



Etihad Airways  
*sustainability*  
Greener together

Transition Finance Framework

September 2020

# Transition Finance Framework

## Table of Contents

Introduction to Etihad.....	3
Etihad’s commitment to Sustainable Finance and Transition Finance Framework .....	10
Use of Proceeds Financing Framework.....	10
a. Use of Proceeds.....	11
b. Project selection and evaluation process .....	12
c. Management of Proceeds.....	12
d. Reporting.....	14
Sustainability-Linked Finance Framework .....	16
A. Selection of Key Performance Indicator (KPI) .....	16
B. Sustainability Performance Targets (SPT).....	17
C. Sukuk Characteristics .....	18
D. Reporting .....	19
E. Verification.....	20
External Review.....	20
Amendments to this Framework .....	20

## Introduction to Etihad

Etihad Airways is the national airline of the United Arab Emirates. Established in 2003 in the UAE capital, Abu Dhabi, Etihad today is a high quality, midsize, full-service airline, using a fleet of modern Airbus and Boeing aircraft to operate passenger services to almost 80 international destinations. Etihad's mission is to deliver an innovative value proposition which focuses on the needs of customers in Abu Dhabi and around the world.

Sustainability continues to be a high priority for responsible businesses, and this is no exception for Etihad. We continue to ensure our compliance with regulations but are also cognizant of future challenges and our responsibilities as a global business. The potential impact of international aviation activity on the environment continues to be a concern and remains a priority of our sustainability agenda.

Our sustainability agenda follows the triple bottom line approach to ensure social, environmental, and financial sustainability for the business. That means better use of the planet's scarce resources, a better impact on our communities, and improved economic growth. We are aligned with commitments of Abu Dhabi and the UAE, including the UAE 2030 Vision and the Abu Dhabi Plan, and the United Nations' global Sustainable Development Goals, to ensure that we focus on issues of global significance that are relevant regionally and can be addressed locally, in our own way.

Etihad has become a global leader in sustainability by both adhering to best practice and promoting it. As well as improving internal business practices, this necessitates actively encouraging environmentally sustainable and socially responsible practices among suppliers, our key stakeholders, and the local business community. The commitments of the UAE and Abu Dhabi mirror the UN Sustainable Development Goals. These align with the nature of our business, our sustainability challenges and recognize the tangible role that the aviation industry can play in addressing the goals.

Our initiatives are conducted within the 'Together' sustainability framework, which we created to align with national policy and concentrates on doing business in a way that adds value to our employees, communities, and the planet:

1. Greener together
2. Working together
3. Growing together
4. Giving together

### 1.1 Climate change and the aviation sector

In 2019, CO<sub>2</sub> emissions from aviation reached 915Mt, representing 2.8% of global CO<sub>2</sub> emissions. If aviation was a country, it would be the 6th largest emitting country, close to the total CO<sub>2</sub> emissions produced by Germany. Before 2020, aviation traffic had grown c4-5% every year for the last 30 years and was expected to continue doing so, which would indicate a doubling of traffic every 15 years. While Covid-19 has resulted in a 60% reduction in global aviation activity, the IEA projects that when aviation returns to the business-as-usual trajectory from prior to the pandemic, the sector will account for 1.8Gt emissions by 2050, or over 4% of global emissions. Passenger travel accounts for 89% of CO<sub>2</sub> emissions from the aviation sector, of which international passenger travel accounts for 61%.

Additionally, there are a number of impacts that climate change would have on the aviation industry itself: rising sea levels and storm surges threaten coastal airports; changes in air temperature impact take-off weight restrictions; more frequent extreme weather patterns disrupt travel; and, changing jet streams can significantly impact fuel consumption, flight paths and times.

It is therefore imperative that the aviation industry take action to reduce emissions and limit temperature rises. The IEA estimates that energy efficiency in aviation needs to improve by more than 3% per year to 2040 in order to align to the goals of the Paris Agreement.<sup>1</sup>

## 1.2 The aviation sector's pathway to net zero

The IEA has acknowledged that due to increasing growth in underlying demand, industry structure, and physics, the aviation sector is among the most challenging sectors of the global economy to decarbonize.<sup>2</sup> The projected pathway towards net zero will require significant investments in efficiency and innovation. Both the IEA and the Energy Transition Commission (ETC) have concluded that due to limited alternatives and relatively low price-elasticity of demand, the emission reduction potential in the aviation sector from demand side levers is limited.<sup>3</sup> Airspace management and greater coordination between national airspace navigation service providers to improve logistics and operations could result in reduced emissions by improving routing, air traffic, and reducing aircraft waiting times. However, even in the most optimistic of scenarios, the potential of modal shift to high-speed rail<sup>4</sup>, improvement in load factors, and air traffic management would account for a maximum reduction of 430 MT CO<sub>2</sub> by 2050, or approximately 15% of expected emissions.

The sector's current projected pathway towards net zero is therefore expected to be driven by changes to energy efficiency and decarbonisation technologies to switch fuel sources. For long-haul passenger transport, this means:

- **Operational efficiency:** The investment in new, fuel-efficient fleet alongside research in enhanced operations to reduce fuel burn. Taking into account the paramount importance of safety certification, improving the efficiency of existing aircraft design is the most viable immediate route towards reducing emissions. The ETC concluded that engine efficiency could be increased to a maximum of 65-70%, from the current levels of 50%. Aircraft design could also contribute to increased efficiency through available technologies (engine updates, composite structure components) as well as future improvements in laminar flow controls, open rotors, and fuel-cells for onboard energy. Finally, improved ground infrastructure can also reduce emissions, e.g. the use of fixed electrical ground power units.
- **Sustainable Aviation Fuel:** Jet fuels from non-fossil-fuel based liquid hydrocarbons are the only technically viable route towards significant decarbonisation, using either bioenergy (biofuels) or power-to-liquid synthesis combining CO<sub>2</sub> with hydrogen (synfuels). These fuels could potentially be compatible with existing engines and refueling infrastructure. The current barriers towards implementation are the high cost of deployment and existing supply chain capacity. For synfuels, the ETC estimates that the current supply chains are unlikely to result in net zero emissions<sup>5</sup>; conversely while in theory all aviation demand could be met by sustainable biofuels, current policy around sustainable biofuels (i.e biofuel sourced primarily from waste or lignocellulosic sources that does not compete with food supply) does not afford sufficient supply

---

<sup>1</sup> <https://www.iea.org/fuels-and-technologies/aviation>

<sup>2</sup> <https://www.iea.org/reports/aviation>

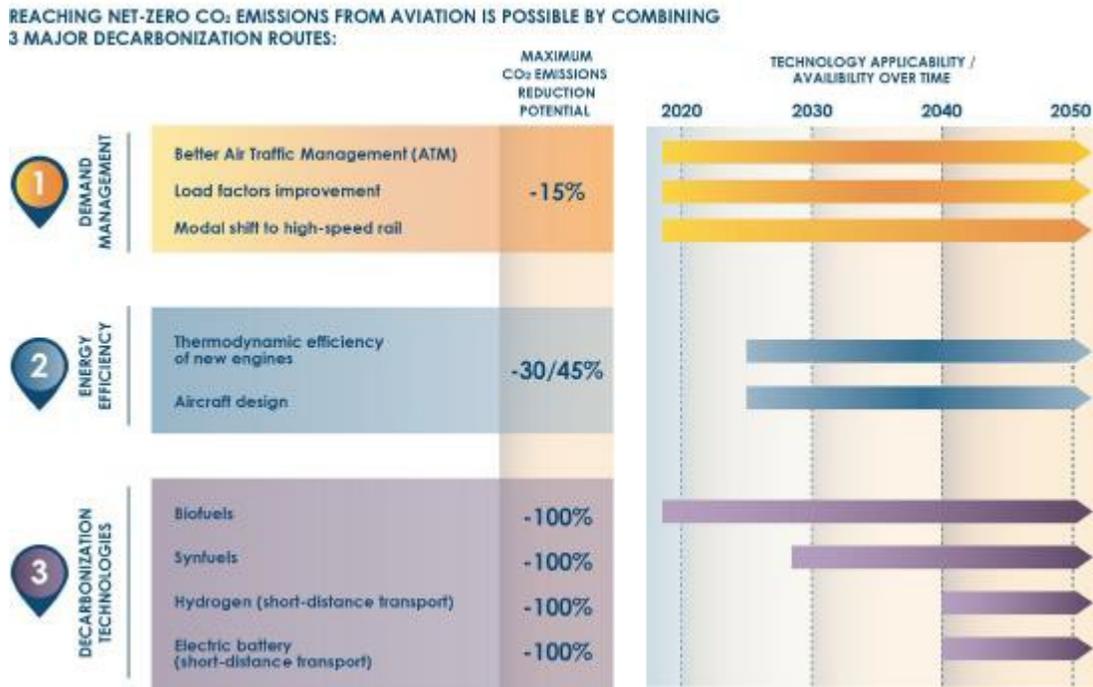
<sup>3</sup> [https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation\\_final.pdf](https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation_final.pdf);

<sup>4</sup> It should be noted that the potential of modal shift is expected to affect short-haul domestic and intra-regional air travel. The ETC concluded that modal shift is not a possibility for long-haul flights.

<sup>5</sup> "If the CO<sub>2</sub> is obtained via direct air capture and hydrogen produced from electrolysis, the carbon intensity of the synfuel over its lifecycle is solely determined by the carbon intensity of the electricity input and can potentially reach net-zero. However, the carbon intensity of the electricity input to synfuels needs to be below 115 grams per kWh – much lower than today's power grids carbon intensity – for synfuels to produce less emissions than fossil-fuel-based jet fuels<sup>26</sup>. If, in turn, the hydrogen is produced through steam methane reforming (SMR), hydrogen production will need to be abated through carbon capture to tend towards zero lifecycle emissions, and could not fully reach net-zero lifecycle emissions given that carbon capture installations typically only capture up to 80-90% of the CO<sub>2</sub> stream. Methane leakages throughout the gas production value chain would also have to be brought to zero. Finally, synfuels using CO<sub>2</sub> captured on the back of industrial plants could not reach net-zero lifecycle emissions at it would only displace emissions from other sectors." [https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation\\_final.pdf](https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation_final.pdf)

for the sector globally.<sup>6</sup> Development of alternative fuels is in its infancy, and they are neither affordable nor available in commercial volumes.

Table 1: Energy Transition Commission Net-Zero Pathway for Aviation<sup>7</sup>



### 1.3 Etihad’s Transition Pathway

In response to the imperative to align to the goals of the Paris Agreement, in November 2019, Etihad formed a dedicated Sustainable Development Committee to define, foster and facilitate sustainability efforts within the organization to ensure social, economic and environmental sustainability. In January 2020 Etihad announced a new target to align to net zero emissions by 2050 and to reduce 2019 net emissions levels by 50% by 2035. This is significantly more ambitious than the existing sector targets from the Air Transport Action Group.<sup>8</sup> It is our belief that there is an urgent requirement for more achievable actions in the short to medium term, starting with innovative measures to reduce carbon emissions incrementally on the path to more permanent solutions.

<sup>6</sup> [https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation\\_final.pdf](https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC-sectoral-focus-Aviation_final.pdf)

<sup>7</sup> [https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC\\_MissionPossible\\_FullReport.pdf](https://www.energy-transitions.org/wp-content/uploads/2020/08/ETC_MissionPossible_FullReport.pdf)

<sup>8</sup> In 2009, the global stakeholder associations of the aviation sector (ACI, CANSO, IATA and ICCAIA), under the umbrella of the Air Transport Action Group, set three key targets:

1. A short-term goal of improving fuel efficiency by 1.5% per annum (CO<sub>2</sub>/RTK) from 2009 to 2020, which current analysis suggests has been comfortably met;
2. A mid-term goal to cap net CO<sub>2</sub> emissions through carbon neutral growth from 2020, which will be implemented through the adoption of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA);
3. A long-term goal to halve net aviation CO<sub>2</sub> emissions by 2050 when compared to 2005 levels.

In order to meet these targets, Etihad has fully integrated sustainability into its business activities, and focused efforts on three emission-reduction pathways: sustainable aviation fuels, voluntary carbon-offsets and operational efficiencies.

Etihad views emission reductions as a whole-of-industry responsibility and is actively exploring collaboration across the entire aviation eco-system, including partnerships with government agencies, to address structural opportunities such as airspace management reform, which, even with small measures, could deliver seismic reductions in aviation's carbon footprint. To that end, our strategy to address climate change is a combination of comprehensive and ambitious collaborative actions across the entire air transport community, including governments, and a meaningful program of carbon offsets. We are committed to engaging with the broader aviation eco-system and the travelling public to continuously develop and implement practical, incremental and quickly deliverable initiatives.

### 1.4 Meeting our net zero target: levers towards decarbonisation

**Demand side management:** Etihad believes one of the biggest, most effective and most required initiatives to reduce aviation's carbon emissions is urgent and ongoing investment in reform of airspace management, and greater coordination between national airspace navigation service providers. Greater alignment of air navigation service providers together with increased investment in traffic management infrastructure and continuous development of efficient traffic management practices would deliver seismic improvement in the airline industry's efforts to achieve carbon-neutral growth, while substantially boosting airspace productivity and driving down both economic and environmental costs.

Etihad Airways has worked independently with a range of air navigation service providers including the GCAA, based at UAE's Sheikh Zayed Centre and Europe's Eurocontrol to explore and test more efficient practices, including optimal flight paths, and will continue to work with airspace organisations to help identify further opportunities for more sustainable operations. Such initiatives would markedly improve traffic flows, reduce airspace congestion and significantly reduce emissions.

A key and emerging driver of sustainable flight operations is the data produced by modern aircraft. More than ever before, information generated during scheduled flights quantifies not only an aircraft's record of performance but also an historical pattern of flight parameters and technical behaviour, and a valuable predictive tool for future flight planning. Etihad is embracing data to drive sustainable outcomes, and currently is engaged in multiple research programs, designed to improve efficiency and help reduce carbon emissions.

- Etihad is now using aircraft-generated statistical data to assess requirements at individual airports and customise fuel volumes to meet actual needs. This will reduce carriage of unnecessary taxi fuel and lead to reduced aircraft weights, lowering fuel consumption and emissions.
- Data also has yielded similar information about the use of potable water carried on aircraft for toilets and wash basins, presenting a pattern of usage across a range of flights, routes and even times of travel. Historically, many flights have carried more than required. Etihad is leveraging this rich data, and advances in aircraft sensor technologies, to determine optimum volumes of potable water to be loaded onto flights, again leading to sizable weight reductions on targeted services and delivering lower fuel consumption and CO2 emissions.
- In 2018, we created a permanent Operations Efficiency Steering Group that set stakeholder targets and implemented several initiatives, including the monitoring, reporting and verification of fuel-saving initiatives. We leveraged data and analytics to optimise fuel quantities on every flight. From 1 September

2018 to 31 March 2019, we reduced our fuel consumption by 26,000 tonnes, which in turn reduced carbon emissions by 82,200 tonnes and saved costs worth around AED 68 million.<sup>9</sup>

- Etihad has been pioneering ecoFlights, using sustainable initiatives to reduce the carbon impact of the flight. Our first ecoFlight took place in January 2019, flying a 787 from Abu Dhabi to Amsterdam utilising sustainable fuel produced in the UAE. On average, Etihad ecoFlights consume 15% less fuel, follow an optimised flight route and reduce the amount of single-use plastic on board. The ecoFlights have continued through the pandemic. As Covid-19 was evolving, to celebrate Ireland's national day, Etihad flew its signature Greenliner aircraft from Abu Dhabi to Dublin. The special green-liveried aircraft operated an optimised roundtrip flight, with optimised climb and continuous descent. The results: when compared to a standard Boeing 787 flight on that route, the ecoFlight reduced journey time by 40 minutes, cut fuel by 800kg and CO2 by 3 tonnes. Against the same flight one year prior with a different aircraft type, on this ecoFlight Etihad cut fuel by 8 tonnes and reduced carbon emissions by a staggering 26 tonnes. This was an initiative that speaks to the importance of industry collaboration, working with Air Navigation Service Providers and airport authorities to deliver sustainable practices.
- In 2020 Etihad Airways will commence a comprehensive review of all elements of a typical flight, in the air and on the ground, to identify ways in which to improve the 'Flight Life Cycle', including maintenance, pre-flight preparation, aircraft loading and unloading, on-board practices and supplies, the way each aircraft is flown, and arrival procedures. This study also will include all suppliers.

**Energy efficiency:** Since its inception in 2003, Etihad Airways has continually been an early adopter of new aircraft types, to ensure that we operate not only the most 'fit for purpose' and passenger-appealing fleet, but also the most cost-effective and sustainable. Etihad has one of the youngest aircraft fleets in the world, averaging just 5.3 years. The company continues to invest in the latest-technology aircraft from Airbus and Boeing, while progressively retiring older, less-efficient types. This process of continuous renewal will elevate next-generation aircraft to well over half of the airline's total fleet by the mid-2020s and, together with a growing number of other sustainability initiatives, will reduce even further the company's fuel consumption and carbon emissions per available seat kilometre.

- The Dreamliner was the first commercial airliner to be constructed primarily of lightweight composite materials to reduce its weight and increase its flying range, while consuming significantly less fuel than earlier-model aircraft of similar size. The Boeing 787-9 is at least 20 per cent more fuel-efficient per seat and emissions than the airplanes it will replace.<sup>10</sup> As of January 2020, Etihad operated 37 of the type, representing almost 40 per cent of its total fleet and serving almost 40 of its 76 passenger routes. By 2023, this aircraft will represent 50 per cent of the airline's fleet. See table below for Etihad's fleet transformation details:

---

<sup>9</sup> [https://cdn.ek.aero/downloads/ek/pdfs/report/annual\\_report\\_2019.pdf](https://cdn.ek.aero/downloads/ek/pdfs/report/annual_report_2019.pdf)

<sup>10</sup> <https://www.boeing.com/commercial/787/>

Aircraft type	31-Dec-19	31-Dec-18	31-Dec-17	31-Dec-16
Airbus A320 Family	29	30	30	35
Airbus A330 Family	-	15	24	25
Airbus A340 Family	-	-	-	8
Airbus A380	10	10	10	8
Boeing 777 Family	19	19	24	24
Boeing 787 Family	37	26	19	10
Airbus A330 (Freighters)	-	-	-	4
Boeing 777 (Freighters)	6	6	5	5
<b>Total</b>	<b>101</b>	<b>106</b>	<b>112</b>	<b>119</b>

- As part of a strategic partnership with Boeing, Etihad has also launched the Greenliner programme, whereby the two companies will work together to research and test innovative technologies designed to improve flight efficiencies, cut fuel consumption, introduce more sustainable products and practices and ultimately achieve further reductions in carbon emissions. Etihad also will offer approved partners in the Etihad Greenliner Program the opportunity to test their own sustainability initiatives aboard scheduled flights of the airline’s Boeing 787 aircraft on any of the 40-plus international routes which they fly. The results will be processed and validated, and the most sustainable initiatives will be used as a base for improving the performance not just of Etihad or its specific suppliers but also of the entire 787 operating community.
  - In 2020, the two companies extended their partnership to collaborate on the EcoDemonstrator programme to enhance safety and reduce CO2 emissions and noise. Alongside industry-leading partners, including NASA and Safran Landing Systems, Etihad and Boeing conducted aircraft noise measurements from sensors on the airplane and the ground. The data will be used to validate aircraft noise prediction processes and the sound reduction potential of aircraft designs, including landing gear, that are modified for quieter operations. In addition, a flight was conducted during which pilots, air traffic controllers and an airline’s operations center will simultaneously share digital information to optimize routing efficiency and enhance safety by reducing workload and radio frequency congestion.
  - Test flights were flown on a blend of sustainable fuel: flying from Seattle to Boeing’s manufacturing site in South Carolina, Etihad’s 787-10 Dreamliner used the maximum sustainable fuel blend permitted for commercial aviation. The transcontinental flight also demonstrated a new way for pilots, air traffic controllers and airline operations centers to communicate simultaneously and optimize routing.
  - The objective of the programme is to utilise a 787 commercial aircraft as a flying testbed to accelerate technology development that will make commercial aviation safer and more sustainable. It leverages the Etihad Greenliner programme as part of the broader Etihad-Boeing Strategic Partnership to test cutting-edge technologies and explore “blue sky” opportunities to improve airspace efficiency, reduce fuel use, and cut CO2 emissions

**Decarbonising technologies - sustainable aviation fuels:** Sustainable aviation fuel (SAF) is the main term used by the aviation industry to describe a nonconventional (fossil derived) aviation fuel (IATA definition), this may include biofuels and synthetic Kerosene.

In support of the UAE’s national objective to reduce its historic reliance on oil, and in line with the global CORSIA scheme, Etihad Airways is an active supporter of alternatives to fossil fuel. Etihad had operated several flights using sustainable aviation fuels including revenue passenger services and delivery flights: the signature “Greenliner” B787

and Etihad's newest B787, the ecoDemonstrator aircraft..<sup>11</sup> We are also actively supporting the growth of sustainable alternative fuels through research and development activities:

- We collaborated with Boeing, Takreer, Total and the Masdar Institute on BIOjet Abu Dhabi: Flight Path to Sustainability to support a sustainable aviation biofuel industry in Abu Dhabi. Following a flight in 2014 powered in part by locally produced aviation biofuel, a roadmap report was produced which outlines the necessary requirements for the development and production of commercial viable and sustainable aviation fuel in Abu Dhabi.
- Etihad is also a founding partner of the Sustainable Bioenergy Research Consortium (SBRC). Led by the Masdar Institute of Science and Technology, the SBRC is tasked with identifying feedstock for sustainable alternative fuel for the aviation industry. EY believes that renewable biofuel production should not compete with food resources. Its flagship project is the Seawater Energy and Agriculture System (SEAS). As part of the SEAS pilot, six ponds of aquaculture generate the nutrient rich water which feeds fields of saltwater tolerant plants from which biomass and oil rich seeds are produced to be converted to liquid fuel. The pilot facility opened in March 2016 and sits on a two-hectare site at Masdar City in Abu Dhabi.
- Etihad has also signed a memorandum of understanding with Tadweer (Abu Dhabi Waste Management Centre) to convert Abu Dhabi municipal waste into jet fuel.

---

<sup>11</sup> <https://www.etihad.com/en-gb/news/boeing-etihad-airways-and-world-energy-lift-sustainable-aviation-fuel-to-the-next-level-on-ecodemonstrator-programme>

## Etihad's commitment to Sustainable Finance and Transition Finance Framework

Having become the first airline to secure commercial finance based upon verified compliance with the Sustainable Development Goals of the United Nations, Etihad Airways will explore and undertake fresh opportunities to raise funds through 'sustainable finance' programs.

Etihad's Transition Finance Framework (the "Framework") has been developed to demonstrate how the Group and its other entities intend to transition the business in alignment with the goals of the Paris Agreement. In order to demonstrate our commitment, Etihad will use both sustainable finance instruments:

- Use of Proceeds Financing Instruments where the proceeds of the financing instruments can be earmarked to Eligible Projects as defined in the Use of Proceeds section of the Transition Finance Framework.
- Sustainability-Linked Financing Instruments where financial characteristics may vary depending on whether the Transition Key Performance Indicator(s) "KPI(s)" reach (or not) the predefined Sustainability Performance Target(s) "SPT(s)" as defined in the Sustainability-Linked Finance section of the Transition Finance Framework.

Etihad can issue Transition bonds, sukuk or loans under this Framework. Issuances under this Framework may take the form of public transactions or private placements, in bearer or registered format, issued under our Debt Issuance Programmes or on a stand-alone basis and may take the form of senior unsecured, covered bond or subordinated issuances. Any issuances under this Framework will be standard recourse-to-the-issuer obligations and investors will not bear the credit risk of the underlying allocated eligible asset exposures.

## Use of Proceeds Financing Framework

For each Transition Finance Instrument, Etihad management asserts that it will adopt the following 4 pillars as set out in the International Capital Market Association ("ICMA") Green Bond Principles <sup>12</sup>("GBP") 2018 and Loan Market Association ("LMA") Green Loan Principles 2020:

- (a) Use of Proceeds**
- (b) Process for Project Evaluation and Selection**
- (c) Management of Proceeds**
- (d) Reporting**

---

<sup>12</sup> In the absence of any globally accepted Transition Standards for Financing instruments, the framework has been aligned to the core pillars of the much widely accepted ICMA's Green Bond Principles

## a. Use of Proceeds

Etihad will allocate an amount at least equivalent to the net proceeds of the Transition Financing Instruments issued under this Framework towards financing and/or refinancing, in whole or in part, new and/or existing eligible businesses and as described below.

### Eligible Transition Use of Proceeds Categories

Category (GBP)	SDG Target	Criteria	Eligible projects	Exclusions
<b>Energy Efficiency</b>  	<p><b>7.3 By 2030, double the global rate of improvement in energy efficiency</b></p> <p><b>7.A By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology</b></p> <p><b>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</b></p>	<p>Development, manufacture and/or installation of energy efficiency aviation technologies and products with a view to improving energy efficiency.</p> <p>Eligible Assets should have an energy efficiency (weighted average) that leads to energy savings of at least 15% against previous technologies.</p> <p>R&amp;D in sustainable aviation fuels, including biofuels, for improved fuel efficiency. Direct emissions from the production of biofuels will be at least 80% lower than fossil fuel counterfactual.</p>	<ul style="list-style-type: none"> <li>Investments in next generation aircraft to replace old fleet (such as Boeing 787-9 and Boeing 787-10)</li> <li>Research and development into Sustainable Aviation Fuels (These include the development of sustainable alternative fuels, which can be produced in commercial quantities for use not only within the Emirates, but also nationally and internationally.)</li> </ul>	<p>Aviation fuels derived from non-RSPO certified palm oil</p> <p>Non-waste biofuels that compete with food production</p> <p>Biofuels that negatively impact biodiversity, e.g habitat loss or displacement of natural ecosystems</p>

## b. Project selection and evaluation process

All of Etihad's activities and investments are subject to its Environmental Policy<sup>13</sup> and Code of Business Conduct, which includes prohibition of slavery, human trafficking, and labor exploitation.<sup>14</sup> Etihad's Code of Ethical Purchasing and Supply requires our suppliers to comply with applicable laws prohibiting human trafficking, forced or child labour and those relating to maximum working hours.

Etihad has established the Etihad Environmental Performance Taskforce (the "Taskforce") with responsibility for governing and implementing the initiatives set out in the Framework.

The Taskforce is comprised of certain Etihad management personnel, including but not limited to representatives from:

- Sustainability;
- Corporate Social Responsibility
- Corporate Communications
- Group Treasury;
- Investor Relations

## c. Management of Proceeds

The Taskforce meets on a quarterly basis to oversee the implementation of sustainability initiatives, review progress and make adjustments as necessary. At each meeting, the Taskforce focuses on specific topics driven by a combination of external factors and the Group's requirements.

The respective project team will identify potential eligible projects based on the eligibility criteria outlined in the Use of Proceeds section.

Once identified, all transition assets will be subject to an extensive due diligence process that will examine all aspects of the projects including, but not limited to: validation of selected target group, confirmation of alignment with SDGs, financial analysis of project costs, assessment of project feasibility, scrutiny around the stated benefits and their measurement.

Potential eligible transition projects will be submitted to the Taskforce for review and confirmation that they qualify as eligible projects. If such project is considered as an eligible project by the Taskforce in accordance with the Framework, it may be earmarked as transition eligible. The Taskforce will ensure that these are aligned with the four core sections of the Green Bond Principles.

There is a lookback period of three years.

The Taskforce will meet quarterly to review the allocation of the proceeds of issuances under this framework and to facilitate ongoing reporting.

---

<sup>13</sup> [https://www.etihadaviationgroup.com/content/dam/eag/corporate/etihadaviation/en-ae/desktop2/pdfs/Environmental\\_Policy.pdf](https://www.etihadaviationgroup.com/content/dam/eag/corporate/etihadaviation/en-ae/desktop2/pdfs/Environmental_Policy.pdf)

<sup>14</sup> [https://www.etihadaviationgroup.com/content/dam/eag/corporate/etihadaviation/en-ae/desktop2/pdfs/Code\\_of\\_business\\_conduct.pdf](https://www.etihadaviationgroup.com/content/dam/eag/corporate/etihadaviation/en-ae/desktop2/pdfs/Code_of_business_conduct.pdf)

## Transition Finance Framework

The Taskforce will be responsible for project selection and will monitor the continued compliance of all projects to the eligibility criteria throughout the life of the projects.

The proceeds of each issuance under this Framework will be deposited in the general funding accounts and to be earmarked to eligible projects. The management of proceeds process will be overseen by the Treasury, Tax and Finance department.

Etihad has established a Sustainable Financing Register (the “Register”) to record the allocations and track the use of proceeds of issuances under this framework. Etihad will maintain the Register to keep track of the use of proceeds for issuances under this Framework. The Register will contain the following information including:

- Type of Funding Transaction
- Key information including, issuer/borrower entity
- Transaction date, tranche(s) information
- Principal amount of proceeds
- Repayment or amortization profile
- Maturity date, and interest or coupon (and in the case of bonds, the ISIN number).

### **Allocation of Use of Proceeds:**

Information including:

- Name and description of eligible projects to which the proceeds of the Issuance have been allocated in accordance with this Framework.
- Amount of Issuance proceeds allocated to each project.
- The remaining balance of unallocated proceeds yet to be earmarked.
- Other relevant information such as information of temporary investment for unallocated proceeds

Any balance of issuance proceeds which are not yet allocated to eligible projects will be held in accordance with Etihad’s liquidity management policy. Etihad will establish a Sustainability Financing Register to track the relevant information for each such issuance. The register will be reviewed bi-annually.

## d. Reporting

Etihad intends to issue reports on the allocation of the net proceeds of Transition Finance Instrument to the Eligible Transition Portfolio (each, an “Allocation Report”). Reporting with respect to each Transition Finance Instrument will take place: (a) within 12 months following the funding date of such Transition Finance Instrument and (b) if the net proceeds thereof have not been allocated by the time of such first report, for each following 12 month period until the full initial allocation of the net proceeds of such bond, sukuk, or loan (with a final such report being published after such initial allocation has been completed). Furthermore, additional reports are intended to be published on a timely basis in case of material developments.

Wherever feasible, Etihad may report on the aggregated impact of the Eligible Transition Portfolio on a category level. Etihad will align, on a best efforts basis, the reporting with the portfolio approach described in ICMA’s Harmonized Framework for Impact Reporting (June 2019).

### Allocation reporting

The Allocation Reports for each Transition Finance will provide information such as:

- The amount or percentage of allocation to the Eligible Transition Portfolio from the proceeds of such Transition Finance Instrument,
- Examples of Eligible Assets invested in from the proceeds of such Transition Finance Instrument,
- The geographic distribution of assets funded from the proceeds of any Issuance under this Framework
- The portion of the proceeds from each issuance under this framework that is for new financing vs. refinancing, and
- The balance of the unallocated proceeds of each issuance under this Framework

### Impact reporting

Within each Allocation Report, Etihad intends to include a discussion on the impact of the portfolio funded by the applicable issuance under this framework from an environmental perspective, subject to the availability of information and baseline data and based on methodologies that will be publicly available.

### Examples of indicators and Metrics:

Eligible Transition Projects Categories	Eligible Projects	Examples of impact indicators
<b>Energy Efficiency</b>	<ul style="list-style-type: none"> <li>• Investments in next generation aircrafts</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced and/or avoided GHG emissions (in t. CO<sub>2e</sub> /year)</li> <li>• CO<sub>2</sub> / Revenue Tonne Kilometre</li> <li>• Use of sustainable aviation fuel (adjusted distance travelled using biofuels)</li> </ul>

## Transition Finance Framework

Eligible Transition Projects Categories	Eligible Projects	Examples of impact indicators
	<ul style="list-style-type: none"> <li>Research and development into sustainable aviation fuels</li> </ul>	<ul style="list-style-type: none"> <li>Number of research programs funded</li> <li>Types of research studies launched</li> <li>Qualitative case studies on R&amp;D projects</li> </ul>

### Verification

Etihad will request on an annual basis, starting one year after issuance and until maturity, a limited assurance report of the allocation of the proceeds of instruments issued under the framework to Eligible Projects. Etihad will also request on an annual basis, starting one year after issuance and until maturity, a limited assurance report of the impact of the proceeds of instruments issued under the framework according to the impact metrics set out in this document.

## Sustainability-Linked Finance Framework

This framework defines a set of guiding principles for financing instruments linked to the achievement of material, quantitative, pre-determined, ambitious, regularly monitored and externally verified sustainability (ESG) objectives through Key Performance Indicators “KPIs” and Sustainability Performance Targets (“SPT”), with no specific dedicated Use-of-Proceeds.

Etihad has designed this Sustainability-Linked Financing Framework in compliance with the Sustainability-Linked Bond Principles 2020 (SLBP) as published by the International Capital Market Association (ICMA), in order to be aligned with market best practices.

For all Sustainability-Linked Financings, Etihad asserts that it will adopt the following as set out in this Framework:

- A. Selection of Key Performance Indicators (KPI)
- B. Calibration of Sustainability Performance Targets (SPT)
- C. Bond characteristics
- D. Reporting
- E. Verification

### A. Selection of Key Performance Indicator (KPI)

#### Co2/RTK

As noted above, energy efficiency is a key contributor to the decarbonisation of aviation, contributing up to 45% to emission reductions in the sector. In measuring fuel efficiency, Etihad is accounting for major factors contributing to the sector’s emissions footprint over which it has control: fuel burn and air transport activity.

<i>Definition</i>	<i>Carbon emissions per revenue tonne kilometres</i>
<i>Units</i>	<i>g Co2e/revenue tonne kilometres</i>
<i>Scope</i>	<i>The KPI is calculated across Etihad’s entire fleet (passenger and freight).</i>
<i>Method</i>	<p><i>The indicator is calculated as the quotient of two values for a given year:</i></p> <ul style="list-style-type: none"> <li>• <i>Numerator: equivalent g of carbon dioxide emitted, calculated by multiplying Etihad’s total fuel burn (kg) by a standard emissions factor of 3.157 kg Co2/kg fuel.<sup>15</sup></i></li> <li>• <i>Denominator: revenue tonne kilometres – the utilised/sold capacity for passengers and cargo expressed in metric tonnes, multiplied by distance flown</i></li> </ul>

The KPI selected is core and relevant to Etihad’s business model and consistent with its strategic priority to reduce its carbon emissions as part of its sustainability strategy. Fuel efficiency, as a major determinant of Etihad's carbon footprint, is of high significance to the Etihad's operations.

The KPI is also measurable, quantifiable, and externally verifiable, as detailed in D. Reporting. The KPI also covers a material scope of Etihad’s activities, given that the passenger fleet accounts for 85% of Etihad’s revenues and over 90% of fuel burn.

<sup>15</sup> This emissions factor is a chemical constant relating to the mass of Co2 produced by stoichiometric combustion of a known amount of fuel.

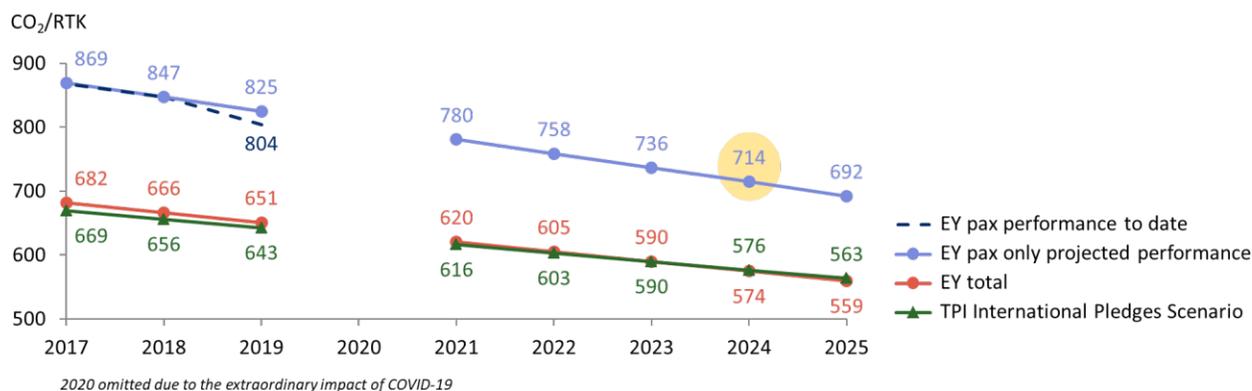
	2017 (baseline)	2018	2019
CO <sub>2</sub> e/RTK PAX only	868.9	851	804
CO <sub>2</sub> e/RTK	682	666	631
Annual reduction		2.0%	5.5%

## B. Sustainability Performance Targets (SPT)

The Sustainability Performance Target (SPT) has been set in line with Etihad’s short, medium and long term sustainability targets:

- Commitment to Net Zero Carbon emissions as per Etihad Aviation Group (EAG)’s 2050 target
- 50% reduction in net emissions by 2035, based on CORSIA established baseline (2019) **20% reduction in emissions intensity (CO<sub>2</sub>/RTK)** in our passenger fleet by 2025, based on EAG fleet transformation plan initiated in 2017

**The Sustainability Performance Target is set at 714 kg CO<sub>2</sub>/RTK for the passenger fleet, which results in a total CO<sub>2</sub>/RTK of 574, with a Target Observation Date of 31 December 2024. This is an aggregate reduction of 17.8% over the 2017 baseline of 869 g CO<sub>2</sub>/RTK.**



Etihad will publicly disclose its performance on the SPT on the Notification Date, which will occur no later than six months after the Target Observation Date.

The target is demonstrably ambitious in reference to sector benchmarks. The SPT trajectory up until 2024 exceeds the CORSIA target to reduce emissions intensity by 2% per annum to 2050 using a 2010 baseline. The SPT trajectory is also below the Transition Pathway Initiative’s International Pledges Scenario, which is based on the IEA Reference Technology Scenario of all existing commitments made by ICAO to reduce international aviation emissions, as well as individual countries’ domestic aviation reduction commitments.<sup>16</sup>

The factors that will support the achievement of the target under normal business operating conditions are:

- **Increase in energy efficiency of Etihad’s fleet:** The renewal of Etihad’s fleet and purchases of more energy efficient aircraft will reduce fuel consumption and improve the emissions per available seat. In the short term,

<sup>16</sup> Carbon performance assessment of airlines: note on methodology  
<https://www.transitionpathwayinitiative.org/publications/34.pdf?type=Publication>

this is the largest driver of emission reductions. Etihad started its transformation journey in 2017, with a major focus on operating a more efficient network and fleet. As part of the fleet restructuring between 2017 and 2019 Etihad has exited its least efficient wide body aircraft including A340, A330, and B777-200LRs, replacing these with an investment in new generation aircraft (B787). In 2017, B787 aircraft accounted for only 7% of Etihad's total capacity production (ASKs) growing as of 2019 to 35%, with an operating fleet of 37 B787 aircraft in Dec 2019. We plan to continue investing in the most efficient aircraft and transforming our fleet.

- **Improvements in the efficiency of our operations:** Etihad's efforts in demand side management, to improve traffic management practices and reduce weight of aircraft, will have a material impact on reducing fuel consumption.
- **Use of sustainable aviation fuels:** Etihad is an active supporter of sustainable aviation fuels, and has taken a leadership role in piloting the use of these fuels and blending them with jet fuel to reduce the carbon intensity of fuel consumption. In 2020, the airline operated four flights using synthetic fuels.

The achievement of the KPI could be disrupted in the case of:

- Events beyond the reasonable control of Etihad such as natural disasters, or pandemics that disrupt business continuity.
- M&A activities, strategic disposals, or extraordinary operations which significantly change the perimeter of Etihad's business.
- Changes to Etihad's operation brought about by events beyond the control of Etihad.

In these cases, Etihad may choose to re-assess the KPI and/or restate the SPT and/or adjust the baseline or KPI scope. Any such change will result in an update of this framework and to the concurrent Second Party Opinion.

### C. Sukuk Characteristics

*We note that changes to the Sukuk characteristics are technically not a part of the terms and conditions of the offering memorandum. However, we provide an undertaking to comply with the provisions of this section in relation to committing to purchasing carbon offsets as described below.*

The UAE is among the member countries that has agreed to the Carbon Offset and Reduction Scheme for International Aviation (CORSIA). Under the CORSIA agreement, net absolute carbon emissions from aviation will be stabilized after 2020. Beginning in 2021, airlines in member countries, including Etihad, will fund climate reduction projects for any gross carbon emissions in excess of the baseline.<sup>17</sup> Etihad will be obliged to purchase carbon offsets to cover post 2020 absolute emissions.

While absolute carbon emissions reductions are critical in order to align to a Net Zero pathway and keep to the global carbon budget, an intensity metric is important in order to show the depth of Etihad's commitment to reducing our carbon footprint.

In issuing a Sustainability-Linked Sukuk, Etihad is voluntarily adding to its existing commitments under CORSIA, committing to also invest in additional climate reduction projects to promote its target to reduce carbon emissions intensity by over 20% from the 2017 baseline (based on Fleet Transformation efforts). However, if the target is not met, Etihad commit to purchasing additional offsets, as below.

---

<sup>17</sup> The baseline was agreed to be the average of total Co2 emissions for the years 2019 and 2020 on the routes covered by CORSIA.

Offset Purchase (equivalent amount on sukuk notional)	CO2/RTK Range	
	From	To
25bps	>736	
20bps	>730.5	736
15bps	>725	730.5
10bps	>719.5	725
5bps	>714	719.5

In 2020, Etihad Airways began to develop and implement a relevant and considered program of carbon offsets, both within its home market of the UAE and in selected markets which it serves. In doing so, the airline sought to ensure that any offset initiatives add value to local markets, and complement its direct initiatives to reduce carbon emissions across its global operations. Where feasible, credits will be purchased from the offset schemes verified by the CORSIA Technical Advisory Body, aligning to the WWF’s guidance on voluntary purchases of carbon credits.<sup>18</sup> In all cases, credits purchased will be real, measurable, additional, permanent, monitored, reported and verified. Etihad will ensure that projects avoid leakage and comply with all social and environmental safeguards.<sup>19</sup> For the avoidance of doubt, where Etihad purchases offsets under its commitments in this framework, these will be in addition to credits that are purchased as part of CORSIA commitments. Offsets purchased will be cancelled for use.

However, if Etihad can demonstrate it has met the Sustainability Performance Target through demonstrated reductions in emissions via improvements in the energy efficiency of the fleet, operational efficiencies, and sustainable aviation fuels<sup>20</sup>, the company will benefit from a bonus premium which rescinds the commitment to offset.

## D. Reporting

Data collection for the KPI is an integral part of Etihad’s operational processes. Etihad’s Flight Management System (AIMS) aggregates and stores data on all flights including Flight Logs, Flight Plans, Load Sheet and all other aircraft data. AIMS automatically transfers all data to Etihad’s Fuel Management Information System, where the data is maintained and monitored for reporting to regulators and quality management purposes.

On an annual basis until the Observation Date, Etihad will disclose performance on fuel burn, RTK, and CO2/RTK for the passenger fleet and across the entire fleet on its website as part of its annual press release on performance. This reporting will be made available within six months of each calendar year end and will also include information on the efforts made to improve emissions intensity, and any other relevant information to enable progress on the SPT.

<sup>18</sup> [https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt\\_TAB\\_Report\\_Jan\\_2020\\_final](https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final).

<sup>19</sup> [https://c402277.ssl.cf1.rackcdn.com/publications/1310/files/original/WWF\\_position\\_and\\_guidance\\_on\\_corporate\\_use\\_of\\_voluntary\\_carbon\\_credits\\_EXTERNAL\\_VERSION\\_11\\_October\\_2019\\_v1.2.pdf?1591194127](https://c402277.ssl.cf1.rackcdn.com/publications/1310/files/original/WWF_position_and_guidance_on_corporate_use_of_voluntary_carbon_credits_EXTERNAL_VERSION_11_October_2019_v1.2.pdf?1591194127)

<sup>20</sup> For the avoidance of doubt: this calculation is based on gross fuel consumption over revenue tonne kilometre and does not include any offsets purchased as part of Etihad’s commitments under CORSIA.

## Transition Finance Framework

Reporting on fuel burn and RTKs is also submitted on an annual basis to ICAO as part of Etihad's reporting under the CORSIA agreement. Etihad will provide a final report on the performance of the KPI against the predefined SPT within six months of the Target Observation Date.

### **E. Verification**

Etihad will obtain annual verification of performance on fuel burn, RTK and CO<sub>2</sub>/RTK from an External Verifier. The External Verifier means KPMG Lower Gulf or any such other qualified provider of third party assurance or attestation services appointed by Etihad. Fuel burn and RTK reporting is also audited for Etihad's submissions to ICAO. This verification will be confirmed in the company's annual results disclosure.

Etihad's performance on the KPI at the Target Observation Date will be verified by an External Verifier, who will provide reasonable assurance on the performance of the company under the ISAE 3000 and AA1000 2008 AS Standards (or equivalent). This verification will be included on the company's website within six months of financial year end.

### **External Review**

Etihad has obtained a Second Party Opinion from Vigeo-Eiris to evaluate the Transition Finance Framework (including both the Use of Proceeds Financing Framework and the Sustainability-linked Financing Framework), its transparency and governance as well as its alignment with the Green Bond Principles 2018 and the Sustainability-linked Bond Principles 2020, published by ICMA.

### **Amendments to this Framework**

The Treasury team will review this Framework on a regular basis, including its alignment to updated versions of the GBP and SLBP as and when they are released, with the aim of adhering to best practices in the market. Such review may result in this Framework being updated and amended. The updates, if not minor in nature, will be subject to the prior approval of Etihad and Vigeo-Eiris. Any future updated version of this Framework that may exist will either keep or improve the current levels of transparency and reporting disclosures, including the corresponding review by an External Reviewer. The updated Framework, if any, will be published on Etihad website and will replace this Framework.