



Mr Guillaume Faury
Chief Executive Officer
Airbus S.E.
1, Rond Point Maurice Bellonte
31707 Blagnac Cedex
France

30 November 2019

Dear Guillaume,

Carbon Emissions Disclosure

TCI Fund Management Limited manages over \$30 billion across a range of asset classes. Since inception of the business over 15 years ago, cumulative investment returns have substantially outperformed equity index benchmarks.

TCI has been a shareholder of Airbus since 2012 and currently owns around 1.5% of the company.

Investment approach and engagement

As part of our investment process we assess a range of ESG factors, particularly climate change risk.

TCI believes that climate change-related risks, in particular a company's greenhouse gas (GHG) emissions, will have a material effect on a company's long-term profitability, sustainability and investor returns. These risks include regulation, taxation, competitive disadvantage, brand impairment, financing, physical asset impairment and litigation.

We actively engage on ESG to help us understand, quantify and influence a company's exposure to climate change-related risks and the way it is managing those risks.

Emissions disclosure

We require companies in which we invest to make appropriate and timely public disclosure of carbon and other GHG emissions. Such disclosure should include targets for emissions intensity reduction and absolute level reduction.

TCI fully supports compulsory disclosure on a standardised basis and the use of the Task Force on Climate-related Financial Disclosure (TCFD) reporting framework (www.tcfhub.org).

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**TCI Fund Management Limited is a private limited company incorporated and existing under the laws of England and Wales
with registered number 08898250**

Authorised and regulated by the Financial Conduct Authority

In our view, reporting to CDP (www.CDP.net) is the best way to implement TCFD. **We expect all our portfolio companies to make full annual public disclosure to CDP.**

Low-Carbon Transition Plans

We expect companies in which we invest to have a credible, publicly-disclosed plan to reduce GHG emissions. This plan should include measurable science-based targets that align with the Paris Agreement, which requires full de-carbonisation of economies (net zero emissions) by 2050.

Actions that should be included in a low-carbon transition plan are to:

1. Change business processes to reduce the company's carbon footprint;
2. Introduce efficient energy management into buildings and factories;
3. Source low carbon energy through direct generation or power purchase agreements;
4. De-carbonise transport fleets, e.g. through electric vehicles;
5. Offset emissions from corporate travel, e.g. through afforestation;
6. De-carbonise supply chains and helping customers lower their carbon intensity;
7. Advocate for regulations which drive the de-carbonisation of their industry to ensure its sustainability.

Voting

1. **We will typically vote against all directors of companies which do not publicly disclose their emissions and do not have a credible plan for their reduction.**
2. **We will also vote against auditors where the Annual Report and Accounts fail to report material climate risks.**

Divestment

We will also evaluate divestment where a portfolio company refuses to disclose its emissions and does not have a credible plan for their reduction.

Airbus disclosure to CDP

We are pleased to see that Airbus has provided disclosure to CDP for 2018 and 2019 and we have carefully analysed these submissions.

However, for 2018, CDP awarded Airbus an overall B grade. While Airbus's environmental systems and reporting through the dedicated Sustainability Steering Committee are relatively strong, Airbus is a world class company and should be achieving an A grade rating, which represents best practice environmental stewardship and disclosure. (Please see the Appendix for CDP's guidance on how to achieve an A grade). In 2018, Boeing achieved an A- grade.

Airbus shortcomings and TCI requirements

There are several significant shortcomings in Airbus's climate-related disclosure and initiatives:

1. We expect CDP to publish 2019 scores for Airbus by the end of this year. Airbus's 2019 submission to CDP is currently designated "non-public" on the CDP website and therefore only available to CDP members, whereas the 2018 submission was made public. The 2019 Airbus submission to CDP should be made publicly available;
2. Only limited data on Scope 3 emissions data is disclosed. Scope 3 emissions should include purchased and capital goods, fuel and energy and use of products sold;
3. Airbus should implement best practices for the sourcing and management of energy across all buildings, processes, and transportation. Airbus should join the RE100 initiative which commits participating companies to procure 100% of their electricity consumption from renewable sources;
4. Changes to the EU emissions trading scheme (ETS) in 2021 will impact the transport sector, with implications for profitability across the supply chain. Airbus should continue to disclose to its shareholders and CDP the actual and expected financial cost of carbon pricing schemes on the company, and how you intend to manage these costs;
5. Carbon offsetting should be undertaken to mitigate your carbon footprint, such as from corporate travel. The EU ETS and CORSIA schemes provide a useful framework to do this. There are also numerous accredited land-based schemes, such as afforestation;
6. While certain senior management and staff are incentivised to deliver emissions reduction targets, serious consideration should be given to broadening the scope of the targets and the scale of the incentives (staff incentives are currently non-monetary). Senior management and staff should be incentivised to deliver emissions reduction targets on a timely basis with a meaningful percentage of incentive compensation tied to these targets.

The urgent need to de-carbonise air transportation

While global aviation contributes only 3% of global CO2 emissions, industry estimates suggest a 3.5-fold increase in passenger traffic by 2050, which underscores the urgent need for aircraft engine manufacturers like Airbus to play a leading role in rapidly de-carbonising air transport.

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) developed by the International Civil Aviation Organization (ICAO) adopted by the global aviation industry (including Airbus) in 2016 stipulates that from:

- 2021 to 2035, net emissions of commercial aviation must be capped at 2020 levels;
- 2050, net aviation emissions need to fall by 50% relative to 2005 levels.

We expect CORSIA targets to be strengthened substantially in order to meet the Paris Agreement goals.

Airbus's de-carbonisation plans

Airbus's R&D programme has a key role to play in de-carbonising the aviation industry. It is positive that 80% of your Eur2bn R&D budget is focused on environmental impact. However, it is imperative that this spending is effective:

- We are pleased to see the annual improvement of existing products and new designs that have a lower climate impact. Airbus would be a key beneficiary if airlines are forced, via regulation or taxation, to renew their fleets;
- Greater use of composite materials to reduce weight of aircraft engine and the development of fully electric aircraft for urban air mobility (e.g Vahana, CityAirbus and the E-Fan X) are also positive;
- Full electrification of long-haul commercial aircraft is viewed by industry experts as unrealistic because of the lack of energy density of existing battery technologies;
- We were disappointed to see that Airbus has stopped its participation in electric taxiing with Safran. We would like to understand the reasons behind the termination of this project as it has the potential to deliver significant de-carbonisation benefits;
- The use of hydrogen is also problematic for current aircraft design given the volume of hydrogen required, but further research is justified. There are also warming effects from the water vapour produced to be considered;
- From our previous discussions with you and your team, you have highlighted the critical importance and potential of low carbon footprint fuels such as biofuels, synthetic fuels. We agree this is an important area, so we focus on it below.

Potential for alternative aviation fuels

In the absence of more radical breakthroughs in technology, the development of low-carbon fuels is vital to achieving net-zero carbon aviation. Advantageously, their use does not require any significant equipment or infrastructure investment and they can be blended with existing jet fuel.

The success of de-carbonised aviation fuels will depend on their environmental integrity, how uptake can be incentivised and scalability. Biofuels that displace land intended for food production or lead to de-forestation are not sustainable.

Advanced Biofuels are more sustainable as they are produced from waste and residues. To date, the uptake has been very limited mainly due to high price (2-3x the cost of kerosene) and availability. The NGO, Transport & Environment - T&E (www.transportenvironment.org) estimates that only 10% of aviation fuel demand can be met from this source by 2050.

For synthetic fuels to be sustainable, they must produce net-zero carbon emissions over the lifecycle. One way to achieve this is by using renewable power to extract hydrogen from water through electrolysis, which is then combined with CO₂.

Necessary regulatory and/or taxation changes for the deployment of alternative aviation fuels

De-carbonising aviation is a massive challenge given the current “cost penalty” of low carbon fuels. Based on T&E and the Energy Transitions Commission - ETC (www.energy-transitions.org) estimates, a carbon tax of between \$115-230 per tonne of CO2 would be needed to bridge the cost gap. ETC also estimates that this would translate into adding between \$40-\$80 in fuel costs per economy passenger on a long-haul flight (say 10% of end ticket prices), which is unlikely to affect demand given the low price-elasticity of air travel.

Internationally coordinated regulation and/or carbon pricing is therefore essential to drive large-scale deployment and future cost reductions. In particular, the introduction of:

- A carbon tax on aviation fuel which grows progressively and predictably;
- A “green fuel” mandate that specifies a gradually increasing percentage (to 100% by 2050) of aviation fuel that must be sourced from zero carbon sustainable sources;
- Strict standards and regulatory safeguards to ensure low carbon fuels are truly sustainable;
- Specific aviation sector incentives to ensure greater use of low carbon fuels, in preference to other sectors of the economy where de-carbonisation can be achieved by other means (e.g. autos moving directly to electric vehicles).

Currently, the penalties, taxes and mandates are insufficient to encourage airlines and fuel companies to seriously invest in the production of, and purchase of, alternative fuels. However, it is only a matter of time before tougher regulation is imposed to force the use of alternative fuels.

It will require all aviation stakeholders to work together and coordinate such initiatives. We recognise that this may create conflicts of interest, however, the alternative is for regulation to be imposed on the industry, including potential bans on old aircraft in certain regions. Currently, nine EU countries are lobbying the European Commission to introduce a carbon tax on air travel.

Airbus has an essential role to play in the long-term solution to de-carbonise aviation and must adopt a strong leadership position in advocating for the mandatory phase-in of low carbon synthetic fuels, even if this increases the cost of air transport. Any R&D necessary for Airbus to be able to use these fuels efficiently should be undertaken.

We appreciate the time and effort Airbus is making to de-carbonise its business, although there is much more work to be done. We found the discussion with your team very helpful and we look forward to continuing the dialogue.

Yours sincerely,



Chris Hohn



Philip Green



Ben Walker

Appendix - How to become an A grade company in the CDP Climate Change Program

An “A grade” is the highest overall CDP score achievable and demonstrates a company’s:

- Strong industry leadership on environmental actions and stewardship;
- Thorough understanding of the risks and opportunities related to climate change;
- Alignment with TCFD disclosure recommendations.

CDP uses its scoring methodologies to incentivise companies to measure and manage environmental impacts through participation in CDP’s climate change, water, forests and supply chain programs. Scoring provides a roadmap for companies to achieve best practice.

Companies are assessed and scored across four consecutive levels, as the company moves towards strong environmental stewardship. Minimum scores must be achieved in order to move to the next level. Inclusion on CDP’s A grade list requires a high leadership score.

The levels are:

1. Disclosure – every question is scored for quality and depth of disclosure, e.g. emissions, targets, environmental impact, strategy, governance, engagement;
2. Awareness – depth of analysis and understanding on how environmental issues affect the business;
3. Management – Evidence of actions taken to address environmental issues;
4. Leadership – Actions represent best practice as formulated by organizations working with CDP to advance environmental stewardship (e.g. Science Based Target initiative, CEO water mandate, CERES, WWF).

Help and guidance

CDP documents available to companies on the CDP website:

1. Scoring Introduction 2019
2. Climate Change 2019: General Scoring methodology Category Weightings

Specific guidance can be obtained from the **CDP Reporter Services Group**, for example, on how to improve the quality of disclosure and the actions required to demonstrate improvement.