COMPLAINT AGAINST VIRGIN ATLANTIC IN RESPECT OF VIOLATIONS OF THE OECD GUIDELINES

Complainant:	POSSIBLE: THE 10:10 FOUNDATION
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	London NW1 7NN
Company:	Virgin Atlantic Limited and
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1. INTRODUCTION AND SUMMARY

1.1. Parties and the Complaint

- 1.1.1. This complaint (the "**Complaint**") is brought to the UK OECD National Contact Point (the "**NCP**") by Possible the 10:10 Foundation ("**Possible**"; the "**Complainant**").
- 1.1.2. The Complaint is brought against Virgin Atlantic Limited and/or Virgin Atlantic Airways Limited ("Virgin"; the "Company") respectively the ultimate owner of, and the original company within, the group that operates the airline known to the public as Virgin Atlantic in relation to certain public statements, advertising and communications regarding Virgin's efforts to reduce and/or offset its impact on climate change, which the Complainant contends are misleading consumers and the general public and are in breach of the recently-updated OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (the "OECD Guidelines" or the "Guidelines")¹.

1.2. The Climate Crisis and its relevance to this Complaint

- 1.2.1. This Complaint must be considered in the wider context of the climate crisis the world is facing. The Complainant refers in particular to the reports of the Intergovernmental Panel on Climate Change (the "IPCC") including "AR6 Climate Change 2021: The Physical Science Basis"², which warns that global warming must be limited to 1.5 degrees Celsius to prevent catastrophic climate change. The IPCC's Special Report on Global Warming of 1.5°C (the "Special Report")³ spelled out the additional impacts arising from warming of 2°C compared to warming of 1.5°C. These are, among others:
 - a) Increased risks from droughts and conversely from floods⁴;
 - b) An additional 10cm of sea-level rise by 2100⁵;
 - c) Greater impacts on biodiversity and ecosystems, both on land and in the oceans⁶;

OECD (2023)

IPCC Sixth Assessment Report: APR 6 Climate Change 2021: The Physical Science Basis: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf

³ https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM version report LR.pdf

⁴ Ibid, para. B.1.3

⁵ Ibid, para. B.2

⁶ Ibid, paras. B.3 – B.4

- d) Greater risk for people of heat-related morbidity and mortality, and of vectorborne diseases such as malaria and dengue fever⁷;
- e) Greater net reductions in yields of maize, rice, wheat, and potentially other cereal crops, particularly in developing regions of the world⁸;
- f) Adaptation to climate change is more challenging, and in some vulnerable regions the capacity to adapt to climate impacts may not exist for warming above 1.5°C9.
- 1.2.2. The Special Report states that to achieve this, global greenhouse gas ("**GHG**") emissions will need to decline by around 45% from 2010 levels by 2030, and reach net zero around 2050¹⁰. The most recent IPCC report, "AR6 Climate Change 2022: Mitigation of Climate Change"¹¹, states that global emissions pathways that have a greater than even chance of limiting warming to 1.5°C with no or limited overshoot require GHG reductions of 43% by 2030 and 84% by 2050, relative to 2019 levels. ¹²
- 1.2.3. On a global basis, nation states (including the UK) have set out a framework for tackling these issues in the 2015 Paris Agreement, with national governments setting increasingly ambitious climate targets to try to reach their obligations under that Agreement. In the UK, this has manifested itself in the 2019 amendments to the Climate Change Act 2008, which commit the UK to "net zero" GHG emissions by 2050, and a commitment under the Paris Agreement framework to reduce emissions by 68% compared to 1990 levels by 2030. Governments re-affirmed their commitment to reducing emissions in the 2022 Glasgow Climate Pact, which, inter alia:
 - a) Recognised 'the interlinked global crises of climate change and biodiversity loss' (Recital);
 - Expressed 'alarm and utmost concern that human activities have caused around 1.1 °C of global warming to date and that impacts are already being felt in every region' (Art. 3);
 - c) Stressed 'the urgency of enhancing ambition and action in relation to mitigation [...] in this critical decade' (Art. 4);

Ibid, para. B.5.2

⁸ Ibid, para B.5.3

⁹ Ibid, para. B.6.2 – 6.3

¹⁰ Ibid, para. C.1

^{11 &}lt;a href="https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC">https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC AR6 WGIII FullReport.pdf

https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf, para C.1.1

- d) Re-affirmed their commitment to the 1.5°C temperature limit, recognising that an increase of 2°C would bring much greater climate impacts (Art. 16);
- e) Noted that achieving the 1.5°C temperature limit would require carbon dioxide emissions to fall by 45 per cent by 2030 relative to the 2010 level (Art. 17); and
- f) Recognised that 'this requires accelerated action in this critical decade' (Art. 18).

1.3. Aviation and climate change

- 1.3.1. GHG emissions from UK aviation rose by 88% between 1990 and 2018.¹³ The Climate Change Committee, established under the Climate Change Act 2008, has warned that aviation is likely to be the largest source of emissions in the UK by 2050, even with technological progress and limiting demand, which the government is currently refusing to do.¹⁴ Aviation is a sector which is exceptionally difficult to decarbonise, with no pathway available to achieve emissions-free flights, and very high cost-, resource-, and technological-barriers to doing so.
- 1.3.2. There are very limited options to reduce CO2 emissions using technology that is commercially available, or likely to become available in the next few decades. The approaches to doing so can broadly be categorised as: (a) improvements to efficiency or operations; (b) use of alternative fuels; (c) development of alternative methods of propulsion; and (d) addressing of emissions outside the sector. As to these:
 - a) Jet engines are already highly developed and optimised for efficiency. Further improvements are only expected to be incremental and there are now real tradeoffs between fuel efficiency and (i) noise and (ii) emissions of local air pollutants in the design of new engines and aircraft.¹⁵ Operational measures to improve efficiency, such as the airspace modernisation, have been explicitly described as aiming to increase the number of planes in the sky.¹⁶
 - b) Historically, improvement in efficiency has been outstripped by growth in passenger numbers and in distances travelled, with the result that emissions from UK aviation have grown steadily even as efficiency has improved (a well-recognised impact known as the Jevons paradox).

Climate Change Committee, The Sixth Carbon Budget: Aviation. 2020. Available here: https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Aviation.pdf

¹⁴ https://www.theccc.org.uk/publication/letter-international-aviation-and-shipping/

Inter-dependencies between emissions of CO2, NOX & noise from aviation, Sustainable Aviation, Policy Discussion Paper, 2017 update. Available at https://tinyurl.com/2vh7kaew. Sustainable Aviation is an aviation industry body.

https://www.gov.uk/guidance/airspace-modernisation

- c) Alternative fuels, often misleadingly described as "sustainable aviation fuels" or SAF, are a currently nascent pathway about which serious concerns have been raised by experts. Simply put, there is no alternative source of fuel available on the scale of the industry's demand for kerosene that could be obtained without causing huge environmental, economic and/or resource problems, such as deforestation. This would displace emissions of fossil carbon elsewhere, not remove the need for them. Concerns about SAF are discussed in greater depth in Section 4.4 below.
- d) Powering planes by electricity or hydrogen will be extremely difficult. Batteries are many times heavier than kerosene per unit of energy stored, and hydrogen is much bulkier. To be able to cover more than very short distances with small numbers of passengers, aircraft running on electricity or hydrogen will require a complete redesign, which engineers have not currently been able to do because of the high technological difficulty involved. The expectation is that these methods of propulsion will be able to cover no more than a few percent of current air miles flown by 2050: The UK's Government's 'High Ambition' scenario assumes 'Zero Emission Flights' will reduce UK aviation emissions by just 4% in 2050.¹⁷
- e) Carbon removals via bioenergy with carbon capture and storage or direct air capture are also both at an early stage of development. They are both highly controversial, due to the high cost and resource implications, and concerns about the lifecycle emissions of bioenergy (discussed further at Section 4.5 below). There is doubt that this will be viable, workable or affordable at scale, and concerns about the uncertainty of long-term storage and the moral hazard involved (whereby the promise of a future alternative to cutting emissions reduces the present incentive to do so). Offsets have already been discredited as largely offering "junk credits" which, if anything, increase overall emissions. 18
- 1.3.3. In addition to the carbon dioxide produced by flights, aircraft also have non-CO2 impacts on the climate, through persistent contrails, effects on the properties of cirrus clouds, and impacts of other exhaust gases such as NOx at altitude.¹⁹ Although there is continued scientific debate about the precise extent of the non-CO2 climate impacts of aviation, and the most appropriate metric by which to compare them to the CO2 warming impacts, the overall scale of the problem has been clear for over

¹⁷ Jet Zero illustrative scenarios and sensitivities, DfT July 2022, p.11.

www.bloomberg.com/news/articles/2023-08-24/junk-offsets-are-feeding-mass-wave-of-greenwashing-studyshows?leadSource=uverify%20wall

^{19 &}lt;u>https://ec.europa.eu/clima/news-your-voice/news/updated-analysis-non-co2-effects-aviation-2020-11-24_en_alignment.co2.effects-aviation-2020-11-24_en_ali</u>

two decades. As early as 1999, the IPCC report, Aviation and the Global Atmosphere calculated the 'Radiative Forcing Index' (the ratio of total warming to CO2-only warming) for aircraft as being 2.7. ²⁰More recent scholarly articles have confirmed that, on the basis of the latest scientific evidence, "Non-CO2 impacts comprise about 2/3 of the net radiative forcing." Put another way, the non-CO2 warming impacts on their own are twice as large as the CO2 impacts on their own. This means that methods to reduce aviation emissions must tackle the full spectrum of emissions produced by planes, not only their carbon emissions – but there are virtually no policies or technologies in place to do so.

- 1.3.4. Options to make deep reductions in aviation emissions remain technologically and/or commercially immature. This means, therefore, that there is no way for customers to fly in the near to medium term without producing emissions. Given the technological complexity of aviation decarbonisation, it is unreasonable to expect that customers will have a grasp of the difficulties in doing so, or of the serious problems or limitations to existing methods such as offsets. It is therefore essential for bodies such as airlines, which communicate directly with customers and prospective customers about these issues, to be honest and accurate about what they can actually achieve to reduce emissions while continuing to fly (and to market flights to customers).
- 1.3.5. Since the pandemic, the aviation industry in the UK, along with the UK government, has expressed intention to expand passenger numbers in the decades to 2050, with the government's most recent update to the Jet Zero Strategy suggesting an increase in passenger numbers of more than 50% from pre-pandemic levels to 2050.
- 1.3.6. Serious concerns have been raised by experts that the UK government's strategy of encouraging demand for aviation to increase hugely to 2050, while relying on technological solutions to remove the resulting increase in greenhouse gas emissions, will not work. Research commissioned by Possible and published by Chatham House²² re-runs the analysis underpinning the government's Jet Zero Strategy, using realistic assumptions about the possible development and deployment rates of technological solutions to aviation emissions, to assess what levels of demand will be possible within the sector's remaining carbon budgets. The study finds that technologies including efficiency, negative emissions and alternative aviation fuels will not be sufficient to manage aviation emissions if the industry keeps on growing. Even if these technologies do develop, to keep within emissions limits

^{20 &}lt;a href="https://archive.ipcc.ch/ipccreports/sres/aviation/index.php?idp=64">https://archive.ipcc.ch/ipccreports/sres/aviation/index.php?idp=64

Lee et al 2021, The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018. https://www.sciencedirect.com/science/article/pii/S1352231020305689

^{22 &}lt;a href="https://www.chathamhouse.org/2023/11/net-zero-and-role-aviation-industry/summary">https://www.chathamhouse.org/2023/11/net-zero-and-role-aviation-industry/summary

UK demand in terms of passenger-kilometres flown in 2030 would need to be 36 per cent lower than in 2019. This level of demand reduction could be achieved by behaviour change by just the small group of people who fly most often, needing no change to travel habits for 77% of people, who already fly rarely.

1.3.7. In terms of the choices available to individual consumers: reducing the number and distance of the flights they take is often the most significant step an individual can take to reduce their carbon footprint. For example, the average GHG footprint in the UK is 11.7 tonnes of CO2-equivalent emissions (CO2e). ²³A typical short-haul flight (say, London-Zurich in business class) emits 200 kg CO2e. A typical long-haul flight (say, London-Singapore in business class) emits more than 5 tonnes of CO2e. ²⁴

1.4. Consumer attitudes to climate change

- 1.4.1. Research has shown that a significant number of UK consumers are environmentally conscious in their purchasing decisions and take into account factors such as the GHG footprint of products and services they purchase. More generally, individuals are now more likely actively to consider how they can reduce their own carbon footprint, thereby contributing to the country's net-zero target a trend recognised in paragraph 94 of the Guidelines. Such consumers are likely to be influenced by airlines' sustainability messaging when choosing: (i) whether to fly (as opposed to travelling by an alternative mode of transport, or not travelling); (ii) how far to fly; and (iii) which airline to fly with.
- 1.4.2. As the Chapter VI, Paragraph 1(d) of the Guidelines recognises, companies must provide "adequate, measurable and verifiable ... information on environmental impacts associated with their operations" and more generally, under Chapter VIII, Paragraph 4, companies must "not make representations or omissions, nor engage in any other practices that are deceptive, misleading, fraudulent or unfair".
- 1.4.3. These requirements are very important in the current context in which consumers and policy makers are increasingly alive to the environmental impact of their decisions and consumption habits. They are especially important in relation to an activity such as flying, which is mostly a discretionary choice for consumers, but which has a uniquely large impact on the annual GHG footprint of most individuals.

https://docs.google.com/document/d/1WdGEPGb7W5QvomzJCmtSDwG NdvtcU3zxzpQNIZ-mHo/edit

https://www.openaccessgovernment.org/the-average-british-carbon-footprint-is-five-times-over-paris-agreement-recommendations/152669/

Possible report, Jetting Away with It,

^{25 &}lt;a href="https://www.energylivenews.com/2020/02/23/almost-half-of-uk-consumers-seek-more-eco-friendly-products/">https://www.energylivenews.com/2020/02/23/almost-half-of-uk-consumers-seek-more-eco-friendly-products/;
https://www.ibm.com/downloads/cas/EXK4XKX8;
https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer.html

1.5. Summary of complaints

- 1.5.1. The Complainant has identified a number of misleading statements by Virgin in its promotional materials (the "Relevant Statements"). Virgin continues to rely on the Relevant Statements, which are available on its website as current statements about its environmental performance. The Relevant Statements may be grouped into a number of themes:
 - a) Misleading claims about reducing emissions;
 - b) Misleading claims about efficiency;
 - c) Misleading claims about alternative fuels; and
 - d) Misleading claims about Net Zero.
- 1.5.2. As explained further in section 4 below, the Relevant Statements are inaccurate and misleading, and therefore breach the OECD Guidelines.
- 1.5.3. In particular, the Complainant contends that the Relevant Statements breach some or all of the following requirements of the OECD Guidelines:
 - a) <u>Chapter VI, Paragraph 1(d)</u> which requires that enterprises "provide the public ... with adequate, measurable and verifiable (where applicable) and timely information on environmental impacts associated with their operations, products and services";
 - b) Chapter VI, Paragraph 3 which requires that "Consistent with the scientific and technical understanding of the risks, where there are threats of serious or irreversible damage to the environment, taking also into account human health and safety, [enterprises should] not use the lack of full scientific certainty or pathways as a reason for postponing cost-effective measures to prevent or minimise such damage."
 - c) <u>Chapter VI, Paragraph 5(c)</u> which requires companies to "Continually seek to improve environmental performance" including by "promoting higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise, including, by providing accurate information on their products (for example, on greenhouse gas emissions...";

- d) <u>Chapter VIII, Paragraph 2</u> which requires that enterprises should "provide accurate, verifiable and clear information that is sufficient to enable consumers to make informed decisions, including information on ... environmental attributes ... of goods and services. Where feasible this information should be provided in a manner than facilitates consumers' ability to compare products";
- e) <u>Chapter VIII, Paragraph 4</u> which requires enterprises "not [to] make representations or omissions, nor engage in any other practices that are deceptive, misleading, fraudulent or unfair"; and
- f) <u>Chapter VIII, Paragraph 5</u> which requires enterprises to "Support efforts to promote consumer education in areas that relate to their business activities, with the aim of, inter alia, improving the ability of consumers to ... (ii) better understand the ... environmental ... impact of their decisions",

together, the "Relevant OECD Guidelines".

- 1.5.4. Full extracts of these parts of the OECD Guidelines are provided at Appendix B.
- 1.5.5. The Complainants invite the NCP to refer to the following international and national marketing code of conduct in their interpretation and application of the OECD Guidelines: the ICC Marketing Code, ISO 4021:2016(E), the UK Code of Non-Broadcasting Activity and the CMA Guidance on environmental claims on goods and services (as further detailed and defined in section 3.2 below).
- 1.5.6. The Relevant Statements are analysed against the relevant OECD Guidelines and marketing codes in section 4 of this Complaint. A table summarising this information is at Appendix A of this Complaint.

2. PARTIES TO THE COMPLAINT

2.1. Introduction and summary

2.1.1. This section of the Complaint provides details about (i) the Complainant and its interests in bringing this Complaint; (ii) Virgin Atlantic Limited and its status as a "multinational enterprise" to which the OECD Guidelines apply; and (iii) why the UK NCP is the relevant NCP to address this Complaint.

2.2. The Complainant

- 2.2.1. Possible is a climate campaigning organisation, whose mission is to inspire people in the UK to take the action the climate crisis demands, and campaign for positive climate solutions to decarbonise areas of consumption emissions including heat, energy, and ground and surface travel. The organisation was started in 2009 (under the name "10:10 Climate Action") with a founding challenge of cutting carbon in the UK by 10% by 2010. Possible is a Charitable Incorporated Organisation registered in England and Wales with the Charity Commission under registration number 1157363.
- 2.2.2. Today, Possible's objectives are: (i) to promote sustainable development for the benefit of the public by the preservation, conservation and protection of the environment and the prudent use of resources; and (ii) to advance the education of the public in subjects relating to sustainable development and the protection, enhancement and rehabilitation of the environment. These objectives are also set out as the organisation's charitable objectives in its governing document. ²⁶
- 2.2.3. In particular, Possible has run a number of campaigns aimed at reducing the environmental impact of aviation, including calling for an equitable Frequent Flyer Levy to replace Air Passenger Duty²⁷, campaigning to ensure any Covid-19 bailout funds to the aviation industry were granted in return for meaningful sustainability commitments²⁸, and promoting a 'Climate Perks' initiative under which employers grant paid travel days to employees who travel by low-carbon (but slower) modes of transport. ²⁹
- 2.2.4. Possible has a legitimate interest in bringing the Complaint given the close connection of its contents to its charitable objectives and campaign activities.

 $[\]underline{ https://register-of-charities.charitycommission.gov.uk/charity-search/-/charity-details/5043626/governing-document}$

^{27 &}lt;u>https://www.wearepossible.org/actions-blog/the-frequent-flight-levy-the-way-to-make-fewer-flights-fair-for-everyone</u>

^{28 &}lt;u>https://www.wearepossible.org/actions-blog/dont-give-airlines-a-free-ride</u>

^{29 &}lt;a href="https://www.climateperks.com/">https://www.climateperks.com/

2.2.5. The Complainant confirms that it is aware that all the information it provides will be shared with Virgin and it understands that the NCP's approach to resolving complaints will in the first instance be to facilitate conciliation or mediation between the Complainant and Virgin.

2.3. The Company

The Company as a multinational enterprise

- 2.3.1. The Complaint is brought against Virgin Atlantic Limited, which the Company's Annual Report 2022³⁰ indicates is the ultimate parent company of the group of companies that operate the airline known to the public as Virgin Atlantic; and/or against Virgin Atlantic Airways Limited, the original company within the group (incorporated in 1981). The Complainant does not know the specific roles of the different companies; rather its concern is with the corporate communications made by 'Virgin Atlantic', which presents itself to the public as a single (or at least, unified) entity.
- 2.3.2. Both companies are registered in the UK and headquartered near Gatwick Airport, London. However, Virgin may be considered a multinational enterprise for the purpose of the Guidelines, which are intentionally broad in their application, because: (i) the very nature of its business means that it operates in many countries around the world; (ii) its Virgin Atlantic group includes companies registered in both Jersey and the USA, as well as in England and Wales; and/or (iii) Virgin Atlantic is itself part of the Virgin Group of companies which operates globally.
- 2.3.3. There is no definition of "multinational enterprise" in the Guidelines. Chapter I, paragraph 4, states:

"A precise definition of multinational enterprises is not required for the purposes of the Guidelines. These enterprises operate in all sectors of the economy. They usually comprise companies or other entities established in more than one country and so linked that they may coordinate their operations in various ways. While one or more of these entities may be able to exercise a significant influence over the activities of others, their degree of autonomy within the enterprise may vary widely from one multinational enterprise to another. Ownership may be private, State or mixed. The Guidelines are addressed to all the entities within the multinational enterprise (parent companies and/or local entities)."

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https://corporate.virginatlantic.com/content/dam/corporate/Virgin-Atlantic-Annual-Report-2022-F-signed.pdf, page 88

- 2.3.4. The Guidelines make it clear that they are intended to apply broadly: Chapter I paragraph 6 notes that governments "wish to encourage the widest possible observance of the Guidelines".
- 2.3.5. The nature of Virgin's business requires it to have an operational presence in most if not all of the countries to which it flies. Its website states that it flies to 35 destinations across 5 continents.³¹
- 2.3.6. Moreover, the groups of companies which comprise the Virgin Atlantic brand is itself multinational: it contains two companies registered in Jersey and two in the USA.³²
- 2.3.7. Furthermore, the Virgin Atlantic group of companies is part of a wider Virgin Group of companies, which share distinctive branding and are all associated in the public imagination with the well-known founder of the group, Sir Richard Branson. The Virgin Group of companies operates in numerous countries, in at least five continents around the world.³³
- 2.3.8. Given Virgin's worldwide presence, the fact that it is comprised of a group of companies that are not exclusively UK-registered, and the fact that it is part of a much wider multinational group that shares a common identity, it is obvious that Virgin itself should be considered a multinational enterprise that is subject to the OECD guidelines.

2.4. The UK NCP

- 2.4.1. The Procedural Guidance to the OECD Guidelines states that "Generally, issues will be dealt with by the NCP of the country in which the issues have arisen". ³⁴
- 2.4.2. As stated above, both Virgin Atlantic Limited and Virgin Atlantic Airways Limited are incorporated in England and Wales. Virgin is headquartered in Crawley, near London Gatwick, and its main base for flights is now London Heathrow. Although the relevant communications are hosted on its website and are therefore accessible to a global audience, they are in English and directed primarily, the Complainant suggests, to UK consumers.
- 2.4.3. The UK NCP is therefore the correct national contact point for this Complaint.

³¹ https://flywith.virginatlantic.com/gb/en/destinations.html

https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202022_F.pdf , p 45

https://www.virgin.com/virgin-companies

Procedural Guidance of the Guidelines, Commentary, para.23.

3. APPLICABLE EXTERNAL CODES TO ASSIST IN INTERPRETATION OF THE GUIDELINES

3.1. Introduction and summary

3.1.1. In this section, the Complainant identifies legislation, industry standards and codes of practice applicable in the UK and which the Complainants contend should inform the NCP's interpretation and application of the OECD Guidelines (together, the "Applicable External Codes").

3.2. Overview of the Applicable External Codes

- 3.2.1. The important role of wider legislation, industry standards and codes of practice in interpreting the OECD Guidelines is acknowledged explicitly in the chapeaux of both Chapters VI and VIII of the Guidelines.³⁵ The Guidelines therefore bring within their scope relevant marketing and advertising practices and standards, including the Applicable External Codes.
- 3.2.2. The Complainant submits that the following are Applicable External Codes and should be referenced as interpretive aids during the NCP's assessment of this complaint:
 - a) The UK Consumer Protection from Unfair Trading Regulations 2008³⁶ and the UK Code of Non-Broadcast Advertising³⁷ ("CAP Code"): In the UK, the Consumer Protection from Unfair Trading Regulations 2008 provide a framework for consumer protection and prohibit commercial practices that are deemed to be misleading, either on their face or by omission. Marketing and advertising is largely self-regulated in the UK with oversight and any enforcement required being carried out by the Advertising Standards Agency (the "ASA"), under a framework that includes the CAP Code.

The CAP Code generally applies to any non-broadcast advertisements and other marketing communications by UK-registered companies, including in newspapers, magazines, on their own websites or online space under their

The chapeau of Chapter VI requires that "enterprises should, within the framework of laws, regulations and administrative practices in the countries in which they operate, and in consideration of relevant international agreements, principles and objectives and standards, take due account of the need to protect the environment ...". The chapeau of Chapter VIII requires enterprises to act in accordance with "fair business, marketing and advertising practices".

The UK Consumer Protection from Unfair Trading Regulations 2008: https://www.legislation.gov.uk/uksi/2008/1277/contents/made

The CAP Code, Edition 12: https://www.asa.org.uk/uploads/assets/47eb51e7-028d-4509-ab3c0f4822c9a3c4/adf7ccc3-7f09-4fcd-9502a60ffbf4a786/The-Cap-code.pdf

control and "other electronic or printed material".³⁸ Its objective is to "protect consumers from misleading marketing communications".³⁹

b) The UK Competition and Markets Authority's ("CMA") "Guidance: making environmental claims on goods and services" (the "Green Claims Code")⁴⁰: The purpose of the CMA Guidance is "to help businesses understand and comply with their existing obligations under consumer protection law when making environmental claims". ⁴¹

The CMA Guidance sets out the expected standards to be adhered to by companies making "eco-friendly" claims in the UK that are "ultimately aimed at consumers". It sets out six principles that firms in scope must adhere to: (i) claims must be truthful and accurate; (ii) claims must be clear and unambiguous; (iii) claims must not omit or hide important information; (iv) comparisons must be fair and meaningful; (v) claims must consider the full lifecycle of the product or service; and (vi) claims must be substantiated.

- 3.2.3. The International Chamber of Commerce's Advertising and Marketing Communications Code ("ICC Marketing Code"): Chapter VIII of the Guidelines makes direct reference to the ICC Marketing Code and the Guidelines 2012 "Reference Instruments" explicitly confirms that the ICC Marketing Code⁴² is "relevant to aspects of the OECD Guidelines...and their implementation."⁴³ The ICC Marketing Code itself contains extensive guidance on environmental claims in marketing communications (Chapter D), and also refers to additional guidance in the ICC Framework for Responsible Environmental Marketing Communications (the "ICC Environmental Communications Framework").⁴⁴
- 3.2.4. <u>The International Standards Organisation's standard on green marketing claims, "ISO 14021:2016(E): Environmental labels and declarations Self-declared environmental labels and declarations Self-declared environmental</u>

³⁸ Introduction, The Cap Code, p. 5

³⁹ Background, Chapter 2, The Cap Code, p. 15

Competition and Markets Authority, Guidance: Making on Environmental Claims on goods and services', published 20 September 2021. Link: https://www.gov.uk/government/publications/green-claims-code-making-environmental-claims-on-goods-and-services

⁴¹ CMA Guidance, para.1.5

ICC Marketing Code. Link: https://iccwbo.org/content/uploads/sites/3/2018/09/icc-advertising-and-marketing-communications-code-int.pdf

Guidelines make reference to the ICC's standards in general at para 81. More specific reference to the ICC Marketing Code is made in OECD Guidelines for Multinational Enterprises: Reference instruments and initiatives relevant to the update Guidelines, March 2012, pg.19.

ICC Marketing Code p.39.

claims (Type II environmental labelling)" ("ISO 14021:2016(E)")⁴⁵ The objectives of ISO 14021:2016(E) are: to harmonise the use of self-declared environmental claims, to promote accurate and verifiable environmental claims that are not misleading; to increase the potential for market forces to stimulate environmental improvements in production, processes and products; to prevent or minimise unwarranted claims; to reduce marketplace confusion; to facilitate international trade; and to increase opportunities for purchasers, potential purchasers and users of the product to make more informed choices.

3.3. Analysis of relevant requirements of the Applicable External Codes

3.3.1. Each of the Applicable External Codes provides guidance on the manner in which a company's advertising or marketing may be deceptive or misleading to consumers, and therefore in breach of the Guidelines. A summary of key themes / requirements of the Applicable External Codes is set out below and the Complainants submit that these should inform the NCP's consideration of whether the Relevant Statements are in breach of the Guidelines.

Impression rather than intention

- 3.3.2. The impression created by marketing communications as well as the specific claims made are relevant to whether a marketing communication is misleading. For example, the ASA's approach is to assess the likely effect on consumers, not the marketer's intentions.⁴⁶
- 3.3.3. "Green" or "sustainable" claims must be evaluated in their entirety to assess how the reasonable consumer will interpret the advertising message. 47 Such claims, especially if used without explanation, are likely to be seen as suggesting that a product, service, process, brand or business as a whole has a positive environmental impact, or at least no adverse impact. 48 An evaluation of the "net impression" of the advertising on its intended target audience should ensure that it is not deceptive or misleading. 49
- 3.3.4. All marketing communications should be judged by their likely impact on the reasonable consumer, having regard to the characteristics of the targeted group and

^{45 &}lt;u>https://www.iso.org/standard/66652.html</u>

⁴⁶ CAP Code, Background, p.16

⁴⁷ ICC Environmental Communications Framework, p.3.

⁴⁸ CMA Guidance, para. 3.9

⁴⁹ ICC Environmental Communications Framework, p.6.

the medium used.⁵⁰ Claims can also be misleading if what they say is factually correct or true, but the impression they give consumers about the environmental impact, cost or benefit of a product, service, process, brand or business is deceptive.⁵¹

Clarity, data, evidence

- 3.3.5. The basis of environmental claims must be clear and unambiguous, and the meaning of all terms used in marketing communications must be clear to consumers.⁵²
- 3.3.6. Environmental claims must have a sound scientific basis. They should be conveyed consistently with the nature and scope of the evidence that supports both the express and implied messages that the reasonable consumer is likely to take away from the statement.⁵³
- 3.3.7. Marketing communications must not suggest that their claims are universally accepted if a significant division of informed or scientific opinion exists.⁵⁴
- 3.3.8. A company's action may not be honest and truthful if it is framed in such a manner that it abuses consumers' concern for the environment or exploits their possible lack of environmental knowledge.⁵⁵

Misleading omissions

- 3.3.9. Marketing communications must state significant limitations and qualifications. Qualifications may clarify but must not contradict the claims that they qualify. The CMA Guidance suggests that businesses could think about whether consumers would be surprised or disappointed to hear the omitted information after they had decided to buy a product. The consumers would be surprised or disappointed to hear the omitted information after they had decided to buy a product.
- 3.3.10. Marketing communications may mislead the consumer by omitting material information, by hiding material information or by presenting it in an unclear, unintelligible, ambiguous or untimely manner.⁵⁸

ICC Environmental Communications Framework, p.5.

⁵¹ CMA Guidance, para.3.11.

⁵² CAP Code, rules 11.1, 11.2; CMA Guidance para.3.51.

⁵³ ICC Environmental Communications Framework, p.10.

⁵⁴ CAP Code, rule 11.5.

⁵⁵ ICC Marketing Code, Article D1.

⁵⁶ CAP Code, Rule 3.9

⁵⁷ CMA Guidance, para.3.94

CAP Code, Rule 3.3; Regulation 6(1) of the Consumer Protection from Unfair Trading Regulations 2008; Article 7(2) Unfair Commercial Practices Directive (2005/29/EC)

3.3.11. Where businesses make claims regarding their carbon neutrality, such as in respect of emissions, they must make it clear if this is the case due to carbon offsetting, such as via CO2 compensation schemes, and provide information about such schemes.⁵⁹

Exaggeration

- 3.3.12. It is misleading to overstate environmental attributes. ⁶⁰ A claim that is literally true may nonetheless be misleading if, for example, it could be misinterpreted to convey a broader benefit or if it exaggerates the environmental benefit or features. ⁶¹
- 3.3.13. It is misleading for marketing communications that refer to specific products or activities to imply, without appropriate substantiation, that they extend to the whole performance of the company, group or industry.⁶²

⁵⁹ CMA Guidance, para.3.72-73

⁶⁰ ICC Marketing Code, Article D1.

⁶¹ ICC Environmental Communications Framework , pg. 8

⁶² ICC Marketing Code, Article D1.

4. THE RELEVANT STATEMENTS AND WHY THEY ARE MISLEADING

4.1. Introduction and summary

- 4.1.1. This section of the Complaint identifies specific instances where Virgin has made the Relevant Statements and sets out the Complainant's position as to why such statements are in breach of the Relevant OECD Guidelines.
- 4.1.2. As set out in paragraph 1.5.1 above, the Relevant Statements fall into the following five categories:
 - a) Misleading claims about reducing emissions;
 - b) Misleading claims about efficiency;
 - c) Misleading claims about alternative fuels; and
 - d) Misleading claims about Net Zero.
- 4.1.3. As foreshadowed above, the Complainant invites the NCP to have regard to the Applicable External Codes when considering whether or not each of the Relevant Statements breach the Relevant OECD Guidelines. The Complainant draws the NCP's attention to specific rules etc as relevant to each claim complained of. There are, however, a number of overarching rules which the Complainant invites the NCP to consider as applicable to every claim complained of:
 - a) <u>CAP Code Rule 11.7</u>: "Marketing communications must not mislead consumers about the environmental benefit that a product offers";
 - b) CMA Guidance paragraph 3.41: "The overall impression created by a claim must match the environmental impact of what is being marketed. Businesses should consider how a consumer is likely to interpret what they are told and what they are shown"; and
 - c) ICC Framework for Responsible Environmental Marketing Communications 2019 p. 11: "Information and claims about a product's environmental attributes should be judged by the likely perception of the reasonable consumer".
 - 4.1.4 The statements on which the Complainant relies, and the specific provisions of the Guidelines and External Codes which they breach, are set out in tabular form in Appendix A.

4.2. Misleading claims about reducing emissions

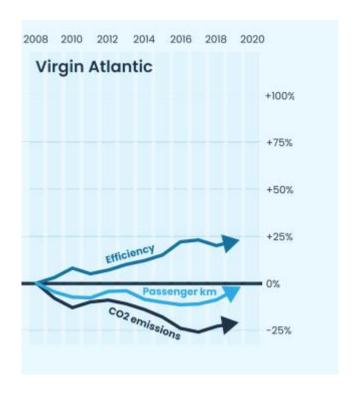
4.2.1. Virgin claims to have reduced total emissions in its sustainability reporting. The CEO's 2019 message states that: "Because of new, more efficient aircraft, since 2007 we've reduced... our total emissions by 21%." More recently, the 'Our Planet' section of Virgin's 2022 Annual Report states:

"over the last decade [...] our absolute carbon emissions have reduced from 4.75m metric tons (MT) of CO2 to just over 3m MT CO2 in 2022, an improvement of 35%". (page 42)

- 4.2.2. This statement misleadingly omits to mention that most of this reduction occurred in the last few years as a result of a reduction in demand. Virgin's emissions fell by 26% from 2019 to 2022, largely as a result of demand not having fully recovered following the Covid-19 pandemic: over the same period, passenger numbers fell from 5.88m to 4.38m a drop of around 25%.
- 4.2.3. The airline's reduction in emissions from 2007 to 2019 was achieved by keeping passenger kilometres roughly constant, while efficiency improvements allowed total emissions to fall.

20

https://corporate.virginatlantic.com/content/dam/corporate/FINAL Virgin Sustainability Report 2019%20LR.PDF



Graph from Missed Targets report, produced by Possible⁶⁴

4.2.4. However, the airline does not seem to want to continue on this trajectory of static passenger km allowing total emissions to fall, as the 2022 Annual Report makes clear:

"To support our plans for growth we took the opportunity to purchase three additional slots at Heathrow. This increased capacity will enable us to further leverage the customer and operational benefits of a single London hub..." [page 19]

"New aircraft will increase capacity in the year, as we add fresh routes to the network..." [page 22]

4.2.5. Virgin Atlantic has publicised its carbon targets, with goals for 2026, 2030 and 2040 included in its 'Mission to net zero' timeline that features prominently on its website and in its 2022 Annual Report.⁶⁵ However, these sources do not mention its failure to achieve its previous emissions target for 2020⁶⁶, which is crucial information for consumers seeking reassurance that the airline is capable of managing the harm it causes to the climate.

^{64 &}lt;u>https://www.wearepossible.org/s/Missed-Targets-Report.pdf</u>

^{65 &}lt;u>https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon.html</u>

⁶⁶ www.wearepossible.org/s/Missed-Targets-Report.pdf

- 4.2.6. Virgin has provided misleading, incomplete and confusing information about its historical emissions reductions.
- 4.2.7. Virgin is therefore in breach of Chapter VI, Paragraph 1(d) of the Guidelines, which requires businesses to provide the public with adequate, measurable and verifiable information on the environmental impacts of the activities of the enterprise. It is likewise in breach of Chapter VI, Paragraph 5(c), which requires companies to promote higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise, including by providing accurate information on their products' greenhouse gas emissions. The Relevant Statements also contravene Chapter VIII, Paragraph 2, which requires enterprises to provide accurate, verifiable and clear information that is sufficient to enable consumers to make informed decisions, including information on the environmental attributes of goods and services; and to provide this information in a manner that facilitates consumers' ability to compare products, particularly in light of the commentary at Chapter VIII, Paragraph 97, which requires that any product and environmental claims that enterprises make should be based on adequate evidence. The Relevant Statements also breach Chapter VIII, Paragraph 4, which requires companies to not make representations or omissions, nor engage in any other practices, that are deceptive, misleading, fraudulent or unfair.

4.3. Misleading claims about efficiency

4.3.1. Virgin claims to have reduced emissions per kilometre in its 2019 sustainability report, with the CEO's message stating that:

"Because of new, more efficient aircraft, since 2007 we've reduced our CO2 per revenue tonne-km (our efficiency metric) by 18.1%" [67]

4.3.2. That figure is reported as an 18% reduction for the same period (ie. 2007-2019) in the overview section of Virgin's 2021 sustainability report⁶⁸ and in Virgin's carbon summary of July 2020⁶⁹. However, in its Annual Report 2021 the airline revised this slightly downwards, stating that it achieved a 17% reduction in CO2/RTK between 2007 and 2019⁷⁰. No explanation was provided for this change.

^{67 &}lt;a href="https://corporate.virginatlantic.com/content/dam/corporate/FINAL Virgin Sustainability Report 2019%20LR.PDF">https://corporate.virginatlantic.com/content/dam/corporate/FINAL Virgin Sustainability Report 2019%20LR.PDF

https://corporate.virginatlantic.com/content/dam/corporate/2021%20AR_Sustainability%20pages.pdf, p.3

https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20and%20aircraft%20carbon%20-%20one%20page%20summary%20July%202020.pdf

https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_compressed.pdf

- 4.3.3. In its 2022 Annual Report, Virgin confusingly uses two different metrics and timescales. In the 'Mission to Net Zero' timeline, it claims to have achieved a 20% reduction in CO2/RTK as at 2022 compared with 2007 [page 45], and later on in the same Annual Report it claims a 12% reduction in CO2/RTK since 2013, with the company's "2022 performance representing a further 4% improvement against 2019" [page 72].
 - 4.3.4. However, it also uses a different metric, that of CO2 per available seat kilometre. The airline states: "our carbon efficiency (CO2/ASK) has improved by 20% over the last decade" [page 42]. The change in metric is confusing and makes it difficult to understand trends in performance. Since ASKs do not distinguish between empty seats and filled seats, efficiency expressed as CO2/ASK does not reduce when load factors drop, even though emissions per passenger-km increase as a result. Virgin's decision to switch from reporting its efficiency as CO2/RTK in 2019 to CO2/ASK in 2022 may be related to the drop in load factor over the same period, from 81.1% in 2019 to 73.4% in 2022. [page 18]
- 4.3.5. The airline seeks to portray this as impressive and as a positive sign that it can be trusted to manage its own emissions. However, it does not mention that this level of efficiency improvement is actually worse than the industry average. The average improvement achieved by the industry was 17.3% between 2009 and 2017,⁷¹ i.e. over 8 years. Compared to this, Virgin's 18.1% over 11 years is lower than average.
- 4.3.6. Virgin also claims to be improving its fuel efficiency by replacing older aircraft with newer ones, which it portrays as making its flights cleaner. In the section of their website on environmental impacts, the company states that:

"We operate one of the youngest and most fuel-efficient fleets in the sky with 70% next generation aircraft and an average age of less than seven years." ⁷²

4.3.7. Similar claims are made in the 2022 Annual Report⁷³ [page 12] and in the company's 2021 Sustainability Report, in which it is stated at page 40:

"We are already one of the most carbon efficient long-haul airlines. Operating one of the youngest and cleanest twin-engine fleets in the skies. At the end of 2021 our average aircraft age across the fleet was just under seven years and 68% next generation. This increases to 100% next generation by the beginning of 2027. This

^{71 &}lt;a href="https://aviationbenefits.org/media/166506/fact-sheet">https://aviationbenefits.org/media/166506/fact-sheet 3 tracking-aviation-efficiency.pdf

https://corporate.virginatlantic.com/gb/en/business-for-good/planet/carbon/fleet.html#:~:text=Fleet%20transformation&text=%F0%9F%8F%86%20We%20operate%20one%20 of,50%25%20reduction%20in%20airport%20noise.

https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202022_F.pdf

means our aircraft are equipped with the most efficient engines and state-of-theart technology designed to save fuel and reduce emissions."⁷⁴

- 4.3.8. Likewise, Virgin also claims to be tackling its climate impacts by improving efficiency, both via flying their existing planes more efficiently⁷⁵ and by buying new planes, which it claims is "the biggest difference we can make right now on our mission to net zero.... We're continuing to grow our fleet with next generation aircraft that burn less fuel [and] produce lower CO2 emissions".⁷⁶
- 4.3.9. This is misleading to consumers as it implies that there is a very sizeable difference between current and new, "next-generation" planes, and that the use of such planes will allow Virgin to make substantial progress towards reaching net zero. This is not true as new planes are incrementally rather than substantially more efficient than existing models, still rely on burning huge amounts of kerosene, and are not a pathway towards net zero. The term "next generation" is vague and is misleadingly used to imply a radically different type of aircraft, rather than the incremental improvements the industry has achieved so far.
- 4.3.10. In addition, savings from efficiencies cannot come close to counter-balancing growth in flights. Historically, flying has become more efficient per kilometre while total aviation emissions have increased, as efficiency savings have been insufficient to counter an increase in the number of flights and passengers (and in fact are highly likely to have contributed to this, as decreasing fuel costs increased passenger volumes).⁷⁷ In 2019, when the industry was operating under business as usual pre-Covid, demand for flights was increasing four times faster than efficiency savings, and there had been a 30% increase in emissions in the past six years.⁷⁸
- 4.3.11. These statements are also misleading insofar as they suggest that the company's speculative future reductions in emissions relate to changes in aircraft (e.g. "Fleet transformation delivering carbon efficiency", "our aircraft are equipped with the most efficient engines and state-of-the-art technology designed to save fuel and reduce emissions", etc) when in fact the company's future reductions in respect of fleets are predicated not only on a change of aircraft but also on wider changes to "efficiency in our network operations" which Virgin fails to provide detail of (including what exactly those anticipated network operations changes will consist of

⁷⁴ https://corporate.virginatlantic.com/content/dam/corporate/2021%20AR Sustainability%20pages.pdf, p.40

^{75 &}lt;u>https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon/fleet.html</u>

^{76 &}lt;u>https://www.youtube.com/watch?v=xdY7Uti-84U</u>

https://stay-grounded.org/wp-content/uploads/2021/08/SG_factsheet_8-21_Efficiency_print_02.pdf

⁷⁸ https://news.sky.com/story/we-do-have-solutions-ba-sets-out-key-planks-of-net-zero-strategy-12401489

⁷⁹ https://corporate.virginatlantic.com/content/dam/corporate/2021%20AR Sustainability%20pages.pdf. p.21

- and to what extent they are anticipated to account for speculative future improvements in efficiency).
- 4.3.12. Fleet replacement and trying to minimise fuel burn is a cost-saving measure for airlines, as Virgin acknowledges. Retiring older and less efficient planes is a standard cost-cutting measure for airlines, and should not be described in a way that gives customers a misleading impression of the efficacy of these new planes to tackle the company's contribution to the climate crisis.
- 4.3.13. Virgin has provided misleading, incomplete and confusing information about its efficiency improvements. It is therefore in breach of Chapter VI, Paragraph 1(d) of the Guidelines, which requires businesses to provide the public with adequate, measurable and verifiable information on the environmental impacts of the activities of the enterprise. It is likewise in breach of Chapter VI, Paragraph 5(c), which requires companies to promote higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise, including by providing accurate information on their products' greenhouse gas They also contravene Chapter VIII, Paragraph 2, which requires enterprises to provide accurate, verifiable and clear information that is sufficient to enable consumers to make informed decisions, including information on the environmental attributes of goods and services; and to provide this information in a manner that facilitates consumers' ability to compare products, particularly in light of the commentary at Chapter VIII, Paragraph 97, which requires that any product and environmental claims that enterprises make should be based on adequate evidence. They also breach Chapter VIII, Paragraph 4, which requires companies to not make representations or omissions, nor engage in any other practices, that are deceptive, misleading, fraudulent or unfair.

4.4. Misleading claims about alternative fuels

- 4.4.1. Alternative fuels to conventional kerosene, misleadingly lumped together by the aviation industry as "sustainable aviation fuels" or SAFs, make up another key plank of the airline's attempts to portray itself as on a path to climate compatibility despite its huge emissions footprint.
- 4.4.2. Virgin trumpets its target to use a 10% blend of SAFs by 2030 as a key part of its programme to decarbonise (for example, this target features on its 'Mission to net zero' timeline on its website⁸¹ and in the CEO's foreword to the company's 2022

^{80 &}lt;u>https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon/fleet.html</u>

^{81 &}lt;a href="https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon.html">https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon.html

Annual Report⁸²). However, this target is no more than the proposed legally-binding SAF mandate, which the UK Government has committed to introduce, a fact that Virgin fails to refer to.⁸³ It therefore does not represent any unique environmental commitment by Virgin – it is (subject to final confirmation by the UK Government) likely to be a legal requirement.

4.4.3. The airline's 'sustainable aviation fuels' webpage says, about SAFs:

"These fuels are produced using a range of sustainable feedstocks - ranging from used cooking oil, non-food crops, biomass waste and industrial waste gasses from processes such as steel making.

"They're proven to safely and effectively power aircraft, potentially reducing lifecycle carbon emissions by up to 70% or more, in comparison to fossil fuel-based typical aviation fuel."84

- 4.4.4. Elsewhere, Virgin has claimed even greater reductions in emissions from its use of alternative fuels, citing "up to 80%"⁸⁵ and "capable of reducing the lifecycle carbon impact of aviation fuel by more than 75%"⁸⁶".
- 4.4.5. In its annual report 2021, Virgin Atlantic claims that:

"SAF includes alternative next generation fuels produced from sustainable feedstocks (ranging from waste fatty acids and oils, to recycled biomass, recycled plastic and captured carbon)"87

4.4.6. A similar description is given on Virgin's Sustainable Aviation Fuel webpage: "sustainable feedstocks - ranging from used cooking oil, non-food crops, biomass waste and industrial waste gasses from processes such as steel making."88

https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202022_F.pdf. p.12

https://www.gov.uk/government/consultations/pathway-to-net-zero-aviation-developing-the-uk-sustainable-aviation-fuel-mandate

https://corporate.virginatlantic.com/gb/en/business-for-good/planet/carbon/sustainable-aviation-fuel.html

https://corporate.virginatlantic.com/gb/en/media/press-releases/virgin-atlantic-agrees-sustainable-aviation-fuelsupply.html

https://corporate.virginatlantic.com/gb/en/media/press-releases/our-mission-to-net-zero-by-2050.html#:~:text=Building%20a%20strong%20domestic%20SAF,traditional%20jet%20fuel%5B1%5D.

^{87 &}lt;a href="https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_c">https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_c
ompressed.pdf

https://corporate.virginatlantic.com/gb/en/business-for-good/planet/carbon/sustainable-aviation-fuel.html

- 4.4.7. Virgin puts forward a number of seriously incorrect and misleading claims here. The term "SAF" is essentially a misleading umbrella term that hides serious differences between emissions profiles for different feedstocks. Use of the phrase "sustainable aviation fuels" or the acronym "SAF" is intrinsically misleading, and has not been clearly defined by Virgin. The term can be used to refer to alternative fuels derived from a wide range of feedstocks including biomass, bio waste, animal fats, plastic waste, municipal solid waste, industrial gases (i.e. fossil carbon), and carbon captured from the air. The feedstock used hugely changes the emissions footprint of the fuel, from being as polluting as kerosene (fuels derived from crops) to potentially approaching carbon neutrality, although not climate/warming neutrality (direct air capture fuels, which are the most difficult and expensive to produce and currently barely at prototype stage). The use of the term "sustainable aviation fuels" therefore creates a misleading impression for the airline's customers and potential customers that their flight's environmental impact has been dealt with and is now "sustainable", which is simply not the case - and would not be the case, even if the airline was flying entirely on power to liquid fuel, the least worst option, which will not be the case for decades, if ever, due to cost and supply chain barriers.
- 4.4.8. The claim that fuel made from recycled industrial gases is "sustainable" is highly questionable these gases still derive from fossil carbon and move carbon from geological storage to the atmosphere. This feedstock relies on fossil fuels continuing to be burned elsewhere, and can never be a pathway to net-zero. The various numbers cited by Virgin as the size of emissions reductions from this type of fuel are far too high the academic literature suggests more in the region of 50%⁸⁹ or 60%⁹⁰ reductions in carbon.
- 4.4.9. In addition, these numbers fail to include the non-CO2 warming from alternative fuels, which make up two-thirds of the warming from planes burning kerosene. Even fuels made from carbon captured directly from the air, which theoretically reduce carbon emissions by close to 100%, can produce only a reduction in total warming of between 30% and 60%, and ignoring the non-CO2 warming. By providing the numbers for carbon emissions only, and ignoring the remaining two-thirds of warming which is not eliminated by using recycled carbon fuels, Virgin provides an incomplete and misleading picture to customers and regulators of the efficacy of its proposed emissions reduction pathway.

⁸⁹ https://link.springer.com/article/10.1007/s11708-013-0263-9

⁹⁰ https://pubs.acs.org/doi/abs/10.1021/acs.iecr.5b03215

^{91 &}lt;a href="https://www.fch.europa.eu/sites/default/files/FCH%20Docs/20200507_Hydrogen%20Powered%20Aviation%20re">https://www.fch.europa.eu/sites/default/files/FCH%20Docs/20200507_Hydrogen%20Powered%20Aviation%20re port FINAL%20web%20%28ID%208706035%29.pdf

- 4.4.10. The claim, made as recently as 2019, that fuels from waste could be available by 2021 at scale and at a similar cost to fossil kerosene⁹² has clearly not materialised by 2022, and shows no sign of being delivered for decades at best. This is typical of the tendency of Virgin (and many other aviation industry bodies) to overpromise and underdeliver on the rate of technological progress on decarbonisation that is possible or likely.⁹³ As the Complainant has previously demonstrated,⁹⁴ this type of claim is less a realistic assessment of the rate of technological progress and more of a greenwashing strategy, pushing forward unsubstantiated and unachievable projections of future progress to attempt to justify present-day rates of expansion of kerosene powered flight which are dangerous for the climate.
- 4.4.11. Virgin also buys alternative fuels from Neste, whose feedstocks include cooking oil and animal fat waste⁹⁵, and expects that in future its feedstocks will include municipal solid waste and forest waste,⁹⁶ which Virgin claims can reduce emissions by up to 80%.⁹⁷ Virgin is also planning to source fuels made from plastic as a feedstock,⁹⁸ along with crops and biomass waste.⁹⁹ Virgin makes extravagant claims about the emissions reductions potential of alternative aviation fuels, claiming that "The possibility of developing carbon neutral and even carbon negative fuels is also now within reach."¹⁰⁰
- 4.4.12. These claims are untrue and misleading for consumers. There is no pathway for developing carbon negative aviation fuels, as it is not possible to capture or store carbon emitted by planes.
- 4.4.13. The use of language is misleading, with terms including "recycled plastic" and "sustainable feedstocks" the incorrect impression that the feedstocks for these alternative fuels can continue to be obtained without causing environmental problems, and that they have already been recycled. The need to reduce, in particular, plastic waste and food waste is widely understood. It is also not the case

⁹² https://corporate.virginatlantic.com/content/dam/corporate/FINAL Virgin Sustainability Report 2019%20LR.PDF

^{93 &}lt;u>https://www.wearepossible.org/our-reports-1/missed-target-a-brief-history-of-aviation-climate-targets</u>

⁹⁴ https://www.wearepossible.org/s/Missed-Targets-Report.pdf

⁹⁵ https://www.neste.com/products/all-products/saf/faq#6d62986c

https://www.neste.com/products/all-products/saf?gclid=Cj0KCQjw3eeXBhD7ARIsAHjssr_GtkA0uHvyLx5ISH4lr G78oR9Mm2G8u8eWEPj-JHA0BOQXyx6_F00aAv1jEALw_wcB#39a0b336

^{97 &}lt;a href="https://corporate.virginatlantic.com/gb/en/media/press-releases/virgin-atlantic-agrees-sustainable-aviation-fuel-supply.html">https://corporate.virginatlantic.com/gb/en/media/press-releases/virgin-atlantic-agrees-sustainable-aviation-fuel-supply.html

⁹⁸ www.independent.co.uk/travel/news-and-advice/virgin-atlantic-sustainable-aviation-fuel-plastics-b2016583.html

⁹⁹ https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon/sustainable-aviation-fuel.html

https://flywith.virginatlantic.com/cn/en/stories/the-environment-our-three-priorities.html

^{101 &}lt;a href="https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_compressed.pdf">https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_compressed.pdf

that the plastics content in alternative fuels has already been recycled - the feedstock is household waste/municipal solid waste, for which less than 10% of the plastics are recycled. ¹⁰² If by this claim Virgin intends to imply that the plastic is recycled by their process of turning it into an alternative fuel, then it is patently inaccurate and misleading to describe the process of burning plastics as airplane fuel as "recycling" in the sense that consumers would understand it, because that term implies a closed loop in which the material is either used over and over again, or is converted into another permanent form - not converted into a form in which it is then burned.

4.4.14. The scientific literature comparing the lifecycle emissions from fuel from waste or biofuels compared to conventional jet fuel is clear that these fuels may produce even more emissions and be worse for the climate than kerosene. Both feedstocks produce fuels with similar tailpipe emissions to kerosene, and the emissions reductions are claimed to be created at a systemic level. For fuels derived from biomass, land is not available to produce crops for biofuels in sufficient quantities to power aviation without causing hugely damaging deforestation, which increases emissions and makes biofuels just as bad for the climate as kerosene, if not worse. 103 This means that fuels derived from biomass have emissions several times that of kerosene when the impact of land use changes are taken into account. 104 Fuels from waste produce more carbon emissions (tailpipe + processing) than conventional kerosene, and can only be made to look like a low-emissions option by creative accounting relying on avoided emissions from landfill. 105 The quantity of genuinely waste or residue biomass available is also tiny in comparison to aviation's kerosene demand. Fuels from waste and from biomass therefore present serious problems when they are relied upon to decarbonise aviation, and neither can be relied upon to offer genuine, system-level carbon reductions compared to fossil fuel kerosene.

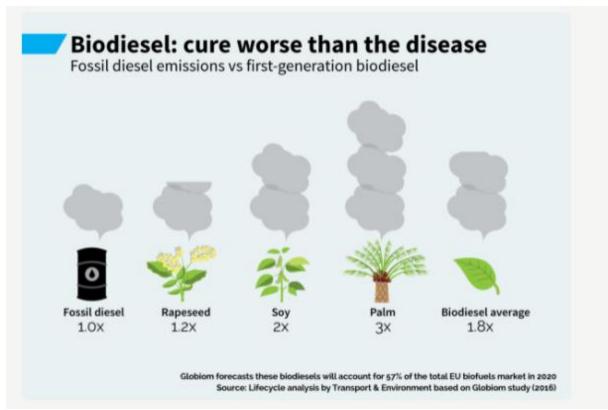
¹⁰² https://www.bigissue.com/news/environment/what-happens-to-plastic-waste-in-the-uk/

https://sdg.iisd.org/news/rainforest-norway-report-finds-aviation-emissions-reduction-targets-could-drivedeforestation/

www.greenqueen.com.hk/airlines-shifting-to-biofuels-may-lead-to-7-million-hectares-deforestation/

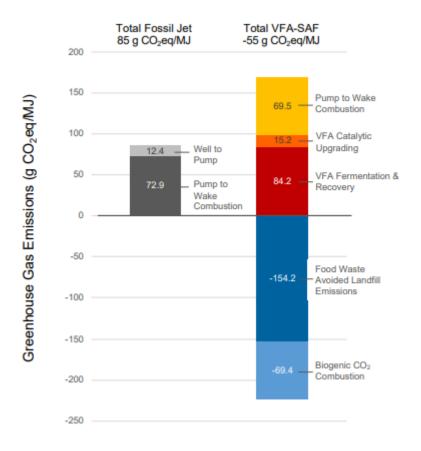
^{104 &}lt;u>www.transportenvironment.org/discover/palm-oil-and-soy-oil-biofuels-linked-high-rates-deforestation-new-study/</u>

¹⁰⁵ www.pnas.org/content/pnas/suppl/2021/03/10/2023008118.DCSupplemental/pnas.2023008118.sapp.pdf#page=24



Source: Transport & Environment analysis. 106

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Source: PNAS paper¹⁰⁷

4.4.15. This diagram - with which Virgin passengers can of course not be expected to be familiar - makes it clear that fuels from waste (on the right) have substantially higher total production and tailpipe emissions than fossil derived jet fuel. The claim that it lowers total emissions derives from the "negative" emissions in blue, which are avoided emissions from reducing landfill. Again, rather than providing actual emissions reductions, this pathway claims reductions as credits against a hypothetical high emission scenario. This ignores the existing viable pathways to avoiding landfill emissions from waste, such as producing less waste. These forms of creative accounting are not a pathway to a genuine low-emissions future, and in fact are likely to increase emissions, both by encouraging pathways which lead to higher systems-level emissions and by discouraging demand reduction under the mistaken impression that climate impacts have been dealt with and it is fine to continue high levels of aviation.

¹⁰⁷ http://www.pnas.org/lookup/doi/10.1073/pnas.2023008118#supplementary-materials

- 4.4.16. The numbers provided by Virgin on the emissions reductions obtainable from alternative fuels are also factually incorrect. The airline claims that these fuels "generally [produce] up to 70% less carbon than fossil fuels." This is incorrect, both from the tailpipe perspective and from the systems-level carbon stocks perspective. In addition, these fuels still produce other warming impacts including nitrous oxide and water vapour, meaning that even if they could be made to be carbon neutral they would not be climate neutral. Virgin's communications around alternative fuels therefore leave customers with a highly inaccurate and misleading impression of the extent to which they can mitigate the warming caused by their flight. This is likely to give customers a false sense of security about the climate impacts of their travel choices, which may have an adverse impact on the climate and increase emissions by encouraging them to take more flights under the inaccurate impression that they can fly without harming the climate.
- 4.4.17. Customers cannot be expected to be aware of the details of the emissions footprints of different types of feedstocks for alternative fuels, and are therefore highly likely to be misled by Virgin's claims. The customer is likely to infer that the use of an alternative fuel, particularly one wrongly described as "sustainable", allows their journey to take place without causing emissions, but this is just not the case; alternative fuels purchased through the CORSIA scheme require only that alternative fuel used deliver a minimum emission reduction of 10% compared to kerosene. In addition, even if alternative fuels were to be able to make fuels neutral in terms of the carbon emissions, they would still cause other GHG emissions which would have a sizeable warming impact.
- 4.4.18. In addition, the airline does not mention that even if fuels from waste could provide a pathway to net-zero flight, this would not be a scalable solution, given the tiny quantities of genuine residues and wastes available compared to the size of the industry's jet fuel demand. The airline's statement that this alternative fuel forms part of its net zero carbon strategy is therefore worrying, and casts serious doubt on the validity of that plan.
- 4.4.19. Overall, there is very little transparency in Virgin's public communications about SAFs, including as to how much they are realistically expected to contribute to the airline's net zero goal. While the 2022 Annual Report boasts that Virgin "will make aviation history by operating the first ever 100% SAF flight across the Atlantic" giving the impression that this is unequivocally a good thing, the actual impact of SAF is left

www.reuters.com/business/sustainable-business/british-airways-owner-iag-makes-sustainable-fuel-commitment-2021-04-22/

www.transportenvironment.org/wp-content/uploads/2021/07/2019 09 Corsia assessement final.pdf

unexplained by Virgin in connection with this single publicity flight. Indeed, buried elsewhere in the discussion within its 2022 Annual Report is the admission that to reach the target of 10% SAF by 2030 will require "a scale-up of over 100 times the announced planned production" in the UK. In other words: (i) it will be enormously challenging to reach even a 10% blend at scale; (ii) doing so will make an unknown contribution to reduction of lifecycle CO2 emissions (because that reduction varies hugely with the type of SAF) and (iii) CO2 emissions only represent one-third of aviation's overall impact on the climate. None of this is clear to the consumer visiting Virgin's website, who is left with the impression that SAFs will make a major contribution towards eliminating the environmental impact of aviation. That misleading impression is further advanced by Virgin's publicity around its launch in late November 2023 of "the world's first 100% Sustainable Aviation Fuel (SAF) transatlantic flight"110The press announcements from both Virgin and British Petroleum (which is supplying the SAF)¹¹¹, misleadingly suggest that (i) there is consensus that "SAF is recognised as having a vital role to play in aviation's decarbonisation"; and (ii) but for regulations which "allow for a 50% SAF blend in commercial jet engines" the airline industry could move towards 100% SAF use and thereby achieve net zero. For all the reasons outlined above, that is not true.

4.4.20. Further, Virgin's claim that "residual CO2 emissions from the flight will be mitigated using innovative carbon removals from biochar projects" is also misleading. There is significant uncertainty about the scale and permanence of GHG sequestration that can be achieved with biochar. Biochar breaks down over time, releasing the stored carbon, and the rate at which this process occurs varies hugely with the type of feedstock used to make the biochar, and the soil and climatic conditions in which it is applied, and 'mitigation estimates are based on pilot-scale facilities, leading to uncertainty.' Moreover, because biochar is black, it reduces the albedo (reflectivity) of the soil to which it is applied and so increases its heat absorption; the same can occur downstream as biochar breaks down into soot. 113 It is therefore misleading to suggest that biochar carbon 'removal' projects will mitigate the residual CO2 emissions. The carbon emission is certain, whereas the carbon sequestration is highly uncertain.

4.5.

4.5.1. Again, the issues with the viability of the airline's net-zero plan cannot possibly be clear to consumers making decisions about whether to travel by plane or choose a lower-emissions form of transport, who are likely to be reassured by the existence of such a plan but without having the capacity to explore it in detail or assess its viability.

¹¹⁰ https://www.virgin.com/about-virgin/latest/virgin-atlantics-historic-net-zero-transatlantic-flight-closer-to-takeoff

¹¹¹ https://www.bp.com/en/global/air-bp/news-and-views/air-bp-news/first-100-percent-saf-transatlantic-flight-readies-for-take-off.html

¹¹² IPCC, Sixth Assessment Report, WG III Full Report, para 7.4.3.2

https://www.biofuelwatch.org.uk/wp-content/uploads/biochar-briefing-2020.pdf, pages 4-5.

Reliance by Virgin on deeply flawed technological pathways is therefore misleading to consumers, who will be given the inaccurate impression that the airline is much more able to address the climate impact of their flight than is actually the case.

4.5.2. Virgin has provided misleading, incomplete and confusing information about its efficiency improvements. It is therefore in breach of Chapter VI, Paragraph 1(d) of the Guidelines, which requires businesses to provide the public with adequate, measurable and verifiable information on the environmental impacts of the activities of the enterprise. It is likewise in breach of Chapter VI, Paragraph 5(c), which requires companies to promote higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise, including by providing accurate information on their products on greenhouse gas emissions. They also contravene Chapter VIII, Paragraph 2, which requires enterprises to provide accurate, verifiable and clear information that is sufficient to enable consumers to make informed decisions, including information on the environmental attributes of goods and services; and to provide this information in a manner that facilitates consumers' ability to compare products, particularly in light of the commentary at Chapter VIII, Paragraph 97, which requires that any product and environmental claims that enterprises make should be based on adequate evidence. They also breach Chapter VIII, Paragraph 4, which requires companies to not make representations or omissions, nor engage in any other practices, that are deceptive, misleading, fraudulent or unfair.

4.6. Misleading claims about net zero pathway

- 4.6.1. Virgin claims that it has a pathway to net zero by 2050,¹¹⁴ i.e. that it is able to bring its business model into alignment with the world's vital climate target while continuing to operate very large numbers of flights. The 'Mission to net zero' timeline is a central part of its sustainability messaging and features prominently on its website¹¹⁵ and in its 2022 Annual Report. It is based heavily on efficiency and alternative fuels, rather than demand reduction, with offsets covering the unspecified volume of emissions that will remain in 2050.¹¹⁶ In this way, Virgin promotes a misleading narrative around its highly-polluting product, telling consumers that they can continue to fly as much as they like, guilt-free, because the airline supposedly has a plan to eliminate the environmental impact of flying.
- 4.6.2. This narrative is highly misleading, in at least the following ways:

^{14 &}lt;a href="https://corporate.virginatlantic.com/gb/en/media/press-releases/our-mission-to-net-zero-by-2050.html">https://corporate.virginatlantic.com/gb/en/media/press-releases/our-mission-to-net-zero-by-2050.html

https://corporate.virginatlantic.com/global/en/business-for-good/planet/carbon.html

https://corporate.virginatlantic.com/gb/en/media/press-releases/our-mission-to-net-zero-by-2050.html

- (a) The airline's claims about what efficiency and SAFs can deliver are inflated and unrealistic; and it has previously failed to achieve its targets and expectations on both. This puts into serious doubt its ability to bring emissions into alignment with the net zero target using technological pathways alone;
- (b) Its plan to reach net zero emissions as an airline is hopelessly vague and incoherent. The milestones are confusingly worded and it appears that implausibly large reductions are left until the final decade before 2050.
- (c) As part of this, the extent to which the airline expects to rely on offsets is completely unexplained, and the limitations of carbon offsets and removals is not explored;
- (d) The airline's communications about its net zero plan do not address or even acknowledge the non-CO2 impacts of aviation, which will not be eliminated by use of SAFs and will not be reduced at all by offsetting;
- (e) Virgin actively tells its customers that it would be wrong to cut down on flying, which it claims is 'intrinsically good'. In this way, Virgin promotes a misleading narrative around its highly-polluting product, telling consumers that they can continue to fly as much as they like, guilt-free.
- 4.6.3. Claims about efficiency and SAFs have been dealt with above. The remaining issues are examined below.

Net Zero plans vague, confusing and incoherent

4.6.4. Virgin's 'Mission to Net Zero' sets targets for 2026, 2030, 2040 and 2050. The target for 2026 is clear and specific. There is no complaint about that. Tellingly, however, the targets for later years become increasingly confusing and vague. The targets for 2030 and 2040 are for a 15% and a 40% 'net reduction in total CO2 emissions vs a 2019 baseline'. What is not explained to the consumer on the website is the meaning of 'net' as part of the 2030 and 2040 targets. If it is intended to mean 'net of any ETS credits, CORSIA offsets, or offsets purchased voluntarily' then this should be explained to the consumer, because: (i) ETS and CORSIA are mandatory regulatory schemes, they do not represent additional effort by the airline; (ii) the reliance on offsets means that the airline will achieve a lower direct reduction in emissions than the headline target implies, but there is no indication of how much lower; and (iii) there are serious concerns about the validity and availability of carbon offsets and removals (as explored further below).

4.6.5. The target for 2050 is simply stated as 'Net Zero', with no further elaboration of what that means. Moreover, if the airline is only targeting a 40% net reduction in 2040, it will have to massively accelerate its efforts in the 2040s to reduce or offset the remaining 60% of its emissions by 2050. The vagueness of the 2030 and 2040 commitments, and the extent to which Virgin's 'Mission to Net Zero' is backloaded – delaying the majority of emissions reductions (of around 1.2m MT CO2) until the last decade – means that the strategy overall lacks any credibility.

Reliance on offsets and removals is unquantified and uncaveated

- 4.6.6. As set out above, the extent to which Virgin proposes to rely on carbon offsets and/or removals is not quantified in its communications about its pathway to Net Zero. This is highly problematic, because the extent to which the airline will reduce its direct emissions is completely opaque.
- 4.6.7. Currently, Virgin does not offer any offsetting option to its customers. Presumably, this is because its previous offering was of extremely low-quality offsets (a generous interpretation of the reason for this would be that high-quality offsets that actually remove and sequester carbon at scale at an affordable price are simply not available). Serious concerns were raised about forestry projects previously used as offsets by Virgin Atlantic which failed to protect forests and also breached human rights, with a forest in Cambodia being clear cut and local people removed from their land.¹¹⁷ Virgin eventually had to pull out of this project after being put under pressure by NGOs, raising concerns that Virgin's own verification processes for offsetting projects are insufficient to prevent serious human rights and environmental abuses.¹¹⁸ The airline's customers are unlikely to be aware of these problems with offsets in general and Virgin's in particular, leaving them vulnerable to being misled about the degree to which the environmental harm caused by their flight can be addressed via offsets.
- 4.6.8. While it is clear that Virgin is currently looking to switch its offset portfolio into projects that do not raise such obvious concerns, it fails to acknowledge that there are inherent problems with <u>all</u> offsets. Offsetting is conceptually based on cutting some emissions while others are permitted to continue or increase, and can only ever reach a stasis point of business as usual, not net-zero, and most projects are very unlikely to actually provide additional emissions reductions. Climate scientists are clear that offsets cannot undo or counterbalance the harm caused to the climate by flying, saying "Carbon offsets don't reduce the impact of flying...Once that carbon is burned and in the atmosphere it is burned and in the atmosphere, contributing to the

https://runwaygirlnetwork.com/2017/11/virgin-atlantic-investigates-claims-its-carbon-offset-scheme-is-damaging-forests/

https://www.fern.org/publications-insight/virgin-atlantic-a-small-victory-in-a-bigger-battle-156/

global heating and resultant impacts we're all increasingly experiencing."¹¹⁹ There is a fundamental non-equivalence between, for example, keeping carbon stored in trees (temporarily, with no guarantee that the trees will not be cut down or burned down in future), and leaving carbon in permanent, geological storage of underground fossil fuels, from which it is removed by planes flying on kerosene.

4.6.9. The airline's communications about carbon offsets and removals are currently at a very high level of generality, but nonetheless they are confusing and misleading. Virgin's webpage dedicated to 'Credible carbon offsets and removals' carries the following statement:

"Carbon offsets are a recognised and verifiable way to compensate for unavoidable emissions through the investment in carbon reduction and removal projects such as reforestation, renewable energy and carbon removal technology like Direct Air Capture. Offsets will play a supporting role in helping us to achieve our net zero by 2050 goal. We are committed to only investing in high quality and Gold Standard offsets to guarantee credible reductions." 120

4.6.10. This statement is misleading:

- (a) The airline does not offer any explanation of the difference between offsets and removals, or any caveats about additionality of offsets or the feasibility or availability of genuine carbon removals.
- (b) The words "recognised and verifiable" are misleading because they do not convey the reality that the use of offsets is at best disputed and at worst utterly discredited.
- (c) The use of "unavoidable" is also misleading because very few flights are utterly essential, while a very large proportion are discretionary leisure travel.
- 4.6.11. As to Direct Air Capture ("DAC"): Virgin refers to "Working in partnership with industry pioneers Carbon Engineering" on this DAC facility¹²¹, but does not clarify for passengers that CE is a company with strong links to oil company Occidental Petroleum and which is actively pushing for DAC to be powered by fossil gas¹²², not clean energy, and for captured carbon to be used to push even more fossil fuels out

https://www.bbc.co.uk/news/business-60400458

https://corporate.virginatlantic.com/gb/en/business-for-good/planet/carbon/offsetting-our-emissions.html

https://corporate.virginatlantic.com/content/dam/corporate/2021%20AR Sustainability%20pages.pdf

https://carbonengineering.com/our-technology/

of the ground via enhanced oil recovery (EOR)¹²³ - a piece of oil company greenwash to try to perpetuate dangerous reliance on fossil fuels. This is a level of detail which passengers cannot be expected to be aware of and its omission means that Virgin's statements on DAC are highly misleading.

4.6.12. In more general terms, DAC, along with other methods of CO2 removal are currently expensive and unproven at any meaningful scale. The large uncertainties in the future development of DAC are clear from scientific studies¹²⁴, but none of these issues is even referred to in Virgin's communications: the overall impression of DAC given by Virgin is deeply misleading

No acknowledgement of non-CO2 impacts

- 4.6.13. As set out in section 1.3.3 above, the full warming impact on the climate of flying is around three times as great as that of aviation's CO2 alone. This issue is not acknowledged on Virgin's website. Moreover, of Virgin's three proposed methods for achieving 'net zero':
 - (a) Improving fuel efficiency will reduce many, but not all of the non-CO2 impacts from flights. Some measures to reduce fuel burn, such as operational efficiency, reduce NOx emissions in proportion. However, some measures to increase engine efficiency, conversely, can increase emissions of NOx¹²⁵. Furthermore, more efficient aircraft do not necessarily reduce contrails. Accordingly, there is not a linear relationship between improvements in efficiency and reductions in non-CO2 emissions and consequent warming.
 - (b) The impact of SAFs on aviation's non-CO2 warming impacts is currently uncertain, and varies between the type of SAF used. The starting point is that emissions of NOx and CO (black carbon, which can affect contrail formation) are 'essentially unaffected' by use of SAFs. 126 Although there is limited research suggesting soot formation might be reduced, a recent report by the Royal Society concluded that "In summary, alternative fuels will have continued non-CO2 effects on climate [...] there is potential hope that the non-CO2 effects might be considerably smaller [...] yet, the findings are very preliminary and largely based on a single model". 127

Inter-dependencies between emissions of CO2, NOX & noise from aviation, Sustainable Aviation, Policy Discussion Paper, 2017 update. Available at https://tinyurl.com/2vh7kaew. Sustainable Aviation is an aviation industry body.

https://carbonengineering.com/news-updates/worlds-largest-direct-air-capture-and-sequestration-plant/

https://www.sciencedirect.com/science/article/pii/S2589004222002607

¹²⁶ Integration of Sustainable Aviation Fuels into the air transport system, Airports Council International 2022, page 15. Available at https://tinyurl.com/24264nac

¹²⁷ Net Zero Aviation Fuels: resource requirements and environmental impacts, Royal Society,

- (c) Offsetting and removals do not address non-CO2 impacts. They can only potentially compensate for them if a multiplier is used so that (for example) 3 tonnes of CO2 is offset or removed for every tonne of CO2 emitted. However, Virgin gives no indication that it intends to apply a multiplier, which is a concept that the aviation industry has doggedly resisted for many years.
- 4.6.14. Overall, Virgin's failure to acknowledge or address the non-CO2 impacts of aviation, while implying to its customers that it has a credible plan to eliminate the environmental impact of flying, is highly misleading and irresponsible. Two thirds of the total warming effect of its operations is simply ignored, and while some measures to reduce CO2 emission may lead to reductions in non-CO2 impacts by a side-wind, for the most part these impacts will remain, even if the airline achieves its 'net zero' ambitions for CO2. Customers are therefore misled into believing that they can continue to fly without harming the environment.

Misleading narrative about 'responsible travel'

4.6.15. Virgin is pushing a misleading narrative around "responsible travel", in which it attempts to claim that the solution to aviation's serious environmental harms is small actions which are the customer's responsibility to take as they continue to fly - or, as the airline puts it, "lower the impact you make when you set out to explore the world". 128 The company claims that:

"responsible travel is a mindset. Begin by understanding that travel is intrinsically good... we shouldn't stop travelling... we should all do a bit more to reduce our impact". 129

4.6.16. The airline then goes on to suggest that the best pathway to travelling responsibly is to travel by choosing Virgin (of course), to suggest that passengers should reduce the weight of their bag by 1kg, think about getting public transport to the airport, bring their reusable water bottle, use only one disposable plastic glass per flight, and "plan your next trip to be even more awesome", encouraging frequent flying. The airline's frequent flyer benefit scheme¹³¹ also encourages and normalises excessive aviation, as well as incentivising customers to choose a more expensive seat with higher associated emissions.

www.virginatlantic.com/gb/en/blog/OurFuture/responsibletravel.html#:~:text=If%20all%20our%20passengers%2 Oreduced,of%20around%201%2C500%20average%20cars

www.virginatlantic.com/gb/en/blog/OurFuture/responsibletravel.html#:~:text=If%20all%20our%20passengers%2 Oreduced,of%20around%201%2C500%20average%20cars

¹³⁰ https://www.virginatlantic.com/gb/en/blog/OurFuture/responsibletravel.html

https://flywith.virginatlantic.com/gb/en/flying-club/members/membership-tiers/gold-benefits.html

- 4.6.17. The airline also seeks approval for small, meaningless actions which do not reduce emissions; e.g. providing canned rather than plastic water bottles ¹³² or changing the wrapping on their headphones¹³³, aimed at reassuring passengers that their journey is "sustainable" and that they can therefore keep flying without contributing to environmental harm.
- 4.6.18. This messaging is clearly misleading to customers who are trying to do the right thing. It presents small, meaningless actions as the answer to the huge climate impacts of aviation, encouraging travellers to keep on flying frequently under a misleading banner of doing good. It does not provide essential information on travelling without flying and the huge decrease in emissions this would bring.

Conclusion on Net Zero messaging

- 4.6.19. Overall, Virgin presents a seriously misleading picture of its plan to achieve 'net zero' emissions. Its communications around sustainability give customers the impression that it has a clear plan to eliminate the environmental impact of flying, and that there is therefore no need for consumers to reduce the number or distance of the flights they take in order to address their carbon footprint. Indeed, Virgin goes further by telling consumers that it would be wrong to stop flying, thereby discouraging by far the most sustainable choice that consumers could make. In truth, Virgin's plan is vague, confusingly expressed, and reliant on unproven technology and an unknown volume of offsets to compensate for remaining emissions. It also fails to acknowledge or address the non-CO2 impacts that account for two thirds of warming. Virgin's operations will have serious negative impacts on the climate for decades to come, but its communications give precisely the opposite impression.
- 4.6.20. Through the Relevant Statements, and generally, Virgin is in breach of Chapter VI, Paragraph 5(c), which requires companies to promote higher levels of awareness among customers of the environmental implications of using the products and services of the enterprise, because it conveys the message that it is environmentally responsible for consumers to continue flying, provided they make peripheral changes that have a trivial effect compared the emission from the flight itself. The Relevant Statements also contravene Chapter VIII, Paragraph 2, which requires enterprises to provide accurate, verifiable and clear information that is sufficient to enable consumers to make informed decisions, including information on the environmental attributes of goods and services; and to provide this information in a manner that

^{132 &}lt;a href="https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_c">https://corporate.virginatlantic.com/content/dam/corporate/Virgin%20Atlantic%20Annual%20Report%202021_c ompressed.pdf

 $^{133 \\ \}underline{\text{https://flywith.virginatlantic.com/gb/en/food-and-drink/sustainability.html}}$

facilitates consumers' ability to compare products. They also breach Chapter VIII, Paragraph 4, which requires companies to not make representations or omissions, nor engage in any other practices, that are deceptive, misleading, fraudulent or unfair.

5. CONCLUSION AND THE COMPLAINANT'S REQUESTS

5.1. Conclusion

5.1.1. As detailed above, Virgin has made a significant number of misleading statements that individually and collectively downplay the current and likely future impact of its operations on the climate. These statements convey the incorrect impression that the airline is in the process of eliminating the environmental impact of its flights. This tells consumers that they can continue to fly frequently without worrying unduly about their carbon footprint. It tells policy-makers that they do not need to take steps to moderate the growth in demand for flying. If the world hopes to achieve the goals of the Paris Agreement, and avoid the worst impacts of climate change, both of these messages are false.

5.2. The Complainant's request

- 5.2.1 The Complainant's central objective in making this complaint is for Virgin to stop misleading consumers, policymakers and the general public in its communications relating to the current and likely future impact of its operations on the climate.
- 5.1.2 The Complainant requests that Virgin take steps to correct the misleading claims contained in its public communications:
 - (a) Withdraw the Relevant Statements;
 - (b) Publish a corrective notice on its sustainability page and in its next Annual Report, and make a public statement confirming that the Relevant Statements have been withdrawn as a result of this complaint that the current state of technological development of genuinely zero-emissions flight, and the potential future trajectory of this, mean that demand management will be an essential role in bringing aviation's emissions into line with the UK's climate commitments; 134
 - (c) Ensure that future statements do not convey similar misleading messages about the climate impact of its operations.
- 5.1.3 The Complainant hopes that mediation of the issue with Virgin will prove productive. If it is not possible to resolve the dispute swiftly and effectively in this way, the Complainant invites the NCP to conclude in a final statement that Virgin's public statements are in breach of the OECD Guidelines in the ways set out in this complaint.

¹³⁴ www.chathamhouse.org/2023/11/net-zero-and-role-aviation-industry