

## Item 5. Operating and Financial Review and Prospects

### CELESTICA INC. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2018

*The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) should be read in conjunction with our 2018 audited consolidated financial statements (2018 AFS), which we prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Unless otherwise noted, all dollar amounts are expressed in U.S. dollars. The information in this discussion is provided as of February 13, 2019 unless we indicate otherwise.*

*Certain statements contained in this MD&A constitute forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (U.S. Exchange Act), and contain forward-looking information within the meaning of Canadian securities laws. Such forward-looking information includes, without limitation, statements related to: our priorities, intended areas of focus, targets, objectives and goals; trends in the electronics manufacturing services (EMS) industry and our segments; the anticipated continuation and impact of adverse market conditions, particularly in our Connectivity & Cloud Solutions (CCS) segment; adverse market conditions in, and the cyclical nature of, our capital equipment business, in particular our semiconductor business; our anticipated financial and/or operational results; benefits anticipated from, and the range and timing of, our cost efficiency initiative; the anticipated impact of our comprehensive CCS segment portfolio review (CCS Review) on our business; the timing, quantity, and intended method of funding of purchases of subordinate voting shares under our current normal course issuer bid (NCIB); the timing of the valuation of certain recently-acquired assets and finalization of the related purchase price allocations; our growth and diversification strategies and plans (and potential hindrances thereto); the expected continuation, and adverse impact on our business, of materials constraints; supplier lead times; the anticipated impact of completed acquisitions (Atrenne Integrated Solutions, Inc. (Atrenne) and Impakt Holdings, LLC (Impakt)) and program wins, transfers, losses or disengagements on our business; anticipated expenses, restructuring actions and charges, capital expenditures and other anticipated working capital requirements, including the anticipated amounts, timing, impact and funding thereof; the anticipated impact on our operations of any new significant tariffs on items imported into the U.S. and related countermeasures; the anticipated repatriation of undistributed earnings from foreign subsidiaries; the impact of tax and litigation outcomes; our anticipated ability to use certain net operating losses; intended investments in our business and associated risks; the anticipated impact of the pace of technological changes, customer outsourcing, program transfers, and the global economic environment on our business; raw materials prices; the impact of outstanding indebtedness under our credit facility on our business; our intention to settle outstanding equity awards with subordinate voting shares; the anticipated aggregate cost of relocating our Toronto manufacturing operations and corporate headquarters; the timing of relocating our corporate headquarters; our expectation that the costs of our Toronto manufacturing and corporate office relocations will be more than offset by the cash proceeds from the property sale; the anticipated impact of recent U.S. tax reform on our business; transition activities related to, and the anticipated impact of, newly-issued accounting standards; the impact of price reductions and longer-term contracts on our business; our intention to sell a lower amount of accounts receivable under a customer's supplier financing program; the potential use of cash, securities issuances and further increases in third-party indebtedness to fund our operations or acquisitions, and the anticipated and potential adverse impacts of such uses and/or increase; the potential adverse impacts of Britain's intention to leave the European Union (Brexit) and/or policies or legislation proposed or instituted by the current administration in the U.S.; our pension obligations; our intentions with respect to our U.K. supplemental pension plan; the potential true-up premium on annuities purchased for our U.K. pension plans; the anticipated impact of the integration of Impakt on our internal controls; and the expected impact of the expiration of one of our income tax incentives in Thailand. Such forward-looking statements may, without limitation, be preceded by, followed by, or include words such as "believes," "expects," "anticipates," "estimates," "intends," "plans," "continues," "project," "potential," "possible," "contemplate," "seek," or similar expressions, or may employ such future or conditional verbs as "may," "might," "will," "could," "should" or "would," or may otherwise be indicated as forward-looking statements by grammatical construction, phrasing or context. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the U.S. Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws.*

*Forward-looking statements are provided to assist readers in understanding management's current expectations and plans relating to the future. Readers are cautioned that such information may not be appropriate for other purposes. Forward-looking statements are not guarantees of future performance and are subject to risks that could cause actual results to differ materially from those expressed or implied in such forward-looking statements, including, among others, risks related to: our*

customers' ability to compete and succeed with our products and services; customer and segment concentration; challenges of replacing revenue from completed or lost programs or customer disengagements; changes in our mix of customers and/or the types of products or services we provide; the impact on gross profit of higher concentrations of lower margin programs; price, margin pressures, and other competitive factors affecting, and the highly competitive nature of, the EMS industry in general and our CCS segment in particular; the cyclical nature of our capital equipment business, in particular our semiconductor business; delays in the delivery and availability of components, services and materials; the expansion or consolidation of our operations; defects or deficiencies in our products, services or designs; integrating acquisitions and "operate-in-place" arrangements, and achieving the anticipated benefits therefrom; negative impacts on our business resulting from recent increases in third-party indebtedness; our response to changes in demand, rapidly evolving and changing technologies, and changes in our customers' business and outsourcing strategies; customer, competitor and/or supplier consolidation; compliance with social responsibility initiatives; challenges associated with new customers or programs, or the provision of new services; the impact of our restructuring actions; the incurrence of future restructuring charges, impairment charges or other write-downs of assets; managing our operations, growth initiatives, and our working capital performance during uncertain market and economic conditions; disruptions to our operations, or those of our customers, component suppliers and/or logistics partners, including as a result of global or local events outside our/their control and the impact of significant tariffs on items imported into the U.S; changes to our operating model; changing commodity, materials and component costs as well as labor costs and conditions; retaining or expanding our business due to execution or quality issues (including our ability to successfully resolve these challenges); non-performance by counterparties (including the financial institutions party to our purchased annuities and other financial counterparties, key suppliers and/or customers); maintaining sufficient financial resources and working capital to fund currently anticipated financial obligations and to pursue desirable business opportunities; negative impacts on our business resulting from any significant uses of cash, securities issuances, and/or additional increases in third-party indebtedness for additional acquisitions or to otherwise fund our operations; our financial exposure to foreign currency volatility; recruiting or retaining skilled talent; our dependence on industries affected by rapid technological change; increasing taxes, tax audits, and challenges of defending our tax positions; obtaining, renewing or meeting the conditions of tax incentives and credits; the relocation of our corporate headquarters; computer viruses, malware, hacking attempts or outages that may disrupt our operations; the management of our IT systems and our ability to protect confidential information; the variability of revenue and operating results; compliance with applicable laws, regulations, and government grants; our pension obligations; interest rate fluctuations and changes to LIBOR; and current or future litigation, governmental actions, and/or changes in legislation. The foregoing and other material risks and uncertainties are discussed in our public filings at [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov), including in this MD&A, our most recent Annual Report on Form 20-F filed with, and subsequent reports on Form 6-K furnished to, the U.S. Securities and Exchange Commission (SEC), and as applicable, the Canadian Securities Administrators.

Our forward-looking statements are based on various assumptions, many of which involve factors that are beyond our control. Our material assumptions include those related to the following: fluctuation of production schedules from our customers in terms of volume and mix of products or services; the timing and execution of, and investments associated with, ramping new business; the successful pursuit, completion and integration of acquisitions; the success of our customers' products; our ability to retain programs and customers; the stability of general economic and market conditions, currency exchange rates, and interest rates; supplier performance, pricing and terms; compliance by third parties with their contractual obligations and the accuracy of their representations and warranties; the costs and availability of components, materials, services, equipment, labor, energy and transportation; that our customers will retain liability for recently-imposed tariffs and countermeasures; our ability to keep pace with rapidly changing technological developments; the impact of the recent U.S. tax reform on our operations; the timing, execution, and effect of restructuring actions; the successful resolution of quality issues that arise from time to time; our having sufficient financial resources and working capital to fund currently anticipated financial obligations and to pursue desirable business opportunities; our ability to successfully diversify our customer base and develop new capabilities; the availability of cash resources for repurchases of outstanding subordinate voting shares; that we achieve the expected benefits from our acquisitions of Atrenne and Impakt; the impact of the CCS Review on our business; and the magnitude of anticipated losses in our capital equipment business in the first quarter of 2019. Although management believes its assumptions to be reasonable under the current circumstances, they may prove to be inaccurate, which could cause actual results to differ materially (and adversely) from those that would have been achieved had such assumptions been accurate. Forward-looking statements speak only as of the date on which they are made, and we disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

All forward-looking statements attributable to us are expressly qualified by these cautionary statements.

## Overview

### *Celestica's business:*

We deliver innovative supply chain solutions globally to customers in two operating and reportable segments: Advanced Technology Solutions (ATS) and Connectivity & Cloud Solutions (CCS). Our ATS segment consists of our ATS end market, and is comprised of our aerospace and defense, industrial, smart energy, healthtech, and capital equipment businesses. Our capital equipment business is comprised of our semiconductor, display, and power & signal distribution equipment businesses. Our CCS segment consists of our Communications and Enterprise end markets and is comprised of our enterprise communications, telecommunications, servers and storage businesses. Our customers include original equipment manufacturers (OEMs), service providers (including cloud-based service providers) and other companies in a wide range of industries. All period percentages and financial information herein reflect the current presentation. Information regarding our reportable segments is included in note 25 to our 2018 AFS.

Our global headquarters is located in Toronto, Ontario, Canada. We operate a network of sites and centers of excellence strategically located in North America, Europe and Asia, with specialized end-to-end supply chain capabilities tailored to meet specific market and customer product lifecycle requirements.

We offer a comprehensive range of product manufacturing and related supply chain services to customers in both of our segments, including design and development, new product introduction, engineering services, component sourcing, electronics manufacturing and assembly, testing, complex mechanical assembly, systems integration, precision machining, order fulfillment, logistics, asset management, product licensing, and after-market repair and return services. Within design and development, our Joint Design and Manufacturing (JDM) offering includes the creation of hardware platforms and design solutions in collaboration with customers, as well as management of aspects of the supply chain and manufacturing.

Revenue from our ATS segment currently represents approximately one-third of our aggregate revenue but generated just under one-half of our total segment income in 2018. Products and services in this segment are extensive and are often more regulated than in our CCS segment, and can include the following: government-certified and highly-specialized manufacturing, electronic and enclosure-related services for aerospace and defense-related customers; high-precision equipment and integrated subsystems used in the manufacture of semiconductors and displays; a wide range of industrial automation, controls, test and measurement devices; advanced solutions for surgical instruments, diagnostic imaging and patient monitoring; and efficiency products to help manage and monitor the energy and power industries. Our ATS segment businesses typically have a higher margin profile and longer product life cycles than the businesses in our CCS segment. Revenue from our CCS segment currently represents approximately two-thirds of our aggregate revenue and generated just over one-half of our total segment income in 2018. Products and services in this segment consist predominantly of enterprise-level data communications and information processing infrastructure products, and can include routers, switches, servers and storage-related products used by a wide range of businesses and cloud-based service providers to manage digital connectivity, commerce and social media applications. Our CCS segment businesses typically have a lower margin profile and higher volumes than the businesses in our ATS segment, and have been impacted in recent periods (and continue to be impacted) by aggressive pricing, rapid shifts in technology, model obsolescence and the commoditization of certain products.

Our CCS segment generally experiences a high degree of volatility in terms of revenue and product/service mix, and has been affected by sustained negative pricing pressures, which have significantly impacted our profitability in recent quarters. These factors, which are characteristic of the highly competitive nature of this market, are not expected to abate. As part of our strategy to continue to diversify our business and improve shareholder returns, we commenced a comprehensive review of our CCS revenue portfolio (CCS Review) in the second half of 2018, with the intention of addressing under-performing programs, as well as better aligning our investments with our strategic and financial priorities. As a result of this review, we intend to disengage from certain CCS customer programs that are not anticipated to contribute to improved consistency in our revenues and CCS segment margin. The review of our CCS business, which generated \$4.4 billion of revenue in 2018, is currently expected to result in a decline in our CCS segment revenue of approximately \$500 million over the next 12 to 18 months, and a corresponding decline in overall company revenue in the single digit percentage range in 2019 (subject to change based on the growth or contraction of CCS programs not subject to the review). The CCS Review is substantially complete, and the customer programs that comprise the approximate \$500 million in revenue have been identified. We expect to complete the majority of related actions in 2019, including the intended restructuring actions (which have been built into our current cost efficiency initiative), and changes to our global manufacturing network. Although we expect reduced revenue in our CCS business as a result of the CCS Review, we intend to maintain a significant majority of our CCS business, and continue to invest in areas we believe are key to the long-term success of our CCS segment, including our JDM offering, to help drive improved CCS financial performance in future periods. Revenue attributable to our JDM business grew approximately 30% in 2018 as compared to 2017.

Within our capital equipment business, revenue from our semiconductor capital equipment customers has been adversely impacted by cyclical decreases in demand, primarily in the second half of 2018. The swift decrease in demand in the fourth quarter of 2018 drove lower utilization, resulting in operating losses in our capital equipment business in the mid-single digit million dollar range for that quarter. We expect the weaker semiconductor demand to continue throughout 2019 and have estimated a single digit million dollar operating loss in our capital equipment business for the first quarter of 2019. In response to this demand softness, we are undertaking actions (as part of our current cost efficiency initiative) to align this business to the current demand environment and to improve profitability. However, despite the current soft demand environment, we believe that new program wins, anticipated market share gains, anticipated growth in electronic content and connectivity, and our recent acquisition of Impakt Holdings, LLC (Impakt) position us favorably to benefit from potential growth in this business in the future. More generally, we continue to pursue new customers and acquisition opportunities in our ATS segment to expand our end market penetration, to diversify our end market mix, and to enhance and add new technologies and capabilities to our offerings.

Within both our CCS and ATS segments, we are focused on higher-value added services, including design and development, engineering, and after-market services. In support of our expansion efforts, we have executed two “operate-in-place” outsourcing agreements with existing aerospace and defense customers, pursuant to which we provide manufacturing and after-market repair services for specific product lines at such customers' sites. In addition, in our ATS segment, we completed the acquisitions of Lorenz, Inc. and Suntek Manufacturing Technologies, SA de CV, collectively known as Karel Manufacturing (Karel) in November 2016, Atrenne Integrated Solutions, Inc. (Atrenne) in April 2018, and Impakt in November 2018 (see “Recent developments” and “Operating Results — *Acquisition Activity and Program Transfer*” below).

To increase the value we deliver to our customers, we continue to make investments in people, value-added service offerings, new capabilities, capacity, technology, IT systems, software and tools. We continuously work to improve our productivity, quality, delivery performance and flexibility in our efforts to be recognized as a leading company in the EMS industry. We have invested in automation and the “Digital Factory” to streamline our processes and reduce costs. Our current cost efficiency initiative, and related restructuring actions, are also intended to further streamline our business, increase operational efficiencies and improve our productivity.

As we expand our business, open new sites, or transfer business within our network to accommodate growth or achieve synergies, however, we may encounter difficulties that result in higher than expected costs associated with such activities. Potential difficulties related to such activities include our ability: to manage growth effectively; to maintain existing business relationships during periods of transition; to anticipate disruptions in our operations that may impact our ability to deliver to customers on time, produce quality products and ensure overall customer satisfaction; and to respond rapidly to changes in customer demand or volumes. We may also encounter difficulties in ramping and executing new programs. We may require significant investments in additional capabilities and increased working capital to support these new programs, including those associated with business acquisitions, and may generate lower margins or losses during and/or following the ramp period. There can be no assurance that our increased investments will benefit our financial performance or result in business growth. As we pursue opportunities in new markets or technologies, we may encounter challenges due to our limited knowledge or experience in these areas. In addition, the success of new business models or programs depends on a number of factors including: understanding the new business or markets; timely and successful product development; market acceptance; the effective management of purchase commitments and inventory levels in line with anticipated demand; the development or acquisition of appropriate intellectual property and capital investments, to the extent required; the availability of materials in adequate quantities and at appropriate costs to meet anticipated demand; and the risk that new offerings may have quality or other defects in the early stages of introduction. Any of these factors could prevent us from realizing the anticipated benefits of growth in our business, including in new markets or technologies, which could materially adversely affect our business and operating results.

#### *Operating Goals and Principles:*

Our current priorities are focused on evolving our revenue portfolio; expanding our non-IFRS operating margin\* and segment margins; and maintaining a balanced approach to capital allocation. Management believes that each of these goals and principles is reasonable.

*Evolving our Revenue Portfolio* — To evolve our revenue portfolio, we intend to continue to focus on: (i) realigning our portfolio towards more diversified revenue, (ii) driving sustainable profitable revenue growth, (iii) growing our ATS segment revenue organically by an average of 10% per year over the long term, (iv) supplementing our organic growth with disciplined and targeted acquisitions intended to expand capabilities, and (v) optimizing and reshaping our portfolio to drive more consistent returns and profitability.

*Expanding Margins* — With respect to expanding margins, we intend to focus on achieving, by the first half of 2020: (i) non-IFRS operating margin\* in the target range of 3.75% to 4.5%, (ii) ATS segment margin in the target range of 5.0% to 6.0%, and CCS segment margin in the target range of 2.0% to 3.0%, and (iii) greater than 50% of total segment income from our ATS segment. Our non-IFRS operating margin\* target range reflects anticipated benefits from our CCS Review, completion of our cost efficiency initiative (CEI), and ongoing expansion of our ATS segment revenue portfolio, both organically and through recent strategy-aligned acquisitions. See “Recent Developments” below.

*Balanced Approach to Capital Allocation* — In terms of capital allocation, we are focused on: (i) returning approximately 50% of non-IFRS free cash flow\* to shareholders annually, on average, over the long term, (ii) investing 1.5% to 2.0% of annual revenue in capital expenditures to support our organic growth, and (iii) executing on strategic acquisitions as part of a disciplined capital allocation framework. We are also focused on maintaining a strong balance sheet.

The foregoing priorities and areas of intended focus constitute our objectives and goals, and are not intended to be projections or forecasts of future performance. Our future performance is subject to risks, uncertainties and other factors that could cause actual outcomes and results to differ materially from the goals and priorities described above.

\* Operating margin and free cash flow are non-IFRS measures without standardized meanings and may not be comparable to similar measures presented by other companies. See “Non-IFRS measures” below for a discussion of the non-IFRS measures included herein, and a reconciliation of our non-IFRS measures to the most directly comparable IFRS measures. We do not provide reconciliations for forward-looking non-IFRS financial measures, as we are unable to provide a meaningful or accurate calculation or estimation of reconciling items and the information is not available without unreasonable effort. This is due to the inherent difficulty of forecasting the timing or amount of various events that have not yet occurred, are out of our control and/or cannot be reasonably predicted, and that would impact the most directly comparable forward-looking IFRS financial measure. For these same reasons, we are unable to address the probable significance of the unavailable information. Forward-looking non-IFRS financial measures may vary materially from the corresponding IFRS financial measures.

Segment performance is evaluated based on segment revenue, segment income and segment margin (segment income as a percentage of segment revenue), each of which is defined in “Operating Results — Segment income and margin” below.

#### *Overview of business environment:*

The EMS industry is highly competitive, with multiple global EMS providers competing for customers and programs. In addition, demand can be volatile from period to period, and aggressive pricing is a common business dynamic, particularly in our CCS segment. As a result, customer and CCS segment revenue and mix, and overall profitability, are difficult to forecast.

Product lifecycles in the markets we serve, production lead times required by our customers, rapid shifts in technology, model obsolescence, commoditization of certain products, the emergence of new business models, shifting patterns of demand, such as the shift from traditional network infrastructures to highly virtualized and cloud-based environments, the prevalence of solid state or flash memory technology as a replacement for hard disk drives, as well as the proliferation of software-defined technologies enabling the disaggregation of software and hardware, increased competition, oversupply of products, pricing pressures, and the volatility of the economy all contribute to the complexity of managing our operations and fluctuations in our financial results. For example, declines in end-market demand for customer-specific proprietary systems in favor of open systems with standardized technologies has adversely impacted some of our CCS segment customers, and consequently, our CCS business. Capacity utilization, customer mix and the types of products and services we provide are important factors affecting our financial performance. The number of sites, the location of qualified personnel, the manufacturing capacity, and the mix of business through that capacity are vital considerations for EMS providers in terms of supporting their customers and generating appropriate returns. Because the EMS industry is working capital intensive, we believe that non-IFRS adjusted ROIC, which is primarily based on non-IFRS operating earnings (each discussed in “Non-IFRS measures” below) and investments in working capital and equipment, is an important metric for measuring an EMS provider’s financial performance.

In addition, uncertainty in the global economy and financial markets may impact current and future demand for our customers’ products and services, and consequently, our operations. We continue to monitor the dynamics and impacts of the global economic and financial environment and work to manage our priorities, costs and resources to anticipate and prepare for any changes we deem necessary.

External factors that could adversely impact the EMS industry and our business include natural disasters and related disruptions, political instability, terrorism, armed conflict, labor or social unrest, criminal activity, disease or illness that affects local, national or international economies, unusually adverse weather conditions, and other risks present in the jurisdictions in which we, our customers, our suppliers, and/or our logistics partners operate. These types of events could disrupt operations at one or more of our sites or those of our customers, component suppliers and/or our logistics partners. These events could also lead

to higher costs or supply shortages or may disrupt the delivery of components to us, or our ability to provide finished products or services to our customers, any of which could adversely affect our operating results. In addition, uncertainties resulting from Brexit (given the lack of comparable precedent) and/or policies or legislation proposed or instituted by the current administration in the U.S., and/or increased tensions between the U.S. and North Korea, China, Russia and/or other countries, may adversely affect our business, results of operations and financial condition.

The United States, Canada and Mexico have agreed on a revised trade deal (USMCA) to replace the North American Free Trade Agreement. The USMCA was signed on November 30, 2018, but is subject to ratification by the legislatures of all three countries. We cannot currently quantify the impact on our business of the USMCA, if ratified. In addition, the current U.S. administration has increased tariffs on certain items imported into the U.S. from several countries, including China, Canada, Mexico, and the European Union (many of which are not addressed by the USMCA). Each of these countries has imposed retaliatory tariffs on specified items, which have been challenged by the U.S. These actions, or other governmental actions related to tariffs or international trade agreements, could increase the cost to our U.S. customers who use our non-U.S. manufacturing sites and components, and vice versa, which may materially and adversely impact demand for our services, our results of operations or our financial condition. We currently ship a significant portion of our worldwide production to customers in the U.S. from other countries. Increased tariffs, and/or changes to international trade agreements, may cause our U.S. customers to insource programs previously outsourced to us, transfer manufacturing to locations within our global network that are not impacted by such actions (potentially increasing production costs), and/or shift their business to other EMS providers. Additionally, tariffs on imported components for use in our U.S. production could have an adverse impact on demand for such production. Retaliatory tariffs could reduce demand for our U.S.-based production or make such production less profitable. Given the uncertainty regarding the scope and duration of these trade actions by the U.S. and other governments, whether trade tensions will escalate further, and whether our customers will bear the cost of the tariffs, their impact on our operations and results cannot be currently quantified, but may be material. Discussions with impacted customers on our recoverability of tariff costs, and/or the potential of transferring their production from China to other sites within our network, are ongoing.

In general, changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, taxation, manufacturing, clean energy, the healthcare industry, development and investment in the jurisdictions in which we, and/or our customers or suppliers operate, could materially adversely affect our business, results of operations and financial condition.

We have significant suppliers that are important to our sourcing activities. If a key supplier (or any company within such supplier's supply chain) experiences financial or other difficulties, this may affect its ability to supply us with materials, components or services, which could halt or delay the production of a customer's products, and/or have a material adverse impact on our operations, financial results and customer relationships. We continue to experience materials constraints from certain suppliers in both our segments, due in part to industry-wide shortages for certain electronic components. These shortages caused delays in the production of customer products, and required us to carry higher than expected levels of inventory in 2017 and 2018. Although we expect these materials constraints and resulting adverse impacts to continue in the near term, we have begun to see improvements in the availability of certain previously constrained items. Nonetheless, only minor improvements in supplier lead times are currently expected. These supply constraints may result in higher materials costs, adversely impacting our financial results if we are unable to recover such increases from our customers.

Our ability to collect our accounts receivable and achieve future sales depends, in part, on the financial strength of our customers. If any of our customers have insufficient liquidity, we could encounter significant delays or defaults in payments owed to us by such customers, or we may extend our payment terms, which could adversely impact our short-term cash flows, financial condition and/or operating results. From time to time, we have extended the payment terms applicable to certain customers, which has adversely impacted our working capital requirements, and increased our financial exposure and credit risk. In addition, customer financial difficulties or changes in demand for our customers' products may result in order cancellations and higher than expected levels of inventory, which could in turn have a material adverse impact on our operating results and working capital performance. We may not be able to return or re-sell this inventory, or we may be required to hold the inventory for a period of time, any of which may result in our having to record additional reserves for the inventory. We also may be unable to recover all of the amounts owed to us by a customer, including amounts to cover unused inventory or capital investments we incurred to support that customer's business. Furthermore, if a customer bankruptcy occurs, our profitability may be adversely impacted by our failure to collect our accounts receivable in excess of our estimated allowance for uncollectible accounts or amounts insured. Our failure to collect accounts receivable and/or the loss of one or more major customers could have an adverse effect on our operating results, financial position and cash flows.

Our business is dependent on the award of new programs. Customers may shift production between EMS providers for a number of reasons, including changes in demand for their products, pricing concessions, more favorable terms and conditions, execution or quality issues, their preference or need to consolidate their supply chain capacity or change their supply chain partners,

tax benefits, new trade policies or legislation, or consolidation among customers. Customers may also choose to increase the amount of business they outsource, insource previously outsourced business, or change the concentration or location of their EMS suppliers to better manage their supply continuity risk. These customer decisions may impact, among other items, our revenue and margins, the need for future restructuring, the level of capital expenditures and our cash flows.

While the demand environment remains volatile, driven largely by technology shifts and increased competition in our CCS segment, we remain committed to making the investments we believe are required to support our long-term objectives and to create shareholder value. These efforts include a focus on the diversification of our customer mix and product portfolios to address changing needs, including a larger emphasis on after-market services, as well as broadening our ATS segment capabilities, and continuing to expand the breadth of our JDM offerings in the areas of network switching and converged storage and servers. The costs of investments that we deem desirable may be prohibitive, however, and therefore prevent us from achieving these diversification objectives. In addition, the ramping activities associated with investments that we do make may be significant and could negatively impact our margins in the short and medium term. Simultaneously, we intend to continue to manage our costs and resources to maximize our efficiency and productivity.

### ***Recent developments:***

#### *Segment Reorganization and Segment Environment:*

During the first quarter of 2018, we completed a reorganization of our reporting structure, including our sales, operations and management systems, into two operating and reportable segments: ATS and CCS. Our prior period financial information has been reclassified to reflect the reorganized segment structure and to conform to the current presentation. The changes to our segment structure had no impact on our historical consolidated financial position, results of operations or cash flows as previously reported. See “Overview — Celestica's business” above for a description of the products, services and characteristics of each of our ATS and CCS segments.

The competitive landscape in our CCS segment remains aggressive, as demand growth continues to move from traditional enterprise network infrastructure providers to cloud-based service providers, resulting in aggressive bidding from EMS providers and increased competition from original design manufacturers as they further penetrate these markets. In addition, although we offer a broad range of services to our CCS customers, we have experienced a shift in the mix of our programs, including growth in our lower-margin fulfillment services, particularly in the first half of 2018. This shift in mix, combined with the pricing pressures described above, demand volatility, and investments we have made to grow our higher-value added after-market services, resulted in lower segment income and margins in our CCS segment for 2018 as compared to prior years. See “Operating Results” below. As a result of the high concentration of our business in the CCS marketplace, we expect continued competitive pressures, aggressive pricing and technology-driven demand shifts, as well as certain materials constraints, to continue to negatively impact our CCS businesses and overall profitability in future periods. In addition, cloud-based service providers have increased their use of products in our CCS segment in recent periods. These customers and markets are cyclically different from our traditional OEM customers, creating more volatility and unpredictability in our revenue patterns as we adjust to this shift, and additional challenges with respect to the management of our working capital requirements.

With respect to our ATS segment, see "Overview — *Celestica's business*" above for a discussion of recent adverse trends impacting our semiconductor capital equipment customers and our capital equipment business, including our estimation of a single digit million dollar operating loss in our capital equipment business for the first quarter of 2019.

#### *CCS Revenue Portfolio Review:*

See “Overview — *Celestica's business*” above for a discussion of our CCS Review, undertaken to address underperforming programs and to identify opportunities to improve our returns, as well as anticipated impacts of this review on our operations and financial results.

#### *Refinancing:*

In June 2018, we entered into an \$800 million credit agreement with Bank of America, N.A., as Administrative Agent, and the other lenders party thereto (New Credit Facility), which provides for a \$350 million term loan (June Term Loan) that matures in June 2025, and a \$450 million revolving credit facility (New Revolver) that matures in June 2023. The net proceeds from the June Term Loan were used primarily to repay all amounts outstanding under our previous credit facility (Prior Facility), which was terminated on such repayment. In November 2018, we utilized the accordion feature under our New Credit Facility to add an incremental term loan of \$250 million (November Term Loan), maturing in June 2025. The June Term Loan and the November Term Loan are collectively referred to as the New Term Loans. The Prior Facility consisted of a \$250 million term loan

(Prior Term Loan) and a \$300 million revolving credit facility (Prior Revolver), each of which was scheduled to mature in May 2020. As of December 31, 2018, an aggregate of \$598.3 million was outstanding under the New Term Loans, and other than ordinary course letters of credit (described below), \$159.0 million was outstanding under the New Revolver.

*Impakt Acquisition:*

In November 2018, we completed the acquisition of U.S.-based Impakt, a highly-specialized, vertically integrated company providing manufacturing solutions for leading OEMs in the display (including LCD and Organic Light Emitting Diode (OLED)) and semiconductor industries, as well as other markets requiring complex fabrication services, with operations in California and South Korea. The purchase price was \$325.4 million, net of cash acquired, subject to a net working capital adjustment (which has not yet been finalized). The purchase was funded with borrowings under the New Revolver, \$245.0 million of which was repaid with proceeds of the November Term Loan. Through this acquisition, we have gained significant new capabilities in large-format, complex, high-mix manufacturing solutions for multiple industries within our ATS segment, and have broadened our precision component manufacturing, full system assembly, integration and machining capabilities. In addition, we expect to benefit from Impakt's full spectrum of specialized vertical services, including its South Korea-based machining and manufacturing expertise. We recorded \$111.2 million of goodwill in connection with this acquisition. We expect to finalize our purchase price allocation in the first half of 2019.

*Atrenne Acquisition:*

On April 4, 2018, we completed the acquisition of U.S.-based Atrenne, a designer and manufacturer of ruggedized electromechanical solutions, primarily for the aerospace and defense market. Atrenne's capabilities include connectors, machining, and the thermal and mechanical design and manufacture of ruggedized chassis and enclosures, primarily for military and commercial aerospace applications. We also believe that Atrenne's capabilities in the design and manufacture of value-added mechanical solutions will expand our service offerings for our industrial customers. The purchase price for Atrenne was \$141.7 million, net of cash acquired, including a net working capital adjustment of \$3.8 million (which is subject to finalization). The purchase was funded with borrowings under the Prior Revolver. We recorded \$64.0 million of goodwill in connection with the acquisition. We expect to finalize our purchase price allocation in the first quarter of 2019, once the net working capital adjustment has been finalized.

*Toronto Real Property and Related Transactions Update:*

In September 2018, the agreement governing the sale of our Toronto real property (Property Sale Agreement), which includes our corporate headquarters and Toronto manufacturing operations, was assigned to a new purchaser (the Assignee), although the original purchaser was not released from its obligations under the Property Sale Agreement. In connection with such assignment, the Property Sale Agreement was amended to provide for the remaining proceeds of \$122 million Canadian dollars (approximately \$89 million at year-end exchange rates) to be paid in one lump sum cash payment at closing (previously, we were to receive one-half of the purchase price in the form of a two-year, interest-free, first-ranking mortgage). Other terms of the Property Sale Agreement remained unchanged. On January 21, 2019, the required municipal zoning approval was obtained. On March 7, 2019, we completed the sale of the real property and received total proceeds of approximately \$110 million, including a high density bonus and an early vacancy incentive related to the temporary relocation of our corporate headquarters. The gain on sale of this property will be recorded as recoveries through other charges (recoveries) in 2019. No net tax impact is anticipated from this sale, as the gain will be offset by the utilization of currently unrecognized tax losses. See "Liquidity — Toronto Real Property and Related Transactions" and note 8 of the 2018 AFS for a discussion of our Toronto property sale and related transactions, as well as transition and capital costs incurred in connection with related relocations.

*Restructuring Update:*

We have recorded \$45 million in restructuring charges from the commencement of our CEI (described herein) through February 13, 2019. Our restructuring actions under the CEI include, among others, actions identified as part of our CCS Review, as well as actions in response to the demand environment in our capital equipment business. We continue to estimate total restructuring charges for the CEI to be within the previously disclosed range of between \$50.0 million and \$75.0 million, however we are extending the program by six months and expect the remainder of the charges to be recorded by the end of 2019. See "Operating Results — Other charges."



### Board Member Addition:

Robert Cascella was appointed to Celestica's Board of Directors effective February 1, 2019. Mr. Cascella is currently an Executive Vice President and Executive Committee member of Royal Philips, a public Dutch multinational healthcare company. He is also the Chief Executive Officer (CEO) of Royal Philips' Diagnosis and Treatment businesses. He was formerly the President and CEO of Hologic, Inc., a public medical device and diagnostics company, from 2003 to 2013. He has also held senior leadership positions at CFG Capital, NeoVision Corporation, and Fischer Imaging Corporation.

### Share Repurchases:

Since the commencement in November 2017 of an NCIB (2017 NCIB) through its expiry on November 12, 2018, we paid an aggregate of \$95.4 million (including transaction fees) to repurchase and cancel 8.7 million subordinate voting shares. We also purchased 1.1 million subordinate voting shares in the open market during the term of the 2017 NCIB, and 1.3 million shares after its expiration (during 2018), in order to satisfy delivery obligations under our stock-based compensation plans.

In December 2018, the TSX accepted our notice to launch a new NCIB (2018 NCIB), which allows us to repurchase, at our discretion, until the earlier of December 17, 2019 or the completion of the purchases thereunder, up to approximately 9.5 million subordinate voting shares in the open market, or as otherwise permitted. We have not repurchased or canceled any subordinate voting shares under the 2018 NCIB from its commencement through February 13, 2019.

### Adoption of IFRS 15:

We adopted IFRS 15, Revenue from Contracts with Customers, effective January 1, 2018. We elected to apply the retrospective approach and as a result, have restated each of the required comparative reporting periods presented herein. A description of the impact of our transition to IFRS 15 is included in note 2 to our 2018 AFS.

## Summary of Key Operating Results and Financial Information

Our consolidated financial statements have been prepared in accordance with IFRS as issued by the IASB and accounting policies we adopted in accordance with IFRS. Such consolidated financial statements reflect all adjustments that are, in the opinion of management, necessary to present fairly our financial position as at December 31, 2018 and 2017 and the financial performance, comprehensive income and cash flows for each of the years in the three-year period ended December 31, 2018. See "Critical Accounting Policies and Estimates" below.

The following tables set forth certain key operating results and financial information for the periods indicated (in millions, except per share amounts and percentages). Financial information for 2016 and 2017 has been restated to reflect our January 1, 2018 adoption of IFRS 15.

	Year ended December 31				
	2016	2017	2018	% Change	% Change
	(restated)	(restated)		2017 v. 2016	2018 v. 2017
Revenue .....	\$ 6,046.6	\$ 6,142.7	\$ 6,633.2	2 %	8 %
Gross profit .....	429.6	418.5	430.5	(3)%	3 %
Selling, general and administrative expenses (SG&A) .....	211.1	203.2	219.0	(4)%	8 %
Other charges .....	25.5	37.0	61.0	45 %	65 %
Net earnings .....	138.3	105.5	98.9	(24)%	(6)%
Diluted earnings per share .....	\$ 0.96	\$ 0.73	\$ 0.70	(24)%	(4)%

Segment revenue\* as a percentage of total revenue:

	Year ended December 31		
	2016	2017	2018
ATS revenue (% of total revenue) .....	32%	32%	33%
CCS revenue (% of total revenue) .....	68%	68%	67%

Segment income and segment margin*:	Year ended December 31							
	2016		2017		2018			
		Segment Margin		Segment Margin		Segment Margin		Segment Margin
ATS segment	\$ 73.9	3.8%	\$ 96.8	4.9%	\$ 102.5	4.6%		
CCS segment	149.3	3.6%	120.4	2.9%	111.4	2.5%		

\* Segment performance is evaluated based on segment revenue, segment income and segment margin (segment income as a percentage of segment revenue), each of which are defined in "Operating Results — Segment income and margin" below.

	December 31 2017	December 31 2018
Cash and cash equivalents	\$ 515.2	\$ 422.0
Total assets	2,964.2	3,737.7
Borrowings under applicable term loans	187.5	598.3
Borrowings under applicable revolving credit facility	—	159.0

	Year ended December 31		
	2016	2017	2018
Cash provided by operating activities	\$ 173.3	\$ 127.0	\$ 33.1
Shares repurchased for cancellation — aggregate price (including transaction costs)	\$ 34.3	\$ 19.9	\$ 75.5
— # (in millions)	3.2	1.9	6.8
Shares repurchased for delivery under stock-based plans — aggregate price (including transaction costs)	\$ 18.2	\$ 16.7	\$ 22.4
— # (in millions)	1.6	1.4	2.1

A discussion of the foregoing information is set forth under "Operating Results" below.

*Other performance indicators:*

In addition to the key operating results and financial information described above, management reviews the following measures (which are not measures defined under IFRS)\*:

	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18
Cash cycle days:	(restated)*	(restated)*	(restated)*	(restated)*				
Days in A/R	61	57	58	58	62	57	60	62
Days in inventory	47	47	50	51	57	56	59	61
Days in A/P	(58)	(56)	(56)	(56)	(62)	(60)	(65)	(65)
Cash cycle days	50	48	52	53	57	53	54	58
Inventory turns	7.8x	7.7x	7.3x	7.2x	6.4x	6.6x	6.2x	6.0x

\* 2017 periods have been restated to reflect the adoption of IFRS 15.

	2017				2018			
	March 31	June 30	September 30	December 31	March 31	June 30	September 30	December 31
A/R Sales (in millions)	\$ 50.0	\$ 50.0	\$ 50.0	\$ 80.0	\$ 113.0	\$ 113.0	\$ 113.0	\$ 130.0
Supplier Financing* (in millions)	44.5	65.4	55.1	52.3	77.8	76.0	81.0	50.0
Total (in millions)	\$ 94.5	\$ 115.4	\$ 105.1	\$ 132.3	\$ 190.8	\$ 189.0	\$ 194.0	\$ 180.0

\* Represents A/R sold to a third party bank in connection with a customer's uncommitted supplier financing program that we joined in the fourth quarter of 2016.

Days in A/R is defined as the average A/R for the quarter divided by the average daily revenue. Days in inventory is defined as the average inventory for the quarter divided by the average daily cost of sales. Days in accounts payable (A/P) is defined as the average A/P for the quarter divided by average daily cost of sales. Cash cycle days is defined as the sum of days in A/R and days in inventory minus the days in A/P. Inventory turns is determined by dividing 365 by the number of days in inventory. A lower number of days in A/R, days in inventory, and cash cycle days, and a higher number of days in A/P and inventory turns generally reflect improved cash management performance.

A/R days increased 4 days from the fourth quarter of 2017 (Q4 2017) to 62 days for the fourth quarter of 2018 (Q4 2018) primarily due to the timing of collections. Inventory days increased 10 days from Q4 2017 to 61 days for Q4 2018 primarily due to the higher inventory levels resulting from acquisitions and a constrained materials environment, as well as requirements to support new programs. A/P days increased 9 days from Q4 2017 to 65 days in Q4 2018 primarily due to higher levels and timing of purchases, as well as the timing of payments. A/R and inventory days each increased 2 days sequentially due to the timing of collections and the impact of the Impakt acquisition, respectively.

We believe that cash cycle days (and the components thereof) and inventory turns are useful measures in providing investors with information regarding our cash management performance and are accepted measures of working capital management efficiency in our industry. These are not measures of performance under IFRS, and may not be defined and calculated in the same manner by other companies. These measures should not be considered in isolation or as an alternative to working capital as an indicator of performance.

Management also reviews other non-IFRS measures including adjusted net earnings, operating margin, adjusted ROIC and free cash flow. See "Non-IFRS measures" below.

### **Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, revenue and expenses, and the related disclosures of contingent assets and liabilities. We base our judgments, estimates and assumptions on current facts, historical experience and various other factors that we believe are reasonable under the circumstances. The economic environment could also impact certain estimates necessary to prepare our consolidated financial statements, including estimates related to the recoverable amounts used in our impairment testing of our non-financial assets (see notes 8 and 9 to our 2018 AFS), and the discount rates applied to our net pension and non-pension post-employment benefit assets or liabilities (see note 19 to our 2018 AFS). Our assessment of these factors forms the basis for our judgments on the carrying values of our assets and liabilities and the accrual of our costs and expenses. Actual results could differ materially from these estimates and assumptions. We review our estimates and underlying assumptions on an ongoing basis and make revisions as determined necessary by management. Revisions are recognized in the period in which the estimates are revised and may impact future periods as well. Significant accounting policies and methods used in the preparation of our consolidated financial statements are described in note 2 to our 2018 AFS. The following is a discussion of those accounting policies which management considers to be "critical," defined as accounting policies that management believes are both most important to the portrayal of our financial condition and results and require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain. On January 1, 2018, we adopted IFRS 9 and IFRS 15. See "Recently adopted accounting standards" in note 2 to our 2018 AFS.

**Key sources of estimation uncertainty and judgment:** We have applied significant estimates, judgment and assumptions in the following areas which we believe could have a significant impact on our reported results and financial position: our determination of the timing of revenue recognition, measures of work in progress and estimates and timing of expected returns, revenues and related costs; valuations of inventory, assets held for sale and income taxes; the amount of our restructuring charges or recoveries; the measurement of the recoverable amounts of our cash generating units (or CGUs, which are the smallest identifiable group of assets that cannot be tested individually and generate cash inflows that are largely independent of those of other assets or groups of assets), which includes estimating future growth, profitability, discount and terminal growth rates, and the fair value of our real property; our valuations of financial assets and liabilities, pension and non-pension post-employment benefit costs; employee stock-based compensation expense, provisions and contingencies; and the allocation of the purchase price and other valuations related to our business acquisitions.

We have also applied significant judgment in the following areas: the determination of our CGUs (which can be comprised of a single site, a group of sites, or a line of business) and whether events or changes in circumstances during the relevant period are indicators that a review for impairment should be conducted, the timing of the recognition of charges or recoveries associated with our restructuring actions, and the decisions and timing of our pension annuity purchases.

*Revenue recognition and deferred investment costs:*

Under IFRS 15, which we adopted on January 1, 2018, where products are custom-made to meet a customer's specific requirements, and such customer is obligated to compensate us for the work performed to date, we will recognize revenue over time as production progresses to completion, or as services are rendered. We generally estimate revenue for our work in progress based on costs incurred to date plus a reasonable profit margin for eligible products for which we do not have alternative uses. We apply significant estimates, judgment and assumptions in determining the timing of revenue recognition, measuring work in progress, and estimating the amount and timing of expected returns, revenues and related costs. Judgment is also applied in determining the recoverability of deferred investment costs, comprised of contract acquisition or fulfillment costs, and in determining the amortization period for such costs, which is based on the projected period of expected future economic benefits. We review sales and profitability forecasts to determine the likelihood of recovery, as well as applicable contractual recoverability arrangements with customers in the event volumes do not materialize. We monitor these deferred costs for potential impairment on a regular basis. Adverse changes to these assumptions may result in impairment of these costs in future periods.

*Inventory valuation:*

We procure inventory and manufacture based on specific customer orders and forecasts and value our inventory on a first-in, first-out basis at the lower of cost and net realizable value. The cost of our finished goods and work in progress includes direct materials, labor and overhead. We may require valuation adjustments to these items if actual market conditions or demand for our customers' products or services are less favorable than originally projected. The determination of net realizable value involves significant management judgment. We consider factors such as shrinkage, the aging of the inventory, our estimates of future demand for the inventory, and our contractual arrangements with customers. We attempt to utilize excess inventory in other products we manufacture or return inventory to the relevant suppliers or customers. We use future sales volume forecasts to estimate excess inventory on-hand. A change to these assumptions may impact our inventory valuation and our gross margins. Should our estimates change based on a change in circumstances, we may adjust our previous write-downs in our consolidated statement of operations in the period a change in estimate occurs.

*Assets classified as held for sale:*

Assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs of disposal, and are no longer depreciated. The determination of fair value less costs of disposal involves judgment by management of the probability and timing of disposition and the expected amount of recoveries and costs. We may engage third parties to assist in the determination of the estimated fair values less costs of disposal for assets classified as held for sale. At the end of each reporting period, we evaluate the appropriateness of our estimates and assumptions. We may require adjustments to reflect actual experience or changes in estimates.

*Income taxes:*

We record income tax expense or recovery based on taxable income earned or loss incurred in each tax jurisdiction where we operate at the enacted or substantively enacted tax rate applicable to that income or loss. In the ordinary course of business, we engage in many transactions for which the ultimate tax outcome is uncertain and therefore estimates are required for exposures related to potential and actual examinations by taxation authorities. We review these transactions and exposures and record tax liabilities for open years based on our assessment of many factors, including past experience and interpretations of tax law applied to the facts of each matter. Management periodically evaluates the positions taken in our tax returns with respect to situations in which applicable tax rules are subject to interpretation. We establish provisions related to tax uncertainties where appropriate, based on our estimate of the amount that ultimately will be paid to or received from the tax authorities. The various judgments and estimates by management in establishing provisions related to tax uncertainties significantly affect the amounts we recognize in our consolidated financial statements. The determination of tax liabilities is subjective and generally involves a significant amount of judgment. We believe that our income tax liability reflects the probable outcome of our income tax obligations based on known facts and circumstances; however, the final income tax outcome may be different from our estimates. A change to these estimates could impact our income tax provision.

We recognize deferred income tax assets to the extent we believe it is probable, based on management's estimates, that future taxable profit will be available against which the deductible temporary differences as well as unused tax losses and tax credit carryforwards can be utilized. We consider factors such as the reversal of taxable temporary differences, projected future taxable income, the character of the income tax asset, tax planning strategies, changes in tax laws and other factors. A change to these factors could impact the amount of deferred income tax assets we recognize. We review our deferred income tax assets at each reporting date and reduce them to the extent it is no longer probable that we will realize the related tax benefits.

The U.S. Tax Cuts and Jobs Act (U.S. Tax Reform) was enacted on December 22, 2017 and became effective January 1, 2018. We believe all significant one-time impacts resulting from the enactment of the U.S. Tax Reform were recorded in the fourth quarter of 2017, but we will continue to assess additional impacts, if any, as they become known due to changes in our interpretations and assumptions, as well as applicable changes in our business and additional regulatory guidance that may be issued.

*Goodwill, intangible assets and property, plant and equipment:*

We estimate the useful lives of intangible assets and property, plant and equipment based on the nature of the asset, historical experience, the projected period of expected future economic benefits to be provided by the asset, the terms of any related customer contract, and expected changes in technology. We review the carrying amounts of goodwill, intangible assets and property, plant and equipment for impairment whenever events or changes in circumstances (triggering events) indicate that the carrying amount of such assets (or the related CGU or group of CGUs) may not be recoverable. In addition to an assessment of triggering events during the year, we conduct an annual goodwill impairment assessment of our CGUs with goodwill in the fourth quarter of the year. Judgment is required in the determination of our CGUs and whether a review for impairment should be conducted.

We recognize an impairment loss when the carrying amount of an asset, CGU or group of CGUs exceeds its recoverable amount. The recoverable amount of an asset, CGU or group of CGUs is measured as the greater of its expected value-in-use and its fair value less costs of disposal. The process of determining the recoverable amount is subjective and requires management to exercise significant judgment in estimating future growth, profitability, discount and terminal growth rates, and in projecting future cash flows, among other factors. Our expected value-in-use is determined based on a discounted cash flow analysis. Determining the estimated fair value less costs of disposal requires valuations and use of appraisals. Where applicable, we engage independent brokers to obtain market prices to estimate our real property and other asset values. At each reporting date, we review for indicators that could change the estimates we used to determine the recoverable amount of the relevant assets.

*Restructuring charges:*

The recognition of restructuring charges (relating to workforce reductions, site consolidations, and costs associated with businesses we are downsizing or exiting) requires management to make certain judgments and estimates regarding the nature, timing and amounts associated with our restructuring actions. Our major assumptions include the timing of employee terminations, the measurement of termination costs, the timing and amount of lease obligations and any anticipated sublease recoveries from exited sites, and the timing of disposition and estimated fair values less costs of disposal for assets we no longer use and which are available for sale. For owned sites and equipment that are no longer in use and are available for sale, we recognize an impairment loss based on their fair value less costs of disposal, with fair value estimated based on market prices for similar assets. We may engage third parties to assist in the determination of the estimated fair values less costs of disposal for these assets. For leased sites that we intend to exit, we discount future contractual lease payments and cancellation fees, if any, less any estimated sublease recoveries, if any. To estimate future sublease recoveries, we engage independent brokers to determine the estimated tenant rents we can expect to realize. At the end of each reporting period, we evaluate the appropriateness of our restructuring charges and balances. Adjustments to the recorded amounts may be required to reflect actual experience or changes in estimates for future periods.

*Legal and other contingencies:*

We recognize a provision for loss contingencies, including legal claims, based on management's estimate of the probable outcome. Judgment is required when there is a range of possible outcomes. Management considers the degree of probability of the outcome and the ability to make a reasonable estimate of the loss. We may also use third party advisors in making our determination. The ultimate outcome, including the amount and timing of any payments required, may vary significantly from our original estimates. Potential material legal and other material contingent obligations that have not been recognized as provisions, as the outcome is remote or not probable, or the amount cannot be reliably estimated, are disclosed as contingent liabilities.

#### *Warranty:*

We offer product and service warranties to our customers. We record a provision for future warranty costs based on management's estimate of probable claims under these warranties. In determining the amount of the provision, we consider several factors including the terms of the warranty (which vary by customer, product or service), the current volume of products sold or services rendered during the warranty period, and historical warranty information. We review and adjust these estimates as necessary to reflect our experience and new information. The amount and aging of our provision will vary depending on various factors including the length of the warranty offered, the remaining life of the warranty and the extent and timing of warranty claims.

#### *Financial assets and financial liabilities:*

We review financial assets at each reporting date. Financial assets are deemed to be impaired when objective evidence resulting from one or more events subsequent to the initial recognition of the asset indicates the estimated future cash flows of the asset have decreased. We use a forward-looking expected credit loss (ECL) model in determining our allowance for doubtful accounts as it relates to trade receivables, contract assets (under IFRS 15), and other financial assets. Our allowance is based on historical experience, and includes consideration of the aging of the balances, the customer's creditworthiness, current economic conditions, expectation of bankruptcies, and political and economic volatility in the markets/location of our customers, among other factors. We measure an impairment loss as the excess of the carrying amount over the present value of the estimated future cash flows discounted using the financial asset's original discount rate, and we recognize this loss in our consolidated statement of operations. A financial asset is written off or written down to its net realizable value as soon as it is known to be impaired. We will adjust previous write-downs to reflect changes in estimates or actual experience.

We value our derivative assets and liabilities based on inputs that are either readily available in public markets or derived from information available in public markets. The inputs we use include discount rates, forward exchange rates, interest rate yield curves and volatility, and credit risk adjustments. Changes in these inputs can cause significant volatility in the fair value of our financial instruments in the short-term.

#### *Derivatives and hedge accounting:*

We enter into forward exchange contracts and swaps to hedge the cash flow risk associated with firm purchase commitments and forecasted transactions in foreign currencies that are considered highly probable and to hedge foreign-currency denominated balances. We use estimates to forecast future cash flows and the future financial position of net monetary assets or liabilities denominated in foreign currencies. We enter into interest rate swap agreements to mitigate a portion of the interest rate risk on our term loan borrowings. We use judgment in determining the amount and timing of such swap agreements. We apply hedge accounting to those hedge transactions that are considered effective. Management assesses the effectiveness of hedges by comparing actual outcomes against our estimates on a regular basis. Subsequent revisions in estimates of future cash flow forecasts, if significant, may result in the discontinuation of hedge accounting for that hedge.

#### *Pension and non-pension post-employment benefits:*

We have pension and non-pension post-employment benefit costs and liabilities that are determined from actuarial valuations. Actuarial valuations require management to make certain judgments and estimates relating to salary escalation, compensation levels at the time of retirement, retirement ages, the discount rate used in measuring the net interest on the net defined benefit asset or liability, and expected healthcare costs (as applicable). These actuarial assumptions could change from period-to-period and actual results could differ materially from the estimates originally made by management. We evaluate our assumptions on a regular basis, taking into consideration current market conditions and historical data. Market driven changes may affect the actual rate of return on plan assets compared to our assumptions, as well as our discount rates and other variables which could cause actual results to differ materially from our estimates. Changes in assumptions could impact our defined benefit pension plan valuations and our future defined benefit pension expense and required funding.

To mitigate the actuarial and investment risks of our defined benefit pension plans, we from time to time purchase annuities (using existing plan assets) from third party insurance companies for certain, or all, plan participants. The purchase of annuities by the pension plan substantially hedges the financial investment risks associated with the pension obligations. See note 19(a) to our 2018 AFS.

### *Employee stock-based compensation:*

IFRS requires grants of share-based compensation to employees to be measured at fair value and expensed in our consolidated statement of operations over the service period (generally the vesting period) of the grant. We measure the fair value of options using the Black-Scholes option pricing model. Measurement inputs include the price of our subordinate voting shares on the grant date, the exercise price of the option, and our estimates of the following: expected price volatility of our subordinate voting shares (based on weighted average historic volatility), weighted average expected life of the option (based on historical experience and general option holder behavior), and the risk-free interest rate. We adjust compensation expense to reflect the estimated number of options that we expect to vest at the end of the vesting period.

The fair value of restricted share units (RSUs) is based on the market value of our subordinate voting shares at the time of grant.

For performance share units (PSUs) that vest based on non-market performance conditions (related to the achievement of pre-determined financial targets over a specified period), the fair value is based on the market value of our subordinate voting shares at the time of grant, and our estimate of the outcome of such performance condition. We adjust the cost of these PSUs as new facts and circumstances arise; the timing of these adjustments is subject to judgment (but is generally in the final year of their three-year term) based on management's estimate of the expected level of achievement of the relevant performance conditions. For PSUs that vest based on our relative total shareholder return (TSR) performance over a three-year period, a market performance condition, the fair value is based on a Monte Carlo simulation model. The number of awards expected to vest is factored into the grant date Monte Carlo valuation. For PSU grants which vest based on a non-market performance measurement in the final year of the three-year performance period, subject to modification by a separate non-market financial target and our relative TSR performance over the three-year vesting period, the fair value of the TSR modifier is based on a Monte Carlo simulation model, and the fair value of the non-TSR-based performance measurement and modifier are based on the market value of our subordinate voting shares at the time of grant and may be adjusted in subsequent periods to reflect a change in the estimated level of achievement related to the applicable non-market performance condition. We do not adjust the grant date fair value based on the eventual number of PSUs that vest based on the level of achievement of the market performance condition. We adjust compensation expense for PSU awards that are not expected to vest because the employment conditions are not expected to be satisfied.

### *Business combinations:*

All identifiable assets and liabilities acquired in business combinations are recorded at fair value as of the acquisition date. Potential obligations for contingent consideration and other contingencies are also recorded at fair value as of the acquisition date. We record subsequent changes in the fair value of such potential obligations from the date of acquisition to the settlement date in our consolidated statement of operations.

We use judgment to determine the estimates used to value identifiable net assets and the fair value of contingent consideration and other contingencies, if applicable, at the acquisition date. We may engage third parties to determine the fair value of certain inventory, property, plant and equipment and intangible assets. We use estimates to determine cash flow projections, including the period of expected future benefit, and future growth and discount rates, among other factors, to value intangible assets and contingent consideration. The fair value of acquired tangible assets are measured by applying market, cost or replacement costs, or the income approach, as applicable, using discounted cash flows and forecasts by management.

## **Operating Results**

Financial information for 2016 and 2017 throughout this "Operating Results" section has been restated to reflect our January 1, 2018 adoption of IFRS 15.

Our annual and quarterly operating results are affected by, among other items: the level and timing of customer orders; our mix of customers and the types of products or services we provide; the rate at which, the costs associated with, and the execution of, new program wins; demand volumes and the seasonality of our business; price competition and other competitive factors; the mix of manufacturing or service value-add; manufacturing efficiency; the degree of automation used in the assembly process; the availability of components or labor; costs and inefficiencies of transferring programs between sites; program completions or losses, or customer disengagements and the timing and the margin of follow-on business or any replacement business; the impact of foreign exchange fluctuations; the performance of third-party providers; our ability to manage inventory, production location and

equipment effectively; our ability to manage changing labor, component, energy and transportation costs effectively; fluctuations in variable compensation costs; the timing of our expenditures in anticipation of forecasted sales levels; and the timing of any acquisitions and related integration costs. Significant period-to-period variations can also result from the timing of new programs reaching full production or programs reaching end-of-life, the timing of follow-on or next generation programs and/or the timing of existing programs being fully or partially transferred internally or to a competitor.

See "Overview — Overview of business environment and Recent developments" above for a discussion of recent market conditions impacting our business.

*Operating results expressed as a percentage of revenue:*

	Year ended December 31		
	2016	2017	2018
	(restated)	(restated)	
Revenue .....	100.0%	100.0%	100.0%
Cost of sales .....	92.9	93.2	93.5
Gross profit .....	7.1	6.8	6.5
SG&A .....	3.5	3.3	3.3
Research and development costs .....	0.4	0.4	0.5
Amortization of intangible assets .....	0.1	0.1	0.2
Other charges .....	0.4	0.6	0.9
Finance costs, net of refund interest income .....	—	0.2	0.4
Earnings before income tax .....	2.7	2.2	1.2
Income tax expense (recovery) .....	0.4	0.5	(0.3)
Net earnings .....	2.3%	1.7%	1.5%

*Revenue:*

Revenue of \$6.6 billion for 2018 increased 8% compared to 2017. ATS segment revenue increased 13% in 2018 compared to 2017, and CCS segment revenue increased 6% in 2018 compared to 2017.

Revenue of \$6.1 billion for 2017 increased 2% compared to 2016. CCS segment revenue increased 2% in 2017 compared to 2016, and ATS segment revenue was relatively flat in 2017 compared to 2016.

The following table sets forth revenue from our reportable segments, as well as segment revenue as a percentage of our total revenue for the periods indicated (in millions, except percentages):

	2016		2017		2018	
	\$	% of total	\$	% of total	\$	% of total
ATS revenue .....	1,954.2	32%	1,958.6	32%	2,209.7	33%
CCS revenue .....	4,092.4		4,184.1		4,423.5	
Communications .....	2,544.9	42%	2,654.6	43%	2,724.2	41%
Enterprise .....	1,547.5	26%	1,529.5	25%	1,699.3	26%
Revenue .....	\$ 6,046.6	100%	\$ 6,142.7	100%	\$ 6,633.2	100%

Our product and service volumes, revenue and operating results vary from period-to-period depending on various factors, as discussed above. See "Overview."



ATS segment revenue represented 33% of total revenue for 2018, compared to 32% for 2017 and 32% for 2016. ATS segment revenue for 2018 increased \$251.1 million (13%) compared to 2017, reflecting new aerospace and defense programs, including from our acquisition of Atrenne and our September 2017 “operate-in-place” program (described below), demand strength in our industrial business, higher year-over-year revenue in our capital equipment business, primarily from a strong first half of 2018, and to a lesser extent, revenue from our acquisition of Impakt. Revenue from our semiconductor capital equipment customers however, was weaker than expected for the second half of 2018, adversely impacted by cyclical decreases in demand, which we expect will continue throughout 2019. See “Overview — *Celestica's business*” above for a discussion of recent trends impacting our semiconductor capital equipment customers. ATS segment revenue for 2018 was also adversely impacted by a \$24 million decrease, as compared to the prior year, due to our exit from the solar panel manufacturing business (accounting for approximately 1% of our ATS segment revenue in 2017).

ATS segment revenue for 2017 was relatively flat compared to 2016, as growth in our capital equipment business and from new programs was offset by a 7% decrease in revenue due to our exit from the solar panel manufacturing business, and a decrease in revenue due to the completion of programs with one of our then-largest consumer customers during the third quarter of 2016. ATS segment revenue for 2017 benefited from a new “operate-in-place” program outsourced to us from one of our aerospace and defense customers in September 2017, as well as our November 2016 Karel acquisition.

CCS segment revenue represented 67% of total revenue for 2018, compared to 68% for 2017 and 68% for 2016. CCS segment revenue for 2018 increased \$239.4 million (6%) compared to 2017. Communications end market revenue for 2018 increased 3% compared to 2017, as increased demand and new programs (including JDM programs) were partially offset by decreased demand from certain of our legacy customers. Enterprise end market revenue for 2018 increased 11% compared to 2017, primarily driven by strong demand in our storage business. Notwithstanding the increase in CCS segment revenue in 2018 as compared to 2017, we continued to be impacted by adverse pricing pressures in this segment in 2018, and expect these adverse conditions to continue in future periods. See “Overview — Recent developments — *Segment reorganization and segment environment*” above.

CCS segment revenue for 2017 increased 2% compared to 2016. Communications end market revenue in 2017 increased 4% compared to 2016, primarily due to demand strength in certain existing programs and new program growth (including with respect to our fulfillment services and JDM programs). Although Communications revenue increased compared to 2016, we experienced slower growth rates (particularly in the second half of 2017) compared to the prior year primarily due to programs reaching their full production levels, and increased pricing pressures and late changes in demand from certain customers in 2017. Enterprise end market revenue for 2017 decreased 1% compared to 2016, as growth from new programs primarily in the first half of 2017 was more than offset by softer demand in the second half of 2017.

Although we supply products and services to over 100 customers, we depend upon a small number of customers for a substantial portion of our revenue. In the aggregate, our top 10 customers represented 70% of total revenue for 2018 (2017 — 71%; 2016 — 68%). For 2018, we had two customers that individually represented more than 10% of total revenue (2017 and 2016 — two customers). Cisco Systems and Dell Technologies accounted for 14% and 10%, respectively, of our total revenue for 2018 (2017 — Cisco Systems (18%) and Juniper Networks (13%); 2016 — Cisco Systems (19%) and Juniper Networks (11%)), in each case from our CCS segment.

Whether any of our customers individually account for more than 10% of our total revenue in any period depends on various factors affecting our business with that customer and with other customers, including overall changes in demand for our customers' products, the extent and timing of new program wins, follow-on business, program completions or losses, the phasing in or out of programs, the relative growth rate or decline of our business with our various customers, price competition and changes in our customers' supplier base or supply chain strategies, and the impact of seasonality on our business.

We are dependent to a significant degree upon continued revenue from our largest customers. We generally enter into master supply agreements with our customers that provide the framework for our overall relationship. These agreements typically do not guarantee a particular level of business or fixed pricing. Instead, we bid on a program-by-program basis and typically receive customer purchase orders for specific quantities and timing of products. There can be no assurance that revenue from any of our major customers will continue at historical levels or will not decrease in absolute terms or as a percentage of total revenue. A significant revenue decrease or pricing pressures from these or other customers, or a loss of a major customer or program, could have a material adverse impact on our business, our operating results and our financial position. Changes in the types of product or services we provide to our customers in a particular period may also adversely impact our margins and operating results for such period. For example, providing a relatively higher concentration of fulfillment services (which commenced in 2017 as

compared to prior years) negatively impacts our operating results for our CCS segment, as our fulfillment services generally have significantly lower margins than our traditional value-added services in that segment. Some of our customer agreements require us to provide specific price reductions to our customers over the term of the contracts, which has significantly impacted revenue and margins in our CCS segment. In addition, as longer-term contracts are becoming more prevalent, we anticipate that these adverse effects will increasingly impact our business in future periods.

In the EMS industry, customers may cancel contracts and volume levels can be changed or delayed. Customers may also shift business to a competitor or bring programs in-house to improve their own utilization or to adjust the concentration of their supplier base to manage supply continuity risk, or for other reasons. We cannot assure the replacement of completed, delayed, cancelled or reduced orders with new business. In addition, we cannot assure that any of our current customers will continue to utilize our services. Changes in demand, order cancellations, and changes or delays in production could have a material adverse impact on our results of operations and working capital performance, including requiring us to carry higher than expected levels of inventory. Materials constraints, primarily impacting our CCS segment (which commenced in 2017 and are expected to continue) can also cause delays in production and could have a material adverse impact on our operations and our inventory levels. In addition, in any given quarter, we can experience quality and process variances related to materials, testing or other manufacturing or supply chain activities. Although we were successful in resolving the majority of such issues that arose in 2018, the existence of these variances could have a material adverse impact on the demand for our services in future periods from any affected customers, which could in turn have a material adverse effect on our business and operating results. Order cancellations and delays could also lower our asset utilization, resulting in lower margins. Significant period-to-period changes in margins can also result if new program wins or follow-on business are more competitively priced than past programs. In addition, customers from time to time shift programs to us from other service providers, including some for lower complexity, light touch programs that are aggressively priced, which can adversely impact future operating results.

*Gross profit:*

The following table shows gross profit and gross margin (gross profit as a percentage of total revenue) for the periods indicated:

	Year ended December 31		
	2016	2017	2018
	(restated)	(restated)	
Gross profit (in millions) .....	\$ 429.6	\$ 418.5	\$ 430.5
Gross margin .....	7.1%	6.8%	6.5%

Gross profit for 2018 increased 3%, or \$12.0 million, compared to 2017. The increase in gross profit was attributable to higher revenue levels in both our CCS and ATS segments. Despite the increase in revenue for 2018, gross margin decreased from 6.8% in 2017 to 6.5% for 2018. The decrease in gross margin resulted primarily from unfavorable changes in overall program mix (including as a result of demand softness in our capital equipment business), increased pricing pressures primarily in our CCS segment, approximately \$10 million in higher provisions we recorded for certain aged inventory during 2018 (Inventory Provisions), and the recognition of a \$1.6 million fair value adjustment with respect to the inventory acquired from Atrenne (Atrenne FVA) through cost of sales in the second quarter of 2018. The Inventory Provisions for 2018 of \$13.5 million (2017 — \$3.3 million) resulted primarily from an increase in our overall aged inventory levels, more than half of which related to customers in our ATS segment. These negative impacts more than offset the increase in gross profit in 2018 as compared to 2017 described above.

Gross profit for 2017 decreased 3% compared to 2016. Gross margin decreased from 7.1% in 2016 to 6.8% in 2017. Gross profit and gross margin for 2017 were negatively impacted by unfavorable changes in program mix, increased pricing pressures and higher ramping costs, offset in part by margin improvements in our ATS segment. During 2017, our CCS segment faced increased pricing pressures, and was also negatively impacted by a higher concentration than in 2016 of new programs, including fulfillment services, that contributed significantly lower gross profit than our historical full-service traditional EMS programs. We also incurred additional ramping costs with respect to new programs, including aerospace and defense programs, as well as programs that required the establishment of infrastructures in multiple jurisdictions. Gross profit and gross margin attributable to our ATS segment businesses in 2017 increased compared to the prior year, as a result of increases in each of our semiconductor and former solar businesses (the latter as a result of lower provisions recorded in 2017), offset in part by the completion of consumer programs which benefited gross margin in 2016. The gross margin for our former solar business was

negatively impacted in 2016 by higher provisions (accounting for 15 basis points in 2016), primarily to write-down the carrying value of our solar panel inventory to then-recoverable amounts).

In general, multiple factors cause gross margin to fluctuate including, among others: volume and mix of products or services; higher/lower revenue concentration in lower gross margin products and businesses; pricing pressures; contract terms and conditions; production management; utilization of manufacturing capacity; changing material and labor costs, including variable labor costs associated with direct manufacturing employees; manufacturing and transportation costs; start-up and ramp-up activities; new product introductions; disruption in production at individual sites, including as a result of program transfers; cost structures at individual sites; foreign exchange volatility; and the availability of components and materials. Our gross profit and SG&A (discussed below) are also impacted by the level of variable compensation expense (including awards under our incentive and stock-based compensation plans) we record in each period.

*Selling, general and administrative expenses:*

SG&A for 2018 of \$219.0 million (3.3% of total revenue) increased \$15.8 million compared to \$203.2 million (3.3% of total revenue) for 2017, primarily due to higher variable expenses, including \$3.2 million in higher employee stock-based compensation expense (described below) in 2018, and \$10.5 million in SG&A attributable to acquisitions completed in 2018.

SG&A for 2017 of 203.2 million (3.3% of total revenue) decreased \$7.9 million compared to \$211.1 million (3.5% of total revenue) for 2016, primarily due to \$2.5 million of lower foreign exchange losses, \$2.5 million of lower stock-based compensation expense in 2017 (discussed below), and lower variable expenses, including costs associated with our Organizational Design (OD) initiative incurred in 2017 compared to 2016. As part of the wind down of our solar panel business, we recorded a provision of \$0.5 million in SG&A expenses during the second quarter of 2017 to write down our solar accounts receivable, primarily as a result of a solar customer's bankruptcy.

*Segment income and margin:*

Segment performance is evaluated based on segment revenue (set forth above), segment income and segment margin (segment income as a percentage of segment revenue). Revenue is attributed to the segment in which the product is manufactured or the service is performed. Segment income is defined as a segment's net revenue less its cost of sales and its allocable portion of selling, general and administrative expenses and research and development expenses (collectively, Segment Costs). Identifiable Segment Costs are allocated directly to the applicable segment while other Segment Costs, including indirect costs and certain corporate charges, are allocated to our segments based on an analysis of the relative usage or benefit derived by each segment from such costs. Segment income excludes finance costs (net of refund interest, when applicable), amortization of intangible assets (excluding computer software), employee stock-based compensation expense, other solar charges, the Atrenne FVA (recognized in the second quarter of 2018), and net restructuring, impairment and other charges (recoveries) (each of which exclusions is quantified herein) as these costs and charges are managed and reviewed by our CEO at the company level. Net restructuring, impairment and other charges (recoveries) include, in applicable periods, restructuring charges (recoveries), impairment charges (recoveries), acquisition-related consulting, transaction and integration costs (Acquisition Costs), legal settlements (recoveries), Toronto transition costs (recoveries), and the accelerated amortization of unamortized deferred financing costs (as described under "Non-IFRS measures" below). See the reconciliation of segment income to our earnings before income taxes in note 25 to the 2018 AFS. Our segments do not record inter-segment revenue. Although segment income and segment margin are used to evaluate the performance of our segments, we may incur operating costs in one segment that may also benefit the other segment. Our accounting policies for segment reporting are the same as those applied to the company as a whole.

The following table shows segment income (in millions) and segment margin for the periods indicated:

Segment income and segment margin:	Year ended December 31							
	2016		2017		2018			
		Segment Margin		Segment Margin		Segment Margin		Segment Margin
ATS segment .....	\$ 73.9	3.8%	\$ 96.8	4.9%	\$ 102.5	4.6%		
CCS segment .....	149.3	3.6%	120.4	2.9%	111.4	2.5%		

ATS segment income for 2018 increased \$5.7 million (6%) compared to 2017. ATS segment margin decreased from 4.9% in 2017 to 4.6% in 2018. The increase in ATS segment income for 2018 was primarily due to higher ATS segment revenue in 2018,

as described above, including higher year-over-year revenue in our capital equipment business, primarily during the first half of 2018. The decrease in ATS segment margin was attributable primarily to the weaker than expected demand from our capital equipment business (primarily with respect to our semiconductor customers) in the second half of 2018, resulting in operating losses in this business in Q4 2018 in the mid-single digit million dollar range, due to the high level of associated fixed costs, which more than offset segment margin improvement from acquisitions and new ATS programs in other businesses. We expect the demand softness in our capital equipment business to continue into 2019, and have estimated a single digit million dollar operating loss in this business for the first quarter of 2019.

ATS segment income for 2017 increased \$22.9 million (31%) compared to 2016. ATS segment margin increased from 3.8% in 2016 to 4.9% in 2017. Despite ATS revenue for 2017 being relatively flat compared to 2016, ATS segment income and margin for 2017 increased primarily due to increases in each of our capital equipment and former solar businesses (the latter as a result of approximately \$10 million in lower inventory provisions recorded in 2017 compared to 2016), offset in part by the completion of consumer programs which benefited segment margin in 2016.

CCS segment income for 2018 decreased \$9.0 million (7%) compared to 2017. CCS segment margin decreased from 2.9% in 2017 to 2.5% in 2018. Despite the increase in our overall CCS segment revenue for 2018 as compared to 2017, CCS segment income and margin for 2018, as compared to 2017, were negatively impacted by increased pricing pressures from some of our significant customers, unfavorable changes in program mix, including a higher concentration of lower margin business compared to the prior year (particularly in the first quarter of 2018), and the Inventory Provisions recorded in 2018 (discussed above). These decreases were partially offset by CCS segment income contributions from our JDM business in 2018 as compared to the prior year. The performance of our CCS segment in recent periods resulted in the implementation of our CEI in October 2017 (and related restructuring actions) in order to reduce our cost structure (see "Other charges" below). In addition, as part of our strategy to diversify our business and improve shareholder returns, we commenced the CCS Review in the second half of 2018, with the intention of addressing under-performing programs. See "Overview — Celestica's business" above for a discussion of our CCS Review, as well as anticipated impacts of this review on our operations and financial results.

CCS segment income for 2017 decreased \$28.9 million (19%) compared to 2016. CCS segment margin decreased from 3.6% in 2016 to 2.9% in 2017. Despite the increase in our CCS segment revenue for 2017 compared to 2016, CCS segment income and margin for 2017, as compared to 2016, were negatively impacted by unfavorable changes in program mix, increased pricing pressures and higher ramping costs. During 2017, our CCS segment faced increased pricing pressures, and was also negatively impacted by a higher concentration than in 2016 of new programs, including fulfillment services, that contributed significantly lower gross profit than our historical full-service traditional EMS programs.

*Stock-based compensation:*

Our employee stock-based compensation expense, which excludes deferred share unit (DSU) expense, varies each period. The portion of our expense that relates to performance-based compensation generally varies depending on our level of achievement of pre-determined performance goals and financial targets. In 2018, we recorded employee stock-based compensation expense of \$14.7 million (2017 — \$14.6 million; 2016 —\$15.0 million) in cost of sales and \$18.7 million (2017 — \$15.5 million; 2016 — \$18.0 million) in SG&A.

The following table shows employee stock-based compensation for the periods indicated:

	Year ended December 31		
	2016	2017	2018
Employee stock-based compensation (in millions) .....	\$ 33.0	\$ 30.1	\$ 33.4

Compared to 2017, our employee stock-based compensation expense for 2018 increased by \$3.3 million, reflecting \$2.4 million in higher reversals we recorded during 2017 in connection with forfeited awards, and additional expenses related to new grants made during 2018 as compared to 2017.

Compared to 2016, our employee stock-based compensation expense for 2017 decreased by \$2.9 million, (predominately through SG&A), primarily due to lower adjustments recorded in 2017 to reflect the reduced level of achievement related to our performance based compensation. In addition, the increase in forfeited awards during 2017 decreased our stock-based compensation by a further \$2.4 million in 2017, which offset a \$2.0 million increase in the accelerated recognition of stock-based compensation expense for employees eligible for retirement in 2017.

Management currently intends to settle all outstanding RSUs and PSUs with subordinate voting shares purchased in the open market by a broker or by issuing subordinate voting shares from treasury. Accordingly, we have accounted for these share unit awards as equity-settled awards. See “Cash requirements” below.

In 2018, we recorded DSU expense of \$2.0 million (2017 — \$2.2 million; 2016 — \$2.1 million) through SG&A. During 2017, we paid \$1.7 million in cash to a director that resigned in July 2017 to settle his outstanding DSUs, and we settled the outstanding DSUs of a director that resigned in November 2017 with 14,098 subordinate voting shares that we purchased in the open market, in each case in accordance with the provisions of the Directors' Share Compensation Plan.

*Other charges:*

(i) Restructuring charges:

We have recorded the following restructuring charges for the periods indicated (in millions):

	Year ended December 31		
	2016	2017	2018
Restructuring charges.....	\$ 31.9	\$ 28.9	\$ 35.4

We perform ongoing evaluations of our business, operational efficiency and cost structure, and implement restructuring actions as we deem necessary. In connection therewith, we are currently implementing restructuring actions under the CEI, including actions related to our CCS Review and anticipated continued demand softness in our capital equipment business. This initiative includes reductions to our workforce, as well as the potential consolidation of certain sites to better align capacity and infrastructure with current and anticipated customer demand, related transfers of customer programs and production, re-alignment of business processes, management reorganizations, and other associated activities. We continue to estimate total restructuring charges for the CEI to be within the previously disclosed range of between \$50.0 million and \$75.0 million, however we are extending the program by six months and expect the remainder of the charges to be recorded by the end of 2019. We have recorded \$43.4 million in restructuring charges from the commencement of our CEI through the end of 2018, including the \$35.4 million of restructuring charges recorded in 2018. The majority of the charges through December 31, 2018 pertained to workforce reductions at sites associated primarily with our CCS segment.

We recorded restructuring charges of \$35.4 million in 2018, consisting of cash charges of \$35.2 million, primarily for consultant costs, employee and lease termination costs, and non-cash charges of \$0.2 million, representing losses on the sale of surplus equipment. Our restructuring provision at December 31, 2018 was \$10.3 million, the majority of which we currently expect to pay in 2019. All cash outlays have been, and the balance is expected to be, funded with cash on hand.

We recorded restructuring charges of \$28.9 million in 2017, consisting of cash charges of \$25.1 million, comprised of employee termination costs resulting from the implementation of our previous OD and Global Business Services (GBS) initiatives (each of which were completed in 2017, and pertained to both of our segments), as well as from the rationalization of our operations in the third quarter of 2017, and \$8.0 million of charges in connection with our CEI (described above) in the fourth quarter of 2017, as well as net non-cash impairment charges of \$3.8 million to write down the carrying value of our solar panel manufacturing equipment (in our ATS segment) to its fair value less costs of disposal, based on executed sales agreements (2017 Solar Write-down). Our restructuring provision at December 31, 2017 was \$12.7 million, comprised primarily of employee termination costs, which were paid with cash on hand.

Our aggregate restructuring charges of \$31.9 million for 2016 consisted of cash charges of \$10.7 million, primarily for employee termination costs relating to our GBS and OD initiatives, as well as our solar panel manufacturing and other exited operations, and non-cash charges of \$21.2 million, to write down certain plant assets and equipment to recoverable amounts,

including \$19.0 million related to our solar panel manufacturing equipment at our two locations (2016 Solar Write-down). The majority of these charges were associated with our ATS segment. See note 4 of our 2018 AFS for a description of our decision in the fourth quarter of 2016 to exit the solar panel manufacturing business, and associated write-downs of assets. Our restructuring provision at December 31, 2016 was \$6.6 million, comprised primarily of employee termination costs, which were all paid with cash on hand.

We may also propose additional future restructuring actions or divestitures as a result of changes in our business, the marketplace and/or our exit from less profitable, under-performing, non-core or non-strategic operations. In addition, an increase in the frequency of customers transferring business to our EMS competitors, changes in the volumes they outsource, pricing pressures, or requests to transfer their programs among our sites or to lower-cost locations, may also result in our taking future restructuring actions. We may incur higher operating expenses during periods of transitioning programs within our network or to our competitors. Any such restructuring activities, if undertaken at all, could adversely impact our operating and financial results, and may require us to further adjust our operations.

The recognition of restructuring charges requires us to make certain judgments and estimates regarding the nature, timing and amounts associated with our restructuring actions. See note 2(m) to our 2018 AFS.

(ii) Asset impairment:

We review the carrying amounts of goodwill, intangible assets and property, plant and equipment whenever events or changes in circumstances (triggering events) indicate that the carrying amount of such assets (or the related CGU or group of CGUs) may exceed their recoverable amount. If any such indication exists, we test the carrying amount of such assets or CGUs for impairment. In addition to an assessment of triggering events during the year, we conduct an annual goodwill impairment assessment (Annual Impairment Assessment) of our CGUs with goodwill in the fourth quarter of the year to correspond with our annual planning cycle. Judgment is required in the determination of our CGUs and whether events or changes in circumstances during the year are indicators that a review for impairment should be conducted. We recognize an impairment loss when the carrying amount of an asset, CGU or a group of CGUs exceeds its recoverable amount, which is measured as the greater of its expected value-in-use and its fair value less costs of disposal. We did not identify any triggering event during the course of 2018 indicating that the carrying amount of our assets or CGUs may not be recoverable. In the fourth quarter of 2018, we performed our Annual Impairment Assessment of our CGUs with goodwill and determined that there was no goodwill impairment as the recoverable amount of such CGUs exceeded their respective carrying values as of December 31, 2018.

We did not identify any triggering event during the course of 2017 indicating that the carrying amount of our assets or CGUs may not be recoverable, other than with respect to our exit from the solar panel manufacturing business. In connection therewith, we recorded the 2017 Solar Write-down (through restructuring charges). In the fourth quarter of 2017, we performed our Annual Impairment Assessment of our CGUs with goodwill and determined that there was no impairment as the recoverable amount of such CGUs exceeded their respective carrying values as of December 31, 2017.

We did not identify any triggering event during the course of 2016 indicating that the carrying amount of our assets or CGUs may not be recoverable, other than the 2016 Solar Write-down (recorded through restructuring charges). In the fourth quarter of 2016, we performed our Annual Impairment Assessment of our CGUs with goodwill and determined that there was no impairment as the recoverable amount of such CGUs exceeded their respective carrying values as of December 31, 2016.

The process of determining the recoverable amount of an asset, CGU or group of CGUs is subjective and requires management to exercise significant judgment in estimating future growth, profitability, and discount and terminal growth rates, among other factors. Where applicable, including with respect to the 2017 Solar Write-down and the 2016 Solar Write-down, we engage independent brokers to obtain market prices to estimate our real property and other asset values. The assumptions used in each of our 2017 and 2016 interim impairment assessments were determined based on past experiences adjusted for expected changes in future conditions. See note 9 of our 2018 AFS for a discussion of how we determine our cash flow projections for our impairment assessments, as well as the cash flow projection periods, growth rates, and discount rates used in our Annual Impairment Assessments for each of 2018, 2017 and 2016.

Our goodwill balance is allocated to the following CGUs (in millions):

	December 31		
	2016	2017	2018
Capital equipment <sup>(1)</sup> .....	\$ 19.5	\$ 19.5	\$ 130.7
A&D <sup>(2)</sup> .....	3.7	3.7	3.7
Atrenne <sup>(3)</sup> .....	—	—	64.0
	<u>\$ 23.2</u>	<u>\$ 23.2</u>	<u>\$ 198.4</u>

- (1) Consists of: (i) in 2018, \$111.2 million of goodwill attributable to our acquisition of Impakt, and \$19.5 million attributable to a prior acquisition (Prior Goodwill); and (ii) in 2017 and 2016, the Prior Goodwill.
- (2) Consists of \$3.7 million of goodwill attributable to our acquisition of Karel completed in 2016.
- (3) Consists of \$64.0 million of goodwill attributable to our acquisition of Atrenne completed in 2018.

As part of our goodwill assessment, we also perform sensitivity analyses for the relevant CGUs in order to identify the impact of changes in key assumptions, including projected growth rates, profitability, and discount and terminal growth rates. We did not identify any key assumptions where a reasonable possible change would result in material impairments to the above goodwill balances in any of 2016, 2017 or 2018. Impairment assessments inherently involve judgment as to assumptions about expected future cash flows and the impact of market conditions on those assumptions. Future events and changing market conditions may impact our assumptions as to prices, costs or other factors that may result in changes in our estimates of future cash flows. Failure to realize the assumed revenues at an appropriate profit margin of a CGU could result in impairment losses in such CGU in future periods.

(iii) Pension annuity purchases:

In March 2017, the Trustees of our U.K. Main pension plan entered into an agreement with a third party insurance company to purchase an annuity for participants in such plan who have retired. The purchase of this annuity resulted in a non-cash loss of \$17.0 million which we recorded in other comprehensive income (OCI) and simultaneously re-classified to deficit during the first quarter of 2017. In April 2017, the Trustees of our U.K. Supplementary pension plan entered into an agreement with a third party insurance company to purchase an annuity for all participants of this plan, all of whom are retired. The purchase of this annuity resulted in a non-cash loss of \$1.9 million, which we recorded during the second quarter of 2017 in other charges in our consolidated statement of operations, as we anticipate winding up this plan during the first half of 2019 (see note 16 of our 2018 AFS). In June 2018, the Trustees of the U.K. Main pension plan entered into an agreement with a third party insurance company to purchase an annuity for participants in such plan who have not yet retired. The purchase of this annuity resulted in a non-cash loss of \$63.3 million during the second quarter of 2018 which we recorded in OCI and simultaneously re-classified to deficit. The cost of the annuities are generally subject to true-up adjustments, and we may be required to pay additional premium amounts to the insurance company after completion of data verification of the participants.

(iv) Toronto transition costs:

In 2018, we recorded \$13.2 million of such transition costs (2017 — \$1.6 million), consisting primarily of utility costs related to idle premises, depreciation charges and personnel costs incurred in the operation of duplicate production lines in advance of the transition, duplicate rent expenses, and relocation costs. See "Liquidity — Toronto Real Property and Related Transactions" below for a discussion of the sale of our Toronto real property and related relocations, including transition and capital costs incurred through December 31, 2018 and expected in connection therewith. See "Recent developments — *Toronto Real Property and Related Transactions Update*" above for a discussion of the consummation of this transaction.

(v) Accelerated amortization of unamortized deferred financing costs:

During the second quarter of 2018, we recorded a \$1.2 million charge to accelerate the amortization of unamortized deferred financing costs related to the extinguishment of the Prior Facility in June 2018.

(vi) Other:

During 2018, we recorded \$11.0 million (2017 — \$4.5 million; 2016 — \$1.4 million) in Acquisition Costs. See note 3 of our 2018 AFS. Additionally, during 2017 and 2016, we received recoveries of damages of \$1.1 million and \$12.0 million, respectively, in connection with the settlement of class action lawsuits in which we were a plaintiff, related to certain purchases we made in prior periods. These recoveries were partially offset by costs we recorded in each year for unrelated legal matters.

*Refund interest income in 2016:*

In 2016, we received refund interest income totaling \$14.3 million in connection with the resolution of certain previously disputed tax matters. See “Income taxes” below.

*Income taxes:*

For 2018, we had a net income tax recovery of \$17.0 million on earnings before tax of \$81.9 million, compared to a net income tax expense of \$27.6 million on earnings before tax of \$133.1 million for 2017 and a net income tax expense of \$24.7 million on earnings before tax of \$163.0 million for 2016.

Our net income tax recovery for 2018 of \$17.0 million was favorably impacted by the recognition of \$3.7 million and \$49.6 million of previously unrecognized deferred tax assets in our U.S. group of subsidiaries as a result of our acquisitions of Atrenne and Impakt, respectively (the benefit pertaining to Impakt is referred to as the Impakt Benefit), which partially offset the \$56.6 million in net deferred tax liabilities that arose in connection with such acquisitions, as well as the reversal of \$6.0 million of previously accrued Mexican taxes (described below). These favorable impacts were offset, in part, by adverse taxable foreign exchange impacts resulting from the weakening of the Malaysian ringgit and Chinese renminbi relative to the U.S. dollar, our functional currency (Currency Impacts). Our functional and reporting currency is the U.S. dollar; however, our income tax expense is based primarily on taxable income determined in the currency of the country of origin. As a result, foreign currency translation differences impact our income tax expense from period to period. During the second quarter of 2018, we received a favorable conclusion to our application for a bi-lateral advance pricing arrangement (BAPA) between the United States and Mexican tax authorities, and reversed \$6.0 million of Mexican income taxes previously accrued to reflect the approved BAPA terms.

Our net income tax expense for 2017 of \$27.6 million was favorably impacted by the recognition of a \$4.3 million deferred income tax benefit (Solar Benefit) related to our solar assets (discussed below), as well as taxable foreign exchange benefits resulting from the strengthening of the Malaysian ringgit and Chinese renminbi relative to the U.S. dollar, which was offset in part by \$4.0 million in deferred income tax expense related to taxable temporary differences associated with the then-anticipated repatriation of undistributed earnings from certain of our Chinese subsidiaries, and a \$2.0 million deferred income tax expense related to recently enacted U.S. Tax Reform (discussed below). In connection with our exit from the solar panel manufacturing business, we withdrew one of our tax incentives in Thailand (which related solely to such operations) during the second quarter of 2017. The withdrawal of this incentive allowed us to apply tax losses arising from the disposition of our solar assets against other taxable profits in Thailand, resulting in the recognition of the Solar Benefit in 2017 and ultimately realized in 2018.

The U.S. Tax Reform was enacted on December 22, 2017 and became effective January 1, 2018. We believe that we recorded all significant one-time impacts resulting from enactment of the U.S. Tax Reform in the fourth quarter of 2017 (consisting of a non-cash increase to our deferred income tax expense of \$2.0 million), but will continue to assess additional impacts, if any, throughout 2019 as they become known due to changes in our interpretations and assumptions, as well as applicable changes in our business and additional regulatory guidance that may be issued. No significant amounts resulting from the U.S. Tax Reform were recorded in 2018. Based on currently available information, we estimate that the U.S. Tax Reform may have an annual adverse impact on our tax expense of approximately \$1 million starting in 2019.

Our net income tax expense for 2016 of \$24.7 million was favorably impacted by a reversal of provisions previously recorded for tax uncertainties related to the final reassessments and settlement of tax accounts in connection with the resolution of a transfer pricing matter for one of our Canadian subsidiaries. In connection therewith, we recorded aggregate income tax recoveries of \$45 million Canadian dollars (approximately \$34 million at the exchange rates at the time of recording), as well as aggregate refund interest income of \$14.3 million. Our net income tax expense for 2016 was negatively impacted by withholding taxes of \$1.5 million pertaining to the repatriation of \$50.0 million from a U.S. subsidiary, deferred income tax expense of \$8.0 million related to taxable temporary differences associated with the then-anticipated repatriation of undistributed earnings from certain of our Chinese subsidiaries, as well as adverse Currency Impacts of \$7.3 million. There was no tax impact recorded in



2016 associated with the \$21.2 million in non-cash impairment charges (recorded through restructuring), however, as discussed above, we recorded the Solar Benefit of \$4.3 million in 2017, which was ultimately realized in 2018.

We conduct business operations in a number of countries, including countries where tax incentives have been extended to encourage foreign investment or where income tax rates are low. Our effective tax rate can vary significantly from period to period for various reasons, including as a result of the mix and volume of business in various tax jurisdictions, and in jurisdictions with tax holidays and tax incentives that have been negotiated with the respective tax authorities (see discussion below). Our effective tax rate can also vary as a result of restructuring charges, foreign exchange fluctuations, operating losses, cash repatriations, certain tax exposures, the time period in which losses may be used under tax laws and whether management believes it is probable that future taxable profit will be available to allow us to recognize deferred income tax assets.

Certain countries in which we do business grant tax incentives to attract and retain our business. Our tax expense could increase significantly if certain tax incentives from which we benefit are retracted. A retraction could occur if we fail to satisfy the conditions on which these tax incentives are based, or if they are not renewed or replaced upon expiration. Our tax expense could also increase if tax rates applicable to us in such jurisdictions are otherwise increased, or due to changes in legislation or administrative practices. Changes in our outlook in any particular country could impact our ability to meet the required conditions.

We have multiple income tax incentives in Thailand with varying exemption periods. These incentives initially allow for a 100% income tax exemption (including distribution taxes), which after eight years transition to a 50% income tax exemption for the next five years (excluding distribution taxes). Upon full expiry of each of the incentives, taxable profits associated with such expired tax incentives become fully taxable. As a result of our exit from the solar panel manufacturing business, we withdrew our tax incentive related to our solar panel manufacturing operations in Thailand during the second quarter of 2017 (see above). One of our remaining three Thailand tax incentives expires in 2019, another expires in 2020, and the third incentive will transition to the 50% exemption in 2022, and expire in 2027. Upon expiry of the first tax incentive in 2019, we estimate an additional annual tax expense of approximately \$1.5 million based on current levels of profit, without accounting for the potential to shift certain Thailand production to incentives that do not expire in 2019.

In certain jurisdictions, primarily in the Americas and Europe, we currently have significant net operating losses and other deductible temporary differences, which we expect will be used to reduce taxable income in these jurisdictions in future periods, although not all are currently recognized as deferred tax assets.

We develop our tax filing positions based upon the anticipated nature and structure of our business and the tax laws, administrative practices and judicial decisions currently in effect in the jurisdictions in which we have assets or conduct business, all of which are subject to change or differing interpretations, possibly with retroactive effect. We are subject to tax audits of historical information by tax authorities in various jurisdictions which could result in additional tax expense in future periods relating to prior results. Reviews by tax authorities generally focus on, but are not limited to, the validity of our inter-company transactions, including financing and transfer pricing policies which generally involve subjective areas of taxation and a significant degree of judgment. Any such increase in our income tax expense and related interest and/or penalties could have a significant adverse impact on our future earnings and future cash flows.

In 2017, the Brazilian Ministry of Science, Technology, Innovation and Communications (MCTIC) issued assessments seeking to disqualify certain amounts of research and development (R&D) expenses for the years 2006 to 2009, which entitled our Brazilian subsidiary (which ceased operations in 2009) to charge reduced sales tax levies to its customers. The assessments against our Brazilian subsidiary (including interest and penalties) total approximately 39 million Brazilian real (approximately \$10 million at year-end exchange rates) for such years. Although we cannot predict the outcome of this matter, we believe that our R&D activities for the period are supportable, and it is probable that our position will be sustained upon full examination by the appropriate Brazilian authorities and, if necessary, upon consideration by the Brazilian judicial courts. Our position is supported by our Brazilian legal advisers.

The successful pursuit of assertions made by any taxing authority could result in our owing significant amounts of tax, interest and possibly penalties. We believe we adequately accrue for any probable potential adverse tax ruling. However, there can be no assurance as to the final resolution of any claims and any resulting proceedings. If any claims and any ensuing proceedings are determined adversely to us, the amounts we may be required to pay could be material, and could be in excess of amounts accrued.

### *Net earnings:*

Net earnings for 2018 decreased \$6.6 million compared to 2017. The decrease was primarily due to \$24.0 million in higher other charges (primarily restructuring charges, Acquisition Costs and Toronto transition costs), \$14.3 million in higher finance costs, (see "Liquidity — *Cash provided by (used in) financing activities*" below) and \$6.5 million in higher amortization of intangibles in 2018 as compared to the prior year, offset in part by \$44.6 million in lower income taxes in 2018 compared to 2017 (primarily due to the \$49.6 million Impakt Benefit).

Net earnings for 2017 decreased \$32.8 million compared to 2016. The decrease was primarily due to lower gross profit in 2017, as well as the receipt of legal recoveries (\$12.0 million) and refund interest income (\$14.3 million) that benefited 2016 compared to 2017.

### *Acquisition Activity and Program Transfer:*

In November 2016, we acquired the business assets of Karel. The Karel acquisition supported our strategy to accelerate our growth in the aerospace and defense market through the addition of value-add capabilities and services. In 2018, we completed the acquisitions of Atrenne and Impakt. See "Overview — Recent developments" above. Our acquisitions of Karel, Atrenne and Impakt pertain to our ATS segment.

In September 2017, one of our existing aerospace and defense customers outsourced certain operations to us under a 10-year "operate-in-place" agreement, pursuant to which we provide manufacturing and after-market repair services for electromechanical and electronic assemblies across a wide array of technologies at such customers' site. This agreement further expanded our relationship with this customer, enhanced our ability to provide end-to-end product lifecycle solutions to our customers, and supported our strategy of growing our aerospace and defense business.

We may, at any time, be engaged in ongoing discussions with respect to possible acquisitions or strategic transactions that could expand our revenue base and/or service offerings, increase our penetration in various industries, establish strategic relationships with new or existing customers, enhance our competitiveness, and/or enhance our global supply chain network. There can be no assurance that any of these discussions will result in a definitive purchase agreement and, if they do, what the terms or timing of any such agreement would be. There can also be no assurance that any acquisition or other strategic transactions will be successfully integrated or will generate the returns we expect. We may fund acquisitions from cash on hand, third-party borrowings, the issuance of securities, or a combination thereof.

## **Liquidity and Capital Resources**

### **Liquidity**

The following tables set forth key liquidity metrics for the periods indicated (in millions):

	December 31		
	2016	2017	2018
Cash and cash equivalents .....	\$ 557.2	\$ 515.2	\$ 422.0
Borrowings under credit facility .....	227.5	187.5	757.3

	Year-ended December 31		
	2016	2017	2018
	(restated)*	(restated)*	
Cash provided by operating activities .....	\$ 173.3	\$ 127.0	\$ 33.1
Cash used in investing activities .....	(64.0)	(89.3)	(545.6)
Cash generated from (used in) financing activities .....	(97.4)	(79.7)	419.3
Changes in non-cash working capital items (included in operating activities above):			
A/R .....	\$ (134.6)	\$ (6.3)	\$ (155.4)
Inventories .....	(61.5)	(139.6)	(224.0)
Other current assets .....	(5.3)	(2.0)	7.6
A/P, accrued and other current liabilities and provisions .....	75.4	51.8	227.0
Working capital changes .....	<u>\$ (126.0)</u>	<u>\$ (96.1)</u>	<u>\$ (144.8)</u>

\* Restated to reflect the impact of our adoption of IFRS 15 as of January 1, 2018 on net earnings and changes in non-cash working capital.

*Cash provided by operating activities:*

In 2018, we generated \$33.1 million of cash from operating activities compared to \$127.0 million in 2017. The decrease of \$93.9 million was primarily due to a \$48.7 million increase in working capital requirements and \$51.2 million in lower earnings before income taxes in 2018 as compared to 2017. Higher working capital requirements for 2018 as compared to the prior year were driven primarily by increases in accounts receivable (\$149.1 million) and inventory (\$84.4 million) balances, offset in part by increases in accounts payable balances (\$175.2 million). Although part of the \$84.4 million in additional inventory in 2018 compared to 2017 was required to support new program ramps, we experienced demand reductions from certain of our customers in each of our segments, as well as materials constraints primarily from CCS segment suppliers during 2018, each of which resulted in us carrying higher than expected levels of inventory at December 31, 2018 compared to 2017. We anticipate that these market conditions will continue to adversely impact us in 2019. The increases in accounts receivable for 2018 as compared to 2017 generally reflect the higher amounts and timing of revenue earned during 2018. The increase in accounts payable reflects increased inventory purchases during 2018.

In 2017, we generated \$127.0 million of cash from operating activities compared to \$173.3 million in 2016. The decrease was primarily due to the income tax refund of \$52 million related to the resolution of certain tax matters we received in the fourth quarter of 2016 (See “Operating results — Income taxes” above), and the decrease in net earnings in 2017 as compared to 2016, offset in part by \$29.9 million in lower working capital requirements in 2017 as compared to 2016. Lower working capital requirements in 2017 were primarily due to improvements in A/R from the prior year (\$128.3 million), offset in part by higher inventory levels (\$78.1 million). Cash generated from accounts receivable improved compared to 2016, primarily due to lower revenue levels in the fourth quarter of 2017 compared to the same period in 2016, as well as \$30.0 million of additional accounts receivable sold under our A/R sales program in 2017 compared to 2016, which we used as an alternative to drawing on our Prior Revolver. Our inventory levels increased compared to 2016, in part to support our new program ramps, but also as a result of demand volatility in our CCS segment, including late changes from certain customers, as well as materials constraints throughout 2017, all of which resulted in us carrying higher than expected levels of inventory at December 31, 2017 as compared to 2016.

From time to time, we extend payment terms applicable to certain customers, and/or provide longer payment terms when deemed commercially reasonable. Longer payment terms, which have become more prevalent, could adversely impact our working capital requirements, and increase our financial exposure and credit risk. Commencing in the fourth quarter of 2016, the payment terms of one of our significant customers was extended. In connection therewith, we registered for that customer's supplier financing program (SFP) pursuant to which participating suppliers may sell A/R from such customer to a third-party bank on an uncommitted basis in order to receive earlier payment. During December 31, 2018, we sold \$50.0 million of accounts receivable under this program (December 31, 2017 — \$52.3 million; December 31, 2016 — \$51.4 million). We utilized the SFP to substantially offset the effect of the extended payment terms on our working capital for the period. We pay discount charges with respect to this arrangement, which we record as finance costs in our consolidated statement of operations. Due to our anticipated disengagement from a portion of this customer's programs in early 2019, we expect to sell a lower amount of A/R under the SFP in future periods.

*Free cash flow (non-IFRS):*

Non-IFRS free cash flow is defined as cash provided by or used in operations after the purchase of property, plant and equipment (net of proceeds from the sale of certain surplus equipment and property), finance lease payments, repayments from a former solar supplier, and finance costs paid. As a measure of liquidity, and consistent with the inclusion of our Toronto relocation capital expenditures and transition costs in non-IFRS free cash flow in the periods incurred, we will include the amounts received from the sale of our Toronto real property, in non-IFRS free cash flow in the period of receipt. Note, however, that non-IFRS free cash flow does not represent residual cash flow available to Celestica for discretionary expenditures. Management uses non-IFRS free cash flow as a measure, in addition to IFRS cash provided by or used in operations, to assess our operational cash flow performance. We believe non-IFRS free cash flow provides another level of transparency to our liquidity. A reconciliation of this measure to cash provided by (used in) operating activities measured under IFRS is set forth below (in millions):

	Year ended December 31		
	2016	2017	2018
IFRS cash provided by operations .....	\$ 173.3	\$ 127.0	\$ 33.1
Purchase of property, plant and equipment, net of sales proceeds .....	(63.1)	(101.8)	(78.5)
Finance lease payments .....	(4.5)	(6.5)	(17.0)
Repayments from former solar supplier .....	14.0	12.5	—
Finance costs paid .....	(9.5)	(10.2)	(36.0)
Non-IFRS free cash flow .....	<u>\$ 110.2</u>	<u>\$ 21.0</u>	<u>\$ (98.4)</u>

Our non-IFRS free cash flow of negative \$98.4 million for 2018 decreased \$119.4 million compared to 2017, primarily due to lower cash generated from operating activities in 2018 (discussed above) as compared to 2017, as well as the payment of approximately \$13 million of debt issuance costs incurred in connection with the arrangement of our New Credit Facility and New Term Loans, higher interest costs incurred on our higher borrowings in 2018, and \$11.3 million of finance lease payments (including accrued interest and fees) we made to settle our outstanding solar equipment leases in the first quarter of 2018. These decreases were offset by \$20.4 million in lower capital expenditures in 2018 as compared to 2017 (see “Cash used in investing activities” below). In addition, 2017 benefited from the repayment of \$12.5 million of advances from a former solar supplier.

Our non-IFRS free cash flow of \$21.0 million for 2017 decreased \$89.2 million compared to 2016, primarily due to lower cash generated from operating activities in 2017 (discussed above) and \$38.5 million of higher capital expenditures in 2017 as compared to 2016.

*Cash used in investing activities:*

Our capital expenditures for 2018 were \$82.2 million (2017 — \$102.6 million; 2016 — \$64.1 million), primarily to enhance our manufacturing capabilities in various geographies and to support new customer programs (with approximately two-thirds of the equipment additions to support our ATS segment). See footnote (iii) to the "Additional Commitments" table below for further detail. As a result of the demand volatility experienced with certain CCS segment customers during 2018, and the shift in production to our other sites due to the impact of newly-imposed tariffs, certain of our planned CCS segment expenditures have been deferred. Our capital expenditures for 2018 included approximately \$15 million in building improvements and new machinery at our new Toronto manufacturing site. The expenditures in 2017 included expanding one of our production sites in Romania to support new ATS customers. We fund our capital expenditures from cash on hand. From time-to-time, we receive cash proceeds from the sale of surplus equipment and property (2018 — \$3.7 million; 2017 — \$0.8 million; 2016 — \$1.0 million).

In 2015, we entered into a supply agreement with a solar supplier (which was terminated in the fourth quarter of 2016) that included a commitment by us to provide cash advances to help secure our solar cell supply. All such cash advances were repaid in full by the second quarter of 2017. We received cash advance repayments of \$12.5 million from this solar supplier in the first half of 2017 (\$14.0 million in 2016).

In November 2016, we completed the acquisition of Karel. The purchase price of \$14.9 million was financed with cash on hand. In April 2018, we completed the acquisition of Atrenne. The purchase price of \$141.7 million was funded with borrowings under the Prior Revolver. In November 2018, we completed the acquisition of Impakt. The purchase price of \$325.4 million was funded with available borrowings under our New Revolver, \$245.0 million of which was repaid with the proceeds of the November Term Loan. See “Overview — Recent developments.”

*Cash provided by (used in) financing activities:*

Share repurchases:

During 2018, we paid \$75.5 million (including transaction fees) (2017 — \$19.9 million; 2016 — \$34.3 million) to repurchase and cancel 6.8 million subordinate voting shares (2017 — 1.9 million; 2016 — 3.2 million) under our 2017 NCIB at a weighted average price of \$11.10 per share (2017 — \$10.58; 2016 — \$10.69).

During 2018, we paid \$22.4 million (including transaction fees) (2017 — \$16.7 million; 2016 — \$18.2 million) for a broker's purchase of 2.1 million subordinate voting shares (2017 — 1.4 million; 2016 — 1.6 million) in the open market to satisfy obligations under our stock-based compensation plans.

Financing:

In June 2018, we entered into the \$800.0 million New Credit Facility, which provides for the \$350.0 million June Term Loan that matures in June 2025, and the \$450.0 million New Revolver that matures in June 2023. The net proceeds from the June Term Loan were used to repay all amounts outstanding under our Prior Facility (\$175.0 million under the Prior Term Loan and \$163.0 million under the Prior Revolver), which was terminated on such repayment, as well as costs related to the arrangement of the New Credit Facility. In November 2018, we utilized the accordion feature under our New Credit Facility to add the incremental \$250.0 million November Term Loan, maturing in June 2025.

During the second half of 2018, we made two scheduled quarterly principal repayments of \$0.875 million under the June Term Loan. In each quarter of 2016 and 2017, and the first two quarters of 2018, we made scheduled principal repayments of \$6.25 million under the Prior Term Loan. We also made a \$15.0 million repayment under the Prior Revolver during the first quarter of 2017.

During the fourth quarter of 2018, we borrowed \$339.5 million under the New Revolver to fund the Impakt acquisition in November 2018 (\$245.0 million of which was repaid with the proceeds from the November Term Loan). During the third quarter of 2018, we borrowed \$55.0 million under the New Revolver for working capital purposes. During the second quarter of 2018, we borrowed \$163.0 million under the Prior Revolver, primarily to fund the Atrenne acquisition in April 2018, as well as for working capital requirements.

During 2017, no amounts were borrowed under the Prior Revolver. As at December 31, 2016, the Prior Revolver had a balance of \$15.0 million, which was repaid during the first quarter of 2017.

During 2018, we paid finance costs of \$36.0 million (2017 — \$10.2 million; 2016 — \$9.5 million). During 2018, these payments included higher interest expense as compared to 2017 due to an increase in borrowings to fund our acquisitions in 2018, higher fees associated with the increased sale of A/R in 2018 as compared to 2017, and higher interest costs in 2018 as compared to 2017 due to rising interest rates (as a result of increases in LIBOR). During 2018, finance costs also included approximately \$13 million (2017 — nil; 2016 — nil) of debt issuance costs related to the arrangement of the New Credit Facility and our New Term Loans.

Finance lease payments:

During 2018, we paid \$17.0 million (2017 — \$6.5 million; 2016 — \$4.5 million) under our finance lease agreements (see "Cash Requirements" below). Finance lease payments during 2018 included \$11.3 million (including fees and accrued interest) we paid in January 2018 to settle and terminate our solar panel equipment leases in anticipation of the sale of such equipment. At December 31, 2018, we had a total of \$10.4 million finance lease obligations outstanding (December 31, 2017 — \$17.7 million; December 31, 2016 — \$18.4 million).

### *Cash requirements:*

We maintain the New Revolver, uncommitted bank overdraft facilities, and an A/R sales program, and we participate in the SFP, to provide short-term liquidity and to have funds available for working capital and other investments to support our strategic priorities. See "Capital Resources" below for a discussion of swing line and letter of credit sub-limits under the New Revolver, as well as the accordion feature of the New Credit Facility. Our working capital requirements can vary significantly from month-to-month due to a range of business factors, including the ramping of new programs, expansion of our services and business operations, timing of purchases, higher levels of inventory for new programs and anticipated customer demand, timing of payments and A/R collections, and customer forecasting variations. The international scope of our operations may also create working capital requirements in certain countries while other countries generate cash in excess of working capital needs. Moving cash between countries on a short-term basis to fund working capital is not always expedient due to local currency regulations, tax considerations, and other factors. To meet our working capital requirements and to provide short-term liquidity, we may draw on the New Revolver, sell A/R through our A/R sales program or participate in the SFP, while available. The timing and the amounts we borrow or repay under these facilities can vary significantly from month-to-month depending upon our cash requirements. As at December 31, 2018, other than ordinary course letters of credit, \$159.0 million was outstanding under the New Revolver for working capital purposes and to partially fund our acquisition of Impakt (December 31, 2017 — nil; December 31, 2016 — other than ordinary course letters of credit, \$15.0 million outstanding under the Prior Revolver). We have also increased the amounts sold under our A/R sales program in recent years (2018 — \$130.0 million; 2017 — \$80.0 million; 2016 — \$50.0 million), as a cost-effective alternative to drawing additional amounts on our revolving facility to meet our ordinary course cash requirements. However, since our A/R sales program and the SFP are both on an uncommitted basis, there can be no assurance that any participant bank will purchase the accounts receivable we wish to sell to them under these programs. In addition, due to our anticipated disengagement from a portion of this customer's programs in early 2019, we expect to sell a lower amount of A/R under the SFP in future periods. See "Capital Resources" below.

We do not believe that the aggregate amounts outstanding under our New Credit Facility as at December 31, 2018 (described under "Capital Resources" below) have had (or will have) a significant adverse impact on our liquidity, our results of operations or financial condition. Our quarterly principal repayment requirements under the New Credit Facility are \$1.5 million (or \$6 million annually) compared to quarterly principal repayments of \$6.25 million (or \$25 million annually) under our Prior Facility (see below for a description of required prepayments under the New Credit Facility). We estimate our aggregate interest expense, based on interest rates and amounts outstanding as of December 31, 2018, and including the impact of our interest rate swap agreements, to be approximately \$10 million per quarter, as compared to approximately \$2 million per quarter for 2016 and 2017, based on interest rates and amounts outstanding under the Prior Facility at the applicable year-end. At December 31, 2018, we had \$269.7 million available under our revolving facility for future borrowings, reflecting outstanding borrowings and letters of credit (December 31, 2017 — \$276.8 million available; December 31, 2016 — \$259.2 million available). We believe that our current level of leverage is acceptable for a company of our size and that we will remain in compliance with the financial covenants under the New Credit Facility. In addition, we believe that cash flow from operating activities, together with cash on hand, remaining availability under the New Revolver, intra-day and overnight bank overdraft facilities, and cash from the sale of A/R, will continue to be sufficient to fund our currently anticipated working capital needs and planned capital spending (including the commitments described elsewhere herein).

Notwithstanding the foregoing, however, our increased indebtedness, together with the mandatory prepayment provisions of the New Credit Agreement (described below), has reduced our ability to fund future acquisitions and/or to respond to unexpected capital requirements, and will require us to use an increased amount of our cash flow to service such debt, and may also: require us to pursue additional term loan financing for potential investments, which may not be available on acceptable terms, or at all; limit our ability to obtain additional financing for working capital, business activities, and other general corporate requirements; limit our ability to refinance our indebtedness on terms acceptable to us or at all; limit our flexibility to plan for and adjust to changing business and market conditions, and increase our vulnerability to general adverse economic and industry conditions. In addition, the New Credit Facility contains restrictive covenants that limit our ability to engage in specified types of transactions and require us to maintain specified financial ratios (described in "Capital Resources" below). Our ability to meet those financial ratios will depend on our ongoing financial and operating performance, which, in turn, will be subject to economic conditions and to financial, market, and competitive factors, many of which are beyond our control. A breach of any of such covenants could result in a default under the instruments governing such indebtedness.

In addition to required aggregate quarterly principal repayments on the New Term Loans of \$1.5 million, commencing in 2020, we will be required to make an annual prepayment of outstanding obligations under the New Credit Facility (applied first to the New Term Loans, then to the New Revolver, in the manner set forth in the New Credit Facility) ranging from 0% — 50% (based on a defined leverage ratio) of specified excess cash flow (as defined in the New Credit Facility) for the prior fiscal year. Proceeds from the sale of our Toronto real property will be taken into account in the determination of excess cash flow. In addition, prepayments of outstanding obligations under the New Credit Facility (applied as described above) may also be required in the

amount of specified net cash proceeds received above a specified annual threshold (including proceeds from the disposal of certain assets, but excluding the net proceeds from the sale of our Toronto real property). Repaid amounts on the New Term Loans may not be re-borrowed. Repaid amounts on the New Revolver may be re-borrowed.

Interest expense under the New Credit Facility, based on interest rates and amounts outstanding as at December 31, 2018, and including the impact of our interest rate swap agreements, is approximately \$10 million per quarter. Any increase in prevailing interest rates, margins, or amounts outstanding, would cause this amount to increase (see discussion below). We also recorded \$0.5 million of quarterly non-cash charges in Q4 2018 to amortize the \$13.4 million in deferred financing costs incurred in connection with the arrangement of the New Credit Facility and New Term Loans. Commitment fees paid during 2018 were \$1.3 million (2017 — \$1.3 million; 2016 — \$1.4 million).

We may use cash on hand, issue debt (including convertible debt) or equity securities, or further increase our levels of third-party indebtedness to fund operations and/or make additional acquisitions (or any combination of the foregoing). Any significant use of cash would adversely impact our cash position and liquidity. Any issuance or incurrence of additional debt would increase our debt leverage, increase our interest expense, and may reduce our debt agency ratings. In addition, any issuance of equity or convertible debt securities (the pricing of which would be subject to market conditions at the time of issuance) could dilute current shareholders' positions; debt or convertible debt securities could have rights and privileges senior to those of equity holders; and the terms of debt securities could impose restrictions on our operations. Sales of our equity securities or convertible debt, or the perception that these sales could occur, could also cause the market price of our subordinate voting shares to decline. Any further increase in our overall debt levels would further adversely impact our ability to fund future acquisitions and/or respond to unexpected capital requirements, and may: limit our ability to obtain additional financing for working capital, business activities, and other general corporate requirements; limit our ability to refinance our indebtedness on terms acceptable to us or at all; limit our flexibility to plan for and adjust to changing business and market conditions, and increase our vulnerability to general adverse economic and industry conditions; and require us to dedicate an additional portion of our cash flow to make interest payments, principal repayments and potential principal prepayments on such indebtedness, thereby limiting the availability of our cash flow for other purposes.

As at December 31, 2018, a significant portion of our cash and cash equivalents was held by foreign subsidiaries outside of Canada, a large part of which may be subject to withholding taxes upon repatriation under current tax laws. Cash and cash equivalents held by subsidiaries related to undistributed earnings that are considered indefinitely reinvested outside of Canada (which we do not intend to repatriate in the foreseeable future) are not subject to these withholding taxes. We currently expect to repatriate approximately \$30 million from various foreign subsidiaries in the near term, and have recorded the anticipated future withholding taxes as deferred income tax liabilities, if applicable. While some of our subsidiaries are subject to local governmental restrictions on the flow of capital into and out of their jurisdictions (including in the form of cash dividends, loans or advances to us), which is required or desirable from time to time to meet our international working capital needs and other business objectives (as described above), these restrictions have not had a material impact on our ability to meet our cash obligations. At December 31, 2018, we had approximately \$355 million (December 31, 2017 — \$351 million) of cash and cash equivalents held by foreign subsidiaries outside of Canada that we do not intend to repatriate in the foreseeable future.

As at December 31, 2018, we had known contractual obligations that require future payments as follows (in millions):

	Total	2019	2020	2021	2022	2023	Thereafter
Borrowings under New Credit Facility <sup>(i)</sup>	\$ 757.3	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 165.0	\$ 568.3
Operating leases	107.4	31.5	23.7	14.5	9.5	6.6	21.6
Finance leases	11.7	3.8	3.3	2.8	1.4	0.4	—
Pension plan contributions <sup>(ii)</sup>	12.0	12.0	—	—	—	—	—
Non-pension post-employment plan payments	35.8	3.6	2.4	2.6	2.8	3.4	21.0
Binding purchase order obligations <sup>(iii)</sup>	1,075.1	1,075.1	—	—	—	—	—
Purchase obligations under IT support agreements <sup>(iv)</sup>	120.8	19.7	19.7	16.5	13.7	13.5	37.7
Total <sup>(v)</sup>	<u>\$2,120.1</u>	<u>\$1,151.7</u>	<u>\$ 55.1</u>	<u>\$ 42.4</u>	<u>\$ 33.4</u>	<u>\$ 188.9</u>	<u>\$ 648.6</u>

- (i) Represents mandatory principal repayment obligations for our borrowings under the New Revolver and New Term Loans (based on amounts outstanding as of December 31, 2018), which mature in June 2023 and June 2025, respectively, and excludes related interest and fees. The Term Loans require mandatory aggregate quarterly principal repayments of \$1.5 million until their maturity (when remaining amounts outstanding are due), and borrowings under the New Revolver are due upon maturity. Borrowings under the New Revolver bear interest for the period of the draw at LIBOR, Canadian Prime, or Base Rate (each as defined in the New Credit Facility) plus a specified margin, or in the case of any bankers' acceptance, at the B/A Discount Rate (as defined in the New Credit Facility). The margin for borrowings under the New Revolver ranges from 0.75% to 2.5%, depending on the rate we select and our consolidated leverage ratio. As a result of our use of the accordion feature of the New Credit Facility in November 2018, interest on the June Term Loan increased from LIBOR plus 2.0% to LIBOR plus 2.125%. The November Term Loan currently bears interest at LIBOR plus 2.5%. Based on the rates and the principal amount outstanding under the New Term Loans (\$598.3 million) and the New Revolver (other than \$21.3 million in letters of credit, \$159.0 million) as of December 31, 2018, and including the impact of our interest rate swap agreements, interest and fees are estimated to be approximately \$10 million per quarter. Actual amounts could differ materially from these estimates. Payment defaults under the credit facility will incur interest on unpaid amounts at an annual rate equal to the sum of (i) 2%, plus (ii) the rate per annum otherwise applicable to such unpaid amounts, or if no rate is specified or available, the rate per annum applicable to Base Rate revolving loans. If an event of default occurs and is continuing, the administrative agent may declare all advances on the facility to be immediately due and payable, and may cancel the lenders' commitments to make further advances thereunder. See "Capital Resources" below and note 12 to our 2018 AFS for a description of our credit facility, including amounts outstanding thereunder, repayment dates and interest obligations.
- (ii) Based on our latest actuarial valuations, we estimate our funding requirement for 2019 to be \$12.0 million (2018 — \$13.3 million; 2017 — \$11.9 million). See note 19 to our 2018 AFS. A significant deterioration in the asset values or asset returns could lead to higher than expected future contributions. Risks and uncertainties associated with actuarial valuation measurements may also result in higher future cash contributions. We fund our pension contributions from cash on hand. Although we have defined benefit plans that are currently in a net unfunded position, we do not expect our pension obligations will have a material adverse impact on our future results of operations, cash flows or liquidity.
- (iii) Represents outstanding purchase orders with suppliers to acquire inventory. These purchase orders are generally short-term in nature and legally binding. However, a substantial portion of these purchase orders are for standard inventory items which we have procured for specific customers based on their purchase orders or forecasts, under which such customers have contractually assumed liability for such material, if not consumed.
- (iv) Represents obligations under IT support agreements.
- (v) This table excludes \$25.5 million of long-term deferred income tax liabilities and \$20.6 million of provisions and other non-current liabilities primarily pertaining to warranties and asset retirement obligations, as we are unable to reliably estimate the timing of any future payments related thereto. However, long-term liabilities included in our consolidated balance sheet include these items. In addition, our interest rate swap agreements require us to pay a fixed rate of interest with respect to an aggregate of \$350.0 million outstanding under the New Term Loans. These payments, however, are partially offset by related interest we receive, based on the variable interest rates swapped. As the offsets are not determinable and vary from quarter to quarter, this table also excludes the interest payments on our interest rate swap agreements.

*Additional Commitments:*

As at December 31, 2018, we had additional commitments that expire as follows (in millions):

	Total	2019	2020	2021	2022	2023	Thereafter
Foreign currency contracts <sup>(i)</sup>	\$ 544.2	\$ 544.2	\$ —	\$ —	\$ —	\$ —	\$ —
Letters of credit, letters of guarantee and surety bonds <sup>(ii)</sup>	35.7	29.1	1.6	0.3	—	—	4.7
Capital expenditures <sup>(iii)</sup>	33.6	33.6	—	—	—	—	—
Total	<u>\$ 613.5</u>	<u>\$ 606.9</u>	<u>\$ 1.6</u>	<u>\$ 0.3</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 4.7</u>

- (i) Represents the aggregate notional amounts of our forward currency contracts and swaps.
- (ii) Includes \$21.3 million in letters of credit issued under our Revolving Facility.
- (iii) Our capital spending varies each period based on the timing of new business wins and forecasted sales levels. Based on our current operating plans, we anticipate capital spending for 2019 to be approximately 1.5% to 2.0% of revenue, and expect to fund these expenditures from cash on hand and through the financing agreements described below under "Capital Resources." As at December 31, 2018, we had committed \$33.6 million for capital expenditures, principally for machinery and equipment to support new customer programs. Of such amount, approximately 25% is committed for Asia, approximately 25% is committed for North America (excluding Canada), approximately 30% is committed for Europe, and approximately 20% is committed for Canada (primarily for building improvements related to our temporary corporate headquarters).

Customer or program transfers between EMS providers are part of the competitive nature of our industry. From time-to-time, we make commitments to purchase assets, primarily inventory, or fund certain costs, as part of transitioning programs from a customer or a competitor. In September 2017, we purchased \$5 million of inventory and assumed the relevant workforce in connection with a program transferred to us under an "operate-in-place" arrangement.



We have entered into financing agreements for the lease of machinery and equipment. For leases where the risks and rewards of ownership have substantially transferred to us, we capitalize the leased asset and record a corresponding liability on our consolidated balance sheet. See "Finance leases" in the contractual obligations table above. See note 2(x) of our 2018 AFS for a discussion of a new IFRS standard pertaining to leases which we adopted January 1, 2019, eliminating the distinction between operating and finance leases.

*Toronto Real Property and Related Transactions:*

On July 23, 2015, we entered into the Property Sale Agreement with a special purpose entity (Property Purchaser) for a purchase price of approximately \$137 million Canadian dollars (approximately \$100 million at year-end exchange rates), exclusive of applicable taxes and subject to specified adjustments, including for certain density bonuses and other items in accordance with usual commercial practice. Upon execution of the Property Sale Agreement, we were paid a cash deposit of \$15 million Canadian dollars (\$11.2 million at the then-prevailing exchange rate).

In September 2018, the Property Sale Agreement was assigned to the Assignee, although the Property Purchaser was not released from its obligations under the Property Sale Agreement. In connection with the assignment, the Property Sale Agreement was amended to provide for the remaining proceeds of \$122 million Canadian dollars (approximately \$89 million at year-end exchange rates) to be paid in one lump sum cash payment at the closing of the transaction (previously we were to receive one-half of the purchase price in the form of a two-year, interest-free, first-ranking mortgage). Other terms of the agreement remained unchanged. On January 21, 2019, the required municipal zoning approval was obtained. On March 7, 2019, we completed the sale of the real property and received total proceeds of approximately \$110 million, including a high density bonus and an early vacancy incentive related to the temporary relocation of our corporate headquarters. The gain on the sale of this property will be recorded as recoveries through other charges (recoveries). See "Related Party Transactions" below for a description of the ownership of the Property Purchaser and its option to obtain an interest in the Assignee.

In connection with the anticipated sale, we have moved our Toronto manufacturing operations to another location in the Greater Toronto area and in connection therewith, entered into a long-term lease in November 2017, with occupancy commenced in March 2018. We completed the transition to this new manufacturing location in February 2019. In addition, we will enter into a long-term lease with the Assignee for our new corporate headquarters. In connection therewith, we are relocating our corporate headquarters to a temporary location while space in a new office building (to be built by the Assignee on the site of our former location) is under construction. In connection therewith, in September 2018, we entered into a 3-year lease for such temporary offices, and such relocation is currently expected to be completed by the end of the first half of 2019. We have incurred (and will continue to incur) significant costs throughout the transition period (which commenced in the fourth quarter of 2017) to relocate our corporate headquarters and to transfer our Toronto manufacturing operations to its new location, and as we prepare and customize the new site to meet our manufacturing needs. These costs consist of building improvements and new equipment which we will capitalize, as well as transition-related costs which we record in other charges. Transition costs are comprised of direct relocation costs, duplicate costs (such as rent expense, utility costs, depreciation charges, and personnel costs) incurred during the transition period, as well as cease-use costs incurred in connection with idle or vacated portions of the relevant premises that we would not have incurred but for these relocations. We incurred approximately \$17 million in capitalized costs through February 13, 2019 (2018 — \$15 million) for the new manufacturing location, funded from cash on hand. We also expect to incur approximately \$6 million (\$1 million of which has been incurred through February 13, 2019; 2018 — nil) of capitalized building improvements in connection with our temporary corporate headquarters. We expect to incur total transition costs (including in connection with the relocation of our corporate headquarters) of up to \$20 million through the end of the second quarter of 2019. We incurred approximately \$16 million of such costs through February 13, 2019, consisting primarily of utility costs related to idle premises, depreciation charges and personnel costs incurred in the operation of duplicate production lines in advance of the transition, duplicate rent expenses, and relocation costs.

*Share Repurchases:*

We have funded and intend to continue to fund our share repurchases from cash on hand, borrowings under our New Revolver, or a combination thereof. See "Cash provided by (used in) financing activities" above.

*Indemnities:*

We provide routine indemnifications, the terms of which range in duration and often are not explicitly defined. These may include indemnifications against third-party intellectual property infringement claims and certain third-party negligence claims for property damage. We have also provided indemnifications in connection with the sale of certain businesses and real property. The maximum potential liability from these indemnifications cannot be reasonably estimated. In some cases, we have recourse

against other parties to mitigate our risk of loss from these indemnifications. Historically, we have not made significant payments relating to these types of indemnifications.

#### *Litigation and contingencies:*

In the normal course of our operations, we may be subject to lawsuits, investigations and other claims, including environmental, labor, product, customer disputes and other matters. Management believes that adequate provisions have been recorded where required. Although it is not always possible to estimate the extent of potential costs, if any, management believes that the ultimate resolution of all such pending matters will not have a material adverse impact on our financial performance, financial position or liquidity. See "Operating Results — Income Taxes" above for a description of certain tax matters.

#### **Capital Resources**

Our capital resources consist of cash provided by operating activities, access to a revolving facility, intraday and overnight bank overdraft facilities, an A/R sales program, the SFP, and our ability to issue debt or equity securities. We regularly review our borrowing capacity and make adjustments, as permitted, for changes in economic conditions and changes in our requirements. As part of our strategic initiatives to scale and diversify our ATS revenue base and expand our capabilities in our ATS segment, we have increased our levels of third-party indebtedness and A/R sales in order to fund acquisitions and working capital needs. In addition, we may use cash on hand, issue equity or debt, or further increase our levels of third-party indebtedness in order to fund operations or additional acquisitions (or any combination of the foregoing). See "Liquidity — *Cash requirements*" above for a discussion of expected and potential adverse impacts from such actions. We centrally manage our funding and treasury activities in accordance with corporate policies, the main objectives of which are to ensure appropriate levels of liquidity, to have funds available for working capital or other investments we determine are required to grow our business, to comply with debt covenants, to maintain adequate levels of insurance, and to balance our exposures to market risks.

At December 31, 2018, we had cash and cash equivalents of \$422.0 million (December 31, 2017 — \$515.2 million), of which approximately 97% was cash and 3% was cash equivalents, consisting of bank deposits. The majority of our cash and cash equivalents was denominated in U.S. dollars, and the remainder was held primarily in Chinese renminbi and the Euro. We also held cash and cash equivalents in the following currencies: British pound sterling, Brazilian real, Canadian dollar, Czech koruna, Hong Kong dollar, Indian rupee, Japanese yen, Korean won, Lao kip, Malaysian ringgit, Mexican peso, Philippines peso, Romanian leu, Singapore dollar, Taiwan dollar and Thai baht. Our cash and cash equivalents are subject to intra-quarter swings, generally related to the timing of A/R collections, inventory purchases and payments, and other capital uses.

Until June 27, 2018, we were party to the Prior Facility, that consisted of the \$300.0 million Prior Revolver and the fully drawn \$250.0 million Prior Term Loan, each of which was scheduled to mature in May 2020. The Prior Revolver had an accordion feature that allowed us to increase the \$300.0 million limit by an additional \$150.0 million on an uncommitted basis upon satisfaction of certain terms and conditions. The Prior Revolver also included a \$25.0 million swing line, subject to the overall revolving credit limit, that provided for short-term borrowings up to a maximum of seven days. Borrowings under the Prior Revolver bore interest at various base rates selected by us consisting of LIBOR, Prime, Base Rate Canada, and Base Rate (each as defined in the Prior Facility), plus a specified margin. The margin for borrowings under the Prior Revolver ranged from 0.6% to 1.4% (except in the case of the LIBOR loans, in which case, the margin ranged from 1.6% to 2.4%), based on a specified financial ratio based on indebtedness. Outstanding amounts under the Prior Revolver were due at maturity (but were required to be repaid prior thereto under specified circumstances). The Prior Term Loan bore interest at LIBOR plus a margin ranging from 2.0% to 3.0% based on the same financial ratio. The Prior Term Loan required quarterly principal repayments of \$6.25 million, with the remainder due at maturity. Prepayments on the Prior Term Loan were required under certain circumstances. We were required to comply with certain restrictive covenants under the Prior Facility, including those relating to the incurrence of senior ranking indebtedness, the sale of assets, a change of control, and certain financial covenants related to indebtedness and interest coverage. Certain of our assets were pledged as security for borrowings under the Prior Facility.

In June 2018, we entered into the \$800.0 million New Credit Facility, providing for the \$350.0 million June Term Loan and the \$450 million New Revolver. In November 2018, we added the \$250.0 million November Term Loan. As of December 31, 2018, an aggregate of \$598.3 million was outstanding under the New Term Loans, and other than ordinary course letters of credit, \$159.0 million was outstanding under the New Revolver (December 31, 2017 — \$187.5 million outstanding under the Prior Term Loan and other than ordinary course letters of credits, no amounts outstanding under the Prior Revolver). See "Liquidity — *Cash provided by (used in) financing activities — Financing*" above for a discussion of amounts borrowed and repaid under our credit facilities during 2016 to 2018.

The June Term Loan requires quarterly principal repayments of \$0.875 million commencing September 30, 2018 and the November Term Loan requires quarterly principal repayments of \$0.625 million, commencing March 31, 2019, and in each case

a lump sum repayment of the remainder outstanding at maturity. See "Liquidity — *Cash requirements*" above for a description of mandatory prepayments required under the New Credit Facility. Except under specified circumstances, and subject to the payment of breakage costs (if any), we are generally permitted to make voluntary prepayments of outstanding amounts under the New Revolver and the New Term Loans without any other premium or penalty. Repaid amounts on the New Term Loans may not be re-borrowed. Repaid amounts on the New Revolver may be re-borrowed.

The New Credit Facility has an accordion feature that allows us to increase the term loans and/or revolving loan commitments by approximately \$110 million, plus an unlimited amount to the extent that a specified leverage ratio on a pro forma basis does not exceed specified limits, in each case on an uncommitted basis and subject to the satisfaction of certain terms and conditions. The New Revolver also includes a \$50.0 million sub-limit for swing line loans, providing for short-term borrowings up to a maximum of ten business days, as well as a \$150.0 million sub-limit for letters of credit, in each case subject to the overall New Revolver credit limit. The New Revolver permits us and certain designated subsidiaries to borrow funds (subject to specified conditions) for general corporate purposes, including for capital expenditures, certain acquisitions, and working capital needs. Borrowings under the New Revolver bear interest at LIBOR, Canadian Prime, or Base Rate (each as defined in the New Credit Facility) plus a specified margin, or in the case of any bankers' acceptance, at the B/A Discount Rate (as defined in the New Credit Facility). The margin for borrowings under the New Revolver ranges from 0.75% to 2.5%, depending on the rate we select and our consolidated leverage ratio. As a result of our use of the accordion feature of the New Credit Facility in November 2018, interest on the June Term Loan increased from LIBOR plus 2.0% to LIBOR plus 2.125%. The November Term Loan currently bears interest at LIBOR plus 2.5%.

As part of our risk management program, we attempt to mitigate interest rate risk through interest rate swaps. In order to partially hedge against our exposure to interest rate variability on the New Term Loans, we entered into 5-year agreements with a syndicate of third-party banks in August and December 2018 to swap the variable interest rate with a fixed rate of interest on \$175.0 million of the total borrowings outstanding under each of the June Term Loan and the November Term Loan (for an aggregate of \$350.0 million). The swap agreements include an option that allows us to cancel up to \$75.0 million of the notional amount of each of the original swap agreements starting in August 2021 for the June Term Loan and December 2020 for the November Term Loan. The cancellable option in the swap agreements is aligned with our risk management strategy for our New Term Loans as it allows us to make voluntary prepayments of outstanding amounts without premium or penalty, subject to certain conditions. Our unhedged borrowings under the New Credit Facility at December 31, 2018 are \$407.3 million (comprised of \$248.3 million under the New Term Loans and \$159 million under the New Revolver). A one-percentage point increase in relevant interest rates would increase interest expense, based on the outstanding unhedged borrowings at December 31, 2018, by \$4.1 million annually. See note 21(b) of our 2018 AFS for further information regarding our interest rate swaps.

We are required to comply with certain restrictive covenants under the New Credit Facility, including those relating to the incurrence of certain indebtedness, the existence of certain liens, the sale of certain assets (excluding real property then held for sale), specified investments and payments, sale and leaseback transactions, and certain financial covenants relating to a defined interest coverage ratio and leverage ratio that are tested on a quarterly basis. At December 31, 2018, we were in compliance with all restrictive and financial covenants under the New Credit Facility. The obligations under the New Credit Facility are guaranteed by us and certain specified subsidiaries. Subject to specified exemptions and limitations, all assets of the guarantors are pledged as security for the obligations under the New Credit Facility. The New Credit Facility contains customary events of default. If an event of default occurs and is continuing, the administrative agent may declare all amounts outstanding under the New Credit Facility to be immediately due and payable and may cancel the lenders' commitments to make further advances thereunder. In the event of a payment or other specified defaults, outstanding obligations accrue interest at a specified default rate.

We incurred debt issuance costs of \$4.9 million in connection with the June Term Loan, and \$5.4 million in connection with the November Term Loan, which we recorded as an offset against the proceeds therefrom. Such costs have been deferred (as long-term debt on our consolidated balance sheet) and will be amortized over the term of the term loans using the effective interest rate method. We incurred debt issuance costs of \$3.1 million in connection with the New Revolver, which have been deferred (as other assets on our consolidated balance sheet) and will be amortized over the term of the New Revolver. We accelerated the amortization of the remaining \$1.2 million of unamortized deferred financing costs related to the Prior Facility upon its termination (\$0.6 million related to our Prior Revolver recorded in other assets and \$0.6 million related to our Prior Term Loan recorded in long-term debt), and recorded it to other charges in our consolidated financial statements in June 2018.

Commitment fees paid during 2018 were \$1.3 million (2017 — \$1.3 million; 2016 — \$1.4 million). At December 31, 2018, we had \$21.3 million outstanding in letters of credit under the New Revolver (December 31, 2017 — \$23.2 million). We

also arrange letters of credit and surety bonds outside our revolving facility. At December 31, 2018, we had \$14.4 million of such letters of credit and surety bonds outstanding (December 31, 2017 — \$13.6 million).

At December 31, 2018, we also had a total of \$132.8 million of uncommitted bank overdraft facilities available for intraday and overnight operating requirements (December 31, 2017 — \$73.5 million). There were no amounts outstanding under these overdraft facilities at December 31, 2018 or December 31, 2017.

At December 31, 2018, we had \$269.7 million available under the New Revolver for future borrowings, reflecting outstanding borrowings and letters of credit (December 31, 2017 — \$276.8 million available under the Prior Revolver).

We have an agreement to sell up to \$250.0 million (increased from \$200 million in November 2018 based on a review of our requirements) in accounts receivable on an uncommitted basis (subject to pre-determined limits by customer) to two third-party banks. The term of this agreement has been annually extended in recent years (including in November 2018) for additional one-year periods (and is currently extendable to November 2020 under specified circumstances), but may be terminated earlier as provided in the agreement. At December 31, 2018, \$130.0 million (December 31, 2017 — \$80.0 million) of A/R were sold under this program, and de-recognized from our accounts receivable balance. As our A/R sales program is on an uncommitted basis, there can be no assurance that any of the banks will purchase the A/R we intend to sell to them under this program.

We have entered into the SFP, pursuant to which participating suppliers may sell accounts receivable from such customer to a third-party bank on an uncommitted basis in order to receive earlier payment. The third-party bank collects the relevant receivables directly from the customer. At December 31, 2018, we sold \$50.0 million of accounts receivable under the SFP (December 31, 2017 — \$52.3 million). We utilized the SFP to substantially offset the effect of extended payment terms required by such customer on our working capital for the period. As the SFP is on an uncommitted basis, there can be no assurance that the bank will purchase the A/R we intend to sell to them thereunder. Due to our anticipated disengagement from a portion of this customer's programs in early 2019, we expect to sell a lower amount of A/R under the SFP in future periods.

The timing and the amounts we borrow and repay under our revolving credit and overdraft facilities, or sell under the SFP or our A/R sales program, can vary significantly from month-to-month depending upon our working capital and other cash requirements.

Our strategy on capital risk management has not changed significantly since the end of 2017. Other than the restrictive and financial covenants associated with our New Credit Facility noted above, we are not subject to any contractual or regulatory capital requirements. While some of our international operations are subject to government restrictions on the flow of capital into and out of their jurisdictions, these restrictions have not had a material impact on our operations or cash flows.

#### *Financial instruments:*

Our short-term investment objectives are to preserve principal and to maximize yields without significantly increasing risk, while at the same time not materially restricting our short-term access to cash.

The majority of our cash balances are held in U.S. dollars. We price the majority of our products in U.S. dollars and the majority of our materials costs are also denominated in U.S. dollars. However, a significant portion of our non-materials costs (including payroll, pensions, site costs and costs of locally sourced supplies and inventory) are denominated in various other currencies. As a result, we may experience foreign exchange gains or losses on translation or transactions due to currency fluctuations.

We have a foreign exchange risk management policy in place to govern our hedging activities. We do not enter into speculative trades. Our current hedging activity is designed to reduce the variability of our foreign currency costs where we have local manufacturing operations. We enter into foreign exchange forward contracts to hedge our cash flow exposures and foreign currency swaps to hedge our balance sheet exposures. Balance sheet hedges are based on our forecasts of the future position of net monetary assets or liabilities denominated in foreign currencies and, therefore, may not mitigate the full impact of any translation impacts in the future. There can be no assurance that our hedging transactions will be successful in mitigating our foreign exchange risk.

At December 31, 2018, we had foreign exchange forwards and swaps to trade U.S. dollars in exchange for the following currencies:

Currency	Contract amount in U.S. dollars (in millions)	Weighted average exchange rate in U.S. dollars	Maximum period in months	Fair value gain (loss) (in millions)
Canadian dollar.....	\$ 210.2	\$ 0.76	12	\$ (10.3)
Thai baht.....	81.1	0.03	12	(0.7)
Malaysian ringgit.....	53.4	0.24	12	(0.8)
Mexican peso.....	25.6	0.05	12	0.2
British pound.....	5.3	1.27	4	—
Chinese renminbi.....	66.8	0.15	12	(1.6)
Euro.....	35.8	1.17	12	0.3
Romanian leu.....	40.4	0.25	12	(0.9)
Singapore dollar.....	22.1	0.74	12	(0.3)
Other.....	3.5	0.01	1	(0.1)
Total.....	<u>\$ 544.2</u>			<u>\$ (14.2)</u>

These contracts, which generally extend for periods of up to 12 months, will expire by the end of the fourth quarter of 2019. The fair value of the outstanding contracts at December 31, 2018 was a net unrealized loss of \$14.2 million (December 31, 2017 — net unrealized gain of \$10.3 million). The unrealized gains or losses are a result of fluctuations in foreign exchange rates between the date the currency forward or swap contracts were entered into and the valuation date at period end.

#### *Financial risks:*

We are exposed to a variety of risks associated with financial instruments and otherwise.

**Currency risk:** Due to the global nature of our operations, we are exposed to exchange rate fluctuations on our financial instruments denominated in various currencies. The majority of our currency risk is driven by operational costs, including income tax expense, incurred in local currencies by our subsidiaries. As part of our risk management program, we attempt to mitigate currency risk through a hedging program using forecasts of our anticipated future cash flows and balance sheet exposures denominated in foreign currencies. We enter into foreign exchange forward contracts and swaps, generally for periods up to 12 months, to lock in the exchange rates for future foreign currency transactions, which is intended to reduce the variability of our operating costs and future cash flows denominated in local currencies. While these contracts are intended to reduce the effects of fluctuations in foreign currency exchange rates, our hedging strategy does not mitigate the longer-term impacts of changes to foreign exchange rates. Although our functional currency is the U.S. dollar, currency risk on our income tax expense arises as we are generally required to file our tax returns in the local currency for each particular country in which we have operations. While our hedging program is designed to mitigate currency risk vis-à-vis the U.S. dollar, we remain subject to taxable foreign exchange impacts in our translated local currency financial results relevant for tax reporting purposes. We do not use derivative financial instruments for speculative purposes.

We cannot predict changes in currency exchange rates, the impact of exchange rate changes on our operating results, nor the degree to which we will be able to manage the impact of currency exchange rate changes. Such changes, including as a result of Brexit or other global events impacting currency exchange rates could materially adversely affect our business, results of operations and financial condition.

**Interest rate risk:** Borrowings under the New Credit Facility bear interest at specified rates, plus specified margins (as described above). We have entered into 5-year interest rate swap agreements with a syndicate of third-party banks in each of August and December 2018 to partially hedge against our exposures to interest rate variability on our New Term Loans. The derivative instruments swap the variable rate of interest for a fixed rate of interest on an aggregate of \$350.0 million of the outstanding borrowings under the New Term Loans. The swap agreements include an option that allows us to cancel up to \$75.0 million of the notional amount of each swap agreement, starting in August 2021 with respect to the June Term Loan and December 2020 with respect to the November Term Loan.

Our unhedged borrowings under the New Credit Facility at December 31, 2018 were \$407.3 million (December 31, 2017 — \$187.5 million under the Prior Credit Facility). Unhedged borrowings expose us to interest rate risk due to the potential variability in market interest rates. A one-percentage point increase in applicable rates would increase interest expense, based on the outstanding unhedged borrowings at December 31, 2018, by \$4.1 million annually. Without accounting for the interest rate swap agreements described above, a one-percentage point increase in applicable rates would increase interest expense, based on our outstanding borrowings of \$757.3 million under the New Credit Facility as at December 31, 2018, by \$7.6 million annually.

**Credit risk:** Credit risk refers to the risk that a counterparty may default on its contractual obligations resulting in a financial loss to us. We believe our credit risk of counterparty non-performance is relatively low, however, if a key supplier (or any company within such supplier's supply chain) or customer experiences financial difficulties or fails to comply with their contractual obligations, this could result in a financial loss to us. If an institution from which we purchased annuities for our pension plans defaults on their contractual obligations, this would result in a financial loss to us, as we retain ultimate responsibility for the payment of benefits to plan participants unless and until such pension plans are wound-up. With respect to our financial market activities, we have adopted a policy of dealing only with credit-worthy counterparties to help mitigate the risk of financial loss from defaults. We monitor the credit risk of the counterparties with whom we conduct business, through a combined process of credit rating reviews and portfolio reviews.

We also provide unsecured credit to our customers in the normal course of business. Customer exposures that potentially subject us to credit risk include our accounts receivable, inventory on hand, and non-cancellable purchase orders in support of customer demand. From time to time, we extend the payment terms applicable to certain customers, and/or provide longer payment terms when deemed commercially reasonable. Longer payment terms, which have become more prevalent, could adversely impact our working capital requirements, and increase our financial exposure and credit risk. We attempt to mitigate customer credit risk by monitoring our customers' financial condition and performing ongoing credit evaluations as appropriate. In certain instances, we may obtain letters of credit or other forms of security from our customers. We may also purchase credit insurance from a financial institution to reduce our credit exposure to certain customers. We consider credit risk in determining our allowance for doubtful accounts and we believe our allowances, as adjusted from time to time, are adequate. The carrying amount of financial assets recorded in our consolidated financial statements, net of our allowance for doubtful accounts, represents our estimate of maximum exposure to credit risk. At December 31, 2018, approximately 1% of our gross accounts receivable are over 90 days past due. Accounts receivable are net of an allowance for doubtful accounts of \$5.3 million at December 31, 2018 (December 31, 2017 — \$4.3 million).

**Liquidity risk:** Liquidity risk is the risk that we may not have cash available to satisfy our financial obligations as they come due. The majority of our financial liabilities recorded in accounts payable, accrued and other current liabilities and provisions are due within 90 days. We manage liquidity risk by maintaining a portfolio of liquid funds and investments and having access to a revolving credit facility, intraday and overnight bank overdraft facilities, an accounts receivable sales program and the SFP. Since our accounts receivable sales program and the SFP are each on an uncommitted basis, there can be no assurance that any participant bank will purchase all the accounts receivable that we wish to sell thereunder. However, we believe that cash flow from operating activities, together with cash on hand, cash from the sale of accounts receivable, and borrowings available under the New Revolver and intraday and overnight bank overdraft facilities are sufficient to fund our currently anticipated financial obligations.

See note 21 to our 2018 AFS for further details.

## Related Party Transactions

Onex Corporation (Onex) beneficially owns or controls, directly or indirectly, all of our outstanding multiple voting shares. Accordingly, Onex has the ability to exercise significant influence over our business and affairs and generally has the power to determine all matters submitted to a vote of our shareholders where the subordinate voting shares and multiple voting shares vote together as a single class. Mr. Gerald Schwartz, the Chairman of the Board, President and Chief Executive Officer of Onex, indirectly owns shares representing the majority of the voting rights of Onex.

Onex has entered into an agreement with Celestica and with Computershare Trust Company of Canada (as successor to the Montreal Trust Company of Canada), as trustee for the benefit of the holders of the subordinate voting shares, for the purpose of ensuring that the holders of subordinate voting shares will not be deprived of any rights under applicable take-over bid legislation to which they would be otherwise entitled in the event of a take-over bid (as that term is defined in applicable securities legislation) if multiple voting shares and subordinate voting shares were of a single class of shares. Subject to certain permitted forms of sale, such as identical or better offers to all holders of subordinate voting shares, Onex has agreed that it, and any of its affiliates that may hold multiple voting shares from time to time, will not sell any multiple voting shares, directly or indirectly, pursuant to a take-over bid (as that term is defined under applicable securities legislation) under circumstances in which any applicable securities legislation would have required the same offer or a follow-up offer to be made to holders of subordinate voting shares if the sale had been a sale of subordinate voting shares rather than multiple voting shares, but otherwise on the same terms.

In January 2009, we entered into a Services Agreement with Onex for the services of Mr. Schwartz (amended in 2017 to replace references to Mr. Schwartz with references to Mr. Tawfiq Popatia, also an officer of Onex) as a director of Celestica, pursuant to which Onex receives compensation for such services. This agreement automatically renews for successive one-year terms unless either party provides a notice of intent not to renew. Under such agreement, as amended, the annual fee payable to Onex is \$235,000 payable in DSUs in equal quarterly installments in arrears. The Services Agreement terminates automatically and the rights of Onex to receive compensation (other than accrued and unpaid compensation) will terminate (a) 30 days after the first day on which Onex ceases to hold at least one multiple voting share of Celestica or any successor company or (b) the date Mr. Popatia ceases to be a director of Celestica for any reason.

The original parties to the Property Sale Agreement were the Company and the Property Purchaser, a consortium of four real estate partnerships. Approximately 27% of the interests in the Property Purchaser were at the time of execution of the Property Sale Agreement, and are, held by a privately-held partnership in which Mr. Schwartz has a material interest; and approximately 25% of the interests in the Property Purchaser were at the time of execution of the Property Sale Agreement, and are, held by a partnership in which Mr. Schwartz has a non-voting interest. In September 2018, the Property Sale Agreement was assigned to the Assignee, although the Property Purchaser was not released from its obligations under the Property Sale Agreement. At the time of execution of such assignment, the Assignee was unrelated to us or the Property Purchaser. Subsequent to the execution of such assignment, the Assignee granted the Property Purchaser an option to obtain a 5% non-voting interest in the Assignee. See “Overview — *Recent developments* and Liquidity — *Toronto Real Property and Related Transactions*” above.

## Outstanding Share Data

As of February 13, 2019, we had 118,079,397 outstanding subordinate voting shares and 18,600,193 outstanding multiple voting shares. As of such date, we also had 345,577 outstanding stock options, 5,085,274 outstanding RSUs, 4,223,278 outstanding PSUs (assuming vesting of 100% of the target amount granted (amounts that will vest range from 0% to 200% of the target amount granted)), and 1,627,598 outstanding DSUs; each vested option or unit entitling the holder thereof to receive one subordinate voting share (or in certain cases, cash) pursuant to the terms thereof, subject to certain time or performance-based vesting conditions.

## Controls and Procedures

### *Evaluation of disclosure controls and procedures:*

Our management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the U.S. Exchange Act) designed to ensure that information we are required to disclose in the reports that we file or submit under the U.S. Exchange Act is recorded, processed, summarized and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the U.S. Exchange Act is accumulated and communicated to the issuer's management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision of and with the participation of management, including our principal executive officer and principal financial officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2018. Based on that evaluation, our principal executive officer and principal financial officer have concluded that, as of December 31, 2018, our disclosure controls and procedures are effective to meet the requirements of Rules 13a-15(e) and 15d-15(e) under the U.S. Exchange Act.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that its objectives are met. Due to inherent limitations in all such systems, no evaluation of controls can provide absolute assurance that all control issues within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met.

### *Changes in internal control over financial reporting:*

We did not identify any change in our internal control over financial reporting in connection with our evaluation thereof that occurred during the year ended December 31, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

On April 4, 2018, we completed the acquisition of Atrenne, and, as a result, have integrated the processes and controls relating to Atrenne into our existing system of internal control over financial reporting. The integration of Atrenne did not result in changes that would materially affect, or would be reasonably likely to materially affect, our internal control over financial reporting. On November 9, 2018, we completed the acquisition of Impakt, and are in the process of assessing its processes and internal controls. Although this assessment may result in changes to our internal control over financial reporting, we do not currently anticipate that the integration of Impakt will result in changes that would materially affect, or would be reasonably likely to materially affect, our internal control over financial reporting. In addition, there were no significant changes to our internal control over financial reporting as a result of our preparation for the adoption of IFRS 16 (Leases) effective January 1, 2019.

### *Management's report on internal control over financial reporting:*

Reference is made to our Management's Report on Internal Control over Financial Reporting on page F-1 of our Annual Report on Form 20-F for the year ended December 31, 2018. Our auditors, KPMG LLP, an independent registered public accounting firm, have issued an audit report on our internal control over financial reporting as of December 31, 2018, which appears on page F-2 of such Annual Report.



**Unaudited Quarterly Financial Highlights** (in millions, except percentages and per share amounts):

	2017*				2018			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenue.....	\$1,482.1	\$1,557.6	\$1,532.8	\$1,570.2	\$1,499.7	\$1,695.2	\$1,711.3	\$1,727.0
Gross margin.....	6.9%	7.0%	6.9%	6.5%	6.2%	6.2%	6.6%	6.9%
Net earnings.....	\$ 22.5	\$ 34.6	\$ 34.8	\$ 13.6	\$ 14.1	\$ 16.1	\$ 8.6	\$ 60.1
Weighted average # of basic shares.....	142.1	143.4	143.7	143.3	142.2	139.6	139.0	136.8
Weighted average # of diluted shares.....	144.0	145.5	145.7	145.5	143.5	140.7	140.3	138.0
# of shares outstanding.....	143.2	143.6	143.7	141.8	139.6	139.3	137.4	136.3
IFRS EPS:								
basic.....	\$ 0.16	\$ 0.24	\$ 0.24	\$ 0.09	\$ 0.10	\$ 0.12	\$ 0.06	\$ 0.44
diluted.....	\$ 0.16	\$ 0.24	\$ 0.24	\$ 0.09	\$ 0.10	\$ 0.11	\$ 0.06	\$ 0.44

\* 2017 quarterly results have been restated to reflect the adoption of IFRS15.

All quarters in the table above have been impacted by our restructuring charges, the amounts of which vary from quarter to quarter.

*Q4 2018 compared to Q4 2017:*

Revenue of \$1.7 billion for the Q4 2018 increased 10% compared to Q4 2017. Compared to Q4 2017, revenue dollars in Q4 2018 from our CCS segment increased 10%. Communications end market revenue increased 7% in Q4 2018 as compared to the prior year period, as increased demand and new programs (including JDM programs) were partially offset by demand softness from certain of our legacy customers. Enterprise end market revenue increased 14% in Q4 2018 compared to the prior year period, primarily driven by strong demand in our storage business. ATS segment revenue increased 11% in Q4 2018 compared to Q4 2017, driven by demand strength and new programs in our industrial business and revenue from our Atrenne acquisition, offset in part by weaker than expected demand in our capital equipment business. Gross profit increased \$18.4 million in Q4 2018 as compared to Q4 2017, and gross margin for Q4 2018 increased to 6.9% of total revenue compared to 6.5% of total revenue for Q4 2017. The increases in gross profit and gross margin were primarily due to higher revenue (primarily in our Enterprise end market and our ATS segment businesses other than capital equipment), changes in CCS program mix, including higher JDM revenues, offset in part by lower utilization and operating losses in our capital equipment business, particularly in our semiconductor business. CCS segment margin for Q4 2018 increased to 3.3% of segment revenue, compared to 2.2% for Q4 2017. ATS segment margin decreased from 5.2% for Q4 2017 to 3.7% for Q4 2018, attributable primarily to the weaker than expected demand from our capital equipment business, resulting in operating losses in this business in Q4 2018 in the mid single-digit million dollar range. Net earnings for Q4 2018 of \$60.1 million were \$46.5 million higher compared to Q4 2017, primarily due to the Impakt Benefit in the fourth quarter of 2018. In addition, the improvement in gross profit was offset in part by \$8.5 million in higher SG&A, \$3.9 million in higher amortization of intangible asset charges (primarily due to our recent acquisitions), and \$6.6 million in higher finance costs in Q4 2018 as compared to Q4 2017.

*Q4 2018 compared to the third quarter 2018 (Q3 2018):*

Revenue for Q4 2018 increased 1% compared to Q3 2018. Compared to the previous quarter, CCS segment revenues were relatively flat, as demand strength from our Enterprise end market (including from JDM), was offset by revenue declines primarily from legacy customers in our Communications end market. ATS segment revenue increased 2% sequentially, as revenue from our recent acquisitions were offset, in part, by a sequential revenue decline in our capital equipment business, as weaker than expected demand resulted in lower utilization and losses for the quarter in this business (discussed above), due to its high fixed cost infrastructure. Gross margin for Q4 2018 increased to 6.9% of total revenue compared to 6.6% of total revenue for Q3 2018. The increase in gross margin was due primarily to improvements in our CCS segment, reflecting favorable changes in customer and program mix, including higher levels of JDM business. CCS segment margin for Q4 2018 increased to 3.3% of segment revenue compared to 2.7% for Q3 2018, while ATS segment margin decreased from 4.6% in Q3 2018 to 3.7% for Q4 2018 (for the reasons discussed above). Net earnings for Q4 2018 of \$60.1 million were \$51.5 million higher compared to Q3 2018, primarily due to the Impakt Benefit.

*Selected fourth quarter 2018 IFRS results:*

	<b>Actual</b>
IFRS revenue (in billions) .....	\$1.7
IFRS EPS (diluted)* .....	\$0.44
IFRS earnings before income taxes as a % of revenue .....	1.2%
IFRS SG&A (in millions) .....	\$59.6

\* IFRS EPS for the fourth quarter of 2018 of \$0.44 on a diluted basis included an aggregate charge of \$0.18 (pre-tax) per share for employee stock-based compensation expense, amortization of intangible assets (excluding computer software), Toronto transition costs (described below) and restructuring charges. This aggregate charge is within the range we provided on October 24, 2018 of an aggregate charge of between \$0.14 to \$0.20 per share for these items.

*Fourth quarter 2018 actual compared to guidance*

	<b>Q4 2018</b>	
	<b>Guidance</b>	<b>Actual</b>
IFRS revenue (in billions) .....	\$1.70 to \$1.80	\$1.7
Non-IFRS operating margin .....	3.5% at the mid-point of our revenue and non- IFRS adjusted EPS guidance ranges	3.5%
Non-IFRS adjusted SG&A (in millions) .....	\$49.0 to \$51.0	\$55.0
Non-IFRS adjusted EPS (diluted) .....	\$0.27 to \$0.33	\$0.29

For Q4 2018, our revenue was within our guidance range, but slightly below our guidance mid-point as lower than expected demand in our Communications end market and demand softness from our capital equipment business were partially offset by stronger than expected demand in our Enterprise end market. Non-IFRS operating margin for Q4 2018 met our guidance. Non-IFRS adjusted SG&A for Q4 2018 was higher than our guidance range primarily due to higher than expected variable expenses and SG&A costs incurred in connection with our Impakt acquisition. Our non-IFRS adjusted EPS results for Q4 2018 were within our guidance range.

Our guidance includes a range for adjusted EPS (which is a non-IFRS measure and is defined below). Management considers non-IFRS adjusted EPS to be an important measure for investors to understand our core operating performance. A reconciliation of non-IFRS adjusted net earnings to IFRS net earnings is set forth below.

*Non-IFRS measures:*

Management uses adjusted net earnings and the other non-IFRS measures described herein (i) to assess operating performance and the effective use and allocation of resources, (ii) to provide more meaningful period-to-period comparisons of operating results, (iii) to enhance investors' understanding of the core operating results of our business, and (iv) to set management incentive targets. We believe the non-IFRS measures we present herein are useful to investors, as they enable investors to evaluate and compare our results from operations in a more consistent manner (by excluding specific items that we do not consider to be reflective of our ongoing operating results), to evaluate cash resources that we generate each period, and to provide an analysis of operating results using the same measures our chief operating decision makers use to measure performance. In addition, management believes that the use of a non-IFRS adjusted tax expense and a non-IFRS adjusted effective tax rate provides improved insight into the tax effects of our ongoing business operations, and is useful to management and investors for historical comparisons and forecasting. These non-IFRS financial measures result largely from management's determination that the facts and circumstances surrounding the excluded charges or recoveries are not indicative of the ordinary course of the ongoing operation of our business.

We believe investors use both IFRS and non-IFRS measures to assess management's past, current and future decisions associated with our priorities and our allocation of capital, as well as to analyze how our business operates in, or responds to, swings in economic cycles or to other events that impact our core operations.

Non-IFRS measures do not have any standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other companies. Non-IFRS measures are not measures of performance under IFRS and should not be considered in isolation or as a substitute for any standardized measure under IFRS. The most significant limitation to

management's use of non-IFRS financial measures is that the charges or credits excluded from the non-IFRS measures are nonetheless charges or credits that are recognized under IFRS and that have an economic impact on us. Management compensates for these limitations primarily by issuing IFRS results to show a complete picture of our performance, and reconciling non-IFRS results back to the most directly comparable IFRS results.

In addition to cash cycle days (including the components thereof) and inventory turns (each described under the caption "Other Performance Indicators" above), which have no defined meanings under IFRS, we use the following non-IFRS measures: adjusted gross profit, adjusted gross margin (adjusted gross profit as a percentage of revenue), adjusted SG&A, adjusted SG&A as a percentage of revenue, operating earnings (adjusted EBIAT), operating margin (operating earnings or adjusted EBIAT as a percentage of revenue), adjusted net earnings, adjusted EPS, adjusted ROIC, free cash flow, adjusted tax expense and adjusted effective tax rate. Adjusted EBIAT, adjusted ROIC, free cash flow, adjusted tax expense and adjusted effective tax rate are further described in the tables below. In calculating these non-IFRS financial measures, management excludes the following items, where applicable: employee stock-based compensation expense, amortization of intangible assets (excluding computer software), restructuring and other charges, net of recoveries (as defined below), impairment charges, other solar charges (as defined below), and acquisition inventory fair value adjustments, all net of the associated tax adjustments (which are set forth in the table below), and non-core tax impacts (tax adjustments related to acquisitions, and certain other tax costs or recoveries related to restructuring actions or restructured sites).

The economic substance of these exclusions and management's rationale for excluding them from non-IFRS financial measures is provided below:

Employee stock-based compensation expense, which represents the estimated fair value of stock options, RSUs and PSUs granted to employees, is excluded because grant activities vary significantly from quarter-to-quarter in both quantity and fair value. In addition, excluding this expense allows us to better compare core operating results with those of our competitors who also generally exclude employee stock-based compensation expense in assessing their operating performance, who may have different granting patterns and types of equity awards, and who may use different valuation assumptions than we do.

Amortization charges (excluding computer software) consist of non-cash charges against intangible assets that are impacted by the timing and magnitude of acquired businesses. Amortization of intangible assets varies among our competitors, and we believe that excluding these charges permits a better comparison of core operating results with those of our competitors who also generally exclude amortization charges in assessing operating performance.

Restructuring and other charges, net of recoveries, consist of costs relating to employee severance, lease terminations, site closings and consolidations, write-downs of owned property and equipment which are no longer used and are available for sale, reductions in infrastructure, Toronto transition costs (recoveries) (defined below), acquisition-related consulting, transaction and integration costs (Acquisition Costs), legal settlements (recoveries), and the accelerated amortization of \$1.2 million in unamortized deferred financing costs recorded on the extinguishment of our Prior Facility during the second quarter of 2018. We exclude these restructuring and other charges, net of recoveries, because we believe that they are not directly related to ongoing operating results and do not reflect expected future operating expenses after completion of these activities. We believe these exclusions permit a better comparison of our core operating results with those of our competitors who also generally exclude these charges, net of recoveries, in assessing operating performance.

Toronto transition costs (recoveries) are costs (recoveries) recorded in connection with the sale of our Toronto real property, the relocation of our Toronto manufacturing operations, the move of our corporate headquarters to a temporary location while space in a new office building for such headquarters at our current location is under construction, as well as the move to such new office space upon its completion. Toronto transition costs consist of direct relocation costs, duplicate costs (such as rent expense, utility costs, depreciation charges, and personnel costs) incurred during the transition period, as well as cease-use costs incurred in connection with idle or vacated portions of the relevant premises that we would not have incurred but for these relocations. Toronto transition recoveries will consist of amounts received from the purchaser of the Toronto real property or gains we record in connection with its sale. We believe that excluding these costs and recoveries permits a better comparison of our core operating results from period-to-period, as these costs will not reflect our ongoing operations once these relocations are complete.

Impairment charges, which consist of non-cash charges against goodwill, intangible assets and property, plant and equipment, result primarily when the carrying value of these assets exceeds their recoverable amount. Our competitors may record impairment charges at different times, and we believe that excluding these charges permits a better comparison of our core operating results with those of our competitors who also generally exclude these charges in assessing operating performance.

Other solar charges, consisting of non-cash charges to further write-down the carrying value of our then-remaining solar panel inventory and the write-down of solar accounts receivable (A/R) (primarily as a result of a solar customer's bankruptcy) to

estimated recoverable amounts, were recorded in the second quarter of 2017 through cost of sales and SG&A expenses, respectively. These impairment charges, which were identified during the wind-down of our solar operations, were excluded as they pertained to a business we had exited, and therefore were no longer directly related to our ongoing core operating results. Although we recorded significant impairment charges to write down our solar panel inventory in the third quarter of 2016, those charges were not excluded in the determination of our non-IFRS financial measures for such period, as we were then still engaged in the solar panel manufacturing business. In connection with this wind-down, we also recorded net non-cash impairment charges to write down the carrying value of our solar panel manufacturing equipment held for sale to its estimated sales value less costs of disposal, which we recorded through other charges during 2017.

Acquisition inventory fair value adjustments relate to the write-up of the inventory acquired in connection with our acquisitions, representing the difference between the cost and fair value of such inventory. Acquired assets and liabilities are recorded on our balance sheet at their fair values as of the date of acquisition. Fair value adjustments are recognized through cost of sales in the period during which the acquired inventory is sold. We recognized the full \$1.6 million adjustment related to inventory acquired from Atrenne during the second quarter of 2018 (as all of the inventory was sold during that quarter), which negatively impacted our gross profit and net earnings for such period. No such adjustment was recorded with respect to inventory acquired from Impakt. We exclude the impact of the recognition of these adjustments, when incurred, because we believe such exclusion permits a better comparison of our core operating results from period-to-period, as their impact is not indicative of our ongoing operating performance.

Non-core tax impacts are excluded, as we believe that these costs or recoveries do not reflect core operating performance and vary significantly among those of our competitors who also generally exclude these charges or recoveries in assessing operating performance.

The following table sets forth, for the periods indicated, the various non-IFRS measures discussed above, and a reconciliation of non-IFRS measures to the most directly comparable IFRS measures, (in millions, except percentages and per share amounts). 2017 financial information has been restated to reflect our adoption, effective January 1, 2018, of IFRS 15.

	Three months ended December 31				Year ended December 31			
	2017		2018		2017		2018	
	(restated)		(restated)		(restated)		(restated)	
	% of	% of	% of	% of	% of	% of	% of	
	revenue	revenue	revenue	revenue	revenue	revenue	revenue	
<b>IFRS revenue</b>	\$ 1,570.2		\$ 1,727.0		\$ 6,142.7		\$ 6,633.2	
<b>IFRS gross profit</b>	\$ 101.6	6.5%	\$ 120.0	6.9%	\$ 418.5	6.8%	\$ 430.5	6.5%
Employee stock-based compensation expense	3.2		3.8		14.6		14.7	
Other solar charges (inventory write-down)	—		—		0.9		—	
Acquisition inventory fair value adjustment	—		—		—		1.6	
<b>Non-IFRS adjusted gross profit</b>	<u>\$ 104.8</u>	6.7%	<u>\$ 123.8</u>	7.2%	<u>\$ 434.0</u>	7.1%	<u>\$ 446.8</u>	6.7%
<b>IFRS SG&amp;A</b>	\$ 51.1	3.3%	\$ 59.6	3.5%	\$ 203.2	3.3%	\$ 219.0	3.3%
Employee stock-based compensation expense	(4.2)		(4.6)		(15.5)		(18.7)	
Other solar charges (A/R write-down)	—		—		(0.5)		—	
<b>Non-IFRS adjusted SG&amp;A</b>	<u>\$ 46.9</u>	3.0%	<u>\$ 55.0</u>	3.2%	<u>\$ 187.2</u>	3.0%	<u>\$ 200.3</u>	3.0%
<b>IFRS earnings before income taxes</b>	\$ 21.3	1.4%	\$ 20.1	1.2%	\$ 133.1	2.2%	\$ 81.9	1.2%
Finance costs	2.6		9.2		10.1		24.4	
Employee stock-based compensation expense	7.4		8.4		30.1		33.4	
Amortization of intangible assets (excluding computer software)	1.1		5.1		5.5		11.6	
Net restructuring, impairment and other charges (recoveries) <sup>(1)</sup>	17.5		16.9		37.0		61.0	
Other solar charges (inventory and A/R write-down)	—		—		1.4		—	
Acquisition inventory fair value adjustment	—		—		—		1.6	
<b>Non-IFRS operating earnings (adjusted EBIAT) <sup>(1)</sup></b>	<u>\$ 49.9</u>	3.2%	<u>\$ 59.7</u>	3.5%	<u>\$ 217.2</u>	3.5%	<u>\$ 213.9</u>	3.2%
<b>IFRS net earnings</b>	\$ 13.6	0.9%	\$ 60.1	3.5%	\$ 105.5	1.7%	\$ 98.9	1.5%
Employee stock-based compensation expense	7.4		8.4		30.1		33.4	
Amortization of intangible assets (excluding computer software)	1.1		5.1		5.5		11.6	
Net restructuring, impairment and other charges (recoveries) <sup>(1)</sup>	17.5		16.9		37.0		61.0	
Other solar charges (inventory and A/R write-down)	—		—		1.4		—	
Acquisition inventory fair value adjustment	—		—		—		1.6	
Adjustments for taxes <sup>(2)</sup>	(0.5)		(50.8)		(6.5)		(56.7)	
<b>Non-IFRS adjusted net earnings</b>	<u>\$ 39.1</u>		<u>\$ 39.7</u>		<u>\$ 173.0</u>		<u>\$ 149.8</u>	
<b>Diluted EPS</b>								
Weighted average # of shares (in millions)	145.5		138.0		145.2		140.6	
IFRS earnings per share	\$ 0.09		\$ 0.44		\$ 0.73		\$ 0.70	
Non-IFRS adjusted earnings per share	\$ 0.27		\$ 0.29		\$ 1.19		\$ 1.07	
# of shares outstanding at period end (in millions)	141.8		136.3		141.8		136.3	
<b>IFRS cash provided by (used in) operations</b>	\$ 43.7		\$ (1.9)		\$ 127.0		\$ 33.1	
Purchase of property, plant and equipment, net of sales proceeds	(20.6)		(18.8)		(101.8)		(78.5)	
Finance lease payments	(1.7)		(0.9)		(6.5)		(17.0)	
Repayments from former solar supplier	—		—		12.5		—	
Finance costs paid	(2.6)		(14.3)		(10.2)		(36.0)	
<b>Non-IFRS free cash flow <sup>(3)</sup></b>	<u>\$ 18.8</u>		<u>\$ (35.9)</u>		<u>\$ 21.0</u>		<u>\$ (98.4)</u>	
<b>IFRS ROIC % <sup>(4)</sup></b>	7.0%		5.0%		11.5%		5.8%	
<b>Non-IFRS Adjusted ROIC % <sup>(4)</sup></b>	16.4%		15.0%		18.8%		15.1%	

(1) Management uses non-IFRS operating earnings (adjusted EBIAT) as a measure to assess performance related to our core operations. Non-IFRS adjusted EBIAT is defined as earnings before income taxes, finance costs (consisting of interest and fees related to our credit facility, our accounts receivable sales program, and the SFP), amortization of intangible assets (excluding computer software), and in applicable periods, employee stock-based compensation expense, net restructuring and other charges (recoveries) (consisting of restructuring charges (recoveries), Acquisition Costs, legal settlements (recoveries), Toronto transition costs (recoveries), and the accelerated amortization of unamortized deferred financing costs), impairment charges (recoveries), other solar charges, and acquisition inventory fair value adjustments. See "Operating Results -- Other charges" for separate quantification and discussion of impairment charges, and the components of net restructuring and other charges (recoveries).

(2) The adjustments for taxes, as applicable, represent the tax effects of our non-IFRS adjustments and non-core tax impacts (described below).

The following table sets forth a reconciliation of our IFRS tax expense and IFRS effective tax rate to our non-IFRS adjusted tax expense and our non-IFRS adjusted effective tax rate for the periods indicated, in each case determined by excluding the tax benefits or costs associated with the listed items (in millions, except percentages) from our IFRS tax expense for such periods:

	Three months ended				Year ended			
	December 31				December 31			
	2017	Effective tax rate	2018	Effective tax rate	2017	Effective tax rate	2018	Effective tax rate
	(restated)				(restated)			
IFRS tax expense and IFRS effective tax rate	\$ 7.7	36 %	\$ (40.0)	(199)%	\$ 27.6	21 %	\$ (17.0)	(21)%
Tax costs (benefits) of the following items excluded from IFRS tax expense:								
Employee stock-based compensation expense	0.9		1.1		1.7		2.3	
Amortization of intangible assets (excluding computer software)	—		—		—		—	
Net restructuring, impairment and other charges	(0.4)		0.7		1.0		1.4	
Other solar charges (inventory and A/R write-down)	—		—		0.4		—	
Non-core tax impact related to fair value adjustment on acquisitions*	—		49.6		—		53.3	
Non-core tax impacts related to restructured sites**	—		(0.6)		3.4		(0.3)	
Non-IFRS adjusted tax expense/Non-IFRS adjusted effective tax rate	\$ 8.2	17 %	\$ 10.8	21 %	\$ 34.1	16 %	\$ 39.7	21 %

\* Consists of deferred tax assets attributable to our acquisitions of Atrenne (recorded in the second quarter of 2018) and Impact (recorded in the fourth quarter of 2018)

\*\* Includes the Solar Benefit recorded in the second quarter of 2017.

(3) Management uses non-IFRS free cash flow as a measure, in addition to IFRS cash provided by (used in) operations, to assess our operational cash flow performance. We believe non-IFRS free cash flow provides another level of transparency to our liquidity. Non-IFRS free cash flow is defined as cash provided by (used in) operations after the purchase of property, plant and equipment (net of proceeds from the sale of certain surplus equipment and property), finance lease payments, repayments from a former solar supplier, and finance costs paid. As a measure of liquidity, and consistent with the inclusion of our Toronto relocation capital expenditures and transition costs in non-IFRS free cash flow in the periods incurred, we will include amounts we receive from the sale of our Toronto real property in non-IFRS free cash flow in the period of receipt. Note that non-IFRS free cash flow, however, does not represent residual cash flow available to Celestica for discretionary expenditures.

(4) Management uses non-IFRS adjusted ROIC as a measure to assess the effectiveness of the invested capital we use to build products or provide services to our customers, by quantifying how well we generate earnings relative to the capital we have invested in our business. Our non-IFRS adjusted ROIC measure reflects non-IFRS operating earnings, working capital management and asset utilization. Non-IFRS adjusted ROIC is calculated by dividing non-IFRS adjusted EBIAT by average net invested capital. Net invested capital (calculated in the table below) consists of the following IFRS measures: total assets less cash, accounts payable, accrued and other current liabilities and provisions, and income taxes payable. We use a two-point average to calculate average net invested capital for the quarter and a five-point average to calculate average net invested capital for the year. A comparable measure under IFRS would be determined by dividing IFRS earnings before income taxes by net invested capital (which we have set forth in the charts above and below), however, this measure (which we have called IFRS ROIC), is not a measure defined under IFRS.

The following table sets forth, for the periods indicated, our calculation of IFRS ROIC % and non-IFRS adjusted ROIC % (in millions, except IFRS ROIC % and non-IFRS adjusted ROIC %). 2017 financial information has been restated to reflect our adoption, effective January 1, 2018, of IFRS 15.

	Three months ended		Year ended	
	December 31		December 31	
	2017	2018	2017	2018
	(restated)		(restated)	
IFRS earnings before income taxes	\$ 21.3	\$ 20.1	\$ 133.1	\$ 81.9
Multiplier to annualize earnings	4	4	1	1
Annualized IFRS earnings before income taxes	\$ 85.2	\$ 80.4	\$ 133.1	\$ 81.9
Average net invested capital for the period	\$ 1,216.5	\$ 1,594.1	\$ 1,152.9	\$ 1,413.6
IFRS ROIC % <sup>(1)</sup>	7.0%	5.0%	11.5%	5.8%

  

	Three months ended		Year ended	
	December 31		December 31	
	2017	2018	2017	2018
	(restated)		(restated)	
Non-IFRS operating earnings (adjusted EBIAT)	\$ 49.9	\$ 59.7	\$ 217.2	\$ 213.9
Multiplier to annualize earnings	4	4	1	1
Annualized non-IFRS adjusted EBIAT	\$ 199.6	\$ 238.8	\$ 217.2	\$ 213.9
Average net invested capital for the period	\$ 1,216.5	\$ 1,594.1	\$ 1,152.9	\$ 1,413.6
Non-IFRS adjusted ROIC % <sup>(1)</sup>	16.4%	15.0%	18.8%	15.1%

	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
	(restated)				
Net invested capital consists of:					
Total assets	\$ 2,964.2	\$ 2,976.0	\$ 3,212.2	\$ 3,316.1	\$ 3,737.7
Less: cash	515.2	435.7	401.4	457.7	422.0
Less: accounts payable, accrued and other current liabilities, provisions and income taxes payable	1,228.6	1,278.1	1,413.8	1,473.3	1,512.6
Net invested capital at period end <sup>(1)</sup>	\$ 1,220.4	\$ 1,262.2	\$ 1,397.0	\$ 1,385.1	\$ 1,803.1

	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
	(restated)				
Net invested capital consists of:					
Total assets	\$ 2,841.9	\$ 2,833.5	\$ 2,876.7	\$ 2,892.0	\$ 2,964.2
Less: cash	557.2	558.0	582.7	527.0	515.2
Less: accounts payable, accrued and other current liabilities, provisions and income taxes payable	1,189.7	1,165.2	1,167.9	1,152.4	1,228.6
Net invested capital at period end <sup>(1)</sup>	\$ 1,095.0	\$ 1,110.3	\$ 1,126.1	\$ 1,212.6	\$ 1,220.4

(1) See footnote 4 of the previous table.

**Recently issued accounting pronouncements:***IFRS 16, Leases:*

In January 2016, the IASB issued this standard, which brings most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases. IFRS 16 supersedes IAS 17, *Leases*, and related interpretations, and is effective for periods beginning on or after January 1, 2019. We adopted this standard effective January 1, 2019 applying the modified retrospective approach, whereby the cumulative effect of adopting IFRS 16 will be recognized as an adjustment to the opening retained deficit balance as of January 1, 2019, without restatement of prior period comparative information. We have implemented changes to our business processes, systems and controls to enable the preparation of our consolidated financial statements in accordance with IFRS 16. We will recognize new right-of-use assets and lease liabilities related to the majority of our operating leases on our consolidated balance sheet as of January 1, 2019 upon initial application of IFRS 16. The amortization of these assets will be recognized as a depreciation charge, and the interest expense on the lease liabilities will be recognized as finance costs in our consolidated statement of operations. Previously, we recognized operating lease expenses on a straight-line basis over the lease term generally in cost of sales or SG&A in our consolidated statement of operations. No significant changes are expected for our existing finance leases nor for any leases in which we are a lessor. Although we are completing our analysis of the impact of adopting IFRS 16, we anticipate that the initial application of the new standard will have a material impact on our consolidated financial statements, and we currently estimate that we will recognize right-of-use assets and lease liabilities on our consolidated financial statements of approximately \$113 million as of January 1, 2019. The opening retained deficit adjustment is not expected to be material.

**Research and development, patents and licenses, etc.**

The information required by this item is set forth above in Item 4(B) "Information on the Company — Business Overview — Research and Technology Development."

**Trend Information**

The information required by this item is set forth above in "Overview," "Operating Results," and "Liquidity and Capital Resources," in Item 3(D) "Key Information — Risk Factors," and in Item 4(B) "Information on the Company — Business Overview."

**Off-Balance Sheet Arrangements**

Not applicable.