Introduction

Aviation is an integral part of modern life. It links people, communities, cultures and countries around the globe. Air transport carries over 4 billion people and about €6.3 trillion in goods every year. Aviation also affects the planet and our shared global environment. Boeing and the aviation industry recognize that climate change is a fundamental challenge of our time, and we’re united in fulfilling our commitment to reduce greenhouse gases. We’ve made substantial progress, but there’s more work to do.

A growing population and urbanization will boost global demand for transportation, with the industry being challenged to meet the demand without a corresponding growth of emissions, community noise or other potentially harmful environmental effects.

To address aviation’s climate impact and to meet the greenhouse gas emissions targets, the aviation industry is pursuing a four-pillar strategy:

1. Improved technology, including new airplanes, more efficient engines, lighter-weight carbon composite airframes.
2. Improving operational efficiency of the global fleet and upgrading air traffic management infrastructure.
3. Developing commercial-scale supplies of sustainable aviation fuel at competitive prices.
4. A single global market-based measure, to fill the remaining emissions gap

As the air transport industry continues to grow, Boeing recognizes that pollution, natural resource scarcity and climate change are serious issues that require credible actions and global solutions.

Jeppesen Systems AB contributes to enabling “More efficient aircraft operations” by developing software that drives efficiencies, optimizes operations and improves environmental performance, in addition to running an environmentally-friendly operation.

About us

Boeing is the world’s largest aerospace company, leading manufacturer of commercial jetliners, defense, space and security systems, and service provider of aftermarket support. The company supports airlines and government customers in more than 150 countries. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense systems, launch systems, advanced information and communication systems, and performance-based logistics and training.

Boeing has a long tradition of aerospace leadership and innovation. The company continues to expand its product line and services to meet emerging customer needs. Its broad range of capabilities includes creating new, more efficient members of its commercial airplane family; designing, building and integrating military platforms and defense systems; creating advanced technology solutions; and arranging innovative financing and service options for customers.

With corporate offices in Chicago, USA, Boeing employs more than 153,000 people in more than 65 countries. This represents one of the most diverse, talented and innovative workforces anywhere. Our enterprise also leverages the talents of hundreds of thousands more skilled people working for Boeing suppliers worldwide.

Boeing Global Services

As the leading manufacturer for commercial and defense platforms, Boeing is positioned to provide unparalleled aftermarket support for mixed fleets worldwide. The business unit Boeing Global Services delivers innovative, comprehensive and cost-competitive service solutions for commercial, defense and space customers, regardless of the equipment’s original manufacturer. With engineering, digital analytics, supply chain and training support spanning across both the government and commercial service offerings, Boeing Global Services’ unsurpassed, around-the-clock support keeps our customers’ commercial aircraft operating at high efficiency, and provides mission assurance for nations around the world.
Boeing Global Services provides agile, cost-competitive services to our customers worldwide. With a focus on complete, innovative solutions, Global Services continues investing in new avenues that drive efficiencies, optimize operations and improve environmental performance. For example, over the last 10 years, Boeing has reduced printing services by 80 percent by enhancing digital offerings for aeronautical charting. Software and data analytics–powered tools help airlines navigate and operate more efficiently, reduce fuel consumption, optimize crew utilization, minimize disruption impact and increase asset availability.

Fuel accounts for up to 40 percent of an airline’s operating cost. Finding ways to reduce that cost has become critical to every airline’s success. Tools such as Fuel Dashboard and its companion Pilot Insight application address that need by enabling pilots to make informed decisions on discretionary fuel and fuel savings in just a few seconds, which helps reduce fuel use by an average of 1 to 2 percent. This visibility enables better decision-making to reduce fuel use, operating costs and carbon emissions. Additionally, Boeing’s FliteDeck Pro mobile airline charting application has been enhanced with a new weather layer feature that provides increased situational awareness for efficient flight planning, scheduling and operations management.

Jeppesen Systems AB
Boeing’s Swedish subsidiary Jeppesen Systems AB is one of the largest software development companies in Göteborg. As a part of Boeing Global Services, we develop optimization solutions for the world’s leading airlines. We focus on innovation and continuous improvement to bring more value to our clients, and explore emerging technologies such as quantum computing, AI and big data analytics.

At our office in central Göteborg we work in a one-of-a-kind software development organization with fascinating solutions that make a real difference to people around the world. Our people are working in an agile learning organization, in teams of talented and creative colleagues who are dedicated to our customers. Employees learn and broaden their perspective by working with 400 IT professionals from more than 30 different nations, as part of a global organization where we collaborate with customers and colleagues across the world. Most importantly, our people are expected to make a difference.

Risks and opportunities
Boeing has named the following risks and opportunities as highest priorities:

*Through our operations*: Greenhouse gas (GHG) emissions; energy conservation; water management; solid waste management/waste to landfill.

*Through the use of our products*: GHG emissions; fuel efficiency; operational efficiency; sustainable aviation fuel.

For this report, we follow the distinction between operational sustainability and product sustainability. In addition, we use the definition of sustainability as having three main pillars: economic, environmental, and social.
Sustainability in Göteborg operations

Environmental sustainability
Our office building was built in 1989 in accordance with environmental building regulations that were applicable at the time. During renovations in more recent years we have only used environmentally-approved materials. We have installed a new cooling system that is completely eco-friendly. The landlord follows current environmental legislation and other requirements.

We have a high quantity and frequency of waste recycling. All our five kitchens have facilities for sorting glass, plastic, food and burnable waste. The waste is then sorted in the landlord’s recycling station near the office. Handling of dangerous waste, light bulbs, fluorescent lamps and batteries is dealt with in a safe and environmentally-friendly way.

We strive to use eco-labelled products in our daily activities. For example we use eco-friendly, fair-trade coffee. All paper we use (toilet paper, paper towels, printing paper etc) is environmentally-certified.

We are continuously reducing our impact on the environment with a focus on energy and transport. We have lights with motion sensors in all the common areas of the building such as the meeting rooms and toilets. Lighting in the corridors turn off when the alarm is activated in the evening. We are only using LED or low-energy light bulbs. The coffee machines have timers in order to minimize energy used and to protect against overheating.

We try to buy materials and products in bulk to reduce the amount of deliveries and thus reduce traffic and its impact on the environment. We also encourage our employees to walk or cycle to work, or use public transport instead of taking the car. Only around 10% of our employees go to work by car. Jeppesen Systems AB has been appointed “Cykelvänlig Arbetsplats” (bike friendly workplace) by the City of Göteborg, and we offer free rental bikes to employees for shorter trips within Göteborg.

We have installed several video conferencing units in our office, and this has led to a decreased number of international flights in recent years, lowering climate impact and costs.

We place requirements on our suppliers to be environmentally-friendly, and almost all of our partners are ISO certified and use eco-approved transport.

We're all responsible for caring for the Earth and encouraging others to do the same.
Together, let’s build a brighter, more sustainable future for generations to come.

As part of our efforts to save energy, the ventilation is switched off during the weekends and operates at a reduced speed during the night on week days.

We are using ‘follow me print’ on our copier machines. This requires the user to scan their badge on the machine in order to retrieve their print jobs which results in less documents being printed unnecessarily and reduces the amount of paper and energy waste.

We also have water towers on each floor instead of bottled water. This is both cheaper and a more eco-friendly alternative.

We raise awareness surrounding environmental issues among our employees and encourage them to save the environment while going about their daily work, such as helping us to recycle waste in the office. We also include information about these issues in our weekly newsletter.

We strive to continuously develop and improve the company’s and our own work in ‘green’ issues. We also have a team of people who look at our working environment, in particular ‘soft’ issues such as ergonomics and dealing with work-related stress etc.

Economic sustainability
In 2019, Jeppesen Systems AB’s revenue increased with 28,2 (9,1) per cent to 1 030,5 (803,6) MSEK. The revenue increase is due to organic growth in the Americas and Asia, but also Europe. During the year, the average number of employees was 300 (282). The company’s investment in new technology continued during 2019, and the total R&D investment was 197,1 MSEK (189,5). As of December 31, 2019, the liquidity and short term assets in Jeppesen Systems AB amounted to 499,6 (610,5) MSEK.
Since 2014, Jeppesen Systems AB has had positive earnings, and the leadership team expects a continued positive development in the coming years.

Social sustainability
In our office in Göteborg, we have around 400 professional employees and consultants creating the best solutions in the market. Just as our customers are found around the world, we have a truly multicultural workplace, with over 35 nationalities represented.

Here, employees work with breakthrough technology, exciting customers and fantastic colleagues from around the world. Our culture is characterized by creativity, professionalism and hard work within an open and flexible work environment. We believe that our employees must be allowed to think big and have fun for us to remain one of the top companies in the industry. To get the best out of each talent, we encourage and enable our employees to continuously develop and explore.

We are a responsible employer. All employees have a safe working environment, we offer health care subsidies and insurances, and we encourage wellness through activities such as wellness weeks, weekly running activities, lectures and race participations. For example, we participate in the yearly Blodomloppet run, highlighting the importance of blood donation.

We also arrange clothing collections for local charities, such as women’s shelters. We support the pink ribbon campaign for breast cancer awareness, and the blue ribbon campaign for prostate cancer awareness.

Human Rights
The Code of Basic Working Conditions and Human Rights (available here) represents the commitment of The Boeing Company to fundamental standards that make Boeing a good place to work. People are Boeing’s most vital asset. The individual and collective contributions of Boeing people at all levels are essential to the success of the company. In recognition of this, Boeing has developed policies and practices designed to assure that our employees enjoy the protections afforded by the concepts set forth in the Code of Basic Working Conditions and Human Rights.

Boeing is committed to the protection and advancement of human rights in its worldwide operations, and the concepts in the Code are generally derived from Boeing policies and practices already in place, but which have not previously been summarized in a single document. While parts of the Code reflect our review of working standards and human rights concepts advanced by other groups, such as the International Labor Organization, the Universal Declaration of Human Rights, and the Global Sullivan Principles, the Code represents Boeing’s statement of its own standards on these subjects, rather than those of a third party.

Anti-Corruption Program
Boeing strictly forbids bribery and corruption of any kind. It is imperative that we compete on the merits alone. Integrity is a core company value and in support of it, Boeing publishes an internal policy inclusive of anti-corruption and anti-bribery requirements and expectations applicable to employees, board of directors, and other stakeholders. Boeing also provides employees and other stakeholders detailed procedures to ensure compliance with the U.S. Foreign Corrupt Practices Act and other global anti-corruption laws and regulations; requires annual training related to ethics and compliance; and provides guidance and instructions on various reporting mechanisms. This guidance is clear that we must never sacrifice our ethical principles to win or keep business—that no business is worth it.

Our anti-corruption program is organized into nine risk areas and includes extensive controls. These controls are tested annually through a self-assessment process as well as periodic risk-based corporate audits and external assessments to assess risk, ensure effectiveness, and identify potential enhancement opportunities. Confidential and anonymous reporting methods are provided. Retaliation against reporting parties is strictly prohibited, and action is taken against violators of anti-retaliation policies.

More information about Boeing’s anti-corruption practices can be found on the Boeing website.

Jeppesen Systems AB Sustainability Report - 2019
Sustainability through our products

The crew and operations management solutions developed in Göteborg enable airlines to drive efficiencies, optimize operations and improve environmental performance. Airlines get better control over resource usage in operations by our systems’ multi-objective decision making capabilities.

With our crew planning tools, we are supporting airlines to plan crew, hotel nights, passive travel and other transports more efficiently. By improving the efficiency of assigning and managing airline crews, our solutions help enhance overall airline operational efficiency, minimizing resource waste. With our operations management solutions we can help airlines utilize aircrafts with the lowest fuel consumption, and saving both costs and emissions.

Final words from our MD

For me, sustainability is about responsibility, a long-term mind set and resource management. As an employer, it is important for us to make sure we take care of our team, to make sure we all feel well, both at work and outside the office. The physical and psychological well-being of our people is always our number one priority.

We also need to make sure that we’ll keep our environmental footprint as small as possible. At Jeppesen Systems AB, we have come a long way in making our operation as environmentally friendly as possible.

This report is an important tool for us to gather what is being done today and show where we should go tomorrow. The next step is to investigate how our products affect sustainability on an environmental, economic and social level for our customers. We are building the future together!

Peter Andersson - Managing Director, Jeppesen Systems AB

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**Metrics**

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<thead>
<tr>
<th>Category</th>
<th>2019</th>
<th>2018</th>
</tr>
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<tbody>
<tr>
<td><strong>Environmental dimension</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy consumption</td>
<td>882,24 kWh</td>
<td>844,04 kWh</td>
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<tr>
<td>Electricity source</td>
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<td>100% renewable</td>
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<tr>
<td></td>
<td>(hydropower)</td>
<td>(hydropower)</td>
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<tr>
<td>Recycling</td>
<td>690 kg paper</td>
<td>200 kg paper</td>
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<tr>
<td></td>
<td>50 kg lamps</td>
<td>45 kg lamps</td>
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<tr>
<td></td>
<td>60 kg batteries</td>
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<tr>
<td><strong>Social dimension</strong></td>
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<tr>
<td>Aggregated customer satisfaction score</td>
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<tr>
<td>Internships for people from marginalised groups</td>
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<td>0</td>
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<tr>
<td><strong>Employee dimension</strong></td>
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<tr>
<td>Number of employees (average)</td>
<td>300</td>
<td>283</td>
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<tr>
<td>Sick leave</td>
<td>3,28%</td>
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<td>Attrition rate</td>
<td>8,6%</td>
<td>11,8%</td>
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<tr>
<td>Male employees</td>
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<tr>
<td>Female employees</td>
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<td>Male employees</td>
<td>7,5%</td>
<td>9,5%</td>
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<tr>
<td>Ratio of female employees</td>
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<tr>
<td>Employees</td>
<td>22,6%</td>
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<tr>
<td>Managers</td>
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