



Mr Philippe Petitcolin
Chief Executive Officer
Safran S.A.
2 boulevard du Général Martial Valin
75015 Paris
France

30 November 2019

Cc Ross McInnes, Chairman

Dear Philippe,

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 Safran since 2012 and currently owns approximately 4% 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).

7 Clifford Street, London, W1S 2FT Telephone: +44 (0) 20 7440 2330

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.

Safran disclosure to CDP

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

However, for 2018, CDP awarded Safran only an overall C grade. In our view, this is an unsatisfactory score. Safran 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).

Safran shortcomings and TCI requirements

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

1. Safran'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 Safran submission to CDP should be made publicly available;**

2. No emissions reduction targets are disclosed for the business. Safran must set ambitious, science-based targets in emissions reductions. We note that Safran has stated that such targets are under consideration for 2020. We also note the need for better disclosure of the financial implications of climate-related risks and opportunities;
3. Safran should implement best practices for the sourcing and management of energy across all buildings, processes, and transportation. For example, Safran 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. While the cost is expected to be small, Safran 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. 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;
7. The 2019 submission suggests there is no engagement with your value chain on climate-related issues. Proper engagement with your supply chain via CDP's Supply Chain Initiative is necessary for Scope 3 emissions disclosure and for managing the emissions of your full supply chain.

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 Safran 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 Safran) 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.

Safran's de-carbonisation plans

Our recent call with Stephane Cueille, Safran's Head of R&D, and CFO Bernard Delpit was very insightful. The R&D program has a key role to play in de-carbonising the aviation industry. It is positive that 75% of

your Eur1.5bn R&D budget is focused on environmental impact. However, it is imperative that this spending is effective:

- We are pleased to see that your new engine (LEAP) reduces CO2 emissions by 15% compared with the previous generation of equivalent engines (CFM);
- A LEAP successor could deliver further CO2 emissions savings, but we appreciate that Safran will need the cooperation of airframe manufacturers when launching new products;
- The development of and hybrid electric propulsion systems (combining gas and electric motors targeted for 2025 launch) and greater use of composite materials to reduce the weight of airframes and aircraft engines, 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;
- 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 and synthetic fuels, and that Safran engines are fully capable of utilising such 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.

Safran should be advocating for Internationally coordinated regulation and/or carbon pricing 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.

Safran 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 Safran to be able to use these fuels efficiently should be undertaken.

We appreciate the time and effort Safran 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.