

# Annual Report

# 2016



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# PRESENTATION

[G4-18]

Since 1999, Embraer S.A. has shared its annual report, with a statement on operational, financial and socio-environmental performance, explained results in their context and presented advances in practices of corporate governance, ethics and compliance. [G4-3, G4-7, G4-30]

This edition complies with Global Reporting Initiative (GRI) G4 Guidelines, in accordance – Core option. The content was prepared through interviews with the Board of Executive Officers and based on the company's Materiality Matrix (see page 6). The data covers the financial year of January 1 through December 31, 2016, and encompasses all sites in Brazil and abroad, except where identified otherwise in explanatory notes. All Embraer sites included in the consolidated financial statements are within the scope of this report. Eventual reformulations of information disclosed in previous reports are clarified throughout the content. [G4-17, G4-22, G4-23, G4-28, G4-32]

In line with best market practices, references from the Dow Jones Sustainability Index (DJSI), from the BM&FBOVESPA's Corporate Sustainability Index (ISE, in Portuguese) and from the Global Compact of the United Nations (UN), of which Embraer is a signatory, were also considered.

The financial data follows International Financial Reporting Standards (IFRS) and was submitted for external verification by KPMG Independent Auditors. The inventory of greenhouse gas (GHG) emissions was audited by Lloyd's Register Quality Assurance (LRQA), whereas the other information was verified internally, without external verification of this publication. [G4-33]

To learn more, access <http://ri.embraer.com.br/Default.aspx?linguagem=en#> or contact the e-mail address [investor.relations@embraer.com.br](mailto:investor.relations@embraer.com.br). [G4-31]

Enjoy!

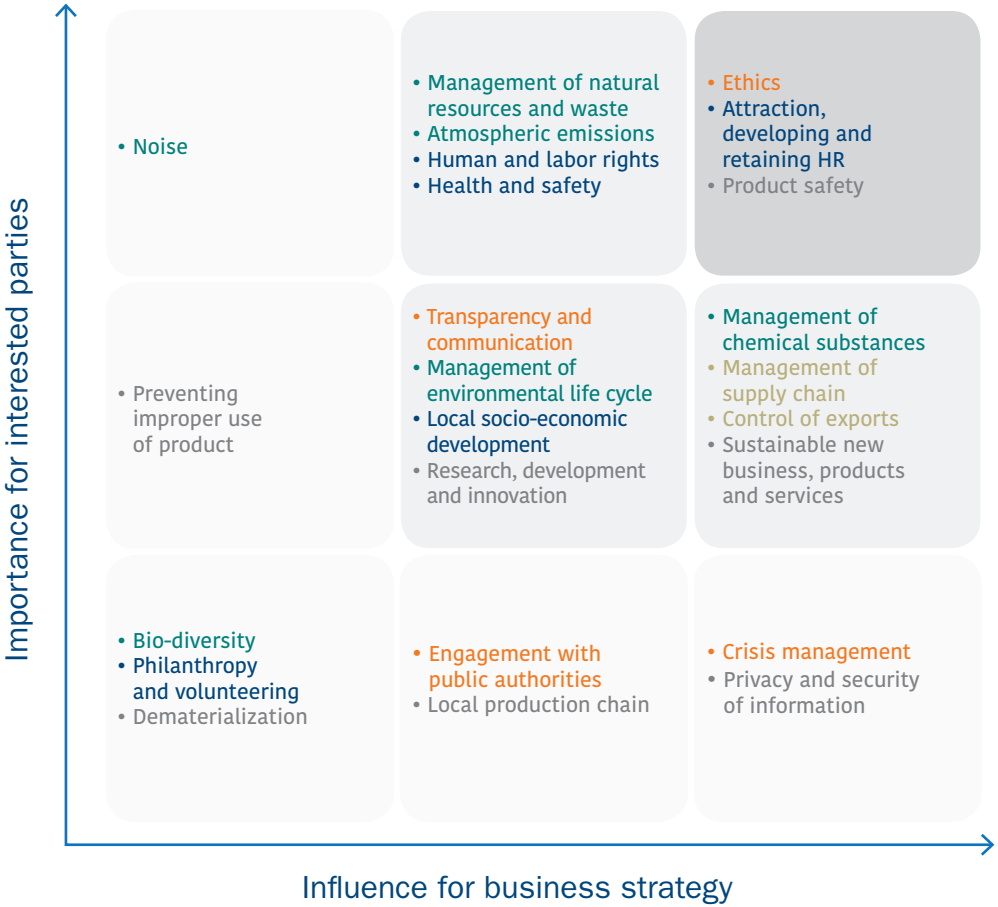




STRATEGIC SUSTAINABILITY DIRECTIVE [G4-18]

Building a sustainable future is one of Embraer’s values (see page 15), and as such, it is part of the company's strategy. In order to identify high-priority issues of sustainability, Embraer carries out a specific consultation process with a formal review every three years. Thus, the Materiality Matrix graphically expresses the combined vision of the company's management and stakeholders regarding the relevance of a predefined set of sustainability issues. The current matrix is the result of consultations made in 2013. Throughout 2016, a new and amplified survey was conducted, generating the 2017-2019 materiality, which is presented in the Annexes section.

Embraer Materiality Matrix (2014-2016)\* [G4-27]



GOVERNANCE | ENVIRONMENT | STAFF | VALUE CHAIN | PRODUCTS, SERVICES AND CUSTOMERS

The company's performance in relation to the priority themes of the Materiality Matrix is evaluated by the Master Sustainability Plan, which presents indicators and triennial targets. With a review every three years and annual revaluation, the first cycle of the plan came into force in January 2015, with horizon of December 2017. [G4-2]

\* The limit of the material aspect outside of Embraer can be found in the GRI indicators. [G4-21]

MASTER SUSTAINABILITY PLAN [G4-2]

No.	Aspect	Indicator	Dec. 2017 Goal	2015 <sup>1</sup>	2016
1	Ethics	Percentage of adherence to compliance policy and procedure. <sup>2</sup>	100%	Managers: 100%* Non managers: 98.98%* *considering the trainings held on Anti-Corruption - Code of Ethics and Conduct	Managers: 96% Non managers: 98% *considering the trainings held on Anti-Corruption - Code of Ethics and Conduct.
2	Attraction, development and retention of human resources	Favorability percentage in the climate survey.	80%	89%	There was no survey in 2016; the company opted for a bi-annual engagement survey. Engagement survey will take place in May 2017.
2	Attraction, development and retention of human resources	Number of staff training hours per year.	500,000 hours per year	557,077 hours	625,416 hours
3	Product safety	Maintenance of type-approval certificates (CHT, in Portuguese) for commercial and executive aviation planes.	100% of type certificates valid.	100%	100%
3	Product safety	Maintenance of company-approval certificates (CHE, in Portuguese) in all Embraer sites of interest as defined in conjunction with the business units.	100% of all sites of interest certified.	100%	100%
4	Management of chemical substances	Development of the new chemical substance management system to ensure an adequate level of knowledge of the product's chemical composition for compliance with current and future environmental legislation.	Phase I – definitions and structuring: until February 2015; Phase II – platform availability and data input: until December 2016; Phase III – full operation of the system: until December 2017.	Finalized: the first phase of the modification of the registration of hazardous substances in SAP In progress: training of employees who register substances in the system. Start of data input into the system, aiming to comply with environmental legislation. As of December 2015, all registrations already incorporate the modifications made to the modified system.	Finished the structuring and definitions phases. Carried out training for all those involved in the registration of chemical substances in the SAP system. All inputs comply with current legislation.
5	Management of supply chain	Percentage of suppliers classified as "high environmental risk" in risk evaluations.	0%	0%	0%
6	Export control	Percentage of adherence to export policy and procedure.	100% adherence to the compliance evaluation survey.	77%	97%
7	Sustainable new business, products and services	Number of new business, products and services incorporating principles of Sustainability.	Annually launch project that demonstrates the inclusion of sustainability.	Non-chrome leather available from tannery for use in aircraft interiors.	Partnership with Boeing in the Eco demonstrator program. Technology tests aimed at reducing fuel consumption, CO <sub>2</sub> emissions and noise.
8	Management of natural resources and waste	Consumption of energy (MWh) per equivalent plane.	Reduce by 3% consumption by equivalent plane, in relation to the base year 2014 (603.78 MWh/equivalent aircraft).	551.96 MWh/aircraft equivalent (reduction of 9%)	499.79 MWh/equivalent aircraft (reduction of 17%)
8	Management of natural resources and waste	Consumption of water (m <sup>3</sup> ) per capita.	Reduce by 4% per capita consumption of water, in relation to the base year 2014 (44.66 m <sup>3</sup> /per capita).	41.78 m <sup>3</sup> /per capita (reduction of 6%)	42.49 m <sup>3</sup> /per capita (reduction of 5%)
8	Management of natural resources and waste	Generation of solid waste/net revenue.	Reduce by 3% the total generation of waste per million dollars of revenue, in relation to the base year 2013 (2.76 t/million dollars).	3,21 t/million dollars (increase of 16%)	2,95 t/million dollars (increase of 7%)
8	Management of natural resources and waste	Generation of dangerous solid waste/net revenue.	Reduce by 3% the total generation of dangerous waste per million dollars of revenue, in relation to the base year 2013 (0.5 t/million dollars).	0.57 t/million dollars (increase of 14%)	0.5 t/million dollars (maintenance)
8	Management of natural resources and waste	Percentage of manufacturing plants and Embraer service centers with ISO 14,001 certification.	100% of manufacturing plants and service centers that existed in 2014 with ISO 14,001 certification.	47.05% (FLM, EGM, ELEB, BOT, GPX, TTE and EVO) <sup>3</sup>	47.05% (FLM, EGM, ELEB, BOT, GPX, TTE and EVO) <sup>3</sup>
8	Management of natural resources and waste	Percentage of manufacturing plants and Embraer service centers with relation to environmental liabilities.	100% of manufacturing plants and service centers that existed in 2014 with relation to environmental liabilities (and their respective treatment plans). New acquisitions of buildings, installations or businesses, must be preceded by evaluation of environmental liabilities (environmental due diligence), aiming to ensure access to necessary information for the company to make decisions.	76.47% (13 of 17)	76.47% (13 of 17)
9	Atmospheric emissions	Emission of greenhouse gases (scope 1+2)/net revenue. <sup>4</sup>	Reduce by 3% the emission of greenhouse gases (scope 1+2) per million dollars of revenue, in relation to the base year 2013.	5.48 t/million dollars (increase of 8%)	4.09 t/million dollars (reduction of 19%)
9	Atmospheric emissions	Emission of VOC/net revenue.	Reduce by 3% the emission of VOC per million dollars of revenue, in relation to the base year 2013 (0.0063 t/million dollars).	0.0034 t/million dollars (reduction of 46%)	0.0011 t/million dollars (reduction of 82%)
10	Human and labor rights	Percentage of individual suits and labor complaint procedures per employee.	Standard of excellence (to be a reference in the market), remaining below the national average for companies in the same sector, in accordance with each country's regulating organizations.	0.391%* *corrected number	0.306%
11	Employee health and safety	Lost Time Injury Rate (LTIR)	To reduce the frequency rates of lost time accidents by 30%, in relation to 2014's accident frequency rate (1.74).	2.25 (increase of 29.31)	1.19 (reduction of 31.6%)
11	Employee health and safety	Percentage of manufacturing plants and Embraer service centers with OHSAS 18,001 certification.	100% of manufacturing plants and service centers that existed in 2014 with OHSAS 18,001 certification.	47.05% (FLM, EGM, ELEB, BOT, GPX, TTE and EVO)	47.05% (FLM, EGM, ELEB, BOT, GPX, TTE and EVO) <sup>3</sup>
12	Transparency and communication	Percentage of indicators responded to in the company's Global Reporting Initiative (GRI) report.	Annual GRI Report Coverage Level.	89.65%	89.65%
13	Management of the product's environmental life cycle	Environmental requirements for developing products.	Incorporate environmental requirements, in addition to those for sound and emissions, for 100% of products launched.	The incorporation of the product's environmental requirements was implemented in the E2 program. The verification of satisfaction of these environmental requirements, in the E2 program, is in progress. For the next aircraft program to be launched by the company, all environmental requirements will be incorporated, using the DIP (Integrated Development of Products) process.	The incorporation of the product's environmental requirements was implemented in the E2 program. The verification of satisfaction of these environmental requirements, in the E2 program, is in progress. For the next aircraft program to be launched by the company, all environmental requirements will be incorporated, using the DIP (Integrated Development of Products) process.
13	Management of the product's environmental life cycle	Use of the simplified evaluation of the product life cycle ("DfE Matrix").	Use "DfE Matrix" to evaluate 100% of new products launched; for already existing products, evaluate the equivalent for at a minimum of 50% Embraer revenue.	New products in 2015: Legacy 450, which was evaluated using the DfE Matrix. Total portfolio: Ejets, Phenoms and Legacy 500/450 already evaluated, responsible for 86% of Embraer revenue.	There were no product launches in 2016. Total portfolio: Ejets, Phenoms and Legacy 500/450 already evaluated, responsible for 84.6 % of Embraer revenue.
13	Management of the product's environmental life cycle	Customer orientation regarding the end of the product's life.	Define document containing Embraer product strategic guidelines with relation to its end of life.	Concluded: the technical guide containing operational guidelines for customers for the proper disposal of products at the end of their life.	Concluded: the technical guide containing operational guidelines for customers for the proper disposal of products at the end of their life. Started: the forming of Corporate Policy for Products' End of Life.
14	Local socio-economic development	Evaluation average (Balance Score Card) for the results of annually supported projects in the scope of the Social Partnership Program.	Grade 4, in an evaluation of 0 to 5 points.	2.45	3.44
14	Local socio-economic development	Number of Embraer volunteers engaged in Entrepreneurship programs, Social Partnership Program and other social projects recognized by the Embraer Institute.	Increase 20% the number of volunteers.	+12% (565 volunteers)	+56.72% (793 volunteers)
14	Local socio-economic development	Approval of Embraer High School students in entrance exams.	Maintain the rate of approval above 80% for Embraer High School students for their entrance exams.	Embraer Juarez Wanderley High School: 84% of public university approval Embraer Casimiro Montenegro Filho High School: 83% of public university approval	Embraer Juarez Wanderley High School: 86% of public university approval Embraer Casimiro Montenegro Filho High School: 87% of public university approval
15	Research, development and innovation	Percentage of annual investment in technological development applied to projects with environmental gains.	Continual increase of the percentage of annual investment in technological development applied to projects with environmental gains, up to the minimum of 50% for the base year 2017 (resource to be applied in 2018).	78%	80%

1. Due to fall of revenue in 2015, some indicators have been significantly altered.  
2. Considering the training carried out on Anti-corruption – Code of Ethics and Conduct.  
3. This goal has been revisited and to ensure its achievement its deadline has been extended to the next 2018/2020 cycle.  
4. Considering Scope 1 emissions related to: fugitive emissions; fuel consumption other than kerosene (jet fuel); and jet fuel consumption from production flights (the current portfolio aircraft). Fuel consumption from development flights, new product certification, as well as the Defence and Security UN aircrafts, are not considered.



# Message from the President and CEO

[G4-1]

## Prepared for the future



We finished 2016 with the certainty that we overcame many challenges, and that we are ready to start a new cycle of achievements in the company. At the beginning of the year, we inaugurated the Embraer Corporate Office (ECO) in São Paulo, with the goal of concentrating the company's corporate activities in one central unit, in search of greater synergy and a global vision. This period has been marked by adverse conditions and a deterioration of the competitive landscape: emerging markets' commercial activity continued in deceleration and global political and economic instabilities have affected sector demand. In this context, our company has been diligent in adjusting costs and expenses to the current market scenario and launched "Challenge 200," in search of US\$200 million in annual savings throughout our operations—these are fundamental adjustments to ensure the growth of our strength and competitiveness in the coming years.

Revenues for the year were US\$6.2 billion, up from US\$5.9 billion the previous year. In our order portfolio, we have accounted for US\$19.6 billion in firm orders (backlog) and we have achieved an adjusted net profit of US\$290.5 million, with positive operational margins for our three business units – a result we will seek to intensify in the upcoming years.

Our programs have consistently progressed, ensuring proper execution of their schedules and budgets. Earlier this year, we celebrated the inaugural flight and the start of the certification campaign for the E190-E2, the first second-generation jet of Commercial Aviation's E-Jets family. Since its launch, the aircraft has received 275 firm orders and 415 letters of intent, options and purchasing rights, a total of 690 commitments from airlines and leasing companies. The model's first units will be delivered in 2018. The KC-390, a multi-mission military aircraft, successfully completed its first international mission: it has traveled more than 30,000 kilometers in Africa, Europe and the Middle East, in addition to the long transatlantic ferry flights. This is the largest aircraft ever to be manufactured in Brazil, and it sets new standards for the category opening up the opportunity for us to expand the globalization of the Defense & Security business. The program's current focus is on solely on the certification campaign, scheduled to be completed in the second half of 2017, with the first delivery planned for the following year.

In Executive Aviation, we have continued to invest in the improvement of the Phenom 100 and Phenom 300 (the world's best-selling business jet for the fourth consecutive year) and of the Legacy 450 and Legacy 500 jets, in addition to enhancing the Legacy 650. We also delivered the 1,000<sup>th</sup> executive jet, a Legacy 500, and we were recognized by U.S. publications Aviation International News (AIN) and *Pro Pilot* Magazine in the rankings for product support and customer support,

respectively. This strengthens our position in customer loyalty, which must be achieved through every relationship opportunity, from prospecting to after-sales. At the end of the year, we announced the creation of a business unit focused on services and customer support. With the start of operations scheduled for the first half of 2017, the unit will be responsible for the development of support solutions for products and services, both current and new, as well as for managing the associated processes and resources.

This was also the year of the conclusion of the investigation into misdeeds in four transactions conducted abroad, between 2007 and 2011. We deeply regret these events, but we are certain that we have grown with this experience. We entered into agreements with Brazilian and U.S. authorities and we have turned the page, focusing on the continued strengthening of a sustainable culture that is founded on the pillars of integrity and business ethics. With improved processes and controls, we have advanced in our trajectory of success, which has been recognized throughout our 50 years, with more than 8 thousand aircraft delivered to the market, in 90 countries.

We are prepared for the future, with modern products and adjusted operations. We continue to focus on the company's sustainability and we reaffirm our commitment to the United Nations (UN) Global Compact. For the same reason, we are celebrating one more year of listing on the Dow Jones Sustainability Index (DJSI) and on the BM&FBOVESPA's Corporate Sustainability Index (ISE, in Portuguese).

We believe that the secret to Embraer's longevity are the people who are part of the company, to whom we are extremely grateful. Together, we remain confident that we will always generate value for customers, shareholders and communities.

**Paulo Cesar de Souza e Silva**  
President and CEO



# Message from the Board of Directors

[G4-1]

2016 was a year marked by important events for the company. The continued development of the E2 Programs in Commercial Aviation and of the KC-390 Program in Defense and Security has progressed successfully, and on track with the schedule established for certification and entry into operations in 2018. Significant changes were made to the Board of Executive Officers, with the appointment of a new President and CEO, Paulo Cesar de Souza e Silva, formerly the head of the Commercial Aviation unit, the company's main business, and the replacement of the General Counsel & Chief Compliance Officer, with the hiring of Fabiana Klajner Leschziner. Additionally, new leaders were selected for Commercial and Executive Aviation, and the creation of a new business unit was announced with a focus on Service and Support. These changes aim to bring the company closer to final customers and to increase the agility of the company's decision-making process.

After six years of in-depth independent investigations and the company's unrestricted collaboration, an agreement was reached with Brazilian authorities (Federal Public Prosecutor

and the Securities and Exchange Commission) and U.S. authorities (Department of Justice and the Securities and Exchange Commission) due to certain irregularities identified in four sales contracts, this past decade. The company has greatly strengthened its Compliance and Internal Controls Program and has implemented an ongoing training program for ethics in relationships with its business partners, both internal and external. Additionally, important structural changes have been made over the last few years, with the Compliance and Internal Audit department now reporting

to the Board of Directors through the Audit and Risk Committee. The company has learned from these facts and is taking the necessary steps to ensure that similar events never happen again.

We look to the future with great optimism, backed by a modern and competitive portfolio of products in all business units, by the satisfaction of our current customers, by the level of governance achieved and by the high quality of our employees.

**Alexandre Gonçalves Silva**

President of the Board of Directors



Israel Vainboim, Josué Christiano Gomes da Silva, Samir Zraick, Alexandre Gonçalves Silva, Sérgio Eraldo de Salles Pinto, Alexandre Magalhães Filho, Cecília Mendes Garcez Siqueira, José Magno Resende de Araújo, João Cox Neto, Pedro Wongtschowski and Hebert Claros da Silva



# Institutional Profile

12

Embraer is the result of the work of thousands of people who, throughout 47 years, have taken on the challenge of establishing a Brazilian company as one of the main forces in the global aerospace market.

Founded in 1969, the company started operations in São José dos Campos, Brazil, its headquarters to this day, with current presence in 10 Brazilian cities and 17 more cities abroad. The company also holds 51% of the shares of Visiona Tecnologia Espacial Telebras, a joint venture with Telebras; and 65% of the Portuguese company OGMA, which specializes in aircraft maintenance and manufacturing. Comprising the holding structure are also the companies ELEB, Embraer Aero Seating Technologies (EAST), Atech, Savis and Bradar. [G4-5, G4-6, G4-8, G4-9]

With cutting-edge technology and human resources, the company designs, develops, manufactures and sells aircraft, systems and solutions for the Commercial Aviation, Executive Aviation and Defense & Security segment (see page 24), offering customer support and services in over 100 countries. [G4-4]

Embraer ended the fiscal year with 18,506 employees throughout the world and delivered 240 aircraft, recording US\$6.2 billion in net income and US\$19.6 billion in firm orders. [G4-9]



**EVERY 10 SECONDS,**  
AN EMBRAER  
AIRCRAFT TAKES  
OFF SOMEWHERE  
IN THE WORLD

**LARGEST BRAZILIAN  
COMPANY IN THE  
DEFENSE AND  
SECURITY SEGMENT**



**GLOBAL LEADER  
IN COMMERCIAL  
JETS WITH UP TO  
130 SEATS**

**5<sup>th</sup>  
LARGEST**  
MANUFACTURER OF  
EXECUTIVE JETS IN  
THE WORLD



# Every day the World gets more Brazilian.

Every day Brazil is more global. [G4-6, G4-8]

## VISION [G4-56]

Embraer will further consolidate its position as one of the leading forces in the global aerospace and defense and security industries. Embraer is a market leader in the segments in which it operates and commands a reputation for excellence.

## VALUES [G4-56]

**OUR PEOPLE ARE WHAT MAKE US FLY |** Our people are happy, competent, valued, fulfilled, and committed to what they do. People who work as teams and who act with integrity, coherence, trust in each other and respect for diversity.

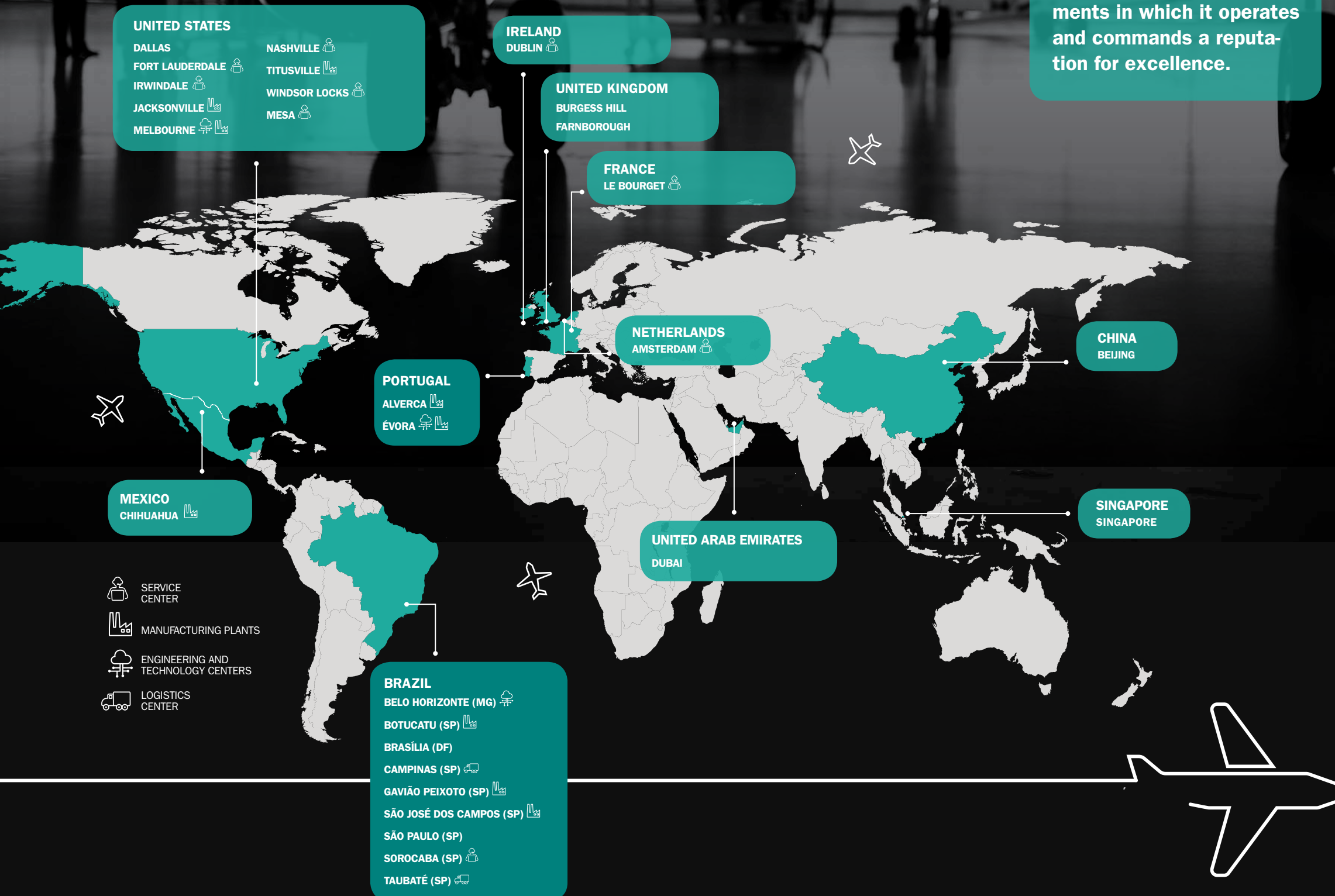
**WE ARE HERE TO SERVE OUR CUSTOMERS |** Customer loyalty is earned by ensuring their total satisfaction and by building strong and enduring relationships. Partnerships are established based on real commitment and flexibility.

**WE STRIVE FOR COMPANY EXCELLENCE |** Company actions are aimed at simplicity, agility, flexibility and safety, while constantly striving for improvement and excellence. An entrepreneurial attitude is built on integrated planning, responsible delegation and disciplined execution.

**BOLDNESS AND INNOVATION ARE OUR HALLMARKS |** Company on the technological forefront, with a capacity for continuous learning; internal transformation and influencing the markets of its businesses. A strategic vision and an ability to overcome challenges with creativity and courage.

**GLOBAL PRESENCE IS OUR FRONTIER |** We demonstrate a global presence and mindset, acting locally to leverage competitiveness and using the best of each location, envisioning a world without borders, one that values diversity.

**WE BUILD A SUSTAINABLE FUTURE |** We are constantly striving to build the foundation for the company's longevity, considering stockholders' profitability, respect for quality of life, environment and society.





MANAGEMENT STRUCTURE AND MODEL

Embraer has adopted the most strict standards of corporate governance and is associated with the Brazilian Institute of Corporate Governance (IBGC, in Portuguese), the Brazilian Association of Public Companies (ABRASCA, in Portuguese), Brazilian Institute of Investor Relations (IBRI, in Portuguese) and the National Institute of Investors (INI, in Portuguese). In 2016, the company was listed on the DJSI for the seventh consecutive year, with three years of continual growth in its overall score. The company also comprises the ISE and the theoretical portfolios of the Brazil Index (IBrX, in Portuguese), the Corporate Governance Stock Index (IGC, in Portuguese), the Stock Index with Differentiated Tag Along (ITAG, in Portuguese), the Industrial Sector Index (INDX, in Portuguese), the Bovespa Index Value 2<sup>nd</sup> Line (IVBX 2, in Portuguese) and the Brazil Index 50 (IBrX 50, in Portuguese). The company's shares are listed in São Paulo on the New Market (BM&FBOVESPA: EMBR3) and in New York, on the New York Stock Exchange (NYSE: ERJ), through

the American Depositary Receipts (ADRs) program, level III. In addition to the New Market requirements, the company's by-laws impose onerous conditions on any shareholder who might hold shares equal or superior to 35% of the capital, including submission to Public Tender Offer (OPA, in Portuguese) as well as an authorization from the Brazilian government, holder of a special class share, which grants a veto right in some strategic matters for the company and the Country. [G4-41]

General Assembly (GA)

- Elects members to and dismisses members from the Board of Directors and the Fiscal Board; sets the global compensation for directors and board members; deliberates on account approvals and proposals for profit and dividend allocation; among the other attributions contained in the provisions of the Brazilian Companies Act.
- The votes of foreign shareholders are limited to 40% of the votes of Brazilian shareholders.
- Information on voting rights and meetings are given in detail in the bylaws, available at <https://goo.gl/wFNwsr>. [G4-40, G4-42]

Board of Directors (BD)

- Composition: 11 members, one elected by the Brazilian government (as holder of the special class share); two are elected by the company's employees (one appointed by the Embraer Employee Investment Club – CIEMB in Portuguese – and another nominated by the company's non-shareholder employees); and eight elected by the other shareholders.
- Two-year term, reelection permitted.
- Eight independent members.
- Eight ordinary meetings per year and extraordinary sessions as necessary – 13 meetings in 2016. [G4-47]
- Defines strategies; elects, supervises and dismisses members of the Board of Executive Officers; monitors risks; and establishes general business policy. [G4-35]
- Carries out annual formal performance evaluation – of the Board, the board members and the Committees – supported by a specialized external consultant. Members evaluate themselves, each other, and also the President and CEO, who, in turn, evaluates the execution of the BD activities every fiscal year. [G4-44]
- The BD's Internal Regiment disciplines its operations and the body's relationship with the committees that advise it.

Strategy Committee

- Composition: up to five members.
- Meets every trimester.
- Supports the BD in preparing the Strategic Plan and the Action Plan; evaluates market opportunities; and monitors results.

Audit and Risk Committee

- Composition: up to five members.
- Meets every bimester.
- Supports the BD in identifying and managing risks; oversees the quality of financial statements; recommends and supervises the external audit firm<sup>1</sup>; monitors performance and independence of the internal audit.

Human Resources Committee

- Internally designated as the Committee of People, Compensation, Organization and Governance.
- Composition: up to five members.
- Meets every trimester.
- Guides the BD with regards to the election and dismissal of the members of the Board of Executive Officers, the establishment of compensation and human resources policies, and to the transfer of resources to employee associations as well as entities for assistance, recreation and private pension; guides on matters of governance of the activities of the BD and of its Committees.

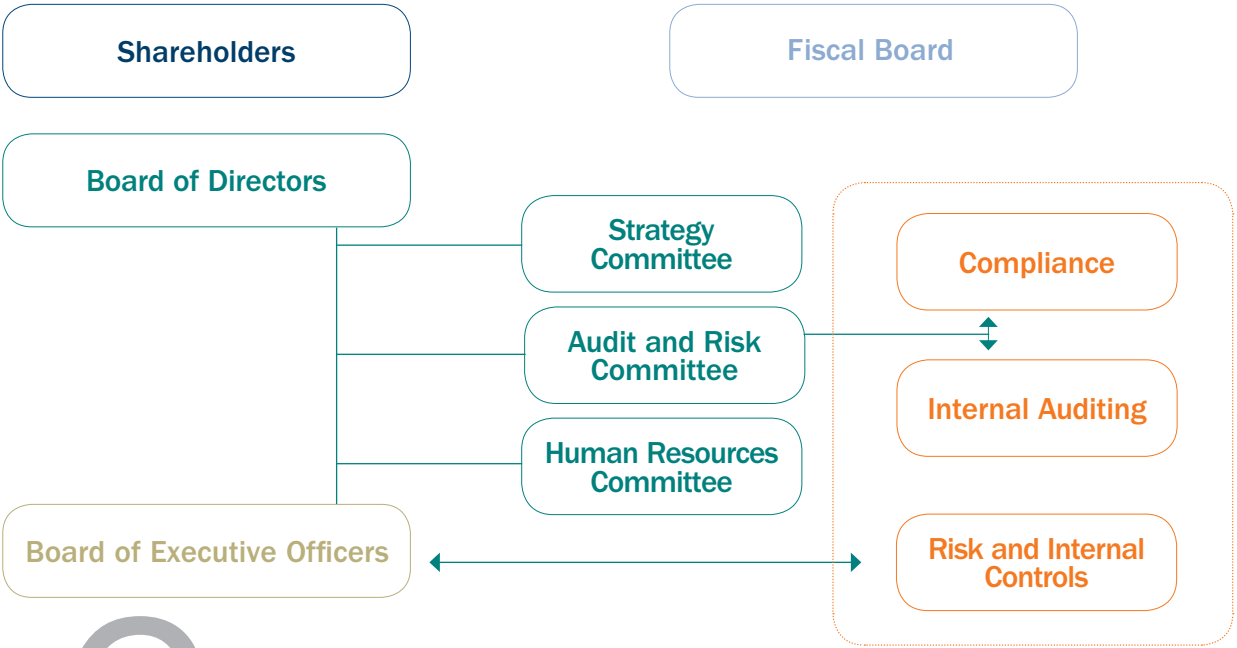
Fiscal Board

- Composition: from three to five members.
- Meets every trimester.
- Examines the financial statements.
- Permanent and independent administration entity.

Board of Executive Officers

- Composition: from four to 11 members elected by the BD.
- Two-year terms, with the possibility of re-election.
- Monthly meetings.
- Responsible for daily administration, following the guidelines of company bylaws and the deliberations of the BD and GA.
- Formally responsible for the company's performance on economic, environmental and social topics: the Executive Vice President of Finance and Investor Relations and the Vice President of People and Sustainability, respectively. [G4-36]
- The Board of Executive Officers is evaluated annually with the 360° methodology, whereas the evaluation of the President and CEO is the responsibility of the BD. All attributes and composition of the BD, the Committees, the Fiscal Board and the Board of Executive Officers are provided in detail at <https://goo.gl/nfyTAo>. [G4-35, G4-38, G4-39]

Corporate governance structure [G4-34, G4-40, G4-41]



1. Function exercised in compliance with American law, especially the Sarbanes-Oxley Act.



## Board of Executive Officers



Michael Amalfitano, José Antonio de Almeida Filippo, John Stephen Slattery, Paulo Cesar de Souza e Silva, Jackson Medeiros de Faria Schneider, Fabiana Klajner Leschziner, Mauro Kern Junior, Mauricio Rodrigues Aveiro, Johann Christian Jean Charles Bordais and Nelson Krahenbuhl Salgado (absent)

### Compliance [G4-DMA: Fighting corruption, G4-S03, G4-S04]

The Compliance Program aims to ensure the adoption of the highest standards of integrity and international good practices as well as the adherence to the laws of the countries in which Embraer is present, above all those that govern anti-corruption practices and export control. The initiative is coordinated by the department of Compliance and supervised by the Board of Directors, the Audit and Risk Committee, and by the President and CEO.

During the fiscal year, the program intensified its relationship with the group of more than 200 compliance agents – employees from various departments, in Brazil and abroad – who act as multipliers of the culture of ethics and compliance in the company. Workshops were also held to ensure full comprehension of the company's policies and how to execute them during daily tasks. The training plan includes lectures on ethics and integrity administered by Marjorie Doyle, member of the Society of Corporate Compliance and Ethics (SCCE).

Lectures were attended by more than 500 employees from several departments and by members of the Board of Directors. Among the advances in the Compliance Program, we highlight the development of the Know Your Customer procedure, which requires a reputational analysis of potential clients based on risk factors, and the adoption of a continuous audit system that performs monitoring of critical operations, such as supplier payments, travel expenses, donations and sponsorships. The intention is to expand the system, which already serves the Internal Audit area, to other processes in the coming years.

In 2010, when potential nonconformities in certain overseas business transactions were questioned by U.S. authorities, the company hired external lawyers to conduct independent investigations, proactively expanding the initial scope and sharing the findings with the competent authorities. These investigations found that the company was responsible for irregular actions in four transactions involving 16 aircraft between 2007 and 2011 in Saudi Arabia, India, Mozambique and the Dominican Republic. On October 24, 2016, Embraer announced the terms for closing this case, which had been investigated by U.S. authorities – the United States Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) – and by Brazilian authorities – Federal Public Prosecutor (MPF) and the Securities and Exchange Commission (CVM). As part of the agreements, the company agreed to contract external and independent monitoring for three years to monitor compliance with the terms and will make a payment of US\$205.5 million to U.S. and Brazilian authorities. Upon timely fulfilment of the agreements, no charges will be brought against Embraer (see more information in the GRI Indicators).

## ETHICS AND INTEGRITY

[G4-DMA: Non-discrimination, G4-DMA: Fighting corruption, G4-S06, G4-S03]

The Anti-Corruption Policy and the Code of Ethics and Conduct ensure the company's integrity in all operations. The former establishes guidelines to prevent conflicts of interest, deal with donations and sponsorships, the offering and receiving of gifts, and outsourcing. It also establishes mechanisms for investigations to be carried out prior to the formation of company partnerships.

The Code of Ethics and Conduct shares norms for responsible business management in all operations. The document is guided by internal business values and by the Global Compact of the United Nations, in addition to complying with anti-corruption laws, international trade, and initiatives such as the International Forum on Business Ethical Conduct (IFBEC) and the Partnering Against Corruption Initiative of the World Economic Forum (PACI-WEF). In 2016, the Board of Directors approved a revision regarding the prohibition of contributions to political parties. The Code is available at <http://compliance.embraer.com.br/en/SitePages/Home.aspx> and all board members, members of the Board of Executive Officers, employees and third-party collaborators are trained in the document's guidelines.



## Helpline

[G4-DMA: Procedure for complaints and claims related to environmental impacts, G4-DMA: Procedure for complaints and claims related to labor practices, G4-DMA: Procedure for complaints and claims related to human rights, G4-DMA: Procedure for complaints and claims related to impacts in society, G4-57, G4-58]

The Helpline is a tool to register allegations and concerns related to attitudes that violate the Code of Ethics and Conduct and the law. Contacts are consolidated by an independent company and forwarded to the Compliance department, in order to assure the confidentiality<sup>2</sup> of the person who files the case, who also receives a protocol number to monitor its progress online. Among the issues raised throughout 2016, nearly 60% were related to conduct deviation, of which 45% were pertinent. Referrals and solutions to the issues included coaching and conduct monitoring, in addition to disciplinary measures, such as warnings, suspensions and dismissals. [G4-LA16, G4-HR12]

In total, 325 reports were filed during the year, a 7% increase over 2015. This rise demonstrates the growing credibility of the channel and of the awareness among employees and third-party collaborators regarding the conduct expected by the company. In 2017, the Helpline changed its name to Helpline – Whistleblowing Channel, in order to help the public better understand its purpose.

Employees, partners and suppliers may contact the following telephone numbers:

Brazil: 0800-721-5968  
Portugal: 800-180-118  
United States: 1-877-900-8779  
Singapore: 800-130-2122  
China: 400-120-4946  
France: 0805-080608  
Netherlands: 0800-450-0019

or on the site [www.embraerhelpline.com](http://www.embraerhelpline.com)

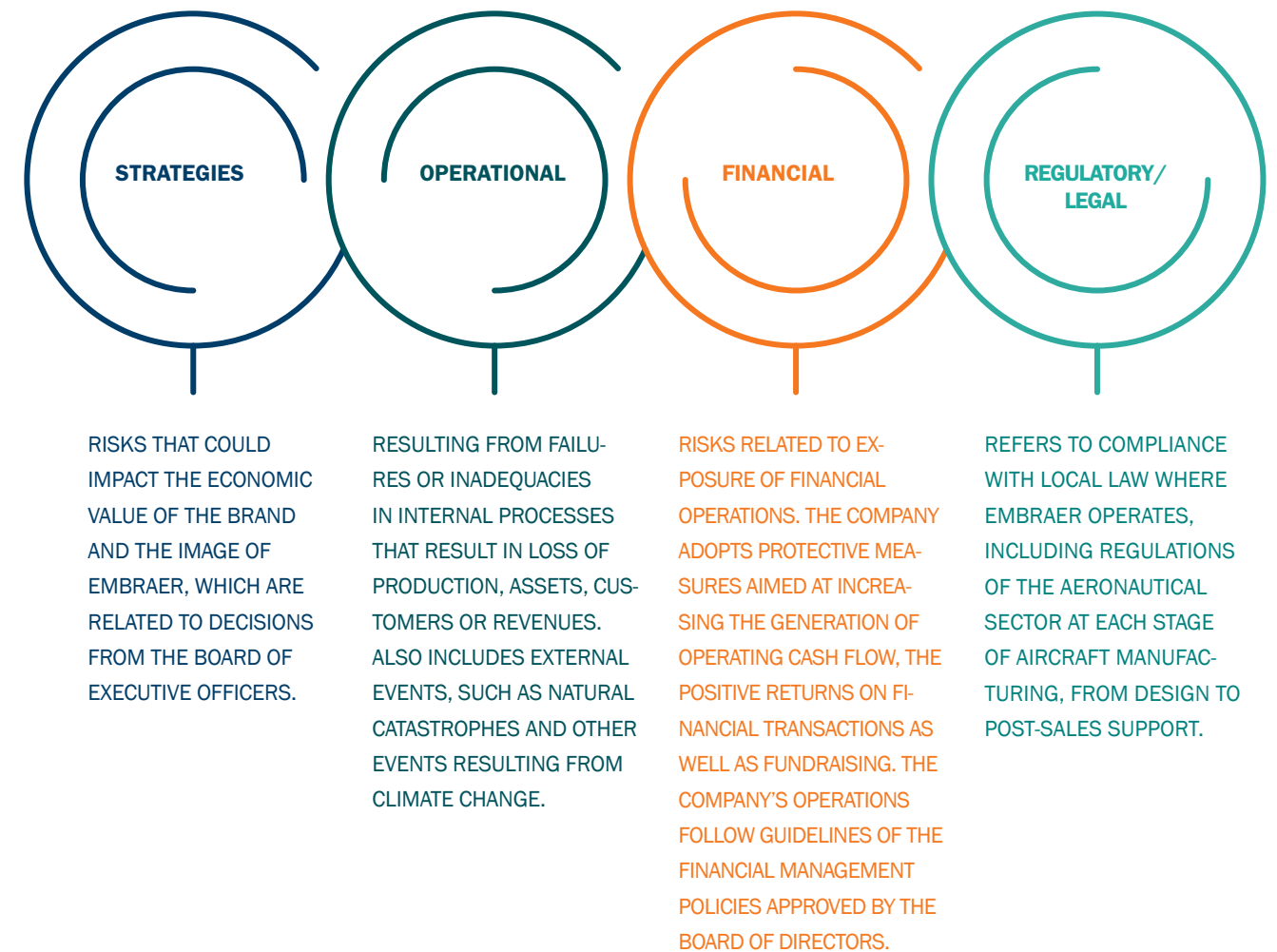


## Risk management [G4-2, G4-14, G4-46]

Embraer's risk management methodology is backed by the Risk Management Policy and is segmented into four categories (see Categorization of Risk). This structure enables the concentration of efforts for more assertive monitoring, identification and mitigation, in each situation. Upper management relies on the support of the Risk and Internal Controls department and is also involved, through interviews and meetings, in the periodic revision of trends and adversities that might compromise operational performance. The structure is reinforced by the Audit and Risk Committee, which ensures autonomy to the Internal Audit area as well as to the external audit services.



## Categorization of risk [G4-DMA: Economic performance]



With respect to climate change, Embraer carries out risk analyses for periods of five years, considering aspects such as environmental laws (Brazilian laws and of countries in which Embraer operates), discussions on carbon taxation and the European Union Emissions Trading Scheme (EU ETS). The most recent analysis, carried out in 2012, did not identify any vulnerabilities of the company to these changes. The main factories are located in Brazil, a country that is not prone to extreme natural phenomena, and the units abroad are also at a low risk. Nevertheless, all operations follow guidelines to minimize adverse effects. In addition to categorizing risks considered to be environmental catastrophes, Embraer monitors potential impacts to its operations. Most of the units are ISO 14001 certified and the company maintains its goal of implementation of this certification at 100% of its manufacturing plants and service centers. [G4-EC2]

## Comittment to excellence

[G4-DMA: Economic performance]

Embraer establishes a corporate procedure for identifying relationship guidelines related to each stakeholder. Based on the Principles of Excellence in Management and on the Model of Management Excellence (MEG, in Portuguese) from the National Quality Foundation (FNQ, in Portuguese), Embraer keeps the Embraer Business System (SEE, in Portuguese), which defines the main guidelines for the company's business model. By presenting a systematic vision of Embraer, the SEE makes it possible to understand the main objectives of management by value streams, stimulating continuous improvement with focus on the stakeholders (customers, shareholders, people, partners, society and the environment), ensuring that all activities result in shared values (see more information in the GRI Indicators). [G4-24, G4-25, G4-26]

2. Except in countries whose laws do not allow reports to be made anonymously. In this case, Embraer abides by local legislation.



## Embraer: value stream



WIN  
CUSTOMERS



DEVELOP  
PRODUCTS



DELIVER  
ORDERS



SERVE  
CUSTOMERS



BUSINESS  
MANAGEMENT\*

## Values by stakeholder



**CUSTOMERS** |  
AVAILABILITY,  
PERFORMANCE,  
COMPETITIVE OFFERING/  
SOLUTIONS, SAFETY



**SHAREHOLDERS** |  
FINANCIAL RETURN/  
FINANCIAL HEALTH



**PEOPLE** | PROFESSIONAL  
AND PERSONAL FULFILLMENT



**PARTNERS** |  
INTEGRITY AND CONTINUITY



**SOCIETY AND THE ENVI-  
RONMENT** | RESPECT FOR  
SOCIETY AND THE ENVIRON-  
MENT, WITH GENERATION OF  
WEALTH AND WELL-BEING



The application of the lean management philosophy is the essence of P3E. Guided by the optimization of processes and the reduction of waste, this philosophy provides reduction in costs as well as gains in productivity and quality. In 2016, P3E has made it possible to improve the efficiency of Commercial Aviation, through a project aimed at reducing production cycles. The program also resulted in the qualification of the sales process for Executive Aviation, which is generating better operating margins.

### Awards and recognition

**Brazil's Most Innovative Company** | Award from the *Valor Econômico* newspaper, in partnership with the consulting firm Strategy&. The company came in first place in the ranking based on an evaluation of the revenues invested in innovation, the creation of new products and the maturity of innovation processes.

**2016 Best Companies to Work For in Brazil** | Ranking shared by the consulting firm Great Place to Work® and by the magazine *Época*. This recognition demonstrates the culture of valuing the internal public and its commitment to the company's performance.

**The Best Companies for Starting your Career** | Survey conducted by the magazine *Você S/A* in partnership with the Fundação Instituto de Administração (FIA) and Companhia de Talentos, which evaluates the satisfaction of young people starting their careers.

\* In 2016, the company established the Business management value stream, which joined the previous flows Serving shareholders, Generating value for partners, Respecting society and the environment and Attracting and retaining people.

One of the fundamental elements of the company's management model is the Embraer Enterprise Excellence Program (P3E), through which employees are engaged in re-envisioning processes for continual improvement of results. Divided into four pillars, the program is considered a key element for the evolution of corporate management.



**Best Companies for Human Resources** | Award given by the newspaper *Valor Econômico* and by the consulting firm Aon to companies that adopt the best practices in human resources management.

**Transparency in Corporate Reports: Evaluating Multinationals in Emerging Markets** | Study conducted by the International Transparency NGO, which analyzed 100 companies operating in 185 markets and headquartered in 15 countries. Among the 12 Brazilian companies analyzed, Embraer was the only one to be graded above 5 (5.6) on a scale from zero (least transparent company) to 10 (most transparent company).

**Empresas Mais** | Prize given by the newspaper *O Estado de S. Paulo* in partnership with the Fundação Instituto de Administração (FIA). Embraer won first place for the category

"Vehicles and Car Parts" and stood out among the ten leaders in Corporate Governance.

**Aviation International News' 2016 Product Support Survey** | Product support survey conducted annually by the U.S. magazine *Aviation International News* (AIN). In 2016, Embraer's Executive Aviation reached the top of the ranking with the highest average for all aspects of the survey (8.4 points out of a total of 10) for new and used executive jets.

**Pro Pilot magazine's Corporate Aircraft Product Support Survey** | Executive Aviation also stood out by taking first place, for the second consecutive year, in the customer support survey for executive aircraft from the magazine *Pro Pilot*. Embraer achieved 8.58 points, the highest score among all manufacturers in the 26 years that the survey has been conducted.





# Customers

## PRODUCTS AND SERVICES

[G4-4, G4-8]

In 2016, Embraer participated in the Farnborough International Airshow, a global tradition in the airspace sector that is held in London. For the first time, the company had each of its three business units featuring a new product: the latest generation E190-E2 commercial jet (see page 25), the KC-390 multi-mission military freighter (see page 27) and the Legacy 500 executive jet (see page 26). These products demonstrate a commitment to cutting-edge innovation and technology, as well as continual portfolio modernization.

In Commercial Aviation's Customer Satisfaction Survey (CSS), the Index of Spontaneous General Satisfaction (ISGE, in Portuguese) reached 84.9% and the Embraer Absolute Favorability (EAF) index reached 83%, preserving an improvement trend over the last seven years and positioning the company in second place among all sector manufacturers. All survey topics for 2016 showed an increase in the absolute favorability index. These results reflect a commitment to serve customers with excellence. In this regard, starting in 2017, the company will operate a business unit focused on customer support and services (see more information on the customer satisfaction survey results in GRI Indicators). [G4-DMA: Labeling of products and services, G4-PR5]



## Commercial Aviation

Embraer Commercial Aviation is a global leader in the manufacturing of jets with up to 130 seats. In 2016, the company celebrated the inaugural flight of the first prototype of the E190-E2 as well as its first international mission, which marked the beginning of the certification campaign. The delivery of the first aircraft is scheduled for 2018. Also, the campaigns for the E195-E2 and E175-E2 models are on track and their entry into service are scheduled for 2019 and 2021, respectively.

The second generation E-Jets have high performance engines that – together with new wings, fly-by-wire flight controls and advances in other systems – result in significant reductions of fuel consumption, maintenance costs, emissions and external noise. Since its launch, this product has won 275 firm orders and a total of 415 options, purchase rights and letters of intention. [G4-EN7]

Despite the schedule of new products in the upcoming years, sales performance for the first generation of E-Jets, mostly the E175 and E190 models, has been on par with previous years. This reflects customers' preference for these aircraft and validates the decision to offer aircraft with 70 to 130 seats, within one family.

The business unit had a significant participation in the United States with the replacement cycle of the 50-seat fleet. On the other side of the globe, China is presenting opportunities stemming from new policies issued by the Civil Aviation Administration of China



**E195-E2**  
(120 TO 146 SEATS)



**E190-E2**  
(97 TO 114 SEATS)



**E175-E2**  
(80 TO 90 SEATS)



**E195**  
(106 TO 108 SEATS)



**E190**  
(97 TO 114 SEATS)



**E175**  
(76 TO 88 SEATS)



**E170**  
(70 TO 78 SEATS)



**FAMILY ERJ 145**  
(37 TO 50 SEATS)

**MORE THAN  
1,800**

COMMERCIAL AIRCRAFT  
IN SERVICE WITH OVER

**100**  
AIRLINES AROUND  
THE WORLD



**THIRD LARGEST  
MANUFACTURER  
OF COMMERCIAL  
JETS IN  
THE WORLD**



(CAAC). The largest country in East Asia has been strategic for Embraer, accounting for 80% of the region's market share of the fleet of jets with less than 130 seats. Africa also presents a potential market, not only among the major airlines, but also with smaller operators that are migrating to E-Jets.



#### SERVICES AND SUPPORT:

- Maintenance and repair of aircraft
- Revitalization of aircraft
- On-Site stocks (OSS)
- Field support
- Technical support
- Flight operations
- Training
- eSolutions

Learn more at  
[www.embraercommercialaviation.com](http://www.embraercommercialaviation.com)

#### Comfort and verticalization

In 2016, Embraer Aero Seating Technologies (EAST) began operations in Titusville, Florida, where it manufactures commercial and executive aircraft seats, including those for the first class of the E2. This represents an important step for the company's verticalization strategy. This new unit's products are characterized by quality, ergonomics, and the use of light materials.

### Executive Aviation

In 2016, shortly after having completed 10 years of operations, Embraer Executive Aviation celebrated the delivery of its 1,000<sup>th</sup> jet, a Legacy 500. The model was also approved for operations at London City Airport, one of the most restrictive landing sites in the world.

This year was also marked by investments in the improvement of the Phenom 100 and Phenom 300 (the world's best-selling business aircraft for the fourth consecutive year) and of the Legacy 450, Legacy 500 and Legacy 650E. The company also began the testing campaign for the Phenom 100EV (the new generation of the Phenom 100), which was presented at the main international event for executive aviation, the National Business Aviation Association (NBAA) Conference and Exhibition, in Orlando, Florida. The new product version introduces a superior avionics system and more powerful engines, with better performance in high temperatures and elevated altitude airports. The new jet is scheduled to enter the market during the first semester of 2017.

Further globalizing the business unit and to be closer to customers, Embraer has transferred part of the final assembly of the Legacy 450 and Legacy 500 jets to Melbourne, Florida, where the Phenom 100 and Phenom 300 models are already being produced. [64-13]



**PHENOM 100**  
(4 TO 7 SEATS)



**PHENOM 300**  
(6 TO 10 SEATS)



**LINEAGE 1000E**  
(13 TO 19 SEATS)

**1 OUT OF EVERY 5  
EXECUTIVE JETS DELIVERED  
IN THE WORLD  
IS FROM EMBRAER**

Throughout the year, sales channels were also opened with representatives in Mexico, Chile, Japan, and in Europe. In addition to enhancing Embraer's global presence, the initiative aims to develop a global brand that comprehends the culture and the uniqueness of buyers in the countries where relationships are established.

#### Far beyond executive use

In 2016, Embraer delivered two Phenom 100E to Etihad Flight College, an integral subsidiary of Etihad Airways, the national airline of the United Arab Emirates. The contract provides for the delivery of two more jets of the same model at the beginning of 2017. The aircraft will be used in the pilot training academy, created to support the rapid growth of the airline's fleet. The Phenom 100E will also be used to train pilots in the United Kingdom's armed forces. The contract signed with Affinity Flight Training Services provides for the acquisition of five aircraft for the Military Flight Training System (MFTS) program of the United Kingdom's Ministry of Defense. The aircraft model is already being used at flight schools in the United States, Finland and Australia.

### Defense & Security

Embraer Defense & Security plays a strategic role in the Brazilian defense system and is the segment leader in Latin America. Additionally, it is present in over 60 countries. The A-29 Super Tucano turboprop, for instance, was the business unit's best-selling model for the year and already serves 13 air forces in tactical support missions, counterinsurgency operations, advanced training and surveillance. Participation in the global market will intensify in the coming years with the launch of the KC-390, a multi-mission aircraft that sets new standards in the category. In addition to delivering more performance and efficiency (with jet propulsion and reduced operating costs), the new freighter is capable of performing various missions such as transporting and launching troops and cargo, humanitarian aid, in-flight refueling, rescue missions and wildfire suppression. In 2016, the aircraft completed major milestones of its flight



**LEGACY 450**  
(7 TO 9 SEATS)



**LEGACY 500**  
(8 TO 12 SEATS)



**LEGACY 650E**  
(13 TO 14 SEATS)



#### SERVICES AND SUPPORT:

- Maintenance and repair of aircraft (Embraer Executive Care – EEC)
- Aircraft refurbishment
- On-Site Stocks (OSS)
- Performance software
- Reduced Vertical Separation Minimum (RVSM)
- Integrated diagnostic solution (Aircraft Health Analysis and Diagnosis – AHEAD)

Learn more at  
[www.embraerexecutivejets.com/en-us](http://www.embraerexecutivejets.com/en-us)

**MORE THAN  
1,000 EXECUTIVE JETS  
DELIVERED IN MORE THAN  
60 COUNTRIES**

test campaign and toured eight countries, traveling more than 16,300 nautical miles (nearly 30,200 kilometers), and in 23 days off base, it demonstrated 100% availability. Embraer expects to receive the Initial Operational Capability (IOC) declaration by the end of 2017 and the Final Operational Clearance (FOC) in 2018. The first deliveries will also occur in 2018.

In recent years, Defense & Security has invested continuously in portfolio diversification with air traffic control products and radars operating under the most challenging climatic and topographic conditions, in addition to integrated border protection systems. During the year, the process of consolidating the operations of Savis Tecnologias e Sistemas S.A. and Bradar Indústria S.A. started. The companies are engaged in the development and production of radars, as well as border monitoring for remote sensing and protection of

**DEFENSE  
AND SECURITY  
SOLUTIONS IN  
MORE  
THAN 60  
COUNTRIES**

26

27



strategic structures. Both compose the Tepro Consortium, in charge of implementing the Integrated Border Monitoring System (Sisfron, in Portuguese) in Brazil. Sisfron comprises a border area of 800 km in the state of Mato Grosso do Sul. By 2016, 70% of the project had already been executed.

Visiona Tecnologia Espacial is a joint venture formed between Embraer and Telebras with the objective of acting in the integration of the system of Strategic Defense and Communications Geostationary Satellite (SGDC, in Portuguese) of the Brazilian Government. Scheduled to be launched at French Guiana in the first semester of 2017, the SGDC aims to meet the country's satellite communications needs, including the National Program (PNBL) and a broad spectrum of strategies. The Gripen Design Development Network (GDDN) in Gavião Peixoto, Brazil, also began operations this year, established for the development of the Gripen NG in Brazil, in partnership with the Swedish company SAAB. Embraer Defense & Security and SAAB will conduct the full development of the two-seat version of the fighter. Between 2019 and 2024, 36 Gripen NG fighters will be delivered to the Brazilian Air Force (FAB, in Portuguese). [G4-13]

**Gold Medal in Defense & Security**

In 2016, Rio de Janeiro hosted the Olympic and Paralympic Games, and nearly 2.5 million people passed through Tom Jobim International Airport. Embraer Defense & Security companies – Atech, Visiona Tecnologia Espacial, Savis and Bradar – worked in partnership with the Brazilian Government and contributed to the above-average safety compliance indices, as measured by the Ministry of Transportation. Atech – which incorporated the activities of Embraer Systems in 2016 – offered the Integrated Air Traffic Management System (SIGMA, in Portuguese), which provides airspace usage planning, and the Advanced Air Traffic Information Management System and Reports of Operational Interest (SAGITARIO, in Portuguese), which simplifies airspace management, previously planned with SIGMA. Visiona, in partnership with five other companies, carried out a monitoring pilot project by capturing high and very high resolution images, even under adverse climatic conditions. During the football matches held in Brasília, the nation's capital, with the support of Savis and Bradar, the army relied on a 4G/LTE (700MHz) mobile broadband network with a more reliable connection, without oscillations or interference. In Rio de Janeiro, the company also made available the Airborne Monitoring Sensor Based on Radio-Frequency Emission (SABER M60, in Portuguese), which assisted the Brazilian Aerospace Defense System (SISDABRA, in Portuguese) in protecting the Games' governmental and sports facilities.

**Agricultural Aviation**

Embraer's Ipanema aircraft is the leader in the Brazilian agricultural aviation market, with 75% market share and more than 1,300 units sold. The product has been manufactured for 50 years, without interruption, focusing on market trends and customer needs. This is the world's first airplane to be certified to fly with 100% ethanol for fuel. Learn more at [www.embraeragricola.com.br](http://www.embraeragricola.com.br)



**KC-390: THE LARGEST AIRCRAFT DESIGNED AND MANUFACTURED IN BRAZIL**



KC-390



A-29  
SUPER TUCANO



SPECIAL  
MISSIONS



INTELLIGENCE  
SURVEILLANCE AND  
RECONNAISSANCE  
(ISR)



**SERVICES AND SUPPORT:**

- Maintenance and repair of aircraft
- Modernization of aircraft
- Unmanned aerial vehicles
- Training and Operation Support System (TOSS)
- Security systems/C4I (command, control, communication, computing and intelligence)
- Air traffic control systems
- Remote sensing
- Aerial surveillance radar
- Satellites
- Development and integration of complex systems for segments other than aviation and defense

Learn more at [www.embraerds.com](http://www.embraerds.com)

In the coming years, the unit will maintain investments in these projects in order to grow sales volume and customer base, increase financial results, portfolio diversity, and expansion of international presence.

**Research, innovation and development**

Being at the forefront of technology is a fundamental condition for Embraer, whose strategy is based on continuous learning and the ability to innovate. The manufacturing plants house engineering and product development teams – the largest of which is in São José dos Campos, Brazil, which concentrates more than 4,000 professionals in these activities, 240 of whom are in pre-competitive R&D. In addition, the company maintains three engineering and technology centers: in Belo Horizonte (MG, Brazil), Melbourne (Florida, USA) and in the District of Évora (Portugal). Embraer protects the intellectual property generated by its research and development investments. Throughout the year, considering the portfolios of invention patents and industrial design, the company filed 609 patent applications and had 314 patents granted. The company also allocates resources for innovation through the Aerospace Participation Investment Fund (FIP in Portuguese), created in 2014 with the Brazilian Development Bank (BNDES, in Portuguese), the Funding Authority for Studies and Projects (FINER, in Portuguese), and the State of São Paulo development agency Desenvolve SP. In 2016, investments were made in five companies in the space, defense and cyber security segments, for which R\$44.27 million were allocated. Incremental innovation, in addition to occurring vigorously within P3E (see page 21), is stimulated among employees by the Good Idea and the Innova programs. Good Idea is a program of suggestions for the development of routine activities with more efficiency. Throughout its history, the program has received contributions from 13,000 people and, in 2016, recorded 11,650 implementations of initiatives.

The Innova Program stimulates the culture of innovation and provides spaces for the consolidation of ideas. The main initiative today is Green Light, which brings a startup environment into the company by offering financial support and up to 100% paid time off for employees to develop their projects. This year, 28 projects were awarded funding for 76 people. Innova underwent a review and, starting in 2017, the program also assumes the role of catalyzing exponential technologies and identifying disruptive opportunities for the business. With this goal, the company will begin immersion into the innovation hubs of the Silicon Valley and of Boston, USA. In addition to these initiatives, employees also meet annually for the Embraer Seminar on Technology and Innovation (SETI, in Portuguese), a conference that presents the main technological advances being developed, which can be strengthened through integration of the different departments of the company. Regarding product sustainability, the program for the Integrated Development of Environmentally Sustainable Products (DIPAS, in Portuguese), coordinated by the Engineering department, leads studies and actions to insert Design for Environment (DfE) strategies into the company. Through this initiative, the use of restricted material is managed with consideration for current and future environmental legislation, technological alternatives to these materials are developed, and studies are conducted with respect to the product life cycle. There is also extensive interaction with the departments responsible for the creation of technologies aimed at reducing fuel consumption, carbon dioxide (CO<sub>2</sub>) emissions, noise, maintenance costs, and increasing operational efficiency, as well as pilot and passenger comfort. Since the aircraft's operation is the longest stage in its life cycle, exceeding 15 years of activity, reducing fuel consumption and, consequently, energy, has a direct impact on the product's environmental performance. Additionally, fuel costs are the main expense in aircraft operation, which is why manufacturers are always seeking design options that promote efficiency, thereby meeting both environmental and market requirements.

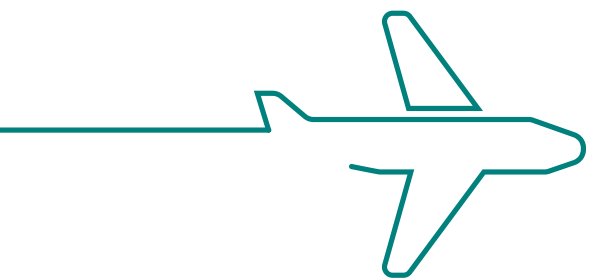
[G4-DMA: Products and services, G4-EN7, G4-EN27]

**United by the common good [G4-EN27]**

In 2016, Embraer and Boeing conducted tests on an E170 aircraft, which received a series of technologies to reduce environmental impact and increase aircraft efficiency and performance, such as a system for measuring air data; special paint to lessen the accumulation of ice and insects; aerodynamic modifications to reduce noise on takeoff and landing; and a bio-fuel blend, produced in Brazil, with 10% bio-kerosene and 90% fossil kerosene. This initiative is part of the partnership between these companies in the context of the Boeing eco-Demonstrator program, which, without precedent, unites the efforts of two of the world's leading aircraft manufacturers for the benefit of the environment and of the aerospace industry.



# SHAREHOLDERS



## STRATEGIC PLAN [G4-45]

Embraer conducts its planning with a 15-year horizon, but attentive to external scenarios, the company promotes annual review cycles with all administrative and operational departments. The strategic plan is approved by the Board of Directors, which evaluates it based on risk management, growth expectations and stakeholder demands.

The review process carried out in 2016 considered the economic moment faced in the aerospace and defense segments, which resulted in a decrease in the number of sales in the segment, especially in Executive Aviation, in relation to the last eight years. In this scenario, Embraer adjusted costs, expenses and operations – essential adjustments to uphold the commitment to the goals set forth.

During the year, the company announced the closure of Harpia Sistemas S.A and Harbin Embraer Aircraft Industry Co. joint venture (HEAI) and, consequently, the termination of the manufacturing of the Legacy 650 jets in China. [G4-13]

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### Strategic plan guidelines

**Commercial Aviation** | Solidify Embraer's leadership position in its segment, expanding the customer base, perfecting the E-Jets, and pursuing excellence in the customer support model.

**Executive Aviation** | Consolidate Embraer's position as one of the world's most admired brands of executive jets, with recognition of customers for the quality of products and service.

**Defense & Security** | Maintain Embraer's leading position in the domestic market and expand its international performance through the modernization of products and support services.

**Business Diversification** | Develop new business from the core competencies of the company, accelerating the adoption of new technologies and business models.

**People, sustainability, organization and processes** | Keep advancing as a global organization committed both to delivering customer satisfaction and valuing its people; a company that grows sustainably and serves as reference in the market for innovation and corporate excellence.

## INTANGIBLE ASSETS

Annually, during the review cycle of the strategic plan, Embraer identifies and prioritizes its intangible assets in order to guide its performance as a company that values people and is committed to customers and business excellence.

**Brand** | Monitored by material published in the press, presence in the sustainability indices and external acknowledgments referring to the management of people and the quality of service and products (see page 22).

**Knowledge** | Measured through the maturity index of processes implemented in the company, as well as by the practices of knowledge management.

**Intellectual property** | Measured by number of patents for inventions and for industrial designs.

**People** | Evaluated periodically by competencies (see page 35). Another indicator is external recognition related to personnel management (see page 22).

**Leadership** | 360° evaluations (see page 35).

## ECONOMIC/FINANCIAL

### PERFORMANCE [G4-DMA: Economic performance]

The year was challenging for Embraer due to reduced sales in the Defense & Security and Executive Aviation, in line with other companies in these segments. The consolidated results, however, were positive in light of the good performance of the Commercial Aviation segment and the reduction of costs and expenses, mainly for the qualification of sales and margin improvement in Executive Aviation. In 2016, the company delivered 240 aircraft, the same volume as the previous year. Net revenue was US\$6,217.5 million, slightly higher than the estimates for the year.

### Operating income and operating margin

Operating income (EBIT) and operating margin closed 2016 at R\$717.8 million and 3.3%, respectively, slightly down when compared to the previous year (operating income of R\$1,103.1 million and operating margin of 5.4%) due to non-recurring items, such as provisions related to the termination of the investigation of non-compliance with U.S. authorities, and also related to the payment of benefits offered in the Voluntary Dismissal Program (PDV, in Portuguese). Excluding these factors, adjusted EBIT was R\$1,700.5 million and adjusted EBIT margin was 7.9%, in line with the company's annual guidance.

### Net income and earnings per share

Adjusted net income, excluding deferred income and social contribution taxes related to the impact of exchange variation on non-monetary assets, and also the aforementioned provisions, was R\$964.9 million. Adjusted earnings per share were R\$1,3179 for the year.

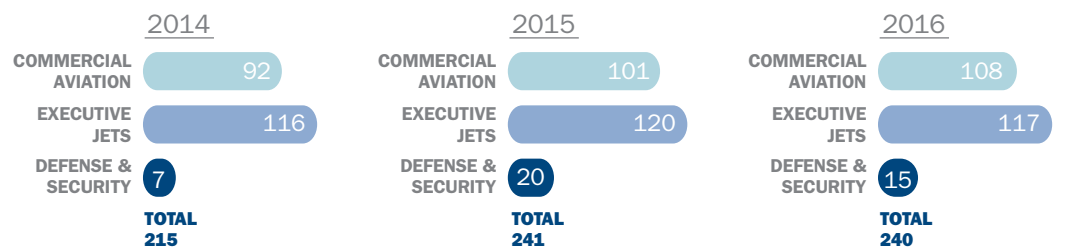
### Capital indicators

In 2016, the company had a negative adjusted free cash flow of R\$1,478.7 million, lower than the positive free cash flow of R\$1,391.7 million in 2015, mainly due to lower cash generation from operating activities, and also due to an increase in investments in property, plant and equipment as well as the development of new products.

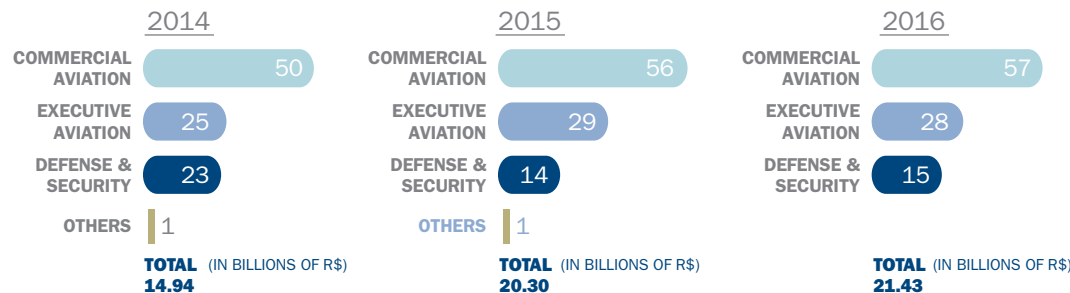
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DELIVERY OF AIRCRAFT BY UNIT



NET INCOME BY SEGMENT (%)



MAIN ECONOMIC-FINANCIAL INDICATORS

MILLIONS OF R\$*	2016	Variation 2016/2015	2015	2014
Net income	21,435.7	6%	20,301.8	14,935.9
Gross margin	19.9%	1.4 p.p.	18.5%	19.8%
Adjusted operating profit <sup>1</sup> (EBIT)	1,700.5	14%	1,493.7	1,303.8
Adjusted operating margin	7.9%	0.5 p.p.	7.4%	8.7%
Adjusted EBITDA <sup>2</sup>	2,844.2	16%	2,450.6	1,980.7
Adjusted EBITDA margin	13.3%	1.2 p.p.	12.1%	13.3%
Net profit	585.4	142%	241.6	796.1
Net margin	2.7%	1.5 p.p.	1.2%	5.3%
Investments <sup>3</sup>	12,458.8	(7%)	13,409.1	8,731.2
Debt	12,254.0	(11%)	13,785.7	6,662.0
Net cash (debt)	(1,873.0)	(6,695%)	28.4	(102.6)
<b>Total assets</b>	<b>38,016.7</b>	<b>17%</b>	<b>45,566.9</b>	<b>27,653.6</b>
Net equity	12,844.9	(14%)	15,008.7	10,265.4
Net debt/equity*	1.0	11%	0.9	0.6
ROA	1.6%	1.1 p.p.	0.5%	2.9%
ROE	4.6%	3.0 p.p.	1.6%	7.8%
ROCE <sup>4</sup>	0.2%	(6.1 p.p.)	6.3%	11.6%
Inventory	8,136.2	(10%)	9,037.9	6,388.9
Inventory turnover*	2.1	17%	1.8	1.9
Asset turnover*	0.6	50%	0.4	0.5
Backlog of firm orders (billions in USD)	19.6	(13%)	22.5	20.9
Delivery of aircraft (units)	240		241	215
Number of employees	18,506	(4%)	19,373	19,167
EBIT per employee (in thousands of R\$)	91.9	19%	77.1	68.0
Distributed dividends	148.6	26%	117.8	214.4
Profit per share <sup>1</sup> (R\$)	0.7959	141%	0.3309	1.0851
Quantity of shares (thousand) <sup>1,5</sup>	735,571	1%	730,205	733,677

Verified numbers are in compliance with the IFRS international accounting norm.  
\* Except Debt/Net Equity, Inventory Turnover, Asset Turnover, Profit per Share and Quantity of Shares.  
**1.** The adjusted term is used for amounts calculated excluding provisions relating to non-recurring items that impacted the result of the period. **2.** Represents net profit plus net financial revenue (expenses), income tax and social contributions, depreciation and amortization, minority shareholding and equity pickup. **3** Values include investments in Development, CAPEX and Shareholding. **4.** ROCE = NOPAT/Shares employed with non-monetary items period average. **5.** Weighted average of existing basic shares during the fiscal year, excluding shares acquired by the company and kept in the treasury.

Capital market

The shares traded on the BM&FBOVESPA (EMBR3) closed 2016 quoted at R\$16.00. The American Depositary Receipts (ADRs) traded in New York (NYSE: ERJ) ended the year quoted at US\$19.25. Embraer’s market value was US\$3.6 billion at the end of the year (US\$5.5 billion in 2015).

Value Added Statement (VAS)

Added value for the year was R\$5,733.2 million, which indicates a small decrease of 2.94% in relation to what was recorded for the previous year. For shareholders, Embraer distributed R\$73.6 million in interest on capital and R\$75.0 million in dividends, totaling R\$148.6 million, with a payout of 25.4% of net consolidated profit, R\$585.4 million. Profit per share was R\$0.7959. Emphasis should be given to the distribution of R\$3,557.1 million in value to employees and R\$592.8 million to federal and municipal governments in the form of taxes and contributions. See more information in the financial statements at: <http://ri.embraer.com.br/listresultados.aspx?idCanal=dwxMd7dcHTw/kwbNAc2ESQ==&linguagem=en#>. **[G4-EC1]**

**Investment level confirmed**

In 2016, the credit risk classification agencies Fitch Ratings and Standard & Poor’s (S&P) Ratings Services reiterated the BBB classification for Embraer. The same rating applies to securities issued abroad.

Fitch also attributed a national long-term grade of AAA (BRA) and S&P removed the negative company classification in CreditWatch, a sign that credit ratings will be reevaluated.



VAS CONSOLIDATED (IN R\$ MILLIONS) **[G4-EC1]**

	2016	2015	2014
<b>Revenue</b>	<b>23,416.0</b>	<b>22,360.1</b>	<b>16,343.0</b>
Inputs acquired from third-parties	(17,157.1)	(16,364.1)	(11,144.2)
Gross added value	6,258.9	5,996.0	5,198.8
Depreciation and amortization	(1,265.6)	(1,073.4)	(676.8)
Net added value produced by the entity	4,993.3	4,922.6	4,522.0
Received added value being transferred	739.9	605.2	418.7
<b>Distribution of added value</b>	<b>5,733.2</b>	<b>5,527.8</b>	<b>4,940.7</b>
Personnel	3,557.1	3,342.4	2,502.3
Government (taxes, rates and contributions)	592.8	1,251.6	1,058.1
Interest and rentals	991.7	652.2	553.7
JCP and dividends	174.0	117.8	214.3
Retained profit/losses from fiscal year	411.4	123.8	581.8
Shares of non-controllers	6.4	40.0	30.5

For more information, access the Annual Financial Statement at <http://ri.embraer.com.br/Download.aspx?Arquivo=5QjXT9Bt2ealHjlqenPhYg==>.



# People

The company ended the fiscal year with 18,506 employees, 16,007 located in Brazil and 2,499 located abroad. The turnover rate was 15.03% (see formation of operating team environment and the hiring rates in GRI Indicators). [G4-DMA: Employment, G4-10, G4-LA1]

## ATTRACTION AND RETENTION

With employees from more than 20 countries, respecting differences is an Embraer principle. Embraer also invites the participation of people with special needs through the On the Path to Diversity program, in operation since 2012, in partnership with the Center for the Integration of Businesses and Schools (CIEE, in Portuguese). [G4-DMA: Diversity and equity of opportunity, G4-LA12]

In 2016, Embraer started its first trainee program. Through next year, those selected will be trained in the classroom and in operations, and will cycle through various departments in order to become familiarized with challenges inherent to a global company's daily routine. In Brazil alone, more than 11 thousand young people expressed interest in the first 23 open positions.



## DEVELOPMENT AND TRAINING

[G4-DMA: Training and education, G4-DMA: Investments]

Developing talents and preparing them to take on positions of leadership are fundamental conditions to ensure the longevity of the business. For this purpose, Embraer uses training programs that cover technical as well as behavioral abilities. Throughout the year, more than 300 courses were offered, mostly online, with the support of videos, tutorials, games and infographics.

Training for leaders and future leaders is planned based on PSE guidelines (see page 21), with emphasis on the Embraer Leadership Development Program, which offers continued education, improvement for upward mobility in careers and other measures focused on the Leadership, Business and Results, and Market axes. The initiative, developed in partnership with Dom Cabral Foundation, graduated two classes in 2015 and four in 2016, which represents 183 managers trained in Brazil and abroad.

Employee performance is analyzed periodically through a skill evaluation. This process was carried out between April and June. Results guide the Personal Development Program (PDI, in Portuguese) and make it possible for leaders to recommend the most appropriate courses to each of their employees. Another performance indicator is the automatic salary progression, geared to production employees



at the beginning of their careers, which provides for adjusting the compensation of those who receive positive evaluations. Leaders are evaluated based on 360° assessments, the Performance Map and the Calibration Committee (see performance analysis and career development in GRI Indicators). [\[G4-LA11\]](#)

INTERNAL COURSES AND PLANNING FOR PRE-RETIREMENT [\[G4-LA10\]](#)

	2016	2015	2014
Employees	90	90	116
Value invested (R\$)	115,305.08*	80,000*	190,820
Grants awarded	90	90	116

\* The 2015 program ended in 2016. The 90 participants of the 2015 program are the same in 2016.

COMPENSATION AND BENEFITS

[\[G4-DMA: Economic performance, G4-DMA: Market presence, G4-DMA: Employment\]](#)

Employees receive fixed compensation, established in accordance with the complexity of their functions aligned with salaries practiced on the market, and variable compensation, based on company results and individual performance (see variation of the proportion of the lowest salaries, gender discrimination, compared to local minimum wage in GRI Indicators). [\[G4-EC5\]](#)

Brazilian employees have a benefits package and may participate in the Embraer Prev complementary pension plan. Membership is voluntary, without restrictions, and time of service is considered for withdrawal. Contributors define a monthly value of up to 8% of their salary and the sponsor matches that amount. Abroad, benefits packages vary in

Through year end, the company invested R\$14,298,941.00 in 625,416 total hours of training, which represents 34 hours per employee (see average number of training hours per year per employee, as well as the total number of employee training hours for human rights policies in GRI Indicators). [\[G4-LA9, G4-HR2\]](#)

accordance with the current legislation in each country. [\[G4-EC3, G4-LA2\]](#)

HEALTH AND SAFETY

[\[G4-DMA: Workplace health and safety\]](#)

Concern with employee health and safety is the focus of the Environmental, Health and Safety Policy (MASS, in Portuguese), which aims to ensure a work environment that complies with labor and environmental law, in addition to complying with health, safety and ergonomic requirements.

The initiatives are developed based on periodic medical exams (for all employees) in order to trace each department's epidemiological profile. With this information the company developed the Behavioral Program, the Tensional Reeducation Training Program (PERTO, in Portuguese) and the Prevention through Design program.

Furthermore, emphasis is given to the Well-Being program, which aims to encourage the practice of healthy habits among employees. The Internal Accident Prevention Committee (CIPA, in Portuguese) exists since 1971, and it is made up of representatives elected annually by employees, and an equal proportion of members are named by the company (87.26% representation), with the objective of ensuring safety in the operating environment. [\[G4-LA5\]](#)

The company is also in dialogue with unions regarding terms related to employee health and safety. Clauses negotiated in collective conventions cover 100% of Brazilian employees and include: offering Personal Protective Equipment (PPE); training and education regarding this issue; complaint recording system; and accident audits and periodic visits with the participation of employees' representatives. [\[G4-11, G4-LA8\]](#)

Internationally recognized certificates, such as the OHSAS 18001 (since 2001), accredit Embraer operations with regard to adopted practices. Incident reduction and work condition improvement goals defined in the Master Sustainability Plan (see page 7) are supplemented annually. In addition, safety indicators are also monitored and analyzed monthly by the Board of Executive Officers and by the Board of Directors.

For the year, the total number of accidents with lost time was 82, and the occupational sickness rate was 0.22% (see more information in GRI Indicators). [\[G4-LA6\]](#)

MANAGEMENT OF ORGANIZATIONAL CLIMATE

In 2016, various sector companies announced cost and expense adjustments, including those related to the operating environment. In this context, Embraer approved a plan for operational adjustments in continuity with the reviews of processes

and the quest for efficiency (see page 30), which included a Voluntary Dismissal Program (PDV, in Portuguese). All applications were evaluated by the company, and the 1,463 people who were awarded received, in addition to their severance pay, compensation of 40% of the nominal monthly salary proportional to their time of service in the company, six months of health and dental plan coverage, and support through lectures and career qualification and/or transition workshops. [\[G4-LA10\]](#)

A satisfaction survey was conducted with these employees, revealing that 85% of the respondents expressed their gratitude for the time they worked at Embraer. This data shows the respect with which the PDV was conducted and reaffirms the high satisfaction rates recorded in surveys over the last seven years.

Every year between 2007 and 2015, Embraer conducted an Internal Organizational Climate Survey, seeking to evaluate the degree of employee satisfaction. Because it is often above the market average, the company opted to improve practices in 2016, with a biannual engagement survey, which will take place in 2017, for the first time.





# Partners

## MANAGEMENT OF SUPPLY CHAIN

[G4-DMA: Environmental evaluation of suppliers, G4-DMA: Evaluation of suppliers in labor practices, G4-DMA: Freedom of association and collective bargaining, G4-DMA: Child labor, G4-DMA: Forced or slave labor, G4-DMA: Evaluation of suppliers in human rights, G4-DMA: Evaluation of suppliers in societal impacts, G4-12]

Embraer's supply chain is divided into 1,200 direct suppliers, with which resources are traded for the manufacturing of products, and 3,000 indirect suppliers, who support technical and administrative activities. The relationship with this public is guided by the Code of Ethics and Conduct (see page 18) and goals are established in the Master Sustainability Plan (see page 7).

Business partners are subject to risk assessments that include monthly monitoring of performance indicators, face-to-face audits at contractor companies' plants and the periodic assessment of environmental impact surveys. In addition, all contracts contain clauses regarding human rights and labor as well as environmental laws. This year, no significant negative impacts were identified with regard to labor practices in the supply chain. [G4-EN32, G4-EN33, G4-LA14, G4-LA15, G4-HR1, G4-HR4, G4-HR5, G4-HR6, G4-HR10, G4-S09]



### EVOLUTION OF PDCA IN 2016



Increase of **12%** for delivery volume and increase of **12.4%** for billing.

Part numbers number  
2014  
2016 **+10.1%**

High risk suppliers  
2014  
2016 **-83%**

Direct employment  
2014  
2016 **-2%**

On-time deliveries  
2014  
2016 **+7.7%**  
(97.2% of deliveries made on-time)

## AERONAUTICS CHAIN DEVELOPMENT PROGRAM (PDCA, IN PORTUGUESE)

In partnership with the Brazilian Industrial Development Agency (ABDI, in Portuguese), the PDCA seeks to improve all companies involved in the direct supply of industrial processes. The initiative was based on the Excellence Management Model (MEG, in Portuguese) of the National Quality Foundation (FNQ, in Portuguese) and promoted significant improvements related to service, costs, quality and waste reduction.

## EXCELLENCE IN MANAGEMENT PROGRAM (PEG, IN PORTUGUESE)

An initiative that aims to enable indirect suppliers to continuously pursue excellence, contributing to increased productivity and technical improvement. Companies – selected from risk mapping and cost reduction opportunities – participate in courses on lean management philosophy and receive guidance for *kaizen* practices (continuous performance improvement).

### EVOLUTION OF PEG IN 2016



**3 classes trained**



**17 projects completed**



**14 goals defined**



**231 measures identified**



**32 hours of training**



**More than 640 hours of kaizens**



**Reduction of 169 days and 9 hours of processes**



**Savings of R\$12 million**

1

IDENTIFICATION OF SUPPLIERS

2

THEORETICAL TRAINING

3

KAIZENS

4

PRESENTATION OF RESULTS



# Society and the Environment

## SOCIO-ENVIRONMENTAL RESPONSIBILITY

[G4-DMA: Energy, G4-DMA: Water, G4-DMA: Emissions, G4-DMA: Effluent and waste]

The MASS Policy also guides Embraer's Environmental actions, having among its principles respect for the environment, the pursuit of eco-efficiency and the management of the company's products' life cycle.

### GREENHOUSE GASES (GHG)

Since 2012, Embraer has been a signatory party of the aerospace industry's sustainability commitment that establishes two of the industry's key goals: carbon neutral growth by 2020 and a 50% reduction in net aviation CO<sub>2</sub> emissions by 2050, considering 2005 levels. Each year, Embraer discloses an inventory of GHG emissions certified by ISO 14064 and audited by Lloyd's Register Quality Assurance (LRQA) (see emission inventory results in GRI Indicators). [G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19, G4-EN20, G4-EN21]

### Energy and water

In 2016, energy consumption totaled 176,889 MWh, a higher value than in 2015, mainly due to the increase of installations and work forces in units of the United States and Portugal. A savings of 2,498 MWh/year was also recorded due to initiatives, such as the modernization of hangar lighting systems, installation of photovoltaic panels, and replacement of tubular fluorescent bulbs with LED lights. This year, the company also hired a consultancy in order to identify improvement opportunities related to the reduction of energy consumption at the Faria Lima, Eugênio de Melo, Taubaté and ELEB units (see more about energy consumption and its reductions in GRI Indicators). [G4-EN3, G4-EN6]



During the fiscal year the company consumed 1,127,226 m³ of water, reusing 5%. [G4-EN8, G4-EN10]

### Effluent and Waste

The company's units discard their effluents in the public network, with the exception of Taubaté and Gavião Peixoto, Brazil, which discard effluents in the Boçoroca and Mulada streams, respectively. This is possible because they have their own Sewage Treatment Plants (ETE, in Portuguese), and the Gavião Peixoto ETE stands out for its removal of nitrogen-based material (ammonium, nitrite, nitrate) and the reuse of water. The volume discarded is less than the supporting capacity of the water bodies and both are outside the Environmental Protected Areas (APA, in Portuguese) (see water disposal broken down by treatment and destination in GRI Indicators). [G4-EN22]

Embraer waste management is carried out by third-party companies, specialized in processing and decontaminating materials for reuse or responsible disposal (see total weight of generated waste and their destinations in GRI Indicators). [G4-EN23]

### Sector partnerships [G4-15, G4-16]

Embraer establishes dialogs with associations, entities, multilateral organizations and voluntary initiatives in order to contribute to the formulation of public policies concerning the aerospace sector. These relationships are regulated by guidelines stated in the Code of Ethics and Conduct and monitored by the Compliance Program (see page 18).

This year, a topic that involved the sector concerned Brazilian Law No. 258/2016, which instituted the modernization of the Brazilian Aeronautics Code. The current document is from 1986, prior to the current Brazilian Constitution, the Consumer Defense Code, the new Civil Code and the National Civil Aviation Agency. This is an important debate taking place in Brazil's Senate. The Brazilian Aerospace Industries Association (AIAB, in Portuguese), in which the company participates on the Board of Executive Officers, was a member of the expert committee that analyzed this reform.

Embraer has also been attentive to discussions about easing sanctions on Iran, allowing the sale of commercial aircraft under license from the Office of Foreign Assets Control (OFAC) of the U.S. Treasury Department, and on the change of European law to allow the transfer of data between Brazil and the U.S.

The company also favored setting limits for state support in the development and maintenance of aeronautical projects. During the year, Brazil appealed to the World Trade Organization (WTO) against subsidies granted by the province of Quebec (Canada) for the development of the Canadian C Series commercial aircraft model, a direct rival of the E-Jets, which aggravated the price dispute in commercial aviation. This is a sensitive issue to maintain a level playing field.

After six years of negotiations between governments, environmental groups and members of the aviation industry, including Embraer, the International Civil Aviation Organization (ICAO) introduced the first standard for certification of CO<sub>2</sub> emissions in aviation. The standard seeks to promote the reduction of CO<sub>2</sub> emissions from aircraft, encouraging the integration of fuel-efficient technologies in the design and development of aircraft. The CO<sub>2</sub> standard will be applied to all new aircraft models launched after 2020 and also, progressively, to all aircraft in use starting in 2023, even if designed and launched before 2020.

During the ICAO October meeting, the 191 member countries also agreed to implement a Carbon Offset and Reduction Scheme for International Aviation (CORSIA). The agreement will add to other industry efforts to address climate change (see Embraer's participation in national and international associations and organizations in GRI Indicators).

## LETTERS, PRINCIPLES AND OTHER EXTERNALLY DEVELOPED INITIATIVES [G4-15]

Name	Date of adoption	Scope	Stakeholders involved
UN Global Compact	2008	Global	Suppliers, manufacturers, transportation companies and organizations from different sectors
Initiative Towards sustainable Kerosene for Aviation (ITAKA)	2012	Global	Suppliers, manufacturers, transportation companies and aerospace sector organizations
Friends of Rio+20	2012	Global	Organizations from various sectors
Commitment to reducing GHG emissions in aviation (ICAO/ATAG)	2012	Global	Suppliers, manufacturers, transportation companies and organizations from the aerospace sector
Call to Action	2014	Global	Suppliers, manufacturers, transportation companies and organizations from different sectors
Bio-fuel research center	2015	Brazil (with world impact potential)	Partnership with Boeing
EcoDemonstrator	2016	Technology test for improving environmental performance of product	Partnership with Boeing



## EMBRAER INSTITUTE [G4-DMA: Indirect economic impacts, G4-DMA: Local communities, G4-EC7, G4-EC8, G4-S01]

The Embraer Institute for Education and Research, which celebrated 15 years of operations in 2016, was created in order to manage Embraer's social private investment in programs focused on education. The initiatives are based on three fronts of action: education, engagement with society and preserving the memory of the Brazilian aeronautical industry. During the fiscal year, in order to encourage good practices, Embraer – through the Embraer institute – embraced four Sustainable Development Goals, established by the United Nations (UN). Learn more at [www.institutoembraer.org.br](http://www.institutoembraer.org.br).



15 YEARS  
OF SOCIAL  
TRANSFORMATION

R\$20  
MILLION  
INVESTED  
DURING THE  
FISCAL YEAR

119,000  
VISITED THE  
A FLIGHT  
FOR EMBRAER  
EXHIBITION  
AT THE CATAVENTO  
CULTURAL MUSEUM

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### ENGAGEMENT WITH SOCIETY

**Social Partnership** | The Social Partnership Program supports educational projects structured by civil organizations. In building its thematic agenda, the Embraer Institute promotes public consultations based on the Sustainable Development Objectives (SDGs) agenda.

**Volunteering** | The Embraer Institute coordinates initiatives focused on disseminating a volunteering culture among employees of the company, and establishes partnerships with public and private entities aiming to intensify volunteerism in activities that comply with Embraer values.

MORE THAN  
**150**  
PROJECTS  
SUPPORTED  
SINCE  
**2004**

**793**  
EMPLOYEES  
ENGAGED  
IN **2016**

### PRESERVING MEMORY

**Embraer Historical Center** | Created in 2006 and incorporated into the Institute in 2014, it is responsible for rescuing, preserving and disclosing the memory of the Brazilian aeronautical industry in four exhibition spaces – São José dos Campos (SP), Gavião Peixoto (SP), Villepinte (France) and Fort Lauderdale (EUA) – and on the website <http://institutoembraer.org.br/centrohistoricoembraer>. In 2016, the virtual exhibition Women in Aviation was held, in line with the fifth UN Sustainable Development Objective (Gender Equality). See <https://goo.gl/EQWdyL>.

**Guided tours** | Launched in 2015 as an experiment, the initiative opens the São José dos Campos unit's doors to the community. In addition to bringing the unit closer to the community, the program rescues the company's history and involves employees who work as guides during the visits.

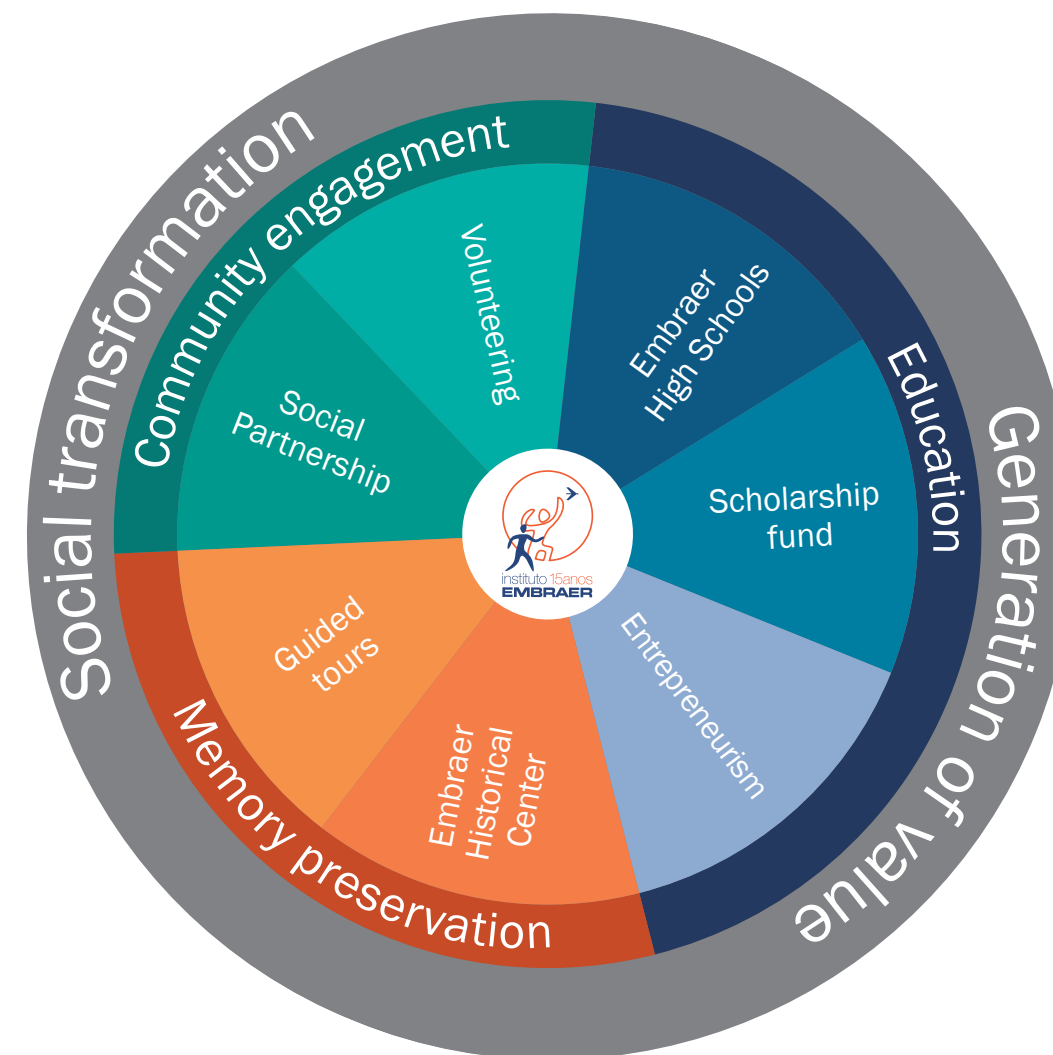
**A Flight for Embraer** | At the end of 2015 and at the beginning of 2016, the Catavento Cultural Museum, in São Paulo, held a thematic exhibition on Aviation Technology, which had an Embraer Institute collection, including a life size passenger cabin.

### EDUCATION

**Embraer High Schools** | Embraer's Juarez Wanderley and Casimiro Montenegro Filho High Schools, located in São José dos Campos and Botucatu, respectively, offer three years of education (a full high school term) at no cost, for students from the public school system. In addition to the full scholarship, Embraer High Schools also provide uniforms, teaching materials, food and transportation. Their applied educational method focuses on academic excellence and professional orientation, through socio-environmental and cultural education, and is a key factor in achieving high approval rates in public and private university entrance exams. For 2016, the two high schools were listed among the best schools in Brazil, based on the results of the National Secondary Education Exam (ENEM, in Portuguese). Juarez Wanderley College also won the first four positions in the Intelligence Olympics, organized by the Multiple Intelligences Assessment (AMI, in Portuguese) and by the Commercial and Industrial Association (ACI, in Portuguese) in São José dos Campos.

**Scholarship Fund** | Program for alumni of the Embraer High Schools who had excellent academic performance, financial limitations and who have been accepted into public or private universities with full tuition waiver. The fund is made up of donations from individuals, among them employees, as well as companies and organizations. Supporting the sustainability of the program, former students also become donors, once they find a place in the job market, and a grace period comes to an end. In 2016, the initiative benefited 271 university students.

**Entrepreneurship** | The Embraer Institute carries out initiatives in order to stimulate the entrepreneurial spirit in students of the public system in the areas where the company is present. Noteworthy, among the highlights of 2016, are the various awards received by the MiniCompany Program, coordinated in partnership with the Junior Achievement organization of the State of São Paulo, including the Best MiniCompany award in the Social Responsibility category.



271  
UNIVERSITY  
STUDENTS  
BENEFITTED  
IN THE YEAR

2,840  
STUDENTS  
GRADUATED  
SINCE THE CREATION  
OF THE INSTITUTE

MORE  
THAN 80%  
GRADUATING STUDENTS  
APPROVED IN  
PUBLIC AND  
PRIVATE UNIVERSITIES

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# GRI INDICATORS

## Location of the organization's headquarters |G4-5|

Avenida Brigadeiro Faria Lima, 2,170 – Putim, São José dos Campos – SP.

## Employee profile |G4-10|

	2016 <sup>3</sup>		2015 <sup>3</sup>		2014 <sup>2</sup>	
BY FUNCTIONAL LEVEL	Men	Women	Men	Women	Men	Women
Board of Executive Officers <sup>1</sup>	82	9	73	9	79	8
Manager	269	45	235	40	234	43
Supervisor	638	82	678	75	726	81
Pilot	93	0	102	0	106	0
Engineer	3,603	547	3,783	586	3,708	576
Professional	1,487	1,036	1,300	965	1,271	961
Technical	2,912	332	3,168	300	3,013	277
Administrative	435	319	480	377	490	386
Operational	6,077	540	6,603	599	6,619	589
Total by gender	15,596	2,910	16,422	2,951	16,246	2,921
Total	18,506		19,373		19,167	

	2016 <sup>3</sup>		2015 <sup>3</sup>		2014 <sup>2</sup>	
BY TYPE OF CONTRACT	Men	Women	Men	Women	Men	Women
Determined time	306	70	217	89	226	67
Undetermined time	15,290	2,840	16,205	2,862	16,020	2,854
Total by gender	15,596	2,910	16,422	2,951	16,246	2,921
Total	18,506		19,373		19,167	

	2016 <sup>3</sup>		2015 <sup>3</sup>		2014 <sup>2</sup>	
BY WORK DAY	Men	Women	Men	Women	Men	Women
Full work day	15,580	2,905	16,403	2,945	16,219	2,916
Half period	16	5	19	6	27	5
Total by gender	15,596	2,910	16,422	2,951	16,246	2,921
Total	18,506		19,373		19,167	

	2016 <sup>3</sup>		2015 <sup>3</sup>		2014 <sup>2</sup>	
BY COUNTRY	Men	Women	Men	Women	Men	Women
Brazil	13,540	2,467	14,488	2,519	14,571	2,523
China	46	21	48	26	43	27
USA	1,479	284	1,406	262	1,189	221
France	93	19	89	19	187	75
Netherlands	75	19	56	10	4	1
Ireland	0	0	0	1	2	1
Portugal	324	83	294	97	209	57
Singapore	39	17	41	17	41	16
Total by gender	15,596	2,910	16,422	2,951	16,246	2,921
Total	18,506		19,373		19,167	

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	2016 <sup>3</sup>		2015 <sup>3</sup>		2014	
BY WORKFORCE	Men	Women	Men	Women	Men	Women
Direct employees	13,108	2,328	14,488	2,519	16,246	2,921
Third-parties <sup>4</sup>	4,355		3,935		0	
Total	19,791		20,942		19,167	

**1.** Includes director-president, vice-presidents and executive officers. **2.** In previous years, the count for Brazil was notated by region in the country. Starting in 2015, the counts came to be notated by country. **3.** Numbers referring to sites in Brazil. **4.** The system used for handling third-parties does not allow for a breakdown by gender.

## Participation in national or international associations and organizations<sup>1</sup> |G4-16|

NATIONAL AGENDA				
	Seat on the Board of Governance	Participation in projects/commissions	Strategic participation	Is there resource allocation beyond the registration/association fee?
Brazilian Association of Public Companies (Abrasca, in Portuguese)	Yes	Yes	Yes	No
Brazilian Association of Industries for Defense and Security Materials (ABIMDE, in Portuguese)	Yes	Yes	Yes	No
Brazilian Association of General Aviation (ABAG, in Portuguese)	Yes	Yes	Yes	No
Brazilian Association of Mechanical Sciences (ABCM, in Portuguese)	No	Yes	Yes	No
Aerospace Industries Association of Brazil (AIAB, in Portuguese)	Yes	Yes	Yes	No
Foreign Trade Association of Brazil (AEB, in Portuguese)	Yes	Yes	Yes	No
Technology Park of São José dos Campos Association	No	Yes	Yes	No
National Association for Research and Development of Innovative Companies (ANPEI, in Portuguese)	Yes	Yes	Yes	No
Center for Competitiveness and Innovation of the Eastern Region of the State of São Paulo (CECOMPI, in Portuguese)	Yes	Yes	Yes	No
National Confederation of Industry (CNI, in Portuguese) <sup>2</sup>	No	Yes	Yes	No
Federation of Industries of the State of São Paulo (Fiesp, in Portuguese)	Yes	Yes	Yes	No
Brazilian Institute of Corporate Governance (IBGC, in Portuguese)	No	Yes	Yes	No
Industrial Enterprise Development Institute (IEDI, in Portuguese)	Yes	Yes	Yes	No
Brazilian National Confederation of Industry (MEI, in Portuguese)	No	Yes	Yes	No

INTERNATIONAL AGENDA				
	Seat on the Board of Governance	Participation in projects/commissions	Strategic participation	Is there resource allocation beyond the registration/association fee?
Aerospace Industries Association (AIA)	No	Yes	Yes	No
Air Transport Action Group (ATAG)	Yes	Yes	Yes	No
Aviation Working Group (AWG)	Yes	Yes	Yes	No



Brazil Industries Coalition (BIC)	Yes	Yes	Yes	No
American Chamber of Commerce (Amcham)	Yes	Yes	Yes	No
Portuguese Chamber of Commerce in Brazil (CPCB, in Portuguese)	Yes	Yes	Yes	No
Brazilian Center for International Relations (CEBRI, in Portuguese)	Yes	Yes	Yes	No
Brazil-China Corporate Council (CEBC, in Portuguese)	Yes	Yes	Yes	No
Brazil-United States Corporate Council (CEBEU, in Portuguese)	Yes	Yes	Yes	No
European Policy Center (EPC)	No	Yes	Yes	No
Global Compact Foundation	No	Yes	Yes	No
Foreign Trade Study Center Foundation (Funcex, in Portuguese)	Yes	Yes	Yes	No
General Aviation Manufacturers Association (Gama)	No	Yes	Yes	No
International Aerospace Environmental Group (laeg)	No	Yes	Yes	No
National Aeronautic Association (NAA)	Yes	Yes	Yes	No
United States Chamber of Commerce (US Chamber)	No	Yes	Yes	No
World Economic Forum (WEF)	No	Yes	Yes	No

**1.** The list does not present the totality of associations in which Embraer participates. However, the most strategic ones were listed. **2.** Associative participation through the Fiesp system.

### Limit of material aspect inside and outside of the organization

Material matters	Material aspects   G4-19	Indicators	Aspect limit in the organization   G4-20, G4-21	
			Inside	Outside
Export control	Economic performance	G4-EC1 G4-EC2 G4-EC3	X	X
Attraction, development and retention of human resources				
Attraction, development and retention of human resources				
Local socio-economic development	Market presence	G4-EC5	X	
Local socio-economic development	Indirect economic impacts	G4-EC7 G4-EC8	X	X
Management of natural resources and waste	Energy	G4-EN3 G4-EN5 G4-EN6 G4-EN7	X	X
Sustainable new business, products and services				
Research, development and innovation				
Management of natural resources and waste	Water	G4-EN8 G4-EN9 G4-EN10	X	

G4-19		G4-20, G4-21	
Atmospheric emissions	Emissions	G4-EN15 G4-EN16 G4-EN17 G4-EN18 G4-EN19 G4-EN20 G4-EN21	X X
Management of natural resources and waste	Effluent and waste	G4-EN22 G4-EN23 G4-EN24	X X
Management of chemical substances			
Management of chemical substances			
Management of the product's environmental life cycle	Products and services	G4-EN27	X X
Management of supply chain	Environmental evaluation of suppliers	G4-EN32 G4-EN33	X X
Transparency and communication	System for complaints and claims relating to environmental impacts	G4-EN34	X X
Attraction, development and retention of human resources	Employment	G4-LA1 G4-LA2	X
Human and labor rights			
Employee health and safety	Work health and safety	G4-LA5 G4-LA6 G4-LA7 G4-LA8	X
Attraction, development and retention of human resources	Training and education	G4-LA9 G4-LA10 G4-LA11	X
	Diversity and equality of opportunity	G4-LA12	X
Management of supply chain	Evaluation of suppliers for labor practices	G4-LA14 G4-LA15	X X
Transparency and communication	System for complaints and claims relating to labor practices	G4-LA16	X X
Human and labor rights	Investments	G4-HR1 G4-HR2	X
	No discrimination	G4-HR3	X X
	Freedom of association and collective bargaining	G4-HR4	X
Management of supply chain	Child labor	G4-HR5	X X
	Forced or slave labor	G4-HR6	X X
	Evaluation of suppliers for human rights	G4-HR10	X X
Transparency and communication	System for complaints	G4-HR12	X X
Local socio-economic development	Local communities	G4-SO1	X X



G4-19		G4-20, G4-21		
Ethics	Fighting corruption	G4-S03 G4-S04 G4-S05	X	X
Management of supply chain	Evaluation of suppliers for societal impacts	G4-S09	X	X
Transparency and communication	System for complaints and claims relating to societal impacts	G4-S011	X	X
Product safety	Labeling products and services	G4-PR5	X	X

Date of the most recent report |G4-29|

The previous version of this annual report was published in April 2016, referring to the fiscal year of 2015.

Approach and frequency of stakeholder engagement and consultation processes between stakeholders and the highest governance body in relation to economic, environmental and social topics |G4-26, G4-37|

Stakeholders	Approach	Responsible parties	Frequency
Customers	Embraer Operators Conference – EOC and Embraer Executive Operators Conference – EEOC for discussion of matters relating to aircraft (maintenance, operation and field items).	Customer Support	Annual
	Kaizens to improve Embraer's interaction with customers.	Customer Support	Continuous/Depending on demands
	Studies to develop or improve products.	Market Intelligence, Customer Support and Engineering	Continuous/Depending on demands
	Customer satisfaction surveys.	Customer Support	Annual
	Aeronautical fairs for presenting and selling products.	Sales	In accordance with global calendar
Suppliers	Embraer Suppliers Conference (ESC) for strategic alignment and awarding the year's best suppliers.	Executive-Administration	Annual
	Supply Chain Alignment (SCA) and Supply Chain Quality Alignment (SQA) for strategic and operational alignment.	Program managers and directors and department of Supplier Quality	Annual
	Executive Meeting for following action plan indicators.	Executive-Administration	Quarterly
	Customer Support Meeting (CSM) dedicated to post-sales for discussing technical and commercial matters.	Executive-Administration	Quarterly
	Program Review Meeting (PRM) for technical/operational surveillance of development activities for series and post sales programs.	Program directors and managers	Biannual

G4-26, G4-37			
Shareholders	Shareholder assembly.	Legal Vice-President	In accordance with the rules for calling a meeting detailed in the Bylaws
	Investor Relations Site.	Administration of Investor Relations	Continuous
	Embraer Day for presenting results and relevant information.	Administration of Investor Relations	Biannual
Society	Meetings with the Ministry of Labor.	Management of Workplace Safety, Occupational Health and Environment	Bimonthly
	Meetings with CETESB, Sanitary Surveillance, Federal/State Police, Ministry of Defense, mayors, municipal secretaries of education, class entities and Brazilian business associations.	Management of Corporate Sustainability and Management of Workplace Safety, Occupational Health and Environment	Continuous
	Participation in international forums and organizations (WEF, ATAG, IATA, ICAO, UNDP, Global Compact, OMC, AWG, among others).	Administration of External Relations and Managing Corporate Sustainability	Continuous
	Meetings with federal and state governments, mayors' administrations and governmental agencies.	Administration of External Relations and Managing Corporate Sustainability	Continuous
	Blog of the Director-President.	Presidency	Continuous
	Cycle of Values – events between leaders and employees for sharing Embraer Values.	Administration of Brand Management and Internal Communications	Bimonthly
	Meetings to follow up on PA/ PMS and alignment each semester.	Leaders and employees	At least each trimester
	Climate survey and meetings between leaders and employees.	Leaders	Continuous
	Helpline.	Compliance Board	Continuous
	Message to managers.	Administration of Brand Management and Internal Communications	Continuous

Measurements taken to develop and improve awareness of the highest governing body regarding economic, environmental and social topics |G4-43|

Measurements	Body	Economic	Environmental	Social
Lecture on shareholder activism	Board of Directors	X		
Presentation on environmental matters at company sites	Board of Directors		X	
Presentation from the Embraer Institute of Education and Research (IEEP, in Portuguese)	Board of Directors			X
Annual compliance training	Board of Directors	X		
Presentation from the Committee of Financial Management	Board of Executive Officers	X		
Presentation of work from the Committee of Control and Environmental Risks (CCRA, in Portuguese)	Board of Executive Officers		X	
Presentation of work from Committee of Sustainability	Board of Executive Officers		X	X
Presentation from the Committee of Ethics	Board of Executive Officers	X		
Anti-trust training	Board of Executive Officers	X		



Highest level body or position that formally analyzes and approves the sustainability report for the organization and ensures that all material matters are covered |G4-48|

President-Director.

Process adopted to communicate critical concerns to the highest level governing body |G4-49|

The company’s Board of Executive Officers and Board of Directors’ Advisory Committees communicate critical company concerns where BD ordinary meetings take place or, if necessary, they request Extraordinary meetings.

Variation of the proportion of the lowest wage, separated by gender, compared to the local minimum wage at important operational sites |G4-EC5|

Country	Gender	Reference			Ratio (%)
		2014	2015	2016	
Brazil (BRL) <sup>1</sup>	Men	1,337.60	1,339.80	1,502.80	880.00
	Women	1,337.60	1,470.55	1,470.55	
United States (USD) <sup>2</sup>	Men	1,733.33	1,733.33	2,142.40	1,395.33
	Women	2,080.00	2,080.00	2,102.53	
Portugal (EUR) <sup>3</sup>	Men	700.00	700.00	700.00	530.00
	Women	700.00	700.00	700.00	
France (EUR) <sup>4</sup>	Men	1,891.99	1,891.99	1,851.39	1,466.62
	Women	1,891.99	1,513.59	1,556.80	

1. Minimum wage in Brazil. The salary floor follows of the union category. 2. Minimum wage in the state of Florida. 3. Minimum wage in Portugal. 4. Minimum wage in France. Important operational sites are those in which Embraer is present have that have a significant quantity of staff. The following countries' offices were not considered: Singapore, China and Netherlands.

Consumption of electrical energy by unit (MWh) |G4-EN3|

	2014	2015	2016
Faria Lima	64,210	65,864	62,472
Botucatu	17,444	17,291	15,683
Évora	Unavailable	14,218	16,021
Eugênio de Melo	14,710	13,707	15,320
Gavião Peixoto	14,210	13,443	15,601
OGMA	Unavailable	12,929	13,326
ELEB	10,775	10,959	10,987
Melbourne	Unavailable	8,147	13,299
Taubaté	4,830	4,031	4,264
Nashville	Unavailable	3,626	4,853
Fort Lauderdale	Unavailable	2,180	3,232
Sorocaba	Unavailable	900	925

Harbin*	Unavailable	830	0
Belo Horizonte	Unavailable	636	612
Beijing	Unavailable	179	183
São Paulo	Unavailable	Unavailable	111
Total	126,179	168,940	176,889

\* In 2016, electrical energy consumed at the São Paulo office was included and the Harbin unit, in China, was excluded, due to closing of operations.

Consumption of energy within the organization |G4-EN3|

Type of fuel (non renewable)	Total consumption (MWh)
Diesel	736
Gasoline	319
Liquefied Petroleum Gas (LPG)	12,087
Natural gas	31,805
Aviation kerosene	102,113
Total	147,060

Consumed non-renewable fuel values include the consumption in sites certified in ISO 14064 – Part 1 referring to Scope 1 (SKJ, EGM, TTE, ELEB, BOT, GPX, BHZ, SOD and SPO). Therefore, consumption referring to Embraer sites abroad were not considered.

Type of fuel (renewable)	Total consumption (MWh)
Hydrous ethanol	83
Total	83

Consumed renewable fuel values include the consumption in sites certified in ISO 14064 – Part 1 referring to Scope 1 (SKJ, EGM, TTE, ELEB, BOT, GPX, BHZ, SOD and SPO). Therefore, consumption referring to Embraer sites abroad were not considered.

Quantities of acquired heating, refrigeration and steam not significant.

Energetic intensity |G4-EN5|

The indicator of energetic intensity covers electrical energy consumed during the year for the manufacturing of aircraft. Due to the various models of plane manufactured by Embraer, the term equivalent aircraft was created, a number calculated from the plane model and the work hours required for its manufacture. In 2016, 249 equivalent aircraft were produced. Considering the consumption of electrical energy in manufacturing plants in Brazil in 2016, the energetic intensity indicator was 500 MWh for each equivalent aircraft produced, a value 10% lower when compared to that in 2015. With relation to the performance of all sites reported for this indicator, the energetic intensity of Embraer S.A. sites was 711 MWh per equivalent aircraft, a value 4% lower than that reached in 2015.

Reduction of energy consumption | G4-EN6 |

Unit	Project title	Economy in the year (kWh)
Gavião Peixoto	Modernization of the hangar illumination system – G-1340	173,184.00
	Modernization of the hangar illumination system – G-1560	69,264.00
	Modernization of the hangar illumination system – G-1350	221,400.00
	Modernization of the hangar illumination system – G-1360	173,952.00
	Modernization of the hangar illumination system – G-1362	112,788.00
	Modernization of the hangar illumination system – G-1550	304,920.00
Faria Lima	Installation of photovoltaic panels	3,352.00
	Patio F 51/57	5,280.00
	Patio F 231	35,868.00
	LED lighting – F-30/2	75,200.00
	Hangar F30/1	41,040.00
	LED lighting – F-51/57	15,010.00
	LED lighting – external (layout)	136,800.00
	LED lighting – F-101	26,400.00
	LED lighting – F-113	116,160.00
	LED lighting – F-77	80,256.00
	LED lighting – F-50	60,192.00
	LED lighting – F-66	170,544.00
Eugênio de Melo	LED lighting – E-501	394,896.00
	LED lighting – external areas – layout	31,200.00
Botucatu	Replacement of tubular fluorescent lights with LED lights – B01 and B12	9,348.00
	Installation of photovoltaic lighting posts	6,480.00
	Project of compressed gas economy	235,247
Total		2,498,780.61

For lighting projects, the avoided consumption was estimated using the old and new lighting powers and the operational time in each hangar where the exchange took place.

For the photovoltaic energy generation project the avoided energy was estimated based on the power of installed photovoltaic panels and the solar incidence in the region.

For the compressed gas economy project in Botucatu, gas economy was estimated based on energy used before and after implementation thereof, in which habit changes were encouraged, such as turning off compressors in the early morning and on weekends.

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Total of water removed by source | G4-EN8 |

Water sources	Quantity (m³)		
	2014	2015	2016
Underground water	647,616	616,545	563,845
Effluent from other organizations	-	-	60,315
Municipal supply of water or other water supplying companies	115,737	344,268	503,066
Total volume of removed water	763,353	960,813	1,127,226

The SJK, EGM and GPX sites are supplied with underground water captured in the area of the company. The ELEB, Taubaté, Botucatu, Belo Horizonte and Sorocaba sites in Brazil and the Évora, OGMA, Fort Lauderdale, Nashville, Melbourne and Beijing sites abroad use municipally supplied water or other water supplying companies. As of 2016, we began to report the volume of effluent treated for reuse from the water company of the municipality of Melbourne. The Harbin unit ceased operations at the start of 2016 and information referring to this unit is not included in the report. Values reported were obtained using direct measurements.

Water sources significantly effected by removal of water | G4-EN9 |

We add that there are no sources significantly effected by our operations.

Total percentage and volume of recycled and reused water | G4-EN10 |

2016			
Site	Total of used water (m³)	Total of recycled and reused water (m³)	Percentage of recycled water
SJK	362,813	5,280	1
EGM	143,113	0	0
TTE	26,464	7,454	28
ELEB	56,106	29,952	53
GPX	69,000	5,801	8
BOT	89,316	0	0
EVO	82,617	1,800	2
FLL	29,560	0	0
BNA	1,980	0	0
MLB	71,283	0	0
BJS	2,213	0	0
BHZ	4,760	0	0
OGMA	239,078	2,840	1
SOD	2,050	0	0
Embraer Brasil	753,622	48,487	6
Embraer S.A.	1,180,353	53,127	5

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The values of recycled and reused water were estimated according to the consumption of the equipment that uses recycled and reused water, as well as according to the volume of the reservoir in which it is stored.

The total amount of used water is the sum of water consumed (G4-EN8) and recycled and reused water.

G4-DMA: Emissions

Embraer uses the approach of operational control, including operational unit emissions and activities which the company controls in the inventory. The reported greenhouse gas emissions cover the SJK, EGM, TTE, ELEB, GPX, BOT, BHZ, SOD and SPO sites. The emission factors used in the calculations are attached. Referenced used were:

- IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Gre-  
enhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds).  
Published: IGES, Japan. [www.ipcc-nggip.iges.or.jp/public/2006gl](http://www.ipcc-nggip.iges.or.jp/public/2006gl).
- National Energetic Balance 2015: Base year 2014/Energy Research Company – Rio de Janeiro: EPE, 2015.  
[https://ben.epe.gov.br/downloads/Relatorio\\_Final\\_BEN\\_2015.pdf](https://ben.epe.gov.br/downloads/Relatorio_Final_BEN_2015.pdf).
- GHG Protocol Brazilian Program. Calculation Tool, 2016 Cycle. [www.ghgprotocolbrasil.com.br/ferramenta-de-calculo](http://www.ghgprotocolbrasil.com.br/ferramenta-de-calculo).
- Ministry of Science, Technology and Innovation (MCTI, in Portuguese). Factors of the CO<sub>2</sub> emissions from  
electrical energy generation from Brazil's National Interconnected System. Accessed on: Jan. 30, 2016.  
[http://www.mctic.gov.br/mctic/opencms/textogeral/emissao\\_corporativos.html](http://www.mctic.gov.br/mctic/opencms/textogeral/emissao_corporativos.html).

Direct emission of greenhouse gases (GHG) (Scope 1) |G4-EN15|

Scope 1 Emissions

GHG	2014	2015	2016
CO <sub>2</sub> (tCO <sub>2</sub> e)	27,396.26	28,164.26	35,704.63
CH <sub>4</sub> (tCO <sub>2</sub> e)	399.19	11.68	10.79
N <sub>2</sub> O (tCO <sub>2</sub> e)	166.86	171.43	239.76
HFC (tCO <sub>2</sub> e)	2,217.17	3,053.97	2,105.83
PFC (tCO <sub>2</sub> e)	0	0	0
SF <sub>6</sub> (tCO <sub>2</sub> e)	0	0	0
Total	30,179.48	31,401.34	38,061.01

Biogenic Emissions (tCO<sub>2</sub>e) Scope 1

2014	2015	2016
84.8	64.81	48.11

Indirect emission of greenhouse gases (GHG) resulting from the acquisition of energy (Scope 2)

|G4-EN16|

Scope 2 Emissions

GHG	2014	2015	2016
CO <sub>2</sub> (tCO <sub>2</sub> e)	16,905.26	15,699.16	10,217.33
CH <sub>4</sub> (tCO <sub>2</sub> e)	0	0	0
N <sub>2</sub> O (tCO <sub>2</sub> e)	0	0	0
HFC (tCO <sub>2</sub> e)	0	0	0
PFC (tCO <sub>2</sub> e)	0	0	0
SF <sub>6</sub> (tCO <sub>2</sub> e)	0	0	0
Total	16,905.26	15,699.16	10,217.33

Biogenic Emissions Scope 2

2014	2015	2016
0	0	0

Other indirect emissions of greenhouse gases (GHG) (Scope 3) |G4-EN17|

Scope 3 Emissions

GHG	2014	2015	2016
CO <sub>2</sub> (tCO <sub>2</sub> e)	29,847.30	31,979.47	26,185.27
CH <sub>4</sub> (tCO <sub>2</sub> e)	1,776.41	1,862.90	1,250.07
N <sub>2</sub> O (tCO <sub>2</sub> e)	250.08	278.61	381.18
HFC (tCO <sub>2</sub> e)	0	0	0
PFC (tCO <sub>2</sub> e)	0	0	0
SF <sub>6</sub> (tCO <sub>2</sub> e)	0	0	0
Total	31,873.78	34,120.98	27,816.52

Biogenic Emissions Scope 3 (tCO<sub>2</sub>e)

2014	2015	2016
1,156.98	1,086.24	1,348.55

Intensity of emissions of greenhouse gases (GHG) |G4-EN18|

Embraer calculates its greenhouse gas intensity indicator by adding the emissions from Scopes 1 and 2 according to the company's net revenue. The company's reduction goal is 3% during 2017, using 2013 as a reference. Considered in this indicator: Scope 1 emissions referring to: fugitive emissions; burning of different aeronautical kerosene fuels (QAV, in Portuguese); and burning of QAV in production flights (current portfolio aircraft). Not considered: development flight emissions and certification of new products, as well as the Defense and Security Business Unit's aircraft. In this way, the 2016 indicator showed 19% reduction with relation to the year of 2013.

Reduction of emissions of greenhouse gas (GHG) |G4-EN19|

Reduction of emissions of greenhouse gas (GHG)	Weight (tCO <sub>2</sub> e)		
	2014	2015	2016
Redesigning processes – Scope 1	77	98	0
Conversion and modernization of equipment – Scope 2	47	239	185
Conversion and modernization of equipment – Scope 1	120	0	0
Changes in the behavior of employees	22	0	19
Total emissions avoided	266	337	204

Emissions of substances that destroy the ozone layer (SDOs, in Portuguese) |G4-EN20|

Emissions shown in tonnes of equivalent CFC-11, calculated using the Ozone Depleting Potential (ODP) adopted by Montreal Protocol. Values taken from the Environmental Protection Agency (EPA), available at [www.epa.gov/ozone/science/ods/index.html](http://www.epa.gov/ozone/science/ods/index.html).

Emissions of substances that destroy the ozone layer (SDOs, in Portuguese)				
Precursor	ODP (tCFC-11E/t gas)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)
HCFC-22	0.055	0.08	0.08	0.04
HCFC-141b	0.110	0.03	0.03	0.02
Total	0.165	0.11	0.11	0.06

Emissions of NOx, SOx and other significant atmospheric emissions |G4-EN21|

Categories	2014	2015	2016
	Volume of emissions in tonnes	Volume of emissions in tonnes	Volume of emissions in tonnes
NOx	103	97	91
SOx	2	2	2

Persistent Organic Pollutants (POP)	0	0	0
Volatile Organic Compounds (VOC)	27	20	7
Particulate Matter (PM)	36	26	19

Reported values refer to manufacturing plants SJK, EGM, Eleb, GPX and BOT. To calculate emissions, the technical norms from the Environmental Company of the State of São Paulo (CETESB, in Portuguese) and the Environmental Protection Agency (EPA) were used. Installations carry out surveillance of atmospheric emissions resulting from stationary sources annually or at the demand of a local environmental agency, as per company procedure doc.emb 2314 and the Plan of Surveillance for Atmospheric Emissions (PMEA, in Portuguese). PMEAs identify all installed stationary sources, analyzed parameters and systems for controlling employed pollutants. Emissions monitored are: Particulated Matter, Volatile Organic Compounds, Nitrogen Oxide, Sulphuric Oxide and Carbon Monoxide. Emissions, measured in mg/Nm3, are converted to tonnes/year in order to verify if they exceeded the limits set by law. Results are recorded at the local environmental agency and do not exceed the set limits, a compensation project not being necessary.

Emissions from volatile organic compounds were significantly reduced in the last few years due to the installation of robots in the main painting cabins, which lessened the quantity of paint used for planes, consequently reducing VOC emissions. Also added are the improvements made for control procedures for calculating emissions.

Total discard of water, separated by quality and destination |G4-EN22|

Total volume of water discard (m³)	2014	2015	2016	Treatment	Destination
Domestic	318,443	373,229	291,422		
SJK	213,196	164,318	153,752	Primary treatment – railing	Public sewage collection network
EGM	46,867	56,970	48,270	Primary treatment – railing	Public sewage collection network
GPX	38,009	34,465	34,319	Anaerobic treatment	Local stream
TTE	20,371	13,311	12,440	Aerobic treatment	Local stream
OGMA	N/C	104,165	42,641	Biological treatment	Public sewage collection network
Industrial	71,108	116,126	108,047		
SJK	23,708	25,690	24,619	Physical-chemical treatment	Public sewage collection network
BOT	37,702	37,670	28,918	Physical-chemical treatment	Public sewage collection network
EGM	4,160	4,200	3,540	Physical-chemical treatment	Public sewage collection network
GPX	615	827	577	Physical-chemical treatment	Local stream
ELEB	4,923	4,714	3,699	Physical-chemical treatment	Public sewage collection network



OGMA	N/C	19,562	19,530	Physical-chemical treatment	Public sewage collection network
EVO	N/C	23,466	27,164	Physical-chemical treatment	Public sewage collection network

OBS.: The value of industrial effluent generated at the Harbin unit (1,763 m³) in 2015 was removed from the table since Harbin closed its operations in 2016. Only effluents treated within Embraer sites were considered. In this way, the volume of the Botucatu’s effluents, which are sent directly to the municipality concessionaire, was not accounted for in this indicator.

Total weight of waste (in tonnes), separated by type and disposal method\* |G4-EN23|

Disposal method	2014			2015			2016		
	Not dan-gerous	Danger-ous	Total	Not dan-gerous	Danger-ous	Total	Not dan-gerous	Danger-ous	Total
Landfill (non-dangerous)	1,190	0	1,190	1,408	0	1,408	2,009	0	2,009
Incineration	0	2	2	374	12	386	394	28	422
Compost	1,295	0	1,295	1,008	0	1,008	867	0	867
Co-processing	4	1,067	1,071	9	1,091	1,100	12	977	989
Decontamination	0	0	0	0	0	0	0	1	1
Sterilization	0	0	0	0	0	0	0	1	1
Recycling	10,368	103	10,471	12,284	113	12,397	12,454	97	12,551
Recovery	853	1,997	2,850	2,490	2,217	4,707	846	2,080	2,926
Sewage treatment	557	0	557	695	758	1,453	679	1,479	2,158
Physical-chemical treatment	0	0	0	29	128	157	23	118	141
Industrial landfill (dangerous)	0	0	0	0	30	30	0	27	27

\* The waste data from Évora unit, not included in the table, totaled 3,152 tonnes for non-hazardous waste, in which 61 tonnes were subject to disposal processes and 3,091 were subject to a recovery process. Considering hazardous wastes, 262 tonnes were disposed of and 61 tonnes were recovered. The variation in results between 2015 and 2016 is due to the inclusion of three sites from United States (Mel-bourne, Nashville and Fort Lauderdale) and the exclusion of the Harbin unit, whose activities ended in 2016.

Total number and volume of significant leakage |G4-EN24|

In 2016, the company did not record leakage of significant volumes.

Number of complaints and claims related to recorded environmental impacts, processed and solved through formal processes |G4-EN34|

We have not received any report on the Helpline with respect to complaints and claims related to environmental impacts.

Total number and rate of employee turnover by age range, gender and region in 2016 |G4-LA1|

Country	Age range	Men		Women		General total	
		Total	%	Total	%	Total	%
Brazil	Under 30 years	264	1.43	123	0.66	387	2.09
	Between 30 and 50 years	760	4.11	216	1.17	976	5.27
	More than 50 years	807	4.36	55	0.30	862	4.66
	Total	1,831	9.89	394	2.13	2,225	12.02
China	Under 30 years	0	0.00	0	0.00	0	0.00
	Between 30 and 50 years	4	0.02	12	0.06	16	0.09
	More than 50 years	2	0.01	0	0.00	2	0.01
	Total	6	0.03	12	0.06	18	0.10
France	Under 30 years	5	0.03	6	0.03	11	0.06
	Between 30 and 50 years	50	0.27	35	0.19	85	0.46
	More than 50 years	14	0.08	7	0.04	21	0.11
	Total	69	0.37	48	0.26	117	0.63
Portugal	Under 30 years	15	0.08	1	0.01	16	0.09
	Between 30 and 50 years	30	0.16	5	0.03	35	0.19
	More than 50 years	1	0.01	0	0.00	1	0.01
	Total	46	0.25	6	0.03	52	0.28
Netherlands	Under 30 years	0	0.00	0	0.00	0	0.00
	Between 30 and 50 years	0	0.00	2	0.01	2	0.01
	More than 50 years	1	0.01	0	0.00	1	0.01
	Total	1	0.01	2	0.01	3	0.02
Singapore	Under 30 years	0	0.00	0	0.00	0	0.00
	Between 30 and 50 years	3	0.02	0	0.00	3	0.02
	More than 50 years	0	0.00	0	0.00	0	0.00
	Total	3	0.02	0	0.00	3	0.02
United States	Under 30 years	55	0.30	7	0.04	62	0.34
	Between 30 and 50 years	135	0.73	28	0.15	163	0.88
	More than 50 years	39	0.21	11	0.06	50	0.27
	Total	229	1.24	46	0.25	275	1.49
General total		2,185	11.81	508	2.75	2,693	14.55

Total number and new employee rate by age range, gender and region in 2016 | G4-LA1|

Country	Age range	Men		Women		General total	
		Total	%	Total	%	Total	%
Brazil	Under 30 years	361	1.95	157	0.85	518	2.80
	Between 30 and 50 years	130	0.70	57	0.31	187	1.01
	More than 50 years	4	0.02	0	0.00	4	0.02
	Total	495	2.67	214	1.16	709	3.83
China	Under 30 years	0	0.00	1	0.01	1	0.01
	Between 30 and 50 years	4	0.02	6	0.03	10	0.05
	More than 50 years	1	0.01	0	0.00	1	0.01
	Total	5	0.03	7	0.04	12	0.06
France	Under 30 years	79	0.43	22	0.12	101	0.55
	Between 30 and 50 years	163	0.88	39	0.21	202	1.09
	More than 50 years	49	0.26	9	0.05	58	0.31
	Total	291	1.57	70	0.38	361	1.95
Portugal	Under 30 years	1	0.01	3	0.02	4	0.02
	Between 30 and 50 years	17	0.09	5	0.03	22	0.12
	More than 50 years	0	0.00	0	0.00	0	0.00
	Total	18	0.10	8	0.04	26	0.14
Netherlands	Under 30 years	1	0.01	1	0.01	2	0.01
	Between 30 and 50 years	20	0.11	7	0.04	27	0.15
	More than 50 years	1	0.01	0	0.00	1	0.01
	Total	22	0.12	8	0.04	30	0.16
Singapore	Under 30 years	22	0.12	7	0.04	29	0.16
	Between 30 and 50 years	24	0.13	5	0.03	29	0.16
	More than 50 years	0	0.00	0	0.00	0	0.00
	Total	46	0.25	12	0.06	58	0.31
United States	Under 30 years	0	0.00	0	0.00	0	0.00
	Between 30 and 50 years	3	0.02	0	0.00	3	0.02
	More than 50 years	0	0.00	0	0.00	0	0.00
	Total	3	0.02	0	0.00	3	0.02
General total		880	4.76	319	1.72	1,199	6.48

Accidents with leave for all workers (direct employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	47	38	28
North America (United States)	11	20	13
Europe, Middle East and Africa	6	24	2
Asia	0	0	0
Total	64	82	43

Accidents with leave for all workers (third-party employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	22	17	35
North America (United States)	0	0	0
Europe, Middle East and Africa	12	1	0
Asia	0	0	0
Total	34	18	35

Accidents rate with leave for all workers (direct employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	1.45	1.17	0.88
North America (United States)	4.29	7.63	3.65
Europe, Middle East and Africa	6.96	22.23	2.68
Asia	0	0	0
Total	1.77	2.25	1.19

Accidents rate with leave for all workers (third-party employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	2.37	1.49	2.78
North America (United States)	0	0	0
Europe, Middle East and Africa	29.10	4.95	0
Asia	0	0	0
Total	3.51	1.54	2.60



Occupational illness for all workers (direct employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	15	8	6
North America (United States)	0	0	0
Europe, Middle East and Africa	0	0	0
Asia	0	0	0
Total	15	8	6

Occupational illness rates for all workers (direct employees) | G4-LA6|

Region	2014	2015	2016
	Number of occupational illnesses	Rate of occupational illnesses	
South America (Brazil)	15	0.25	0.19
North America (United States)	0	0	0
Europe, Middle East and Africa	0	0	0
Asia	0	0	0
Total	15	0.22	0.17

Days lost (accidents + illnesses) for all workers (company employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	993	6,945*	885
North America (United States)	203	423	17
Europe, Middle East and Africa	110	438	25
Asia	0	0	0
Total	1,306	7,806	927

\* Considering a fatal accident which took place in 2015, for which 6,000 lost days were counted, as per NBR 14280.

Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender | G4-LA6|

Days lost (accidents + illnesses) for all workers (third-party employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	223	210	609
North America (United States)	0	0	0
Europe, Middle East and Africa	0	17	0
Asia	0	0	0
Total	223	227	609

Rate of days lost (accidents + illness) for all workers (third-party employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	24.04	1.49	48.43
North America (United States of America)	0	0	0
Europe, Middle East and Africa	0	4.95	0
Asia	0	0	0
Total	23.00	1.54	45.27

Absentee rate separated by women | G4-LA6|

Scheduled hours	Hours of absence	Percentage
3,918,774.14	265,285.47	6.77

Absentee rate separated by men

Scheduled hours	Hours of absence	Percentage
22,151,700.83	854,162.27	3.86

Total		
Scheduled hours	Hours of absence	Percentage
26,070,474.97	1,119,447.74	4.29

Total number and rate of occupational illness for third-party employees is zero (0). There were not deaths for the report's period.

Rate of days lost (accidents + illnesses) for all workers (company employees) | G4-LA6|

Region	2014	2015	2016
South America (Brazil)	30.55	213.70	27.92
North America (United States of America)	79.23	161.47	4.77
Europe, Middle East and Africa	127.65	405.64	33.44
Asia	0	0	0
Total	36.08	214.04	25.65

Employees with high incidence or high risk of illness related to their occupation | G4-LA7|

None.

Average number of training hours per year per employee, separated by gender and functional category\* |G4-LA9|

		2014		2015		2016	
		Men	Women	Men	Women	Men	Women
Board of Executive Officers	Hour load	1,101	297	5,383	967	3,832	396
	Employees in the category	79	8	73	9	72	9
	Hours per employee	14	37	74	107	53	44
Manager	Hour load	4,512	1,692	16,544	3,312	19,280	2,820
	Employees in the category	234	43	235	40	223	34
	Hours per employee	19	39	70	83	86	83
Supervisor	Hour load	31,266	3,901	35,363	4,015	24,152	2,696
	Employees in the category	726	81	678	75	625	69
	Hours per employee	43	48	52	54	39	39
Pilot	Hour load	1,332	0	1,285	0	2,694	0
	Employees in the category	106	0	102	0	93	0
	Hours per employee	13	0	13	0	29	0
Engineer	Hour load	133,344	23,180	105,260	18,843	116,927	20,091
	Employees in the category	3,708	576	3,783	586	3,550	544
	Hours per employee	36	40	28	32	33	37
Professional	Hour load	31,691	21,669	29,652	21,756	33,698	27,243
	Employees in the category	1,271	961	1,300	965	1,236	942
	Hours per employee	25	23	23	23	27	29
Technical	Hour load	98,781	14,151	95,219	8,807	128,310	18,772
	Employees in the category	3,013	277	3,168	300	2,879	329
	Hours per employee	33	51	30	29	45	57
Administrative	Hour load	16,108	13,558	11,382	8,679	9,880	6,397
	Employees in the category	490	386	480	377	420	309
	Hours per employee	33	35	24	23	24	21
Operational	Hour load	197,431	14,677	179,383	11,229	194,844	13,384
	Employees in the category	6,619	589	6,603	599	6,066	535
	Hours per employee	30	25	27	19	32	25
Total	Hour load	515,565	93,126	479,470	77,607	533,617	91,799
	Employees in the category	16,246	2,921	16,422	2,951	15,164	2,771
	Hours per employee	32	32	39	26	35	33

\* There was an alteration of data related to prior years since, in 2014, the Embraer standard for functional categorization was used. In consolidating training hours per capita, for what was considered the total number of training participants, there was an alteration so that the number of company employees would be considered. Data for 2013, 2014 and 2015 is global. In 2015 there was an increase in training hours for Leadership, due to the implementation of the Leader School.

Analysis of career performance and development in 2016\* |G4-LA11|

Functional category	Total men	Number of men who were regularly evaluated	Percentage of men who were regularly evaluated	Total women	Number of women who were regularly evaluated	Percentage of women who were regularly evaluated
Board of Executive Officers	72	79	110	9	11	122
Manager	223	235	105	34	32	94
Supervisor	625	657	105	69	78	113
Pilot	93	91	98	0	0	0
Engineer	3,550	3,465	98	544	538	99
Professional	1,236	1,173	95	942	886	94
Technical	2,879	2,639	92	329	259	79
Administrative	420	390	93	309	298	96
Operational	6,066	4,727	78	535	375	70
Total	15,164	13,456	89	2,771	2,477	89

\* Due to the Voluntary Dismissal Program, the number of employees is less than the number of evaluated in some categories.

Composition of groups responsible for governing and separating employees by functional category, in accordance with gender, age range, minority status and other diversity indicators |G4-LA12|

Functional category	Total	Woman (%)	Man (%)
Board of Executive Officers	91	10	90
Manager	314	14	86
Supervisor	720	11	89
Pilot	93	0	100
Engineer	4,150	13	87
Professional	2,523	41	59
Technical	3,244	10	90
Administrative	754	42	58
Operational	6,617	8	92
Total	18,506	16	84

Functional category	Total	Under 30 years (%)	From 30 to 50 years (%)	More than 50 years (%)
Board of Executive Officers	91	0	48	52
Manager	314	1	65	34
Supervisor	720	2	80	18
Pilot	93	0	45	55
Engineer	4,150	18	72	10
Professional	2,523	17	72	11
Technical	3,244	23	64	13
Administrative	754	32	56	11
Operational	6,617	20	76	5
Total	18,506	19	71	10



Employees by minority status	2014 <sup>1</sup>	2015 <sup>1</sup>	2016 <sup>2</sup>
Number of black employees who work for the company	829	889	1,480
Percentage of leadership positions occupied by black employees	2.67	2.60	2.30
Number of people with disabilities	709	755	617

1. Data strictly refers to Brazil. 2. Data referring to 2016 includes integral subsidiaries – Atech and Savis-Bradar.

Composition of groups responsible for governing and separating employees by functional category, in accordance with gender, age range, minority status and other diversity indicators |G4-LA12|

Governance body	Total	Woman (%)	Man (%)
Board of Directors	11	9	91
Board of Executive Officers	10	10	90

Governance body	Total	Under 30 years (%)	From 30 to 50 years (%)	More than 50 years (%)
Board of Directors	11	0	9	91
Board of Executive Officers	10	0	30	70

Number of complaints and claims related to recorded labor practices, processed and solved through formal processes |G4-LA16|

All reported problems, concerns, complaints or violations addressed to the Embraer Helpline are treated confidentially. The complaint will receive a protocol in order to follow the report status online. The verification process is covered by a policy and a procedure, following a calculation methodology. Embraer does not tolerate retaliation with anyone who reports a concern in good faith.

	2016 (Helpline)
Reports made on the complaint channel	325
Outside the scope	23
Inside the scope	302
Applied measures	100
Warnings and suspensions	31
Exemptions	6
Coaching, surveillance, orientation, awareness campaign and improvement of processes and policies	63

Total number of employee training hours regarding human rights or procedures related to human rights matters relevant to the Organization’s operations, including the percentage of trained employees |G4-HR2|

	Number of hours dedicated to training employees	Total number of hours dedicated to training for policies or procedures related to human rights matters	Percentage of hours dedicated to training for policies or procedures related to human rights matters
Brazil	548,296	1,303	0.2
China	1,526	16	1.0
United States	61,868	500	0.8
France	452	14	3.0
Netherlands	1,391	46	3.3
Portugal	10,489	199	1.9
Singapore	1,394	3	0.2
Total	625,416	2,081	0.3

	Number of employees*	Number of employees trained in policies or procedures related to human rights matters	Percentage of employees trained in policies or procedures related to human rights matters
Brazil	15,436	1,168	7.6
China	67	13	19.4
United States	1,763	445	25.2
France	112	13	11.6
Netherlands	94	40	42.6
Portugal	407	167	41.0
Singapore	56	2	3.6
Total	17,935	1,848	10.3

\* Data does not include subsidiaries.

Total number of cases of discrimination and corrective measures taken |G4-HR3|

There was no internal or external case of discrimination due to ethnicity, color, sex, religion, ideology, nationality or social origin reported on the official company channel (Helpline) which had been verified and considered as having happened in 2016.

Percentage of operations with implemented programs of local community engagement, impact evaluation and local development |G4-S01|

Percentage of operations with programs of local community engagement is 49.98%.

Total number and percentage of operations submitted to risk evaluation related to corruption and significant identified risks |G4-S03|

Operations	Total number of operations submitted to risk evaluations related to corruption	Percentage of operations submitted to risk evaluations related to corruption
Due diligence of suppliers	5,164	100
Due diligence of sponsors	146	100
Due diligence of donations	34	100
Due diligence of class entities	96	100

Risks related to corruption	Type of risk evaluation	Action to mitigate risks
Conflicts of interest (improper or incorrect payments in order to obtain favors)	Qualitative	Inclusion of the subject of conflicts of interest in training that is related to anti-corruption and to the Code of Ethics, analysis of suppliers through the due diligence process, in addition to responses to periodic consultations held with the Compliance team. Additionally, continuous surveillance was implemented for payments considered critical and specific tests were included for the departments analyzed by the Internal Audit. Control tests were also performed for SOx certification, by the Internal Controls department.
Improper accounting (incorrect records and/or provisioning)	Qualitative	Continuous surveillance was implemented for payments considered critical and specific tests were included for the departments analyzed by the Internal Audit. Additionally, control tests were also performed for SOx certification, by the Internal Controls department.
Improper commercial discounts (absence of approval or alteration of prices)	Qualitative	Inclusion of specific tests in the departments analyzed by the Internal Audit.
Failure to observe proper anti-corruption procedures in the M&A process	Qualitative	The Compliance team's carrying out of the due diligence analyses, in addition to carrying out training on anti-corruption matters. Additionally, specific tests for verifying due diligence in Mergers and Acquisitions (M&A) processes were included in the Internal Audit's work plan.
Improper or duplicated payment (to public authorities and certifying entities)	Qualitative	Inclusion of the subject of conflicts of interest in training that is related to anti-corruption and to the Code of Ethics, analysis of suppliers through the due diligence process, in addition to responses to periodic consultations held with the Compliance team. Additionally, continuous surveillance was implemented for payments considered critical and specific tests were included for the departments analyzed by the Internal Audit. Control tests were also performed for SOx certification, by the Internal Controls department.
Bribery or improper benefits (improperly receiving or paying suppliers, commercial representatives, customers, public authorities and external entities)	Qualitative	Continuous surveillance was implemented for payments considered critical and specific tests were included for the departments analyzed by the Internal Audit. Additionally, control tests are made for SOx certification, executed by Internal Controls and training actions and responses to periodic consultations made to the Compliance team.

Communication and training in policies and procedures for fighting corruption |G4-S04|

Region*	Governance bodies established in the organization	Number of individuals and/or employees that compose each governance body
Southeast	Board of Directors	13
	Fiscal Council	10
	Board of Executive Officers	9
Total	3	32

Region*	Number of individuals and/or employees that compose each governance body in each region	Number of members of the governance body to which anti-corruption policies and procedures have been communicated	Percentage of members of the governance body to which anti-corruption policies and procedures have been communicated
Southeast	32	32	100

\* Considered only the Southeast region of Brazil

Functional categories	Number of employees in each functional category
Leaders	1,177
Non-leaders	16,133

Types of trading partners	Number of each type of trading partner
Suppliers	5,064
Third parties (commercial representatives, law firms and logistics agents)	100

Functional category	Number of employees who were notified of the anti-corruption procedures and policies	Percentage of employees who were notified of the anti-corruption procedures and policies
Board of Executive Officers	87	98
Manager	382	97
Supervisor	629	99
Pilot	77	99
Engineer	3,680	100
Professional	0	0
Technical	3,223	95
Administrative	8,027	94
Operational	1,205	99
Total	17,310	97



Confirmed incidents of corruption and actions taken |G4-S05|  
None.

Number of complaints and claims related to recorded societal impacts, processed and solved through formal processes |G4-S011|  
None.

Results from customer satisfaction surveys |G4-PR5|

Satisfaction indicators obtained from the annual satisfaction survey of Commercial Aviation customers (%)	2014	2015	2016
Embraer Absolute Favorability (EAF)	67.20	77.30	83.20
Relative-to-benchmark Favorability (RBF)	0.85	0.85	0.91
Embraer Absolute Unfavorability (EAU)	8.00	3.60	3.70
Spontaneous General Satisfaction Index (ISGE)	87.40	85.90	84.90



# GRI G4 CONTENT INDEX

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SPECIFIC STANDARD CONTENT

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	G4-LA10	36 and 37		
	G4-LA11	35 to 36 and 65		6
Diversity and equality of opportunities	G4-DMA	34		
	G4-LA12	34 and 65 to 66	At Embraer we value diversity and we are committed to providing equal employment opportunities, without regard to ethnicity, age, gender, religion, national origin, physical or mental disability, sexual orientation or medical condition.	6
Evaluation of suppliers' labor practices	G4-DMA	38 to 39		
	G4-LA14	38		
	G4-LA15	38	Currently unavailable. There is no monitoring of negative impacts on labor practices in the supply chain.	
Procedures for complaints and claims related to labor practices	G4-DMA	20		
	G4-LA16	20 and 66		
SUB-CATEGORY: Human rights				
Investments	G4-DMA	35 to 36		
	G4-HR1	38		2
	G4-HR2	36 and 67		1
Non-discrimination	G4-DMA	19		
	G4-HR3	67		6
Freedom of association and collective bargaining	G4-DMA	38 to 39		
	G4-HR4	38		3
Child labor	G4-DMA	38 to 39		
	G4-HR5	38		5
Forced work or analogous with slavery	G4-DMA	38 to 39		
	G4-HR6	38		4
Supplier evaluation as to human rights	G4-DMA	38 to 39		
	G4-HR10	38		2
Procedures for complaints and claims related to human rights	G4-DMA	20		
	G4-HR12	20		1
SUB-CATEGORY: Society				
Local communities	G4-DMA	42 to 43		
	G4-S01	42 to 43 and 67		1
Fight against corruption	G4-DMA	18 and 19		
	G4-S03	18 to 19 and 68		10
	G4-S04	18 to 19 and 69		10
	G4-S05	70		10
Supplier evaluation as to impacts on society	G4-DMA	38 to 39		
	G4-S09	38		
Procedures for complaints and claims related to impacts on society	G4-DMA	20		
	G4-S011	70		
SUB-CATEGORY: Product liability				
Labeling of products and services	G4-DMA	24		
	G4-PR5	24 and 70		

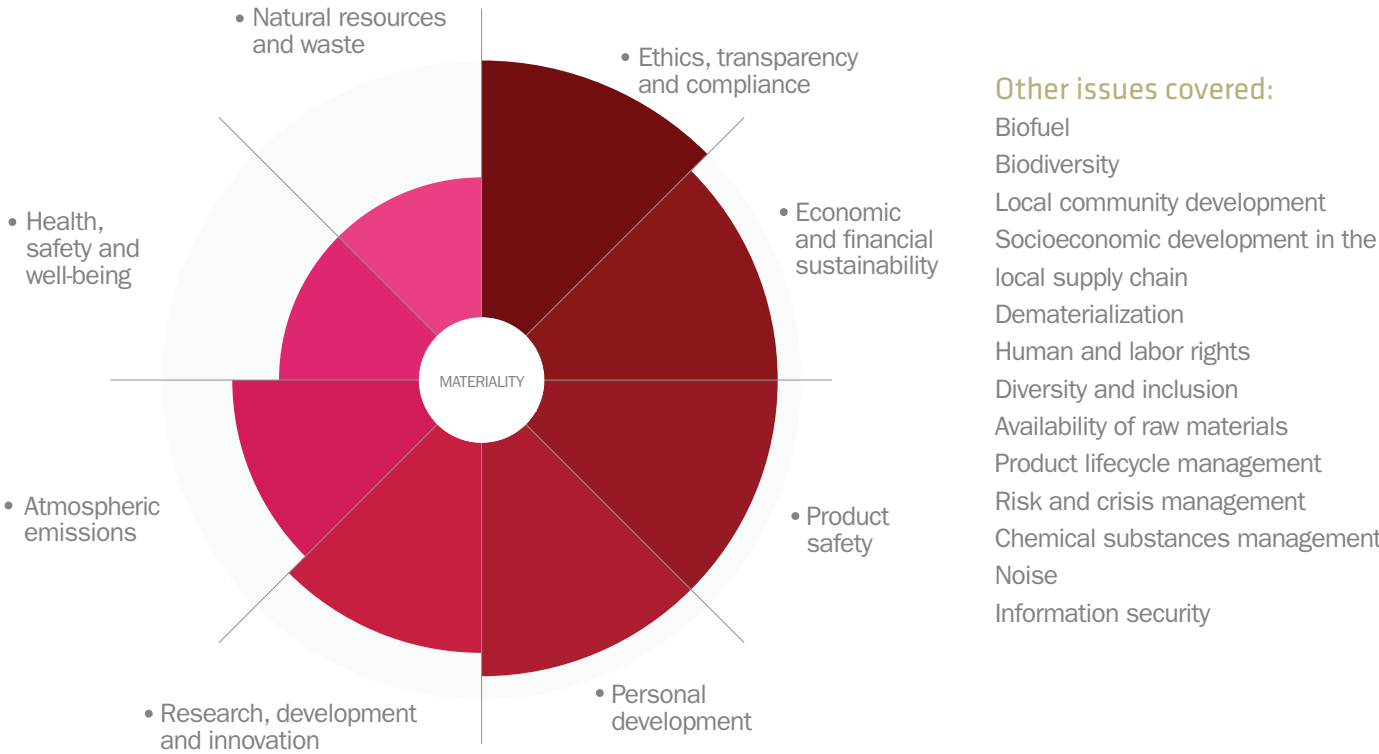
MATERIALITY 2017-2019

The review of the first Materiality Matrix (2014-2016), conducted during 2016, followed the guidelines of the Global Reporting Initiative (GRI) guidelines from version G4. The definition of the set of themes to be analyzed considered the topics identified in the first matrix, the recently launched Sustainable Development Goals (SDGs) and the topics routinely addressed in the sustainability indices of the New York and São Paulo stock exchanges. Thus, 21 themes were initially defined for the consultation process: biofuels; biodiversity; local community development; personal development; socioeconomic development in the local supply chain; dematerialization; human and labor rights; availability of raw materials; diversity and inclusion; atmospheric emissions; ethics, transparency and compliance; product lifecycle management; natural resources and waste; risk and crisis management; chemical substances management; research, development and innovation; noise; health, safety and well-being; product safety; information security; economic and financial sustainability.

The Embraer Business System (SEE, in Portuguese) was used as a reference to define the stakeholders to be consulted in the process. The SEE determines the key stakeholders (clients, customers, partners, shareholders and society) of the company and defines the business management model, the organization model and the main roles and responsibilities for the management of Embraer. The process also involved sectoral and regulatory organizations, aviation experts and civil society organizations.

The process was attended by 46 representatives of Embraer’s main stakeholders, of which: 6 shareholders; 11 clients of the Business,

Executive and Defense and Security Aviation business units; 6 suppliers; 11 representatives of society (including NGOs, sectoral organizations and experts in the sustainability field) and 12 employees from different areas of the company. In order to ensure the identification of the most significant topics for the company’s business, the vice presidents and the CEO were also consulted. The matrix was later validated by the Sustainability Committee, the Board of Executive Officers and by Embraer’s CEO. The material issues identified will be the basis for the new Sustainability Plan (2018-2020), which will be developed during 2017 and will present specific indicators and targets for each issue. The Plan will continue to be disclosed annually, which will allow monitoring of the company’s results and progress in relation to the achievement of the goals established. **The following materiality presents the eight themes identified in the process considering the combined vision (significance of the environmental, social and economic impacts related to the Embraer activities versus the influence of the theme for the company’s stakeholders) of the evaluations carried out.**





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# Credits

## **OVERALL COORDINATION**

VICE PRESIDENCY OF PEOPLE AND SUSTAINABILITY  
CORPORATE SUSTAINABILITY MANAGEMENT

**CONSULTANCY FOR INDICATORS, EDITORIAL  
COORDINATION, LAYOUT, REVIEW AND CONTENT**  
THEMEDIAGROUP

## **TEXT**

KMZ CONTEÚDO  
(COORDINATION: THEMEDIAGROUP)

## **ENGLISH TRANSLATION**

CENTRAL DE TRADUÇÕES & GLOBAL LANGUAGES

## **PHOTOGRAPHY**

EMBRAER'S COLLECTION