Your worldwide training partner of choice





Annual Activity and Corporate Social Responsibility Report Fiscal year 2017



# **About this report**

#### Our approach and scope

This Annual Activity and Corporate Social Responsibility Report consolidates information on our company strategy, corporate social responsibility (CSR) activities and fiscal year 2017 performance into one document. It includes all the information previously found in our CSR Report and the editorial pages of our Annual Report. All the financial data is available in our Financial Report.

Integrating our reporting in this way enables us to provide stakeholders with a single source of information in key areas. It also signals that CSR is inseparable from our core business strategy and activities. As you'll read in this report, our training solutions generate benefits across the three central elements of sustainability: economic, environmental and social.

This report covers our global operations and, unless otherwise stated, presents quantitative and qualitative information for fiscal year 2017 (ended March 31, 2017).

#### **Reporting standards**

This report is aligned with the <u>Global Reporting Initiative (GRI) G4</u> <u>Sustainability Reporting Guidelines</u>. An independent institution, the GRI provides a standard framework for sustainability reporting across companies and industries. You'll find an index outlining our alignment with the GRI G4 core reporting requirements and references to other relevant information sources here.

All figures in this report are in Canadian dollars.

#### **Feedback**

We welcome your views on the topics covered in this report. Please send your comments, suggestions and questions to media@cae.com.

### How to use this report

#### Interactivity

When opened in Adobe Reader, this PDF document incorporates several interactive features as indicated below.

#### **Functions**



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Marc Parent
President and
Chief Executive Officer

# **Leading and growing Since 1947**

I am delighted to report that we delivered a strong performance in fiscal 2017—one of the best years in our seven-decade history. We continued to make very good progress in pursuit of our training strategy by expanding our relationships with customers around the globe. We generated \$2.7 billion in annual revenue and ended the year with a record \$7.5 billion backlog, which enhances visibility and augments the recurring nature of CAE's business. I want to congratulate and sincerely thank all our employees for their strong performance in advancing our strategic priorities in fiscal 2017.

#### **Key achievements**

In Civil Aviation Training Solutions, we generated strong demand for CAE's unique and comprehensive training solutions, which led to higher training centre utilization and higher operating margins for Civil overall. We continued to lead the market in full-flight simulator sales with a near-record year, and in training services, we signed long-term contracts with Jet Airways in India, Vietnam Airlines and Korea Airports Corporation, among others.

We completed two large-scale initiatives to help bolster our competitive position. One involved a process improvement program to significantly improve how we engineer, build, deploy and support our simulators. The other program served to enhance our ability to delight customers by helping us recruit, onboard, develop and retain the best training instructors. We also demonstrated CAE's innovation leadership in training by successfully validating a new ground-breaking data-driven objective assessment training system that will produce a step change in the way the industry trains commercial pilots. We expect this to become a key differentiator to grow our share of a large civil aviation training market.

Our Defence & Security business secured major long-term training systems integrator (TSI) contracts and, in the process, ramped up orders by 40% for a record \$1.4 billion. Among other comprehensive agreements, our innovative approach enabled us to win the contract to create the U.S. Army's new fixed-wing training centre and program, which we operationalized ahead of

schedule. We delivered in an unprecedented way from our large bid pipeline in fiscal 2017 and expect to continue winning our fair share of this market.

In Healthcare, we also demonstrated our innovation leadership, positioning the business for long-term growth. We doubled the amount of business we do with original equipment manufacturers of complex medical devices. We also partnered with Microsoft to bring the power of mixed reality to medical ultrasound simulation, delivering an application with great potential to enhance healthcare education and training and improve clinical skills and patient safety. This breakthrough innovation is a prime example of what CAE brings to bear in this market.

#### Looking ahead: Protect, grow, innovate

'Protect, grow, innovate'—these mutually reinforcing strategic imperatives will guide our decisions and actions in fiscal 2018 and beyond. To continue protecting our business, we will maintain our market leadership, drive operational excellence and asset optimization, increase our process agility and demonstrate greater thought leadership.

Over the last couple of decades, CAE has established itself as a thought leader in aviation training and we are now delivering some of the most innovative and comprehensive solutions that



training in large part because of our commitment to invest in both technological and operational innovation.

CAE is a 4.0 company, well positioned to leverage the current technological revolution.

we believe will enable us to unlock a greater portion of the overall \$3.5 billion civil aviation training market. We see significant headroom to grow with passenger air traffic expected to double over the next 20 years. We recently issued our first public <u>Airline Pilot Demand Outlook</u> in which we forecast the need for 255,000 new airline pilots by 2027. This spells good news for the world's leading civil aviation training company.

Geopolitical realities are driving up investments across defence forces globally. Governments around the world are placing a high priority on mission readiness and the intrinsic benefits of simulation-based training. These factors are driving a greater need for training and we believe that CAE is very well positioned to grow its share as a training systems integrator.

We have a positive view of CAE Healthcare's long-term potential as the use of simulation expands for education and training. We remain confident that Healthcare will become a more significant part of CAE's overall business, and we will continue to broaden our offering in the training of nurses, the largest healthcare market.

Innovation has been our 'secret sauce' since 1947. We are a global leader in training in large part because of our commitment to invest in both technological and operational innovation. CAE is a 4.0 company, well positioned to leverage the current technological revolution. We are embracing new digital technologies such as big data, artificial intelligence and machine learning at a fast speed. Our employees are helping us harness the value of the digital world through our Innovation Challenges initiative, for which we received more employee ideas this year than ever before.

# Corporate social responsibility embedded in our strategy

Part of our evolution hinges on further embedding corporate social responsibility (CSR)), which is anchored in our mission and our values, in everything we do. In fiscal 2017, we significantly improved our health, safety and environmental data and performance.

Fiscal 2017 also stands out for the cultural evolution underway at CAE. We are taking concrete steps to harness the real power of our company—our people. They are the ones who will take our organization to new heights.

Throughout calendar year 2017, we will leverage our 70th anniversary celebrations to emphasize our values and leadership attributes while increasing our focus on employees, their development and wellbeing, and on continuing to inject more fun into the workplace. These priorities support our strategy to compete for and attract key talent to our organization. In fiscal 2017, we recruited 500 new employees to support our growth.

#### True success story

This past year, our strong financial and operational performance was reflected on the stock market and by investors' resounding approval of our training strategy. Our compelling value proposition is attracting a growing number of employees, customers, partners and shareholders worldwide. As we look to the year ahead, we expect to see continued good growth as we pursue our vision to be the recognized global training partner of choice.

To achieve our vision and aspirations, we must cultivate the right talent, grow strong leaders and recruit critical resources. We will also continue to make it more satisfying to work at CAE. These are just a few of the ways we will ensure that we remain a leader and grow in the decades to come. We are proud to pursue the mission of CAE's founder and all the employees before us who have made this company a true success story over the past 70 years.



#### **Overview**



**Training partner of choice. Since 1947.** 

CAE is celebrating its 70<sup>th</sup> anniversary. For seven decades, we've sustained our leadership by offering compelling solutions to customers operating in complex, mission-critical environments. Our success reflects our ability to evolve and rapidly adapt to changing needs and to deliver on our promises of quality, reliability and performance.

Our success is also a testament to our people. Their passion, innovation and focus have allowed us to become the best at what we do—to build a brand that's trusted around the world.

We're the only pure-play company resolutely committed to the long-term training and simulation needs of our civil aviation, defence & security and healthcare customers.

Marc Parent President and CEO, CAE

#### **Roots in innovation**

When Ken Patrick, an ex-Royal Canadian Air Force officer, founded CAE in 1947, his goal was to "...take advantage of a war-trained team that was extremely innovative and very technology intensive."

By the mid-1950s, CAE was already creating its first simulators. One innovation led to another and, by 1982, we had developed a <u>flight simulator so realistic</u> that training on real aircraft was no longer necessary. The rest is history.

#### It's all about safety, efficiency and readiness

Today we're the training partner of choice in end-to-end virtual-to-live solutions for a growing number of airlines, defence forces and healthcare professionals and institutions. Our training network, the world's largest, spans more than 65 training centres and flight academies around the globe.

We train over 120,000 civil and defence crewmembers annually and work with more than 300 airlines and major business aircraft operators to increase the safety of air travel. As a leader in training systems integration, we deliver air, land, naval and public safety training to approximately 50 defence forces in over 35 countries. We help ensure these men and women return home safely by preparing them for a range of missions. We're also a leading provider of innovative healthcare training solutions that enable medical personnel to provide better care.

At CAE, our purpose is noble: to make air travel safer, defence forces mission ready and medical personnel better able to save lives. We're confident that Mr. Patrick would be proud of what we have become.



#### **Worldwide presence**





#### FY2017 financial and business highlights

\$2.7 billion

annual revenue (up 8% year over year) \$7.5 billion

record order backlog (up 18% year over year)

\$327.9 million

free cash flow (up 32% year over year)

\$6 million

donated to local and regional initiatives (cash and in-kind)

\$1.03
earnings
per share before

**specific items** (\$0.93 earnings per share)

50 full-flight simulators sold 76% civil training centre annual utilization

18new patents granted21patents filed

- Launched the validation phase of our new objective assessment training system with AirAsia
- Unveiled the first C Series aircraft full-flight simulator at our joint venture in Frankfurt
- Signed business and commercial aviation training contracts with multiple operators, such as Tag Aviation, Vietnam Airlines and Scandinavian Airlines
- Approval of the CAE-developed Common Database as an international Open Geospatial Consortium (OGC) standard
- Inaugurated the CAE Dothan Training Center in Alabama for the U.S. Army Fixed-Wing Flight Training program

- Received contract extension to support NATO Flying Training in Canada through 2023
- Awarded C295W aircrew and maintenance training solution contract to support the Royal Canadian Air Force's (RCAF) Fixed-Wing Search and Rescue program
- Launched the CAE VimedixAR ultrasound simulator with Microsoft Hololens, the first ultrasound simulator with real-time interactive holograms of human anatomy
- Hosted our 20<sup>th</sup> Human Patient Simulation Network (HPSN)
   World conference and hosted our first HPSN conferences in China and India

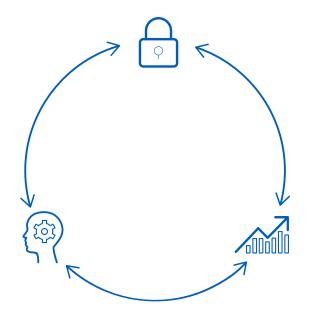


## **Strategy**

# **End-to-end training** partner of choice

Our vision is to be the recognized global training partner of choice to enhance customer safety, efficiency and readiness.

Achieving this goal depends on the successful implementation of three mutually reinforcing imperatives—protect our leadership, grow our business, and innovate in everything we do.



#### **Protect**

We protect our market leadership and delight customers everywhere by driving our operational excellence, asset optimization, process agility and thought leadership.

#### Grow

The considerable headroom in our three expanding core markets provides us with ample opportunities to grow and win new market share.

#### **Innovate**

Our innovation-fuelled DNA enables us to deliver next-generation products and services to expand our addressable market and stay ahead of the competition.

#### A trusted and credible training partner

Our global leadership stems from our:

- Comprehensive training solutions
- Extensive experience delivering academic, simulator and live flying training
- Industry-leading global training network

- Commitment to excellence and innovation spanning 70 years
- Close collaboration with regulators and policymakers to help shape the future of training
- Ability to reduce customers' environmental impact through simulation-based training



#### Six pillars of strength

Our strategy and investment theses are based on six interrelated pillars of strengths. We benefit from a high degree of recurring business, we have a strong competitive moat, and we have significant headroom in large markets that are being driven by secular tailwinds. These factors, combined with CAE's culture of innovation, give us the potential to generate superior returns. As we look ahead, we take confidence in the strength of our position and the supportive fundamentals of our end markets.



# High degree of recurring business

We operate in highly regulated industries with mandatory and recurring training requirements for maintaining professional certifications. Our long-term agreements with many airlines and business aircraft operators are also an important source of our recurring business.



# Headroom in large markets

Significant untapped market opportunities exist in our three growing core businesses. While we're a market leader in civil aviation, we address less than 33% of an approximately \$3.5 billion training market. In defence and security, we have a 7% share of the approximately \$15 billion TSI market.



# Potential for superior returns

At CAE, we believe we have the potential to grow faster than the underlying markets and that our large backlog and recurring revenue profile give us greater visibility.



# Strong competitive moat

Our global training centre network, unique end-to-end cadet-to-captain training solutions, TSI expertise, unrivalled customer intimacy and strong, recognizable brand strengthen this moat.



# Underlying secular tailwinds

Both the civil aviation and defence sectors are enjoying strong tailwinds. In civil aviation, air passenger traffic is expected to grow by 4.2% annually over the next 10 years.



# Culture of innovation

Innovation is part of our DNA and our people make it happen. In collaboration with our customers, we design and deliver the most sophisticated training solutions.

# **Business highlights**





# **Civil Aviation Training Solutions**



#1
in commercial
aviation training

**50** + training centres and flight academies

#### **Leading the industry**

Our Civil Aviation Training Solutions business dates back to 1955 when we began designing what would become the first Canadian-built commercial flight simulator for Canadian Pacific Airlines. Today we deliver end-to-end aviation training solutions to address the professional pilot's total lifecycle needs, from cadet to captain, around the globe.

#### Quality, reliability, innovation

Quality, fidelity and reliability are the hallmarks of our offerings. Over the years, we've gained a wealth of experience developing full-flight simulators for more than 150 types of aircraft, including 35 first-to market simulators. We've also consistently delivered innovative training technologies and solutions to the market.



#### Year in review

Our Civil Aviation Training Solutions business performed well in fiscal 2017. It generated a 9% year-over-year increase in revenue and a 15% year-over-year increase in segment operating income. Both network utilization and operating margins improved. We sold 50 full-flight simulators (FFSs), our second-best year ever for FFS sales. Our backlog grew by 7% compared to fiscal 2016.

Among other highlights, we expanded our global training network with eight net FFS additions, inaugurated a new helicopter training and R&D centre in Canada, and announced training programs in the U.S., Germany and Vietnam. We also announced expanded training programs in the Netherlands, the United Arab Emirates, South Korea, Malaysia, India and Brazil.

#### **Key FY2017 highlights**

9% revenue growth

15% segment operating income growth<sup>1</sup>

1.09 book-to-sales ratio<sup>2</sup>

50 full-flight simulators sold

\$3.3 billion backlog<sup>3</sup>

- 1 Segment operating income (SOI) is a non-GAAP measure and our key indicator of each segment's financial performance. This measure gives us a good indication of the profitability of each segment because it does not include the impact of any items not specifically related to the segment's performance. We calculate it by taking the operating profit and excluding the impact of restructuring costs.
- **8 full-flight simulator**net additions to our global network
- 2 The book-to-sales ratio is a non-GAAP measure calculated as total orders divided by total revenue in a given period.
- Backlog is a non-GAAP measure that represents the expected value of orders we have received but have not yet executed.



# Objective assessment training system

We launched the validation and refinement phase of our breakthrough data-driven objective assessment training system with our partner and customer AirAsia in July 2016. Supported by innovative data collection and analysis techniques, this system will provide live objective assessment of pilot competencies and live instructor evaluation of each airline's standard operating procedures.

# Addressing global pilot demand

The commercial aviation industry is expected to double in size over the next 20 years. This growth has significant implications for the professional pilot pipeline worldwide. At CAE, we train 120,000 pilots for more than 300 airlines every year. This unique vantage point of the industry has equipped us with a deep understanding of the outlook for pilots.

We're now sharing our insights and analysis with the broader industry through our first <u>Airline Pilot Demand Outlook</u>. Released in June 2017, our outlook identifies a global requirement for 255,000 new pilots and for developing 180,000 first officers into new airline captains over the next 10 years.



Graduating Ryanair's 2,000<sup>th</sup> cadet



Lockheed Martin Commercial Flight Training integration



Leadership in business aviation Upset Prevention and Recovery Training (UPRT)



**Creating new pilots** 





#### Improving instructor quality

Instructors play a pivotal role in executing our integrated training solutions strategy. In fiscal 2017, we began centralizing our instructor recruitment and onboarding, initial assessment and ongoing performance management functions. We continue to foster a culture of quality through our instructor pillars, which include teaching and communication skills as well as style adaptability.

For our global instructor recruitment and onboarding needs, we're now leveraging the expertise of CAE Parc Aviation. The Dublin-based organization has grown into the world's leading provider of aviation personnel and support services.

# Looking ahead

Demand for trained aviation professionals is driven by air traffic growth, pilot retirements and the number of aircraft deliveries. The expansion of global economies and airline fleets has resulted in a high demand for qualified airline personnel.

Our <u>Airline Pilot Demand Outlook</u> estimates that approximately 25,500 new pilots will be needed, on average, every year for the next 10 years. As the world's leading provider of cadet-to-captain pilot training, and with our worldwide training network and expertise, we're well positioned to meet this demand.

At CAE, we continue to shape the future of training with the imminent delivery of our data-driven objective assessment training system. We're partnering with the airline industry to help professional pilots develop faster, learn to master critical situations and adapt effectively to their operators' culture and standard operating procedures. We'll also continue working with aerospace regulatory bodies to make the world's safest mode of transportation even safer.



Feature story

# Using simulators to raise kids' spirits

It's a Saturday morning in lanuary and Arthur Appelo is pacing back and forth at the entrance to CAE's Amsterdam Training Centre in Hoofddorp, Netherlands. He knows what's about to happen—the same thing that's been taking place at the centre for the past seven years. Finally, a bus and several cars arrive. Out of them emerge numerous disabled and terminally ill children and their families. Arthur greets each youth with a warm smile. The fun is about to begin.

As Area Operations Leader of CAE Central Europe, Arthur oversees the Hoofddorp facility, which provides aviation training services to a long list of clients. Today, however, Arthur and his team of 28 CAE volunteers are playing host to AirSmiles. CAE Amsterdam has been partnering with the Dutch foundation since 2010. Together they give 6- to 17-year-olds with disabilities and incurable diseases the thrill of a lifetime: the chance to fly a plane all by themselves.

I'm not sure who gets more out of the experience, the kids and their families or the CAE employees and freelance instructors who help out. Put it this way; I never have a problem finding volunteers for CAE AirSmiles Day!

Arthur Appelo Area Operations Leader of CAE Central Europe

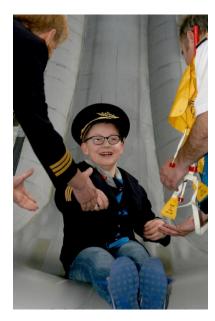


From the moment the kids arrive to the moment they leave, they experience an unforgettable adventure. CAE volunteers dressed up as quizmasters treat the youth to an animated lecture on aviation. A quiz (how exactly does a 70-tonne machine stay airborne, anyway?) follows with teams competing for a prize.

Then it's the kids' turn to quiz the flight crew. One child gets the entire crowd chuckling when he innocently asks a pilot: "Are you married to the flight attendant?" Every year though, the day's highlight is, without a doubt, the hour or so the kids get to spend in one of the simulators with their family and an instructor.

"Once they cross the bridge into the simulator cockpit and are at the controls," explains Arthur, "their eyes grow wide with excitement. They can fly their passengers anywhere—high over the Austrian mountains or low under the Golden Gate Bridge. And every time they turn the throttle, they feel the G-force. In that instant, they're no longer sick or disabled kids; they're no longer isolated and in pain; they're pilots!"

At the end of the day, after hugs and highfives, the AirSmilers head home with a certificate signed by their instructor and pictures to post on Facebook. They've earned their bragging rights.













#### **High flyers**

AirSmiles—Hoogvliegers or 'high flyers' in Dutch—is the brainchild of pilot Jeroen Engelkes. In 2007, he decided to use his flying skills to bring joy into the lives of sick and disabled children, and the AirSmiles Foundation was born.

Ten years later, in addition to CAE's event, the foundation organizes 15 Big AirSmiles Days annually in airfields all over the Netherlands, complete with police cars, fire trucks, sports cars, helicopters and jets. Volunteer pilots take youth up in their turboprops, piston props and choppers. Individual AirSmiles Days are organized for children too sick or disabled to handle the bigger events. To date, more than 8,000 youth have become AirSmilers.

#### An irresistibly heartwarming cause

Long-time AirSmiles Foundation board member and trucking company owner Frank Bakker and his wife Esther got the AirSmiles bug back in 2007. A family member introduced them to Jeroen, the foundation's current chairman, and the rest is history. Today it's AirSmiles 24/7 at Frank and Esther's house.

"The foundation's mission really tugged at our heartstrings," remarks Frank. "It's truly a transformative experience when you see the change in these kids. And it's emotional for the parents too. I remember a 15-year-old boy who was always in his mother's arms. At the end of the day, his mom approached me and, through her tears, told me it was the first time that she'd seen her son smile in three years. Imagine! Three years!"

#### **CAE** signs on

Frank met Arthur's predecessor, Jan Van Engelen, at an AirSmiles fundraiser in 2009. He explained to Jan that, because the foundation wasn't equipped to fly in the winter, everything ground to a halt during the cold months. Jan was quick to put Frank in contact with Arthur, back then the centre's Head of Training. Arthur just as promptly offered Frank the use of CAE's simulators for an entire AirSmiles day in January.

Thanks to CAE, Frank and Esther are now busy with AirSmiles all year round. Some of CAE's suppliers and partners have even jumped on board. From the training centre's caterer to its building cleaner and a few local hotels, people generously donate their time and money.

"In addition to being a great team event for us, we get to give back as both corporate and private citizens," beams Arthur. "It's an extremely rewarding experience with some very personal and moving moments."

In addition to being a great team event for us, we get to give back as both corporate and private citizens. It's an extremely rewarding experience with some very personal and moving moments.

**Arthur Appelo** 

Arthur had one of his most touching AirSmiles experiences last year. During the quiz, the suspense of not knowing if he had won proved too much for one young competitor with autism. He had to be taken home. In the end, his team did win the prize. At the end of the day, Arthur drove to the boy's house and presented the surprised youth with his prize. As he recalls the boy's pure delight, a smile lights up Arthur's eyes. He quips with a grin: "I guess they don't call it AirSmiles for nothing."



# **Defence & Security**



**72** different training platforms

**350K +**live flying training hours delivered by the NFTC program

# **Improving mission readiness** worldwide

Founded by a former Royal Canadian Air Force (RCAF) officer, our company started with a contract to repair RCAF ground communication equipment. Six years later in 1952, we entered the simulator business with an RCAF contract to design a simulator for the CF-100 interceptor/fighter.

Today our Defence & Security business is a world leader in helping defence forces maintain their mission readiness. As a globally recognized training systems integrator (TSI), we develop and deliver live-virtual-constructive (LVC) training solutions for air, naval, land and public safety.



#### Year in review

Our TSI capability and robust bid pipeline drove historically high orders of \$1.4 billion in new contracts and an additional \$939 million in contract options for our Defence & Security business in fiscal 2017. Year-over-year revenue increased by 7%, orders by an impressive 40% and total backlog by 29%. We expanded our market share and won several large defence training contracts, evidence that our TSI offering fulfills a significant need for our customers. Among other highlights, we delivered the Naval Warfare Training System to the Swedish Navy and began building the Naval Training Centre for the United Arab Emirates Navy.

#### **Key FY2017 highlights**

7% revenue growth

1% segment operating income growth <sup>1</sup>

1.33 book-to-sales ratio <sup>2</sup>

\$4.2 billion backlog<sup>3</sup>

<sup>1</sup> Segment operating income (SOI) is a non-GAAP measure and our key indicator of each segment's financial performance. This measure gives us a good indication of the profitability of each segment because it does not include the impact of any items not specifically related to the segment's performance. We calculate it by taking the operating profit and excluding the impact of restructuring costs.

<sup>2</sup> The book-to-sales ratio is a non-GAAP measure calculated as total orders divided by total revenue in a given period.

<sup>3</sup> Backlog is a non-GAAP measure that represents the expected value of orders we have received but have not yet executed.



#### **Training systems integration progress**

Last year, we continued to make progress in implementing our training systems integration (TSI) capability for delivering comprehensive training solutions. Here are a few examples of this progress.



#### U.S. Army fixed-wing Training Center in Dothan, Alabama

In March 2017, we inaugurated our new state-of-the-art CAE Dothan Training Center in Alabama. With its suite of advanced simulators and training devices, the centre serves as the new training facility for the U.S. Army Fixed-Wing Flight Training program. Together with the U.S. Army, we built on our extensive knowledge and experience to develop the facility and the comprehensive training program ahead of schedule in less than 11 months. U.S. Army aviators will be training with CAE for years to come.



# NATO Flying Training in Canada (NFTC)

In January 2017, the Government of Canada extended the period of performance for our NATO. Flying Training in Canada (NFTC) program, one of the world's premier military pilot training programs, to 2023. The NFTC program expands our capability to support live flying training and to help develop next-generation fighter pilots. It also increases our opportunities for growth as a training systems integrator for air forces globally.



# Royal Canadian Air Force (RCAF) fixed-wing search and rescue (FWSAR) program

In February 2017, Airbus Defence and Space selected us to provide comprehensive aircrew and maintenance training services to support the Royal Canadian Air Force (RCAF) fixed-wing search and rescue (FWSAR) program. This most recent agreement builds on our long partnership with Airbus across many platforms.

The Government of Canada chose the Airbus C295W as its new FWSAR platform in December 2016. The first phase of the contract calls for us to design and build a new training centre at Canadian Forces Base (CFB) 19 Wing in Comox, British Columbia.



# Common Database approved as industry standard

In October 2016, the Open Geospatial Consortium (OGC) approved CDB, formerly known as the Common Database, as an OGC standard. CAE had originally designed and developed the CDB for the United States Special Operations Command (USSOCOM). Adopting the OGC CDB standard will deliver accurate. detailed terrain data to users in both the geospatial and simulation industries. It will also enhance data interoperability and reduce the time needed to develop, update and configure synthetic representations of the world.





# Naval instructors win Breitling Trophy with our support

Instructors at the Lynx Simulator Facility at Royal Naval Air Station (RNAS) Yeovilton received the prestigious Breitling Trophy for achieving the best overall performance during the annual Naval Flying Standards inspection. The Breitling Trophy recognizes the squadron delivering an exceptional level of training to Royal Navy frontline crews.

The Royal Navy Lynx helicopter crew train using our simulators and cockpit procedures. We also provide on-site engineering, maintenance and support services to ensure high availability and quality of their training devices.



# Virtual flag exercise with Canadian and Australian forces

In August 2016, we supported both the Royal Canadian Air Force (RCAF) and Royal Australian Air Force (RAAF) as they participated in Coalition Virtual Flag 16 (CVF16), one of the world's largest virtual air combat exercises. We leveraged our TSI expertise to help both air forces prepare, plan and execute their CVF16 missions. The two air forces flew our simulators during the exercise.



#### **Bravo Zulu Awards**

The 3<sup>rd</sup> annual Defence & Security employee recognition awards highlight the special achievements and outstanding performance of teams and/or individuals within the group. This program is intended to promote our 'customer-first' orientation. In fiscal 2017, 12 teams were nominated. Four were selected for a Bravo Zulu Award, recognizing teams in Montreal, Ottawa, Tampa and Sydney.

# Looking ahead

In Defence & Security, we'll continue to leverage of our strong bid pipeline. Geopolitical realities are fuelling defence spending globally, generating additional opportunities. The next-generation aviation and naval defence systems require significant personnel training, and the training we offer is the safest, most efficient solution to ensure mission readiness.

The recent emphasis on the <u>next wave of high technology</u> also bodes well for CAE. We'll continue to lead the way in integrating technological advances into our solutions to further improve defence forces' mission readiness. As our reputation for creating integrated, immersive and interoperable training environments that feature best-of-breed solutions grows, so will our TSI contracts.



Feature story

## **Growing roots in Western Canada**

May 1, 2016, was starting out like any other day for Maryse Carmichael at the Canadian Forces Base (CFB) 15 Wing in Moose law, Saskatchewan. That is, until Maryse heard the news. A major forest fire was tearing through the city of Fort McMurray, Alberta, some 1,000 kilometres away. The untameable wildfire—soon to become the costliest disaster in Canadian history—was forcing the evacuation of Fort McMurray residents, among them family members of CAE employees.

"We knew we had to do something," says Maryse, Business Development and Community Relations Manager of the NATO Flying Training in Canada (NFTC) program in Western Canada, for which CAE became the prime contractor in 2015. "We put out a call to CAE employees worldwide and their generosity was unbelievable. Together with CAE, employees donated over \$76,000 to the Red Cross for food banks, clothes and shelter to help the victims."

Since 2015, CAE has made being an active corporate citizen in Western Canada a top priority. Our support of the wildfire victims is just one example of our community engagement.



#### An eye on the skies

Maryse shares CAE's commitment to Western Canadian communities, not only because that's her job now, but because this part of the country is near and dear to her. She has spent well over a decade here, much of it in the sky. She's a former Royal Canadian Air Force (RCAF) pilot.

It all started when, at 16, she followed her three older brothers into the Air Cadets. By 17, Maryse had her private pilot's license. "Then I saw the Snowbirds, Canada's legendary military aerobatics team, perform at CFB Bagotville and I was hooked; I knew I wanted to fly jets," she smiles. She joined the military in 1990 and received her RCAF wings at CFB Moose Jaw four years later.

In 2000, the same year the government launched NFTC to train Canadian and allied military pilots, Maryse became the first woman to fly with the Snowbirds. For two years, she flew in formation, wing tip to wing tip, with eight other pilots. In 2010, the Snowbirds came calling again and, for three years, Maryse served as the squadron's Commanding Officer. Another first for women.

"Leading a team of 90 highly dedicated individuals was just as exciting as being in the air," reflects Maryse, "especially because lives depended on our flawless functioning."





#### **Neighbour of choice**

CAE hired Maryse in March 2015. Since then, Maryse has applied her passion, experience and knowledge of the area to raise CAE's profile.

"Our goal is to ensure that people see CAE as a neighbour of choice," remarks Maryse, playing on CAE's 'Global training partner of choice' vision. "Over the next five years, 70% of our workforce will be eligible for retirement and we want people to know that we're a great neighbour, employer and career choice."

"Since taking over the NFTC operations, CAE has had a very positive impact across our city," states Fraser Tolmie, Mayor of Moose Jaw. "They bring a highly skilled workforce with a very high level of engagement in the community. They support our local events and are engaged in our high schools and Saskatchewan Polytechnic. We look forward to strengthening this mutually beneficial partnership with CAE."

In fiscal 2017 alone, CAE helped sponsor more than a dozen regional and community initiatives, from career days and citizenship awards to sidewalk fairs. It also deepened ties by formalizing partnerships to help facilitate hands-on learning opportunities for students. This includes agreements with the Saskatchewan Indian Institute of Technology, the Art Smith Aviation Academy and the Prairie South School Division, which oversees 40 schools across southern Saskatchewan.

#### **Onboarding women pilots**

One project especially close to Maryse's heart is opening doors for women in aviation. "I was a complete anomaly when I got my wings," she says, "and that was 20 years ago. To this day, only 4% to 5% of military and civil pilots are women."

In March 2017, Maryse attended The Sky's No Limit - Girls Fly Too!, an event in Abbotsford, British Columbia, that gives women of all ages the opportunity to fly in small aircraft or in helicopters. As a guest speaker, she reassured young women that they have a place in the world of aviation.

In July 2016, CAE sponsored the annual Ninety-Nines conference in Ottawa. "Founded in 1929 to support women pilots, the Nine-Nines' first president was Amelia Earhart," beams Maryse. "Back then, the group had 99 members and today consists of thousands of members from over 44 countries."

to see CAE's logo displayed prominently in the communities. They're excited to share their passion and stories with residents so people understand what we do. ""

**Maryse Carmichael** 



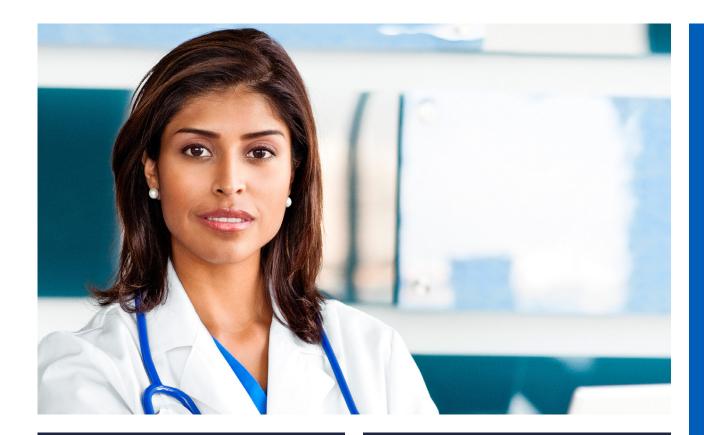
#### Passion, discipline and teamwork

CAE is also facing a new horizon. In January, the Government of Canada extended CAE's NFTC contract through to at least 2023. Between now and then, the government will evaluate future aircrew training requirements while CAE conducts numerous upgrades to sustain the NFTC program well into the next decade.

"We need to keep advancing our systems and technology while building strong community relations," sums up Maryse. "Not unlike being a Snowbird pilot, it will take passion, discipline and teamwork—we can do it!".



#### **Healthcare**



12,500 + simulators installed worldwide

Industry's broadest training products and services portfolio

#### **Enhancing patient safety**

Just as passenger safety is the top priority in civil aviation, patient safety and outcomes matter most in healthcare. Medical errors are the third-leading cause of death in the U.S., and simulation-based training provides a low-risk alternative for practising life-saving procedures, rapid response and inter-professional team training, major disaster response and anesthesia administration.

Building on our aviation expertise, we launched our Healthcare business to effectively enhance healthcare training and improve patient outcomes in clinical settings. Today we're a training partner of choice for the medical industry, societies and associations worldwide. We offer the industry's broadest portfolio of healthcare simulation products and solutions.



#### Year in review

In fiscal 2017, we doubled the volume of our work with original equipment manufacturers (OEMs). While our overall sales in Healthcare were flat, we strengthened our partnerships and launched co-marketing agreements as well as new programs and products. One of these products, CAE VimedixAR, brings the power of augmented reality to the world of healthcare training to further improve patient outcomes.



#### **Key FY2017 highlights**

\$110.7 million

\$6.6 million segment operating income<sup>1</sup>

<sup>1</sup> Segment operating income (SOI) is a non-GAAP measure and our key indicator of each segment's financial performance. This measure gives us a good indication of the profitability of each segment because it does not include the impact of any items not specifically related to the segment's performance. We calculate it by taking the operating profit and excluding the impact of restructuring costs.



#### **Human Patient Simulation Network**

In February 2017, we hosted our 20<sup>th</sup> Human Patient Simulation Network (HPSN) World conference in the U.S. with attendees from 21 countries. The network's expansion continued in fiscal 2017 with the launch of the first HPSN conferences in China and India.

Every year, HPSN World, the largest education, training and networking medical simulation meeting of its kind, is held in the United States. HPSN World 2017 in Ponte Vedra Beach, Florida, marked the network's 20<sup>th</sup> anniversary. During the conference's eye-opening plenary address, attendees heard about how the <u>Orlando Regional Medical Center's emergency response team</u> cared for victims of the Pulse nightclub shooting, the deadliest mass shooting in U.S. history.

As part of their dedication to preparedness through learning, the team uses simulation to train and prepare for medical emergencies. This training helped the team work efficiently together and save the lives of the 35 shooting victims admitted to the hospital on June 12, 2016.

The HPSN's mission is "to bring the international simulation community together, offering collaborative workshops, hands-on learning opportunities, resources and technologically advanced simulation-based medical education (SBME) solutions that enhance patient safety and improve outcomes."

# R&D partnership extended with Quebec government

In June 2016, the Quebec government announced the extension of its R&D agreement with CAE until 2020. The agreement created an R&D program focused on developing new simulation technologies, services and training for the healthcare sector.

Watch the video ≡□





# CAE VimedixAR: A 3D simulation innovation

In April 2016, our healthcare engineers partnered with Microsoft to integrate the Microsoft HoloLens, the world's first fully self-contained wearable holographic computer, with our CAE Vimedix high-fidelity ultrasound simulator.

Ten months later, we launched CAE VimedixAR at the International Meeting on Simulation in Healthcare (IMSH) 2017 in Florida. CAE VimedixAR frees ultrasound, one of medicine's least invasive and most important bedside tools for detecting pathology, from the constraints of 2D monitors. The result is an incomparable learning experience with huge potential for improving patient safety.



# Training medical responders at Rio 2016

Our Apollo patient simulator helped prepare more than 4,800 volunteer medical responders for the Rio 2016 Olympics. Using Apollo enabled the medical teams to practice responding to a wide range of medical emergencies and potentially save lives. Medical volunteers practiced for months with Apollo at the Estacio de Sa University in Rio de Janeiro to be ready to treat Olympic athletes and audience members in the event of a medical crisis.



Simulation-based training represents the future of healthcare training and patient safety. The globe's aging population will increase both people's healthcare needs and nations' healthcare costs. New regulations are expected to further stimulate the adoption of simulation-based training in medical schools and for certification purposes. Limited access to real patients during training and the medical technology revolution are also fuelling the growth in simulation-based training.

At CAE, we'll continue to actively introduce new product innovations and pursue new partnership agreements. Launching our innovative, purpose-built <a href="CAE Juno">CAE Juno</a> patient simulator in fiscal 2018 will allow us to make inroads into the nursing profession, the segment's largest market. Investing in our Healthcare sales force will also enable us to grow our market share.



Feature story

# **Driving innovation in 3D healthcare simulation**

Imagine if a surgeon could practice implanting a new cardiac device by manipulating a hologram of the individual patient's exact anatomy to get a 3D perspective of the precise pathway. What if a medical student could interact with a rare pathology and the surrounding organs as they float before his or her eves. slicing through the anatomy and viewing it from a multitude of angles? While this may sound far-fetched, the recent release of CAE VimedixAR, CAE's new ultrasound training simulator with the Microsoft HoloLens, puts this reality just a heartbeat away.

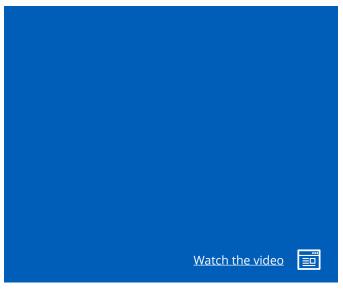
The seed of this revolutionary healthcare innovation was planted when the software giant launched Microsoft HoloLens, the world's first fully self-contained wearable holographic computer. The Microsoft HoloLens headset enables users to interact with digital content by showing a high-definition 3D hologram in their real world environment.

Microsoft, which had already singled out CAE for its breakthroughs in flight simulation, immediately recognized the potential of a healthcare application. In April 2016, Erick Fortin, Director of Global Engineering and Project Management for CAE Healthcare, and his team of engineers became among the first in Canada to be granted full access to Microsoft HoloLens for development purposes.

#### Hitting the ground running

"CAE's experience with virtual reality goes back to the 1980s when our engineers developed a virtual reality headset for the military and, while successful and featuring advanced technology, the project was ultimately abandoned," recalls Erick. "When, over three decades later, we saw the mixed reality capabilities of Microsoft HoloLens, our imagination was immediately sparked again. We started seeing all kinds of possibilities to provide healthcare students and professionals with a truly groundbreaking learning tool."





Ten intense months later, Erick's team launched CAE VimedixAR at the International Meeting on Simulation in HealthCare 2017. CAE VimedixAR generates a real-time anatomically precise hologram image as the user passes an ultrasound probe over a manikin. CAE's innovation is set to transform training in the healthcare industry and beyond.



#### It's all about improving patient safety

"Erick's team has taken ultrasound, one of medicine's least invasive and most important bedside tools for detecting pathology, to a whole new level," states Dr. Chad Epps, Immediate Past President of the Society for Simulation in Healthcare. "By marrying CAE Vimedix and Microsoft HoloLens, they've freed medical ultrasound simulation from the constraints of its 2D environment inside a monitor."

He continues: "With CAE VimedixAR, you see how the ultrasound beam cuts through the human anatomy. It enables true kinesthetic learning. It's so easy to enlarge, turn, rotate or instruct the hologram to go back into the manikin's body. And unlike virtual reality which immerses you in a virtual world, augmented or mixed reality lets you engage simultaneously with the holographic and the real world. That's both magical and highly practical."

A CAE VimedixAR demonstration comes to life with the words "CAE Vimedix, start simulation." The instructor commands a hologram of the heart to appear over the manikin. Students outfitted with headsets take turns using their fingers, as if on a touchpad, to enlarge or rotate the heart. They walk around the hologram to gain a different perspective and peer inside the heart.



for Simulation in Healthcare

lt's an incomparable learning experience, with huge potential for improving patient safety.

**Dr. Chad Epps** 

#### **Teaming up with Microsoft**

"CAE was the first to turn our hypothesis, that Microsoft HoloLens could be used with industry-specific equipment to create something unique and valuable, into a reality," comments D'Arcy Salzmann, Senior Director of Strategy for Microsoft HoloLens.

While developing CAE VimedixAR at their lab in Montreal, Erick's team built a strong relationship with Microsoft.

"We invited representatives from Microsoft's Montreal and Toronto offices to see the progress we were making," says Erick. "Our ultimate goal was to present a prototype at Microsoft's headquarters in Redmond, Washington, so my team was thrilled when the invitation came in to do just that."

"We were more than impressed," affirms D'Arcy. "In fact, after CAE's team left, we kept the CAE VimedixAR prototype to show customers a practical application of Microsoft HoloLens. When they see CAE VimedixAR in action, they're truly amazed."

D'Arcy continues; "The best part for me was watching CAE tackle and execute a challenging technical task so beautifully. Our intention was always to pioneer the

platform and get people to create exciting things on top of it, but that can be like teaching people to fish. We didn't expect to find such a deep software development bench at CAE."

Today CAE is the first company to bring a commercial Microsoft HoloLens application to the medical simulation market and one of only a few authorized resellers of the Microsoft HoloLens worldwide.

#### Looking to the future

While even some of the most promising innovations can lack commercial appeal, CAE VimedixAR's release in January was met with an explosion of interest. In March, CAE made its first sale to Sherbrooke University in Quebec, with more following in the months since.

"The new generation of learners is digitally native," explains Dr. Epps. "Training institutions know this will capture students' attention. It also lowers the cost of training by eliminating the consumables associated with traditional training approaches."

D'Arcy tips his hat to CAE: "Thanks to CAE, real-life applications of Microsoft HoloLens are no longer theoretical. We appreciate that they immediately

jumped onboard and invested their resources producing something potentially lifevalue. saving engineers, that's why we get up every day—to make a difference. We look forward to a growing collaboration with CAE."



While duly proud of his team's accomplishment, Erick has his eyes firmly fixed on the future: "If we accomplished that much in one year, imagine what we can do in two or three! This technology is only going to get more sophisticated and we're thrilled to be at the vanguard."

# Corporate social responsibility





Corporate social responsibility

## **CSR** message



**Hélène V. Gagnon**Vice President, Public Affairs and Global Communications and Leader of the CSR Committee

# Living our noble purpose

At CAE, <u>our purpose</u> is noble and rooted in the principles of corporate social responsibility (CSR). It captures how we make a difference in the world, and drives our decisions and actions. Our purpose makes our employees proud and our customers delighted. It has generated <u>economic</u>, <u>social</u> and <u>environmental benefits</u> for the past 70 years. And it's how we'll bring our <u>vision</u> to life in the future.

#### **Our progress**

Over the past two years, we've seen a marked increase in the maturity, engagement and energy around CSR initiatives at CAE. We delivered on our fiscal 2016 promise to improve our visibility on global metrics.

In fiscal 2017, we established clear processes, roles and responsibilities globally. This international network enabled sites worldwide to report on their health and safety, environmental and donations and sponsorships metrics. As a result, the data we now use to assess our CSR performance is more mature and reflective of our global operations.

Our fiscal 2017 data reveals improvements across the board. In health and safety (H&S), we achieved an 18% year-over-year reduction in recordable accidents. We created a global steering committee to guide and accelerate these improvements. We trained more than 6,900 employees on H&S and increased the global implementation of our 10 critical H&S standards from 11% in fiscal 2016 to 56% in fiscal 2017.

We also made huge strides in terms of our environmental performance. In fiscal 2017, our voluntary Green Pledge initiative inspired almost 2,000 individual employee environmental initiatives. We held our first Global Environment, Health and Safety meeting. We completed our first carbon footprint calculation. At sites where we have operational control, we reduced our global electricity consumption by 2% and our non-hazardous waste disposal by 3%. We also established our first waste and energy reduction targets.

#### Our culture takes centre stage

After 70 years, we're now in a phase of our history where our culture must evolve if we are to make CAE's vision a reality. An achievement that tells me we're making excellent progress is our 9% year-over-year increase in employee engagement in fiscal 2017. That's a significant increase in one year, yet we still have a lot of room for improvement.



In fiscal 2017, we established clear processes, roles and responsibilities globally. This international network enabled sites worldwide to report, for the first time, on their health and safety, environmental and donations and sponsorships metrics.

We started modernizing our workspaces, providing programs to recognize and celebrate employees, introducing fun activities that bring employees together, and adopting a more dynamic approach to telling our story and recruiting employees. In fact, leveraging social media helped us hire 500 new employees within 12 months to support our growth and showcase ongoing career opportunities at CAE.

#### Our challenges

While we've come a long way in only two years, we still have much to do in virtually every aspect of our CSR performance. We plan to engage with external stakeholders around our materiality matrix and, following this, develop a new and updated comprehensive roadmap for guiding and measuring progress on our CSR journey.

We recorded 10 serious H&S incidents in fiscal 2017. Our goal is zero. We intend to increasingly use leading indicators such as near misses to help us move closer to this goal and improve our overall H&S performance.

In terms of employee engagement, we remain a long way from where we want to be as an employer of choice. This will be another priority over the next couple of years. We'll also focus on better aligning our donations and sponsorships with the policy we rolled out in fiscal 2016.

All of us at CAE are proud of the effort and improvements we're making and we're determined to do more. We're humbled to deliver training solutions that make the world a safer, better and cleaner place. We're also proud to contribute to our customers' success and to society in such a meaningful way, and to be living a noble mission.

# 5 million

gallons of jet fuel saved annually by training pilots in a full-flight simulator instead of a real aircraft

# \$6 million

in global donations and sponsorships (cash and in-kind) in fiscal 2017



Corporate social responsibility

# **CSR** governance and oversight

Launched in fiscal 2016, our cross-functional CSR Committee is responsible for rolling out and embedding CSR commitments and best practices across CAE. It's also in charge of identifying, reviewing and assessing our performance in ethical, environmental, social and reputational matters. The committee includes members from our major businesses and key geographic locations.

The committee meets quarterly to review progress and, through the CSR Committee Chair, reports performance quarterly to the Executive Management Committee and periodically to the Board of Directors or its committees (Governance, Human Resources and Audit). The Chief Compliance Officer provides monthly compliance reports to the Executive Management Committee and quarterly reports to the Board.

#### **Our CSR Committee:**

- Includes members from our three core businesses (Civil Aviation Training Solutions, Defence & Security and Healthcare) as well as engineering and corporate services, and three members of our Executive Management Committee
- Interacts with our various stakeholders (investors, employees, customers, suppliers, aviation regulators, governments, local communities and universities)
- Oversees the six core priorities of our CSR approach

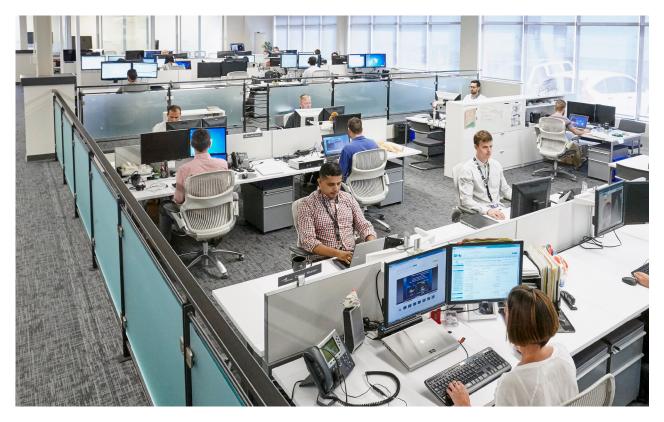
#### **Materiality matrix**





Corporate social responsibility

# **Business integrity**



#### Why it matters

Adhering to the highest ethical standards is essential to building stakeholder trust, goodwill and value in today's world. We expect our employees and business partners to consistently meet these high standards.

#### Our priorities

• Ensure compliance and solid ethical standards

#### **Future commitments**

- Continue strengthening our governance, risk management and internal controls
- Roll out our new company-wide Human Rights Policy



#### Improving business integrity and ethics governance

Bribery and corruption are risks faced by virtually all organizations operating globally. Over the past five years, we've taken several significant steps to address these risks and strengthen our compliance program.

Under the leadership of our General Counsel, Chief Compliance Officer and Corporate Secretary, in fiscal 2017 we took two pivotal steps to better manage the risks posed by foreign representatives: we updated our Anti-Corruption Policy and we began using our customer relationship management (CRM) software to support the process. We're currently updating our online and in-class anti-corruption training material to reflect these changes. In fiscal year 2018, live training sessions will continue to be delivered to the sales, business development, marketing, finance, procurement and HR functions across all divisions of CAE.

We'll continue to leverage our ongoing compliance review to reinforce our governance, risk management and internal controls. Periodic risk assessments and audits of our areas of risk help us maintain oversight on our practices and operating guidelines. Our Compliance Office works closely with the internal audit team to perform these audits. The Compliance Office also conducts risk assessments and monitoring on different programs as the need arises.

# Code of Business Conduct The 648 first of theirses flumborl settlines (1687) intrinsion positives and expenditules for appropriate continuities described. The first province general pollutions as to acceptable to furzion. In the continuities and expenditules as to acceptable to furzion (acceptable to furzion) these control for expenditules and existing acceptable to a positive for expenditules and existing acceptable to a positive for expenditules and existing acceptable to a positive for expenditules and existence acceptable to the expension acce

# Reinforcing our Code of Business Conduct

In fiscal 2016, we launched a fiveyear process of enhancing our Code of Business Conduct to demonstrate our commitment to address major business ethics risks. This included integrating our CSR core priorities into the Code and training our managers on the Code. In fiscal 2017, all managers and key personnel, including all employees in the HR, finance, procurement, sales and business development functions, were trained on and signed our Code. Starting this year, all employees will have to read, acknowledge and agree to comply with our Code on an annual basis.

#### Responsible supply chain management

As a signatory to the UN Global Compact, we demonstrate our commitment to upholding its principles, in part, by taking steps to ensure responsible procurement. We integrate human rights, labour, environment and anti-corruption considerations into our global strategic sourcing tools and processes.

Procurement documents such as Request for Proposal, Supplier Survey Report and <u>Purchasing – General Terms and Conditions</u> include clauses designed to specifically address compliance with laws and ethical business conduct. Employee health and safety, combatting bribery, prohibiting the use of child or forced labour, hazardous materials and conflict minerals are among the issues addressed.

Social and environmental factors are considered alongside financial factors when making procurement decisions, and are detailed among the criteria used for supplier selection.

We conduct spot verifications on suppliers and their supply chain when necessary. If a verification reveals non-compliant practices, we suspend all activities with the supplier and demand an immediate action plan and remediation. If the delinquent supplier implements corrective measures and demonstrates compliance with our policy, we then decide whether to resume business with the supplier.

#### **Green procurement**

Supplier responses regarding environmental responsibility, initiatives, compliance and sustainability are among the aspects integrated into our approach to green procurement. As an example, our major office supplies vendor adheres to our environmental requirements.

#### **Conflict minerals**

We established and communicated our <u>Conflict Minerals Policy</u> to our suppliers. Our Conflict Minerals program, which includes supply chain surveys, supports this policy. We suspended or discontinued our business relationship with some suppliers who failed to respond to or complete these surveys. We also verify smelters reported in supplier surveys to ensure their participation in the Conflict-Free Smelter Program of the Conflict-Free Sourcing Initiative (CFSI).



#### Reporting

Our Chief Compliance Officer provides monthly compliance reports to the Executive Management Committee and quarterly reports to the Board.

# EthicsPoint: Our third-party anonymous reporting system

EthicsPoint helps us ensure that our local and international business activities meet the highest ethical standards. This website and call centre service provides employees, customers, partners and suppliers with a simple, risk-free way to confidentially report activities that may involve criminal conduct or violations of our policies and Code of Business Conduct. Our Whistleblowing Policy protects good-faith whistleblowers from retaliation.

We strongly encourage our employees and any party we conduct business with to come forward if they notice any misconduct. This enables us to deter non-compliance and reduce our exposure to unethical behaviour.

Most concerns reported in recent years relate to Human Resources issues. We ensure all reports are rapidly and confidentially handled as required by law. Certain violations such as violations to the Code of Business Conduct require disciplinary action which varies depending on the severity of the breach. We make sure that appropriate incident investigation and corrective actions are taken for all reports. All EthicsPoint inquiries are reported to the Board on a quarterly basis.

In fiscal 2017, the number of whistleblowing reports declined by approximately 40% as shown in the table on this page. The most common type of EthicsPoint report relates to equal opportunity and harassment issues (two in FY17 and six in FY16).

#### Reports

	FY17	FY16
ISSUES		
CAE property	0	1
Computer systems, internet, intranet and email	0	1
Confidentiality of company, employee and third-party Information	0	2
Contracts and records	1	1
Safety in the workplace	1	0
Equal opportunity and harassment-free workplace	2	6
Interpretation of the Code of Business Conduct	1	1
Reporting violations of the Code of Business Conduct	1	2
Total	6	14

# See all our site certifications

#### FY2017 highlights

97.8%

of managers and key personnel trained on our Code of Business Conduct

95.6% of our employees trained on export control compliance

foreign representatives trained on our Anti-Corruption Policy



#### **United Nations Global Compact**

We became a signatory to the UN Global Compact in fiscal 2016. Since then, we've aligned key documents with the UN Global Compact's Ten Principles and the United Kingdom Modern Slavery Act. We now require vendors to confirm their commitments to high ethical, environmental and social standards. In fiscal 2017, we developed a company-wide Human Rights Policy, which will be rolled out in fiscal 2018.



Corporate social responsibility

# **Health and safety**



#### Why it matters

<u>Safety First</u> is the central focus that guides everything we do, everywhere we operate. It captures our company-wide commitment to leadership, accountability and excellence in health and safety.

#### **Our priorities**

- Finish implementing the 10 global health and safety (H&S) standards in our operational excellence model (56% implemented in fiscal 2017; target is 100% for FY18)
- Education and development: Complete phase one of our global H&S leadership and employee training (phase one is Montreal only; phase two is worldwide)

#### **Future commitments**

- Reduce our Injury Frequency Rate (IFR) and Days Lost Rate (DLR) by 5% by 2018 (part of the CEO's performance objectives)
- Strengthen our H&S global governance
- Integrate leading indicators into our yearly objectives to improve our leadership actions



In fiscal 2017, we started to measure the number of training sessions provided at our global sites. During this period, we trained more than 6,900 employees on H&S—now our annual benchmark—in alignment with our education and development pillar. Over 20 'Learning from Incident' and 'Learning from Others' communication campaigns were also deployed globally.

# **Creating a solid foundation in H&S**

To achieve our vision of world-class H&S performance and zero injuries, we're guided by our:



Global Health and Safety Policy



Four strategic H&S pillars



Safety Management System



Global H&S team



Five-year strategic H&S plan



10 critical H&S standards

## **FY2017 highlights**

Congratulations to our employees worldwide for delivering a 20% reduction in our H&S metrics for the third consecutive year.

	2017	2016	2015
Incident Frequency Rate	0.55	0.74	1.23
Days Lost Rate	2.79	3.52	4.9
Lost Time Injury Frequency Rate	0.25	0.28	0.45



# Hear our leaders speak about health and safety

To reach another key milestone in our global health and safety commitment, we announced the creation of a new Steering Committee for Global Health & Safety and Aviation Safety in February 2017. At the committee's first meeting, we asked members for their views on health and safety.

Watch what they had to say!





## On the road to world-class H&S performance



We celebrated Global Health and Safety Day at Work on April 28, 2016. From more visible propellers to fire evacuation drills and new processes to better manage contractors, employees implemented health and safety initiatives at some 20 sites worldwide.



We held our first annual Global Environment, Health and Safety meeting with guest speakers and key trainings, workshops and discussions involving more than 50 participants from 17 countries. At the meeting, we created global synergies for exchanging best practices and aligned all H&S representatives with our corporate strategy and vision.



Every year, our H&S recognition program strengthens our Safety First culture by highlighting and celebrating significant H&S contributions in four categories: business division, site, project and individual. Congratulations to the following fiscal 2017 winners:

## Business division

Post-Delivery Services (PDS) for their numerous initiatives such as implementing H&S key performance indicators for projects, online training for all employees, specific training for field personnel as well as issuing H&S bulletins

#### Site

Our CAE Oxford Aviation Academy in Phoenix, U.S., for its significant improvement in H&S, which includes 83% fewer reported events and lost days, hiring a new H&S representative, implementing a complete safety program and management process as well as its overall emphasis on H&S culture

#### Project

Tools for rigging/working at heights/handling in Montreal, which featured employee-led projects to create tools for improving health and safety while working at heights, when rigging is required, or for handling/moving simulator parts

#### Individual

Peter Preudhomme, IT Coordinator at our facility in Steenokkerzeel, Belgium, for going above and beyond the call of duty by increasing management and employee H&S awareness, establishing local governance, building relationships and collaborating with external H&S partners, integrating a new evacuation plan, running periodic assessments, conducting a risk analysis and much more

# **Aviation safety culture**

As our live flying training programs grow, along with the number of our instructors in the air, the risks are also increasing. We're rolling out a more open approach across CAE to foster an aviation safety culture focused on leading indicators and greater safety for all. Rather than blaming individuals for their missteps, we encourage people to speak openly about them so we can all learn and improve.

At our CAE Oxford Aviation Academy, the world's largest ab initio flight training network, we've been using a disciplined process of root cause analysis to examine our near misses since 2010. This process has resulted in numerous corrective actions, better procedures and more effective and frequent training to prevent the recurrence of these near misses.



Corporate social responsibility

# Our people



# Why they matter

Attracting, developing and retaining the best talent will always be key to our success. And as our company shifts from a product to a training service focus, cultivating high employee engagement is more crucial than ever.

# Our priorities

- Attract the best talent
- Develop and retain a skilled and engaged workforce
- Evolve a corporate culture aligned with our new vision
- Provide interesting career opportunities to our employees

#### **Future commitments**

- Continue to improve employee engagement and drive our culture's evolution in line with our vision
- Deploy our gender diversity program and plan
- Improve workspaces



# Hats off to our employees

In the late 1940s, CAE consisted of 18 employees repairing and installing Royal Canadian Air Force (RCAF) radio equipment from a vacant aircraft hangar in St. Hubert, Canada. Today our 8,500-plus employees work across 160 sites in more than 35 countries delivering sophisticated integrated training solutions. Their expertise and passion for excellence fuel our global success as the training partner of choice in civil aviation, defence and security, and healthcare.

#### Thousands of stories. One CAE.

We launched our 70<sup>th</sup> anniversary celebrations on March 17, 2017. For the next year, ambassadors and site leaders will engage employees worldwide in fun and creative activities to mark this important milestone. Our 70<sup>th</sup> anniversary campaign theme of "Thousands of stories. One CAE." rallies people around sharing their stories to showcase both the diversity and unity of the CAE family.



CAE is a trusted brand with a strong sense of family. In fact, we even have families like the Salmon family with three generations of CAE employees.

Watch their story



#### Improving employee engagement

Conducted in November 2016, our employee survey resulted in an impressive 9% increase in employee engagement during a one-year period. Although we're satisfied with the improvement, we're not satisfied with our overall results. We still have much work to do.

Our team leaders received their individual survey results to help prioritize actions in their departments and make CAE an even better place to work.

# **Evolving our culture**

Change is afoot at CAE as we adopt a more accessible, bottom-up style of communication and take local employee initiatives global to connect our workforce worldwide. Examples in fiscal 2017 include:





# **CAEchampions recognition program**

Launched in June 2016, CAEchampions is our new global employee recognition program. It enables us to reward employees for their years of service while building a culture of recognition and strengthening people's connection to our <u>five Leadership Attributes</u>.

CAEchampions includes e-Bravo, an online platform where employees celebrate each other's contributions in real time, further promoting an engaged and high-performance culture. Our Spotlight on Recognition Week also allowed us to retroactively celebrate employees who had achieved service milestones.

Between June 2016 and March 2017:

18,239 e-Bravos sent by employees **5,662**Service
Awards
bestowed for
≥ five years of service

**1,956** pins given for years of service



# FY2017 highlights

**1,614 employees** enrolled in our technical career track

655 employees completed

15,475 hours of training and education



**Professional Women's Network (PWN)** 

**525 leaders** completed

**2,995 hours** of leadership training

17
new engineering
hires completed the
Ken Patrick Program
for new graduates



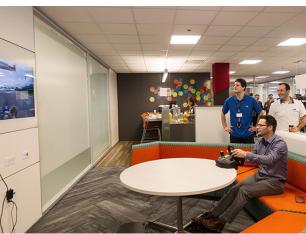
CAE and Office québécois de la langue française (OQLF) event

# A busy year of onboarding employees

In fiscal 2017, new hires worldwide gave our onboarding process a satisfaction rating of over 80%.









#### Creating activity-based work environment

We consulted employees and applied best-practice thinking to create an activity-based team work environment that addresses the lack of light, team work areas and flexibility at our 64-year-old Montreal headquarters.

The Lumina experimental space pilot project provides employees with different environments tailored to the diverse tasks they perform in a day. These brighter, more functional spaces include private offices, scrum areas for daily meetings, coffee corners, lounges and team work areas. The project is part of the Workspace Master Plan currently being developed to improve employee productivity and satisfaction at our Montreal headquarters.



#### Initiatives for talent recruitment

Over the past five years, our employees have helped develop Canada's next generation of talent and expertise by working side by side with over 1,200 co-op students. In fiscal 2017 alone, we hired 230 co-op students, 14% more than last year. We also increased our campus activities by 30%, for a total of 27 events in fiscal 2017. The benefits to both CAE and the students are significant. Our employees also actively mentor high school students interested in engineering and science through diverse programs and competitions.

To support CAE's growth, we leveraged several tools and events to tap into our global pool of external candidates. This included a career day at CAE Montreal attended by more than 300 engineers.



Corporate social responsibility

# **Customer service / Product excellence and innovation**



## Why it matters

Product and service innovations are key elements of our competitive advantage. Our strong innovation culture and commitment to best-in-class customer service drive these innovations. They also support our vision to be recognized as the global training partner of choice.

# Our priorities

- Ensure customer engagement and satisfaction
- Design and deliver quality and responsible next-generation training products and services
- Ensure customer data protection
- Embed a strong innovation and collaboration culture

#### **Future commitments**

- Continue to design for safety and environment
- Formalize sustainability guidelines for the design, development and delivery of our product and services



# **Customer service**

Our global customer service team supports both our Civil Aviation Training Solutions and Defence & Security business units. As these businesses grow, so does our need to consistently delight an even greater number of customers around the world. Empowering, training and recognizing our customer service employees is key to managing this growth and continuing to deliver excellent service.

## A busy year in customer service

In Civil Aviation, acquiring and starting to integrate Lockheed Martin Commercial Flight Training (LMCFT) paved the way for a new Customer Service European Hub in Sassenheim, Netherlands. This centre will significantly improve our ability to effectively serve customers in Europe and Africa.

In logistics or spares and repairs, joint governance between our operations and global strategic sourcing teams enhanced collaboration, improved internal and external repair process efficiency and identified performance gaps.

To promote excellence in customer service, we also created an advisory board with senior members of our team. Members must currently work in customer service and have at least 20 years of experience at CAE.

## **Protecting customer data**

We understand the importance of ensuring customer data and intellectual property are handled with the utmost sensitivity and confidentiality. We have strong controls to ensure compliance with all laws and regulations, including the protection of intellectual property and the exportation and importation of commodities, services and technical data. Employees are trained on handling intellectual property as part of our annual <u>Code of Business Conduct</u> training.

Under the leadership of our Chief Information Officer (CIO), we aligned our IT policies framework with NIST 800-053 and 171. To prevent data security breaches, we invested in the deployment of cyber security controls to comply with aerospace and defence industry standards. All our employees must complete annual mandatory IT security awareness training. We conduct regular audits on our IT security controls. Our CIO reports to the Executive Committee and to the Board's Audit Committee on IT security incidents and presents a status and progress report on our IT security plan.

## **Tracking customer satisfaction**

In fiscal 2017, <u>executive compensation</u> was tied, in part, to the customer satisfaction scores generated by our annual customer survey. Customers ranked our performance as follows:

#### **Civil Aviation**

3/5
sub-divisions and regions exceeded their customer satisfaction targets

## **Defence & Security**

**97%** satisfaction for **on-time delivery** 

98% satisfaction for product quality

# **Healthcare**

**4.8/5 net satisfaction**score



# Product excellence and innovation

With 70 years of breakthrough innovations, our R&D has paved the way for leading-edge flight simulators, training systems integration (TSI) solutions and high-fidelity patient simulators. Our partnerships with industry organizations, regulatory bodies, suppliers and customers help us remain at the forefront of new safety, operating efficiency and environmental standards and processes.

#### A focus on innovation

At CAE, our technological leadership is underpinned by our strong innovation culture, longstanding commitment to R&D and sustainability mindset. We devote over 7% of our global annual revenue to R&D and consistently rank as one of the top 20 Canadian companies in R&D investment.

\$1.47 billion

invested in R&D in the past 10 years

In FY2017:

21
new patent
applications filed

18
new patents
granted

## **Engaging employees in innovation**

Our advanced technologies and products emerge out of our deep-rooted R&D and innovation ecosystem and processes. Launched in 2012, our annual Innovation Challenges initiative is part of this ecosystem. It leverages employees' creativity to spark winning ideas that often evolve into concrete improvements and new products such as the CAE VimedixAR. In fiscal 2017, Innovation Challenges incorporated an environmental category to drive innovation in this area.

## Sustainable products and services

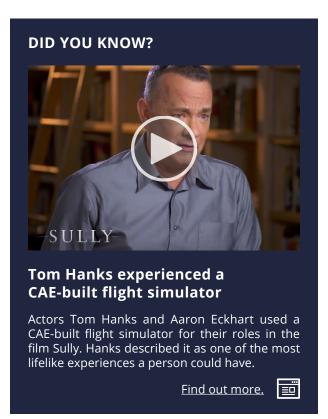
CAE is the global leader in the sale of full-flight simulators, a climate-friendly product. We sold 50 FFSs in fiscal 2017. The full-flight simulators we sell save millions of tonnes of  $CO_2$  annually. In our own Civil training network alone, the simulators we operate save over five million metric tonnes of  $CO_2$  per year. We estimate this number using the number of training hours spent internally on flight simulators and multiply this by the normal burn rate (at cruise) of equivalent real aircraft.

With our full-flight simulator electromechanical motion systems, customers reduce their average annual power consumption per simulator by up to 70% and eliminate 400 gallons of mineral oil per simulator, compared to the hydraulic systems previously used.

# Design for safety and environment

Our Global Engineering department designs our simulator technologies and training materials to improve resource efficiency, eliminate hazardous materials and increase our customers' energy efficiency. We follow numerous standards throughout the life-cycle of our products, from the design and manufacturing stages to the end-of-life phase. As an example, we adhere to the Restriction of Hazardous Substances (RoHS) directive for the United Nation's Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation.

In fiscal 2016, we considered environmental impacts in the redesign of the industry's most advanced full-flight simulator, the CAE 7000XR.





# Paying tribute to our inventors

We operate in an industry where securing intellectual property (IP) is vital to protecting our innovations in an increasingly competitive market. In fiscal 2017, we inaugurated a multimedia Patent Wall at our Montreal head office. This interactive wall showcases our inventors over the past seven decades and underscores the pivotal role innovation plays at CAE. Our Patent Wall is a testament to employees' ingenuity, determination and passion.

As of today, we hold 43 patents and 163 patent applications thanks to our creative employees and the teams that support them. In fiscal 2017, we were granted 18 new patents derived from our R&D activities of previous fiscal years. We also filed 21 new patent applications and rewarded their inventors through our Eureka Program.

## A unique aerospace training lab in North America

In November 2016, we helped inaugurate the new Laboratoire d'enseignement des systèmes intégrés en aérospatiale du Québec (LESIAQ) at the École des métiers de l'aérospatiale de Montréal (ÉMAM). This unique 10,000-square-foot laboratory features actual aircraft and helicopter test platforms as well as our Advanced Engineering Environment modelling and simulation software. This software allows university engineering students to learn on a simulated platform as well as on actual Iron Birds.

As one of LESIAQ's key industrial partners, our contribution amounted to nearly \$650,000. We plan to further equip this unique lab with state-of-the art modelling and simulation capabilities to provide students with comprehensive learning experiences.

#### SA<sup>2</sup>GE

This year, we announced our participation in SimEco 4.0, an R&D project under the SA<sup>2</sup>GE program. This project aims to develop new products and processes to further reduce greenhouse gas emissions related to aircraft. The Quebec government, through the Ministry of Economy, Science and Innovation, and SA<sup>2</sup>GE have committed to contributing up to 50% of eligible costs incurred by CAE through to fiscal 2020.

#### **Institute for Data Valorization (IVADO)**

In 2015, the creation of IVADO helped reinforce Montreal's global reputation as a hub for artificial intelligence. IVADO brings together industry professionals and academic researchers to develop cutting-edge expertise in data science, operational research and artificial intelligence.

As one of IVADO's first key members, we take pride in helping provide its 900 affiliated scientists with a multidisciplinary institute for developing processes to extract trends, metrics and concrete information from big data. Experts from IVADO's talent pool are working alongside our subject matter experts on research projects related to safety, security and efficiency, using data sciences.



# **Biometrics internship**

We financed an internship with DC's George Washington School of Engineering and Applied Science to explore using large data sets collected during defence force flight training events to improve effectiveness and efficiency. Students had access to our engineers, test pilots and instructors as well as a full-flight simulator.



Corporate social responsibility

# **Environmental protection**



## Why it matters

Minimizing the environmental impact of our operations helps protect natural resources, improve employee and community quality of life, and preserve our license to operate. It also enables us to reduce costs, strengthen our competitiveness and foster trust.

# **Our priorities**

- Ensure environmental management system excellence and compliance
- Set targets for energy and carbon footprint reduction
- Improve our material and resource efficiency

#### **Future commitments**

- Further develop our energy and waste reduction initiatives by launching strategic pilot projects to be subsequently deployed on a global scale
- Review employees' personal Green Pledge initiatives, share them and support, when applicable, their implementation at other sites
- Deploy centralized waste-sorting stations, including compostable material sorting, at our Montreal headquarters



## Shrinking our environmental footprint

Our global presence spans 160 sites and training locations in over 35 countries. Approved by our Chief Executive Officer, our Environmental Policy and ISO 14001-aligned Environmental Management System (EMS) guide us in managing our environmental impact across these sites and locations. An increase in inter-site communication and best-practice sharing is helping accelerate improvements in our environmental performance.

Here's a summary of our top five environmental achievements in fiscal 2017:

- We completed our first carbon
   We launched Green Pledge, footprint calculation.
- At sites where we have operational control over nonhazardous waste and energy, we reduced our:
  - Global electricity consumption by 2%
  - Non-hazardous waste disposal by 3%
- We held our first annual Global Environment, Health and Safety meeting.

a company-wide voluntary initiative signed by more than 20% of employees and

environmental initiatives.

 For the first time, our annual Innovation Challenges initiative included an environmental category, which received 72 ideas from employees for reducing energy use and waste production.

inspiring almost 2,000 individual

# Calculating our carbon footprint

For the first time in fiscal 2017, we calculated our global GHG emissions. We used an operational control approach and included all facilities over which we have operational control in our GHG inventory. We limited our inventory to Scope 1 and 2 emissions.

In recent years, we were only calculating the GHG emissions for our Montreal headquarters in Canada.

## Reporting

Environmental performance reports are presented to the Board of Directors on a quarterly basis. Every site manager is responsible for tracking performance against environmental targets as well as compliance with local environmental regulations and requirements.

#### **Environment as an onboarding tool**

In fiscal 2017, we began showing new employees an environmental onboarding presentation as part of their integration process. The presentation outlines the key elements of our Environmental Management System, including our Environmental Policy, local and global environmental structure, and our company-wide commitment to the environment.

#### Training our leaders on environmental issues

All environmental officers, group leaders and up must participate in a corporate environmental awareness training program. The program explains the basic elements of good environmental management principles, the environmental responsibilities of all employees and the actions to be taken in the event of an environmental emergency. Environmental training programs are also developed on an adhoc basis and made available to all employees through our intranet.

# Monitoring our environmental performance

To drive further improvements, we established and met our first waste and energy reduction targets in fiscal 2017.



Our simulators play a key role in reducing our customers' carbon footprint by avoiding the fuel consumption and CO<sub>2</sub> emissions associated with live flying training.



We won the Canadian Industry Program for Energy Conservation (CIPEC) Leadership Award in the Process and Technology Improvement category for modernizing the heating, ventilation and air-conditioning (HVAC) system at our headquarters in Montreal, Canada. This improvement reduced the site's energy costs by 31%.

#### **Green Procurement**



See Business integrity section



# **Growing employee engagement**

Across CAE, people are increasingly sharing best practices and initiatives that cover all our environmental aspects, including energy efficiency and waste reduction. Enviro-News, our global internal environmental newsletter, is sent monthly and provides updates on best practices and initiatives taking place across the company. This communication tool enables us to share corrective actions and stimulate continuous improvement.



As part of our Earth Day celebrations and our "One planet. Thousands of gestures. One CAE." campaign, more than 40 sites shared their dedication and diverse environmental initiatives.



Montreal head-office employees are proud of their new composting program. Launched in fiscal 2017, the pilot project was a huge success and is now being deployed throughout our headquarters.



On April 22, 2016 and April 27, 2017, we combined Earth Day with our monthly CAE Colour Day, inspiring employees from around the world to wear green to work.



On January 26, 2017, our Gondia site marked India's 67<sup>th</sup> anniversary by integrating the Green Pledge into its celebrations.

Over 200 people also participated in the Clean India Day campaign. To support the community and the environment, staff and students cleaned up a stretch of land from the CAE site to the neighbouring village of Birsiwas.



All 14 of our sites throughout Australia and New Zealand are certified to the AS/NZS ISO14001:2004 Environmental Management Systems Standard as well as the AS/NZS 4801:2001 Occupational Health and Safety Management Systems.

The journey began in 2014 with a plan to certify the Sale and Silverwater sites to both standards, which was achieved in February 2016. We then began migrating the Environmental Health and Safety Management System (EHSMS) to the other 12 sites. In fiscal 2017, site managers and employees, along with senior management support, succeeded in integrating the EHSMS across all 12 sites. The EHSMS ensures we meet our obligations under the standards as well as fulfill our commitment to the environment and to our employees' health and wellbeing.



Employees are biking to work in increasing numbers at CAE sites around the world. In fact, our Montreal head office has been recognized as a bikefriendly place to work by Vélo Québec.

Our President and CEO Marc Parent is part of a group of employees that bikes to work.



Feature story

# CAE Green Pledge: Making a difference, together

In fiscal 2016, Patrick Didierjean, our Global Environment Manager, and our Environmental Officers worldwide created an ingenious way to support our fiscal 2017 environmental objectives. On January 17, 2017, they launched the Green Pledge, an online company-wide voluntary initiative that invites employees around the globe to commit to four simple day-to-day actions. Less than three months later, more than 20% of our workforce had signed the pledge and added nearly 2,000 personal environmental initiatives—a resounding success for our first Green Pledge.



contribution to protecting the environment is clearly the fuel consumption and CO<sub>2</sub> emissions clients avoid when they train on our simulators as opposed to in the air. However, this doesn't absolve us from the responsibility of taking action to reduce our own environmental impact across our offices and facilities. ••

Patrick Didierjean Global Environment Manager

## Beyond environmental compliance

The idea behind the Green Pledge is simple: make every day Earth Day at CAE, no matter where you work. Patrick and his team were thrilled that so many employees jumped on board.

"Sharing people's environmental initiatives across the company—while respecting employee anonymity—inspired others to think about what more they could do," remarks Patrick. "This pledge is about making a difference by moving beyond environmental compliance and encouraging people to change their behaviours, both at work and at home. We're one of the first Canadian companies to launch a global environmental challenge like this. That's something both existing and prospective employees can be proud of."



#### A friendly competition

To incentivize people, the Green Pledge included a friendly inter-site challenge with prizes going to the global site and the three regional sites with the highest percentage of pledgers. The challenge inspired more than a little friendly competition in the race for a spot on the podium.



I was hoping to place first in the Americas region but my colleagues in Halifax nudged me out of that spot. It's all in good fun and for a good cause.

**Jamie Walby** 

Jamie used the Green Pledge as an opportunity to reach out to leaders and employees alike at the NATO Flying Training in Canada (NFTC) program in Moose Jaw, Saskatchewan. His goal was to raise awareness and encourage concrete gestures to further improve the site's environmental performance.

"The Moose Jaw Canadian Forces Base is very large with some 30 buildings," explains Jamie. "The potential to make changes and shrink our environmental footprint are significant. As part of my own personal Green Pledge, I launched a new recycling program across the site. I'm also working with our janitorial services supplier to facilitate a shift to products that are less hazardous and use less packaging."

# GREEN PLEDGE For a greener environment, adopt these simple actions: USE REUSABLE CUPS, **BOTTLES, UTENSILS** DOCUMENTS IN A DOUBLE-SIDED P **SHUT DOWN YOUR** LIGHTS WHEN YOU **COMPUTER MONITOR** AT THE END OF THE DAY YOUR WORKDAY YOUR PERSONAL

#### Growing environmental awareness and action

To further reduce energy consumption and related costs, the Moose Jaw site is currently replacing all lighting in the base's hangars with high-efficiency lights. Add to this, the 45% of CAE employees working at the base who signed the pledge and there's a true groundswell of environmental awareness and commitment to action in Moose Jaw. This groundswell is also present in CAE locations worldwide.

Along with the four day-to-day environmental actions, the Green Pledge encouraged people to add a personal initiative. Here are a <u>few examples</u> of the nearly 2,000 initiatives to which people pledged their commitment.

"The environment is increasingly top of mind for CAE employees," smiles Patrick. "As a result, a growing number of leaders are integrating environmental considerations into their own initiatives. Our 2017 Innovation Challenges initiative is a great example. For the first time this year, it included an environmental protection category, which in the end received the highest number of innovative employee submissions."

Patrick adds: "We can't take this progress for granted though. People are hardwired to revert to their habitual ways of behaving. That's why my team will continue to come up with creative and effective ways of keeping environmental protection on everyone's radar. Just wait and see!"



Corporate social responsibility

# Local economies and community investment



## Why it matters

We know that we can only be successful if the communities and economies in which we operate are thriving and prosperous. Our training solutions contribute to this wellbeing by increasing aviation safety, strengthening public security and improving patient outcomes.

# **Our priorities**

- Support local economies where we operate in line with our Donations and Sponsorships Policy
- Position CAE as a thought leader in training

#### **Future commitments**

- Progressively increase the percentage of donations and sponsorships aligned with our policy and vision:
  - Support educational facilities, activities and programs developing excellence or interest among young people in science, technology and engineering
  - Encourage young people to pursue a career as pilots
  - Support organizations that improve aviation and patient safety



# A neighbour of choice

Investing in communities and local economies is key to building a reputation for being a neighbour of choice everywhere we operate. It also helps strengthen employee engagement across CAE. In fiscal 2017, our employees made a difference in a number of ways around the world.



Riding to conquer cancer



Supporting young Canadian and world champions



**Helping Orlando** shooting victims



**FIRST Robotics** 



Providing university scholarships



# Our award-winning Centraide campaign

Our highly successful 2016 CAE-United Way/Centraide campaign focused on fun and, in the process, became a powerful springboard for bringing employees together. It also earned us Centraide's Solidaires Employee Campaign Award in the 1,000-plus-employee category for leadership and social involvement.

Employee engagement and innovation were at an all-time high as people participated in a Hidden Talent Week, a rowing challenge and the Centraide Cup soccer tournament. Guest speakers, Lunch & Learns, caring activities and video presentations helped raise awareness and funds while great prizes encouraged employee payroll contributions. In the end, we donated \$744,000 to Centraide for a year-over-year increase of nearly \$85,000.



# **Engaging with stakeholders**

We proactively engage with a diverse range of stakeholders on a broad number of issues. This engagement takes the form of conferences, sectorial and cross-sectorial initiatives, partnerships with government and educational institutions as well as direct dialogue with various community groups.

# Contributing to fundamental and applied research

Over the past seven years, we've contributed talent and more than \$8 million to collaborative projects with universities and research institutes. Projects range from basic research to product, process and service commercialization.

#### Examples include:

- Founding member of IVADO (Institute for Data Valorization)
- Operational Research Chair at the École Polytechnique de Montréal
- Healthcare partnership with Université de Montréal

# Thought leadership

As a thought leader, our work with regulatory bodies and industry worldwide is one of the ways we continue to actively shape the future of training globally. This includes representing our stakeholders in discussions on civil aviation regulations to ensure the industry's strategic, safe and sustainable evolution.

We've been involved in numerous Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA) and International Civil Aviation Organization (ICAO) regulatory committees and working groups.

# Women in Engineering Chair at University of Ottawa

We'll donate \$20,000 annually for a period of three years, for a total of \$60,000 towards establishing a fund for the promotion and advancement of girls and women in science and engineering at the University of Ottawa's engineering faculty. The fund will finance activities and initiatives that encourage girls to consider studies and careers in engineering and provide them with positive female role models.

## Work Integrated Learning (WIL)

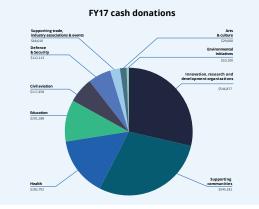
In Canada, we're working with the rest of the aerospace community to improve current internship models and identify opportunities to increase the diversity, quality and number of WIL internships. These improvement opportunities are being further defined by the partners and universities via their aerospace institutes that manage WIL. Two working groups have been created and, in fiscal 2018, a new model is targeted to be implemented.

## Kids Code Jeunesse (KCJ)

We continue to support KCJ with employee volunteers who dedicate their time to provide coding workshops in elementary schools.

# Donations and sponsorships in FY2017

In total, we donated \$6 million (cash and in-kind) to local and regional initiatives worldwide in fiscal 2017.



# **Supporting local economies**

Through our presence in more than 35 countries around the world, we're helping create economic growth by delivering goods to our customers, jobs for our employees, payments to our suppliers, investments in communities and value to our investors. Here's a snapshot of how we supported local economies in fiscal 2017.

\$2,704.5
\$2,339.8
\$838.4
\$24.8
\$1.9

Amounts in millions

# Appendix





# Site certifications

ISO 14001:2004

#### **CAE Australia Pty Ltd**

#### CAE Australia / CAE Sydney

Unit 40 Slough Avenue Silverwater NSW 2128 AUSTRALIA

#### CAE Canberra

15 Tench Street Kingston ACT 2604 AUSTRALIA

#### **ACE Training Centre**

Bankstown Airport 33 Nancy Ellis Leebold Drive Bankstown NSW 2200 AUSTRALIA

#### **CAE at Seahawk Simulation and Warfare**

Centre, Swordfish Road HMAS Albatross Nowra NSW 2541 AUSTRALIA

#### **Airlift Simulator Facility**

Building 375 Percival Street RAAF Base Richmond NSW 2755 AUSTRALIA

#### **KC30-A Simulator Facility**

Building 1123 F-111 Drive Amberley QLD 4306 AUSTRALIA

#### **CAE Brisbane**

Level 15, 120 Edward Street Brisbane QLD 4000 AUSTRALIA

#### **CH47F Training Centre**

Building 0808 RAAF Base Townsville Ingham Road Garbutt QLD 4810 AUSTRALIA

#### **Black Hawk Simulator Facility**

Army Aviation Training Centre Oakey QLD 4401 AUSTRALIA

#### 292 Squadron AFS

Building 398, 292 Squadron AFS Edinburgh SA 5111 AUSTRALIA

#### **CAE Melbourne**

Suite 6, 260 Auburn Road Hawthorne VIC 3122 AUSTRALIA

#### **B350 Training Centre**

Lot 17 Wellington Park Way Sale VIC 3850 AUSTRALIA

#### SH2G(I) Seasprite Training Centre

6 Squadron, Tainui Street, Base Whenuapai Auckland 0618 NEW ZEALAND

#### **T6 and Pilot Training Support**

Hanger No. 1, Kororareka Ave Ohakea 4816 NEW ZEALAND

#### **CAE Moose Jaw (NFTC)**

5 Wing, Moose Jaw, SK S0H 0N0 Canada

#### ISO 14001:2015

#### CAE Burgess Hill (UK)

Innovation Drive, Burgess Hill, West Sussex, RH15 9TW, United Kingdom

#### RNAS Culdrose (UK)

Building D51, Helston, Cornwall, TR12 7RH, United Kingdom

#### **RAF Brize Norton (UK)**

24 Sqn HQ, Carterton, Oxfordshire, OX18 3LX, United Kingdom

#### CAE Medium Support Helicopter Aircrew Training Facility (UK)

RAF Benson Wallingford,Oxfordshire OX10 6AA, United Kingdom

#### AS 9100C / ISO 9001:2008

#### **CAE Headquarters**

8585 Côte de Liesse, Saint-Laurent, Qc H4T1G6

Scope: Design (hardware and software), manufacture, repair and overhaul of the Magnetic Anomaly Detection (MAD)/AIMS equipment

#### ISO 9001:2015

#### **CAE Headquarters**

8585 Côte de Liesse, Saint-Laurent, Qc H4T1G6

Scope: Design, manufacture, service and maintenance of simulation products and training solutions

#### **CAE Montreal**

400 Montée de Liesse, Saint-Laurent, Qc H4T 1N8

Scope: Storage, handling and warehousing

#### CAE Montreal

105 Montée de Liesse, Saint-Laurent, Qc H4T1S6

Scope: Assembly and testing of simulation products; storage, handling and warehousing



# **GRI** indicators

	FY17	FY16	FY15	INDICATOR
ECONOMIC PERFORMANCE				
Direct Economic Value Generated				
Total Revenues (\$ Millions)	2,704.5	2,512.6	2,246.3	G4-EC1
Economic Value Distributed				
Total Operating Costs - Including Total Employee Salaries and Other Short-Term Employee Benefits (\$ millions)	2,339.8 (1)	2,177.1	1,913.5	G4-EC1
Salaries and Other Short-Term Employee Benefits (\$ millions)	838.4 (2)	786.9	706.2	G4-EC1
Payments to Providers of Capital (\$ millions)	139.1 <sup>(3)</sup>	121.8	101.2	G4-EC1
Corporate Income Taxes (\$ millions)	24.8 (4)	18.5	34.1	G4-EC1
Community Investment (\$ millions)	1.9 (5)	1.8	1.7	G4-EC1
Economic Value Retained (\$ millions)	198.9 <sup>(6)</sup>	193.4	195.8	G4-EC1
Financial Assistance from Government (\$ CDN)				
Government Assistance Payment Received (\$ millions) (7)	34.7	29.4	27.9	G4-EC4
Market Presence				
Proportion of Senior Management Hired from Local Community (8)				
% of Senior Management Hired from Local Community	91%	89%	92%	G4-EC6
% of Senior Management Hired from Local Community in Canada	98%	99%	97%	G4-EC6
% of Senior Management Hired from Local Community in U.S.	76%	81%	82%	G4-EC6
% of Senior Management Hired from Local Community, outside Canada and U.S.	78%	62%	73%	G4-EC6
Procurement Practices				
% of Procurement Budget Used on Suppliers Local to that Operation				
Australia	99%	74%	94%	G4-EC9
Asia	87%	61%	85%	G4-EC9
Europe	55%	71%	70%	G4-EC10
Middle East	88%	89%	82%	G4-EC11
North America	60%	56%	57%	G4-EC12
South America	81%	62%	91%	G4-EC13

<sup>(1)</sup> Operating Cost - including: Cost of sales, R&D expenses, SG&A expenses, other gains - net, after tax-share in profit of equity accounted investees, and employee wages and benefits
(2) Salaries and other short-term employee benefits

<sup>(3)</sup> Payments to providers of capital - including: Dividends paid and Interest paid

<sup>(5)</sup> Community investment for the following types of causes: Arts & Culture, Disaster and Humanitarian Relief, Education, Employee Engagement in the Community, Environmental Initiatives, Health, Innovation, Research & Development Organizations and Supporting Communities

<sup>(6)</sup> Total revenues - Less: Total operating costs including employee salaries and benefits, Payment to providers of capital, Corporate income taxes, and Community investments

<sup>(7)</sup> Total payments received from the government for projects (repayable loan) (8) Director and up, citizenship of the country in which they work



	FY17	FY16	FY15	INDICATOR
ENVIRONMENT				
Greenhouse Gas Emissions (GHG) (tCO <sub>2</sub> e)				
GHG Emissions (scope 1 and 2 location based)	78,383 <sup>(2)</sup>	710	833	G4-EN15, EN16
GHG Emissions (scope 1 and 2 market based)	86,042 (2)	-	-	G4-EN15, EN16
Direct GHG Emissions (scope 1)	18,625 <sup>(2)</sup>	646	761	G4-EN15
Energy Indirect GHG Emissions (scope 2 location based)	59,757 <sup>(2)</sup>	64	72	G4-EN16
Energy Indirect GHG Emissions (scope 2 market based)	67,417 <sup>(2)</sup>	-	-	G4-EN16
GHG Emissions Intensity (location based) (tCO <sub>2</sub> e/\$million revenue)	22.10 (1,3)	0.28	0.37	G4-EN18
GHG Emissions Intensity (market based) (tCO <sub>2</sub> e/\$million revenue)	24.93 (1,3)	-	-	G4-EN18
Energy Consumption (MWh)				
Energy Consumed within the Organization	247,876 <sup>(4)</sup>	31,970	39,705	G4-EN3
Natural Gas	20,358 (4)	3,303	3,877	G4-EN3
Electricity Consumed	175,454 <sup>(4)</sup>	28,667	35,828	G4-EN3
Diesel, Heating Oil, Propane, Fuel for Aircraft and Cars, Hot and Chilled Water	52,064 <sup>(4)</sup>	-	-	G4-EN3
Energy Intensity (MWh/\$million revenue)	91.65 (4)	12.7	17.7	G4-EN5
Waste (5)				
Waste Generated Absolute (tonnes)	1,507	1,153	1,279	G4-EN23
Total Weight of Hazardous Waste	96	76	104	G4-EN23
Total Weight of Non-Hazardous Waste	1,411	1,077	1,175	G4-EN23
Waste Generated Intensity (tonnes/revenue)	0.56	0.46	0.57	-
Non-Hazardous Waste Recycled (%)	84%	80%	72%	
Water (5)				
Water Withdrawn (m³)	89,156	82,989	95,242	G4-EN8
Water Consumption Intensity (m³/revenue)	32.97	33.03	42.4	
Green Building Certifications, Labelling or Rating				
Green Building Certifications	4 (6)	1	1	CRE8
ISO 14001	19 (7)	12	6	CRE8

<sup>(1)</sup> The calculations for GHG emissions and GHG emissions intensity cover Scope 1 and 2 emissions only.

(2) NEW CALCULATION METHOD: In FY17, we started calculating our GHG emission globally instead of for Montreal only. It's our first year of reporting GHG data on a global scale. Our Scope 1 and 2 GHG emissions are consolidated based on an operational control approach, and calculated by fiscal year. The numbers for FY16 and prior years applied only to our site in Montreal, Canada, and were calcultated by calendar year ending on December 31. For FY16 and prior years, we measured carbon dioxide, methane and nitrous oxides using emission factors and global warming potentials from Environment Canada's National Inventory Report, 2010 and the International Panel on Climate Change (second assessment report - 100 year Global Warming Potentials). The difference between Market and Location for scope 2 was not specified.

<sup>(3)</sup> In FY17, we started calculating our GHG emissions intensity globally instead of for Montreal only. It's our first year of reporting GHG data on a global scale. Our Scope 1 and 2 GHG emissions are consolidated based on an operational control approach, and calculated by fiscal year. The numbers for FY16 and prior years applied only to our site in Montreal, Canada, and were calculated by calendar year ending on December 31. For FY16 and

prior years, we measured carbon dioxide, methane and nitrous oxides using emission factors and global warming potentials from Environment Canada's National Inventory Report, 2010 and the International Panel on Climate Change (second assessment report - 100 year Global Warming Potentials). The difference between Market and Location for scope 2 was not specified.

(4) In FY17, we started calculating our energy consumption globally instead of for Montreal only. It's our first year of reporting our consumption data on a global scale. Our conversions to MWh were based on EPA Emission Factors for Greenhouse Gas Inventories, Nov 2015. Energy consumption

relates to fuel, natural gas and electricity consumed within the organization. For FY16 and prior years, conversions for the Montreal site to MWh from volumes of natural gas and electricity consumed were based on Environment Canada conversion factors.

<sup>(5)</sup> For Montreal only. Waste disposal methods and associated quantities are provided to us by our third-party waste disposal contractor.

<sup>(6)</sup> Brunei (Green Mark), Montreal (Boma Best), Sassenheim (Breeam), Mount Pearl (Leed for Core and Shell Development)



	FY17	FY16	FY15	INDICATOR
SAFETY				
Occupational Health and Safety Performance				
Incident Frequency Rate	0.55 (1)	0.74	1.23	G4-LA6
Days Lost	278	319	394	G4-LA6
Days Lost Rate	2.79	3.52	4.9	G4-LA6
Lost Time Injury Frequency	0.25 (1)	0.28	0.45	G4-LA6
Fatalities	0	0	0	G4-LA6

(1) Per 200,000 hours worked

	FY17	FY16	FY15	INDICATOR
EMPLOYER OF CHOICE				
Total Employees				
Total Number of CAE Employees	7,584 <sup>(2)</sup>	7,211	7,168	G4-9
Total Number of Employees from Joint Ventures	1,102 (3)	1,245	1,045	G4-9
Total <sup>(4)</sup>	8,686	8,456	8,213	
Employees by Gender <sup>(4)</sup>				
Number of Employees (female)	1,735	1,692	1,633	G4-10
Number of Employees (male)	6,951	6,764	6,580	G4-10
% of Female Employees	20%	20%	20%	G4-10
% of Male Employees	80%	80%	80%	G4-10
Employees Covered by Collective Bargaining Agreements (5)				
Number of Employees Covered by Collective Bargaining Agreements	1,025	1,142	978	G4-11
Percentage of Employees Covered by Collective Bargaining Agreements	14%	16%	14%	G4-11
Number of Non-Unionized Employees	6,559	6,069	6,190	G4-11
Employees by Contract <sup>(6)</sup>				
Number of Employees (permanent)	7,363 <sup>(7)</sup>	6,995	6,940	G4-10
Number of Employees (part time)	221 (8)	216	228	G4-10
Number of Employees (temporary)	1,098 <sup>(9)</sup>	858	791	G4-10
Number of Employees (contractors)	1,973 (10)	1,060	194	G4-10

<sup>(2)</sup> All employees accounted for as per CAE's headcount definition (all permanent employees, full time or part time)
(3) All employees from joint ventures
(4) CAE headcount + joint ventures
(5) All employees accounted for as headcount as per CAE's definition.
(6) Stats based on headcount only as information is not available for joint-venture employees.

<sup>(7)</sup> Permanent full time
(8) Permanent part time
(9) All other employees (temporary, students, on call) not included in headcount definition
(10) In 2016, we began integrating all contingent workers in our HR management system.



	FY17	FY16	FY15	INDICATOR
EMPLOYER OF CHOICE				
New Employee Hires (1)				
Total Number of New Employee Hires	1,028	1,003	690	G4-LA1
New Employee Hire Rate (% of total employees)	14%	14%	10%	G4-LA1
Age Group				
New Employee Hires below 30 Years Old	332	268	256	G4-LA1
% New Employee Hires below 30 Years Old	32%	27%	37%	G4-LA1
New Employee Hires between 30-50 Years Old	491	426	314	G4-LA1
% New Employee Hires between 30-50 Years Old	48%	42%	46%	G4-LA1
New Employee Hires above 50 Years Old	205	309	120	G4-LA1
% New Employee Hires above 50 Years Old	20%	31%	17%	G4-LA1
Gender				
New Employee Hires for Women	207	218	164	G4-LA1
% New Employee Hires for Women	20%	22%	24%	G4-LA1
New Employee Hires for Men	821	785	526	G4-LA1
% New Employee Hires for Men	80%	78%	76%	G4-LA1

<sup>(1)</sup> Includes all permanent employees, full time or part time  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 



	FY17	FY16	FY15	INDICATOR
EMPLOYER OF CHOICE				
Employee Turnover (1)				
Employee Turnover Number	442	576	669	G4-LA1
Employee Turnover Rate (% of total employees)	6%	8%	9%	G4-LA1
Age Group (2)				
Employee Turnover below 30 Years Old	101	126	150	G4-LA1
% Employee Turnover below 30 Years Old	11%	18%	16%	G4-LA1
Employee Turnover between 30-50 Years Old	218	329	337	G4-LA1
% Employee Turnover between 30-50 Years Old	6%	9%	9%	G4-LA1
Employee Turnover above 50 Years Old	123	121	154	G4-LA1
% Employee Turnover above 50 Years Old	4%	5%	6%	G4-LA1
Gender (3)				
Employee Turnover for Women	92	150	174	G4-LA1
% Employee Turnover for Women	6%	10%	12%	G4-LA1
Employee Turnover for Men	350	426	495	G4-LA1
% Employee Turnover for Men	6%	7%	9%	G4-LA1

<sup>(1)</sup> Turnover calculated with CAE definition of headcount - voluntary terminations only (and excluding retirement, death) (2) T/O rate calculated based on total # of employees in similar group (3) T/O rate calculated based on # of employees in similar group



	FY17	FY16	FY15	INDICATOR
COMMUNITY INVESTMENT				
Type of Cause (Cash only)				
Arts & Culture	\$29,600	\$53,407	\$134,000	G4-EC1
Civil Aviation	\$117,458 <sup>(1)</sup>	\$87,465	-	G4-EC1
Disaster and Humanitarian Relief	_ (2)	-	\$10,000	G4-EC1
Education	\$201,288	\$345,876	\$206,347	G4-EC1
Employee Engagement in the Community	_ (2)	\$1,777	\$12,700	G4-EC1
Environmental Initiatives	\$10,100	\$10,000	\$10,000	G4-EC1
Health	\$282,792	\$346,581	\$284,988	G4-EC1
Innovation, Research and Development Organizations	\$546,877	\$348,040	\$677,870	G4-EC1
Supporting Communities	\$545,181	\$498,882	\$411,358	G4-EC1
Supporting Trade & Industry Associations and Events	\$48,010 <sup>(3)</sup>	-	-	G4-EC1
Defence & Security	\$112,113 (1)	\$136,416	-	G4-EC1
Type of Invesment (Cash only)				
Charitable Donations	\$1,021,633	\$1,098,413	\$1,020,452	G4-EC1
Community Investment	\$871,786	\$730,031	\$726,810	G4-EC1
Breakdown of Investment (Cash and In-Kind)				
Cash Contribution	\$1,893,419	\$1,828,444	\$1,572,862	G4-EC1
In-Kind Giving, Product or Service Donations	\$4,186,349 (4)	\$5,956,262	\$174,400	G4-EC1
Total in Fiscal Year	\$6,079,768	\$7,784,706	\$1,747,262	

<sup>(1)</sup> New as of FY16
(2) Included in Supporting Communities from FY16
(3) New category as of FY17
(4) This category includes software licences donated to universities (the amount may vary from year to year).

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