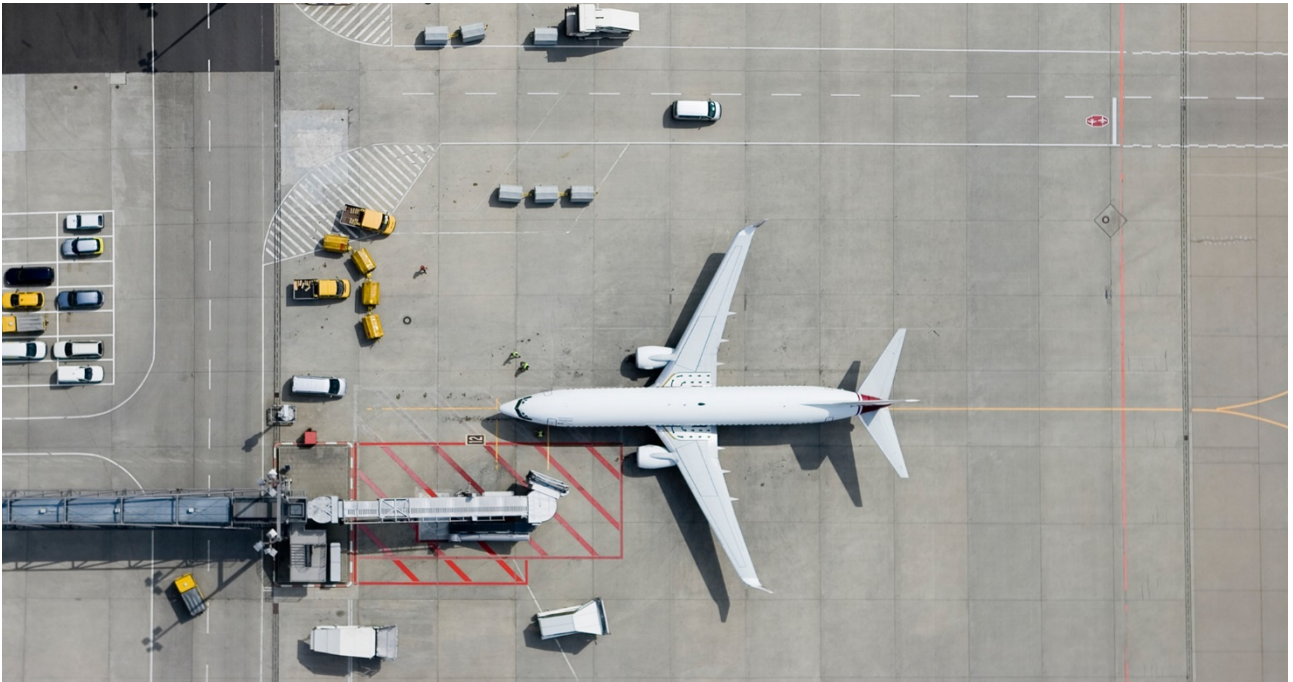




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## Client Briefing

European Commission publishes Steer Report on sustainable finance taxonomy for the aviation sector

MAY 2021

On 12 March 2021, Steer published its final report entitled "Sustainable finance taxonomy for the aviation sector". In this briefing, we consider the findings of the Steer Report and in particular its proposals for developing the technical screening criteria for aviation-related activities to be included in the EU Taxonomy Regulation. The extent to which these proposals will reflect the final technical screening criteria adopted by the European Commission remains to be seen. However, the Report's objective approach – in particular, its recommendation that, in most cases, technical screening criteria should align with or exceed existing targets and standards set by ICAO – is likely to be welcomed by the aviation industry.

## Introduction

In June 2020, we published a briefing in which we examined the recent developments in ESG financing within the aviation sector, as well as the potential impact of Covid-19 as a catalyst for growth in this area.<sup>1</sup> One of the key challenges identified was that ESG financings in the aviation sector would need to overcome accusations of "greenwashing" given that aviation has traditionally been viewed as a polluting industry.

The EU Taxonomy Regulation (the "EUTR"),<sup>2</sup> which came into force on 12 July 2020, seeks to prevent "greenwashing" by introducing a harmonised set of criteria to determine which products can be marketed to investors as environmentally sustainable. The sector-specific requirements of the EUTR are due to be implemented through "technical screening criteria" under delegated legislation to be adopted by the end of 2022.

On 21 April 2021, the European Commission released the first EU Taxonomy Climate Delegated Act,<sup>3</sup> which establishes technical screening criteria under two of the environmental objectives set out in the EUTR (namely climate change mitigation and climate change adaptation) and covers the following sectors: energy, forestry, waste collection and treatment, manufacturing, buildings and transport (but excluding aviation, other than in relation to airport infrastructure). Although aviation is not currently addressed by technical screening criteria under the EUTR, the EU Technical Expert Group (TEG) on Sustainable Finance has recommended that aviation should be addressed by the EUTR in the future given the significance of emissions from the sector.<sup>4</sup>

Following the recommendations of the TEG, Steer was appointed by the European Commission to undertake a study to support the development of a methodology to assess the "green" impacts of investment in the aviation sector. On 12 March 2021, Steer published its final report entitled "Sustainable finance taxonomy for the aviation sector" (the "**Steer Report**" or the "**Report**").<sup>5</sup> In this briefing, we consider the findings of the Steer Report and in particular its proposals for developing the technical screening criteria for aviation-related activities to be included in the EUTR.

## Findings of the Steer Report

As a initial step, the Steer Report identifies a list of aviation-related activities that should be considered for inclusion in the EUTR:

- **Aircraft related:** air transport (passenger and freighter aircraft) and aircraft manufacturing, maintenance and technology development
- **Fuel production, storage and distribution:** sustainable aviation fuels (SAFs) including advanced biofuels and electrofuels
- **Air traffic management (ATM)**
- **Airport related:** airport operations and ground handling and construction of airport infrastructure

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<sup>1</sup> <https://www.herbertsmithfreehills.com/latest-thinking/governance-esg-in-aviation-finance-global>

<sup>2</sup> Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32020R0852&from=EN>

<sup>3</sup> [https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800_en.pdf); [https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1\\_en.pdf#page=133&zoom=100,90,76](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf#page=133&zoom=100,90,76); [taxonomy-regulation-delegated-act-2021-2800-annex-2\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-2_en.pdf) (europa.eu)

<sup>4</sup> [https://ec.europa.eu/info/sites/default/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy\\_en.pdf](https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf)

<sup>5</sup> <https://op.europa.eu/en/publication-detail/-/publication/4f03764a-8540-11eb-af5d-01aa75ed71a1/language-en/format-PDF/source-194978803>

These activities can only be included in the EUTR if they make a "substantial contribution" to one or more of the six objectives of the EUTR (the "**Objectives**"),<sup>6</sup> namely:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

The Report suggests that climate change mitigation is the most relevant of the Objectives in the context of aviation, together with pollution prevention and control.

In addition to making a substantial contribution to one or more of the Objectives, the activity must also:

- "do no significant harm" to the other Objectives;<sup>7</sup>
- be carried out in compliance with minimum safeguards in alignment with appropriate OECD and UN principles;<sup>8</sup> and
- comply with technical screening criteria established by the European Commission under delegated legislation.<sup>9</sup>

The Steer Report concludes that "*a clear vision as to what aviation activities could be considered as environmentally sustainable, with a balanced approach to monitoring and avoiding the risk of greenwashing would increase the attraction to investors of green finance in this sector. Clear technical criteria are likely to be the primary pre-issuance driver necessary to produce a material change in this area*".

## Technical screening criteria

In the remainder of this briefing, we will look at the Steer Report's proposals for developing technical screening criteria for aviation-related activities in the context of the two Objectives deemed to be most relevant to the aviation sector, namely climate change mitigation and pollution prevention and control.

### Climate change mitigation screening criteria

The first (and perhaps most significant) proposal for technical screening criteria in the context of aviation activities relates to the Objective of climate change mitigation. In order for an activity to qualify as environmentally sustainable under this Objective, it must:

- 1) contribute substantially to the stabilisation of greenhouse gas concentrations in the atmosphere at a level consistent with the long-term temperature goal of the Paris Agreement through the avoidance or reduction of greenhouse gas emissions,<sup>10</sup> including by increasing clean or climate-neutral mobility (a "**low carbon activity**");<sup>11</sup> or
- 2) (if there is no technologically and economically feasible low-carbon alternative) support the transition to a climate-neutral economy consistent with a pathway to limit the temperature increase to 1.5°C above pre-industrial levels (a "**transition activity**"),<sup>12</sup> provided that it:
  - a) has greenhouse gas emission levels that correspond to the best performance in the sector or industry;
  - b) does not hamper the development and deployment of low-carbon alternatives; and
  - c) does not lead to a lock-in of carbon-intensive assets; or

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<sup>6</sup> Articles 3(a) and 9 of the EUTR.

<sup>7</sup> Articles 3(b) and 17 of the EUTR.

<sup>8</sup> Articles 3(c) and 18 of the EUTR.

<sup>9</sup> Article 3(d) of the EUTR.

<sup>10</sup> In the context of aviation, this requires consistency with the European Green Deal sustainable mobility targets, i.e. a 90% reduction in greenhouse gas emissions from the transport sector as a whole by 2050. [Sustainable mobility \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/infographic/infographic_sustainable_mobility_targets_2021.pdf)

<sup>11</sup> Article 10(1) of the EUTR. A "low carbon" activity must satisfy at least one of the criteria set out in Article 10(1) of the EUTR. The most relevant to aviation is Article 10(1)(c): "Increasing clean or climate-neutral mobility".

<sup>12</sup> Article 10(2) of the EUTR.

- 3) directly enable other activities (including "low carbon" activities) to make a substantial contribution to this Objective (an "**enabling activity**"),<sup>13</sup> provided that it:
- does not lead to a lock-in of assets that undermine long-term environmental goals, considering the economic lifetime of those assets; and
  - has a substantial positive environmental impact, on the basis of life-cycle considerations.

### **Low carbon activities**

The Report identifies three aviation-related activities that it proposes should be included as "low carbon activities" for the purposes of the EUTR:

- the sale, lease or operation of any aircraft powered by "clean" fuels, including electric batteries, hydrogen fuel cells or liquid hydrogen (LH2) turbines;
- the sale, lease or operation of any aircraft powered by advanced biofuels or electrofuels following the approach set out in the Renewable Energy Directive (recast) (the "**RED**");<sup>14</sup> and
- airport operations using low-carbon processes, such as ground handling using electric equipment or electric taxiing.<sup>15</sup>

### **Transition activities**

The Report acknowledges that "*it is more difficult to define what are acceptable "transition activities" for aviation because current aircraft technology does not support zero or low-emission flying and is unlikely to do so for commercial aircraft for 10 years or more*". However, it nonetheless concludes that financial investments supporting activities which are consistent with following pathways towards major reductions in aircraft emissions can be included in the EUTR as "transition activities", provided that emission levels generated by such activities correspond with the best technology available at any given point in time (the so-called "**leading edge**" principle).

Applying this methodology, the Report proposes that thresholds for allowable levels of CO<sub>2</sub> emissions should be determined for each category of commercial aircraft (i.e. regional, single aisle and twin aisle aircraft)<sup>16</sup>, with these thresholds becoming more stringent over time – consistent with the "leading edge" principle. The table below shows the aircraft CO<sub>2</sub> emissions thresholds proposed by the Report for each aircraft category, in each case measured in terms of the margin below the ICAO CO<sub>2</sub> new type certification standard.

<b>Aircraft category</b>	<b>2021</b>	<b>2027</b>	<b>2037</b>
Regional aircraft (20-100 seats)	-11%	-16%	n/a*
Single aisle/narrowbody (101-220 seats)	-4%	-14%	-24%
Twin aisle/widebody (>220 seats)	-3%	-12%	-21%

\* n/a due to low carbon technology being presumed to be available

Source: Steer Report, p.84

### **Enabling activities**

The Report proposes that "enabling activities" should include a wide range of activities, such as:

- the manufacture of aircraft powered by "clean" fuels, including electric batteries, hydrogen fuel cells or liquid hydrogen (LH2) turbines;

<sup>13</sup> Articles 10(1)(i) and 16 of the EUTR.

<sup>14</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L2001&from=EN>

<sup>15</sup> Low carbon airport infrastructure is already covered by technical screening criteria in section 6.17, Annex 1 of the EU Taxonomy Climate Delegated Act.

<sup>16</sup> The Report recommends that general aviation (defined as aircraft with less than 20 seats) should only be included in the EUTR if it qualifies as a "low carbon" activity (rather than as a "transition" activity) due to the earlier availability of alternative propulsion technology (such as electric, hybrid electric or hydrogen-powered aircraft) in this category and also owing to its significantly higher emissions (per passenger km flown).

- potentially, the manufacture of aircraft powered by advanced biofuels or synthetic kerosene produced with green electricity (although there would need to be credible guarantees that the aircraft would not be used with fossil fuel kerosene); and
- construction or use of airport infrastructure for recharging battery-powered aircraft or for storing and processing carbon-free fuels, including sustainable aviation fuel and liquid hydrogen.<sup>17</sup>

### **Sustainable aviation fuels (SAFs)**

The Report acknowledges that the production of advanced biofuels is already included in the EUTR framework, and therefore it does not propose screening criteria for activities relating to production of SAFs. Instead, it focusses on the screening criteria for the production of electrofuels (described as hydrogen-based synthetic fuels). In this regard, the Report recommends that, for consistency with the approach taken in other EU climate-related initiatives, the screening criteria for hydrogen-based synthetic fuels should be determined in close alignment with the requirements for advanced biofuels set out in the RED.

### **Pollution prevention and control screening criteria**

The Steer Report also makes proposals for technical screening criteria in the context of aviation activities relating to the Objective of pollution prevention and control. The EUTR sets out a number of criteria for an activity to qualify as environmentally sustainable under this Objective (noting that activities only need to satisfy one of these criteria to qualify).<sup>18</sup> The criteria most relevant to aviation include:

- 1) preventing or, where that is not practicable, reducing pollutant emissions into air, other than greenhouse gasses; and
- 2) improving levels of air quality in the areas in which the economic activity takes place whilst minimising any adverse impact on human health and the environment or the risk thereof.

The Report states that activities that can reduce air pollution (particularly with respect to particulate matter (PM) and nitrogen oxides (NO<sub>x</sub>)) and aircraft noise should be considered for inclusion in the EUTR.

### **Non-volatile particulate matter**

The Report recommends that the screening criteria for the reduction of non-volatile particulate matter (nvPM) emissions should go beyond the standard agreed by ICAO at the tenth meeting of its Committee on Aviation Environmental Protection ("CAEP") (CAEP/10) in 2016 (as subsequently updated by CAEP/11).<sup>19</sup> Although ICAO has not yet developed targets for nvPM reductions, it may do so during the CAEP/12 cycle (2019-2022) and the Report suggests that such targets could then be used as thresholds for the purposes of the EUTR. Pending the establishment of an industry-wide methodology for robustly measuring nvPM emissions, the Report proposes that screening criteria for activities relating to the sale, lease or operation of aircraft and aircraft manufacturing and technology development should be that the proposed investments can demonstrate nvPM emissions at least as good as the ICAO standard.

### **NO<sub>x</sub> emissions**

The Report proposes that the screening criteria for the reduction of aircraft NO<sub>x</sub> emissions should be consistent with the target set by ICAO at CAEP/8, namely that the target for 2027 should be set at 54% below the CAEP/8 NO<sub>x</sub> standard. The Report states that this target should apply from 2021 onwards on the basis that no intermediate target exists and noting that it goes significantly beyond the level of compliance.

### **Noise pollution**

The Report recommends that the screening criteria for the reduction of aircraft noise pollution should relate to the ICAO Chapter 14 noise standards for aircraft.<sup>20</sup> The proposed noise screening criteria are set out in the table below and are expressed in terms of "effective perceived noise in decibels" (EPNdB) below the ICAO Chapter 14 noise standards across aircraft types.

<b>Aircraft category</b>	<b>2021</b>	<b>2027</b>	<b>2037</b>
Regional aircraft (20-100 seats)	13	14.5	17

<sup>17</sup> As noted above, low carbon airport infrastructure is already covered by technical screening criteria in section 6.17, Annex 1 of the EU Taxonomy Climate Delegated Act.

<sup>18</sup> Article 14(1) of the EUTR.

<sup>19</sup> <https://www.icao.int/ENVIRONMENTAL-PROTECTION/Pages/CAEP.aspx>

<sup>20</sup> [Reduction of Noise at Source \(icao.int\)](https://www.icao.int/ENVIRONMENTAL-PROTECTION/Pages/CAEP.aspx)

Single aisle/narrowbody (101-220 seats)	12	15.5	24
Twin aisle/widebody (>220 seats)	15	19.5	26.5

Source: Steer Report, p.100

## Conclusion

The Steer Report makes a number of significant recommendations in relation to aviation activities that could potentially be included in the EUTR. In particular, the Report sets out detailed proposals for the technical screening criteria that could be applied to aviation activities seeking to qualify under the Objectives of climate change mitigation and pollution prevention and control. However, to what extent these proposals will reflect the final technical screening criteria adopted by the European Commission remains to be seen.

In most cases, the technical screening criteria proposed by the Steer Report seek to align with or exceed existing targets and standards set by ICAO. This objective approach is likely to be welcomed by the aviation industry. For example, the Aviation Working Group (AWG) has expressed support for a single international system for classification of green aircraft financing and leasing, in order to avoid conflicting national or regional standards.<sup>21</sup> Whilst the EUTR falls short of establishing a universal classification regime, many of the technical screening criteria proposed by the Report (e.g. the "leading edge" principle relating to the best available aircraft technology, the differentiation of emissions thresholds based on aircraft type, and the use of the ICAO CO<sub>2</sub> new type certification standard) are consistent with the principles advocated by the AWG.

Industry participants will no doubt be closely monitoring further developments in this area in anticipation of the EU Commission publishing its proposals for delegated legislation applicable to aviation in due course.

### **UK and Brexit**

Following expiry of the Brexit transition period on 31 December 2020, any delegated legislation adopted by the European Commission under the EUTR does not apply in the UK.<sup>22</sup> However, the UK Government has indicated that it may nevertheless decide to align its own "green taxonomy" with the EUTR. In an announcement by the UK Chancellor Rishi Sunak on 9 November 2020, it was stated that "*the UK taxonomy will take the scientific metrics in the EU taxonomy as its basis and a UK Green Technical Advisory Group will be established to review these metrics to ensure they are right for the UK market*".<sup>23</sup>

## Further Information

Herbert Smith Freehills' finance practice is at the forefront of advising on ESG issues and works closely across all offices to help deliver robust high quality advice to clients. From issuing bonds to fund the development of renewable energy projects to raising debt that satisfies issuers' environmental policies and investors' ESG mandates, our finance specialists have the experience to successfully support you when accessing funding options. Clients we have supported in this growing area range from blue chip corporates and project companies to financial institutions and government departments.

<sup>21</sup> <http://awg.aero/wp-content/uploads/2021/03/AWG-letter-on-EU-taxonomy-for-green-financing-2021.pdf>

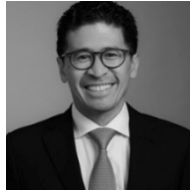
<sup>22</sup> Although the EUTR itself came into force during the Brexit transition period and therefore constitutes retained EU law for UK purposes, certain key elements of the EUTR regime (including the technical screening criteria) will only become applicable after the end of the Brexit transition period and therefore do not form part of UK domestic law.

<sup>23</sup> [Chancellor sets out ambition for future of UK financial services - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/chancellor-sets-out-ambition-for-future-of-uk-financial-services)

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