

Airbus **ORG** is deeply aware of its responsibility to society and future generations, and contributes to a number of **UN Sustainable Development **ORG**** Goals through its core business and how it operates. Airbus **ORG** 's products and services, such as its **Earth **LOC****-observation technologies, allow it to play an active role in tackling climate change, providing insights that help make the planet more resilient. Airbus **ORG** believes that a sustainable **tomorrow **DATE**** needs the strongest foundations **today **DATE****. In line with its purpose, the progress in its sustainability journey, and the evolution of reporting frameworks, Airbus **ORG** has further evolved its non-financial reporting in **2022 **DATE****, providing additional transparency and striving to better demonstrate its level of commitment and performance, as presented in the following pages. For example, as one of the most important players in the aviation industry, Airbus **ORG** contributes significantly to **SDG 8 - Decent **MONEY** Work and Economic Growth** - as highlighted through the **2020 **DATE**** Benefits Beyond Borders - global fact sheet, available on **the Air Transport Action Group **ORG**** website: As a major **European **NORP**** defense manufacturer, Airbus **ORG** also has significant economic impact across **Europe **LOC****. According to the **AeroSpace **ORG**** and **Defense Industries Association of Europe **ORG****, the industry supports over **879,000 **CARDINAL**** jobs across the continent, all contributing to **Europe **LOC**** 's economic prosperity with **EUR 238 billion **MONEY**** in **annual **DATE**** revenue in **2021 **DATE****, **EUR 138 billion **MONEY**** of which comes from exports. Full aerospace ecosystems - bringing together academia, research centers and corporations, all with high value-added jobs -

often develop around Airbus ORG 's sites such as those in Toulouse GPE or Hamburg GPE . This development is accelerated thanks to Airbus ORG 's innovation ecosystem such as Airbus ORG Scale: an innovation unit that combines corporate innovation, start-up engagement and company-building activities. In order to give direction and focus, in 2020 DATE Airbus ORG updated its sustainability strategic framework around the four CARDINAL sustainability priority commitments listed below that apply across its entire value chain. These commitments are in close connection with the UN ORG SDGs and contribute more specifically to eight CARDINAL of them. Across each commitment Airbus ORG has set key performance indicators and targets enabling Airbus ORG to monitor progress towards these ambitions. They can also be found in the related sections of this chapter, which is structured around each of the four CARDINAL commitments, completed by two CARDINAL sections which cut across all four CARDINAL commitments, 1.2.15 Responsible Supply Chain and - 1.2.16 Community Impact. Complementing the climate change section, EU Taxonomy ORG regulatory information is disclosed in section 1.2.19 LAW . Several sources were essential in deciding on the four CARDINAL commitments, including the 2019 DATE materiality assessment, a benchmark exercise, an analysis of market and regulatory trends, an evaluation of ESG risks in Airbus ORG 's risk report, a human rights gap analysis and the consideration of Airbus ORG 's values. Airbus ORG updated its materiality assessment in 2022 DATE and used stakeholders inputs to support the ranking, of which ESG issues are most material. The results of this 2022 DATE update were captured in a materiality matrix , which is fundamental in confirming the relevance of Airbus ORG 's four CARDINAL commitments. Airbus ORG asked its 12 CARDINAL most important stakeholder groups about their view

on how important it is for Airbus ORG to address a given topic. Besides, Airbus ORG established the Airbus Supplier Sustainability Council ORG in 2022 DATE . It organized other events where sustainability topics were addressed during the year DATE , such as the Capital Market Day and the Airbus Summit ORG . Airbus ORG evaluated the potential impact of its activities on people and environment in connection with Airbus ORG 's activities - e.g. employees, end users, and local communities. Scoring was derived from Airbus ORG 's enterprise risk management system and complemented by interviews with representatives from Airbus ORG 's top management. The Executive Committee ORG is supported by several committees or boards linked to Airbus ORG 's four CARDINAL sustainability commitments: the Environment Executive Steering Committee ORG , the Inclusion & Diversity Advisory Board ORG , the Product Safety Board ORG as well as the Occupational Health and Safety Governance Board ORG , all chaired by Executive Committee ORG members; the Steering Committees of the Human Rights and Sustainable Supply Chain Roadmaps ORG , both sponsored by Executive Committee ORG members. Its mission continues to focus on: Setting the ambition level regarding Airbus ORG 's environmental and social commitments; Identifying the levers to achieve this ambition; Enabling the business to deliver this ambition across the full value chain; Engaging employees on sustainability; Providing clarity on ambition and progress to internal and external stakeholders; Coordinating with relevant functions the performance and reporting on progress with regards to the four CARDINAL commitments. These teams are for the most part supported by dedicated policies which are referred to in Airbus ORG 's Code of Conduct - a single reference intended to guide daily DATE behaviour and help employees resolve the most common ethical and compliance issues that they may encounter.

The Code of Conduct **ORG** applies to all of **Airbus ORG**'s employees and directors, regardless of their job title, responsibilities, seniority, or location, within every subsidiary or joint venture where **Airbus ORG** has control. This principle also applies to the other members of **the Executive Committee ORG** who do not serve on **the Board of Directors ORG**, and to a large extent to executives and Level IV managers employed at **Airbus ORG**. **Airbus ORG**'s vigilance plan includes measures to identify risks and prevent serious impacts related to sustainability resulting from **Airbus ORG**'s own operations and from its suppliers and other contractors. As far as its own operations are concerned, **Airbus ORG** has adopted internal policies and management tools to perform the monitoring, assessment, mitigation and reporting of risk and compliance allegations, which are embedded into **Airbus ORG**'s culture and processes. Enterprise risk management and internal audit: With regards to risk management, sustainability risks and opportunities are fully embedded in **Airbus ORG**'s **ERM ORG** system. On this matter, **Airbus ORG** offered employees **more than 900 CARDINAL** online and in-person training opportunities in **2022 DATE**, ranging from ethics and compliance to export control, health and safety, product safety, cyber security, internal controls, inclusion and diversity, quality and customer centricity, sustainability awareness and more. Training courses linked to sustainability topics were integrated into the **2022 DATE** mandatory training list for **Airbus ORG** employees. Affiliates: All **Airbus ORG** controlled affiliates are expected to deploy similar internal policies by applying **Airbus ORG**'s directives. Its enforcement is supported by the Directors training program which was delivered to **117 CARDINAL** people in **2022 DATE** over **eight full-day DATE** digital sessions, as well as on-boarding sessions performed for newly appointed managing directors of controlled affiliates. The single directive assists

Airbus **ORG** 's affiliates in effectively fulfilling their responsibilities, while assuring Airbus **ORG** 's ongoing commitment to high standards of corporate governance. It was built on the basis of Airbus **ORG** related internal policies including, but not limited to: Airbus **ORG** 's Code of Conduct **ORG** , International Framework Agreement, Agreement on the European Works Council **ORG** , Supplier Code of Conduct, Health & Safety Policy, Environmental Policy, Airbus **ORG** 's Anti-Corruption Policy **ORG** and related directives. In 2022 **DATE** , 81 **CARDINAL** controlled affiliates were selected to perform such verifications. Airbus **ORG** 's controlled affiliates are also asked to regularly evaluate risks via Airbus **ORG** 's ERM **ORG** system, and to regularly monitor them as part of their risk assessment process. Complementing the materiality assessment described further above, Airbus **ORG** reviewed in 2022 **DATE** the list of its priority sustainability risks as shown above to help prioritize its actions. This process complements, and is fully integrated into, Airbus **ORG** 's ERM **ORG** process. All employees are encouraged to express their views, defend their opinions, and point out unacceptable behavior - especially behavior that violates Airbus **ORG** 's Code of Conduct **ORG** . Employees can raise concerns with their line manager, their human resources business partner, a legal and compliance representative, or through Airbus **ORG** 's OpenLine **NORP** hotline. Airbus **ORG** endeavors to ensure that the procedures to assess, investigate and manage allegations are well-aligned throughout Airbus **ORG** . In line with Airbus **ORG** 's purpose, pioneering sustainable aerospace for a safe and united world, and its aim to lead the transition of the air transport sector towards its net-zero carbon emissions aspirational goal, Airbus **ORG** 's foremost ambition as an aircraft manufacturer is to bring the first **ORDINAL** hydrogen-powered commercial aircraft to the market by the middle of the next decade **DATE**

, and to play a leading role in the decarbonization of the aviation sector. Climate change is considered by Airbus ORG as a financially material topic and is one of the top Airbus ORG risks. Impact materiality was also confirmed through the comprehensive Scope 1 CARDINAL , 2 CARDINAL and 3 CARDINAL screening completed in 2022 DATE in the framework of Airbus ORG submitting targets for validation of the Science-Based Target ORG initiative, using the recommended Greenhouse Gas Protocol PRODUCT methodology. While Scope 1 & 2 ORG represent less than 0.2% PERCENT of total emissions each, Scope 3 CARDINAL category 11 CARDINAL - Use of sold products - has been identified as highly material for Airbus ORG , representing above 90% PERCENT of total emissions. The second ORDINAL most material was Category 1 CARDINAL - Purchased goods and services, representing around 2.5% PERCENT of total emissions. According to both the Intergovernmental Panel on Climate Change ORG and the International Energy Agency ORG , air transport represented over 2% PERCENT of global man-made GHG ORG emissions in 2021 DATE . While Airbus ORG has a direct and critical role in developing and providing technical solutions, the concomitant development of adapted ecosystems will also be a key success factor, which Airbus ORG intends to facilitate and enable. In addition, in order to better meet stakeholders expectations and develop its own climate strategy, Airbus ORG adheres to the CDP GPE , SBTi and TCFD ORG initiatives. In 2022 DATE , Airbus ORG 's approach to climate change was rated A- by the CDP LOC for the third consecutive year DATE . In addition, Airbus ORG has recently set its first ORDINAL near-term science-based targets to reduce emissions on all scopes, in line with a 1.5 Celsius QUANTITY temperature pathway for its Scope 1 & 2 emissions, which were submitted to SBTi in

June 2022 **DATE** and validated in January 2023 **DATE** . The following sections gather information related to the four **CARDINAL** pillars of the TCFD **ORG** framework, of which Airbus **ORG** has been a supporter since December 2020 **DATE** . The policy applies company-wide, including to affiliates where Airbus **ORG** owns more than half **CARDINAL** of the voting rights or the right to appoint the majority of the board directors. The policy also covers Airbus **ORG** 's employees and contractors while at Airbus **ORG** 's sites or at work under the responsibility of Airbus **ORG** . It takes a holistic approach to measuring and acting upon Airbus **ORG** 's environmental performance by assessing the environmental impact of internal operations, as well as providing capabilities to Airbus **ORG** 's customers to reduce the impact of the products in operation. Two **CARDINAL** main management structures are relevant for the governance of sustainability matters and climate change: the Board of Directors **ORG** and the Executive Committee **ORG** . As mentioned earlier, the Board of Directors **ORG** is supported by the ECSC **ORG** . In practical terms, the ECSC **ORG** , as a committee of the Board of Directors **ORG** , oversees strategic decision-making and the execution of the approved sustainability strategy, including areas such as innovation and environmental and climate action. In 2022 **DATE** , the ECSC **ORG** reviewed and provided guidance on a wide variety of climate-related topics, including the SBTi targets, SAF **ORG** , and decarbonisation of the supply chain. To support the Executive Committee **ORG** in environmental matters, especially climate-related, an Environment Executive Steering Committee **ORG** was established in 2019 **DATE** . The EnC **ORG** is composed of members of the Executive Committee **ORG** and senior executives company-wide responsible for environmental topics. The EnC **ORG** reviews climate change related topics, including the progress on

meeting objectives to reduce GHG ORG emissions, the decarbonisation strategy and climate-related risks. Environmental operations are led by the Sustainability & Environment ORG department, whose role is to guide the business on environmental matters and to set the policy and deploy, drive and improve the Environmental Management System ORG throughout Airbus ORG . Airbus ORG 's EMS ORG is based on ISO 14001:2015. It was recertified in November 2022 DATE , having previously confirmed by certification surveillance audits in 2020 DATE and 2021 DATE . Since 2010 DATE , environmental data published by Airbus ORG has been verified by external auditors. Capturing Emerging Regulatory Requirements ORG , Stakeholder ORG 's Expectations and Trends In order to be aware of fast-evolving sustainability regulations, requirements and expectations that could impact its business, a Sustainability Regulatory Intelligence ORG team monitors regulatory developments with a view to understanding, evaluating, anticipating and preparing for legal and regulatory requirements that apply to Airbus ORG 's activities and products. Environmental risks and opportunities are managed following Airbus ORG 's ERM ORG system. A specific sustainability and environment ERM ORG plan integrates additional requirements, defined within the ISO 14001:2015 certified EMS ORG , and provides a set of rules applicable company-wide, to ensure a consistent management of environmental risks and opportunities. Risks and opportunities are reported quarterly DATE to the Executive Committee ORG of Airbus ORG and of its Divisions ORG , including climate-related risks. Top risks are consolidated at Airbus ORG level to be brought to the attention of the Board of Directors ORG and reviewed semi-annually DATE . In accordance with TCFD ORG recommendations, Airbus ORG is strengthening its ERM ORG risk identification process for climate-related risks and

opportunities, incorporating climate scenario analysis. Airbus **ORG** used three **CARDINAL** temperature climate scenarios: 1.5 Celsius **QUANTITY** , 2 Celsius **QUANTITY** and 3 Celsius **QUANTITY** ; and three **CARDINAL** time horizons: short-term, medium-term and long-term in identifying climate-related risks and opportunities. They are complemented by the following opportunities identified: Exploring and identifying new business opportunities in the field of renewable and low-carbon energy in order to position Airbus **ORG** in the energy value chain and contribute to the Paris **GPE** Agreement temperature goals. Products and services: Increased need for Earth **LOC** observation, atmospheric and weather data services could increase market demand for certain products and services of Airbus **ORG** , and lead to the creation of new business opportunities. Regarding GHG **ORG** emissions, this plan was based on a scientific approach and is consistent with the aviation sector's decarbonisation long-term aspirational goal of reaching net-zero carbon emissions by 2050 **DATE** . This approach also echoes net zero **CARDINAL** carbon 2050 **DATE** ambitions from international sectoral bodies such as the Air Transport Action Group **ORG** , as well as the UN **ORG** specialized civil aviation body, the International Civil Aviation Organization **ORG** . This is consistent with Airbus **ORG** 's mid-term target setting, covering all three **CARDINAL** scopes, and with its core product policy that focuses on developing and delivering aircraft with lower carbon emissions while engaging with the energy ecosystem. However, even if reportedly difficult to predict, according to a study published in 2022 **DATE** by ATAG **ORG** named What will it cost to get to net-zero carbon for global aviation? CO2 emissions: reduce direct and indirect net GHG emissions by 63% **PERCENT** by 2030 **DATE** compared to 2015 **DATE** across the whole Airbus **ORG** reporting scope. This target is in line with a 1.5 Celsius

QUANTITY pathway and was validated by SBTi in **January 2023 DATE**. As an additional voluntary commitment, **Airbus ORG** has committed to compensating all residual emissions for scopes **1 & 2 CARDINAL** from **2023 DATE** and gradually switching to using only carbon removals from **2030 DATE** and on-wards; beyond the mid-term plan, **Airbus ORG**'s ambition is to pursue reducing emissions aligned with a **1.5 Celsius QUANTITY** trajectory towards **2050 DATE**. In order to do so, it is evaluating the future application of the SBTi **Net-Zero PRODUCT** standard and removing residual emissions as an additional voluntary commitment; interim targets are set in line with **Airbus ORG**'s **2030 CARDINAL** roadmap. They refer to a material sub-scope of its operations representing **89% PERCENT** of total reported emissions in **2022 DATE**, on which **Airbus ORG** can have a more direct control and influence. This target was set in absolute value at **687kt CARDINAL** CO₂e for **2023 DATE** on a scope extended to another **four CARDINAL** sites. Meanwhile, this metric is used by **Airbus ORG** to measure its progress towards its **2030 CARDINAL** target, in order to be able to take into account the contribution of its electricity sourcing on its industrial decarbonisation target. This refining of methodology is expected to trigger restatements in **the coming years DATE**, including that of the **2015 DATE** baseline. Energy: **reduce** final energy consumption from stationary sources and electricity by **20% PERCENT** by **2030 DATE** compared to **2015 DATE** across the whole **Airbus ORG** reporting scope. In **2022 DATE**, **17,500 CARDINAL** fixed phones were removed across **European NORP** sites. In **France GPE**, it represented electricity savings of **920 CARDINAL** MWh. The installation of a compressed air management system in **Donauwoerth GPE** has saved **approximately 150 MWh QUANTITY**. In **Broughton PERSON**, automatic standby in **Paint Shops ORG** during weekends and shutdowns has

already led to energy saving of 340 **CARDINAL** MWh. In the context of the energy crisis in Europe **LOC** , Airbus **ORG** undertook a number of actions to contribute to the collective effort as a corporate citizen. This included reducing heating systems temperature by 1 Celsius **QUANTITY** in its European **NORP** sites, reducing heating device energy consumption by about 7% **PERCENT** , and diverting from the use of gas to other sources of energy where possible in German **NORP** sites. Since 2022 **DATE** , new Beluga **PRODUCT** jigs and tools have enabled each logistic flight to transport two **CARDINAL** A350 **PRODUCT** wings instead of one **CARDINAL** previously. Deployment of Airseas Seawing for vessels: the experiment on the Ville de Bordeaux **FAC** transatlantic logistic vessel started in December 2021 **DATE** continued in 2022 **DATE** . Ambition to secure at least 90% **PERCENT** renewable or low-carbon electricity direct supply to all sites in Europe **LOC** before 2030 **DATE** . The renewable power purchase agreement project launched in 2020 **DATE** reached a major milestone in 2022 **DATE** with the validation of renewable and low-carbon power purchase requirements as well as finalizing the selection of suppliers. Airbus **ORG** is making progress on contracting for 2023 and 2024 **DATE** . All remaining purchased electricity in Europe **LOC** will be covered by guarantees of origin from 2024 **DATE** . In 2030 **DATE** , this will represent a maximum of 10% **PERCENT** of consumed electricity. Since 2019 **DATE** , the share of electricity consumption from industrial operations in Europe **LOC** which is covered by GoOs **ORG** has increased annually by 10% **PERCENT** , exceeding 40% **PERCENT** in 2022 **DATE** . The installation of a combined heat and power plant in Donauwoerth **PERSON** led to a further saving of 1,800 **CARDINAL** t of CO₂. An Enthalpy Recovery **ORG** project in Illescas **GPE** and energy consumption by 1,089 MWh **QUANTITY** resulting in about 380 **CARDINAL**

t CO2e saving. The share of SAF **ORG** used in Airbus **ORG** 's own operations will progressively increase to at least 30% **PERCENT** by 2030 **DATE** . Airbus **ORG** set an interim target of 10% **PERCENT** in 2023 **DATE** for its commercial aircraft activities and its Helicopters Division **ORG** . Since 2019 **DATE** , SAF **ORG** has been used in the operation of Airbus **ORG** 's Beluga **PRODUCT** transport aircraft for the purpose of internal logistics. In 2022 **DATE** , flight test activities in both Divisions **ORG** started using SAF **ORG** . In total, an estimated 4,823 tons **QUANTITY** CO2 were saved during the year **DATE** when compared to conventional kerosene. Airbus **ORG** has committed to remove 100% **PERCENT** of its residual emissions by 2030 **DATE** , which will represent around 400kt **PRODUCT** CO2e in 2030 **DATE** . It will start with compensating all remaining emissions from 2023 **DATE** , with a gradual phase-in of carbon removal solutions to cover 100% **PERCENT** of residual emissions by 2030 **DATE** . Since 2019 **DATE** , Airbus **ORG** has introduced a mechanism to compensate for its business travel emissions based on the concepts of additionality, real reduction, prevention of double counting, prevention of overestimation and no additional harm. As a minimum, the carbon offsets purchased by Airbus **ORG** are certified by the Gold Standard **ORG** or Verra **ORG** or Verified Carbon Standard or Climate, Community and Biodiversity Standards **ORG** and the supplier needs to show proof of how each one of the mentioned criteria was met. The volume of offsets required in 2022 **DATE** was around 45 kt CO2e **QUANTITY** procured through offset producer South Pole **LOC** in the form of a cluster of compensation and removal projects. This contract with the South Pole **LOC** has been reviewed to cover the full volume of 2023 **CARDINAL** residual emissions, estimated to be over 700 **CARDINAL** kt CO2e. In addition, Airbus **ORG** plans to secure 2024-2030

DATE volumes well in advance. In **2022 DATE**, to foster tech-based solutions development, **Airbus ORG** has partnered with **1PointFive CARDINAL**, a **US GPE** company, and has pre-purchased **100,000 tons QUANTITY** of carbon removals per year over **four years - or DATE** **400,000 tons QUANTITY** in total - as part of an initial off-take. A portion of these volumes will be allocated to **Airbus ORG**'s scope **1 & 2 ORG** offset strategy. In **2021 DATE**, this price was updated from **30 EUR MONEY** /tCO2 to **150 EUR MONEY** /tCO2, giving a clear signal to project leaders on the importance of CO2 footprint reduction and enabling an acceleration of project portfolio implementation. In **2022 DATE**, scope **1 & 2 ORG** GHG emissions have decreased by **around 5.8% PERCENT**, exceeding the target, primarily due to **four CARDINAL** factors: the acceleration of energy saving investments and of **SAF ORG** usage that reached **over 3% PERCENT** of **Airbus ORG**'s total aircraft fuel consumption, the lower-than-planned industrial ramp-up, the deployment of additional energy saving measures in the context of the energy crisis, as well as clement weather conditions especially over **the last months of the year DATE**. It covered **89% PERCENT** of total emissions in **2022 DATE**. Geographical scope: In **2022 DATE**, **48 CARDINAL** sites. Scope of metrics: Scope 1 & 2 and notably excluding refrigerant leakage, electricity on site from **CHP ORG**, emissions due to processes, as well as excluding **DFO ORG** for **12 CARDINAL** sites and heating for **one CARDINAL** site representing **less than MONEY** 4 ktons CO2e in total. In **2022 DATE**, **Airbus ORG** defined a target for its Scope **3 CARDINAL** category **11 CARDINAL** for commercial aircraft products, covering **over 90% PERCENT** of its total emissions: reduce scope **3 CARDINAL** for commercial aircraft by **46% PERCENT** in terms of CO2 per passenger-kilometer. This target, alongside **Airbus ORG**'s scope **1 & 2 CARDINAL** target, was validated by

SBTi in January 2023 **DATE**, showing Airbus **ORG**'s GHG **ORG** reduction targets are aligned with the goals of the Paris Agreement **LAW** adopted at COP21 in December 2015 **DATE**. The metric is based on Airbus **ORG**'s corresponding scope 3 Use of Sold Product **WORK_OF_ART** for commercial aircraft. In alignment with SBTi methodology, it now includes emissions from upstream fuel production and predicted average SAF **ORG** usage over the aircraft lifetime as per IEA **ORG** SDS scenario. Airbus **ORG** is committed to contributing to meeting the Paris Agreement **LAW** targets and to taking a leading role in the decarbonisation of the aviation sector in cooperation with all stakeholders. Since the 1990 **DATE**'s, the sector has improved significantly the fuel and CO2 efficiency of subsequent generations of aircraft, thereby reducing CO2 emissions per revenue passenger kilometer by more than 50% **PERCENT**. In 2009 **DATE**, the aviation sector was the first **ORDINAL** to agree at sectoral level on ambitious CO2 emission reduction goals through ATAG **ORG** by committing to an aspirational goal of reducing net emissions from aviation by 50% **PERCENT** by 2050 **DATE** compared to 2005 **DATE** levels. In September 2021 **DATE**, ATAG **ORG** updated its ambition and commitment with the 2021 **DATE** edition of the ATAG **ORG** Waypoint 2050 **DATE** report to reflect the industry's increased ambition to achieve net-zero carbon emissions by 2050 **DATE** and contribute to the Paris Agreement goals. In Europe **LOC**, the EU **ORG** Green Deal creates conditions and opportunities for Airbus **ORG** and the European **NORP** aviation industry to accelerate the transition. Airbus **ORG** supports the ambition to reach a net-zero carbon aviation ecosystem in Europe **LOC** by 2050 **DATE**, and will contribute to the EU **ORG**'s 2030 **CARDINAL** Climate Target Plan **EVENT**. At the international level, in October 2022 **DATE**, ICAO **ORG** member states adopted

a long-term aspirational goal that sets the objective of net zero **CARDINAL** carbon emissions in 2050 **DATE** for international civil aviation operations. Around 75% **PERCENT** of the global commercial aircraft fleet is still made up of older generation aircraft, while latest generation aircraft are up to 25% **PERCENT** more efficient than the previous generation. Airbus **ORG** 's commercial aircraft portfolio includes the most efficient aircraft: The A350 **PRODUCT** and A330neo **ORG** offer 25% **PERCENT** reduction in fuel burn and significantly reduced noise footprint versus the previous generation of aircraft. The A320neo **ORG** family brings a 20% **PERCENT** reduction in fuel burn, and nearly half **CARDINAL** the noise footprint compared to previous generation of aircraft. The A220 **PRODUCT** offers 25% **PERCENT** reduction in CO2 emissions per seat versus previous generation of small single aisle aircraft, 50% **PERCENT** reduction in noise footprint and 50% **PERCENT** fewer NOx emissions than the standards. In 2022 **DATE** , 99% **PERCENT** of the delivered commercial aircraft corresponded to latest generation aircraft. Continuous improvement commitment is also reflected by Airbus **ORG** 's contribution to Europe **LOC** 's CleanSky2 **PERSON** program: a military aircraft C295 **PRODUCT** from Airbus **ORG** has been used as an in-flight technology demonstrator, Flight Test Bed **PRODUCT** . Developing and deploying SAF **ORG** , with all aircraft types 100% **PERCENT** SAF **ORG** compatible before 2030 **DATE** . In order to accelerate its action plan, Airbus **ORG** strengthened its governance on this matter by creating a dedicated project team, responsible for the end-to-end SAF **ORG** roadmap strategy and deployment. All Airbus **ORG** 's commercial aircraft are already certified to fly with a fuel blend of up to 50% **PERCENT** SAF **ORG** . SAF **ORG** produced by using most advanced pathways can provide CO2 emission reductions of up to 80% **PERCENT** throughout

their life cycle. This means that already today **DATE**, the emissions from aircraft currently offered by **Airbus ORG** could be reduced by **40% PERCENT** if their full blending capability was used. Looking ahead, **Airbus ORG**'s ambition is to have all its aircraft platforms, including helicopters, capable of being operated with **100% PERCENT** **SAF ORG** before the end of the decade **DATE**. The **50% PERCENT** limit is set today **DATE** to ensure the blended **SAF ORG** fits within the **JetA CARDINAL** specification, and thus can be used on aircraft with no modification. **Airbus ORG** is involved in two **CARDINAL** main research projects: VOLCAN and ECLIF3, conducted in partnership with important actors of the industry. Both projects aim at assessing the impact of **100% PERCENT** **SAF ORG** on engine and fuel systems while measuring the positive impact on aircraft's emissions and fuel efficiency. They will allow **Airbus ORG** to collect information and enable further research activities and technical work in order to reach the goal of gaining **100% PERCENT** **SAF ORG** certification for commercial flights. Since **2008 DATE**, **Airbus ORG** has acted as an important catalyst in the certification process, demonstration flights, partnerships and policy advocacy of sustainable jet fuel. Since **2011 DATE**, over **460,000 CARDINAL** commercial flights have used **SAF ORG** and more than **1 million CARDINAL** flights with **SAF ORG** are expected by **2025 DATE**. Besides ECLIF and **VOLCAN ORG** projects, flight test campaigns started with the **A380 PRODUCT**, with the **A320 PRODUCT** powered by **P&W ORG**, and with the H225 helicopter. Flight tests using blended **SAF ORG** were also performed on the A400 M and **C295 PRODUCT** military aircraft. **Airbus ORG**, the Organisation for Joint Armament Cooperation **ORG** and the **A400 M ORG** customer nations are engaged in initial discussions to develop the roadmap towards the certification and operational use of **100% PERCENT** **SAF ORG**.

in military aircraft. In addition, Airbus **ORG** and other industry partners have carried out in 2022 **DATE** the world's first 100% **PERCENT** SAF **ORG** flight using an in-service military aircraft. In the context of the developing regulatory frameworks fostering SAF **ORG** market growth, Airbus **ORG** supports policies that would incentivize SAF **ORG** production and usage at affordable costs. While the aviation sector contemplates an objective of 10% **PERCENT** SAF **ORG** globally by 2030 **DATE**, today **DATE**'s pipeline of demand hardly exceeds 20 M tons **QUANTITY**, suggesting necessity for further acceleration. The USA Sustainable Skies Act **ORG** targets 3 billion gallons **QUANTITY** annually **DATE** by 2030 **DATE**. The EU **ORG**'s current ReFuelEU legislative proposal targets a 5% **PERCENT** SAF **ORG** mandate for 2030 **DATE** growing to 63% **PERCENT** by 2050 **DATE**. Airbus **ORG** believes a coordinated action of all actors could foster a 10% **PERCENT** SAF **ORG** penetration at the global level by 2030 **DATE**. Today **DATE**, SAF **ORG** production is very limited. Matching SAF **ORG** production and demand is essential to achieve the establishment of the SAF **ORG** market. Airbus **ORG** supports decarbonisation scenarios which include an ambitious rollout of SAF **ORG** using all possible pathways. Positive momentum is seen in the European Union **ORG** and in the US **GPE**. Creating favorable conditions for the SAF **ORG** market to develop can be achieved if stakeholders gather together in collaborative platforms such as Commercial Aviation Alternative Fuels Initiative **ORG** in the US **GPE**. As of 2022 **DATE**, 38 **CARDINAL** countries have implemented SAF **ORG** policies to support the industry's ambition, according to IATA **ORG**. Airbus **ORG** estimates that products delivered in 2022 **DATE** will see their life-time emissions reduced by around 14% **PERCENT** thanks to the gradual introduction of SAF **ORG** during their

operational life. This considers a **SAF ORG** penetration scenario aligned with the **IEA ORG** SDS, and with **Airbus ORG**'s scope **3 CARDINAL** disclosure and **SBTI ORG**-validated target. **Airbus ORG** is engaged in many initiatives and partnerships promoting the development of **SAF ORG** production and use, participating for instance in **the World Economic Forum EVENT**, including its **First Movers Coalition and Clean Skies ORG** for **Tomorrow DATE** coalition, and in **the Coalition for the Energies of the Future ORG**. This also includes partnerships with producers such as the agreement signed in **2022 DATE** with **Neste ORG**, aiming to accelerate the aviation sector's transition to **SAF ORG**. As a member of **ICCAIA ORG**, **Airbus ORG** has actively supported the activities of **ICAO LAW** defining the **2050 DATE** net **zero CARDINAL** carbon long-term aspirational goal for civil aviation and continuously contributes to **the Committee on Aviation Environmental Protection ORG** on **SAF ORG**. **Airbus ORG** contributed to the **2019 DATE** study from which the **French NORP** **SAF ORG** roadmap was developed. In the **UK GPE**, **Airbus ORG** is a member of **the Jet Zero Council ORG** under which a **SAF ORG** delivery group has been put in place. Regarding **SAF ORG** production, **Airbus ORG** supports **CORSIA ORG**'s standard emphasizing the necessity to respect land rights and land use rights including indigenous or customary rights. **Airbus ORG** is committed to complying with local regulations and **CORSIA ORG**'s standard for its own usage. Several technologies are being studied such as: **Airbus ORG**'s transnational research & technology program, wing of **tomorrow DATE**, has successfully delivered a **first ORDINAL** full-size wing prototype or demonstrator that will help mature next-generation wing technologies; the completion of the **first ORDINAL** of **three CARDINAL** fully composite wing demonstrators marks the integration of **more than 100**

CARDINAL different component and manufacturing technologies that include an all-new industrial assembly system, and which have helped validate key automation targets; wing of **tomorrow DATE** is particularly efficient thanks to the incorporation of lighter composite components and of a folding wing tip. In **July 2022 DATE**, **Airbus ORG** partnered with **CFM ORG** to test flight the open fan technology. The open fan engine will be tested on an **A380 PRODUCT** in the second half of this decade **DATE**. The **eXtra NORP** performance wing project, launched in **September 2021 DATE**, improves wing aerodynamics and performance that is intended to be compatible with any future aircraft configuration and propulsion system to reduce CO2 emissions. In **April 2022 DATE**, **Airbus ORG** completed wind-tunnel testing of its **eXtra ORG** performance wing demonstrator. **Airbus ORG** sees **two CARDINAL** primary uses for hydrogen: hydrogen can be used to directly power the aircraft by being combusted through modified gas-turbine engines or converted into electric power via fuel cells. From hydrogen propulsion to hydrogen-based synthetic **SAF ORG**, from pod configuration to blended-wing aircraft, **Airbus ORG** is evaluating, maturing and validating radical technological breakthroughs. In **2020 DATE**, **Airbus ORG** revealed **three CARDINAL** different hydrogen-powered **ZEROe ORG** concept aircraft. They illustrate the research that **Airbus ORG** is investing in with the objective to bring a hydrogen-powered commercial aircraft to market in **2035 DATE**. Progress was made in key areas in **2022 DATE**: the launch of the hydrogen combustion engine **A380 PRODUCT**-based demonstrator, in partnership with **CFM ORG**; the iron pod of a **first ORDINAL** fuel cell powered engine is ready to be tested in the EAS test house, and the launch of its associated demonstrator, also based on a modified **A380 PRODUCT**; the launch of the **Blue Condor ORG** demonstrator to study

and assess the impact of non-CO2 emissions induced by hydrogen combustion; the launch of **Zero-Emission Development Centers** **MONEY** around **Europe** **LOC**, and the **first** **ORDINAL** prototype of cryogenic tanks tested with nitrogen and then hydrogen. In **2019** **DATE**, **Airbus** **ORG** signed a memorandum of understanding with airlines such as **SAS** **Scandinavian Airlines** **ORG** and easyJet to jointly research a hydrogen-powered aircraft ecosystem and its infrastructure requirements. It has joined several major hydrogen alliances, such as **the Hydrogen Council** **ORG**, **Hydrogen Europe** **ORG**, and **European Clean Hydrogen Alliance** **ORG**. It also participates in The Fuel Cells and Hydrogen Joint Undertaking, **European Clean Hydrogen Alliance** **ORG**, **France Hydrogene** **ORG**, **French Conseil National del Hydrogene** **ORG**, and **the German** **ORG** **Wasserstoffrat** **ORG**. **Airbus** **ORG** promotes **the H2 Hub** **PRODUCT** at airport concept in which partners will join forces to adapt the infrastructure to the use of hydrogen by aircraft, and more. In this context, it has signed partnerships with **Delta** **ORG**, **Wizz Air** **ORG**, **Linde** **ORG**, **Air Liquide** **ORG**, **Changi Airport Caas** **FAC**, **Korean Air** **ORG**, **Incheon Airport** **FAC**, **Kawasaki Heavy Industries** **ORG**, **Kansai Airport** **FAC**, **Plug Power** **ORG**, **Fortescue Future Industries** **ORG**, **ANA** **ORG**, **Air New Zealand** **ORG**, **Vinci** **ORG**, **Engie** **ORG**, AREC, group **ADP** **ORG**, **Bristol Airport** **FAC**, **Hynamics** **ORG**, **Hydrogen South West** **LOC**, **SAVE** **SNAM** **ORG** and **Milan Airport** **FAC**. Since **2014** **DATE**, **Airbus** **ORG** 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 significantly reduced impact. **Airbus** **ORG** has partnered with **Daher** **ORG** and **Safran** **ORG** to develop a distributed hybrid-propulsion aircraft demonstrator with the support

of France GPE 's CORAC ORG and DGAC ORG and for which it is providing battery technology and overseeing aerodynamic modelling. The idea for a compact flying taxi first ORDINAL came from Airbus ORG 's desire to take city commuting into the air in a sustainable way. Airbus ORG has learned a lot from the test campaigns with two CARDINAL demonstrators, CityAirbus ORG and Vahana GPE . In 2022 DATE , Airbus ORG partnered with Renault Group ORG to advance research on electrification and mature technologies associated with next-generation battery systems. Inaugurated in 2019 DATE , the more than 3,000 m2 E-Aircraft System House QUANTITY is the largest test house dedicated exclusively to alternative propulsion systems and fuels in Europe LOC . In May 2018 DATE , Airbus ORG created the Urban Mobility ORG entity to take its exploration into cutting-edge commercial urban air mobility solutions and services to the next level. Airbus ORG therefore supports initiatives aimed at reducing ATM ORG inefficiencies such as the Single European Sky Air Traffic Management Research ORG program, while working on disruptive practices like formation flying. Airbus ORG organizes face-to-face forums and webinars every year DATE with airlines to exchange knowledge on how to improve ground and in-flight operational efficiency and using latest technological solutions. In November 2019 DATE , Airbus ORG launched the fellofly project which aims to demonstrate the technical, operational and commercial viability of two CARDINAL aircraft flying closer together for long-haul flights. Through its subsidiary Navblue ORG , Airbus ORG provides services helping its customers to minimize fuel consumption with best operational practices, innovative services and training. Through its subsidiary Metron ORG , Airbus ORG provides solutions to airports, authorities and airlines to optimize air traffic management taking into account live congestion and

weather condition data, hence reducing engines running time and fuel burnt. In 2022 DATE , flights in the airspace of nine CARDINAL countries could benefit from it. Coordinated by Airbus ORG in the Single European Sky ATM Research program, ALBATROSS ORG launched in 2021 DATE , is an initiative of major European NORP aviation stakeholders to demonstrate how the technical and operational innovations Airbus ORG delivered in the past years DATE can be combined and used all together to further reduce the environmental footprint of aviation on the short term. By end 2020 DATE , Airbus ORG 's fellofly demonstrator project had signed agreements with two CARDINAL airline customers, Frenchbee ORG and SAS Scandinavian Airlines ORG , as well as with three CARDINAL Air Navigation Service Providers - ORG France GPE 's DSNA ORG , the UK GPE 's NATS ORG and European Eurocontrol ORG - to demonstrate its operational feasibility. In November 2021 DATE , two CARDINAL A350 PRODUCT test aircraft conducted the first ORDINAL -ever transatlantic fellofly flight confirming the potential for fuel savings of more than 5% PERCENT during long-haul flights. In 2022 DATE , Metron ORG 's ATM optimization solution deployment was further extended to Qatar GPE and expanded in Singapore GPE . For that reason, Airbus ORG supports ICAO ORG 's CORSIA ORG scheme as the only global market-based measure for international civil aviation. Once removed from the air, the CO2 can be used to produce power-to-liquid SAF ORG that is drop-in compatible with today DATE 's aircraft. In 2021 DATE , Airbus ORG and a number of major airlines such as Air Canada ORG , Air France-KLM ORG , easyJet, International Airlines Group ORG , LATAM Airlines Group ORG , Lufthansa Group ORG and Virgin Atlantic GPE have signed Letters of Intent WORK_OF_ART to explore opportunities for a future supply of carbon

removal credits from direct air carbon capture technology. In 2022, Airbus partnered with 1PointFive and pre-purchased 400,000 tons of carbon removals. a Canadian-based climate solutions company, operating the largest Direct Air Carbon Capture Research & Development facility in the world. Lee et al. 2020, states that uncertainties around the contribution of non-CO2 emissions on aviation's net effective radiative forcing are 8 times higher than those of CO2. Airbus is actively working on a large portfolio of projects focused on increasing the understanding of non-CO2 emissions generation, their evolution and their climate effects, but also to evaluate and develop solutions covering several promising mitigation options impacting three well-identified domains: through the use of new energies such as SAF or hydrogen, enhanced engine technology and flight operations. These include: on SAF, the ECLIF and VOLCAN projects included a DLR's Falcon aircraft, flying within 100 m behind Airbus test aircraft fueled with 100% SAF, to capture and analyze in-flight data. The preliminary observations show a positive impact of SAF on aircraft emissions, and the tests will continue in 2023; on hydrogen, Airbus launched Blue Condor in 2022, a demonstrator taking a modified glider up to 33,000 feet to analyze hydrogen combustion's impact on contrail properties. The result of this analysis will provide critical information on aviation's non-CO2 emissions, including contrails and NOx, in advance of the ZEROe demonstrator flight testing; on operational measures, Airbus announced in 2022 its participation in the Contrail Impact Task Force, a cross-sector cooperation led by the RMI to explore opportunities to address the warming impact of

certain contrails. If selected - expected **early 2023 DATE** , as expected, **Airbus ORG** 's project will run for **three years DATE** with the objectives of improving weather forecasting capabilities, improving climate impact assessment, defining a climate-optimized concept of operations and trialing system solutions at aircraft and **ATC ORG** level. In **2022 DATE** , around **20% PERCENT** of delivered helicopters were equipped for such missions. Military aircraft platforms can play a crucial role in the protection of populations from natural disasters, such as for example during the aftermath of **hurricane Irma EVENT** in **2017 DATE** when several **European NORP** nations used their **A400 M ORG** and **C295 PRODUCT** aircraft to transport **first ORDINAL** aid and humanitarian equipment to several impacted **Caribbean NORP** islands. In **July 2022 DATE** , a removable firefighting demonstrator kit was successfully tested on the **A400 M ORG** airlifter during a flight test campaign in **Spain GPE** . Due to its low-level flight capability and maneuverability at low speeds, **the A400 M ORG** can accurately drop payloads of water at very low heights, down to **150 ft QUANTITY** . **Today DATE** , **20 CARDINAL** of **Airbus ORG** 's satellites are involved in climate change monitoring and **an additional 20 CARDINAL** are in development. **Earth LOC** -observation satellites allow the monitoring of deforestation, rising sea levels and **GHG ORG** emissions in the atmosphere. **Airbus ORG** is involved in all major environment-monitoring satellite programs in **Europe LOC** and plays a key role in all **12 CARDINAL** of the **Copernicus ORG** missions, the **EU ORG** 's **Earth Observation Program ORG** . **Sentinel-5P CARDINAL** takes **up to 40 million CARDINAL** observations per day and provides a much finer view of emissions than previous satellites or detectors on the ground. In **2022 DATE** , **Airbus ORG** has progressed on the development and testing of new technologies that will be featured on biomass, the **first ORDINAL**

ever satellite that will report how much CO2 is captured by the world's forests. Upcoming missions also include **EarthCARE** **PERSON**, monitoring the impact of clouds and tiny atmospheric particles on atmospheric radiation; **Merlin** **PERSON**, studying **GHG** **ORG** and global warming; and **Microcarb** **ORG**, measuring CO2 levels. They provide insights enabling reduction in the use of nitrates, and play a significant role in helping agro-industrial companies like **Ferrero** **ORG** or **Nestle** **ORG** monitor adherence to their non-deforestation commitments. **Airbus** **ORG**'s **Pleiades Neo** **PRODUCT** constellation delivers precision insights to help farmers cultivate their fields more sustainably in the context of a changing climate. **Pleiades Neo's** **PRODUCT** **Red Edge** **ORG** band makes it possible to accurately predict and pinpoint subtle stress situations in crops long before the problem can be detected with conventional vegetation indices or even the human eye. **Airbus** **ORG** is investing in and accelerating its efforts on **five** **CARDINAL** complementary strategic pathways to reduce its environmental footprint, in support of the overall sector ambition, as highlighted above. Overall, a major portion of **Airbus** **ORG** capital expenditures, **R&T** **ORG**, and R&D expenses is linked to its commercial aircraft activities and the realization of these **five** **CARDINAL** decarbonisation pathways. In **2022** **DATE**, the total R&D spend of **Airbus** **ORG** amounted to **EUR 3.1 billion** **MONEY**. In **2022** **DATE**, **Airbus** **ORG** delivered **661** **CARDINAL** commercial aircraft. Of note, the emissions of **five** **CARDINAL** **A330-200** **PRODUCT** aircraft destined to **A330 MRTT** **ORG** production are excluded from the commercial aircraft perimeter and included in the military aircraft perimeter as part of the other products category. Based on an average life-time in service of **around 22 years** **DATE**, and **SAF** **ORG** uptake assumptions as per **IEA** **ORG** -SDS scenario **2020** **DATE**, the total CO2 emissions for these products over their

anticipated life-time is estimated at around 425 **CARDINAL** MtCO₂e, which translates to an average efficiency of 64.4gCO₂e per passenger-kilometer. In 2021 **DATE**, Airbus **ORG** delivered 611 **CARDINAL** aircraft with resulting estimated life-time emissions of around 400 **CARDINAL** MtCO₂e and average efficiency of 66.3gCO₂e per passenger-kilometer. In 2022 **DATE**, in order to align with SBTi-validated target methodology, Airbus **ORG** established a new efficiency metric that will be used for performance measurement. Namely, the difference in the two **CARDINAL** efficiency metrics can be explained by differences in the following two **CARDINAL** key assumptions: the integration of emissions related to the upstream fuel production and the consideration of the likely usage of SAF **ORG** over the product lifetime, as per the IEA **ORG** -SDS assumptions, as illustrated on the chart for the year 2022 **DATE**. Airbus **ORG** estimates that products delivered in 2022 **DATE** will see their life-time emissions reduced by around 14% **PERCENT** thanks to the gradual introduction of SAF **ORG** during their operational life. Since 2015 **DATE**, aircraft efficiency measured through this metric has improved by 27% **PERCENT**, largely supported by significant investments into new aircraft technology and designs, as well as by projected SAF **ORG** uptake impact to a lower extent. Given the variable time horizons of each of the five **CARDINAL** decarbonisation pathways presented above, it is expected that the increase of SAF **ORG** used by airlines in the coming decades **DATE** will have a decisive impact for achieving this -46% **PERCENT** target by 2035 **CARDINAL**. Airbus **ORG** intends to develop means to monitor the actual availability of SAF **ORG** and the resulting impact on aircraft emissions. In 2021 **DATE**, Airbus **ORG** published a first **ORDINAL** evaluation of the GHG **ORG** emissions arising from the goods and services it purchases based on its 2020 **DATE** spend that amounted to 11.3

CARDINAL MtCO₂e. In the course of **2022 DATE**, the calculation methodology has been refined which resulted in a reduction of **12.5% PERCENT** of reported emissions to **9.9 CARDINAL** MtCO₂e. Following similar assumptions, emissions based on **2021 DATE** spent were estimated at **about 8.4 CARDINAL** MtCO₂e. **2022 DATE** estimates will be computed in **early 2023 DATE** as spent data consolidation is completed. These evaluations were performed using a dedicated tool developed by **the International Aerospace Environmental Group ORG** and are expected to be further refined in **the coming years DATE** as mass-based information can be used. While this method includes a certain degree of uncertainty - considered high by the **IAEG ORG** on a certain number of emissions factors used - it provides a relevant view of the sources of **GHG ORG** emissions in **Airbus ORG**'s supply chain and enables comparison of **Airbus ORG**'s various scopes throughout its supply chain. Notably, this evaluation helped prioritize the engagement with the highest contributing suppliers, through the **CDP GPE** or **the Airbus Supplier Code of Conduct ORG**. In addition, **Airbus ORG** considers a **CDP GPE** score as a relevant indicator for assessing the maturity of its suppliers to address climate change, and requests its main suppliers to respond to the CDP Supply Chain program on an **annual DATE** basis. In **2022 DATE**, it continued engaging with suppliers representing **82% PERCENT** of **Airbus ORG**'s total sourcing volume, following which suppliers representing **78% PERCENT** of **Airbus ORG**'s sourcing volume have completed the **CDP LOC** questionnaire. In **2022 DATE**, suppliers representing **66% PERCENT** of the sourcing volume received an A or B score. Sending feedback letters to all suppliers after the **2021 DATE** campaign has allowed **Airbus ORG** to raise the awareness of suppliers and propose areas of improvement. From the **2022 DATE** campaign results, **Airbus ORG** is

going to request **multi-year DATE** action plans from suppliers that got a C or D score in order to foster improvement in the management of their carbon footprint. Furthermore, a dedicated section in **Airbus ORG**'s intranet provides information about **Airbus ORG**'s commitment towards climate, and related action plans are available for employees to expand their awareness. On the training platform, e-learning in relation to climate, such as climate crisis, climate science, or climate change economics, are freely available to employees while **one CARDINAL** environment-related e-learning has been included since **2022 DATE** in **Airbus ORG** mandatory **yearly DATE** training plan, applicable to all employees. From **October 2021 to September 2022 DATE**, **some 73,457 CARDINAL** employees were trained in environmental awareness. Since **2021 DATE**, **Airbus ORG** has established a global sustainability ambassadors network now comprising **448 CARDINAL** ambassadors from across **18 CARDINAL** functions and **18 CARDINAL** countries. In addition, in **2022 DATE**, through **Airbus ORG**'s impact digital platform, employees had the chance to participate in several climate change-related challenges inspired by **international days DATE** such as **World Water Day EVENT** and **UN ORG** Earth Day, recording over **1,700 CARDINAL** individual actions. In order to better embed this ambition into **Airbus ORG**'s performance management, CO2 performance targets have been included in variable remuneration schemes since **2021 DATE**. **The Executive Committee ORG** agreed in **2021 DATE** to include a reduction target for **2022 DATE** of **-5% PERCENT** for CO2 Scopes 1 & 2, part of **the Top Airbus Objectives ORG**. The **2022 DATE** target was overachieved with an actual performance of **-8.5% PERCENT**. This target was set in absolute value at **687kt CARDINAL** CO2e for **2023 DATE**. Due to the significant impact of lower-carbon aviation and eco-design on its business,

Airbus **ORG** estimates that at least 50% **PERCENT** of engineering profiles will have to be upskilled by 2030 **DATE** .

Clean and Sustainable Aerospace **ORG** is identified as one **CARDINAL** critical skill group in Airbus **ORG** 's competence strategy. Cooperating with the Scientific Community **ORG** and Universities Climate change is a critical challenge for humanity, and Airbus **ORG** believes innovation and technology can bring some pieces of the solution. For instance, Airbus **ORG** is collaborating with the DLR **ORG** in Germany **GPE** , Manchester Metropolitan University **ORG** in the UK **GPE** , with the ONERA **ORG** or the Montpellier Business School **ORG** in France **GPE** , the Denmark Technical University **ORG** in Denmark **GPE** , the Massachusetts Institute of Technology **ORG** in the USA **GPE** , the Tsinghua University **ORG** in China **GPE** or the European Joint Research Centre **ORG** . Airbus **ORG** also created the CEDAR **ORG** Chair for Eco-Design of Aircraft **ORG** together with ISAE-SUPAERO in 2013 **DATE** .

The CEDAR **ORG** Chair is composed of international scholarships, interdisciplinary program of student projects derived from concrete industrial cases in the field of Future Aircraft Design **ORG** , and environmental engineering certificate with focus on the issues of sustainable development, offering an approach to design aircraft over the entire product life cycle, addresses eco-mobility and the economics of air transport. Leveraging on Airbus **ORG** 's unique understanding of aerospace industry specificity, Airbus **ORG** is engaged in a constant dialogue with policy makers, directly or through trade associations. Such engagements are performed in compliance with the Ethical **ORG** business conduct principles described in section 1.2.14 of the Code of Conduct **ORG** and Airbus **ORG** 's Responsible Lobbying Charter. In 2022 **DATE** , as a member of the industry association ICCAIA **ORG** through the ASD, Airbus **ORG** actively participated in the

International Civil Aviation Organization's **ORG** work to define guidance, standards and recommended practices aimed at minimizing emissions from aircraft and engines, as well as defining policies with regards to local air quality, climate change, and noise. Specifically, in **2022 DATE** **Airbus ORG** has been an active member supporting the adoption of a climate Long Term Ambitious Goal to the **ICAO 41 LAW** **st assembly ORG** in **October DATE**. At **European NORP** level, **Airbus ORG** has engaged with **the European Commission ORG** on climate change policies discussions such as the **ReFuel Aviation ORG** initiative as part of the Fit for **55 CARDINAL** regulatory package. At national level, **Airbus ORG** has engaged with **France GPE**, **Spain GPE**, **UK GPE** and **Germany GPE** in order to exchange on federal policies on climate change. In particular in **France GPE**, **Airbus ORG** has cooperated with the **CORAC ORG** on research for technology and fuels. As well, in **2022 DATE** **Airbus ORG** has directly discussed with **the European Commission ORG** supporting the development of a carbon removal framework with high environmental integrity in **Europe LOC**. In **2022 DATE**, in partnership with **Toulouse Metropole FAC**, **Tiseo ORG** and **Sopra-Steria ORG**, a smartphone application called **Ecomode PERSON** was developed to incentivise the shift to collective commuting or low-carbon individual mobility modes. This has been deployed amongst employees in **Toulouse GPE** and is of potential benefit to the citizens of all **37 CARDINAL** municipalities of **the Toulouse Metropole FAC**. Through its **Airseas ORG** joint-venture, **Airbus ORG** is co-developing kite solutions for sea vessels as complementary carbon-free propulsion, with a potential to ultimately equip a significant part of the global maritime fleet and generate **up to 20% PERCENT** emission savings. For instance, in **2022 DATE** the **Airbus Foundation ORG** organized humanitarian

missions, including providing free-of-cost chartering of air transport, in response to Cyclone Batsirai **PRODUCT** in Madagascar **GPE** , Cyclone Rai **PERSON** in the Philippines **GPE** and also following the flooding in Pakistan **GPE** . Pollution may impact Airbus **ORG** primarily through the potential consequences of business disruption arising from constraints on activities in Airbus **ORG** 's value chain in case of local pollution peaks, for instance. In this regard, Airbus **ORG** is reportedly subject to multiple regulatory provisions, including those of the EU Industrial Emissions Directive **ORG** . The IED notably applies to the management of Airbus **ORG** 's industrial activities in France **GPE** , Germany **GPE** and Spain **GPE** . Beyond this directive, the law on soil management is covered under several national texts which may differ from one **CARDINAL** country to another, as well as in the permits issued for Airbus **ORG** 's industrial activities. Specific regulations cover the topic of chemical substances, with the main regulations covering Airbus **ORG** 's activities and products being Registration, Evaluation, Authorisation and restriction of chemicals; Restriction of Hazardous Substances **ORG** ; Persistent Organic Pollutants; and Biocidal Products **ORG** . Environmental risk and opportunities are managed following Airbus **ORG** 's ERM **ORG** system. In addition, Airbus **ORG** 's ISO 14001 **CARDINAL** certified EMS **ORG** notably applies the standard recommendations for pollution control audits, training, risk assessment and identification, implementation of risk prevention procedures. For example, sites shall conduct an analysis of environmental aspects and impacts at least every three years, as well as each time a material change in operations occurs, also in connection with Airbus **ORG** 's ERM **ORG** process. Also, each year **DATE** , more than five **CARDINAL** spill-related emergency situations are conducted to test defined emergency plans. Overall, in 2022 **DATE** , emitted VOCs increased

7.5% **PERCENT** year-on-year, reflecting the increase in aircraft production rate compared to 2021 **DATE** . Since 2011 **DATE** , Airbus **ORG** has analyzed the impact of over 1,100 **CARDINAL** substances, and qualified and deployed substitutes for over 100 **CARDINAL** substances in 300 **CARDINAL** products. In Toulouse **GPE** , Airbus **ORG** has launched the Median **ORG** initiative, regrouping actors in charge of flight activities around the airport to find the most effective solution to reduce noise levels. Airbus **ORG** identified three **CARDINAL** materials for which this approach is especially meaningful as they are essential to aircraft manufacturing: aluminum, titanium, and carbon fiber-reinforced plastics. While aerospace represents a small fraction of the global volumes for most materials - e.g. Airbus **ORG** 's aluminum consumption is estimated to be about 0.1% **PERCENT** of the global market - it can figure among the main users for some highly specialized materials such as titanium or CFRP **ORG** . A number of related regulations apply to Airbus **ORG** globally, regionally and locally, such as the Basel Convention **LAW** on the Control of Trans-boundary Movements of Hazardous Wastes **ORG** and their Disposal, or the EU Waste Framework Directive **LAW** . Additionally, this was complemented at the end of 2021 **DATE** for Airbus **ORG** 's commercial aircraft activities by a specific cross program forum that reviews, prioritizes, and budgets waste or inventory-related initiatives. Airbus **ORG** 's aircraft products make efficient use of these materials by being designed to operate for several decades **DATE** with high utilization rates, being highly serviceable and repairable, and ultimately allowing for around 90% **PERCENT** of their constituents by mass to be recovered, including recycling. Metallic waste accounts for more than 30% **PERCENT** of Airbus **ORG** 's site-generated waste. Considering the risk of resource depletion versus growing demand, Airbus **ORG** has kicked off in 2022 **DATE** a

dedicated transformation project related to the circularity of critical raw materials, especially non-ferrous metals, with a focus on the most material perimeter, its commercial aircraft activity. **Airbus ORG** also focuses on the waste generated by its operations throughout the manufacturing process and has set an objective of reducing overall waste amounts by **20% PERCENT** by **2030 DATE**, with **0% PERCENT** landfilling and **0% PERCENT** incineration without energy recovery. Over **the past years DATE**, **Airbus ORG** has focused on metering and on data robustness and accuracy for measuring waste, with a focus made on standardizing the practices towards waste collectors and in line with regulatory requirements for greater traceability. In **2022 DATE**, non-exceptional waste increased by **3.7% PERCENT**, largely explained by the commercial aircraft production ramp up context and people returning to the workplace after the COVID-19 period, impacting general waste. In **Airbus ORG**'s **European NORP** operations, the main sources of hazardous waste are contaminated packaging and chemical waste, especially waste from surface treatment activities, oil, fuel and various chemicals. **Airbus ORG**'s components are designed to last over the average aircraft service lifetime, which can exceed **20 years DATE**. **Airbus ORG** sends **over half CARDINAL** of its waste to be recycled. As an order of magnitude, in **2022 DATE**, **20% to 50% PERCENT** of aluminum products delivered to **Airbus ORG** came from recycled raw materials. For example, **TARMAC Aerosave ORG** joint venture, provides such reverse manufacturing services, including dismantling, sorting, packaging for reuse or sending to relevant waste collectors while ensuring parts traceability, in various locations in **France GPE** and **Spain GPE**. A memorandum of understanding between **Airbus ORG** and the city of **Chengdu GPE** was signed in **2022 DATE** for the launch of an aircraft life cycle management service in **China GPE**. Overall, **TARMAC**

ORG has recycled over 300 **CARDINAL** aircraft since 2007 **DATE**. Detailed **LCA ORG** studies have been finalized for the **A220-100 PRODUCT**, **A220-300 PRODUCT**, **A320neo ORG** and **A350-900 PRODUCT**, covering over 95% **PERCENT** of **Airbus ORG**'s deliveries of commercial aircraft products in 2022 **DATE**. **Airbus ORG** is currently working together with **the European Union Aviation Safety Agency ORG** in the frame of the Product Environmental Footprint initiative on the framework, to enable the publication of verified and standardized data in the future. Besides, as an example and part of its Eco-design initiative, **the Defense and Space Division ORG** used **LCA ORG** for the development of the **Sentinel GPE** satellites that are built for the **ESA ORG**. **Airbus ORG**'s **Defense and Space Division ORG** is engaged in a strategic transformation process which will focus on increasing the circularity of its products, and expanding its product environmental impact assessment capabilities to include topics such as hybrid propulsion. In addition, **Airbus ORG** has launched a dedicated traceability project to increase data availability and transparency from the aircraft **Bill of Materials ORG** and leveraging on digital capabilities in collaboration with its supply chain. As recommended by **the EU Critical Raw Material ORG** framework, **Airbus ORG** has created and is maintaining a dedicated **Airbus ORG** framework - CRM. The mapping of **CRM PRODUCT** in **Company ORG**'s products is currently ongoing, based on available bill of materials, in the frame of an internal project. **Competence Management Circularity ORG** is a part of **Airbus ORG**'s sustainability and environment competency strategy. Water consideration is included in **Airbus ORG**'s **LCA ORG** approach. **Airbus ORG** analyses current and projected local water stress levels to understand where **Airbus ORG**'s activities have the greatest impact on water resources and prioritize actions in these

areas. This analysis is based on the World Resources Institute's **ORG** Aqueduct Water Risk Atlas **FAC** tool. Due diligence aspects with regards to the potential environmental impact on water resources in Airbus **ORG** supply chain are described in section 1.2.15 Responsible Supply Chain **LAW**. The Airbus Environmental Policy **ORG** and overall governance, as described in - 1.2.2 Climate Change **ORG** are applicable to water. Environmental risk and opportunities, including the ones related to water, are managed following Airbus **ORG**'s ERM **ORG** system, as described in the section 1.2.2 Climate Change **ORG**. In order to better monitor its approach with regards to water management, Airbus **ORG** has set the following 2030 **CARDINAL** targets: 50% **PERCENT** reduction in purchased water; 0% **PERCENT** increase in water withdrawal. In 2022 **DATE**, water withdrawal volumes increased by about 10% **PERCENT** compared to 2021 **DATE**, mainly as a result of people returning to the workplace after the COVID-19 period. When compared to 2015 **DATE** baseline, water withdrawal reduced by 2.5% **PERCENT** while purchased water dropped by 13% **PERCENT**. In 2022 **DATE**, leaks were identified and fixed in Blagnac **ORG** and Mirabel **PERSON**, with an estimated impact of less than 2% **PERCENT** on total water withdrawal. Airbus **ORG** recognizes the considerable pressure planet Earth **LOC** is facing as a result of loss of biodiversity. The latest 2019 **DATE** report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services **ORG** demonstrates that the health of ecosystems is deteriorating more rapidly than ever and the 2021 **DATE** IPBES-IPCC co-sponsored workshop shows the clear inter-dependencies between climate action and biodiversity protection. In this context, Airbus **ORG** intends to improve its understanding of the impacts its activities and biodiversity may have on each other alongside the inter-dependencies of this subject with Airbus

ORG 's ongoing climate actions. These include the ones for **2030 DATE** and **2050 DATE** agreed at the **15th ORDINAL** Conference of the Parties of the UN Convention on Biological Diversity in **December 2022 DATE**, in **Montreal GPE**, according to which all signatory countries should update their **National Biodiversity Strategies and Action Plans ORG** as well as **National Biodiversity Finance Strategies ORG**. Key goals are also ones set by **the European Union ORG** in the **EU ORG** Green Deal and **the EU Biodiversity Strategy ORG** of **2020 DATE** that place **the European Union ORG** at the forefront of this transformation. **The Airbus Environmental Policy ORG** and overall governance, as described in 1.2.2 **Climate Change ORG**, applies to the biodiversity topic. Environmental risk and opportunities are managed following **Airbus ORG** 's **ERM ORG** system, as described in the section 1.2.2 **Climate Change ORG**. In **2022 DATE**, **Airbus ORG** launched a project to compile an inventory of potential impacts across the **five CARDINAL** drivers of biodiversity loss: changing use of sea and lands, direct exploitation of organisms, climate change, pollution and invasive non-native species. When building a new site or extending an existing one, **Airbus ORG** engages with local partners on conservation and remediation projects to preserve flora and fauna that were impacted by **Airbus ORG** 's industrial activities. In **France GPE**, for instance, during and after construction works, **Airbus ORG** strives to apply the Avoid, Reduce, **Compensate ORG** mitigation hierarchy, as well as establish a budget for compensation measures that goes beyond the duration of the project. **Airbus ORG** 's space products, and more especially **Earth LOC**-observation satellites, play an instrumental role in the understanding of biodiversity evolution. In addition, **Airbus ORG** through its corporate community work and its **Airbus Foundation ORG** has supported a number of biodiversity projects

that aim to help preserve wildlife and natural ecosystems at a community level, such as contributing to the International Union for Conservation of Nature **ORG** forest restoration project.