

Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Airbus (the Company) is an international reference in the aerospace sector. We design, manufacture and deliver industry-leading commercial aircraft, helicopters, military transports, satellites and launch vehicles, as well as providing data services, navigation, secure communications, urban mobility and other solutions for customers on a global scale.

Airbus employs around 130,000 people around the globe in more than 170 locations worldwide. Latest industrial developments include final assembly lines in Tianjin (China) and Mobile, Alabama (US). We also produce helicopters in Brazil, operate research centres in Singapore, India, the US, China and Russia, and we run Maintenance, Repair and Overhaul (MRO) hubs on five continents.

In line with the Company's purpose "pioneering sustainable aerospace for a safe and united world" and to drive the transition of the air transport system towards climate neutrality, our foremost ambition as an aircraft manufacturer is to bring the first zero emission (also referred to as "ZEROe") commercial aircraft to the market by the mid of the next decade and to play a leading role in the decarbonisation of the aviation sector. The Company is investing major resources into examining and reducing the impact of its products in operation together with all actors within the aviation sector. As a supporter of the Task Force on Climate-related Financial Disclosures ("TCFD"), the Company does not only rigorously track and measure its own impact in its sites, products and services, but it also works in cooperation with its worldwide supply chain to drive more effective environmental management, decarbonise its industry and foster circularity by optimising resource utilisation. To help the Company reach its vision it places innovation at the core of this effort by investing in research, new technologies and sustainable solutions.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2020	December 31, 2020	Yes	1 year

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Australia
 Brazil
 Canada
 China
 Denmark
 France
 Germany
 Mexico
 Morocco
 Netherlands
 Poland
 Romania
 Singapore
 South Africa
 Spain
 Tunisia
 United Kingdom of Great Britain and Northern Ireland
 United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-TO0.7/C-TS0.7

(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?

Aviation

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	<p>In 2020 the former Ethics & Compliance Committee of the Board of Directors was expanded to include sustainability as a whole, with the first meeting of the Ethics, Compliance and Sustainability Committee ("ECSC") taking place in October 2020.</p> <p>The ECSC is responsible for assisting the Board of Directors to oversee the Company's:</p> <ul style="list-style-type: none"> - Culture and commitment to ethical business, integrity and sustainability; - Ethics & Compliance programme, organisation and framework for the effective governance of ethics and compliance, including all associated internal policies, procedures and controls; and - Sustainability strategy and effective governance to ensure that sustainability-related topics, including climate-related topics, are taken into account in the Company's strategy and objectives. <p>To support the Executive Committee in environmental matters, especially climate-related, an Environment Executive Steering Committee ("EnC") was established. The EnC gathers some members of the Executive Committee and senior managers responsible for environmental topics. It meets monthly to review the progress and take decisions on all matters related to the environmental strategy. The EnC reviews climate-related topics, including the progress on greenhouse gas ("GHG") emissions reduction objectives, the decarbonisation strategy and climate related risks.</p> <p>Examples of decisions taken by the Board on climate related issues:</p> <ul style="list-style-type: none"> - The board validated the disclosure of scope 3 - use of sold products data as part of the 2020 annual report, making Airbus the first major aircraft manufacturer to do so. - In 2020, the board validated the introduction in the Top Company Objectives of a CO2 reduction target of -2.7% compared to 2019.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives	<p>The CEO and the Executive Management Team (Managing Board) are responsible for executing the strategy, as approved by the Board of Directors (Supervisory Board), and for managing the day-to-day operations of Airbus' business and the CEO is accountable for its proper execution.</p> <p>Strategic decisions execution under CEO responsibility includes areas such as corporate matters, innovation and environmental protection. In particular, the CEO is responsible for the implementation of the sustainability strategy as decided by the Board, including climate strategy mitigation with Airbus commitment to support the SDG13 on climate actions.</p> <p>Example 1: In adherence with the High5+ initiative aiming at reducing the scope 1 and 2 emissions of Airbus in accordance with the Paris agreement, a yearly emission reduction objective has been validated by the supervisory board and communicated by the CEO. This is reviewed monthly by the Management Board.</p> <p>Example 2: The Board approved the development of Airbus aircraft A321 NEO XLR programme offering significant reductions in fuel consumption and CO2 emissions.</p>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Risks Officer (CRO)	Both assessing and managing climate-related risks and opportunities	Quarterly

Other, please specify Head of Sustainability and Environment	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Head of Communication and Corporate affairs	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Sustainability and Environment network in Airbus spans across the Group, Corporate Divisions and National site-levels to allow for a bottom-up and top-down approach to managing environmental issues, interfacing a network of experts in the different countries and sites that identify, assess and monitor environmental issues, including climate-related issues.

Group Level

The Environment Executive Steering Committee ("EnC") was established in September 2019. The EnC gathers some members of the Executive Committee (EVP Communication, Corporate Affairs and CEO Chief of Staff, Chief Technology Officer, Head of Strategy, Head of Engineering), representatives of divisions (Airbus Helicopters and Airbus Defence and Space) and senior managers responsible for environmental topics. It meets monthly to review the progress and take decisions on all matters related to the environmental strategy. The EnC reviews climate change related topics, including the progress on greenhouse gas ("GHG") emissions reduction objectives, the decarbonisation strategy and climate related risks.

Corporate level

Environmental operations are led by the Sustainability & Environment department, whose role is to guide the business in environmental matters and to set the policy and deploy, drive and improve the Environmental Management System ("EMS") throughout the Company. The Company's EMS is based on ISO 14001:2015. Airbus was the first aircraft manufacturer to be ISO 14001 certified, and continues to show its commitment by having been recertified to ISO 14001: 2015 in November 2019, and confirmed by a certification surveillance audit in 2020. Airbus also monitors environmental regulatory developments to understand, evaluate and prepare for legal and regulatory evolutions applicable to its activities and products.

National level

At the national level, a National Entity Environmental Representative is responsible to set up an organization with the sites within his/her national scope, at site level to monitor and manage environmental issues, including climate-related issues.

Monitoring of climate-related issues

Monitoring of environmental issues (including climate) is done at three levels on a monthly basis: the Environment Executive Steering Committee directs the environmental strategy while the Corporate Sustainability and Environment department (group level) ensures a harmonized approach of mitigation actions and risk management and the corporate business division level (through Roadmaps) ensures the implementation of these mitigation actions and risk management processes. Monitoring mechanisms include referencing waterfall charts to ensure that risk mitigation actions are working to reduce risk exposure. Climate R&Os are monitored through the Enterprise Risk Management process under the leadership of the CRO, through quarterly review of the risks and opportunities and associated actions.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	n.a

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target	The annual CO2 reduction objective (-2.7% in 2020) forms part of the CEO's and other Executive Committee member's remuneration.
Environment/Sustainability manager	Monetary reward	Energy reduction project	Managers involved in environmental management, energy savings, and CO2 emissions management, have sustainability targets related to CO2 emissions reductions. These objectives are reviewed every year and individual bonuses notably depend on this performance review.
All employees	Non-monetary reward	Efficiency project	Various events are organized during the year, such as specific days dedicated to the employees' awareness of Environment and Energy issues (Energy Days, Environmental Month, Carbon Footprint Awareness Day), as well as AirbusTV programmes on CO2 related corporate projects, and our annual forums dedicated to Environment and Energy. These events highlight CO2 initiatives to which employees contribute,

		and all our employees benefit from these important corporate recognitions.
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C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Early identification of risks and opportunities is part of the risk management strategy therefore identified risks and opportunities are considered within a timeframe from 0 to 5 years
Medium-term	5	10	Most environmental risks are considered with a range of 6 to 10 years
Long-term	10	30	Other environmental risks, regarding climate change and regulation, have a time horizon beyond 10 years, and for future programs, a specific risk assessment has been undertaken for 2050 (30 years in the future)

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Environmental risks with a substantive financial or strategic impact (i.e. rated "very high" with a potential EBIT impact above 500M€) are escalated to the Finance ERM CoC in the quarterly top environmental risks report, which is then sent to the Airbus Board of Directors. Each environmental risk and opportunity is assessed according to its criticality level resulting from the combination of its probability of occurrence and its impact. Criticality levels are "low" (impact on EBIT less than 125M€, "medium" (impact on EBIT between 125 and 250M€), "high" (impact on EBIT between 250 and 500M€), "very high" (impact on EBIT above 500M€). Beyond the financial impact, there is a set of environment criteria used to assess the impact that a risk under analysis may pose on Airbus. The probability takes into account the likelihood for risk materialization but it is also considered the time needed to act versus predicted time of the impact occurrence and the confidence level on action plan success.

This Environmental assessment grid is described in the ROM Plan (Risk and Opportunity Management Plan) which defines the Enterprise Risk Management (ERM) system applicable to

Environmental Risk and Opportunity management. This ERM is used as a tool to support and to help make decisions, bring added-value for the business area and is part of the Environmental culture.

Risks and opportunities are recorded and monitored with the Active Risk Management (ARM) tool. Top risk and opportunities, corresponding to the substantive impacts on Airbus business, are regularly reported to company top management.

As required by ISO14001:2015 Environmental Management Systems, the identification of environmental Risk and Opportunity takes into account, considering a life cycle perspective:

- The environmental aspects and impacts,
- Compliance obligations, and;
- Internal and external stakeholders' expectations relevant for Airbus

The ROM Plan describes the grids used to assess the impact of environment related risks and opportunities. The following are (some of) the criteria used for risk assessment:

- Costs / Financial impact, an internal scale helps to determine the impact criticality, which can go from low to very high - Performance, this criterion can be linked to either Airbus premises or product environmental performance including the increase of environmental aspects (CO₂, energy consumption, water, waste, etc.)
- Conformity or compliance with applicable regulations and requirements
- Litigation/Legal, due to the noncompliance with the laws and the need for reparation
- Reputation, helps to assess the damage to company's image from local to serious damage, this criterion is accompanied by other criterion that could be: performance (increase of environmental aspect or impact), compliance, litigation, etc.

The following are (some of) the criteria used for opportunities assessment:

- Reduction of non-Recurring Cost (NRC), from a financial perspective some environmental related projects/initiatives can bring savings to the company.
- Reduction of Recurring Costs (RC), the implementation of environmental improvements can help to accelerate the "return on investment" due to reduction of recurring bills, e.g. energy reduction.
- Environmental Improvement, this criterion aims at company's opportunities all those initiatives leading to reduce Airbus environmental footprint in order to align with company's purpose and strategy (CO₂ reduction, energy consumption reduction, waste reduction, VOC emissions reduction and water consumption reduction)
- Company reputation

All roadmap / Multi-Functional Teams (MFT) leaders review, at least quarterly, their new and current risks and opportunities and update ARM accordingly. This updated risks and opportunities are then presented to the respective Steering Committees/Decision Boards in order to align objectives and priorities defined at company and organizational levels. A quarterly Risk Review Board (RRB) is chaired by Head of Corporate Sustainability & Environment, during which the Roadmaps/MFT present their respective R&O Pictures for consolidation.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

A dedicated team within the CFO's responsibility, Enterprise Risk Management Centre of Competence (ERMCOOC) supervises the effectiveness of the Risk and Opportunity Management process. Early identification of risks and opportunities is part of the risk management strategy and includes short-term, medium-term and long-term risks and opportunities. As an example short-term and medium-term risks and opportunities range between 0 to 10 years and for long-term risks for climate, a specific assessment has been conducted until 2050. The key risks and opportunities and their corresponding action plans are reported to the Board of Directors through a reporting synthesis, consolidated on a quarterly basis.

Each environmental risk and opportunity is assessed according to its criticality level resulting from the combination of its probability of occurrence and its impact. Criticality levels are "low", "medium", "high", "very high". There is a set of environment criteria used to assess the impact that a risk under analysis may pose on Airbus. The probability takes into account the likelihood for risk materialization but it is also considered the time needed to act versus predicted time of the impact occurrence and the confidence level on action plan success.

This Environmental assessment grid is described in the ROM Plan (Risk and Opportunity Management Plan) which defines the Enterprise Risk Management (ERM) system applicable to Environmental Risk and Opportunity management. This ERM is used as a tool to support and to help make decisions, bring added-value for the business area and is part of the environmental culture.

Risks and opportunities are recorded and monitored with the Active Risk Management (ARM) tool. Top risk and opportunities, corresponding to the substantive impacts on Airbus business, are regularly reported to company top management.

Below are two cases of risks identified by Airbus:

Physical risk: Risk of production stoppage due to sea level rise

During a risk identification session, Airbus identified the risk of production being affected or stopped at some of its sites or at supplier's sites due to sea level rise. The impact of this risk would be disruption of production at the affected sites leading to relocation of the activity to a new site or a different supply strategy. In order to further assess the risk, Airbus undertook a study jointly with its insurance company to assess the exposure of Airbus sites and selected suppliers to sea level rise and the likelihood of the occurrence. This study took in consideration geographical location, up to date climate evolution projections and the impact on sea level rise as well as the nature of the activities performed in the affected sites and specific constraints linked to their relocation (i.e. proximity to airport, just in time delivery from suppliers). The study concluded that some significant impact could occur on some sites by 2050. The risk has been formally entered in the risk management tool (ARM) and its criticality assessed as "High".

Transitional risk: risk of market disruption due to climate change mitigation measures
 During a risk identification session, Airbus identified the risk of its main market - commercial aviation products and services - being disrupted by future regulatory measures designed to mitigate the consequences of climate change. These regulatory measures may lead to explicit limitations on air transport or a reduction of demand for air transport through environmental charges or taxes. The impact of this risk for Airbus is a reduced demand for its commercial aviation products and services, leading to decreased revenue and reduced ability to invest in future products. In order to assess this risk, Airbus considered the market evolutions forecast from the Strategy Department and simulated the effects of known and potential measures in order to understand the impact on the business. The risk has been formally entered in the risk management tool (ARM) and its criticality assessed as "Very High".

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>Current climate regulation can have a significant impact on Airbus, potentially affecting direct operations as well as the wider air transport ecosystem and the upstream industrial value chain. Therefore, Airbus constantly monitors its activities and coordinates with stakeholders to ensure it is compliant with climate regulations. Current climate regulations (e.g. EU ETS, BEGES, Non-Financial Reporting Directive (NFRD)) are systematically considered in the company's risk identification sessions and integrated in its Enterprise Risk Management system (ERM). The resulting analysis shows that the impact can be substantial, and could include for instance the levying of fines or additional costs, which is why this risk type is relevant for Airbus.</p> <p>Company specific example:</p>

		<p>Airbus has identified a risk of increased cost linked to the European Union Emissions Trading System (EU ETS) regulation. Airbus is subject to the EU ETS for its industrial and internal logistical activities operating a fleet of cargo aircraft to transport aircraft components between production and assembly sites. If the free EU ETS allowances were to be significantly reduced or cancelled, or if the price of carbon goes up significantly, this would result in increased costs for Airbus. For example in 2020, Airbus received 31799 free allocations for its Beluga operations (ATI). With the current price of carbon of 50€ per tonne, the cost for Airbus if the free allocations were removed would be an additional expenditure of around 1.6 million euro.</p>
Emerging regulation	Relevant, always included	<p>Emerging climate regulation can have a significant impact on Airbus, potentially affecting direct operations as well as the wider air transport ecosystem and the upstream industrial value chain. Therefore, Airbus constantly monitors regulatory developments and societal trends in order to steer its business in a direction that will ensure its future compliance. Emerging climate regulations (e.g. CSRD, Taxonomy) are systematically considered in the company's risk identification sessions and integrated in its ERM system. The resulting analysis shows that the impact can be substantial, and could include for instance the levying of fines, additional costs, or increased difficulties in securing necessary funding, which is why this risk type is relevant for Airbus.</p> <p>Company specific example:</p> <p>As part of the European climate regulations, the Taxonomy regulation is being defined in order to identify economic activities which are in line with the European Green Deal commitments, with the ambition to orientate investment flows towards such activities.</p> <p>It is still unclear which Airbus products / activities will be taxonomy-eligible and how financial partners will integrate this information in their own assessment and offerings while we can expect that Green Bonds and Sustainability-linked Bonds principles will align with taxonomy criteria to a certain extent. Depending on these factors, Airbus' cost of financing might be impacted, each 0.05% interest rate variation on each 1b€ gross financial debt resulting in a 500,000€ yearly impact on financial charges.</p> <p>This risk is being addressed by a dedicated multi functional team internally, assessing the potential impact of the Taxonomy and potential eligibility of the company's revenues and future investments, as well as aligning with the wider sector in order to provide aligned feedback to the EU Commission on the topic as part of the public consultation process.</p>
Technology	Relevant, always included	<p>Mitigating impacts on climate change from aviation will require an array of measures ranging from new technology to alternative fuels as well as improvements in air traffic management. As a leader in the</p>

		<p>manufacture of large commercial aircraft, Airbus actively participates in the development of technologies that it expects will enable the sustainable future of air transport. Developing the right technologies can bring significant competitive advantage, and as such this is an aspect always considered by Airbus in its risk assessments. The resulting analysis shows that the impact can be substantial, including loss of competitiveness, reduced profitability or lost investments, which is why this risk type is relevant for Airbus.</p> <p>A company specific example :</p> <p>Airbus has identified the risk of a reduction in the company's business, results of operations and financial condition if a competitor brings a lower emission product to the market before it does. Delivering on commitments and potential future requirements to mitigate climate impacts will require significant technological developments for the commercial aircraft sector. For instance, hydrogen aircraft have the potential to significantly reduce the climate impact of air transport, but the development of such aircraft will require extensive research and development to mature the required new technologies (e.g. hydrogen based systems, electric machines, energy storage and distribution). In the event that a competitor or new market participant has access to technological developments unavailable to Airbus and is able to place on the market a large passenger aircraft with significantly lower emissions before Airbus, climate mitigation requirements may temporarily push the market towards competing products until Airbus can develop a competing alternative, which could lead to a temporary loss of market competitiveness and reduced revenue. The probability that the impact would last for a long period of time is low as Airbus has dynamic R&D activities that seek to ensure it remains at the forefront of technological developments. For instance, in september 2020 Airbus revealed the "ZeroE" concepts of hydrogen aircraft showing how hydrogen technologies could be used in a future commercial aircraft.</p>
Legal	Relevant, always included	<p>As society mobilises to mitigate the effects of climate change, there are increasing requirements for companies to disclose climate impacts. Compliance with these requirements by large companies is closely scrutinised by societal stakeholders (NGOs, associations, press) with a risk of legal action if a non-compliance is suspected. Aviation is particularly targeted by this scrutiny because of its share of global emissions and image as a carbon intensive sector. This is therefore a relevant risk for Airbus to consider and is always included in the risk assessments. The resulting analysis shows that the impact can be substantial, and could include for instance loss of reputation or the levying of fines and penalties, which is why this risk type is relevant for Airbus.</p> <p>Company specific example</p>

		<p>Airbus identified the risk of its reputation being damaged and the levying of fines and penalties for failing to comply with climate disclosure requirements set out in law (such as those resulting from the NFRD). Airbus could face legal proceedings in the event of such a failure to comply with its external reporting obligations. The impact for the company could be loss of reputation, loss of attractiveness to future employees and investors, and the levying of fines and penalties. For instance, Airbus is subject to the French law on carbon emission disclosure "BEGES", which in its revised form contains a €10,000 penalty for companies failing to disclose their emissions with a maximum of €20,000 if the offence is repeated. This risk has been assessed and its criticality set as "MEDIUM"</p>
Market	Relevant, always included	<p>Market risks have been identified as relevant through the ERM system. Changes in societal expectations and growing concerns about climate change may impact market demand for air transport. In particular, a change in passenger behaviour or their transition to other transport modes could decrease the demand for the Company's current and future generation of products, causing a loss of revenues. Airbus considers that this change may call for new products and technologies to be developed, relying on different resources and supply chains than today's well established aerospace value chain. This change could put pressure on the supply of key resources and components which could be in high demand from other industries, and result in difficulties to supply, increase procurement costs or disruption of supply.</p> <p>A company specific example of this risk is the development of breakthrough technologies for aircraft propulsion (e.g. hydrogen based systems, electric machines, energy storage and distribution), which will require establishing a secure and stable supply of materials and components not currently commonly used by Airbus or in higher quantities than today. This new supply may rely on suppliers and industries facing strong demand from other sectors, potentially resulting in production delays, increased costs or disruption of supply. For example, an exceptionally severe and prolonged drought in Taiwan which started in 2020 is causing a global shortage in microchips and other key electronic components as water is essential to the production of these components and a number of the world's major suppliers are situated in this area. As the shortage affects a large proportion of the electronics supply, there is a risk that essential components purchased by Airbus will become unavailable, potentially resulting in production delays and penalties from customers. As a mitigation, Airbus is analysing whether affected companies are part of its extended supply chain and will be defining alternative sourcing strategies.</p>

Reputation	Relevant, always included	<p>Airbus considers its reputation to be a valuable asset and therefore reputational risks are considered as particularly relevant. They can be divided into several categories. Firstly, there is a risk that misperceptions about the Company's environmental performance is used as a key decision-making criteria for consumers, investors, or even new talents. Secondly, there is a risk that the Company's reputation is damaged by growing societal concerns about the climate change impact of aviation or by the lack of transparency on progress made to address climate-related issues.</p> <p>Company specific example: Airbus was the first manufacturer to disclose its ambition to bring a zero-emission aircraft to the market. If the ambition is perceived as unattainable or if the Company is not able to deliver on its ambition it could result in reputational damage leading to reduced investment, loss of revenues and reduced attractiveness. A similar situation could occur if the Company's environmental performance is not on par with its expressed ambition. An example of this can be found in the recent pledge by students from some of France's top higher education institutions to never work for a company contributing negatively to climate change.</p>
Acute physical	Relevant, always included	<p>Acute physical risks have been identified through the ERM system as relevant to Airbus. Extreme weather events can damage industrial operations and Airbus considers the effects of such events on its operations. Future installations may require more stringent requirements and planning to withstand more intense weather events.</p> <p>Company example The effects of climate change on weather conditions may impact operating conditions of Airbus industrial activities (including its supply chain) with higher occurrence and severity of, for instance, hurricanes, hail storms or floods. As a consequence, industrial activities may be disrupted or interrupted if a part of the Airbus industrial system or its supply chain is put out of order by such events. Some Airbus sites have been identified as being particularly vulnerable to these events (e.g. Airbus Mobile FAL for hurricanes) or have been affected in the past (e.g. hail storm in Toulouse damaging buildings and parked aircraft). In order to mitigate this risk, Airbus seeks to adapt its insurance policies accordingly. This risk is significant only if infrastructures performing activities not duplicated elsewhere are completely destroyed by the event and production severely disrupted.</p>
Chronic physical	Relevant, always included	<p>Chronic physical risks can have significant impact on industrial infrastructure requiring expensive modifications of the production set up. As such they have been identified as a top risk through the company's ERM system. In-depth risk analyses have been undertaken</p>

		<p>on sites that have been identified as exposed to sea level rises with appropriate insurance and building modifications considered as a means to mitigate these risks.</p> <p>Company specific example It has been identified that several Airbus production sites (e.g. Saint Nazaire, Hamburg, Marignane) situated near the coastline are exposed to the risk of sea level rise. This risk has been identified and assessed in the company's ERM system and action plans have been defined to mitigate the severity.</p>
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C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Technology

Substitution of existing products and services with lower emissions options

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Airbus has identified the risk of a reduction in the company's business, results of operations and financial condition if a competitor brings a lower emission product to the market before it does. Delivering on commitments and potential future requirements to mitigate climate impacts will require significant technological developments for the commercial aircraft sector. For instance, hydrogen aircraft have the potential to significantly reduce the climate impact of air transport, but the development of such aircraft will require extensive research and development to mature the required new technologies (e.g. hydrogen based systems, electric machines, energy storage and distribution). In the event that a competitor or new market participant has access to technological developments unavailable to Airbus and is able to place on the market a large passenger aircraft with significantly lower emissions before Airbus, climate

mitigation requirements may temporarily push the market towards competing products until Airbus can develop a competing alternative, which could lead to a temporary loss of market competitiveness and reduced revenue. The probability that the impact would last for a long period of time is low as Airbus has dynamic R&D activities that seek to ensure it remains at the forefront of technological developments. For instance, in september 2020 Airbus revealed the “ZeroE” concepts of hydrogen aircraft showing how hydrogen technologies could be used in a future commercial aircraft.

Time horizon

Long-term

Likelihood

Very unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

27,400,000,000

Potential financial impact figure – minimum (currency)
Potential financial impact figure – maximum (currency)
Explanation of financial impact figure

High barriers to entry (including certification requirements, large investment needs, skilled competencies and access to technology) means the risk of disruptive technologies not available to Airbus being integrated in an operational large passenger aircraft is unlikely before 10 to 15 years. It is likely that if a new technology would become available to a competitor, it would become available to Airbus within the next 3 to 5 years thereafter. The impact on Airbus financial position is likely to be focused on the lower end market for passenger aircraft for which capacity and range requirements are lower, and would be mitigated by the existing order backlog. Based on these assumptions, a potential risk scenario could be that Airbus faces a reduction in market share of 10% for a maximum period of 5 years. Taking into account Airbus 2019 commercial aircraft revenue of 54.8Bn€ (2020 is considered non representative for commercial aircraft due to the important production cuts and drop in deliveries as a consequence of the COVID crisis), this scenario would result in a maximum cost of risk of $54.8 \times 0.1 \times 5 = 27.4$ Bn€ in lost revenues over the period.

Cost of response to risk

2,000,000,000

Description of response and explanation of cost calculation

Reducing emissions from our products and increasing efficiency is part of our corporate climate strategy and our product development process. In order to mitigate the risk of its products becoming less competitive, Airbus spends 2 to 3Bn€ annually on R&D and R&T for commercial aircraft activities. This budget is split between investments in incremental developments of our current product portfolio which is required to maintain its competitiveness, as well as investment in the development of breakthrough technologies (e.g. hydrogen based systems, electric machines, energy storage and distribution) that are required for the next generation of commercial aircraft. As an example, Airbus' ambition is to develop and put on the market the first zero emission aircraft by 2035, which will leverage the progress made on hydrogen technologies. The precise split of investment between incremental development and future product technology research is confidential information and cannot be disclosed here.

Comment

N/A

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

The effects of climate change on weather conditions may impact operating conditions of Airbus industrial activities (including its supply chain) with higher occurrence and severity of, for instance, hurricanes, hail storms or floods. As a consequence, industrial activities may be disrupted or interrupted if a part of the Airbus industrial system or its supply chain is put out of order by such events. Some Airbus sites have been identified as being particularly vulnerable to these events (e.g. Airbus Mobile FAL for hurricanes) or have been affected in the past (e.g. hail storm in Toulouse damaging buildings and parked aircraft). In order to mitigate this risk, Airbus seeks to adapt its insurance policies accordingly. This risk is significant only if infrastructures performing activities not duplicated elsewhere are completely destroyed by the event and production severely disrupted.

Time horizon

Long-term

Likelihood

Exceptionally unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

27,400,000,000

Potential financial impact figure – minimum (currency)**Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

This risk scenario considers a major weather event affecting all Final Assembly Lines at the Toulouse site requiring reconstruction of the entire facility, which would result in reduced production output of approximately 50% of commercial aircraft. In this scenario, commercial aircraft revenues are reduced by 50% for 1 year while the site is being rebuilt and production is partly shifted to other sites. Taking into account Airbus 2019 commercial aircraft revenue of 54.8Bn€ (2020 is considered non representative for commercial aircraft due to the important production cuts and drop in deliveries as a consequence of the COVID crisis), the maximum cost of risk is $50\% * 54.8\text{Bn€} = 27.4\text{Bn€}$. However this scenario doesn't model a potential shift of revenues to future years as a result of negotiations with customers to reschedule deliveries.

Cost of response to risk

956,000

Description of response and explanation of cost calculation

Based on the extremely unlikely nature of the scenario resulting in a significant impact, Airbus is managing this risk by working closely with insurance companies to monitor risks related to weather events and adapt coverage if required. Managing this risk also involves preparing emergency scenarios and production redistribution if parts of the company are affected. Around 10 people are dedicated to the management of insurance related topics for commercial aircraft activities, including the management of climate related risks on all sites where they analyse the level of risk (based on geographical location, construction of the site, type of activity performed) and interact with insurance companies to define the most appropriate coverage. For example, at our site in Mobile, US, a contingency plan has been developed to transfer production to other sites in case the site is affected by a destructive weather event. The cost is calculated by the number of employees in 2020 (131,349) divided by the total personnel cost for 2020 (12,548 million euro) and multiplied by 10 employees. $(12548/131349)*10 = 0.956\text{M€}$

In addition, specific costs may arise from extended insurance premiums. These costs are confidential and cannot be disclosed here.

Comment

N/A

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Technology

Substitution of existing products and services with lower emissions options

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Meeting the air transport sectoral decarbonisation objectives will require the whole ecosystem to evolve to accommodate new types of aircraft (such as electric propulsion, hydrogen storage), new energy pathways (such as hydrogen, synthetic fuel, biofuels). Airbus has identified the risk that the air transport ecosystem may not be ready to accommodate its future products developed to meet its climate change mitigation objectives. Airbus customers may be unable or unwilling to purchase products which cannot be widely operated within the available infrastructure and procedures. For instance, a future aircraft using hydrogen as a fuel would not be operable without a robust hydrogen supply infrastructure in place and adapted procedures to ensure efficiency and safety of operations. Airbus would have incurred significant development costs in order to bring a new product to market and would risk losing this investment as well as market share if the surrounding air transport system is not able to accommodate it.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

This risk scenario considers Airbus putting on the market a product such as a hydrogen fueled aircraft which customers are unwilling or unable to operate because the air transport ecosystem has not developed sufficiently. In this scenario, Airbus would not be able to recuperate its investment in the new aircraft programme, estimated at 10Bn€ (the development of large aircraft programmes are long-term projects whose costs vary greatly, moreover historical costs may be less relevant now that digital optimisation projects are in place to decrease this cost).

Cost of response to risk

478,000

Description of response and explanation of cost calculation

In order to mitigate this risk, Airbus will work with air transport stakeholders (fuel producers, airports, airlines) to anticipate the adaptations required to accommodate the new aircraft. For example, a hydrogen aircraft would require hydrogen production, distribution and storage infrastructure to be developed and deployed in order to be operative. In order to influence the development of such infrastructures, in 2018 Airbus joined the Hydrogen Council, a global initiative that brings together leading companies with a united vision and long-term ambition for hydrogen to foster the clean energy transition. Similarly to what was done for preparing the introduction of the A380 which required modifications in the airport infrastructure, Airbus does not anticipate having to fund these evolutions directly but estimates that around 5 people from the public affairs and corporate affairs departments are dedicated to this activity, focusing on building industrial partnerships to develop the relevant infrastructure, interact with authorities to secure public support to these evolutions and work with the aerospace institution to harmonise the approaches and standards. The management cost is estimated to be 0.478M€, calculated by the number of employees in 2020 (131,349) divided by the total personnel cost for 2020 (12,548 million euro) and multiplied by 5 employees. $(12548/131349)*5 = 0.478M€$

Comment

N/A

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Airbus recognises its role in contributing to reduce the global environmental footprint of the sector and the importance of aligning and respecting the commitments of the Paris Agreement. Airbus also supports the air transport sector decarbonisation roadmaps set out in the ATAG Waypoint 2050 and Destination 2050 reports to reduce emissions in line with the Paris Agreement's goal. Based on this, Airbus has identified the opportunity to meet its climate mitigation objectives and generate increased revenue by achieving its ambition to be the first aircraft manufacturer to bring to the market a climate neutral passenger aircraft by 2035. Developing a climate neutral aircraft will bring significant technological challenges as many new technology bricks have to be developed in a short period of time to enable aircraft operation without generating carbon emissions, requiring heavy investment and the creation of new energy pathways. One example of such technological challenges is the development of hydrogen as a direct fuel for aircraft or as feedstock for synthetic fuels. If Airbus succeeds in being the first aircraft manufacturer to develop such technologies and integrate them in a commercial aircraft programme, this could result in a very strong market position and result in increased revenue.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

27,400,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The scale of technological developments on the aircraft itself and in the air transport ecosystem at large is such that today Airbus estimates that it will be able to put a climate neutral aircraft on the market by 2035. It is likely that if a new technology would become available to Airbus, it would become available to competitors within the next 3 to 5 years thereafter. Airbus expects that the introduction of a new climate neutral aircraft in 2035 would result in a 10% increase in market share that could be expected to last for a maximum period of 5 years. Taking into account Airbus 2019 commercial aircraft revenue of 54.8Bn€ (2020 is considered non representative for commercial aircraft due to the important production cuts and drop in deliveries as a consequence of the COVID crisis), this would result in a maximum benefit of opportunity of $54.8 \times 0.1 \times 5 = 27.4$ Bn€ in added revenues over the period.

Cost to realize opportunity

2,000,000,000

Strategy to realize opportunity and explanation of cost calculation

Reducing emissions from our products and increasing efficiency is part of our corporate climate strategy and our product development process. In order to capitalise on this opportunity, Airbus spends 2 to 3Bn€ annually on R&D and R&T for commercial aircraft activities. This budget is split between investments in incremental developments of our current product portfolio which is required to maintain its competitiveness, as well as investment in the development of breakthrough technologies (e.g. hydrogen based systems, electric machines, energy storage and distribution) that are required for the next generation of commercial aircraft. As an example of the latter point, Airbus' ambition is to develop and put on the market the first zero emission aircraft by 2035, which will leverage the progress made on hydrogen technologies. The precise split of investment between potential incremental development and future product technology research is currently under assessment and confidential in nature so cannot be disclosed here.

Comment

N/A

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Airbus has identified the opportunity to further develop its activities linked to the sale and operation of satellite products monitoring climate parameters (e.g. Carbonsat, Cryosat). These satellites provide the scientific community and authorities with valuable data to understand the evolution of the global climate and assist decision makers in devising the most appropriate measures to mitigate the effects of climate change. For example, the European Space Agency (ESA) and Airbus are currently developing two satellites aiming at a better understanding of the climate and how life on Earth is affected by climate change:

EarthCARE: The sixth ESA Earth Explorer mission, EarthCARE (Earth Clouds, Aerosols and Radiation Explorer), will focus on clouds, tiny particles in the atmosphere – aerosols – and their influence on atmospheric radiation. Among other things, EarthCARE will draw up vertical profiles of natural and man-made aerosols, register the distribution of water and ice and their transport by clouds, and investigate the interrelationships between clouds and precipitation and their effects on radiation.

BIOMASS is the seventh mission selected by ESA as part of its Living Planet programme and addresses fundamental questions on the status and dynamics of the Earth's forests. Using a unique space-borne P-band (435 MHz) Synthetic Aperture Radar instrument, the mission will map the global distribution of biomass over a multi-year mission, allowing much better characterisation of changes in global carbon flux. The BIOMASS mission will provide, for the first time, systematically-acquired global scale maps of biomass and, more importantly, changes in biomass due to forest loss (from logging/burning) and forest regrowth.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,100,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Airbus has identified the opportunity to be selected by the ESA as the main contractor on the Copernicus Programme for operating the Land Surface Temperature Monitoring mission (LSTM) for an order value of 375M€ and the development of the Polar Ice and Snow Topographic Mission (CRISTAL) for an order value of 300M€, as well as the development of the L-band Synthetic Aperture Radar (SAR) payload for ROSE-L. Overall, the total order volume for these four missions is around 1.1Bn€. The financial impact is equal to the amount of these four missions, thus 1.1 Bn€. n€.

Cost to realize opportunity

1,030,000,000

Strategy to realize opportunity and explanation of cost calculation

In order to be seen as a credible partner to be entrusted to these critical missions, Airbus has active research partnerships with the European Space Agency, French development agency, as well as exchanges on potential developments with international agencies and institutions such as the UNFCCC. This opportunity involves operating missions on behalf of ESA for which Airbus already has the required competencies and infrastructures, with no specific costs attached to the realisation of this opportunity. The cost to realize this opportunity is equal to the development costs for the Copernicus programme work packages detailed above, which is calculated by applying the ratio of [(revenue - EBIT) / revenue] for the Airbus Defence and Space division for 2020, applied to the revenue generated by the programmes. Airbus Defence and Space 2020 revenue : 10,446M€. Airbus Defence and Space 2020 EBIT: 660M€. Revenue from opportunity: 1,100M€. $((10,446 - 660) / 10,446) * 1,100 = 1,030M€$

Comment

N/A

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Airbus has identified the opportunity to replace older generation aircraft with its efficient latest generation products (A320neo, A330neo, A350WXB) in the frame of the proposed "Green Stimulus" as part of the EU green deal. This stimulus would allow Airbus to significantly reduce emissions by replacing old aircraft with more efficient products, as

well as generating additional revenue for the Company. It is important that the replaced aircraft are dismantled appropriately, in a way that preserves the environment and ensures the effective recycling of the materials. Airbus, through its TARMAC Aerosave joint venture with SNECMA and Suez, has developed a selective dismantling process (reverse manufacturing) allowing for more than 90% of an aircraft weight to be recycled or reused, further reducing GHG emission by decreasing the need for primary material production.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

63,500,000

Potential financial impact figure – minimum (currency)
Potential financial impact figure – maximum (currency)
Explanation of financial impact figure

The "green stimulus" would aim at retiring older generation aircraft in order to replace them with more efficient - current generation - ones. This could bring some existing backlog orders forward in time as well as creating new ones. In 2019 (2020 is considered non representative for commercial aircraft due to the important production cuts and drop in deliveries as a consequence of the COVID crisis) Airbus delivered 863 aircraft for a related revenue of 54.8Bn€, equivalent to 63.5M€ per aircraft. This opportunity would therefore generate an average revenue of 63.5M€ per aircraft sold as part of the "green stimulus" scheme.

Cost to realize opportunity

56,610,000

Strategy to realize opportunity and explanation of cost calculation

The green stimulus scheme aims at replacing older generation aircraft with latest generation ones as a way to rapidly reduce greenhouse gas emissions of the fleet. Latest generation commercial aircraft currently offered by Airbus have the potential of reducing CO2 emissions by 20-25% compared with previous generation aircraft and only represent around 10% of the fleet currently in service. The strategy to realise the opportunity is for Airbus to advocate that public support is needed to accelerate the replacement of the fleet with latest generation aircraft as a way to reduce emissions. For

example, the Airbus A320 NEO offers a 20% CO₂ reduction per passenger-kilometer compared to the previous generation A320 CEO. The cost to realise this opportunity is equal to the manufacturing cost of each additional aircraft sold, which is calculated by applying the ratio of [(revenue - EBIT)/revenue] for the Airbus commercial aircraft activities for 2019 (2020 is considered non representative for commercial aircraft due to the important production cuts and drop in deliveries as a consequence of the COVID crisis), applied to the revenue generated by each additional aircraft sold. 2019 revenue from commercial aircraft activities: 54,775M€
 2019 EBIT from commercial aircraft activities: 5,947M€. Revenue from opportunity: 63.5M€. $((54,775 - 5,947) / 54,775) * 63.5 = 56.61\text{M€}$

Comment

N/A

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
IEA B2DS	Airbus regularly issues (e.g. once a year) a global market forecast which identifies market trends. Building on this forecast and in an effort to develop understanding of the carbon budget for the aviation sector relative to the more

	<p>global context, forecasts of CO₂ emissions were assessed for the entire world and for the aviation sector, mainly based on IPCC RCPs, IEA (450, 2DS, B2DS) and ICAO scenarios and assumptions.</p> <p>The scenario analysis undertaken was sector specific, and is relevant for all of Airbus Commercial activities. We have selected, and when relevant calibrated, the various inputs to consider the 2015-2050 time horizon. This time horizon is relevant to the aviation sector (considering the long life of aircraft on the market (25 years indicative)).</p> <p>We have developed our understanding of the uncertainties around assumptions and longer term evolutions by:</p> <ul style="list-style-type: none"> -Performing a comparison with other various scenarios from different origins: IEA B2DS, Irena Remap, one scenario from an NGO, one scenario from a major oil company and one scenario from an independent consultancy. -Using Nationally Determined Contributions (NDCs) to identify domestic trends and better understand variations between overall global trends and specific local ones. -Looking at longer term projections up to 2100. <p>Climate related scenario analysis is used in two contexts: Industrial operations and Aircraft operations. Climate-related scenarios are used to inform business strategy decisions, in particular for emission reduction pathways. The outcome of this work was shared by Airbus as part of its contribution to the goals set by the Air Transport Action Group (ATAG). The ATAG goals were designed to align to a carbon budget for aviation to be consistent with a well-below 2°C trajectory. The climate scenario analysis shows that the ATAG Goals require the full leverage of the basket of measures including technology, operational and infrastructure improvements, deployment of sustainable fuels and compensating mechanisms such as offsetting .</p> <p>In line with the scenario analysis and the ATAG ambition, Airbus has reinforced its services offer addressing fuel efficiency and emissions reductions. This includes for instance upgrades packages, including Descent Profile Optimization Services (updating the Flight Management System to optimize programmed descent profiles on A320 CEO and A330 CEO aircraft and reduce fuel burn) or sharklets wingtip retrofit for the A320 family that aim at reducing fuel consumption up to 4%. NAVBLUE, a fully owned Airbus subsidiary, proposes solutions and software that improve Flight Operations fluidity and efficiency highly contribute to reducing fuel consumption and noise: this includes for instance fuel monitoring solutions based on data analytics, but also pilot applications allowing them to leverage their contribution to airline's fuel saving programs.</p> <p>The scenario analysis also pushed Airbus to commit to the ambitious</p>
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	engagement of reaching net zero emissions before 2050 on site and industrial operations.
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C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>The R&O analysis pushed Airbus to realize the short term opportunity of reducing emissions of its existing products and services, through a services offer addressing fuel efficiency and emissions reductions. Airbus took the decision to develop this new service, which includes for instance upgrades packages, including Descent Profile Optimization Services (updating the Flight Management System to optimize programmed descent profiles on A320 CEO and A330 CEO aircraft and reduce fuel burn) or sharklets wingtip retrofit for the A320 family that aim at reducing fuel consumption up to 4%. NAVBLUE, a fully owned Airbus subsidiary, proposes solutions and software that improve Flight Operations fluidity and efficiency highly contribute to reducing fuel consumption and noise: this includes for instance fuel monitoring solutions based on data analytics, but also pilot applications allowing them to leverage their contribution to airline's fuel saving programs. In addition, Airbus offers dedicated fuel efficiency training courses and fuel consulting missions (eg Navblue Fuel and Flight Efficiency Consulting Service). The service is already operational and fulfils expectations.</p> <p>In 2019, Airbus launched the Digital Design, Manufacturing & Services (DDMS) programme. The aim of this program is to rethink the way we design, manufacture and operate our products, keeping in mind the industrial system and services ambitions from the start. Five key value delivery streams were selected to pull them all. One of these values is sustainability. The purpose of this program applied to sustainability is to provide integrated processes, methods, tools and transformation levers to enable to predict and analyse the environmental impact for new products, services and industrial system by around 2030. In 2021, this</p>

		programme is still ongoing and is progressing according to plan.
Supply chain and/or value chain	Yes	<p>Based on the R&O analysis and identification, material information has helped to better determine the impacts of climate risks occurring in the supply chain.</p> <p>In order to develop the required mitigation plan, Airbus has created the Sustainable Supply Chain Roadmap (SSCR) in 2020, looking at the whole spectrum of sustainability (including climate change) in our supply chain.</p> <p>The SSCR has established a structured plan to manage the climate impact of the supply chain and develop collaboration on the topic with key suppliers to be deployed in a short timeframe (2 years) through:</p> <ul style="list-style-type: none"> - The reinforcement of the Airbus Supplier Code of Conduct, additional formal commitment campaigns for existing contracts, and further integration in contracts for new contracts. This supports all dimensions of sustainability. This code is built on an industry standard (IFBEC) with Airbus specific additions - The assessment process of our suppliers for sustainability purpose, starting with the most risky suppliers where we currently have 72% of suppliers assessed. - The CDP engagement program launched with our top suppliers to promote a better understanding of their impact and as a consequence a better integration of those in their strategy
Investment in R&D	Yes	<p>The R&O analysis shows that Airbus should focus on developing technologies to reduce emissions of its products. New technologies and design including operational breakthrough solutions for existing and future products among which hydrogen-based solutions, blended wing-body, open rotor, sustainable aviation fuels are being developed.</p> <p>As an example, the Company revealed three concepts for the world's first zero-emission commercial aircraft in September 2020. These concepts each represent a different approach to achieving zero-emission flight, exploring various technology pathways and aerodynamic configurations in order to support the Company's ambition of leading the way in bringing the lowest possible climate impact solutions to the aviation industry.</p> <p>Airbus is evaluating, maturing and validating these technologies in order to put a zero-emission aircraft on the</p>

		market by 2035.
Operations	Yes	As part of its “High5+” plan to reduce CO2 emissions from industrial operations by 40% by 2030 compared to 2015, an opportunity has been identified to reduce emissions through the use of Sustainable Aviation Fuels (SAF) in the fleet of “Beluga” transport aircraft. The beluga ST aircraft has used SAF since December 2019 followed progressively by Beluga XL. The resulting savings in 2019 and 2020 were about 460 tonnes of CO2. In addition, Airbus has offered sustainable aviation fuel (SAF) for delivery and customer acceptance flights since 2016.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	<p>Climate risks and opportunities result in business decisions to address risks or capture opportunities as described in previous questions.</p> <p>Relevant related financial impacts are fully integrated into our corporate financial planning and budgeting. For instance, the revenue line can integrate market opportunity capture while associated production costs or CapEx are budgeted accordingly. Similarly, insurance costs are budgeted and R&D expenses are anticipated over a longer time horizon. M&A strategy linked to climate risk and opportunity management also influences financial planning with the integration of funding needs to group needs both in terms of liquidity and capital requirements. This was the case for instance in 2020 with the launch of a joint-venture with ElringKlinger to support our Hydrogen ambitions. A long term plan incorporating business decisions and strategy (3-5 year horizon) is updated on a yearly basis and provides visibility for defining the relevant capital allocation and access-to-capital strategy while short term budgeting enables a closer steering of financials.</p> <p>In addition, CapEx assessments include a CO2-incentive component through a CO2 shadow pricing mechanism and therefore impacting actual expenses and related financial planning. Case study : In Saint Nazaire, a paint shop project has been influenced by the review of its CO2 emissions. The originally planned boiler was therefore replaced by a heat pump with higher cost but lower CO2 emissions. This more expensive option was timely budgeted so that appropriate financial resources could be secured.</p>

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based) +3 (upstream)

Base year

2015

Covered emissions in base year (metric tons CO₂e)

1,060,138

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

94.4

Target year

2030

Targeted reduction from base year (%)

40

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

636,082.8

Covered emissions in reporting year (metric tons CO₂e)

880,429

% of target achieved [auto-calculated]

42.3786808887

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target is part of our “High5+” plan to reduce emissions by 40% by 2030 (baseline 2015). The target covers scope 1, scope 2 and a subset of scope 3 (upstream logistics and transportation). It has been calculated following the SBT methodology and updated in 2019 in line with the “well below 2°C scenario”. It has not been certified by SBTi as the perimeter does not include sufficient scope 3 emissions yet.

The 2020 status shows a significant decrease of environmental footprint compared to 2019 due to the unexpected and unprecedented COVID-19 crisis, materially affecting the Company’s commercial aircraft operations. CO₂ emissions have decreased by around 20% in 2020, in part due to the decrease of industrial activities mainly in the Company’s commercial aircraft operations. Nevertheless, significant efforts have been made on all environmental aspects with regards to metering and digitising data acquisition and analysis in order to comply with long-term objectives.

Target reference number

Abs 2

Year target was set

2019

Target coverage

Business division

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based) +3 (upstream)

Base year

2019

Covered emissions in base year (metric tons CO₂e)

909,407

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

77.5

Target year

2020

Targeted reduction from base year (%)

2.7

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

884,853.011

Covered emissions in reporting year (metric tons CO₂e)

723,604

% of target achieved [auto-calculated]

756.7120763962

Target status in reporting year

Achieved

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target is an annual target set for Airbus (42 sites across Airbus Divisions, excluding Subsidiaries and Airbus sites outside Europe. Additional sites are integrated in the scope of this target each year, when efficient monthly monitoring and project roadmap are available), in line with the well-below 2°C scenario.

Target reference number

Abs 3

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Base year

2019

Covered emissions in base year (metric tons CO₂e)

108,356

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

19

Target year

2030

Targeted reduction from base year (%)

30

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

75,849.2

Covered emissions in reporting year (metric tons CO₂e)

74,667

% of target achieved [auto-calculated]

103.6367775358

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

This target concerns the reduction of CO₂ emissions from our fleet of specialised transport aircraft (Beluga) used for internal logistic transporting aircraft structures between production sites and assembly lines. The objective is to reduce Beluga emissions by 30% by 2030 (2019 baseline) through the gradual introduction of Sustainable Aviation Fuels (SAF) in the fuel used by the aircraft fleet. This comes as a contribution to our global High5+ plan to reduce industrial emissions (scope 1, 2 and a subset of scope 3) by 40% by 2030 (2015 baseline), which was set up using science based target methodology and guidelines but has not been submitted for validation since industrial emissions do not cover the required two-third of value chain emissions.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2019

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Percentage

Target denominator (intensity targets only)

Base year

2019

Figure or percentage in base year

10

Target year

2030

Figure or percentage in target year

100

Figure or percentage in reporting year

20

% of target achieved [auto-calculated]

11.1111111111

Target status in reporting year

Underway

Is this target part of an emissions target?

Yes, this comes as a contribution to our global High5+ plan to reduce industrial emissions (scope 1, 2 and a subset of scope 3) by 40% by 2030 (2015 baseline) as detailed in Abs 1.

Is this target part of an overarching initiative?

Other, please specify
High5+

Please explain (including target coverage)

This target concerns the use of renewable electricity at our European sites. The objective is to gradually increase the share of renewable electricity to 100% by 2030 (baseline 2019). This comes as a contribution to our global High5+ plan to reduce industrial emissions (scope 1, 2 and a subset of scope 3) by 40% by 2030 (2015 baseline).

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	52,500
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Other, please specify

Other, please specify

Renewable energy certificates, Sustainable Avion Fuel for internal flights (scope 1)

Estimated annual CO2e savings (metric tonnes CO2e)

52,500

Scope(s)

Scope 1

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

6,000,000

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

N/A

C4.3c**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Dedicated budget for energy efficiency	Led by Environmental Affairs, Airbus launched a program to achieve its High5+ plan objectives, deploying a global and coordinated footprint reduction plan with consolidated roadmaps by different aspects, energy, water, waste and VOCs. For Airbus Commercial activities in Europe ambitious yearly objectives have been set covering all activities from buildings and manufacturing processes to ICT equipment. It supports and enables deployment of smaller and larger projects, including energy efficiency projects, with short and long-term time horizons. The High5+ program has a dedicated budget for improvements that may not be invested in under normal business circumstances, allowing longer return on investment criteria to be applied to energy efficiency projects.
Financial optimization calculations	Financial optimization calculations is a driver for all of Airbus investments, which includes energy efficiency and CO2.

Other CO2 Evaluation	CO2 impact evaluation is now mandatory for each new CapEx investment. Airbus has set processes to review the CO2 impact of each new investment and flags up investments with missing CO2 evaluation.
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C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

531,868

Comment

These data have been recalculated including subsidiaries, so as to cover all Airbus data consistent with global reporting and not only target related like precedent year disclosure.

Scope 2 (location-based)

Base year start

January 1, 2015

Base year end

December 31, 2015

Base year emissions (metric tons CO2e)

423,863

Comment

These data include recalculation with update of Emission Factors on Electricity.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

0

Comment

No market based data in 2015

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

469,862

Start date

January 1, 2020

End date

December 31, 2020

Comment

N/A

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

578,005

Start date

January 1, 2019

End date

December 31, 2019

Comment

N/A

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

N/A

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

365,014

Scope 2, market-based (if applicable)

312,841

Start date

January 1, 2020

End date

December 31, 2020

Comment

N/A

Past year 1

Scope 2, location-based

405,686

Scope 2, market-based (if applicable)

375,790

Start date

January 1, 2019

End date

December 31, 2019

Comment

N/A

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Please explain

This category has been identified as relevant through sectoral materiality assessment. Evaluation of Purchased Goods and Services is underway. A sectoral method is currently being developed with the support of the IAEG, pending official release. Upon this methodology being available, Airbus will be in a position to estimate the Purchased Goods and Services impact.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

This category has been assessed as not material for our activity.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

128,485

Emissions calculation methodology

Emissions calculated cover the perimeter of oversize transportation, through rail, road & sea transportation modes. Kms are collected for the different modes for all related routes and are converted to CO2 emissions with Emission Factors database.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

This category has been identified as relevant through sectoral materiality assessment. Emissions calculated cover perimeter of oversize transportation, through rail, road & sea transportation modes.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

22,286

Emissions calculation methodology

Airbus' travel agency provides the information on the business travel in planes using the ICAO methodology and emission factors to calculate this figure.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The scope of this category includes business travel flights.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

This category has been identified as relevant through sectoral materiality assessment. Evaluation is under process.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

443,252,000

Emissions calculation methodology

In order to provide the level of transparency expected by stakeholders and following recommendations from the TCFD, Airbus has extended its reporting to include the in-use emissions of commercial aircraft delivered in 2020 (Scope 3 – Use of sold products). In 2020, Airbus delivered 566 aircraft with resulting estimated life-time emissions of around 440MtCO₂e (of which 80Mt are linked to upstream fuel production) and average efficiency of 63.5gCO₂e per passenger-kilometre.

Airbus' emission calculation methodology was developed by a joint team comprising key personnel from the Engineering and Environment departments and is aligned with the guidance provided by the Greenhouse Gas Protocol. External auditors performed a review of the calculation methodology applied by Airbus and assessed the reasonableness of the supporting assumptions. Airbus has used a number of assumptions based on internal and external information including assumptions based on publicly-available data. These assumptions include the aircraft load factor, the current

penetration rate of sustainable aviation fuels, their CO₂ reduction potential and the indirect emissions index from jet fuel production, emission factors, as well as aircraft operational usage and average in-service lifetime. Primary data collected within the Company was also used, such as the type of sustainable aviation fuel considered or aircraft performance and configuration parameters.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

N/A

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Following materiality assessment done on all scope 3 categories at sectoral level, this category has been identified as not relevant for our sector

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

15.68

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

782,703

Metric denominator

unit total revenue

Metric denominator: Unit total

49,912

Scope 2 figure used

Market-based

% change from previous year

18.38

Direction of change

Increased

Reason for change

Numerator decrease is due to energy and emission saving measures as well as production rates/manufacturing activities decrease due to CoVid19 pandemic.

Denominator decrease is mainly due to commercial aircraft deliveries and associated revenues decreasing due to CoVid19 pandemic.

Intensity figure increase is due to emissions not being entirely proportional to industrial activity and therefore revenue.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	458,477	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	11,385	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO ₂ e)
France	189,534
Germany	157,318
United Kingdom of Great Britain and Northern Ireland	37,033
Spain	39,628
Other, please specify Rest of World	46,349

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO ₂ e)
Airbus Commercial Aircraft	355,628
Airbus Helicopters	54,042
Airbus Defence & Space	60,192

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO₂e.

	Gross Scope 1 emissions, metric tons CO ₂ e	Comment
Transport OEM activities	469,862	N/A

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
France	55,144	49,419	610,001	82,483
Germany	128,357	110,864	308,624	41,771
United Kingdom of Great Britain and Northern Ireland	17,481	13,771	70,772	15,018
Spain	54,432	29,434	187,890	86,289
Other, please specify Rest of World	109,600	109,353	238,892	739

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Airbus Commercial Aircraft	244,255	218,348
Airbus Helicopters	23,434	20,265
Airbus Defence & Space	97,325	74,228

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO₂e.

	Scope 2, location-based, metric tons CO ₂ e	Scope 2, market-based (if applicable), metric tons CO ₂ e	Comment
Transport OEM activities	365,014	312,841	N/A

C-TO7.8

(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.

Activity

Aviation

Emissions intensity figure

0.0000635

Metric numerator (Scope 3 emissions: use of sold products) in Metric tons CO₂e

363,939,000

Metric denominator

p.km

Metric denominator: Unit total

5,731,272,837,343

% change from previous year

-4.66

Vehicle unit sales in reporting year

566

Vehicle lifetime in years

22

Annual distance in km or miles (unit specified by column 4)

2,415,810

Load factor

82.5%

Please explain the changes, and relevant standards/methodologies used

Emissions considered for this calculation are total direct emissions arising from products delivered in 2020 over their entire lifetime as per the scope 3 “use of sold product” calculation. Please note that the absolute scope 3 figure reported in C6.5 includes indirect emissions linked to fuel production, whereas this efficiency metric only includes direct emissions.

2019 data: efficiency metric 66.6gCO₂/pax.km, total direct emissions 604,307,000 tCO₂e, total pax.km 9,072,735,238,665

The decrease of the value compared to the previous year (2019) can be attributed to a higher proportion of latest generation products (A320 NEO, A350 XWB, A330 NEO A220) versus the outgoing generation (A320 CEO, A330 CEO, A380), improving the overall efficiency of the delivered fleet.

C7.9**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

C7.9a**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO ₂ e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	23,190	Decreased	2.43	Purchase of Guarantees of Origin. In 2020 we avoided 52 173 tons CO ₂ e through purchase of Guarantees of Origin. In 2019, 28 983 tons of CO ₂ e were avoided this way. Total 2019 scope 1+2: 954000 tons CO ₂ e. The change in

				emissions is therefore $[52173-28983=]$ 23190 tons CO ₂ e. This represents a $[23190*100/954000]=$ 2.43% reduction from previous year total scope 1+2.
Other emissions reduction activities	2,146	Decreased	0.23	Energy optimisation projects delivered in 2020 avoided 2146 tonnes of CO ₂ e. Total 2019 scope 1+2: 954000 tons CO ₂ e. This represents a $[2146*100/954000]=$ 0.23% reduction from previous year total scope 1+2.
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology	3,045	Decreased	0.4	Electricity Emission factors updated according to IEA 2019 v1.01 for 2020 data and IEA 2018 v1.01 for 2019 data. Canada emission factor replaced by Quebec emission factor - applied to Mirabel Site Electricity consumptions.
Change in boundary	26,265	Increased	2.75	Mobile FAL is now included in 2019 and 2020 according to reporting rules. Total 2019 scope 1+2: 954000 tons CO ₂ e. This represents a $[26265*100/954000]=$ 2.75% reduction from previous year total scope 1+2.
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	25,012	2,039,553	2,064,565
Consumption of purchased or acquired electricity		226,300	1,068,785	1,295,086
Consumption of purchased or acquired heat		0	121,093	121,093

Consumption of self-generated non-fuel renewable energy		866		866
Total energy consumption		252,179	3,229,431	3,481,610

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,230,198

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

56.1

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,493

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

63

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

716,708

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

71.5

Unit

kg CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Propane Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,781

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

63

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

2,913

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

69.2

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Distillate Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

34,679

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

74

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Butane

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

226.8

Unit

metric tons CO2e per MWh

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Solid Biomass Waste

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

23,727

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

0

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

Fuels (excluding feedstocks)

Aviation Gasoline

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

53,066

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

70

Unit

metric tons CO2 per GJ

Emissions factor source

Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions

Comment

n.a

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	866	866	866	866
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Denmark

MWh consumed accounted for at a zero emission factor

239

Comment

n.a

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

France

MWh consumed accounted for at a zero emission factor

82,485

Comment

n.a

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Germany

MWh consumed accounted for at a zero emission factor

41,771

Comment

n.a

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

Spain

MWh consumed accounted for at a zero emission factor

86,289

Comment

n.a

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

United States of America

MWh consumed accounted for at a zero emission factor

500

Comment

n.a

Sourcing method

Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Low-carbon energy mix

Country/area of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor

15,018

Comment

n.a

C-TO8.5

(C-TO8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Activity

Aviation

Metric figure

643,000

Metric numerator

tCO₂

Metric denominator

Production: Aircraft

Metric numerator: Unit total

363,939,000

Metric denominator: Unit total

566

% change from previous year

-8.2

Please explain

Emissions considered for this calculation are total direct emissions arising from products delivered in 2020 over their entire lifetime as per the scope 3 “use of sold product” calculation. Please note that the scope 3 figure reported in C6.5 includes indirect emissions linked to fuel production, whereas this efficiency metric only includes direct emissions.

2019 data (for evolution calculation): total direct emissions 604,307,000 tCO₂e, total deliveries 863 aircraft, metric = 700240 tonnes of CO₂e per aircraft. The decrease of the value compared to the previous year (2019) can be attributed to a higher proportion of latest generation products (A320 NEO, A350XWB, A330 NEO A220) versus the outgoing generation (A320 CEO, A330 CEO, A380), improving the overall efficiency of the delivered fleet.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-TO9.3/C-TS9.3

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Activity

Aviation

Metric

Production

Technology

Other, please specify

Vehicle with improved performance

Metric figure

431

Metric unit

Other, please specify
aircrafts

Explanation

Airbus delivered 431 A320 neo family aircrafts in 2020, with -15% to – 20% fuel burn compared to A320XLR.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	n.a

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Activity

Aviation

Technology area

Other, please specify
R&D for the following technologies: Airframe, Aerodynamics, Alternative Fuels, Propulsion, Ground handling operations, and Electric Planes

Stage of development in the reporting year

Small scale commercial deployment

Average % of total R&D investment over the last 3 years

81-100%

R&D investment figure in the reporting year (optional)

2,900,000,000

Comment

The figure is the sum for: airframe, aerodynamics, sustainable fuels, propulsion, ground handling operations, electric planes. The precise distribution of this budget is confidential and cannot be shared.

The Company is committed to contributing to developing, building and testing

alternative-propulsion systems – powered by electric, hydrogen and/or solar technology – to enable the aviation industry to disruptively reduce the CO₂ emissions of commercial aircraft, helicopters, satellites and future urban air mobility vehicles.

The Company's work in electric flight has laid the groundwork for our future concept of zero-emission commercial aircraft known as ZEROe. The Company is now exploring a variety of hybrid electric and hydrogen technology options. From hydrogen propulsion (via direct burn or fuel cells) to hydrogen-based synthetic SAF, from pod configuration to blended-wing aircraft, The Company is evaluating, maturing and validating radical technological breakthroughs which could be hosted on its zero-emission aircraft by 2035. The Company is also investing in the proper facilities to test these new technologies. Inaugurated in October 2019, the E-Aircraft System House ("EAS") is, with more than 3,000m², the largest test house dedicated exclusively to alternative propulsion systems and fuels in Europe. This means the Company can now test the latest electric motors and hybrid-electric engines directly on its own premises, and develop its own low-emission alternative propulsion units.

Since 2014, the Company has been exploring how recent technology advancements – from battery capacity and autonomy to electric propulsion – can help drive the development of new kinds of aerial vehicles with the potential for zero emissions when powered by renewable energies. In May 2018, the Company created the Urban Mobility entity to take its exploration into cutting-edge commercial urban air mobility solutions and services to the next level.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY21_Airbus_Assurance Report on NFI_08.04.21 Vsignée.pdf

Page/ section reference

In the verification report, the page 1 mentions a list of Non-financial indicators, specified in Annex 1 and including Scope 1 emissions, which have been verified by E&Y.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY21_Airbus_Assurance Report on NFI_08.04.21 Vsignée.pdf

Page/ section reference

In the verification report, the page 1 mentions a list of Non-financial indicators, specified in Annex 1 and including Scope 2 emissions, which have been verified by E&Y.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY21_Airbus_Assurance Report on NFI_08.04.21 Vsignée.pdf

Page/section reference

In the verification report, the page 1 mentions a list of Non-financial indicators, specified in Annex 1 and including Scope 3 Business travel emissions, which have been verified by E&Y.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FY21_Airbus_Assurance Report on NFI_08.04.21 Vsignée.pdf

Page/section reference

In the verification report, the page 1 mentions a list of Non-financial indicators, specified in Annex 1 and including Scope 3 Business travel emissions, which have been verified by E&Y.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100


C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE 3000, with limited assurance	In the verification report, the page 1 mentions a list of Non-financial indicators, specified in Annex 1 and including energy consumption, which have been verified by E&Y.  1

 1FY21_Airbus_Assurance Report on NFI_08.04.21 Vsignée.pdf

C11. Carbon pricing**C11.1**

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

38.8

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2020

Period end date

December 31, 2020

Allowances allocated

117,870

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO₂e

182,375

Verified Scope 2 emissions in metric tons CO₂e

0

Details of ownership

Facilities we own and operate

Comment

Includes Airbus industrial assets, internal production flights through Beluga.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Airbus has in place a regulatory survey process for monitoring, anticipating and identifying legal and regulatory texts possibly applicable or that may impact Airbus' activities. This activity is performed on a daily basis by a dedicated team of experts. Under the regulatory surveillance process, Airbus monitors the legal and regulatory discussions and processes in the relevant countries for the companies' activities in order to anticipate systems that may be applicable in the future or that are innovative in terms of trend (this includes international, regional and national systems, as for example, UNFCCC discussions, existing cap-and-trade systems worldwide, the ICAO CORSIA scheme, initiatives linked to environmental taxation or charges,

among others). In addition, special monitoring is performed for the carbon pricing systems that are currently regulating Airbus activities, e.g. EU ETS. When a potentially applicable system or modification is identified, the regulatory team assesses it and informs the corresponding environmental roadmap and, when appropriate, the relevant functions and/or multi-functional team. Later, a strategy is defined depending on the system. The process of yearly compliance for the EU ETS is nationally implemented whilst overviewed and coordinated by a multifunctional team.

As a result of this monitoring process and exchanges with the various functions and divisions, the High5+ emission reduction plan was built in order to avoid and reduce emissions first and compensate for the residual ones. The plan includes a carbon price going up to 100€ per ton by 2030, along with other energy efficiency related activities. A concrete example of this is the installation of wood boiler to replace a gas boiler at the Toulouse site, used for the heating of assembly areas. This investment dramatically reduced CO2 emissions, therefore reducing the costs associated with, for example, EU ETS allowances.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Methane avoidance

Project identification

Everbright Landfill Gas

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

43,914

Number of credits (metric tonnes CO2e): Risk adjusted volume

43,914

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Navigate GHG regulations
Drive low-carbon investment
Stress test investments
Identify and seize low-carbon opportunities

GHG Scope

Scope 1
Scope 2

Application

Commercial Aviation division.

Actual price(s) used (Currency /metric ton)

35

Variance of price(s) used

In 2011 the internal carbon price was 20 euros/ton

Type of internal carbon price

Shadow price

Impact & implication

The shadow price of carbon is used in the CAPEX process to make decisions based on the adjusted return on investment once the price of carbon is taken into account. For example, at the Toulouse site, the paint shop was equipped with a heat pump that is powered by biomass, reducing electricity and gas consumption (Scope 1 and Scope 2). This was a low carbon taken directly as a result of the shadow price, using the price as a 'stress test' looking 10 years ahead.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
 Yes, our customers
 Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

1

% total procurement spend (direct and indirect)

90

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

As a baseline, Airbus supplier contracts include requirements for them to comply with all applicable laws and regulations regarding production, products and services and requirements for suppliers to provide information on environmental, health and safety matters. In addition, suppliers are requested to implement an Environmental Management System which shall consider continuous improvement through the mitigation of significant environmental aspects and impacts, including greenhouse gases and air emissions. In 2018 Airbus implemented the IFBEC Model Supplier Code of Conduct in its entirety as the Airbus Supplier Code of Conduct. The Supplier Code of Conduct was sent to the 12,000 main suppliers across the world with a letter from the Airbus' Chief Procurement Officer and the Airbus General Counsel requesting a commitment to the Code. Airbus expects its suppliers to comply with the key values set out in this Code and to conduct business in accordance with all applicable laws and regulations of their operating markets, the countries in which operations are managed, or services provided. In Airbus Ethics and Compliance Code of Conducts Airbus suppliers acknowledge to aspire to become and eco efficient enterprise, promote eco efficiency to reduce global environmental footprint. As a way to drive engagement from suppliers and gather valuable insight on CO2 emissions in the supply chain, Airbus joined the CDP supply chain engagement program in 2019. For the first year, the program will cover Airbus' top 100 suppliers representing around 90% of total procurement spend for Airbus commercial.

Impact of engagement, including measures of success

Airbus expects the CDP Supply Chain Engagement Program to provide visibility on GHG emissions for around 90% of the total procurement spent for Airbus Commercial. For its first full campaign as a member of the CDP supply chain campaign gathering 2020 emission data, Airbus obtained a 49% response rate directly from selected suppliers. With regards to the rest of its suppliers not included in the CDP Supply Chain Engagement Program, Airbus expects its suppliers to comply with the key values set out in its Code of Conduct and to manage business in accordance with all applicable laws and regulations and in accordance to their own targets on their Environmental Management Systems. In Airbus Ethics and Compliance Code of Conducts Airbus suppliers acknowledge to aspire to become an eco efficient enterprise, promote eco efficiency to reduce global environmental footprint. In addition, as a result of IAEG working group, a first GHG accounting for Airbus Commercial has been performed using 2018 spend data. The result can help to identify the more GHG intensive commodities/MFT and help to prioritize efforts to apply a GHG reduction program in the frame of existing Procurement Supplier Development Process.

Comment

Suppliers are also expected to cascade these principles throughout their own supply chains.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

The vast majority (estimated at over 90%) of our value chain emissions come from the operation of the commercial aircraft products we deliver. Airlines are therefore the most relevant group of customers to engage with in order to share the Airbus strategies and best practices to reduce emissions arising from the operation of its products.

Airbus is addressing the challenges for aviation to reduce emissions (CO₂ mainly) by proposing innovation through best in class products and services but also in promoting environmental best practices to Airlines. To this end Airbus is leading the "Sustainable Aviation Engagement Programme" (SAEP), which aims at collaborating with customers

to improve environmental and climate performance. The SAEP is an exciting and innovative initiative that aims at establishing long-term partnership and engagement with the leading airlines in sustainable aviation and eco responsible development, in order to reduce the environmental footprint of Airbus aircraft in operations. In case of common synergy on environmental strategy and objectives, Airbus and its customers can collaboratively define and set-up long-term partnerships and projects. This Programme brings together the expertise from across Airbus specialists, in cooperation with key stakeholders, offering a consolidated and fully rounded view of products and services towards a sustainable aviation. Based on four pillars (aircraft technology, aircraft operations, Air Traffic Management -ATM- and sustainable aviation fuels), the programme enables airlines to minimise their environmental impact, by harnessing the full potential of Airbus' latest generation, fuel efficient aircraft to minimise fuel burn and noise in their operations. Airbus is committed on long-term cooperation projects with its customers i.e. Cathay Pacific, IAG (British Airways, IBERIA), AirFrance/KLM, Thai Airways, Thai AirAsia, Garuda.

Impact of engagement, including measures of success

Engagement with customers on climate change related topics resulted in some partnerships / cooperation enabling flights with sustainable fuels or supporting the implementation of a monitoring, verification and reporting system (MRV) in the context of ICAO carbon offsetting programme, CORSIA. Examples of cooperation through the « Sustainable Aviation Engagement Programme» CO2 emissions reduction through the use of Sustainable Aviation Fuels: - Installation in Toulouse of a facility to allow Airlines to fly with Sustainable Fuels for their delivery flights. - Cooperation with Cathay Pacific to deliver 48 A350 from Toulouse to Hong-Kong with Sustainable Fuels. - Cooperation with China Airlines and IBERIA on A350 deliveries with Sustainable Fuels, with Delta Airlines on A330neo deliveries with sustainable fuels -JetBlue delivery flight from US Mobile Alabama Reducing use-phase GHG emissions through carbon offsetting - Support to with DGCA Indonesia and Garuda Indonesia to define and test the plan to Monitor, Report and Verify the carbon emissions for Garuda (CORSIA MRV implementation plan). - Support to Thailand aviation (CAAT, Thai Airways and Thai AirAsia) on CORSIA MRV.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

100

Please explain the rationale for selecting this group of customers and scope of engagement

The vast majority (estimated at over 90%) of our value chain emissions come from the operation of the commercial aircraft products we deliver. Airlines are therefore the most relevant group of customers to engage with in order to share the Airbus strategies and best practices to reduce emissions arising from the operation of its products.

This engagement is offered to Airbus' global airline customer base, meaning potentially all customers can participate. Every year, Airbus holds the Fuel savings & emissions reduction seminar. The objective of the two and half day seminar involving airlines from all around the world is to share fuel saving practices and initiatives to reduce emissions. We help airlines reduce their environmental footprint and operating costs by showing them short to midterm pragmatic solutions, driving future developments to match their expectations. We also take advantage of this event to gather feedback from our customers to improve our services and products for emissions reductions.

Impact of engagement, including measures of success

As information sharing is a difficult impact to measure, the impact of engagement is therefore measured through the number of persons attending: the opportunity to share information, new ideas and network with people facing and enthusiastically embracing similar challenges is seen as a major benefit by the participants every year, with a growing participation. In 2019, 160 people participated to the seminar, representing 50 Airlines and 10 external bodies such as Airport / Air Navigation Service Providers / Original Equipment Manufacturer / Environmental companies / Fuel provider as well as experts from Airbus involved in fuel efficiency & reduction of emissions from engineering, customer services, programmes, environmental affairs and innovation. In 2020, the event did not take place as usual due to the COVID restrictions on travel, but Airbus ensured the engagement with customers was maintained by holding two virtual seminars : one in April which gathered 300 participants and another in October with 360 participants. Measuring the impact of this engagement is difficult as our customers do not generally attribute their change in behaviour to information they have received during one of the Airbus events. Nevertheless, Airbus is monitoring publically available information related to commitments taken by our customers, such as for exemple the commitment to use SAF in their operations as SAF uptake is one of the topics promoted during the engagement events. For instance, British Airways has pledge to use 10% SAF as part of its operations by 2030, Delta have implemented the use of SAF for delivery flights; and Finnair have announced they expect to spend 10 million euros on SAF annually by the end of 2025.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

The end of life processing of our commercial aircraft product is an important climate-related part of the value chain as it has the potential to reduce GHG emission by decreasing the need for primary material production, providing the aircraft is appropriately dismantled and its materials segregated and recycled.

Airbus has set up a partnership with engine manufacturer Safran and waste and recycling specialist Suez through the TARMAC Aerosave joint venture in order to provide aircraft dismantling and recycling services for commercial aircraft at the end of their operational lives. The success of this initiative is measured in terms of the overall weight percentage of the aircraft that can be recycled or reused. Today, more than 90% of an aircraft weight is recycled or re-used through a selective dismantling (reverse manufacturing) process), reducing GHG emission by decreasing the need for primary material production.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify Carbon standard	Support	In 2020, Airbus has actively participated at the International Civil Aviation Organisation (ICAO) in discussions to define standards and recommended practices aiming at minimizing emissions from aircraft and engines, as well as defining policies with regards to local air quality climate change, and noise.	Airbus supports the ICAO initiative, believing this development means the international community is one step closer to a worldwide agreement on CO2 emissions
Clean energy generation	Support	At European level, Airbus has engaged with the EU Commission on climate change policies discussions such as the "ReFuel Aviation" initiative. At national level, Airbus has engaged with France, Spain, UK and Germany in order to exchange around federal policies on climate change. In particular in France, Airbus has cooperated with the CORAC (Conseil pour la Recherche Aeronautique Civile) on research for technology and fuels.	Airbus believes that the European Green Deal and the ReFuelEU Aviation initiative can play an important role in speeding up the development, production and use of drop-in sustainable aviation fuels in Europe.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

The Groupement des Industries Françaises Aéronautiques et Spatiales (GIFAS)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The voice of our industry in France, representing the industry on French, European and international bodies, both public and private, coordinating industrial and business activities and harmonizing technical procedures. GIFAS has a role to play in promoting sustainable practices of the sector, including climate change best practices. Airbus is participating at two levels, at CEDD ("Commission environnement développement durable"), founder and former chair of the commission, and CORAC ("Comité d'orientation de la recherche aéronautique civile") regrouping all aviation stakeholders, a specific carbon group has been set up and coordinated by Airbus.

How have you influenced, or are you attempting to influence their position?

Airbus is involved in working groups and pursue cross-fertilizing dialog with authorities.

Trade association

The German Aerospace Industries Association (BDLI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The German Aerospace Industries Association (BDLI) is the primary industry representative for the aerospace sector in Germany. As the voice of German aerospace, BDLI engages in dialogue with political institutions, authorities, trade associations and governments at home and abroad. The BDLI notably organised the "Aerodays2020" in 2020. The EU #AeroDays2020 are the most important European event for research and innovation and is hosted every four years by the European Commission. In 2020, for the first time, the event took place in Berlin, together with the German host, the Federal Ministry of Economics and Energy (BMWi), and jointly

organised by the German Aerospace Industries Association (BDLI) and the German Aerospace Center (DLR). At this hybrid event, more than 1,100 participants from all over the world took part in the conference, consisting of the Berlin Aviation Summit and the EU AeroDays FORUM.

All stakeholders confirmed at the EU #AeroDays2020 that their goal is to make climate-neutral aviation possible. This requires long-term stable framework conditions and concrete support in the risky development of technological competencies up to market maturity. The aviation industry has shown what this path can look like.

How have you influenced, or are you attempting to influence their position?

Airbus is involved in the association and participates in working groups. The CEO of Airbus Defence and Space is president of BDLI.

Trade association

The Aerospace and Defence Industries Association of Europe (ASD)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Raises awareness and promotes the values and positions of its members to all EU institutions, including positions on climate change related issues.

How have you influenced, or are you attempting to influence their position?

Airbus is involved in the association and participates in working groups. At the European level, the ASD Environment Committee is chaired by Airbus.

Trade association

The International Aerospace Environmental Group (IAEG™)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The International Aerospace Environmental Group (IAEG) is a non-profit organization of global aerospace companies created to collaborate on and share innovative environmental solutions for the industry. The group works to promote the development of voluntary consensus standards and provide accessible solutions for key environmental issues.

How have you influenced, or are you attempting to influence their position?

Airbus is a Founding Member of IAEG, and currently occupies the Vice-Chair position in the Executive Committee. Airbus participates in different areas of IAEG, such as greenhouse gas emissions, substances management, substitution technologies and supply chain to share practises and promote development of global standards for implementation of environmental requirements in the aerospace industry.

Trade association

Business confederations : The Association Française des Entreprises Privées (AFEP)/
The Mouvement des Entreprises de France (MEDEF)/ Entreprises pour Environnement
(EPE)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Non sectoral trade associations

How have you influenced, or are you attempting to influence their position?

Airbus is involved to provide inputs to produce various responses to national or EU consultations on all environmental issues including climate change. Airbus has contributed to the issuance of the ZEN 2050 report established by EPE. Airbus has renewed his commitments with around 100 other main corporations on climate change (french business climate pledge).

Trade association

Association française de normalisation (AFNOR)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AFNOR Non sectoral standardization body. The AFNOR Group designs and deploys solutions based on voluntary standards around the world. The Group serves the general interest in its standardization activities and provides services in such competitive sectors as training, professional and technical information and intelligence, assessment and certification.

How have you influenced, or are you attempting to influence their position?

Airbus is involved in the coordination of the overall national environment (and CSR) standardization strategy as chair of the relevant strategic committee. Airbus is also participating to numerous working groups at national and international levels, in particular for climate change, carbon neutrality, sectoral transportation GHG reporting, circular economy... Inputs were made on various ISO documents such as ISO 14064, 14067, 14068 (on going)...

Trade association

Air Transport Action Group (ATAG)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The association sets goals and mobilises action on strategic aviation issues such as climate change through involvement throughout the industry (i.e. with other manufacturers, airlines, airports, air traffic management).

How have you influenced, or are you attempting to influence their position?

Airbus is involved in this association and participates in working groups. Airbus is a board member of ATAG.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Through ASD Airbus was engaged in the Destination 2050 report which provides a vision and path for meaningful CO2 emission reduction efforts in Europe and globally. Building on the Paris Agreement and the European Green Deal, it sees all flights within and departing the EU, UK and EFTA realising net zero CO2 emissions by 2050.

ALBATROSS is an initiative of major European aviation stakeholders to demonstrate how the technical and operational innovations delivered by SESAR in the past years can further reduce the environmental footprint of aviation towards a more sustainable mode of transportation. The project will explore and then demonstrate in real conditions the feasibility of implementing the most fuel-efficient flights through a series of gate-to-gate live trials across Europe. It is coordinated by Airbus with the support of EUROCONTROL, Air France, Austro Control, DLR, DSN, LFV, Lufthansa, NOVAIR, Schiphol, SAS, Swedavia, SWISS, Thales AVS, Wizz Air UK. The project is performed through SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme. These live trials will showcase mature operational solutions with potential fuel/CO2 savings, selected from the SESAR Solutions catalogue or other operational solutions in an advanced stage of validation. As a very large demonstration (VLD), the project will particularly focus on combined demonstrations where multiple solutions coexist and also on the close collaboration between all actors involved: Airlines, Air Navigation Service Providers, Airport operators, Military, Network manager, Controllers, Pilots, Airframers and Suppliers. Many solutions will be put into practice parallelly to demonstrate the potential to minimise the environmental impact of aviation. Some selected examples include the following:

New precision approach procedures (RNP-to-ILS, RNP-AR, etc) will be implemented. Continuous climb and descent will be facilitated. Several novel data analytics-based tools will be introduced to assist pilots to identify tactical in-flight trajectory optimization opportunities to improve fuel efficiency. Possibilities to relax and mitigate certain ATM constraints through airspace design by collaborative procedures and a certain degree of flexibility in the constraints will be tested. Improvements to taxiing operations will be investigated, in the form of single-

engine taxiing. Moreover, a sustainable hybrid towing vehicle for taxi assistance ("taxibot") will be used in order to reduce emissions.

The project will examine how a resulting and adapted concept of operation could be permanently integrated into network operations.

At several locations near Airbus sites, Airbus has set up several initiatives with the support of the EU funds to develop the use of clean commuting (bike, car sharing, public transportation, autonomous shuttles..). In Toulouse, the COMMUTE project has set up the basis of a new urban mobility management to reduce local pollution as well as traffic congestion around the airport platform.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Airbus has processes in place, under the supervision of the Chief Compliance Officer, to monitor the company's activities' conformity to applicable regulations and ethical rules adopted by the Group. The Ethics and Compliance programme ensures that relevant policies and guidelines are implemented and up-to-date, starting with the Airbus Code of Ethics. It also ensures that these policies and guidelines are communicated and that employees are trained, aim at raising awareness in order to promote compliance as a corporate culture. These processes are applied to our climate change strategy.

In addition, several multifunctional groups have been set up to ensure appropriate internal and external consistency with climate change strategy.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication


In mainstream reports

Status

Complete

Attach the document

 AIRBUS-URD_2020_EV_2021_03_26_MEL (4).pdf

 AIRBUS-URD_2020_EV_2021_03_26_MEL (4).pdf

Page/Section reference

Governance/Strategy/Risk and opportunities/Emissions figures : REPORT OF THE
BOARD OF DIRECTORS OF AIRBUS p55 -60

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

N/A

C15. Signoff

C-FI

(C-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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer Airbus	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
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SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please state the main reason why you are declining to respond to your customers

Prefer to work directly with customer, not through a third party

Please confirm below

I have read and accept the applicable Terms