W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

As a leading global aerospace company, Boeing develops, manufactures and services commercial airplanes, defense products and space systems for customers in over 150 countries. As a top U.S. exporter, the company leverages the talents of a global supplier base to advance economic opportunity, sustainability and community impact. Boeing’s diverse team is committed to innovating for the future; leading with sustainability; and cultivating a culture based on the company’s core values of safety, quality, integrity, and sustainability.

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

<table>
<thead>
<tr>
<th>Reporting year</th>
<th>Start date</th>
<th>End date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 1 2021</td>
<td>December 31 2021</td>
</tr>
</tbody>
</table>
(W0.3) Select the countries/areas in which you operate.
Australia
Bahrain
Belarus
Belgium
Brazil
Canada
China
Denmark
Ethiopia
France
Germany
Ghana
Greece
Hungary
India
Indonesia
Ireland
Israel
Italy
Japan
Kazakhstan
Kuwait
Luxembourg
Malaysia
Malta
Mexico
Netherlands
New Zealand
Norway
Oman
Poland
Qatar
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Singapore
South Africa
Spain
Sweden
Switzerland
Taiwan, China
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

(W0.4)

(W0.4) Select the currency used for all financial information disclosed throughout your response.
USD

(W0.5)

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.
Companies, entities or groups over which operational control is exercised

(W0.6)

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?
Yes

(W0.6a)
(W0.6a) Please report the exclusions.

<table>
<thead>
<tr>
<th>Exclusion</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully-serviced leased Facilities.</td>
<td>Boeing facilities that are leased where the utility invoices are combined into lease terms and utility usage data is unavailable.</td>
</tr>
<tr>
<td>Facilities that are smaller than 250,000 square feet AND consume less than 50,000 MMBTUs in total energy per year.</td>
<td>Typically, at least one of these two thresholds needs to be met for a facility to participate in Boeing's corporate conservation program, where environmental metric data including water intake volume is monitored and reported at the corporate level. Per leadership discretion, however, smaller facilities that do not meet either threshold can still voluntarily participate in the corporate conservation program. Excluded facilities (combined with the first exclusion above) comprise well below 20% of Boeing's total global water intake.</td>
</tr>
<tr>
<td>Facilities without discrete water meters.</td>
<td>Facilities are not included if they do not have water meters to obtain consumption data from.</td>
</tr>
<tr>
<td>Facilities without an established and consistent data collection process.</td>
<td>Facilities are not included if they do not have a reliable source of data through an established and consistent process that can be supported by written documentation with meter readings (e.g., utility invoices).</td>
</tr>
</tbody>
</table>

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

<table>
<thead>
<tr>
<th>Indicate whether you are able to provide a unique identifier for your organization.</th>
<th>Provide your unique identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, an ISIN code</td>
<td>US097023AU94</td>
</tr>
</tbody>
</table>

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

<table>
<thead>
<tr>
<th>Direct use importance rating</th>
<th>Indirect use importance rating</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient amounts of good quality freshwater available for use</td>
<td>Important</td>
<td>Important 1. Direct use: Boeing's direct use of freshwater is primarily comprised of 1) potable and sanitary use, 2) direct contact use, and 3) non-contact use. First, freshwater quantity and quality are both important to support essential daily potable and sanitary uses across all site operations. Secondly, direct contact use typically includes metal finishing, paint and wash operations, quality assurance activities, and other uses that involve direct contact between the product and freshwater (whether further treated onsite or not). Freshwater quantity and quality are thus important for direct contact use as well because they can directly impact core production activities. Thirdly, non-contact cooling makes up a substantial percentage of the overall freshwater intake at a typical Boeing facility. It is also important that sufficient, good-quality freshwater from municipal supplies is available to ensure stable cooling system operations to minimize risks of interruption. 2. Indirect use: The nature of Boeing's manufacturing requires strict quality assurance and control of parts and materials acquired through its supply chain. Thus, it is important that sufficient good-quality freshwater be available to suppliers whose production processes and technologies rely on it, as such availability indirectly impacts Boeing's value chain. Indirect water use of Boeing's products may vary by purpose and quantity; however, freshwater availability is still important for commercial airplane operations and defense product use. These importance ratings will stay the same in the near future.</td>
</tr>
</tbody>
</table>

| Sufficient amounts of recycled, brackish and/or produced water available for use | Not very important | Not very important 1. Direct use: Reclaimed water is used at few Boeing facilities in Southern California for non-contact cooling and irrigation. However, the vast majority of Boeing's facilities are located in regions that do not have access to municipality-supplied recycled water. These regions are also defined as “low” to “medium” on the WRI Aqueduct scoring scale in terms of water stress. About 90% of Boeing's reported total water intake are from these low to medium stress areas, and Boeing's engineering specifications on water quality are generally standardized around freshwater supplied through municipalities. Freshwater is the most reliable source for quality assurance, while recycled water use is limited to very few regions, applications, and at low quantities. Boeing does not use brackish or produced water for direct operations. As a result, sufficient amounts of these water types are deemed not very important for direct use. 2. Indirect use: Upstream of Boeing's direct operations, typical direct value chain suppliers may conduct part fabrication and raw material processing. These activities typically require similar freshwater quality as Boeing's direct use, as well as downstream indirect use of Boeing's products (mostly aircraft operations), which does not typically require substantial amounts of recycled water as compared to freshwater. As a result, sufficient amounts of these water types are not very important for direct or indirect uses. These importance ratings will stay the same in the near future. |

W1.2
(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

<table>
<thead>
<tr>
<th>Water withdrawals – total volumes</th>
<th>% of sites/facilities/operations</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water withdrawals – volumes by source</td>
<td>76-99</td>
<td>In the current reporting year, Boeing monitored total water withdrawal volumes at about 83% of worldwide sites calculated by square footage. Exclusion criteria are reported in W0.6a.</td>
</tr>
<tr>
<td>Entrained water associated with your metals &amp; mining sector activities - total volumes [only metals and mining sector]</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Produced water associated with your oil &amp; gas sector activities - total volumes [only oil and gas sector]</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Water withdrawals quality</td>
<td>26-50</td>
<td>Boeing's contracted water treatment service providers routinely monitor water withdrawal quality at the site level, in order to make proper operational adjustments in cooling systems to accommodate makeup water quality fluctuations and maintain stable operation. Typically monitored parameters may include pH, temperature, and conductivity. This percentage is an estimate based on general service coverage of the overall enterprise contract.</td>
</tr>
<tr>
<td>Water discharges – total volumes</td>
<td>Not monitored</td>
<td>Boeing only monitors water discharges at the facility level for compliance purposes when required by discharge permits. At select Boeing sites, domestic sewer discharges are metered through municipalities and data monitoring is potentially feasible. This is being explored and compiled at the enterprise level.</td>
</tr>
<tr>
<td>Water discharges – volumes by destination</td>
<td>Not monitored</td>
<td>Boeing only monitors water discharges at the facility level for compliance purposes when required by discharge permits. At select Boeing sites, domestic sewer discharges are metered through municipalities and data monitoring is potentially feasible. This is being explored and compiled at the enterprise level.</td>
</tr>
<tr>
<td>Water discharges – volumes by treatment method</td>
<td>Not monitored</td>
<td>Boeing does not currently monitor water discharges U.S. by treatment method at the enterprise level. However, this can potentially be feasible at select facilities, which is being explored.</td>
</tr>
<tr>
<td>Water discharge quality – by standard effluent parameters</td>
<td>51-75</td>
<td>Boeing only monitors water discharge quality at the facility level for compliance purposes when required by discharge permits. Only permit-required effluent parameters are monitored.</td>
</tr>
<tr>
<td>Water discharge quality – temperature</td>
<td>Not monitored</td>
<td>Boeing only monitors water discharges at the facility level for compliance purposes when required by discharge permits. Only permit-required discharge temperatures are monitored.</td>
</tr>
<tr>
<td>Water consumption – total volume</td>
<td>Not monitored</td>
<td>Although Boeing monitors water withdrawal volumes, there is no systematic monitoring of discharge volumes except when required by facility-level permits. As a result, water consumption volumes are not monitored, as it is the difference between withdrawal (monitored) and discharge (not monitored in its entirety).</td>
</tr>
<tr>
<td>Water recycled/reused</td>
<td>1-25</td>
<td>Volumes of recycled and reused water in select locations are measured at the facility level only and not at the enterprise level.</td>
</tr>
<tr>
<td>The provision of fully-functioning, safely managed WASH services to all workers</td>
<td>100%</td>
<td>Boeing's Environment, Health, and Safety organization manages WASH services and makes them available to all workers.</td>
</tr>
</tbody>
</table>

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

<table>
<thead>
<tr>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total withdrawals</td>
<td>4147.66</td>
<td>Lower</td>
</tr>
<tr>
<td>Total discharges</td>
<td>Please select</td>
<td>Boeing does not collect data on water discharge volumes at the corporate level.</td>
</tr>
<tr>
<td>Total consumption</td>
<td>Please select</td>
<td>Boeing does not collect data on water consumption volumes at the corporate level.</td>
</tr>
</tbody>
</table>

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

<table>
<thead>
<tr>
<th>Withdrawals are from areas with water stress</th>
<th>% withdrawn from areas with water stress</th>
<th>Comparison with previous reporting year</th>
<th>Identification tool</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Yes</td>
<td>1-10</td>
<td>About the same</td>
<td>WRI Aqueduct</td>
</tr>
</tbody>
</table>

W1.2h
Provide total water withdrawal data by source.

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Volume (megaliters/year)</th>
<th>Comparison with previous reporting year</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh surface water, including rainwater, water from wetlands, rivers, and lakes</td>
<td>Relevant but volume unknown</td>
<td>&lt;Not Applicable&gt;</td>
<td>Boeing does use captured rainwater at its Portland, Oregon (US) facility but does not have a meter to monitor volumes. Based on the design of the system, we estimate the volume to be about 0.05 megaliters per year and are working to better quantify for future reports.</td>
</tr>
<tr>
<td>Brackish surface water/Seawater</td>
<td>Not relevant</td>
<td>&lt;Not Applicable&gt;</td>
<td>Boeing does not withdraw brackish surface water/seawater for direct operations. As a result, it is deemed not relevant.</td>
</tr>
<tr>
<td>Groundwater – renewable</td>
<td>Relevant</td>
<td>11.79 Higher</td>
<td>Only the Boeing Palmdale, California (US) site withdraws directly from groundwater wells instead of from a municipal supply relying on groundwater sources. For Palmdale in 2021, site construction activities led to an increased amount of groundwater withdrawal. This is however a one-time increase and the following year's withdrawal is expected to return to normal patterns.</td>
</tr>
<tr>
<td>Groundwater – non-renewable</td>
<td>Not relevant</td>
<td>&lt;Not Applicable&gt;</td>
<td>Boeing does not have withdrawals from non-renewable groundwater sources. As a result, it is deemed not relevant.</td>
</tr>
<tr>
<td>Produced/Entrained water</td>
<td>Not relevant</td>
<td>&lt;Not Applicable&gt;</td>
<td>Boeing does not have withdrawals from produced/entrained water sources. As a result, it is deemed not relevant.</td>
</tr>
<tr>
<td>Third party sources</td>
<td>Relevant</td>
<td>4137.38 Lower</td>
<td>Boeing uses third-party (municipal) water sources for the majority of its water withdrawals. These third-party sources vary depending on availability to their respective geological regions. In 2021, Boeing's overall water withdrawal volume further declined as a result of telecommuting, production decrease, and water conservation activities.</td>
</tr>
</tbody>
</table>

Provide a figure for your organization's total water withdrawal efficiency.

<table>
<thead>
<tr>
<th>Revenue (USD)</th>
<th>Total water withdrawal volume (megaliters)</th>
<th>Total water withdrawal efficiency</th>
<th>Anticipated forward trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>6208600000</td>
<td>4147.66</td>
<td>15017142.1958405</td>
<td>With continued revenue increase and withdrawal volume decrease, the water withdrawal efficiency is expected to continue to improve in the future.</td>
</tr>
</tbody>
</table>

Do you engage with your value chain on water-related issues?

No, we do not engage on water with our value chain

Why do you not engage with any stages of your value chain on water-related issues and what are your plans?

Boeing recognizes engagement with our value chain as important to our overall water stewardship practices and our water policy. Based on a materiality assessment, other sustainability issues such as GHG emission reductions have been identified as higher priorities. While engagement on water-related issues has been deemed important but not an immediate business priority for 2021, we will reassess this as we collect more information on water issues across our value chain. Currently, Boeing has taken actions to initiate engagement with our value chain in the following ways: - Working with the Roundtable for Sustainable Biomaterials (RSB) and other value chain partners to promote use of sustainable aviation fuel (SAF) and ensure that SAF production is sustainable and does not compete with water use priorities. - Including standard expectations from suppliers on best practices in wastewater handling and stormwater management. - Working with industry partners via the International Aerospace Environmental Group to establish a voluntary standard for supplier ESG due diligence and to demonstrate stewardship. We expect this industry collaboration will afford identifying, and taking action on, water-related issues at both a Boeing supplier relationship level and industry supply base.
(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines
3

Total value of fines
27943

% of total facilities/operations associated
0.9

Number of fines compared to previous reporting year
This is our first year of measurement

Comment
In 2021, there were three facilities in the reporting boundary that were subject to water-related fines, respectively as the El Segundo, California (US) site, the Renton, Washington (US) site, and the Santa Susana, California (US) site.

W2.2b
(W2.2b) Provide details for all significant fines, enforcement orders and/or other penalties for water-related regulatory violations in the reporting year, and your plans for resolving them.

<table>
<thead>
<tr>
<th>Type of penalty</th>
<th>Financial impact</th>
<th>Country/Area &amp; River basin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine</td>
<td>1668</td>
<td>United States of America, Other, please specify (Dominguez Watershed)</td>
</tr>
</tbody>
</table>

**Type of incident**
Other, please specify (This penalty was not due to wastewater compliance violations, but rather due to a clerical delay in processing total fees due. The facility was since able to bring payments up to date.)

**Description of penalty, incident, regulatory violation, significance, and resolution**
The El Segundo, California (US) site was fined for non-payment of quarterly wastewater surcharge fees. This was due to a clerical delay in processing total fees due, and the facility was since able to bring payments up to date. The fine was not considered significant.

<table>
<thead>
<tr>
<th>Type of penalty</th>
<th>Financial impact</th>
<th>Country/Area &amp; River basin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine</td>
<td>4275</td>
<td>United States of America, Other, please specify (Cedar Valley Aquifer/Cedar River Watershed)</td>
</tr>
</tbody>
</table>

**Type of incident**
Spillage, leakage or discharge of potential water pollutant

**Description of penalty, incident, regulatory violation, significance, and resolution**
The Renton, Washington (US) site received a notice of violation due to a fire suppressant foam leak into the sanitary sewer through a floor drain. Boeing was fined based on provisions of Boeing’s permit with King County, which operates the sanitary sewer system. Appropriate corrective action has since been taken with assistance of an environment attorney.

<table>
<thead>
<tr>
<th>Type of penalty</th>
<th>Financial impact</th>
<th>Country/Area &amp; River basin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine</td>
<td>22000</td>
<td>United States of America, Other, please specify (Los Angeles River Watershed)</td>
</tr>
</tbody>
</table>

**Type of incident**
Effluent limit exceedances

**Description of penalty, incident, regulatory violation, significance, and resolution**
The Santa Susana Field Lab, located in Simi Valley, California, US, exceeded the site-specific NPDES permit discharge limits for Copper, Chronic Toxicity, Iron, Manganese, Dioxin (TCDD), and Biological Oxygen Demand (BOD) at one or more of the outfalls. Boeing was fined due to this permit violation, and is taking corrective action to bring these effluent water quality parameters back in compliance.

---

**W3. Procedures**

**W3.3**

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

**W3.3a**
(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage
Direct operations

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
More than 6 years

Type of tools and methods used
Enterprise risk management
Other

Tools and methods used
Enterprise Risk Management
External consultants

Contextual issues considered
Water availability at a basin/catchment level
Water regulatory frameworks
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered
Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level

Comment
Risk insurer FM Global does this risk assessment in coordination with Boeing. Manufacturing and business operations are engaged for needs and requirements. They review water availability and the risks associated with the availability. A detailed resiliency plan is generated to ensure we can operate without incoming water for a period of time.

(W3.3b) Describe your organization’s process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Boeing's Board of Directors has extensive oversight of strategy development, company culture, the company's safety programs and initiatives, political and charitable contributions, corporate sustainability and key strategic, operational and compliance risks. Our Board has adopted a set of Corporate Governance Principles to assist the Board in the exercise of its responsibilities. Along with Boeing's Certificate of Incorporation and By-Laws and charters of the committees of the Board, it provides an effective framework for Boeing's governance. The Governance & Public Policy (GPP) Committee reviews our governance practices and policies on an ongoing basis and, where appropriate, proposes modifications to the Board.

Sustainability governance is rooted in Boeing's values. The Board oversees a variety of sustainability topics and in 2021, the GPP Committee charter was amended to expressly include oversight of our practices — relating to corporate sustainability, including matters related to environmental stewardship and climate change, and to diversity, equity and inclusion. Boeing's Chief Sustainability Officer (CSO) is a Boeing Executive Council position reporting to Boeing's Chief Executive Officer. The CSO reports the progress of Boeing's sustainability objectives and stakeholder-oriented reports regularly to the GPP Committee and the full Board.

The CSO is responsible for advancing Boeing’s approach to sustainability, focusing on priorities, stakeholder-oriented reporting and company performance. The CSO leads the Global Enterprise Sustainability organization, designed to sharpen our focus on key environmental, social and governance efforts through dedicated leadership alignment in these areas. The CSO’s team includes a Chief Engineer who advances sustainability technologies as well as future mobility applications and a Global Sustainability Policy and Partnerships leader who strengthens our company focus on sustainability outside the United States. Reinforcing our commitment and enterprise approach, a Global Sustainability Council composed of global leaders from across our business units and functions was established to provide executive leadership, advocacy and partnership with the sustainability organization to advance our objectives and strategy. This council works to partner and advance sustainability objectives and strategy throughout the enterprise. The council also oversees sub-councils with focuses on policy, customers, sustainability and enterprise services, sustainable aviation fuels, finance and governance, and technology and future mobility.

In addition to risk management throughout the enterprise, risk insurer FM Global conducts a risk assessment in coordination with Boeing. Manufacturing and business operations are engaged for needs and requirements. They review water availability and the risks associated with the availability. If any portion of Boeing's operations or value chain were determined to be at risk, Boeing would require detailed resiliency and response plans for mitigation. A detailed resiliency plan is generated to ensure we can operate without incoming water for a period of time.
W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Boeing considers an opportunity or risk to have substantive financial impact if it could have a significant effect on our financial position, results of operations, and/or cash flows.

Boeing considers an opportunity or risk to have substantive strategic impact on our business if it could have a significant effect on our markets, products, operations, customers, and/or suppliers.

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks exist, but no substantive impact anticipated</td>
<td>Boeing's primary operations are in the United States with only two international sites that meet our data inclusion criteria. Virtually all Boeing operations withdraw potable water from third-party, public water supplies. These public utilities are in the forefront of securing raw water sources in order to meet local residential, commercial, industrial, and agricultural demands. Within our reporting boundary, about 90% of Boeing's water withdrawal is in non-water stressed areas (WRI Aqueduct score &quot;low&quot; to &quot;medium&quot;). In addition, Boeing's manufacturing is much less water-intensive as compared to other peer industry companies that are at similar revenue scales but in different industrial sectors (e.g., semiconductor fabrication, automotive, pharmaceutical, etc.). Overall, water-related risks are assessed to be low with no substantive impact to Boeing. Any identified potential water-related risk, whether substantive or not, would be evaluated and managed through our enterprise risk management process. If any portion of Boeing's operations or value chain were determined to be at risk, Boeing would require detailed resiliency and response plans for mitigation.</td>
</tr>
</tbody>
</table>

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation in progress</td>
<td>The nature of Boeing's manufacturing requires sufficient quantities and strict qualities of parts and materials acquired through its direct supply chain (parts and materials that directly comprise Boeing's products). Amongst Boeing's vast upstream supply chain, various suppliers may have drastic differences in their business's exposure and sensitivity to water-related risks. Because Boeing currently has very limited engagement with our supply chain on water-related matters, a quantitative conclusion cannot be made due to lack of visibility of supplier data. However, should any direct suppliers identify and present water risks that are substantive enough to threaten supply quality, quantity, pricing, or schedule, Boeing would evaluate its exposure to the identified situation per internal financial and strategic risk management procedures. For this reporting year, no known substantive water risk was presented by any suppliers to Boeing. To enhance our risk assessment processes on water-related issues and to demonstrate environmental stewardship, we collaborated with other industry partners in 2021 through the International Aerospace Environmental Group to establish a voluntary standard for Environmental, Social, and Governance (ESG) due diligence.</td>
</tr>
</tbody>
</table>

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

**Type of opportunity**

- Efficiency
  - Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

Boeing has initiated water balance studies to quantify water use at the facility level, in several key areas of direct operations, including potable and sanitary use, direct-contact production, non-contact cooling/HVAC, and other miscellaneous uses. Boeing’s sustainability organization has established a dedicated conservation fund to invest
in water reduction, energy efficiency and waste reduction projects at our facilities. This fund is used in part to conduct studies at individual sites, with special focuses on top water-consuming sites and sites located in water-stressed areas. Water balance studies help identify focus areas to improve water use efficiency and maximize quantitative improvement outcomes. In 2021, the first water balance study was conducted at the St. Louis site, which is one of Boeing's largest energy and water consumer. As a result of this study, 22 feasible water savings opportunities were identified and each opportunity has different levels of implementation costs, financial savings, and potential water volume reductions.

**Estimated timeframe for realization**
4 to 6 years

**Magnitude of potential financial impact**
Low

**Are you able to provide a potential financial impact figure?**
Yes, an estimated range

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
2500

**Potential financial impact figure – maximum (currency)**
265000

**Explanation of financial impact**
As a result of the water balance study in St. Louis, 22 feasible water savings opportunities were identified, each with varying estimated implementation costs, financial savings, and potential water volume reductions. The potential financial impact (annual savings) range of $2,500 and $265,000 includes all 22 identified projects that were deemed feasible due to an estimated return on investment (ROI) of shorter than 5 years. These cost savings are “Association for Advancement of Cost Engineering (AACE) Class 5” estimates, which are performed for “proof of concept” purposes, at accuracy ranges typically varying between -50% and +100%, at an 80% confidence level. Class 5 estimates were sufficient for this type of study at this phase, because the purpose is to assess initial project viability, evaluate alternate schemes, and help with strategic long-range planning.

**Type of opportunity**
Efficiency

**Primary water-related opportunity**
Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**
Boeing's sustainability team collaborates with the contract management team to engage with water treatment service suppliers, who are contractually required to identify and propose water-related cost savings opportunities every quarter. Including such requirement into the suppliers' performance evaluation matrix allows Boeing the opportunity to regularly screen proposed projects and secure internal and external resources to implement them.

**Estimated timeframe for realization**
1 to 3 years

**Magnitude of potential financial impact**
Low-medium

**Are you able to provide a potential financial impact figure?**
Yes, an estimated range

**Potential financial impact figure (currency)**
<Not Applicable>

**Potential financial impact figure – minimum (currency)**
10000

**Potential financial impact figure – maximum (currency)**
400000

**Explanation of financial impact**
The range of financial impact provided above is an order-of-magnitude estimate based on reasonable engineering judgement and proposed savings estimated by the water treatment supplier. Depending on the nature of the identified savings project, the estimated timeframe and financial impact for realization vary greatly. For instance, additional chemical treatment in cooling tower makeup water could cost about $100,000 and six months to a year to implement at a specific Boeing site, while replacing an aged cooling tower controller to allow for better control and improve tower cycles could cost about $40,000 and less than a month to implement. Boeing's sustainability organization secures and manages the conservation project funding pool by gathering and reviewing all site-submitted applications along with cost analyses. Water-efficiency projects are among these applications as well. If approved, the estimated financial impact is eventually realized after project execution.

**Type of opportunity**
Efficiency

**Primary water-related opportunity**
Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**
Boeing strategically requires sites that make up the top 80% of Boeing's water withdrawal volume to implement Conservation Best Practices (CBP). CBP are low-cost operational and/or behavioral initiatives that reduce water use and associated utility costs. Key components of this initiative include developing site-level conservation plans through 2025 and sharing the plans with key decision makers. In addition to infrastructure-related improvements listed elsewhere, the CBP also focus on finding and fixing water leaks and requiring all major sites to have a water use reduction project specific to its operations. In 2021, Boeing's total water withdrawal volume further decreased by approximately 4.2% from its 2020 levels.

**Estimated timeframe for realization**
Current - up to 1 year

**Magnitude of potential financial impact**
Low
Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
5000

Potential financial impact figure – maximum (currency)
150000

Explanation of financial impact
The financial impact as a direct and exclusively isolated result of CBP can be difficult to delineate. However, depending on actual reduced water volumes, the provided range is a conservative, rough estimate. Based on historical combined water and sewer rates, a 1% reduction in total water withdrawal would generate approximately $150,000 in direct water and sewer cost savings.

Type of opportunity
Efficiency

Primary water-related opportunity
Water recovery from sewage management

Company-specific description & strategy to realize opportunity
At the Boeing Auburn, Washington (US) site, a pilot study is underway to evaluate treating tank-line wastewater and recycling it back to use, potentially saving approximately 50%-60% of the site's total water intake. This project was in conception stages for several years, and some progress was made in 2021 that produced meaningful results to guide future treatment process design, which will be an addition/improvement based on the existing infrastructure of the onsite wastewater treatment plant, which is currently discharging treated effluent to the local sewage treatment plant under a permit.

Estimated timeframe for realization
4 to 6 years

Magnitude of potential financial impact
Low-medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
200000

Potential financial impact figure – maximum (currency)
1000000

Explanation of financial impact
This is an "order of magnitude" high level financial impact estimate of annual cost savings, including water and sewer discharge costs and permit costs. This does not include capital costs to be incurred while installing treatment system improvements and piping upgrades to facilitate recycling of the further treated effluent.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?
Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Content</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company-wide</td>
<td>Company water targets and goals</td>
<td>Boeing’s Environment Policy includes a commitment to conduct operations in compliance with applicable environmental laws, regulations, and Boeing policies and procedures. Our Environment policy includes protection of water resources by preventing pollution, conserving natural resources, and working with our stakeholders on activities that promote environmental protection and stewardship. This commitment also includes setting aggressive goals to reduce total water withdrawal by 20% between 2017 and 2025. Our Environment Policy can be found at: <a href="https://www.boeing.com/principles/environment/index.page">https://www.boeing.com/principles/environment/index.page</a>. Boeing believes in all 17 SDGs and has identified alignment between ten specific goals and our efforts to support the outcomes that make the world a better place for all. One of those ten goals, Goal 12: &quot;Ensure sustainable consumption and production patterns&quot;, includes Target 12.2: achieve the sustainable management and efficient use of natural resources by 2030. In support of such goal and target, Boeing has established water intake volume reduction targets for both 2025 and 2030. Our commitment to the UN SDGs can be found in the appendices of our 2022 Sustainability Report at: <a href="https://www.boeing.com/principles/sustainability/annual-report/index">https://www.boeing.com/principles/sustainability/annual-report/index</a>.</td>
</tr>
</tbody>
</table>

W6.2
W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

<table>
<thead>
<tr>
<th>Position of individual</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boeing’s CEO</td>
<td>Boeing’s CEO focuses on executing our strategic imperatives and our core values of safety, quality, integrity and sustainability as well as increasing transparency with our stakeholders. The CEO works closely with the Board to oversee a variety of sustainability topics while managing water-related business risks. In 2021, the Governance and Public Policy (GPP) Committee charter was amended to expressly include oversight of our practices relating to corporate sustainability, including environmental stewardship and climate change issues. In addition, the CEO leads the company to embrace our core values, which include a commitment to sustainability as well as leading our focus on environmental stewardship. In 2021, the CEO approved our 2030 targets, which include an additional 5% total water withdrawal reduction between 2025 and 2030.</td>
</tr>
</tbody>
</table>

W6.2b

(W6.2b) Provide further details on the board’s oversight of water-related issues.

<table>
<thead>
<tr>
<th>Frequency that water-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which water-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled - some meetings</td>
<td>Monitoring implementation and performance</td>
<td>Senior management is responsible for day-to-day risk management, including the creation and implementation of risk management policies and procedures. The Board is responsible for overseeing management in the execution of its risk management responsibilities and for assessing the company’s approach to risk management. The Board has extensive oversight of key strategic, operational and compliance risks. Recent Board discussions have addressed shareholder feedback on a variety of topics, including sustainability priorities. The Board and its committees address a variety of sustainability-related topics including risk management of water and climate related issues.</td>
</tr>
<tr>
<td></td>
<td>Overseeing acquisitions and divestitures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overseeing major capital expenditures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding annual budgets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding business plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding major plans of action</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding risk management policies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding corporate responsibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation/R&amp;D priorities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Setting performance objectives</td>
<td></td>
</tr>
</tbody>
</table>

W6.2d
(W6.2d) Does your organization have at least one board member with competence on water-related issues?

<table>
<thead>
<tr>
<th>Board member(s) have competence on water-related issues</th>
<th>Criteria used to assess competence of board member(s) on water-related issues</th>
<th>Primary reason for no board-level competence on water-related issues</th>
<th>Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Our Board’s Governance &amp; Public Policy Committee is responsible for identifying and assessing potential board candidates and recommending nominees for the Board’s approval. In this process, the Committee assesses the qualifications of nominees an ongoing basis, including with respect to sustainability. The Committee reviews annually the skills and characteristics required of directors in light of the Board’s current composition, evolving business requirements, and the long-term interests of the Company and its shareholders. This assessment includes consideration of experience in areas that are relevant to Boeing’s global activities, such as engineering, manufacturing, risk management, public policy, sustainability, among other factors. Although we do not currently call out water-related expertise in our directors’ biographies explicitly, any experience in sustainability, including specific competence with respect to water-related issues, would be considered in our overall assessment of a director nominee.</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)
Chief Sustainability Officer (CSO)

Responsibility
Assessing future trends in water demand
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
Half-yearly

Please explain
The CSO is responsible for the company’s environment stewardship strategy and performance goals and targets. The CSO reports directly to the CEO and provides regular updates on our sustainability priorities, strategy and reporting. Based on our ambitious 2025 target of reducing water withdrawal by 20% from 2017, the CSO reports performance towards this target monthly to the company’s senior business, program, and site leaders. The Board’s Governance and Public Policy committee charter was amended in 2021 to expressly include oversight of our practices relating to corporate sustainability, including matters related to environmental stewardship and climate change. This committee convenes at least semi-annually for updates on sustainability topics including water related risks if applicable.

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

<table>
<thead>
<tr>
<th>Provide incentives for management of water-related issues</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, and we do not plan to introduce them in the next two years</td>
<td></td>
</tr>
</tbody>
</table>

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers
Yes, trade associations
Yes, funding research organizations
Yes, other

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

After the appointment of the Chief Sustainability Officer (CSO) and the establishment of the Global Enterprise Sustainability (GES) organization in October 2020, Boeing established a Global Policy Council that oversees climate-related policy activity. In 2021, Boeing's Board revised its Governance and Public Policy committee charter to include review and monitor the Company's practices related to public policy and corporate sustainability, including matters related to environmental stewardship, climate change, diversity, equity, and inclusion. In addition, Boeing established a Global Sustainability Policy & Partnership (GSPPP) team consisting of senior leaders from across Boeing. Together, the Board, the GPP Committee and senior leadership, are committed to ensuring that our policy-related engagement activities align with the company’s values, including water-related sustainability matters as well as values-based, transparent governance.

(W6.6)
Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, and we have no plans to do so.

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

<table>
<thead>
<tr>
<th>Long-term business objectives</th>
<th>Are water-related issues integrated?</th>
<th>Long-term time horizon (years)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, water-related issues are integrated</td>
<td>5-10</td>
<td>Environmental targets integrate a water reduction strategy for the upcoming years. Water related issues and opportunities are part of the plan. In addition, water and wastewater budgets are forecasted five years into the future for financial and conservation planning purposes.</td>
<td></td>
</tr>
<tr>
<td>Yes, water-related issues are integrated</td>
<td>5-10</td>
<td>Environmental targets integrate a water reduction strategy. Water-related issues and opportunities are part of the plan, which includes reducing withdrawal, improving discharge quality, water risk management, and resiliency planning. Boeing's strategy to mitigate issues is to reduce water withdrawal through the following practices: prioritize high-impact projects, enhance evaporative cooling efficiencies, incorporate water efficiency into project designs, and improve water discharges.</td>
<td></td>
</tr>
<tr>
<td>Yes, water-related issues are integrated</td>
<td>5-10</td>
<td>Water and wastewater budgets are forecasted five years into the future for financial and conservation planning purposes. Boeing has reserved conservation project funding under the Global Enterprise Sustainability organization and water conservation project spends are covered under this funding pool.</td>
<td></td>
</tr>
</tbody>
</table>

W7.2

(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)
1.85
Anticipated forward trend for CAPEX (+/- % change)
0
Water-related OPEX (+/- % change)
-0.05
Anticipated forward trend for OPEX (+/- % change)
-0.05

Please explain

In 2021, Boeing continued to invest in water quality and water conservation projects. Boeing’s sustainability organization spent substantially more CAPEX on conservation activities in 2021, which included water-related projects. The small decreases in the past and forward trends of water-related OPEX were mostly due to completion of major capital related projects.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

<table>
<thead>
<tr>
<th>Use of scenario analysis</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>No, and we do not plan to do so within the next two years</td>
</tr>
</tbody>
</table>

Physical risks were assessed using IPCC RCP4.5 & 8.5 for 2030 and 2050 time horizons, with RCP8.5 generally introducing the upper boundary for risk. The high-level physical risk analysis covers a subset of Boeing’s global portfolio of owned and third-party assets & some key infrastructure. It includes 9 different vulnerability indicators for 7 types of activities. Physical risks included several potential effects of temperature, water, humidity, wind, flooding, and extreme weather events. Transition risks and opportunities were assessed using a scenario based on the key commitment to limit global warming to well below 2°C above pre-industrial levels. The scenario assumes proactive and sustained action to reduce carbon emissions over the next 30 years to build a low carbon economy. These analyses are currently climate-related and do not yet specifically identify water-related outcomes or business strategy. Boeing has deemed climate-related ones as higher business priority.

W7.4
Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

The Boeing Company recognizes the "true cost of water" being an important trend in water security analyses. However, this internal price would need to extend beyond direct costs of supply and consumption, into indirect and intangible socioeconomic costs associated with water use. Although such internal price is valuable for planning, we have not prioritized this at the current time due to the complexity of the analysis and other higher-priority sustainability objectives. It is difficult to predict the exact time frame of consideration to add this to the agenda.

Do you classify any of your current products and/or services as low water impact?

No, and we do not plan to address this within the next two years

Please explain

It would be a large cross-functional endeavor to systematically define and scale Boeing's complex products for water impact. We have not prioritized this at the current time due to the complexity of the analysis and other higher-priority sustainability objectives. It is difficult to predict an exact time frame to officially commit to this analysis.

Describe your approach to setting and monitoring water-related targets and/or goals.

The Boeing Company's environmental strategy and policies have been guided and approved by the Global Sustainability Council, which is composed of: Boeing's Executive Council, the CSO, CEO, and other stakeholders in the Environment Health and Safety (EHS) and Global Enterprise Sustainability (GES) organizations. Boeing's Global Sustainability Council acknowledges the importance of water stewardship and our social responsibility to demonstrate water initiatives regardless of water use intensity, especially with Boeing's global footprint. Our 20% absolute water withdrawal reduction from 2017 to 2025 was set regardless of business growth. This 20% absolute reduction target was set in an effort to drive business strategy and propel awareness towards water conservation across the Boeing enterprise. Following the 2025 water intake reduction target, another 5% reduction target has been set for 2030, from the 2025 baseline. Progress towards these targets is regularly reported to and reviewed by the Council, in addition to other internal executive reviews across the company. Meetings of the Global Sustainability Council focus on aligning targets with corporate long-range business planning as well as the company's environmental and safety performance. Boeing's strategy is guided by a comprehensive review and assessment of the most significant environmental challenges and risks facing our company and industry.
(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

- **Target reference number**
  - Target 1

- **Category of target**
  - Water withdrawals

- **Level**
  - Company-wide

- **Primary motivation**
  - Water stewardship

**Description of target**
From the 2017 baseline of total corporate water withdrawal, Boeing targets a 20% reduction by 2025. This is an absolute reduction that is not normalized by any typical denominator such as product volume, revenue, square footage, or head count.

**Quantitative metric**
% reduction in total water withdrawals

- **Baseline year**
  - 2017
- **Start year**
  - 2018
- **Target year**
  - 2025
- **% of target achieved**
  - 100

**Please explain**
In 2021, the Boeing Company achieved a 27% water withdrawal reduction from the 2017 baseline. This was a 4% further reduction from the 2020 year, due to conservation efforts as well as reduced occupancy and production.

---

**W9. Verification**

**W9.1**

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

**W9.1a**

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

<table>
<thead>
<tr>
<th>Disclosure module</th>
<th>Data verified</th>
<th>Verification standard</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1 Current state</td>
<td>(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?</td>
<td>ISAE 3000</td>
<td>The Boeing Company has historically verified Greenhouse Gas emissions for more than a decade along with CDP carbon reporting, and considers it important to perform a similar third-party verification of its disclosed water data. This 2021 verification of water withdrawal data covered all Boeing sites that were included into the reporting boundary, where the auditor reviewed water invoice data with meter reads in order to check the accuracy of the data reported at the facility level, leading to final verification of the 2021 total water withdrawal volume.</td>
</tr>
<tr>
<td>W8 Targets</td>
<td>(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.</td>
<td>ISAE 3000</td>
<td>The total verified water withdrawal volume (reported in W1.2b) was used to calculate Boeing’s progress in 2021 towards 2025 water reduction targets.</td>
</tr>
</tbody>
</table>

---

**W10. Sign off**

**W-FI**

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization’s response. Please note that this field is optional and is not scored.

---

W10.1
**W10.1** Provide details for the person that has signed off (approved) your CDP water response.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 Vice President of Global Environmental Sustainability</td>
<td>Environment/Sustainability manager</td>
</tr>
</tbody>
</table>

**W10.2**

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate’s Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

<table>
<thead>
<tr>
<th>I understand that my response will be shared with all requesting stakeholders</th>
<th>Response permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please select your submission options</td>
<td>Yes</td>
</tr>
<tr>
<td>Public</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Please confirm below

I have read and accept the applicable Terms