid, Spain	100%
Aeroquip-Vickers Canada Inc.	Operations	77 King Street West, Toronto-Dominion Centre, #400, Toronto, Ontario M5K 0A1, Canada	100%
Aeroquip-Vickers International S.a.r.L.	General Corporate Administration	12 Rue Eugene Ruppert, L-2453 Luxembourg, Luxembourg	100%
Aeroquip-Vickers Limited	Inactive	P.O. Box 4, New Lane, Havant, Hampshire, PO9 2NB, United Kingdom	100%
Arrow-Hart, S. de R.L. de C.V.	Operations	Carretera Municipal Tlalnepantla, Cuautitlan KM 17.8 Sin Numero, Villa Jardin, Cuautitlan, 54800, Mexico	100%
Ascensores Cutler-Hammer S.A.	Inactive	Caracas, Distrito Federal, Venezuela	100%
Azonix Corporation	Operations	900 Middlesex Turnpike, Suite 700, Billerica, MA 01821, United States	100%
Beijing Internormen-Filter Ltd. Co.	Operations	Mauhua Industry Park, Nancai, Shunyi District, Beijing 101300, China	100%
Beijing Yoosung Shinhwa Automobile Parts Co., Ltd.	Operations	M2-5 10, Xinggu, Industrial Development Zone of Pinggu Dist., Beijing, China	100%
Blessing International B.V.	Inactive	Terhijdenseweg 465, Breda 4825 BK, The Netherlands	100%
Blinda Industria e Comercio Ltda.	Operations	Avenida Ireno da Silva Venancio, 199 - Galpoes 14A e 14B, Votorantim, Sao Paulo, 18111-100, Brazil	100%
Bussmann do Brasil Ltda.	Operations	Rodovia SP 75 - Deputado Archimedes Lammoglia, km 23.5, Chacara Sao Joao, Itu, SP 13312-500, Brazil	100%
Bussmann International Holdings, LLC	Operations	114 Old State Road, Ellisville, MO 63021-5942, United States	100%
Bussmann International, Inc.	Operations	114 Old State Road, Ellisville, MO 63021-5942, United States	100%
Bussmann, S. de R.L. de C.V.	Operations	Prolongación Hermanos Escobar 7750, Col. Partido Manuel Doblado, Chihuahua, Ciudad Juárez, 32310, Mexico	100%
Cambridge International Insurance Company Ltd.	General Corporate Administration	Clarendon House, 2 Church Street, Hamilton HM 12, Bermuda	100%
Cannon Technologies, Inc.	Operations	100 South Fifth Street, #1075, Minneapolis, MN 55402, United States	100%
CBE Services, Inc.	General Corporate Administration	600 Travis, Suite 5400, Houston, TX 77002, United States	100%
CEAG Notlichtsysteme GmbH	Operations	Senator-Schwartz-Ring 26, D-59494, Soest, Germany	100%
Centralion Industrial Inc.	Operations	9F, No. 135, Section 2, Da-Tong Road, Xi-Zhi City, Tapei, Taiwan	100%
Chagrin Highlands III Limited	General Corporate Administration	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Componentes de Iluminacion, S. de R.L. de C.V.	Operations	Magneto 1935 Parque Industrial Gema CD, Juarez, Chihuahua, 32648, Mexico	100%
Cooper (China) Co., Ltd.	General Corporate Administration	No. 95 Shengli Road, Pudong New Area, Shanghai, China	100%
Cooper (Ningbo) Electric Co., Ltd.	Operations	Hangzhou Wan Bay New Zone of Cixi Economic Development Area, Zhejiang Province, China	80%

Cooper Bermuda Investments Ltd.	General Corporate Administration	Canon's Court, 22 Victoria Street, Hamilton, HM 12, Bermuda	100%
Cooper B-Line, Inc.	Operations	509 West Monroe Street, Highland, IL 62249, United States	100%
Cooper Bussmann (U.K.) Limited	Operations	Melton Road, Burton-On-The-Wolds, Leiceistershire, LE125TH, United Kingdom	100%
Cooper Bussmann Hungaria Kft.	Operations	Berkenyefa sor 7, Gyor, 1051, Hungary	100%
Cooper Bussmann, LLC	Operations	114 Old State Road, Ellisville, MO 63021-5942, United States	100%
Cooper Capri S.A.S.	Inactive	36-40 rue des Fontenils, 41600, Nouan-le-Fuzelier, France	100%
Cooper Colombia Investments, Ltd.	General Corporate Administration	Walker House, 87 Mary Street, George Town, Grand Cayman, KY1-9001, Cayman Islands	100%
Cooper Controls (Watford) Limited	Inactive	26 Greenhill Crescent, Watford Business Park, Watford, WD18 8XG, United Kingdom	100%
Cooper Controls Limited	Inactive	26 Greenhill Crescent, Watford Business Park, Watford, WD18 8XG, United Kingdom	100%
Cooper Crouse-Hinds (LLC)	Operations	Cooper Middle East LLC Primary Address, Dubai	100%
Cooper Crouse-Hinds (UK) Ltd.	Operations	Dorset Road, Sheerness, ME12 1LP, United Kingdom	100%
Cooper Crouse-Hinds AS	Operations	Postboks 113, Manglerud, Oslo, 0612, Norway	100%
Cooper Crouse-Hinds B.V.	Operations	Sydneystraat 74, 3047 BP, Rotterdam, Netherlands	100%
Cooper Crouse-Hinds GmbH	Operations	Senator-Schwartz-Ring 26, D-59494, Soest, Germany	100%
Cooper Crouse-Hinds MTL, Inc.	Operations	4300 Fortune Place, Suite A, West Melbourne FL 32904, United States	100%
Cooper Crouse-Hinds Pte. Ltd.	Operations	2 Serangoon North, Avenue 5 $06-01 Fu Yu, Singapore, 554911, Singapore	100%
Cooper Crouse-Hinds, LLC	Operations	Wolf & 7th North Streets, Syracuse NY 13221-4999, United States	100%
Cooper Crouse-Hinds, S. de R.L. de C.V.	Operations	Av. Javier Rojo Gomez 1170, Col. Guadalupe del Morgal, Iztapalapa, 09300 Mexico, DF, Mexico	100%
Cooper Crouse-Hinds, S.A.	Operations	Avda. Santa Eulalia 290, 08223 Terrassa, Barcelona, Spain	100%
Cooper Csa Srl	Operations	Via S. Bovio, 3, 20090 Segrate, Italy	100%
Cooper Edison (Pingdingshan) Electronic Technologies Co., Ltd.	Operations	22 Nan Huan Dong Lu, Pingdingshan City, Henan Province, 467001, China	100%
Cooper Electric (Changzhou) Co., Ltd.	Operations	Room 216, Building No. 10, Science and Technology Park, Changzhou National Hi-Tech District, Jiangsu Province, China	100%
Cooper Electric (Shanghai) Co., Ltd.	General Corporate Administration	Room 1-201, Floor 2, Business Building, No. 2001 Yanggao Road, North Waigaoqiao Free Trade Zone, Shanghai, 200131, China	100%
Cooper Electrical Australia Pty. Limited	Operations	205-209 Woodpark Road, Smithfield, NSW 2164, Australia	100%
Cooper Electrical International, LLC	General Corporate Administration	600 Travis, Suite 5400, Houston, TX 77002, United States	100%
Cooper Electronic Technologies (Shanghai) Co., Ltd.	General Corporate Administration	Building B, Sheng Li Road #955, Pu Dong, Shanghai, China	100%
Cooper Enterprises LLC	General Corporate Administration	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Cooper Finance (Canada) L.P.	General Corporate Administration	114, 885-42nd Avenue SE, Calgary AB, Canada	100%
Cooper Finance Group Ltd.	General Corporate Administration	Canon's Court, 22 Victoria Street, Hamilton, HM 12, Bermuda	100%
Cooper Finance USA, Inc.	General Corporate Administration	600 Travis, Suite 5400, Houston, TX 77002, United States	100%
Cooper Germany Holdings GmbH	Operations	Senator-Schwartz-Ring 26, D-59494, Soest, Germany	100%
Cooper India Private Limited	General Corporate Administration	Unit 1006 A&B, 10th Floor, Weldon Park, Sohna Road, Sector 48, Gurgaon, Haryana 122002, India	100%

Cooper Industries (Canada) Inc.	General Corporate Administration	1 First Canadian Place, #1600, 100 King Street West, Toronto, Ontario M5X 1G5, Canada	100%
Cooper Industries (Electrical) Inc.	General Corporate Administration	1 First Canadian Place, #1600, 100 King Street West, Toronto, Ontario M5X 1G5, Canada	100%
Cooper Industries Colombia S.A.S.	Operations	Avenida 82, No. 10-62 P.5 Bogota, Colombia	100%
Cooper Industries Finance B.V.	General Corporate Administration	Teleportboulevard 136-142, 1043 Amsterdam, The Netherlands	100%
Cooper Industries Finanzierungs-GbR	General Corporate Administration	Senator-Schwartz-Ring 26, D-59494, Soest, Germany	100%
Cooper Industries FZE	Operations	PO Box 120939, Sharjah Airport International Free Zone, Sharjah, United Arab Emirates	100%
Cooper Industries Global B.V.	Operations	Terhijdenseweg 465, Breda 4825 BK, The Netherlands	100%
Cooper Industries Holdings GmbH	Operations	Senator-Schwartz-Ring 26, D-59494, Soest, Germany	100%
Cooper Industries International, LLC	General Corporate Administration	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Cooper Industries Investments UK Limited	Inactive	Jephson Court, Tancred Close, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Cooper Industries Japan K.K.	Operations	7-5 Shibadaimon 2-chome, Minato-ku, Tokyo, Japan	100%
Cooper Industries Malaysia SDN BHD	Operations	Suite 18.01, 18th Floor, MWE Plaza, No. 8, Lebuh Farquhar, 10200 Pulau Pinang, Malaysia	100%
Cooper Industries Middle East, LLC	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Cooper Industries Poland, LLC	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Cooper Industries Romania SRL	Operations	12, III str., Zona Industriala Vest Street, Arad, 312900, Romania	100%
Cooper Industries Russia LLC	Operations	Paveletskaya naberezhnaya 2,, building 1, office 313, 115114, Moscow, Russian Federation	100%
Cooper Industries Trading Unlimited Company	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Cooper Industries UK Subco Limited	General Corporate Administration	Jephson Court, Tancred Close, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Cooper Industries Unlimited Company	General Corporate Administration	41 A B Drury Street, Dublin 2, Ireland	100%
Cooper Industries Vietnam, LLC	General Corporate Administration	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Cooper Industries, LLC	General Corporate Administration	600 Travis, Suite 5400, Houston, TX 77002, United States	100%
Cooper Interconnect, Inc.	General Corporate Administration	750 West Ventura Blvd., Camarillo, CA 93010, United States	100%
Cooper International Holdings S.a.r.l	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Cooper Investment Group Ltd.	General Corporate Administration	Canon's Court, 22 Victoria Street, Hamilton, HM 12, Bermuda	100%
Cooper Investment Group S a.r.l.	General Corporate Administration	412F route d'Esch, L-1030 Luxembourg, Luxembourg	100%
Cooper Korea Ltd.	Operations	12th Floor Vision Tower, 707-2, Yeoksam-dong, Gangnam-gu, Seoul, Korea	51%
Cooper Lighting de Mexico, S. de R.L. de C.V.	Operations	Ave Del Parque #1190, Cienega de Flores, Monterrey, NL 65550, Mexico	100%
Cooper Lighting, LLC	Operations	1121 Highway 74 South, Peachtree City GA 30269, United States	100%
Cooper Menvier France SARL	Operations	Z.A. de la Graviere, Rue Beethoven, Riom 63200, France	100%
Cooper Mexico Distribucion, S. de R.L. de C.V.	Operations	Blvd Thomas Fernandez 7930 209, Col. Campestre, Juarez, Mexico	100%
Cooper Netherlands Investments, Ltd.	General Corporate Administration	Walker House, 87 Mary Street, George Town, Grand Cayman, KY1-9001, Cayman Islands	100%
Cooper Notification, Inc.	Operations	7246 16th St. E, Suite 105, Sarasota, FL 34243, United States	100%

Cooper Offshore Holdings S.a.r.l. (Luxembourg)	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Cooper Power Systems do Brasil Ltda.	Operations	Rua Placido Vieira, 79 Santa Amaro, Sao Paulo 04754-080, Brazil	100%
Cooper Power Systems, LLC	Operations	2300 Badger Drive, Waukesha WI 53188-5931, United States	100%
Cooper Pretronica Lda.	Operations	Parque Industrial Serra das Minas, Av. Irene Lisboa, lote 19, armazem C, piso 2, Alto do Forte, 2635-001, Rio de Mouro, Portugal	100%
Cooper Safety B.V.	Operations	Terhijdenseweg 465, Breda 4825 BK, The Netherlands	100%
Cooper Securite S.A.S.	Operations	Rue Beethoven, 63200, Riom, France	100%
Cooper Security Limited	Inactive	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Cooper Shanghai Power Capacitor Co., Ltd.	Operations	3 FL. YuAn Bldg., 738 Dongfang Road, Pudong, Shanghai, 200122, China	65%
Cooper Switzerland Investments, Ltd.	General Corporate Administration	Walker House, 87 Mary Street, George Town, Grand Cayman, KY1-9001, Cayman Islands	100%
Cooper Technologies Company	General Corporate Administration	600 Travis, Suite 5400, Houston, TX 77002, United States	100%
Cooper Univel S.A.	Operations	7th Km. Old National Road, Katerinis-Thessalonikis, Komvos Korinou, Katerini, 60100, Greece	100%
Cooper Wheelock, Inc.	Operations	273 Branchport Avenue, Long Branch NJ 07740	100%
Cooper Wiring Devices de Mexico, S.A. de C.V.	Operations	Carrera Tlalnepantla-Cuautitlan Km. 178, Esquina Calle 8 de Mayo Cuautitlan, Estado de Mexico, Mexico	100%
Cooper Wiring Devices Manufacturing, S. de R.L. de C.V.	Operations	Carrera Tlalnepantla-Cuautitlan Km. 178, Esquina Calle 8 de Mayo Cuautitlan, Estado de Mexico, Mexico	100%
Cooper Wiring Devices, Inc.	Operations	203 Cooper Circle, Peachtree City, GA 30269, United States	100%
Cooper Xi'an Fusegear Co., Ltd.	Operations	A0307 Chuang Ye square, No. 48 KeJi Road, Xi'an AHi-Tech Development Zone, Xi'an, RRC, Shanxi Province, China	100%
Cooper Yuhua (Changzhou) Electric Equipment Manufacturing Co., Ltd.	Operations	No. 60 Hehuan Road, Zhonglou Economic Development Zone, Jiangsu Province, Changzhou, China	100%
Crouse-Hinds de Venezuela, C.A.	Inactive	Av. Raul Leoni, Ed., Mara, Piso 8, Apto. 83, Caracas 1061, Venezuela	100%
CTI-VIENNA Gesellschaft zur Prüfung elektrotechnischer Industrieprodukte GmbH	Operations	Einzingergasse 4, 1210 Wien, Austria	100%
Cutler-Hammer Electrical Company	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Cutler-Hammer Industries Ltd.	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Cutler-Hammer, SRL	General Corporate Administration	Carretera Sanchez Km 18 1/2, San Cristobal Parque Industrial Itabo SA (PIISA), Haina, Dominican Republic	100%
Cyme International T & D Inc.	Operations	1485 rue Roberval, Bureau 104, Saint-Bruno-de-Montarville, Quebec J3V 3P8, Canada	100%
D.P. Eaton Electric	Operations	Ul. Bereznjakovskaja 29, 6th Floor , Kiev 02098, Ukraine	100%
Digital Lighting (Dong Guan) Co., Ltd.	Operations	Xinmin Village, Chang An Town, Dong Guan City, Guang Dong Province, China	100%
Digital Lighting Co., Limited	Operations	Unit 1, 13/F, Delta House 2 on Yin Street, Shatin New Territories, Hong Kong	100%
Digital Lighting Holdings Limited	Operations	Unit 1, 13/F, Delta House, 3 On Yin Street, Shatin, Hong Kong	100%
Dongguan Cooper Electronics Co. Ltd.	Operations	Xin Min Road, Xin Min District, Changan Town, Guangdong Province, Dongguan City, China, China	100%
Dongguan Wiring Devices Electronics Co., Ltd.	Operations	Yuan Shin Bei Vill, Changping Town, Dongguan, Guangdong 523583, China	100%

Eagle Electric MFG. Co. Mexico, S.A. de C.V.	Inactive	Vasconcelos Oriente 617, Residencial Santa Engracia, Garza Garcia, Nuevo Leon, Mexico	100%
Eaton (China) Investments Co., Ltd.	General Corporate Administration	Eaton Center Shanghai, No. 3 Lane 280 Linhong Road, Shanghai, 200335, China	100%
Eaton Aeroquip LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Aerospace LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Ann Arbor LLC	Operations	30600 Telegraph Road, #2345, Bingham Falls, Michigan 48025, United States	100%
Eaton Automated Transmission Technologies Corporation	Operations	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Automation G.m.b.H	Operations	Spinnereistrasse 8-14, St. Gallen 9008, Switzerland	100%
Eaton Automation Holding G.m.b.H.	General Corporate Administration	Spinnereistrasse 8-14, St. Gallen 9008, Switzerland	100%
Eaton Automotive Components Spolka z o.o.	General Corporate Administration	Ul. 30 Stycznia, No. 55, 83-110 Tczew, Poland	100%
Eaton Automotive Spolka z o.o.	Operations	Ul. Rudawka 83, 43-382 Bielsko-Biala, Poland	100%
Eaton Automotive Systems Spolka z o.o.	Operations	Ul. Rudawka 83, 43-382 Bielsko-Biala, Poland	100%
Eaton B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton C.V.	General Corporate Administration	Postbus 71744, 1008 DE, Amsterdam, Netherlands	100%
Eaton Capital Global Holdings Unlimited Company	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Eaton Capital Unlimited Co.	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Eaton Controls (Luxembourg) S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Controls (UK) Limited	Operations	Jephson Court, Tancred Close, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Eaton Controls, S. de R.L. de C.V.	General Corporate Administration	Av. Chapultepec S / N, Parque Industrial Colonial, Reynosa, Tams., C.P. 88570, Mexico	100%
Eaton Corporation	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Cummins Automated Transmission Technologies LLC	Operations	301 E. Market Street, Indianapolis IN 46204, United States	50%
Eaton Cummins Automated Transmission Technologies S. de R.L. de C.V.	Operations	200 Avenida Circuito Mexico, Parque Industrial Tres Naciones, San Luis Potosi, 78395, Mexico	100%
Eaton Cummins Automated Transmission Technologies Sarl	Operations	Route de la Longeraie 7, 1110, Morges, Switzerland	50%
Eaton Electric & Engineering Services Limited	General Corporate Administration	Room 4, 16th Floor, Kodak House II, 39 Healthy Street East, North Point, Hong Kong	100%
Eaton Electric (Japan) Ltd.	Operations	Mainichi Intecio 12F, 3-4-5, Umeda, Kita-ku, Osaka City, Japan	100%
Eaton Electric (South Africa) Pty Ltd.	Operations	Osborn and Esander Roads, Wadeville, Germiston, Gauteng 1407, South Africa	100%
Eaton Electric (Thailand) Ltd	Operations	No. 89/1 Kasemsap Building, 4th Floor, Vibhavadi-Rangsit Road, Khwaeng Jompol, Khet Chatuchak, Bangkok, Thailand	100%
Eaton Electric ApS	Operations	Niels Bohrs Vej 2, DK-7100, Vejle, Denmark	100%
Eaton Electric AS	Operations	Ryensvingen 5-7, Oslo, 0680, Norway	100%
Eaton Electric Company Ltd.	Operations	595 Soi Ramkamhaeng 39, Ramkamhaeng Road, Khwaeng Wangthonglang, Khet Wangthonglang, Bongkok, Thailand	100%
Eaton Electric d.o.o.	Operations	Rumski drum 13, Sremska Mitrovica, 22000, Serbia	100%
Eaton Electric G.m.b.H.	Operations	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Eaton Electric Holdings LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%

Eaton Electric Limited	General Corporate Administration	PO Box 554, Abbey Park, Southampton Road, Titchfield PO14 9ED, United Kingdom	100%
Eaton Electric Manufacturing Middle East LLC	Operations	PO Box 42278, Mussafah Esnaad Offshore Base, Abu Dhabi, United Arab Emirates	49%
Eaton Electric S.a.r.l.	General Corporate Administration	50, 52 Boulevard Abdellatif Benkaddour, Casablanca, 20050, Morocco	100%
Eaton Electric S.I.A.	Operations	2b Zemitana Street, Riga 1012, Latvia	100%
Eaton Electric S.r.l.	Operations	Baneasa Business & Technologie Park Sos., Bucaresti-Ploiesti No. 42-44, Cladirea B2, etaj 3, Bucaresti 013696, Romania	100%
Eaton Electric s.r.o.	Operations	Komárovská 2406, Praha 9 - Horní Počernice, 193 00, Czech Republic	100%
Eaton Electric s.r.o.	Operations	Komárovská 2406, Praha 9 - Horní Počernice, 193 00, Czech Republic	100%
Eaton Electric Spolka z.o.o.	Operations	Ul. Galaktyczna 30, 80-299 Gdansk, Poland	100%
Eaton Electric SPRL	Operations	Industrialaan 1, B-1702 Groot-Bijgaarden, Belgium	100%
Eaton Electrical Equipment Co Ltd	Operations	No. 1 West Hengtang River, Export-Oriented Development Area, Changzhou City, Jiangsu, China	100%
Eaton Electrical IP G.m.b.H. & Co. KG	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton Electrical Ltd.	Operations	Lou Yang Rd. 2#, Suzhou Industrial Park, Suzhou, China	100%
Eaton Electrical Products Limited	Inactive	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Eaton Electrical S.A.	Operations	Moravia de la Antigua Entrada del Colegio, Saint Clare 300, Metros Al Oeste, San Jose, 10156-1000, Costa Rica	100%
Eaton Electrical Systems Limited	Operations	Wheatley Hall Road, Doncaster, South Yorkshire, DN2 4NB, United Kingdom	100%
Eaton Electrical, S.A.	Operations	Avenue Libertador, Edif. Lex, Piso 1, Caracas, Venezuela	100%
Eaton Electro Productie S.r.l.	Operations	Str. Independentei Nr 8, Sârbi, 437157, Romania	100%
Eaton Elektrik Ticaret Limited Sirketi	Operations	Nida Kule Is Merkezi Degirmen Sokak No:18 K:17, Kozyatagi, 34742 Turkey	100%
Eaton Elektrotechnika s.r.o.	Operations	Komarovska 2406, Praha 9 - Horni Pocernice 19300, Czech Republic	100%
Eaton Energy Solutions, Inc.	Operations	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Enterprises (Hungary) Kft.	General Corporate Administration	Hercegprimas, Utca 12. Magafoldszint, Budapest, 1051, Hungary	100%
Eaton Enterprises Limited	Operations	Room 1604, 16th Floor, Kodak House II, 39 Healthy Street East, North Point, Hong Kong	100%
Eaton Enterprises, S. de R.L. de C.V.	General Corporate Administration	Av. Insurgentes Sur No. 1898, Torre Siglum, Piso 14, Col. Florida, CP 01020 Mexico City, Mexico	100%
Eaton ETN Offshore Company	General Corporate Administration	Purdy's Wharf Tower One, 900-1959 Upper Water Street, Halifax, Nova Scotia B3J 2X2, Canada	100%
Eaton ETN Offshore II Company	General Corporate Administration	Purdy's Wharf Tower One, 900-1959 Upper Water Street, Halifax, Nova Scotia B3J 2X2, Canada	100%
Eaton Filtration (Denmark) ApS	Operations	Maglemolle 90, 4700, Naestved, Denmark	100%
Eaton Filtration (Italy) S.r.l.	Operations	Via Gaetano Donizetti 18, 20020, Lainate, Italy	100%
Eaton Filtration (Poland) Sp. z o.o.	Operations	Milczany 79, 27 600 Sandomierz, Poland	100%
Eaton Filtration (Proprietary) Ltd.	Inactive	Corner Esander and Osborne Roads, Wadeville, Gauteng, 1428, South Africa	100%
Eaton Filtration (Shanghai) Co. Ltd.	Operations	H2 6/F No. 17 Building, No. 33, Xiya Road, Waigaoqiao FTZ, Pudong New Area, Shanghai, China	100%
Eaton Filtration BVBA	General Corporate Administration	Eigenlostraat 21, 9100 Sint Niklaas, Belgium	100%
Eaton Filtration Ltd.	Operations	Uruma Kowa Building, 8-11-37 Akasaka, Minato-ku, Tokyo, 107-0052, Japan	100%

Eaton Finance S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Fluid Power (Shanghai) Co., Ltd.	Operations	388 Aidu Road, Waigaoqiao FTZ, Pudong New Area, Shanghai, China	100%
Eaton Fluid Power Limited	Operations	145 off Mumbai-Pune Road, Pimpri, Pune 411 018, India	98%
Eaton Fluid Power S.r.l.	General Corporate Administration	Via Privata Maria Teresa 7, 20123 Milan, Italy	100%
Eaton France Holding S.A.S.	General Corporate Administration	11 avenue de l'Atantique les Ulis, 91955, Courtaboeuf, France	100%
Eaton Fu Li An (Changzhou) Electronics Co., Ltd.	Operations	Xin Min Road, Xin Min District, Changan Town, Guangdong Province, Dongguan City, China, China	100%
Eaton FZE	Operations	BB03-BB04, Jebel Ali Free Zone South 5, Dubai, United Arab Emirates	100%
Eaton Germany G.m.b.H.	General Corporate Administration	Dr.-Reckeweg-Strasse 1, D-76532 Baden-Baden, Germany	100%
Eaton Global Limited	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Eaton Global Holdings Limited	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Eaton GmbH & Co. KG	General Corporate Administration	Bornestrasse 10, 40211 Dusseldorf, Germany	100%
Eaton Holding (Austria) G.m.b.H.	Operations	Eugenia 1, A-3943, Schrems, Austria	100%
Eaton Holding (Netherlands) B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo OV, The Netherlands	100%
Eaton Holding (UK) II Limited	Operations	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Eaton Holding G.m.b.H.	General Corporate Administration	Wagramerstrasse 19, A-1220 Wien, Austria	100%
Eaton Holding I B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding I Limited	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Eaton Holding II Limited	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Eaton Holding II LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Holding II S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding III B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding III Limited	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Eaton Holding III S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding International LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Holding IV S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding IX S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding Limited	General Corporate Administration	PO Box 4, New Lane, Havant, Hampshire, PO9 2NB, United Kingdom	100%
Eaton Holding LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Holding S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding SE & Co. KG	General Corporate Administration	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%

Eaton Holding SRL	General Corporate Administration	Whitepark House, Whitepark Road, Bridgetown, Barbados	100%
Eaton Holding Turlock B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding V B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding V S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding VI B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding VI S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding VII B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding VIII B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Holding VIII S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding X S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Holding XII B.V./S.a.r.l.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo OV, The Netherlands	100%
Eaton Holec AB	Operations	PO Box 50105 Malmo 20211, Sweden	100%
Eaton Holec OY	Operations	Koskelontie 13, Espoo FI-02920, Finland	100%
Eaton Hydraulics (Luzhou) Co., Ltd.	Operations	Wangjiang Rd., Economic & Technology Development Zone, Luzhou, Sichuan, China	100%
Eaton Hydraulics (Ningbo) Co., Ltd.	Operations	1965, South Meixujiang Rd., Science and Technology Park, Ningbo, Zhejiang Province, China	100%
Eaton Hydraulics (Proprietary) Limited	General Corporate Administration	3 Eaton Africa Place, Aeroport Extension 2, Kempton Park, Johannesburg, Gauteng 1619, South Africa	100%
Eaton Hydraulics LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Hydraulics Systems (Jining) Co., Ltd.	Operations	8 Kangtai Rd., High and New Tech Industrial Develop Area, Jining, China	100%
Eaton I Spolka z.o.o.	Operations	Ul. Rudawka 83, 43-382 Bielsko-Biala, Poland	100%
Eaton II LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton III LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton India Innovation Center LLP	General Corporate Administration	No. 2, Evr Street, Sedarapet Pondicherry, 605111, India	100%
Eaton Industrial Clutches and Brakes (Shanghai) Co., Ltd.	Operations	East Side, 1 Floor, No. 34 Building, 281, Fasai Rd., Waigaoqiao FTZ, Shanghai, China	100%
Eaton Industrial Corporation	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Industrial IP G.m.b.H. & Co. KG	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton Industrial Systems Private Limited	General Corporate Administration	145 off Mumbai-Pune Road, Pimpri, Pune 411 018, India	100%
Eaton Industries (Argentina) S.A.	General Corporate Administration	Lima 355, PB, Buenos Aires, South America, C1073AAG, Argentina	100%
Eaton Industries (Austria) G.m.b.H.	General Corporate Administration	Eugenia 1, A-3943 Schrems, Austria	100%
Eaton Industries (Belgium) BVBA	Operations	Industrialaan 1, B-1702 Groot-Bijgaarden, Belgium	100%
Eaton Industries (Canada) Company	General Corporate Administration	5050 Mainway, Burlington ON L7L 5Z1, Canada	100%
Eaton Industries (Chile) S.p.A.	General Corporate Administration	Panamericana Norte Km. 15 1/2, Comuna de Lampa, Región Metropolitana, Chile	100%
Eaton Industries (Colombia) S.A.S.	General Corporate Administration	Avenida 82, No. 10-62 P.5 Bogota, Colombia	100%

Eaton Industries (Egypt) LLC	Operations	Building No. 289, Second Admin Sector, 4th Flr, El-Tesaen "90" St., Fifth District, New Cairo, Cairo, Egypt	100%
Eaton Industries (England) Limited	Operations	Jephson Court, Tancred Close, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Eaton Industries (France) S.A.S.	General Corporate Administration	110 Rue Blaise Pascal, Immeuble Le Viséo - Bâtiment A Innovallée, 38334, Montbonnot St Martin, France	100%
Eaton Industries (Ireland) Limited	General Corporate Administration	Fitzwilliam Hall, 25-26 Fitzwilliam Place, Dublin 2, Ireland	100%
Eaton Industries (Israel) Ltd.	General Corporate Administration	2 Raul Wallenburg Street, Tel Aviv, Israel 69719	100%
Eaton Industries (Italy) S.r.l.	Operations	Via S. Bovio, 3, 20090 Segrate, Italy	100%
Eaton Industries (Japan) Ltd.	Operations	Uruma Kowa Building, 8-11-37 Akasaka, Minato-ku, Tokyo, 107-0052, Japan	100%
Eaton Industries (Jining) Co., Ltd	Operations	8 Kangtai Road, High Tech Industrial Development Area, Jining City, Shandong Province 272023, China	100%
Eaton Industries (Korea) Limited	General Corporate Administration	832-2 Yeoksam-dong, Kangham-Ku, Seoul, Korea	100%
Eaton Industries (Luxembourg) B.V./S.a.r.l.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo OV, The Netherlands	100%
Eaton Industries (Morocco) LLC	Operations	Zone Franche d'Exportation Midparc, Nouaceur, Casablanca, 27182, Morocco	100%
Eaton Industries (Netherlands) B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo OV, The Netherlands	100%
Eaton Industries (Philippines), LLC	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Eaton Industries (Shanghai) Co., Ltd	Operations	139 Fan Hua Road, Pudong New Area, Shanghai 201204, China	100%
Eaton Industries (Spain) S.L.	General Corporate Administration	Plaça Europa, 9-11 No. 2 planta, 08908, L'Hospitalet de Llobregat , Barcelona, Spain	100%
Eaton Industries (Thailand) Ltd.	General Corporate Administration	No. 156 Moo 3, Ratchasima-Chokechai Road, Tambon Nong Bua Sala, Amphur Muang Nakornratchasima, Nakornratchasima Province, 30000, Thailand	100%
Eaton Industries (U.K.) Limited	Operations	6 Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire, CV31 3RZ, United Kingdom	100%
Eaton Industries (Wuxi) Co., Ltd.	Operations	Tsinghua Tongfang High Tech Park, Xishan Economic Development Area, Wuxi, China	100%
Eaton Industries Company	Operations	1st Floor, 106 Wrights Road, Addington, Christchurch, NZ, 8041, New Zealand	100%
Eaton Industries EOOD	Operations	83 Gioeshevo Str., Room 412, Floor 4, Sofia 1330, Bulgaria	100%
Eaton Industries G.m.b.H.	General Corporate Administration	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Eaton Industries Holding G.m.b.H.	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton Industries Holdings Ltd.	General Corporate Administration	Canon's Court, 22 Victoria Street, Hamilton, HM 12, Bermuda	100%
Eaton Industries II G.m.b.H.	Operations	Im Langhag 14, Illnau-Effretikon 8307, Switzerland	100%
Eaton Industries KFT	Operations	Nagyenyed u. 8-14, Budapest, 1123, Hungary	100%
Eaton Industries LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton Industries Manufacturing G.m.b.H.	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Industries Panama S.A.	Operations	Avenida Boulevard El Dorado, Edificio Centro Comercial Boulevard El Dorado Apto 33, El Dorado, Panama, Panama	100%
Eaton Industries Pte. Ltd.	General Corporate Administration	8 Marina Boulevard, Marina Bay Financial Centre, #05-02, Singapore 018981, Singapore	100%
Eaton Industries Pty. Ltd.	General Corporate Administration	105 Henderson Road, Rowlille VIC 3178, Australia	100%

Eaton Industries s.r.o.	General Corporate Administration	Karlovarská 5578, Chomutov, 430 01, Czech Republic	100%
Eaton Industries SAC	General Corporate Administration	Av. Víctor Andrés Belaúnde, 147 Toree real seis, piso 7, Sa Lima, Peru	100%
Eaton Industries Sdn. Bhd.	General Corporate Administration	Level 21, Suite 21.01, The Gardens South Tower, 59200 Mid Valley City, Kuala Lumpur, Malaysia	100%
Eaton Industries, S. de R.L. de C.V.	General Corporate Administration	Brecha E 99 SN, Parque Industrial Reynosa, Reynosa, Tamaulipas, 88670, Mexico	100%
Eaton Intelligent Power Limited	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Eaton International B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton International Industries Nigeria Limited	Operations	7th Floor, Marble House, 1 Kingsway Ikoyi, Lagos, Nigeria	100%
Eaton IV LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton Japan Co., Ltd.	General Corporate Administration	Uruma Kowa Building, 8-11-37 Akasaka, Minato-ku, Tokyo 107-0052, Japan	100%
Eaton Leasing Corporation	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Limited	General Corporate Administration	PO Box 554, Abbey Park, Southampton Road, Titchfield PO14 9ED, United Kingdom	100%
Eaton LLC	General Corporate Administration	33 Electrozavodskaya Str., Building 4, Mocow 107076, Russia	100%
Eaton LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton Ltda.	General Corporate Administration	Rua Clark, 2061, Predio 54, Bairro Macuco, Valinhos, Sao Paulo 13279-400, Brazil	100%
Eaton Madeira SGPS Lda.	General Corporate Administration	Rua Dr. Brito Câmara, No. 20, 1st Floor, 9000-039, Funchal, Portugal	100%
Eaton Management Services LLP	General Corporate Administration	145 off Mumbai-Pune Road, Pimpri, Pune 411 018, India	100%
Eaton Manufacturing G.m.b.H.	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Manufacturing II G.m.b.H.	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Manufacturing III G.m.b.H.	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Manufacturing LP	General Corporate Administration	Tay House, 300 Bath Street, Glasgow, G2 4NA, United Kingdom	100%
Eaton MEDC Limited	Operations	Unit B, Sutton Parkway, Oddicroft Lane, Sutton-in-Ashfield, NG17 5FB, United Kingdom	100%
Eaton Moeller B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
Eaton Moeller S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Phoenixtec MMPL Co. Ltd.	General Corporate Administration	No. 269-1, Baodong Road, Guanmiao Dist., Tainan City 718, Taiwan	100%
Eaton Power Quality (Shanghai) Co., Ltd.	Operations	Mid-west side of 34th factory building, 281 Fasai Rd., Waigaoqiao FTZ, Shanghai, China	100%
Eaton Power Quality AB	Operations	Kista Science Tower, 16451 Kista, Sweden	100%
Eaton Power Quality Limited	Operations	1401 Hutchison House, 10 Harcourt Road, Hong Kong	100%
Eaton Power Quality OY (Finland)	Operations	Koskelontie 13, Espoo FI-02920, Finland	100%
Eaton Power Quality Private Limited	Operations	145 off Mumbai-Pune Road, Pimpri, Pune 411 018, India	100%
Eaton Power Quality S.A.S.	General Corporate Administration	110 Rue Blaise Pascal, Immeuble Le Viséo - Bâtiment A Innovallée, 38334, Montbonnot St Martin, France	100%
Eaton Power Solution Ltda.	Operations	Avenida Acesso Rodoviario, s/n, Quadra 09, Modulos 2/3, TIMS, Sala U, 29161-376 Serra, Espirito Santo, Brazil	100%

Eaton Production International G.m.b.H.	Operations	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Eaton Protection Systems IP G.m.b.H. & Co. KG	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton S.A.S.	General Corporate Administration	2 Rue Lavoisier, 78310 Cooignieres, France	100%
Eaton S.r.l.	Operations	Via Privata Maria Teresa 7, 20123 Milan, Italy	100%
Eaton Safety IP G.m.b.H. & Co. KG	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton Safety Limited	Operations	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Eaton SAMC (Shanghai) Aircraft Conveyance System	Operations	Building 3, No. 12 Jinwen Road, Zhuqiao Zhen Pudong New District, Shanghai, China	49%
Eaton SE	General Corporate Administration	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Eaton Senstar Automotive Fluid Connector (Shanghai) Co., Ltd.	Operations	West side of the general factory, FM12-4, 388, Aidu Rd., Waigaoqiao FTZ, Shanghai, China	55%
Eaton Services S.a.r.L.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Solutions, S. de R.L. de C.V.	General Corporate Administration	De La Montana, 128 Parque Industrial Queretaro, Queretaro, QE 76220, Mexico	100%
Eaton Switzerland Holding I GmbH	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Switzerland Holding II GmbH	General Corporate Administration	Route de la Longeraie 7, 1110, Morges, Switzerland	100%
Eaton Technologies (Luxembourg) S.a.r.l.	General Corporate Administration	Rue Eugene Ruppert 12, L-2453 Luxembourg, Luxembourg	100%
Eaton Technologies G.m.b.H.	Operations	Auf der Heide 2, 53947 Nettersheim, Germany	100%
Eaton Technologies IP G.m.b.H. & Co. KG	General Corporate Administration	Airport Center Schönefeld, Mittelstrasse 5-5a, 12529, Schönefeld, Germany	100%
Eaton Technologies Private Limited	General Corporate Administration	Cluster C Wing 1, EON Free Zone, Plot No. 1, Survey No. 77, MIDC Kharadi Knowledge Park, Kharadi, Pune, Maharashtra 411 014, India	100%
Eaton Technologies S.A.	General Corporate Administration	Chemin de Pau, 64121, Serres-Castet, France	100%
Eaton Technologies, S. de R.L. de C.V.	General Corporate Administration	Avenida de la Montana Num 128, Parque Indusrtrial Queretaro, Santa Rosa Jauregui, Queretaro, Qro. C.P., 76220, Mexico	100%
Eaton Trading Company, S. de R.L. de C.V.	General Corporate Administration	Avenida de la Montana Num 128, Parque Indusrtrial Queretaro, Santa Rosa Jauregui, Queretaro, Qro. C.P., 76220, Mexico	100%
Eaton Truck Components (Proprietary) Ltd.	Operations	3 Eaton Africa Place, Aeroport Extension 2, Kempton Park, Johannesburg, Gauteng 1619, South Africa	100%
Eaton Truck Components Spolka z o.o.	Operations	Ul. 30 Stycznia, No. 55, 83-110 Tczew, Poland	100%
Eaton Truck Components, S. de R.L. de C.V.	General Corporate Administration	Monterrey, Nuevo Leon, Federal District, Monterrey Cty; Federal District Rgn, Mexico	100%
Eaton US Holdings, Inc.	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Eaton Worldwide LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding GP I	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding GP II	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding GP III	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding GP IV	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding I LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%

EIC Holding II LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding III LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding IV LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding V LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
EIC Holding VI LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Electromanufacturas, S. de R.L. de C.V.	Operations	Calle Farrocarril S/N, Santa Cruz de las Flores, Tlajomulco de Zuniga, Jalisco, Mexico	100%
Elpro Technologies Pty. Limited	Operations	9/12 Billabong Street, Stafford, Queensland 4053, Australia	100%
ETN Asia International Limited	Operations	Les Cascades Building, 4th Floor, Edith Cavell Street, Port Louis, Mauritius	100%
ETN Holding 1 Limited	General Corporate Administration	Les Cascades Building, 4th Floor, Edith Cavell Street, Port Louis, Mauritius	100%
ETN Holding 2 Limited	General Corporate Administration	Les Cascades Building, 4th Floor, Edith Cavell Street, Port Louis, Mauritius	100%
ETN Holding 3 Limited	General Corporate Administration	Les Cascades Building, 4th Floor, Edith Cavell Street, Port Louis, Mauritius	100%
EX Innovations Limited	Inactive	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Fast Eaton (Xi'an) Drivetrain Company Ltd.	Operations	Xi'an Hi-Tech Development Zone, Xi'an, 710075, China	49%
FHF Bergbautechnik GmbH & Co. KG	Operations	Gewerbeallee 15-19, 45478 Mülhem an du Ruhr, Duisburg, Germany	100%
FHF Funke+Huster Fernsig GmbH	Operations	Gewerbeallee 15-19, 45478 Mülhem an du Ruhr, Duisburg, Germany	100%
FHF New World GmbH	Operations	Gewerbeallee 15-19, 45478 Mülhem an du Ruhr, Duisburg, Germany	100%
Funke+Huster (Tianjin) Electronics Co. Ltd.	Operations	K1-6-102, No. 6 Hi-Tech Develop 6th Road, Green Industrial Base, HuaYuan, Tianjin 300384, China	100%
Funke+Huster GmbH	Operations	Gewerbeallee 15-19, 45478 Mülhem an du Ruhr, Duisburg, Germany	100%
Gardner-Denver International, C.A.	Inactive	Guarenasa, Miranda State, Venezuela	100%
GeCma Components electronic GmbH	Operations	Heinrich-Hertz-Strasse 12, 50170, Kerpen, Germany	100%
Georgetown Financial Services Ltd.	General Corporate Administration	PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands	100%
Gitiesse Asia Pte. Ltd.	General Corporate Administration	Blk 196 Pandan Loop, #04-15 Pantech Business Hub Singapore 128384	30%
Gitiesse S.r.l.	Operations	Via Ponte Polcevera 8/14 - 16161, Partita Iva, 01070220106, Genova, Italy	100%
Green Holding Company	General Corporate Administration	Century Yard, Cricket Square, Hutchins Drive, PO Box 2681, George Town, Grand Cayman, Cayman Islands	100%
Guangzhou Nittan Valve Co. Ltd.	Operations	No. 79, Junye Road, East Area, Econ & Tech Develoment Zone, Guangzhou, Guangdong Province, China	100%
Hein Moeller Stiftung G.m.b.H.	General Corporate Administration	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Hernis Scan System do Brasil Comercio E Servicos LTDA	Operations	Rodovia BR 101 KM 263 - Loja 3, Rio Bonito, 2880-0000, Brazil	80%
Hernis Scan Systems - Asia Pte Ltd.	Operations	6th Changi North Street 1, 2nd level, Spanners Building, Singapore, 498825, Singapore	100%
Hernis Scan Systems A/S	Operations	Tangen Alle 41, P.O. Box 791 Stoa, Arendal, 4809, Norway	100%
Illumination Management Solutions, Inc.	Operations	18242 McDurmott West, Suite J, Irvine, CA 92614, United States	100%

Iluminacion Cooper de las Californias, S. de R.L. de C.V.	Operations	Calle Orbita No. 3 PIMSA II (12.5 km Carretera a San Luis) Baja California Mexicali, Mexico	100%
Institute for International Product Safety G.m.b.H.	Operations	Hein-Moeller Strasse 7-11, D-53115 Bonn, Germany	100%
Intelligent Switchgear Organization LLC	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	51%
Internormen Filters Private Limited	Operations	145 off Mumbai-Pune Road, Pimpri, Pune 411 018, India	100%
Kaicheng Funke+Huster (Tangshan) Mining Electrical Co. Ltd.	Operations	No. 183 Huoju Road, New & Hi-Tech Industrial Park, 063020 Tangshan, Hebei, China	60%
Lian Zheng Electronics (Shenzhen) Co., Ltd.	Operations	No. 4, Liufang Road, Office 67 Xin'an Streets, Bao'an District, Shenzhen City, Guangdong Province, China	100%
Martek Power F SAS	Operations	15 Rue Bicentenaire, de la Révolution, Z.A. Du Parc - Le Plessis - Pâté,Brétigny s/Orge, 91731, Paris, France	100%
Martek Power GmbH	Operations	Bachstrasse 6, 77883 Ottersweier, Germany	100%
Martek Power Limited	Operations	Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong, Hong Kong	100%
Martek Power Limited (UK)	Inactive	Glebe Farm Technical Campus, Knapwell, Cambridge CB23 4GG, United Kingdom	100%
Martek Power S.A. de C.V.	Operations	Calle Romano No. 13525-C, Fracc. Alcala, Tijuana, Baja California, Mexico	100%
Martek Power SA	General Corporate Administration	28 Boulevard Joseph II. L-1840 Luxembourg, Luxembourg	100%
McGraw-Edison Development Corporation	Operations	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Measurement Technology Limited	Inactive	Great Marlings Butterfield, Luton, Bedfordshire LU2 8DL, United Kingdom	100%
Menvier Limited	Inactive	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Menvier Overseas Holdings Limited	Operations	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Moeller Electric (Shanghai) Co., Ltd.	Operations	Part A, No. 62 Fu Te Dong Yi Road, Wai Gao Quia Bonded Area, Shanghai 200131, China	100%
Moeller Electric Ltda.	Operations	Rua Clark, 2061 - Bairro Macuco , Valinhos , Sao Paulo, 13279-400, Brazil	100%
Moeller Industria de electro-electronicos do Amazonas Ltda.	Operations	Av Ephigenio Sales 86, Adrianopolis, Manaus, Amazonas 69050-050, Brazil	100%
MP Group SAS	Operations	19 Rue des Campanules, Parc du Mandinet Lognes, Torcy 77185, France	100%
MTL Instruments B.V.	Operations	Terhijdenseweg 465, Breda 4825 BK, The Netherlands	100%
MTL Instruments GmbH	Operations	Heinrich-Hertz-Strasse 12, 50170, Kerpen, Germany	100%
MTL Instruments LLC	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
MTL Instruments Private Limited	Operations	No 3 Old Mahabalipuram Road, Sholinganallur, Chennai, 600 119, India	100%
MTL Instruments SARL	Operations	7 Rue des Rosieristes, Champagne au Mont D'or, 69410 , France	100%
MTL Italia Srl	Operations	Via A Meucci, 10 20094 Corsico Milano, Italy	100%
MTL Partners II, Inc.	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
MTL Partners, Inc.	Operations	1209 Orange Street, Wilmington, Delaware 19801, United States	100%
Nittan BVI Co. Ltd.	General Corporate Administration	PO Box 957, Offshore Incorporation Centre, Road Town, Tortola, British Virgin Islands	100%
Nittan Euro Tech Spolka z o.o.	Operations	Ul. Rudawka 83, 43-382 Bielsko-Biala, Poland	49%
Nittan Global Tech Co., Ltd.	Operations	Nishi-Shinjuku Bldg. 2F, 8-4-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo 160-0023, Japan	49%
Nittan Valve Co., Ltd.	Operations	2-7-2 Yaesu, Chuo-ku, Tokyo 104 Japan	30%

Norex AS	Operations	Fekjan 7b, 1394 Nesbru, Norway	50%
Ocean Technical Systems Limited	Inactive	Oceantech House, Station Approach, Cheam, Surrey SM2 7AU, United Kingdom	100%
Oxalis Group Limited	Inactive	Oxalis House, Masons Rd, Stratford-upon-Avon CV37 9NB, United Kingdom	100%
Phoenixtec Electronics (Shenzhen) Co., Ltd.	Operations	Building 16 & 6-7F, Building 19 Free Trade Zone, Shatoujiao, Shenzhen, 518081, China	100%
Phoenixtec International Corp.	General Corporate Administration	Offshore Incorporations Limited, P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, Virgin Islands, British	100%
PKL, LLC	Operations	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	49%
Polaron Components Limited	Inactive	USK House, Llantarnam Park, Cwmbran, Gwent, NP44 3HD, United Kingdom	100%
Polimer Kaucuk Sanayi ve Pazarlama A.S.	General Corporate Administration	Huzur Mahallesi, Imam Cesme Yolu Caddesi, Candan Sokak No: 3, Ayazaa-Sisli, Istanbul, 34396 Turkey	100%
Productos Eaton Livia S.L.	Operations	Via Compultense 109, Alcara de Henares, 28805, Madrid, Spain	100%
PT Eaton Industries	General Corporate Administration	Menara Bidakara 2 Lantai 9 Unit 04, JI. Jend. Gatot Subroto Kav 71-73, Jakarta, Indonesia	100%
PT. Fluid Sciences Batam	Operations	Lot 512, Batamindo Industrial Park, Mukakuning, Batam, Riau, 29433, Indonesia	100%
Riseson International Limited	General Corporate Administration	Unit 902, Tower B, Hunghom Commercial Centre, 37-39 Ma Tau Wai Road, Hunghom, Kowloon, Hong Kong	100%
Rizhao Yoosung Shinhwa Automobile Parts Co., Ltd.	Operations	M2-5, 11, Xinggu Industrial Develop, Beijing, 101200, China	100%
RTE Far East Corporation	Operations	2-7 Nan-Yuan, Chung Li Industrial Zone, Taiwan 32041, Taiwan	100%
Santak Electronic (Shenzhen) Co., Ltd.	Operations	No. 8 Baoshi Road, Block 72 Baoan District Shenzhen, China	100%
Santak Electronics Company Limited	Operations	Unit 902, Tower B, Hunghom Commercial Centre, 37-39 Ma Tau Wai Road, Hunghom, Kowloon, Hong Kong	100%
Saturn Insurance Company Ltd.	General Corporate Administration	Aon House, 30 Woodbourne Avenue, Pembroke HM, 08, Bermuda	100%
Scantronic Benelux BV	Operations	Terhijdenseweg 465, Breda 4825 BK, The Netherlands	100%
Scantronic Holdings Limited	Inactive	Jephson Court, Tancred Close, Queensway, Royal Leamington Spa, Warwickshire CV31 3RZ, United Kingdom	100%
Scoremax Limited	General Corporate Administration	Unit 902, Tower B, Hunghom Commercial Centre, 37-39 Ma Tau Wai Road, Hunghom, Kowloon, Hong Kong	100%
Sefelec GmbH	Operations	Bachstrasse 6, 77883, Ottersweier, Germany	100%
Sefelec SAS	Operations	19 Rue des Campanules, Parc du Mandinet Lognes, Torcy 77185, France	100%
Semelec SAS	Operations	11 Av. De l'Atlantique le Ulis, Courtaboeuf 91955, France	100%
Senyuan International Holdings Limited	General Corporate Administration	Century Yard, Cricket Square, Hutchins Drive, PO Box 2681, George Town, Grand Cayman, Cayman Islands	100%
Senyuan International Investments Limited	General Corporate Administration	PO Box 957, Offshore Incorporation Centre, Road Town, Tortola, British Virgin Islands	100%
Shinhwa Precision Co., Ltd.	Operations	1095-10, Shindang-dong, dalseo-gu, Daegu, Korea	30%
Shinhwa Takahashi Press Co. Ltd.	Operations	1095-10, Shindang-dong, dalseo-gu, Daegu, Korea	51%
Silver Light International Limited	Operations	Leval 28 Three Pacific Place, 1 Queen's Road East, Hong Kong	100%
Silver Victory Hong Kong Limited	Operations	5/F East Asia Textile Building, 2 Ho Tin Street, Tuen Nun, New Territories, Hong Kong	100%
Standard Automation & Control LP	Operations	2450 South Shore Boulevard, Suite 210, League City, TX 77573, United States	100%

Sure Power, Inc.	Operations	388 State Street, #420, Salem, Oregon 97301, United States	100%
Tai Ah Electrical Ltd.	General Corporate Administration	11th Floor Evermew Commercial Centre, 33-35 Pine Street, Tai Kok Tsui, Kowloon, Hong Kong	100%
Taiwan Nittan Industrial Co., Ltd.	Operations	No. 729, Changxing Road, Bade City, Taiwan	49%
The MTL Instruments Group Limited	Operations	Great Marlings Butterfield, Luton, Bedfordshire LU2 8DL, United Kingdom	100%
Tractech (Ireland) Limited	Operations	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
TT (Ireland) Acquisition Limited	General Corporate Administration	Eaton House, 30 Pembroke Road, Dublin 4, Ireland	100%
Turlock B.V.	General Corporate Administration	Europalaan 202, 7559 SC, Hengelo Ov, Netherlands	100%
U.S. Engine Valve Company	Operations	7039 SC-11, Westminster, SC 29693, United States	49%
Ultronics Nordic Sales AB	Operations	Kista Science Tower, 16451, Kista, Sweden	100%
UPE Electronics (Shenzhen) Co., Ltd.	Operations	Room 404-409, WanCheng Building, HongMian Road Futian FTZ, ShenZhen, NA, 518038, China	100%
Vickers Systems Limited	Operations	Units 19-30, 19/F Corporation Park, 11 On Lai Street, Siu Lek Yuen, Shatin, N.T., Hong Kong	100%
Winner Hydraulics Ltd.	General Corporate Administration	CITCO B.V.I. Limited, Citco Building, Wickhams Cay, P.O. Box 662, Road Town, Tortola, Virgin Islands, British	100%
Wireless Power and Communications AS	Operations	Vige Havnevei 78, 4633 Kristiansand S, Norway	34%
Wright Line Holding, Inc.	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Wright Line LLC	General Corporate Administration	Eaton Center, 1000 Eaton Boulevard, Cleveland OH 44122, United States	100%
Zhenjiang Daqo Eaton Electrical Systems Co., Ltd.	Operations	Development Area, Yangzhong, China	50%

As of December 31, 2017, the Company had the following branches outside of Ireland:

Name	Type	Country
Blessing International B.V.	Branch	United Kingdom
BussDansk, A Danish Branch of Bussmann International, Inc.	Branch	Denmark
Bussmann India, Branch of Bussmann International	Branch	India
Bussmann International, Inc.	Branch	Singapore
Cooper (China) Co. Ltd Beijing	Representative Office	China
Cooper (China) Co., Ltd. Chengdu	Branch	China
Cooper (China) Co., Ltd. Guangzhou	Branch	China
Cooper Crouse-Hinds B.V.	Branch	Belgium
Cooper Crouse-Hinds GmbH	Liaison Office	India
Cooper Crouse-Hinds GmbH	Representative Office	Libya
Cooper Industries	Branch	South Africa
Cooper Industries Global B.V.	Branch	Kazakhstan
Cooper Industries International, LLC	Branch	Philippines
Cooper Industries Middle East, LLC	Branch	Bahrain
Cooper Industries Middle East, LLC	Representative Office	Qatar
Cooper Industries Middle East, LLC	Branch	Saudi Arabia
Cooper Industries Middle East, LLC	Branch	Saudi Arabia
Cooper Industries Middle East, LLC	Representative Office	Saudi Arabia
Cooper Industries Middle East, LLC	Representative Office	Saudi Arabia
Cooper Industries Middle East, LLC	Representative Office	Saudi Arabia
Cooper Industries Middle East, LLC	Branch	United Arab Emirates
Cooper Industries Poland, LLC	Branch	Poland
Cooper Industries Vietnam, LLC	Representative Office	Vietnam
Cooper Safety B.V.	Branch	Belgium
Cutler-Hammer Electrical Company	Branch	Puerto Rico
Cutler-Hammer Industries Ltd.	Branch	Dominican Republic
Dubai Techno Park	Branch	United Arab Emirates
Eaton Corporation	Branch	Czech Republic
Eaton Corporation	Representative Office	Indonesia
Eaton Corporation	Branch	Jordan
Eaton Corportion	Branch	Puerto Rico
Eaton Electric Limited	Representative Office	Kenya
Eaton Electric S.I.A.	Branch	Estonia
Eaton Electric S.I.A.	Representative Office	Lithuania
Eaton Electrical S.A.	Branch	El Salvador
Eaton Electrical S.A.	Branch	Guatemala
Eaton Electrical S.A.	Branch	Honduras
Eaton Electrical S.A.	Branch	Nicaragua
Eaton Electrical S.A.	Branch	Panama
Eaton Electrical Systems Limited	Branch	Ireland
Eaton Elektrotechnika s.r.o.	Representative Office	Kazakhstan
Eaton Enterprises, LLC	Branch	Switzerland
Eaton FZE	Representative Office	Jordan
Eaton FZE	Representative Office	Lebanon
Eaton FZE	Representative Office	Oman
Eaton Industries (Spain) SL	Branch	Portugal
Eaton Industries Manufacturing G.m.b.H.	Representative Office	Croatia
Eaton Industries Manufacturing G.m.b.H.	Branch	Korea

Eaton Industries Manufacturing GmbH	Branch	India
Eaton Industries Philippines, LLC	Branch	Philippines
Eaton Industries Pte Ltd	Representative Office	Vietnam
Eaton Manufacturing LP	Branch	Algeria
Eaton Manufacturing LP	Branch	Greece
Eaton Manufacturing LP	Branch	Hungary
Eaton Manufacturing LP	Representative Office	Ivory Coast
Eaton Manufacturing LP	Branch	Portugal
Eaton Power Quality OY	Branch	Denmark
Eaton Power Quality OY	Branch	Norway
Eaton Power Quality OY	Branch	Poland
Eaton Production International G.m.b.H.	Branch	United Kingdom
EIMG Global Sourcing	Representative Office	China
McGraw-Edison Development Corporation	Branch	Greece
Saudi Arabia Technical and Scientific	Branch	Saudi Arabia
Swiss Branch of Eaton Holding VIII S.a.r.l.	Branch	Switzerland
Swiss Branch of Eaton II LP	Branch	Switzerland
Swiss Branch of Eaton III LP	Branch	Switzerland
Swiss Branch of Eaton Industries LP	Branch	Switzerland
Swiss Branch of Eaton IV LP	Branch	Switzerland
Swiss Branch of Eaton LP	Branch	Switzerland
Swiss Branch of Eaton Manufacturing Limited Partnership	Branch	Switzerland
Swiss Branch of Eaton Services S.a.r.l	Branch	Switzerland

Eaton Corporation plc

Parent Company Financial Statements
For the Year Ended December 31, 2017

EATON CORPORATION plc
COMPANY STATEMENT OF FINANCIAL POSITION

(In thousands)	Note	December 31 2017	December 31 2016
Fixed Assets			
Financial Assets - Investment in Group Undertakings	4	$ 27,396,800	$ 27,120,976
Current Assets			
Cash at bank and in hand		264	953
Debtors (amounts falling due within one year)	5	3,132,193	5,766
		3,132,457	6,719
Total Assets		$ 30,529,257	$ 27,127,695
Capital and Reserves			
Called up share capital presented as equity	6	$ 4,462	$ 4,557
Share premium	7	575,261	505,835
Capital redemption reserve fund	7	441	326
Other reserves	7	438,186	351,347
Profit and loss account	7	28,590,669	8,370,489
Total Capital and Reserves		29,609,019	9,232,554
Creditors			
Creditors (amounts falling due after one year)	8	653,027	15,824,546
Creditors (amounts falling due within one year)	9	267,211	2,070,595
Total Liabilities		920,238	17,895,141
Total Capital and Reserves and Liabilities		$ 30,529,257	$ 27,127,695

The profit for the financial year amounted to $10,788,811 (2016 Loss of $512,286).

The accompanying notes are an integral part of the Company Statement of Financial Position.

The Financial Statements were approved by the Audit Committee of the Board of Directors and the Board of Directors on February 28, 2018 and signed on its behalf by:

Craig Arnold
Chairman of the Board of Directors

Gerald B. Smith
Director

EATON CORPORATION plc
COMPANY STATEMENT OF COMPREHENSIVE INCOME

(In thousands)	Note	December 31 2017	December 31 2016
Profit (loss) for the financial year	7	$ 10,788,811	$ (512,286)
Total other comprehensive income - gain arising on group reorganization	4, 7	11,353,330	—
Total comprehensive profit (loss) for the year		$ 22,142,141	$ (512,286)

EATON CORPORATION plc
COMPANY STATEMENT OF CHANGES IN EQUITY

(In thousands)	Share capital presented as equity	Share premium	Capital redemption reserve fund	Other reserves	Profit and loss account	Total
December 31, 2015	$ 4,651	$ 429,688	$ 208	$ 259,619	$ 10,651,878	$ 11,346,044
Profit and loss for the period	—	—	—	—	(512,286)	(512,286)
Other comprehensive income	—	—	—	—	—	—
Total comprehensive loss for the period	—	—	—	—	(512,286)	(512,286)
Dividends	—	—	—	—	(1,037,375)	(1,037,375)
Share based payment expense for the period	—	—	—	91,728	—	91,728
Issue of shares under share based payment plans	24	76,147	—	—	(2,012)	74,159
Repurchase and cancellation of Ordinary shares	(118)	—	118	—	(729,716)	(729,716)
December 31, 2016	4,557	505,835	326	351,347	8,370,489	9,232,554
Profit and loss for the period	—	—	—	—	10,788,811	10,788,811
Other comprehensive income	—	—	—	—	11,353,330	11,353,330
Total comprehensive income for the period	—	—	—	—	22,142,141	22,142,141
Dividends	—	—	—	—	(1,068,242)	(1,068,242)
Share based payment expense for the period	—	—	—	86,839	—	86,839
Issue of shares under share based payment plans	20	69,426	—	—	(3,668)	65,778
Repurchase and cancellation of Ordinary shares	(115)	—	115	—	(850,051)	(850,051)
December 31, 2017	$ 4,462	$ 575,261	$ 441	$ 438,186	$ 28,590,669	$ 29,609,019

Dollar amounts are in thousands unless indicated otherwise.

Note 1. AUTHORISATION OF FINANCIAL STATEMENTS AND STATEMENT OF COMPLIANCE

Eaton Corporation is a public limited company incorporated and domiciled in the Republic of Ireland. The registered office of the Company is 30 Pembroke Road, Ballsbridge, Dublin 4, Ireland. The financial statements were prepared in accordance with FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102), issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants (Generally Accepted Accounting Practice in Ireland) as it applies to the financial statements of the Company for the year ended 31 December 2017.

The financial statements of Eaton Corporation plc for the year ended 31 December 2017 were authorised for issue by the Board of Directors on February 28, 2018.

Note 2. ACCOUNTING POLICIES

2.1 Basis of preparation

The financial statements are prepared under the historical cost convention in accordance with the Companies Act 2014 and are presented in United States dollars ($), which is also the functional currency.

The financial statements have been prepared on the going concern basis. The directors have taken into account all relevant information covering a period of at least twelve months from the date of approval of the financial statements. The directors believe that the Company is well placed to manage its business risks successfully despite the current uncertain economic outlook.

Eaton Corporation plc is availing of the reduced disclosure framework under FRS 102 on the basis that Eaton Corporation plc itself meets the definition of a qualifying entity, being a member of a group that prepare publicly available financial statements which give a true and fair view, and in which Eaton Corporation plc is consolidated. The consolidated financial statements, in which these Company financial statements are included are available to the public at its registered office.

Eaton Corporation plc has taken advantage of the following disclosure exemptions under FRS 102:

a. the requirements of section 4 Statement of Financial Position- paragraph 4.12 (a) (iv).
b. the requirements of section 7 Statement of Cash Flows and section 3 Financial Statement Presentation paragraph 3.17(d).
c. the requirements of section 26 Share Based Payment: paragraph 26.18 (b), 26.19 to 26.21 and 26.23.
d. requirements of section 33 Related Party Disclosures, paragraph 33.7.

The accounting policies which follow set out those policies which apply in preparing the financial statements for the year ended 31 December 2017.

2.2 Judgements and key sources of estimation uncertainty

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the statement of financial position date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates.

The following judgements have the most significant effect on amounts recognised in the financial statements.

Taxation

Management estimation is required to determine the amount of deferred tax assets that can be recognised based upon likely timing and level of future taxable profits together with assessment of the effect of future tax planning strategies.

Impairment of investments in group undertakings

Where there are indicators of impairment of investments in group undertakings, the Group performs impairment tests based on fair value less costs to sell or a value in use calculation. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction on similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the cash generating unit being tested. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash flows and the growth rate used for extrapolation purposes.

2.3 Significant accounting policies

(a) Foreign currency

Transactions in foreign currencies are initially recorded in the entity's functional currency United States dollars by applying the spot exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the statement of financial position date. All differences are taken to the income statement.

(b) Impairment of investments in group undertakings

The company assesses at each reporting date whether investments in group undertakings may be impaired. If any such indication exists, the company estimates recoverable amount of investments. If it is not possible to estimate the recoverable amount of the individual investments, the company estimates the recoverable amount of the cash-generating unit to which the investments belongs. The recoverable amount of an investment or cash-generating unit is the higher of its fair value less costs to sell and its value in use. If the recoverable amount is less than its carrying amount, the carrying amount of the investment is impaired and it is reduced to its recoverable amount through an impairment in the income statement unless the investment is carried at a revalued amount where the impairment loss of a revalued asset is a revaluation decrease.

An impairment loss recognised for investments in group undertaking, is reversed in a subsequent period if and only if the reasons for the impairment loss have ceased to apply. Management has determined that there are no indicators of impairment in the current year.

(c) Financial assets

Investments in group undertakings

Investments in subsidiaries are recognised at cost less impairment.

(d) Taxation

Corporation tax is provided on taxable profits at the current rates.

Deferred tax is recognised in respect of all timing differences which are differences between taxable profits and total comprehensive income that arise from the inclusion of income and expenses in tax assessments in periods different from those in which they are recognised in the financial statements, except that unrelieved tax losses and other deferred tax assets are recognised only to the extent that the directors consider that it probable that they will be recovered against the reversal of deferred tax liabilities or other future taxable profits. Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which timing differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date. Management has determined that as there are no future taxable profits against which to offset carried forward tax losses, a deferred tax asset has not been included in the financial statements.

(e) Share based payments

The Company and its subsidiaries operate various share based payment plans. The Company issues Ordinary shares related to these employee equity share programs at various subsidiaries.

The share based payment expense associated with the share plans is recognized as an expense by the entity which receives services in exchange for the share based compensation. In these Company only accounts, the profit and loss account is charged with the expense related to the services received by the Company. The remaining portion of the share based payments expense represent a contribution to group entities and is added to the carrying amount of those investments.

Proceeds received from employees, if any, for the exercise of share based instruments increase the share capital and share premium accounts of the Company.

(f) Provisions and contingencies

The Company has guaranteed certain liabilities and credit arrangements of the group. These guarantees are accounted for in accordance with Section 21 Provisions and Contingencies of FRS 102. The Company reviews the status of these guarantees at each reporting date and considers whether it is required to make a provision for payment on those guarantees based on the probability of the commitment being called. The Board of Directors have assessed the likelihood that such guarantees will be called as remote. Considering this, the Board of Directors have decided to account for those financial guarantee contracts as contingent liabilities in the financial statements.

A provision is recognized when the Company has a legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation and the amount of the obligation can be estimated reliably.

(g) Dividends

Dividends on Ordinary shares are recognized as a liability in the period in which they are declared by the Company.

(h) Financial instruments

Cash at bank and in hand

Cash and cash equivalents in the statement of financial position comprise cash at banks and in hand and short term deposits with an original maturity date of three months or less.

Short-term debtors and creditors

Debtors and creditors with no stated interest rate and receivable or payable within one year are recorded at transaction price. Any losses arising from impairment are recognised in the income statement in operating expenses.

Debt

Debt is initially recorded in the statement of financial position at the net proceeds, defined as the fair value of the consideration received upon the issue of a capital instrument after deduction of issue costs.

The difference between the amount recognized and the total payments required to be made under the debt (interest and repayment of principal together with any premium) represents the total finance cost, which is accounted for over the term of the debt.

This finance cost is charged to the income statement over the term of the debt at a constant rate of interest on the outstanding amount of the debt. The carrying value of the debt is increased annually by the amount of the finance cost relating to that period, and reduced by the amount of payments made.

(i) Income statement

In accordance with Sections 304 (1) and 304 (2) of the Companies Act, 2014, the Company is availing of the exemption from presenting the individual profit and loss account. For 2017 and 2016, the Company's net profit (loss) was $10,788,811 and ($512,286) , respectively.

Note 3. HISTORY AND DESCRIPTION OF THE COMPANY

Eaton Corporation plc became the parent company of the Eaton Group following a reorganization that took place in 2012.

The principal activity of Eaton Corporation plc is an investment holding company. It owns all of the outstanding ordinary shares of Cooper Industries and Eaton Intelligent Power Limited and a 5.77% partnership interest in Eaton GmbH & Co. KG.

The Company's registered office is located at 30 Pembroke Road, Ballsbridge, Dublin 4, Ireland.

Note 4. FINANCIAL ASSETS - Investment in Group Undertakings

December 31, 2015 - at cost	$ 25,780,056
Capital contribution for share based payment expense, including estimated forfeitures of $54 for dividends paid on unvested restricted stock awards	90,920
Capital contribution in cash to Eaton Industries (Ireland) Limited	1,250,000
December 31, 2016 - at cost	27,120,976
Capital contribution for share based payment expense, including estimated forfeitures of $48 for dividends paid on unvested restricted stock awards	85,358
Capital contribution in cash to Eaton Industries (Ireland) Limited	90,466
Capital contribution in cash to Eaton Intelligent Power Limited	100,000
December 31, 2017 - at cost	$ 27,396,800

At December 31, 2017, the Company had the following subsidiaries:

Company Name	% Shareholding	Registered Office	Nature of Business
Cooper Industries Unlimited Company	100% [1]	30 Pembroke Road, Ballsbridge, Dublin 4, Ireland	Investment Holding
Eaton Intelligent Power Limited	100% [2]	30 Pembroke Road, Ballsbridge, Dublin 4, Ireland	Intellectual property management
Eaton GmbH & Co. KG	5.77% [3]	Alegis Rheinland GmbH Steuerberatungsgesellschaft, Bornestrasse 10, 40211, Dusseldorf, Germany	Real Estate Holding Company

[1] 163,600,724 ordinary shares of $0.01 par value

[2] 1 ordinary shares of $1 par value

[3] The interest in Eaton GmbH & Co. KG represents a partnership interest with the remaining 94.23% being held indirectly by the Company.

As part of a re-organization of subsidiary undertakings during the year, Cooper Industries Unlimited Company, a direct subsidiary of the Company, acquired from the Company its 100% interest in Eaton Industries (Ireland) Limited. This resulted in the Company owning a 100% interest in Eaton Industries (Ireland) Limited indirectly, through its investment in Cooper Industries Unlimited Company, rather than directly. The Company has adopted an accounting treatment consistent with the requirements of section 2.8 of FRS 102 which requires transactions to be accounted for and presented in accordance with their substance as opposed to their legal form. The carrying value of the investment in Eaton Industries (Ireland) Limited has been reclassified to form part of the carrying value of the investment in Cooper Industries Unlimited Company and no movement has been recognized in the value of the investment as the Company has the same interests in subsidiaries before and after the transaction.

Note 5. DEBTORS (amounts falling due within one year)

	December 31	
	2017	2016
Amounts due from subsidiary undertakings	$ 3,132,185	$ 5,766
Prepayments and accrued income	8	—
	$ 3,132,193	$ 5,766

Amounts due from subsidiary undertakings includes a loan of $3 billion that is interest free and repayable on demand.

Note 6. CALLED UP SHARE CAPITAL

	December 31	
	2017	2016
Authorized		
750,000,000 Ordinary shares of $0.01 par value each	$ 7,500	$ 7,500
10,000,000 Serial preferred shares of $0.01 par value each	100	100
10,000 A Preferred shares of $1.00 par value each	10	10
40,000 Deferred ordinary shares of €1.00 par value each	52	52
	$ 7,662	$ 7,662
Allotted, called-up and fully paid share capital		
439,981,585 (2016: 449,463,251) Ordinary shares of $0.01 par value each	$ 4,400	$ 4,495
10,000 A Preferred shares of $1.00 par value each	10	10
40,000 Deferred ordinary shares of €1.00 par value each	52	52
	$ 4,462	$ 4,557

During the year, 2,025,207 ordinary shares of $0.01 par value each were issued under share based payment plans and 11,506,873 ordinary shares of $0.01 par value each were repurchased and cancelled.

The holders of Ordinary shares are entitled to dividends, have voting rights and participate pro rata in the total assets of the Company in the event of its winding up.

The holders of Deferred ordinary shares are not entitled to receive dividends or vote. Upon a return of assets, whether on liquidation or otherwise, the Deferred ordinary shares shall entitle the holder to the repayment of the amounts paid up on such shares after repayment of the capital paid up on the Ordinary shares, plus the payment of $5 million on each of the Ordinary shares and the holders of the Deferred ordinary shares shall not be entitled to any further participation in the assets or profits of the Company.

The A Preferred shares are non-voting, have the right to receive dividends at twice the dividend paid per Ordinary share. The holder of the shares has agreed that the A Preferred shares are to be subject to call by the Company at par value at any time 5 years after their issuance.

Note 7. RESERVES

	Share premium	Capital redemption reserve fund	Other reserves	Profit and loss account	Total
December 31, 2015	$ 429,688	$ 208	$ 259,619	$10,651,878	$11,341,393
Dividends	—	—	—	(1,037,375)	(1,037,375)
Share based payment expense for the period	—	—	91,728	—	91,728
Issue of shares under share based payment plans	76,147	—	—	(2,012)	74,135
Repurchase and cancellation of Ordinary shares	—	118	—	(729,716)	(729,598)
Profit and loss for the period	—	—	—	(512,286)	(512,286)
December 31, 2016	505,835	326	351,347	8,370,489	9,227,997
Dividends	—	—	—	(1,068,242)	(1,068,242)
Share based payment expense for the period	—	—	86,839	—	86,839
Issue of shares under share based payment plans	69,426	—	—	(3,668)	65,758
Repurchase and cancellation of Ordinary shares	—	115	—	(850,051)	(849,936)
Profit and loss for the period	—	—	—	10,788,811	10,788,811
Gain arising on group reorganization (Note 4)	—	—	—	11,353,330	11,353,330
December 31, 2017	$ 575,261	$ 441	$ 438,186	$28,590,669	$29,604,557

Share premium account

This reserve records the amount above the nominal value received for shares sold, less transaction costs.

Other reserves

This reserve is used to recognise the value of equity-settled share-based payments provided to employees of the group as part of their remuneration.

Capital redemption reserve fund

This reserve represents the nominal value of shares canceled.

Profit and loss account

As part of the re-organization of subsidiary undertakings as described in Note 4, the consideration paid for Eaton Industries (Ireland) Limited by Cooper Industries Unlimited Company was as follows:

1. the assumption by Cooper Industries Unlimited Company of $19.0 billion notes advanced by subsidiaries of the Company to the Company;
2. the issuance of a $3.0 billion loan due to the Company from Cooper Industries Unlimited Company; and
3. the issuance of one ordinary share by Cooper Industries Unlimited Company to the Company

The Company has derecognized the liabilities previously recorded on its balance sheet as these are now assumed by Cooper Industries Unlimited Company and created a receivable for the amount now owed to it by Cooper Industries Unlimited Company. The gain, wholly comprising the derecognition of the liabilities and the recognition of the new loan note, has amounted to $21,997,103. $10,643,773 of this gain has been determined to be realized and has been recorded through the Company Profit and Loss account with the unrealized portion of the gain, $11,353,330, recorded through the Company Statement of Comprehensive Income.

Note 8. CREDITORS (amounts falling due after one year)

	December 31	
	2017	2016
Non-interest bearing note payable to Eaton Industries (Holdings) Limited with a face amount of $7.504 billion and an original issue discount of $1.912 billion due in December 2022	$ —	$ 6,296,632
Non-interest bearing note payable to Eaton Industries (Holdings) Limited with a face amount of $2.183 billion and an original issue discount of $565 million due in January 2023	—	1,820,324
Notes payable to subsidiary undertakings falling due between two and five years	—	5,384,163
Notes payable to subsidiary undertakings falling due after more than five years	651,640	2,232,345
Amounts due to subsidiary undertakings	1,387	91,082
Total creditors (amounts falling due after one year)	$ 653,027	$ 15,824,546

The notes payable are unsecured.

Note 9. CREDITORS (amounts falling due within one year)

	December 31	
	2017	2016
Accruals	$ 712	$ 1,004
Amounts due to subsidiary undertakings	1,164	181,941
Notes payable to subsidiary undertakings	265,335	1,887,650
Total creditors (amounts falling due within one year)	$ 267,211	$ 2,070,595

The notes payable are unsecured.

Note 10. LOANS

Loans repayable, included within creditors, are analysed as follows:

	December 31	
	2017	2016
Repayable within one year	$ 265,335	$ 1,887,650
Repayable within two to five years	—	5,384,163
Repayable after more than five years	651,640	10,349,301
	$ 916,975	$ 17,621,114

Details of loans are as follows:

	December 31	
	2017	2016
Interest at 2.15% repayable in 2019	$ —	$ 700,000
Interest at 2.07% repayable in 2019	—	478,525
Interest at 2.22% repayable in 2019	—	1,670,000
Interest at 1.58% repayable in 2019	—	485,349
Interest at 3.00% repayable in 2020	—	143,148
Interest at 2.03% repayable in 2021	—	574,852
Interest at 2.03% repayable in 2021	—	785,700
Interest at 2.03% repayable in 2021	—	46,589
Interest at 2.52% repayable in 2021	—	500,000
Repayable within two to five years	$ —	$ 5,384,163

	December 31	
	2017	2016
Interest at 2.94% repayable in 2022	—	6,296,632
Interest at 2.99% repayable in 2023	—	1,820,324
Interest at 3.41% repayable in 2023	—	500,000
Interest at 3.25% repayable in 2024	—	406,643
Interest at 3.22% repayable in 2024	—	753,312
Interest at 0.92% repayable in 2024	651,640	572,390
Repayable in more than five years	$ 651,640	$ 10,349,301

Note 11. SHARE BASED PAYMENTS

The Income statement includes $1.529 million for 2017 and $0.862 million for 2016 of share based Directors fees. The remaining portion of the share based payment expense of $85.358 million, including estimated forfeitures of $48 for dividends paid on unvested restricted stock awards, for 2017 and $85.358 million share based payment expense, including estimated forfeitures of $54 for dividends paid on unvested restricted stock awards, for 2016 has been included as a capital contribution in Investment in Subsidiaries (Note 4). As required in accordance with FRS 102 section 26.18(a) a description of each type of share-based payment arrangement that existed at any time during the period, including the general terms and conditions of each arrangement, such as vesting requirements, the maximum term of options granted, and the method of settlement is included in Note 14 to the Consolidated financial statements.

Note 12. RELATED PARTY TRANSACTIONS

Directors' fees and expenses

The Income statement includes $8.737 million for 2017 and $6.568 million for 2016 of Directors’ fees and expenses, including share based Directors’ fees.

In accordance with section 33 paragraph 1A of FRS 102, disclosures need not be given of transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member. The Company has availed of this exemption.

Note 13. TAXATION

The company has incurred tax losses in the year that are available indefinitely for offset against future taxable profits. A deferred tax asset has not been recognised in respect to these losses as it is not probable that they will be recovered against future taxable profits.

Note 14. EVENTS AFTER THE REPORTING PERIOD

On February 28, 2018, Eaton's Board of Directors declared a quarterly dividend of $0.66 per ordinary share, a 10% increase over the dividend paid in the fourth quarter of 2017. The dividend is payable on March 23, 2018, to shareholders of record at the close of business on March 12, 2018.

Note 15. AUDITOR'S REMUNERATION

The fees paid to Ernst & Young Ireland in respect of the audit of the Company individual accounts were $0.1 million in each of 2017 and 2016. In addition, Ernst & Young Ireland received fees of $0.6 million and $0.4 million for other assurance services in each of 2017 and 2016. Ernst & Young Ireland did not receive any fees for non-audit services in 2017 and 2016 and received $0.1 million in each of 2017 and 2016 for tax advisory services. Note 22 to the Consolidated Financial Statements provides additional information regarding Auditors’ remuneration.