C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

(1). About EVA Air

Since its establishment for 33 years, EVA Air has upheld its corporate principles of “Challenge, Innovation and Teamwork”, insisting on rigorous flight safety, service quality and corporate sustainability. In 2022, we pragmatically faced the impacts of the COVID-19 pandemic, the Ukraine-Russia war, inflationary pressures, and labor shortages. We capitalized on the gradual reopening of borders and the recovery of the passenger market by steadily increasing passenger flights. Meanwhile, we flexibly utilized the belly capacity of passenger aircrafts and provided customized cargo services, resulting in record-high cargo revenue for the year. The profitability for the year also surpassed that of 2021. After three years of pandemic challenges, EVA Air has demonstrated operational resilience and forged a more robust business structure. Moving forward, EVA Air will continue to maintain a balanced operation strategy between passenger and cargo development. Moreover, we will optimize our fleet and network planning to achieve the highest efficiency and effectively respond to market changes and challenges.

EVA Air is actively concerned about global warming issues and proactively implements various energy-saving measures to respond to the global aviation industry's goal of achieving net-zero carbon emissions. We are committed to promoting net-zero carbon emission plans in both "flight operations" and "ground operations" while sustainable aviation fuel plays a crucial role in carbon reduction. At the same time, we continuously improve fuel policies, optimize fuel usage for flight planning, and other measures. Setting carbon reduction targets in different stages (short, medium, and long term) incorporated with the "Green Travel Carbon Offset Program" to achieve the goal of "net-zero carbon flying by 2050" and create a vision for sustainable airline.

(2). Management system certification and environmental policies

The Environmental Committee is in responsible for practical operations for the EVA Air Corporate Sustainability Committee’s Environmental Action Team. The Committee is the unit that implements the Company's environmental and energy decision-making and management. They supervise setting of environmental protection and energy management goals and targets; promote management plans and performance management; and regularly report to the Board of Directors. They help internalize concepts of environmental sustainability into every phase of our operations. The committee is divided into three task forces: SAF, Environment and Energy, and Carbon Credit. These task forces consist of department/division heads who serve as permanent members. Regular meetings are held on a quarterly basis to review the implementation status and achievements of respective responsibilities, thus ensuring the effectiveness of the Company's environmental and energy management policies and operations. The aim is to effectively mitigate the negative impacts of greenhouse gas emissions on the global environment and establish a positive international image for EVA Air as a sustainable and green enterprise.

The various fuel conservation measures are planned and executed by the Fuel Conservation Group. The measures include fuel efficiency analysis of various aircraft models and selecting the most suitable aircraft models based on long-, mid-, short-range flight routes and the number of passengers. Furthermore, the fuel conservation plans involve topics such as the modernization of fleets, weight reduction of aircraft, flight operations and aircraft maintenance. The performance of fuel conservation measures are also shared with Environment Committee.

(3). Introducing TCFD to Manage Environmental Risks and Opportunities

Task Force on Climate-Related Financial Disclosures (TCFD) develops suggestions for more beneficial and efficient climate-related disclosures. We implement the four main core elements of TCFD framework, identifying and controlling high risk factors caused by climate change and extreme climates, and expand risk monitoring to all environmental aspects. EVA Air assesses the negative impact, the impact target, and the impact strength of every major environmental risk, and discloses response measures for all currently identified environmental risks from the aspects of "the highest level of management and duties, the strategic plan, the risk management action, and the goal". Moreover, we provide educational trainings and comprehensive information, adopt risk manage procedures and fully grasp various hazard information. In addition, we identify opportunities for the company’s operations resulting from climate change. We actively establish strategies and management measures to properly and timely pursue any development opportunities with potential short, mid-, or long-term benefits to the Company’s business.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for
1 year

Select the number of past reporting years you will be providing Scope 2 emissions data for
1 year

Select the number of past reporting years you will be providing Scope 3 emissions data for
1 year

C0.3

(C0.3) Select the countries/areas in which you operate.
Taiwan, China

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
TWD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Operational control

C-TO0.7/C-TS0.7

(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?
Aviation

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	TW0002618006

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Director on board	(1). How the Director on Board's responsibility is related to climate-related issues: The Company has set up the “Corporate Sustainability Committee” (the “CSC”), which is a specialized unit responsible for formulating policies, regulations and management and executing corporate social responsibility. The CSC meeting is held quarterly to have general discussions in the aspects of economics, environment and society. The Company’s President is assigned as Committee Chairman. The execution of related operation is reported to the Board of Directors regularly. (2). Example of a climate-related decision made by the Director on Board: (2.1) To respond CDP and S&P CSA. (2.2) Introduction of TCFD recommendation. (2.3) With respect to environmental sustainability, we introduced the eco-friendly 787 Dreamliners successively in response to the Company’s environmental goals of saving energy and reducing emissions of carbon dioxide and other greenhouse gases, so as to lessen the impact of the aviation industry on the environment. In 2018, the first 787-9 Dreamliner joined our fleet. In 2019, 2019 and 2022, we continued to introduce the 787 passenger aircraft from the same series and 777 freighter in response to the environmental objectives of energy conservation, carbon reduction and greenhouse gas emission reduction.

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	<Not Applicable>	The Sustainability Committee under the Board of Directors is the highest guidance and supervisory unit for EVA Air's sustainable development. The chairman acts as the convener. In implementation, the Corporate Sustainability Committee (CSC) serves as the dedicated unit for promoting corporate sustainability. Climate change plans’ implementation effectiveness is reported to the Sustainability Committee and the Board of Directors every year. The Corporate Sustainability Committee’s Environmental Action Team is in charge of formulating and implementing action plans.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Among the 9 directors, 9 have expertise in risk management and 1 of them has expertise in environmental protection.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee
Sustainability committee

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Half-yearly

Please explain
The Sustainability Committee under the Board of Directors is the highest guidance and supervisory unit for EVA Air's sustainable development. The chairman acts as the convener. In implementation, the Corporate Sustainability Committee (CSC) serves as the dedicated unit for promoting corporate sustainability. Climate change plans' implementation effectiveness is reported to the Sustainability Committee and the Board of Directors every year.
The Corporate Sustainability Committee's Environmental Action Team is in charge of formulating and implementing action plans.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
President

Type of incentive
Monetary reward

Incentive(s)
Salary increase

Performance indicator(s)
Achievement of climate transition plan KPI
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to
Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)
Fuel is one of the largest operating costs of the aviation industry. Reducing the use of fuel through the implementation of various energy reduction projects can reduce the cost of EVA Air and contribute to the overall interests of the Company. The President's salary is related to the Company's profitability.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The incentive contribute the improvement on fuel efficiency and reduce carbon emissions from our service and product.

Entitled to incentive
Business unit manager

Type of incentive
Monetary reward

Incentive(s)
Salary increase
Profit share

Performance indicator(s)
Achievement of a climate-related target
Reduction in total energy consumption

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
Achievement status of ISO 14001 and ISO 50001 Environmental and Energy Action Plans

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Every year, through the operation of ISO 14001 and 50001 management systems, relevant action plans are implemented to achieve environmental and energy management goals, including power saving, improving employees' environmental awareness, waste reduction, and greenhouse gas reduction. The action plan for 2022 includes: upgrading the air-conditioning system of the building, holding an environmental protection proposal competition, and gradually replacing gasoline vehicles with electric vehicles or hybrid vehicles.

Entitled to incentive
All employees

Type of incentive
Monetary reward

Incentive(s)
Bonus – set figure

Performance indicator(s)
Board approval of climate transition plan
Shareholder approval of climate transition plan
Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
In 2022, Environment Committee promote an "Innovation Environmental ideas" Program. Invite all colleagues to provide their environmental proposal regarding energy saving, eco or environmental friendly. Participant will be reward if proposal is adopted or evaluated with feasibility.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
Through this activity, employees' awareness of the environment and energy protection can be improved, so as to understand the impact of operating activities on the environment, and propose improvement plans to help the company achieve energy conservation and net protection.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	EVA Air's sustainable development framework focus on our core value "flight safety, quality service and corporate sustainability." Based on this core value, we have developed short-, medium-, and long-term strategies. For the short-term, the time horizon is current to 3 years.
Medium-term	3	5	EVA Air's sustainable development framework focus on our core value "flight safety, quality service and corporate sustainability." Based on this core value, we have developed short-, medium-, and long-term strategies. For the medium-term, the time horizon is 3-5 years.
Long-term	5	10	EVA Air's sustainable development framework focus on our core value "flight safety, quality service and corporate sustainability." Based on this core value, we have developed short-, medium-, and long-term strategies. For the long-term, the time horizon is 5-10 years.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

(1). The definition of substantive financial or strategic impact, and its indicator and threshold:

The quantitative data of financial or strategic impact strength (1-5 levels) and likelihood (1-7 levels) were used. The product of those two numbers serves as the basis for judging the level of risk indicators. A substantive financial or strategic impact on business will be identified when **the risk indicator exceeds 21 (Medium-high)**:

- **>32: High (substantive strategic impact)**
- **21-32: Medium-high (substantive strategic impact)**
- 12-20: Medium
- 6-10: Medium-low
- <6: Low

(2). Application scope:

Direst operation and partners in value chain.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
(1). Enterprise Risk Management :
In order to improve and implement the risk management mechanism, the Company has established the “Risk Management Policy and Procedures” to carry out risk management aimed at uncertain factors that may threaten the Company's operations, improve the efficiency in division of labor in risk management, and ensure the achievement of the Company's operational goals.

(1.1) Enterprise Risk Management Process:
Step 1 Risk Identification: Sub-committees of the CSC identify the risks that may be faced during business operation (including the description of risk appetite and tolerance levels)
Step 2 Risk Assessment: Assess the impact, frequency, vulnerability and speed of onset of the identified risk factors to prioritize the identified risks
Step 3 Risk Management: Each responsible departments shall propose the mitigation and response plan, and report to the CSC regularly
Step 4 Disclosure and Communication: The CSC reports the Company's overall risk management results to the Board of Directors every year, and disclose information in accordance with regulatory requirements

(1.2) Risk Management Framework :
The Board of Directors is the highest supervisory unit for EVA enterprise risk management, and continues to oversight the effectiveness of the risk management mechanism in accordance with the overall corporate strategy and programs. The “Corporate Sustainability Committee” is responsible for implementing enterprise risk management related matters, and quarterly meetings are held to supervise the implementation of risk management policies as well as the implementation and improvement progress of risk control measures by various competent departments. The annual internal control self-assessment audit evaluates the operation of the Company's risk management processes, and a regular report is submitted to the Board of Directors on the overall performance. In addition, according to the principle of materiality, risk identification, assessment, management, and disclosure are carried out for the risks that may be faced during business operation in terms of the economy (including corporate governance), environment, society, and risks related to material topics, . Moreover, sensitive analysis and stress testing are conducted for selected financial and non-financial risks. The five major risk categories of the Company are strategic, operational, financial, environmental and other risks.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	(1). Relevance: In 2012, the EU began to apply carbon emission control measures to all airlines departe from or arrive in the EU. After the Brexit, UK put UK ETS into effect. These regulations resulted in carbon trading expenses and operational management costs. (2). Company case: EVA Air originally planned to operate 28 passenger scheduled flights to Europe per week, including 3 flights to Amsterdam weekly, 7 flights to Vienna weekly, 7 flights to Paris weekly, and 7 flights to London weekly, and 4 flights to Milan flights weekly in 2022; and planned to expand our future network to more destinations in EEA based on market condition. Also, to expand code-share cooperation with Thai Airways, providing Taiwanese passengers with convenient flight services to Europe, and actively strives for other destinations with marketability. In 2022, COVID-19 epidemic still affected global airline operations, EVA Airways significantly reduced its international flights. According to flight records, in 2022, there were 1,392 flights departed from or arrived in Europe. In terms of our sales of 2022, the revenue of passenger operations is TWD 31.87 billion and of cargo operations is TWD 90.3 billion, respectively. If our GHG emissions exceed the allowance, EVA Air has to purchase the carbon credits with the price of about 80 EUR or 80 GBP per metric tonnes CO2e from EU ETS and UK ETS market. EU ETS: Currently, EU still adopts “reduced scope” policy, only intra-EEA flights, i.e. flights departs from EEA and arrived in EEA, are subject to EU ETS regulations. Although the aforementioned EVA Air’ flights departed from or arrived in EEA, only a small number of non-scheduled business flights operated in intra-euro area. In 2022, there are 122 tons of carbon emissions are required to be surrendered. Since carbon allowance are allocated every year, there is still a balance after surrender, so there is no need to purchase additional carbon rights. UK ETS: Under the scope of UK ETS, flights operate from UK to EEA region, or intra- UK are required to offset its emissions. In 2022, total of 22 tons of allowance were surrender to UK. No additional allowance was purchased from carbon market.
Emerging regulation	Relevant, always included	(1). Relevance: The International Civil Aviation Organization (ICAO) stipulates that all international airlines should conduct carbon emissions monitoring according to the Emission Monitoring Plan (EMP) starting in 2019 and comply with the relevant regulations of CORSIA. (2). Company case: Currently, EVA Air has a few flights operating between countries that participate in CORSIA, for example, flights depart from Thailand and arrive in Netherlands. However, from 2020 to 2022, due to the impact of the COVID-19 epidemic, international air transportation dropped significantly, global carbon emission grow factor on international air transportation was zero. Therefore, EVA has no carbon offset obligation yet. In June 2022, the 226th Session of the ICAO Council requested CAEP to undertake further analysis on the impacts of COVID-19 on CORSIA and its baseline. The ICAO Council agreed on a series of proposals for consideration by the 41st Session of the ICAO Assembly, including using of 85% of 2019 emissions as the CORSIA baseline after the pilot phase (2024 – 2035). Taiwanese government has not yet voluntarily participate in CORSIA. Therefore, most of EVA Air’s international flights has no offset obligation. We assume that if Taiwanese government announce participation in CORSIA starts from 2024, the emissions that EVA Air should be offset will be 631,016 and 1,069,318 and 1,482,993 metric tonnes in 2024, 2025 and 2026, respectively. If the carbon price is USD 10 (=TWD 300) at that time, the cost will increase by about TWD 0.19 billion in 2024, TWD 0.32 billion in 2025, and 0.44 billion in 2026.

	Relevance & inclusion	Please explain
Technology	Relevant, always included	(1). Relevance: Under the theme of climate change, the fuel efficiency of aircraft has become a topic of public concern, so EVA Air plans to gradually introduce the latest fuel-efficient aircraft. This has some impact on our operation, EVA Air must have repair technology and personnel for the new model. To do so, aircraft maintenance personnel and technicians need to go through two major stages of training at the repair station: basic training and departmental specialized training. They are also required to pass the examinations for the aforementioned training to be qualified as maintenance personnel and technicians. After obtaining CAA Aircraft Maintenance Engineer Certification, they will attend aircraft type training at maintenance training organizations to cultivate aircraft type professional maintenance capabilities and become authorized to sign the release. (2). Company case: Aircraft's periodic/non-periodic (emergency or special condition) checks, maintenance and repairs are inextricably associated with flight quality and safety. In its initial launch, EVA Air has already heavily invested in building a modern jumbo wide-body aircraft maintenance center, followed by establishing Evergreen Aviation Technologies Corp., which has already acquired numerous maintenance accreditations from 14 countries, including those of FAA, EASA and ISO-AS9100 QA. Besides, the alliance cooperation with GE is beneficial to build the capability and higher level technology for aircraft maintenance and engine overhaul, which can provide a greater guarantee for the flight safety of EVA Air. Evergreen Aviation Technologies Corporation's facilities occupy an area of 58,600 m2, including aircraft hangar spaces spanning 4 hangars, a powerplant shop, a powerplant test cell, multiple accessory shops, storage warehouse and offices. It's the largest modern aircraft maintenance center in Taiwan; it boasts four hangars which can house nine jumbo wide-body and three narrow-body aircraft, two engine repair factories equipped with engine test cell of up to 120,000 pounds thrust, which can be elevated to a maximum of 150,000 pounds as required. It also provides engine repair services for various types of engines including the latest GEnx engine, satisfying the requirements for repair and maintenance of high-end fuselages of a variety of aircraft models.
Legal	Relevant, always included	(1). Relevance: (1.1) In January 2023, the third reading of the amendment to the "Climate Change Response Act" was passed, which explicitly states Taiwan's commitment to achieving net-zero greenhouse gas emissions by 2050. This amendment has become a major legal source for future climate governance. (1.2) From January 2022, the Paris airport will impose a mandatory addition of 1% sustainable aviation fuel for aviation fuel oil suppliers. (2). Company case: (2.1)The aviation industry is currently not subject to short-term regulations. However, we will continue to monitor the legislative progress of relevant subsidiary laws and comply with regulatory requirements. We will also assess the impact on the Company and upstream industries. (2.2) If sustainable aviation fuel is not provide by fuel supplier in Paris airport, the fuel supplier will be charged 12.5 euros (€/m3) per cubic meter of fuel for the annual volume supplied at the airport, and those cost increase may be passed on airline company. In 2022, additional of 0.34 million USD were paid to fuel supplier.
Market	Relevant, always included	(1). Relevance: In order to strive for a low-carbon air transport market, the introduction of new energy-saving aircraft and electronic services has become the operation strategy of airline industry. (2). Company case: Fleet introduction In addition to the completion of fleet establishment, which consists of thirty-four 777-300ER, five 777 freighter, four 787-9, six 787-10, nine A330-300, three A330-200, twenty-four A321-200 and two ATR. EVA Air will continue to introduce 787-9, 787-10 and 777 freighter in following years. The Boeing 787 Dreamliners are made with a large quantity of composite materials, including lightweight carbon fiber, which are applied in the fuselage, wings, engine blades, etc. The percentage of such materials accounts for more than 50% of the total weight, drastically reducing the weight of the fuselage. Also, the new materials are less readily subject to fatigue and corrosion compared with the traditional aluminium alloy; this helps to reduce maintenance costs. In addition, LED lighting is used to replace fluorescent lamps, reducing about half of the electricity consumption. With the latest model of GEnx engine manufactured by General Electric, the adoption of new aircraft reduces fuel consumption and greenhouse gas emissions by 20%. Their high fuel efficiency and flight endurance will help enhance EVA Air's operating performance. EVA e-Library To protect the environment and provide passengers with contactless and worry-free travel experiences, EVA Air took the lead among national carriers and launched the EVA e-Library electronic magazine service on February 8, 2022. This innovative service replaces traditional paper publications, eliminating constraints related to onboard space, weight, and the inability to provide up-to-date materials. The EVA e-Library offers a time-sensitive advantage, providing over 31 languages and more than 500 different newspapers, periodicals, and magazines in various categories such as finance, arts and culture, travel, and current affairs. This service meets the diverse needs of passengers while aligning with the future trend of automated services. It also reduces weight, fuel consumption, and paper waste, enabling the Company to take practical action towards achieving its commitment of net-zero carbon emissions by 2050. By actively assuming corporate social responsibility, EVA Air strives to create an ideal goal of sustainable business operations.
Reputation	Relevant, always included	(1). Relevance: According to the statistics by International Air Transport Association (IATA), the annual carbon dioxide emissions by the aviation industry accounts for 2% of the global emissions, but in terms of the global economy contribution value, the aviation industry contributes 8% of the global gross domestic product (GDP). Nearly 3.5 billion people conduct various air activities each year. In order to reduce the global carbon dioxide emissions and mitigate global warming, IATA has set the shared industry goals of net-zero carbon emission by 2050. (2). Company case: In order to reduce the impact of climate change on reputation, therefore, EVA Air established the Fuel Conservation and Carbon Reduction Committee in 2006 to continuously promote various aircraft fuel conservation projects. Total 28,319 tons of fuel were save in 2021, an equivalent of 88,205 tons of CO2e emission. More, EVA Air is the first to roll out a "Green Travel" EVA Carbon Offset Program in Taiwan, in which passengers can make donations based on the calculated carbon emissions of their flight to offset the CO2 created during their flight and achieve "zero-carbon travel".
Acute physical	Relevant, always included	(1). Relevance: Taiwan is an island country in the Pacific that suffers from 3-5 typhoons every year. Over the past 37 years, typhoons that strike East and Southeast Asia have intensified by 12–15%, with the proportion of storms of categories 4 and 5 having doubled or even tripled. In addition to the typhoon, EVA Air's headquarters and the main airport for aircraft transportation are located in Taoyuan, a rain-intensive county. According to the results of the current GCM model simulation, the annual incidence of continuous 24-hour rainfall over 200mm in Taoyuan is 50%, and the return period is 2 years. But by 2030 and 2100, the maximum incidence will increase to 82% and 89% respectively. If the incidence of rain exceeds 350mm for 24 consecutive hours, the annual incidence will increase from the current 0.024% to 3.5% in 2030 and 37% in 2010. (2). Company case: In 2019, EVA Air's revenue from long-haul passenger flight is approximately TWD 11.4 million per voyage, and from short-haul is approximately TWD 2.3 million per voyage. Total 30 short-haul flights were cancelled due to typhoon, resulting in a revenue loss of approximately TWD 69 million and indirect cost of TWD 38.4 million. In 2020, EVA Air's revenue from long-haul passenger flight is approximately TWD 8.6 million per flight, and from short-haul is approximately TWD 1.8 million per flight. There was no any flight cancelled due to the typhoon, because there was no typhoon hit Taiwan in 2020, or typhoon had a slight impact on EVA Airways' stations in other countries. In 2021, EVA Air's revenue from long-haul passenger flight is approximately TWD 4.4 million per flight, and from short-haul is approximately TWD 1.8 million per flight. Total 24 short-haul flights were cancelled due to typhoon, resulting in a revenue loss of approximately TWD 69 million and indirect cost of TWD 43.2 million. In 2022, EVA Air's revenue from long-haul passenger flight is approximately TWD 13.3 million per flight, and from short-haul is approximately TWD 2.5 million per flight. No flight was cancelled due to typhoon.
Chronic physical	Relevant, always included	(1). Relevance: (1.1). An analysis of Taiwan's annual average rainfall from 2041 to 2060 was conducted using the "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform Project" through the Sixth Assessment Report on Climate Change (IPCC AR6) under the SSP1-2.6 low greenhouse gas (GHG) emissions scenario. EVA Air's main operating airport in Taiwan is Taoyuan International Airport. Under the SSP1-2.6 low GHG emissions scenario, the average annual rainfall in Taoyuan County from 2041 to 2060 will increase by 30% compared with that in the base period. Since changes in rainfall will not cause immediate and serious effects for EVA Air, it is assessed that under this scenario there will be no significant physical risk of impact on ground operations or aircraft operations. (1.2). According to the analysis of IPCC AR6, under the SSP5-8.5 very high GHG emissions scenario, atmospheric carbon emissions will reach double the current level in the middle of the century (2050), the average temperature at the end of the century will increase by 4 degrees compared with that of the base period, and the average sea level will probably rise by 0.988 to 1.88 meters by the end of the century compared with that during the period from 1995 to 2014. EVA Air's coastal airports in Taiwan, San Francisco, New York, Vancouver, Okinawa, Hong Kong, etc. might be submerged in sea water, which will directly affect flight operations and might also cause capital property losses or aviation safety incidents, among other effects. (2). Company case: Based on EVA Air's total revenue of TWD 127.1 billion in the reporting year (2022), if the operation is interrupted due to the above-mentioned natural disasters, the average daily loss will be about TWD 0.348 billion, and this figure does not include the loss of capital and assets caused by natural disasters.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Carbon pricing mechanisms

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Situation:
Based on the statistics by International Air Transport Association (IATA), the annual carbon dioxide emissions by the aviation industry accounts for 2% of the global emissions, but in terms of the global economy contribution value, the aviation industry contributes 8% of the global gross domestic product (GDP). Nearly 3.5 billion people conduct various air activities each year. In order to reduce the global carbon dioxide emissions and mitigate global warming, at the 77th IATA Annual General Meeting in Boston, USA, on October 4th 2021, a resolution was passed by IATA member airlines committing them to achieving net zero carbon emissions from their operations by 2050. This pledge brings air transport into line with the objectives of the Paris agreement to limit global warming to 1.5°C.

Potential risk:
(1). The EU began to apply carbon emission control measures to all operating airlines inside the EU in 2012.
(2). The International Civil Aviation Organization (ICAO) stipulates that all international airlines should conduct carbon emissions monitoring according to the Emission Monitoring Plan (EMP) starting in 2019 and comply with the relevant regulations of CORSIA.
(3). Austria levues an Energy Efficiency Tax annually on the use of fuel.
(4). UK ETS: After the Brexit, UK put UK ETS into effect. These regulations resulted in carbon trading expenses and operational management costs. Under the scope of UK ETS, flights operate from UK to EEA region, or intra- UK are required to offset its emissions.

Company specific task:
(1). EU ETS: In 2022, only 122 metric tonnes should be reported, and the financial impact can be negligible.
(2). CORSIA: Up to 90 to 100% of international flights to EVA Air will be affected, potentially impact on 70% of revenue.
(3). UK ETS: In 2022, total of 22 tons of allowance were surrender to UK. No additional allowance was purchased from carbon market. Only about TWD 106,000 annual fee is required to pay for UK government each year.
(4). Austria: The tax levy has temporarily suspended since 2021.
(5). US: Washington State imposes USE TAX for fuel consumption and Hazardous TAX were 153,142 USD in 2022.
(6). Paris SAF Tax: If sustainable aviation fuel is not provide by fuel supplier in Paris airport, the fuel supplier will be charged 12.5 euros per cubic meter of fuel for the annual volume supplied at the airport, and those cost increase may be passed on airline company.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
5180000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
(1). EU ETS: Due to the low GHG emissions currently, only about TWD 13,000 is required to pay Emissions Trading System Support Facility (ETS SF) each year.

(2). CORSIA: From 2020 to 2022, due to the impact of the COVID-19 epidemic, international air transportation dropped significantly. Therefore, EVA Air has no carbon offset obligation yet.

In June 2022, the 226th Session of the ICAO Council requested CAEP to undertake further analysis on the impacts of COVID-19 on CORSIA and its baseline. The ICAO Council agreed on a series of proposals for consideration by the 41st Session of the ICAO Assembly, including using of 85% of 2019 emissions as the CORSIA baseline

after the pilot phase (2024 – 2035). Assume that Taiwanese government announce participation in CORSIA starts from 2024, the emissions that EVA Air should be offset will be 631,016, 1,069,318 and 1,482,993 metric tonnes in 2024, 2025 and 2026, respectively.

If the carbon price is USD 10 (=TWD 300) at that time, the cost will increase by about TWD 0.19 billion in 2024, TWD 0.32 billion in 2025, and 0.44 billion in 2026.

(3). UK ETS: In 2022, total of 22 tons of allowance were surrender to UK. No additional allowance was purchased from carbon market. Only about TWD 106,000 annual fee is required to pay for UK government each year.

(4). Austria: The tax levy has temporarily suspended since 2021.

(5). US: Washington State imposes USE TAX for fuel consumption and Hazardous TAX were 153,142 USD in 2022, equal to TWD 4721520.56.

(6). Paris SAF Tax: In 2022, additional of 0.34 million USD were paid to fuel supplier.

The potential financial impact on increased indirect cost is (1)+(2)+(3)+(4)+(5)+(6)= TWD 5.18 million in 2022

Cost of response to risk
133600000

Description of response and explanation of cost calculation
Primary action:
Our proactive actions include GHG inventory, risk/opportunity identification, energy-saving projects, performance monitoring, etc.

EVA Air's company case:
EVA Air formed the "Environment Committee", which is EVA Air's highest decision-making supervisory unit for environment management policy. The Committee convenes at quarterly meetings to discuss the status and achievement performance of all responsible duties, ensures the effectiveness of the Company's environment and energy management guidelines and policies, effectively reduces the adverse global impact of GHG emissions, and establishes EVA Air's positive image in the international community as a sustainable and green corporation. EVA Air's headquarters in the Nankan Park has promoted and obtained certification to the ISO 14001 Environmental Management System and ISO 50001 Energy Management System, to implement the aforementioned environmental and energy policies.
The various fuel conservation measures at EVA Air are planned and executed by the Fuel Conservation Group. The measures include fuel efficiency analysis of various aircraft models and selecting the most suitable aircraft models based on long-, mid-, short-range flight routes and the number of passengers. Furthermore, the fuel conservation plans involve topics such as the modernization of fleets, weight reduction of aircraft, flight operations and aircraft maintenance.

Cost of management in 2022:
(1). Total 20 personnel are responsible for planning and analyzing fuel conservation measures, and managing EU ETS and CORSIA, and fuel procurement =TWD 28.5 million
(2). Environmental operating expenditures include waste removal and treatment fees, aircraft noise control fees, CORSIA, EU ETS and UK ETS fees, ISO environmental and energy management systems setup fees, and other project development fees = TWD 105.1 million

The total cost is (1)+(2)) = TWD 133.6 million

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Cyclone, hurricane, typhoon

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Situation:
Taiwan is an island country in the Pacific that suffers from 3-5 typhoons every year. Over the past 37 years, typhoons that strike East and Southeast Asia have intensified by 12–15%, with the proportion of storms of categories 4 and 5 having doubled or even tripled.

Potential risk:
According to the results of the current GCM model simulation, the annual incidence of continuous 24-hour rainfall over 200mm in Taoyuan is 50%, and the return period is 2 years. But by 2030 and 2100, the maximum incidence will increase to 82% and 89% respectively. If the incidence of rain exceeds 350mm for 24 consecutive hours, the annual incidence will increase from the current 0.024% to 3.5% in 2030 and 37% in 2050.

Company specific task:
EVA Air's headquarters and the main airport for aircraft transportation is located in Taoyuan, a rain-intensive county.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
20400000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Weather factors such as heavy snow, typhoon, heavy fog, thunderstorms, poor visibility and other weather factors caused flight cancellations or delays, resulting in incurring related costs. In 2022, no flight was cancelled due to weather impact, and these total expenses were TWD 20.4 million, including passenger accommodation, passenger transportation, labor costs for flight crew, additional fuel costs, aerodrome service fee, aircraft deicing fees, and passenger endorsements fee to other airlines, etc.

In 2022, EVA Air's revenue from long-haul passenger flight is approximately TWD 13.3 million per flight, and from short-haul is approximately TWD 2.5 million per flight.

Total financial impact on reduced revenue and increased cost = TWD 20.4 million

Cost of response to risk
71320000

Description of response and explanation of cost calculation
Primary action:
Transfer of aircraft to enhance efficiency.

EVA Air's company case:
The dispatching unit will correctly grasp and accurately analyse the global meteorological information at any time, and convene relevant units to hold a contingency meeting before the natural disaster occurs, and make the most accurate decision for cancellation or delay to reduce the loss caused by flight schedule changes.

Cost of management:
The manpower cost of flight unit (roughly 50 employees) per year = TWD 71.32 million

The total cost = TWD 71.32 million

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Market	Increased cost of raw materials

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Situation:
Aviation fuel price fluctuations, rising costs associated with airports and other abnormal weather affect the normal operation of flights, etc., increasing the operating costs of the aviation industry. Aviation fuel accounts for a considerable proportion of airline operating costs, and international oil prices are vulnerable to climate change, international situation, oil-producing country policies and exchange rate fluctuations, and the control of fuel costs is more difficult.

Potential risk:
According to IATA’s analysis released on December 6, 2022, IATA forecasted the total fuel spend for 2023 is expected to be $229 billion—consistent at 30% of expenses. IATA’s forecast is based on Brent crude at $92.3/barrel (down from an average of $103.2/barrel in 2022). Jet kerosene is expected to average $111.9/barrel, while jet kerosene prices are expected to average $138.8/barrel for 2022.

Company specific task:
The uncertainty of fuel price fluctuations and the rising of airport-related expenses increase the operating costs of the airline industry. In order to stabilize fuel costs, in addition to signing long-term contracts with major fuel suppliers in the world to obtain greater discounts, EVA Air also uses derivative products to achieve hedging purposes, and will observe the trend of oil prices at any time and take appropriate hedging operations to stabilize costs for fuel procurement.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
10000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
EVA Air consumes about 11,150,000 barrels of fuel in 2022. If the price of fuel per barrel rises by USD 30, the annual increase of operating cost will be as high as TWD 10 billion.

The financial impact on increased cost = per barrel rises by USD 30 *total fuel consumption * exchange rate = TWD 10 billion

Cost of response to risk
207800000

Description of response and explanation of cost calculation
Primary action:
The expansion of flight routes and increasing operation scale have gradually increased fuel consumption. In response to the ever-increasing scale of the fleets, EVA Air has actively established various fuel conservation plans, and purchased the latest energy-saving aircraft.

EVA Air's company case:
In 2015, the Company formed the “Environment Committee”, which is EVA Air’s highest decision-making supervisory unit for environment management policy. The Committee is responsible for planning and ensuring the effectiveness of the Company’s environment and energy management guidelines and policies. The Committee is divided into 3 task groups: sustainable aviation fuel, environment and energy, and carbon rights; based on these three aspects, the Committee promotes action plans to reduce the impact brought by our business operation, including Greenhouse Gas (GHG) emissions, etc.

The various fuel conservation measures at EVA Air are planned and executed by the Fuel Conservation Committee, which is formed since 2006. The measures include fuel efficiency analysis of various aircraft models and selecting the most suitable aircraft models based on long-, mid-, short-range flight routes and the number of passengers. Furthermore, the fuel conservation plans involve topics such as the modernization of fleets, weight reduction of aircraft, flight operations and aircraft maintenance. In 2021, EVA Air saved a total of 28,160 tons of fuel, or an equivalent of emissions reduction of 88,705 tons of CO2e. EVA Air will continue to review current operations and find opportunities to reduce fuel consumption and emissions.

Cost of management in 2022:
(1). Total 20 personnel are responsible for planning and analysing fuel conservation measures, and managing EU ETS and CORSIA, and fuel procurement =TWD 28.5 million
(2). Environmental operating expenditures include waste removal and treatment fees, aircraft noise control fees, CORSIA, EU ETS and UK ETS fees, ISO environmental and energy management systems setup fees, and other project development fees.= TWD 105.1 million
(3). Environmental equipment expenditures include the cost of establishing a carbon offset program, expenses for upgrading to energy-saving elevators, and costs related to outdoor air quality monitoring equipment and smart energy management systems.= TWD 74.2 million

The total cost is (1)+(2)+(3) = TWD 207.8 million

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Participation in carbon market

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Situation:
Based on the statistics by International Air Transport Association (IATA), the annual carbon dioxide emissions by the aviation industry accounts for 2% of the global emissions, but in terms of the global economy contribution value, the aviation industry contributes 8% of the global gross domestic product (GDP). Nearly 3.5 billion people conduct various air activities each year. In order to reduce the global carbon dioxide emissions and mitigate global warming, at the 77th IATA Annual General Meeting in Boston, USA, on October 4th 2021, a resolution was passed by IATA member airlines committing them to achieving netzero carbon emissions from their operations by 2050. This pledge brings air transport into line with the objectives of the Paris agreement to limit global warming to 1.5°C.

Potential opportunity:
Since 2012, the aviation industry has participated in the EU Emissions Trading Scheme (ETS). If an airline company operates in Europe as its destination and departure point, or operates in Europe, it is important to comply with the legislative requirements of the designated EU member. Under the regulation of the EU ETS, airlines must submit baseline data and will be allocated a certain amount of emissions allowance. A company that is not compliant will pay a high expense because it will purchase a carbon credit that exceeds the amount of emissions every year.

Company specific case:
EVA Air originally planned to operate 28 passenger scheduled flights to Europe per week, including 3 flights to Amsterdam weekly, 7 flights to Vienna weekly, 7 flights to Paris weekly, and 7 flights to London weekly, and 4 flights to Milan flights weekly in 2022; Only intra-EURO flights are subject to EU ETS regulations. Although the aforementioned scheduled flights travel between Asia and the European Union, they are not operated between countries in the EU region. Currently, only a small number of non-scheduled business jets operated intra-euro flights.
In 2022, there are 122 tons of carbon emissions are required to be surrendered.

After surrendered European Aviation Allowance (EUAA) for year 2022, and receive free allocation for year 2023, the remaining European Aviation Allowance (EUAA) in EVA Air's account are 24,734 metric tonnes. EUAA price is expected to be around €80 per EUAA, if EVA Air sell all of our EUAA in carbon market, it will bring additional €1,975,720 in revenue.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
67200000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
After surrendered European Aviation Allowance (EUAA) for year 2022, and receive free allocation for year 2023, the remaining European Aviation Allowance (EUAA) in EVA Air's account are 24,734 metric tonnes. EUAA price is expected to be around 80 € per EUAA, if EVA Air sell all of our EUAA in carbon market, it will bring additional euro 1,975,720 in revenue. (1 TWD=34 TWD)

The potential financial impact on increased revenue = TWD 67.2 million

Cost to realize opportunity
12507

Strategy to realize opportunity and explanation of cost calculation
Primary action:
The expansion of flight routes and increasing operation scale have gradually increased fuel consumption. In response to the ever-increasing scale of the fleets, EVA Air has actively established various fuel conservation plans, and purchased the latest energy-saving aircraft. The various fuel conservation measures at EVA Air are planned and executed by the Fuel Conservation Group. The measures include fuel efficiency analysis of various aircraft models and selecting the most suitable aircraft models based on long-, mid-, short-range flight routes and the number of passengers.

"Environment Committee" is divided into 3 task groups: sustainable aviation fuel, environment and energy, and carbon rights; based on these three aspects, the Committee promotes action plans to reduce the impact brought by our business operation, including Greenhouse Gas (GHG) emissions, noise pollution, etc.. The carbon rights group is responsible for managing the carbon rights in each regulation system, such as CORSIA, EU ETS and UK ETS, and regularly evaluates the sale of carbon rights.

EVA Air's company case:
Counting the number of "Intra-euro" flights every year, as of the end of 2018, EVA Air's actual emissions in the EU are less than the allocated amount, and the additional amount can be sold in the carbon market. So we have registered in the EU ETS account for annual carbon emissions upload and credit auction. After the implementation of the EU ETS, the carbon credits accumulated in 2012-2018 by EVA Air were auctioned in 2019, and a total of approximately TWD 26.64 million were obtained. EVA Air continue to receive annual EUAA allocation from 2019 to 2023.

In 2022, there are 122 tons of carbon emissions are required to be surrendered. After surrendered European Aviation Allowance (EUAA) for year 2022, and receive free allocation for year 2023, the remaining European Aviation Allowance (EUAA) in EVA Air's account are 24,734 metric tonnes. EUAA price is expected to be around 80 € per EUAA, if EVA Air sell all of our EUAA in carbon market, it will bring additional TWD 67.2 million in revenue. (if 1 EUR=34 TWD)

Cost to realize opportunity:
The total cost = EU ETS Annual fee = TWD 12,507

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Situation:
EVA Airways operated 86 aircraft by the end of 2022, including 78 passenger aircraft and 8 freighters. There's no new aircraft delivered throughout 2022. The average age of passenger aircraft and freighters is 8.48 and 3.14 years, respectively. The average age of EVA Air's fleet is 8.06 years.

Potential opportunity:
EVA Air has served destinations more than 60 cities over four continents (Europe, America, Asia and Australia), to form a complete global passenger and cargo transport network. We provide perfect services to meet consumer demands with intensive schedule by new fleet. It also creates more business opportunities for the low carbon market.

Company specific case:
Through strategic alliances with the world's leading airlines, EVA Air has created a globally network. In addition to our well-established presence in the Americas with 8 destinations such as Los Angeles, San Francisco, and New York, weekly operating 65~84 flights, we have also been actively expanding our European network. In the fourth quarter of 2022, we launched flights to Milan and Munich, offering service to 6 European destinations with 30 flights weekly. As the airline with the most extensive coverage and highest frequency of flights to both the Americas and Europe, we are strengthening Taiwan's position as a global transit hub. This enhances EVA Air's overall Asia-Europe and Asia-America network, providing seamless connections for passengers worldwide.

In 2022, we pragmatically faced the impacts of the COVID-19 pandemic, the Ukraine-Russia war, inflationary pressures, and labor shortages. We capitalized on the gradual reopening of borders and the recovery of the passenger market by steadily increasing passenger flights. Meanwhile, we flexibly utilized the belly capacity of passenger aircrafts and provided customized cargo services, resulting in record-high cargo revenue for the year. The profitability for the year also surpassed that of 2021. After three years of pandemic challenges, EVA Air has demonstrated operational resilience and forged a more robust business structure. Moving forward, EVA Air will continue to maintain a balanced operation strategy between passenger and cargo development. Moreover, we will optimize our fleet and network planning to achieve the highest efficiency and effectively respond to market changes and challenges.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
33686000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
(1). Based on 2019 passenger and cargo revenue to calculate the average revenue per aircraft. If the twenty-one 787 perform for 18 years, the revenue will be: 126,720,587,436/79 X 21 =33,685,219,445

(2). Assume that compared with the 777-300ER, the 787 can save 2 tons of fuel for 1 hour under the same operation conditions, 12 hours a day, and 18 years for each aircraft. The estimated fuel savings are: 21 X 2 tons of fuel X 12 hours X 365 days = 183,960 tons of fuel. Calculated at USD 0.6 per litre of fuel, it can save costs about TWD 3,311,280.

The total financial impact on increased revenue = (1)+(2) = TWD 33.686 billion

Cost to realize opportunity
115430000000

Strategy to realize opportunity and explanation of cost calculation
Primary action:
EVA Airways operated 86 aircraft by the end of 2022, including 78 passenger aircraft and 8 freighters. There's no new aircraft delivered throughout 2022.

EVA Air's company case:
With the participation of the 787 passenger aircraft, the sales of passenger aircraft cabins will be strengthened to optimize the operational efficiency of the fleet. The 787 new generation aircraft plans for medium and long-haul routes with more capacity to increase market competitiveness.

10 Boeing 787 has been gradually delivered since 2018, there are also 11 Boeing 787 passenger aircraft on order, which are planned to be delivered gradually starting from 2023. These new aircraft deliveries will help us meet the demand of the recovering passenger transport market, strengthen our overall operational network, and open up new routes. EVA Air will continuously optimize its fleet composition to timely enhance its competitiveness in the fierce competition market without affecting its long-term growth plan.

Both the passenger and cargo demand for the European routes are equally important. The 777 or 787 aircraft with better benefits will be dispatched flexibly to enhance the efficiency of the flight routes.

Cost to realize opportunity:
The cost indicates the expenditures for introduction of new fleet with twenty-one 787 = USD 207.776 billion, equals to TWD 115,43 billion per year.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Other, please specify (Smart energy management system)

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Situation:
As global warming intensifies, energy issues continue to receive attention. Energy saving and carbon reduction have become a global trend. In recent years, in addition to the requirement of energy saving of at least 1% per year for domestic enterprises in accordance with the Energy Law, the government has also continued to promote energy saving and implement incentive measures.

Potential opportunity:
EVA Air monitors power consumption at its operating locations in Taiwan (Nankan Park, Taipei Building, Old Bonded Warehouse Building and Bonded Warehouse Building) to implement energy-saving and carbon reduction measures more effectively, and to confirm the results of various energy conservation projects.

Company specific case:
Air conditioning system is one of the most important electrical equipment in office buildings. In 2019, EVA Air introduced a smart energy management system in Nankan Park, acting as the Company's main energy-saving measure. Through smart control, the most energy-consuming air-conditioning ice water and cooling water systems are optimized to reduce energy costs.
Through the analysis of Nankan Park's electricity consumption and external monthly average temperature, monthly relative temperature and monthly total labor hours in 2018, the regression equation for the power consumption baseline was established. Under this condition, the change of the regression electricity consumption before and after the improvement was used as the basis for calculating the energy saving rate.
The system was operated in October 2019, and a total of 2,930,602 kWh of electricity were saved by the end of 2022.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
28749147

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
If system operate for 10 years from 2020 to 2030

(1). The system went alive in November 2019, and a total of 2,930,602 kWh of electricity were saved by the end of 2022, an equivalent of total of TWD 6,795,253 are saved.
(2). From 2023 to the end of 2029, TWD 21,953,894 are expected to be saved, according to average monthly power saving from November, 2020 to the end of 2022.

The potential financial impact on decreased indirect cost = (1)+(2) = TWD 28,749,147

Cost to realize opportunity
8724990

Strategy to realize opportunity and explanation of cost calculation
Primary action:
Continue to monitor power use.

EVA Air's company case:

Cost to realize opportunity:
If system operate for 10 years from 2020 to the end of 2029
(1). Total contract cost: TWD 8,324,990
(2). In the next 3 to 10 years, assume TWD 400,000 will be paid as the maintenance fee every year, the 7-year maintenance fee is : TWD 2,800,000

The total cost is = (1)+(2) = TWD 8,724,990

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan
Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan
Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
EVA Air officially announced its determination to achieve "Net-Zero Carbon Emissions by 2050" in November 2021, looking forward to becoming a leader in environmental sustainability and working together with partners from all walks of life to make a contribution to the mitigation of global warming. The use of SAF will be the most critical measure to achieve Net-Zero emissions. The current strategy is to work with the government, aviation associations, aviation industry, and oil merchants to establish my country's sustainable aviation fuel production energy and achieve the possibility of the aviation industry achieving net zero carbon emissions; It also helps downstream customers reduce Scope 3 indirect greenhouse gas emissions.

The mechanism for our shareholders to provide feedback can be through official web site.

Frequency of feedback collection
More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: IEA NZE 2050	Company-wide	<Not Applicable>	(1). Descriptions of scenarios and their impact On the issue of climate change, the world has gradually reached a consensus on controlling the temperature rise at 1.5 degrees Celsius by the end of the century. To move towards this goal, the International Air Transport Association (IATA) has proposed that the global aviation industry should achieve net zero carbon emissions by 2050 and to invest in carbon reduction with the four major strategies of upgrading technology, improving infrastructure and operation efficiency, using sustainable aviation fuel, and adopting economic measures. The European Union has also issued the Green Deal policy and the "European Climate Law" with the goal of net zero carbon emissions by 2050 and 55% carbon reduction by 2030, and further promoted the use of sustainable alternative fuels in air transport. Additionally, the International Civil Aviation Organization (ICAO) has continuously promoted the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) so as to implement the growth goal of zero carbon starting from 2020. In order to align with the aforementioned external norms, EVA Air must use sustainable aviation fuel in future flight operations and gradually increase the usage ratio. The relevant carbon tax derived from traditional aviation fuel, or the carbon offset based on international flights, will become a large financial expenditure, and thus annual operating costs may increase. (2). The scope of assessment is the main operating bases in Taiwan and air transport service with the time boundary in 2050 (3). EVA Air establishes a science-based target (SBT) and invest in the use of sustainable aviation fuel and renewable energy respectively in the two areas of "aircraft operations" and "ground operations" as the main axis of carbon reduction so as to gradually achieve the goal of net zero carbon emissions.
Transition scenarios: IEA APS	Company-wide	<Not Applicable>	(1). Descriptions of scenarios and their impact In March 2022, the National Development Council released the statement on Taiwan's 2050 net-zero carbon emission pathway and strategies, as well as the various transition measures planned to be achieved in the business sector by 2050 pursuant to the industrial transformation strategy. In 2023, the Legislative Yuan passed the third reading of the amendments to the "Climate Change Response Act" to formally enact the goal of net-zero emissions by 2050 in national climate governance. In the future, carbon fees will be levied and a domestic carbon market trading mechanism will be launched. Although the aviation industry is not currently regulated by Climate Change Response Act, in order to align with the overall national goals, EVA Air's office operations in Taiwan will cooperate in Taiwan's net-zero carbon emission pathway measures for the business sector so as to achieve the national goal of net-zero carbon emissions. Relevant measures will be successively implemented starting from 2030, including the complete adoption of Grade 1 energy efficient products for air-conditioning and refrigeration equipment, the complete adoption of high efficiency lamps and optimized air-conditioning operations, using 30% green electricity, intelligent operations and management, and ensuring that 60% of existing buildings meet the exterior thermal insulation for requirements for green buildings. These measures will cause a substantial increase in operating costs in the short term. (2). The scope of assessment is the main operating bases in Taiwan with the time boundary in 2050 (3). EVA Air evaluates the introduction of green building certification for self-owned buildings, the introduction of smart energy management systems, the enhanced replacement of old energy consuming equipment, and use renewable energy every year.
Physical climate scenarios: RCP 2.6	Company-wide	<Not Applicable>	(1). Descriptions of scenarios and their impact An analysis of Taiwan's annual average rainfall from 2041 to 2060 was conducted using the "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform Project" through the Sixth Assessment Report on Climate Change (IPCC AR6) under the SSP1-2.6 low greenhouse gas (GHG) emissions scenario. EVA Air's main operating airport in Taiwan is Taoyuan International Airport. Under the SSP1-2.6 low GHG emissions scenario, the average annual rainfall in Taoyuan County from 2041 to 2060 will increase by 30% compared with that in the base period. Since changes in rainfall will not cause immediate and serious effects for EVA Air, it is assessed that under this scenario there will be no significant physical risk of impact on ground operations or aircraft operations. (2). The scope of assessment is the air transport service with the time boundary from 2041 to 2060 (3). EVA Air correctly obtains global climate information and accurately analyze various risk values, and plan corresponding measures for various types of natural disaster risks.
Physical climate scenarios: RCP 8.5	Company-wide	<Not Applicable>	(1). Descriptions of scenarios and their impact According to the analysis of IPCC AR6, under the SSP5-8.5 very high GHG emissions scenario, atmospheric carbon emissions will reach double the current level in the middle of the century (2050), the average temperature at the end of the century will increase by 4 degrees compared with that of the base period, and the average sea level will probably rise by 0.988 to 1.88 meters by the end of the century compared with that during the period from 1995 to 2014. EVA Air's coastal airports in Taiwan, San Francisco, New York, Vancouver, Okinawa, Hong Kong, etc. might be submerged in sea water, which will directly affect flight operations and might also cause capital property losses or aviation safety incidents, among other effects. (2). The scope of assessment is the air transport service with the time boundary in 2050 (3). EVA Air expects to introduce a Business Continuity Plan (BCP) and strengthen infrastructure and equipment to cope with the operational impact caused by high-frequency rainfall and extreme weather patterns under the high-emission scenario at the end of the century.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

At the 77th IATA Annual General Meeting in Boston, USA, on 4 October 2021, a resolution was passed by IATA member airlines committing them to achieving net-zero carbon emissions from their operations by 2050. This pledge brings air transport in line with the objectives of the Paris agreement to limit global warming to 1.5°C.

The Taiwan Environmental Protection Administration announced that the “Greenhouse Gas Reduction and Management Act” would be amended to the “Climate Change Response Act” and enacted the goal of net zero emissions by 2050.

Hence, We would like to analyze the potential financial impact of the above requirements and formulate responses as below.

Results of the climate-related scenario analysis with respect to the focal questions

In the face of climate change, as a member of the global community, EVA Air officially declared in November 2021 our commitment to achieve Net-Zero Carbon Emissions by 2050. We aim to be a leader in environmental sustainability and actively collaborates with partners from different sectors to respond to the challenges and contribute to mitigating global warming. On the path to achieving net-zero carbon emissions, EVA Air focuses on two main areas: Aircraft Operations and Ground Operations. Preliminary plans have been made to set short-, medium-, and long-term goals for sustainable aviation fuel and renewable energy (green electricity) usage. In June 2022, EVA Air signed up for the Science Based Targets initiative (SBTi), committing to setting carbon reduction targets and taking actions in line with SBTi guidelines within two years.

In February 2023, the Taiwan Environmental Protection Administration announced that the “Greenhouse Gas Reduction and Management Act” would be amended to the “Climate Change Response Act” and enacted the goal of net zero emissions by 2050. EVA Air pays constant attention to the formulation of relevant laws and regulations at home and abroad so as to adjust the long-term effects on the overall aviation supply chain. We expect to establish an internal carbon pricing system through external carbon trading regulations to dynamically adjust our climate change response strategies, reduce greenhouse gas emissions, optimize fuel efficiency, develop low-carbon investments, grasp low-carbon opportunities, and promote supply chain carbon reduction so as to fulfill our responsibility to protect the Earth’s environment.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	(1). The impact is high on EVA Air and the time horizon is medium-term (3-5 years). (2). Strategy is influenced: The Environmental Committee is in responsible for practical operations for the EVA Air Corporate Sustainability Committee’s Environmental Action Team. The Committee is the unit that implements the Company's environmental and energy decision-making and management. They supervise setting of environmental protection and energy management goals and targets; promote management plans and performance management; and regularly report to the Board of Directors. They help internalize concepts of environmental sustainability into every phase of our operations. The committee is divided into three task forces: SAF, Environment and Energy, and Carbon Credit. The aim is to effectively mitigate the negative impacts of greenhouse gas emissions on the global environment and establish a positive international image for EVA Air as a sustainable and green enterprise. (3). Company specific case of the most substantial strategic decision: Our primary carbon reduction strategy focuses on reducing carbon from aircraft operations. EVA Air actively participates in international greenhouse gas emission control initiatives, such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the European Union Emissions Trading System (EU ETS), and the United Kingdom Emissions Trading System (UK ETS). We fully support the aviation industry's collective decarbonization goals and undertake planning and actions based on the four pillars of decarbonization set by the International Air Transport Association (IATA). Our aim is to provide superior fuel efficiency and low-carbon emission aviation transportation services. In response to the continuous growth of our fleet, we have created a big data database; set up analysis dashboards; trained data analysts to grasp opportunities for fuel conservation and carbon reduction through data; actively formulated and promoted a variety of fuel conservation programs; implemented feasible fuel conservation and carbon-reduction strategies.
Supply chain and/or value chain	Yes	(1). The impact is medium on EVA Air and the time horizon medium-term (3-5 years). (2). Strategy is influenced: As a global corporate citizen, EVA Air has realized that the issue of sustainability is not restricted to corporate operations. An overall drive must be launched to help implement the concept of sustainable development. Therefore, EVA Air revised the internal procurement procedures with “Supplier Partnership Social Responsibility Policy for Sustainable Development ” by the President in 2015. (3). Company specific case of the most substantial strategic decision: EVA Air, in collaboration with its suppliers, is committed to sustainability. In addition to demanding good quality and adherence to delivery schedules from suppliers, we also strive to fulfill our shared responsibility of protecting the environment and providing a favorable working environment to enhance the competitiveness of the supply chain. In order to understand and assess the overall sustainability of the supply chain, we have developed a "Sustainability Risk Assessment Survey (SAQ)" in our procurement operations based on the United Nations Global Compact, the UN Framework and Guiding Principles on Business and Human Rights, and the Responsible Business Alliance (RBA). Through the distribution of questionnaires, we evaluate the sustainability risks of our suppliers. In 2022, questionnaires were sent to both Tier 1 suppliers and key suppliers (both Tier 1 and non-Tier 1), and we achieved a 100% response rate. Through in-depth analysis of the questionnaires, we identified potential risks in the economic, environmental, and social aspects of the supply chain. The results of the sustainability risk assessment in EVA Air's overall supply chain in 2022 did not identify any suppliers with scores below 70, indicating high risk. Therefore, we further analyzed the sustainability risk assessment results and selected the lowest 1% of suppliers with potentially higher risks among Tier 1 suppliers. These suppliers are core, irreplaceable, have significant annual transaction amounts, and hold critical positions in the company's stable operations. Audits and guidance were conducted both online and on-site, and a total of 12 suppliers of concern among Tier 1 suppliers were audited. After active communication and guidance with the suppliers, improvements have been made.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Investment in R&D	Yes	(1). The impact is high on EVA Air and the time horizon is short-term (1-3 years). (2). Strategy is influenced: EVA Air uses the Flight Operations Risk Assessment System (FORAS) as a decision support tool, compiling relevant information, such as real-time weather information, crew information, airport facilities, aircraft system information, etc. Risk analysis is carried out on every flight so as to effectively grasp the risk factors that may affect the flight safety of each flight. The risk factors are used as the basis for pre-flight risk assessment; thereby, appropriate preventive measures can be adopted. In order to lower the flight operation risk, the FORAS system provides departure and landing risk information and appropriate recommendations, such as crew operation, aircraft condition and external operating environment, to the flight crews through iPad, 2.5 hours before take-off; 45 minutes before landing, FORAS analyzes the landing station's latest weather report, and reassesses the approach and landing risk. (3). Company specific case of the most substantial strategic decision: To integrate the various data sources for carrying out event analysis, action tracking and monitoring current operating status to reduce risk factors and enhance risk control, EVA Air had developed the Safety Management Information System (SMIS) in 2010. The SMIS is a management system including flight safety, ground safety, cabin safety, aviation security and dangerous goods events. The system integrates the five major categories of flight safety events into a single platform; it summarizes the cause, tracking and operating improvements of the incidents and proposes necessary risk mitigation plan.
Operations	Yes	(1). The impact is high on EVA Air and the time horizon is medium-term (3-5 years). (2). Strategy is influenced: The EVA Air Safety Promotion Committee (SPC) is the Company's highest decision-making and supervision unit for flight safety, with the highest power and authority to ensure overall operation safety and promote the Safety Management System (SMS). Its responsibilities include regularly examining the SMS for its continuous improvement and enhancement, and reviewing and evaluating the results of safety-related operations and the SMS. (3). Company specific case of the most substantial strategic decision: The Committee integrates the Safety Management System (SMS) teams and Safety Coordination Meeting (SCM), and its main mission includes: collecting safety information, grasping operational risks, formulating improvement measures, implementing improvement plans, etc. Related improvement plans and goals are provided for issues monitored specifically by the respective teams, and the reports are regularly submitted to the SPC for approval. Through such mechanism, we aim to reduce the risk of human and organizational errors. In 2022, the "SMS Action Team" identified five categories of risk control tracking items. Among them, the risk control item of "encountering unexpected turbulence" required the Cabin Crew Department to produce a video on "Turbulence Response Principles." Additionally, the department requested that the captain remind the crew of turbulence forecasts and the appropriate actions to be taken in the pre-shift briefings every day to reduce the risk of injuries to crew members. Furthermore, through FORAS-ERM, aircraft encountering turbulence were immediately reported, and the Dispatch Center notified the company and nearby aircraft in the airspace as a risk alert, taking necessary measures. Regarding the five categories of risk control items, the "SMS Action Team" developed a total of 26 improvement measures, including procedure revisions, enhanced personnel training, shortened parts replacement schedules, and case studies, all of which have been implemented. The achievement rate of the improvement measures reached 100%.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs	(1). Capital expenditures and company case: The time horizon covered by the financial planning of capital expenditures is medium-term (3-5 years). Under the theme of climate change, in pursuit of better energy efficiency, the purchase of aircraft is our largest capital expenditure. EVA Air has started to introduce the 787 from 2018. We expected to introduce twenty-four 787 aircraft by 2022. However, In response to COVID-19 impact and market changes, we continued to optimize fleet and flight network, EVA Airways has reached agreement with Boeing to reshuffle seven of the 787-10 yet to be delivered to four 787-9 and three 777 freighters. Therefore, the original introduction plan of twenty-four 787 is changed to thirteen 787-10, eight 787-9 and three 777F The total cost is approximately USD 7.80 billion, according to the aircraft price announced by Boeing. The Boeing 787 Dreamliners are made with a large quantity of composite materials, including lightweight carbon fiber, which are applied in the fuselage, wings, engine blades, etc. The percentage of such materials accounts for more than 50% of the total weight, drastically reducing the weight of the fuselage. Also, the new materials are less readily subject to fatigue and corrosion compared with the traditional aluminium alloy; this helps to reduce maintenance costs. In addition, LED lighting is used to replace fluorescent lamps, reducing about half of the electricity consumption. With the latest model of GEnx engine manufactured by General Electric, the adoption of new aircraft reduces fuel consumption and greenhouse gas emissions by 20%. Their high fuel efficiency and flight endurance will help enhance EVA Air's operating performance. (2). Direct costs : The time horizon covered by the financial planning of capital expenditures is medium-term (3-5 years). In the face of climate disasters, as a member of the global community, EVA Air officially declared in November 2021 our commitment to achieve Net-Zero Carbon Emissions by 2050. We aim to be a leader in environmental sustainability and actively collaborates with partners from different sectors to respond to the challenges and contribute to mitigating global warming. On the path to achieving net-zero carbon emissions, EVA Air focuses on two main areas: Aircraft Operations and Ground Operations. Preliminary plans have been made to set short-, medium-, and long-term goals for sustainable aviation fuel and renewable energy (green electricity) usage. By 2025, we plan to use 2% of sustainable aviation fuels and 10% of renewable energy (green electricity). The current price of SAF is 3 to 5 times higher that aviation fuel, while green electricity is roughly 2 times higher than electricity price. Based on the analysis of aircraft fuel consumption and electricity consumption in 2019, if above targets are reached by 2025, additional operating costs may be increased to 2 billion to 3 billion. (3). Revenues and company case: The time horizon covered by the financial planning of revenues is medium-term (3-5 years). Taiwan is an island country in the Pacific that suffers from 3-5 typhoons every year. Over the past 37 years, typhoons that strike East and Southeast Asia have intensified by 12–15%, with the proportion of storms of categories 4 and 5 having doubled or even tripled. In addition to the typhoon, EVA Air's headquarters and the main airport for aircraft transportation are located in Taoyuan, a rain-intensive county. According to the results of the current GCM model simulation, the annual incidence of continuous 24-hour rainfall over 200mm in Taoyuan is 50%, and the return period is 2 years. But by 2030 and 2100, the maximum incidence will increase to 82% and 89% respectively. If the incidence of rain exceeds 350mm for 24 consecutive hours, the annual incidence will increase from the current 0.024% to 3.5% in 2030 and 37% in 2010. In 2021, EVA Air's revenue from long-haul passenger flight is approximately TWD 4.4 million per flight, and from short-haul is approximately TWD 1.8 million per flight. Total 24 short-haul flights were cancelled due to typhoon, resulting in a revenue loss of approximately TWD 69 million and indirect cost of TWD 43.2 million. In 2022, EVA Air's revenue from long-haul passenger flight is approximately TWD 13.3 million per flight, and from short-haul is approximately TWD 2.5 million per flight. No flight was cancelled due to typhoon. According to the current research report, when sea temperature rises at 1, 2, 3 and 4 degrees Celsius, sea level will rise by 2.1, 4.7, 6.4 and 8.9 meters around Taiwan. Based on the statistics data released by the Taiwan government, the occurrence frequency of the rainy season in Taiwan has increased from 19 years in 1950 to 7 years in 2010, and the annual rainfall has increased from 3,200 mm to 3,600 mm, resulting in a significant increase in the probability of flooding. Based on EVA Air's total revenue of TWD 95.3 billion in the reporting year (2021), if the operation is interrupted due to the above-mentioned natural disasters, the average daily loss will be about TWD 261.1 million, and this figure does not include the loss of capital and assets caused by natural disasters. Based on EVA Air's total revenue of TWD 127.1 billion in the reporting year (2022), if the operation is interrupted due to the above-mentioned natural disasters, the average daily loss will be about TWD 0.348 billion, and this figure does not include the loss of capital and assets caused by natural disasters.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
No, but we anticipate setting one in the next two years

Target ambition
<Not Applicable>

Year target was set
2022

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
6116402

Base year Scope 2 emissions covered by target (metric tons CO2e)
13540

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
6129942

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2035

Targeted reduction from base year (%)
8.09

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
4489866

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
12329

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
4502195

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
The target covers 100% of our global operation with no exclusion.

Plan for achieving target, and progress made to the end of the reporting year
In 2022, we continually carry out fuel saving measures:
With the expansion of routes network and scaling up our business, fuel consumption in total will gradually increase. In response to the continuous growth of our fleet, we have created a big data database; set up analysis dashboards; trained data analysts to grasp opportunities for fuel conservation and carbon reduction through data; actively formulated and promoted a variety of fuel conservation programs; implemented feasible fuel conservation and carbon-reduction strategies; and fully complied with the government's goals of energy-saving, carbon-reduction, and reduction of greenhouse gas emissions.

Calculation for achievement rate:
The target is 8.09163% reduction in 2035 with the base year 2019.
Therefore, the targeted emission is 5,639,547 metric tonnes in 2035.
Our emissions are 6,129,942 and 4,502,195 metric tonnes in the base year and the reporting year, respectively.
The complete percentage of time and emission are:
(2021-2019)*100/(2035-2019) = 12.5%
(6,129,942-5,639,547)*100/(6,129,942-4,502,195) =332%

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1

Target year for achieving net zero
2050

Is this a science-based target?
No, and we do not anticipate setting one in the next two years

Please explain target coverage and identify any exclusions
The data cover 100% operation of air transportation. According to the results of the Company's GHG (greenhouse gas) emissions inventory in 2019, the GHG emissions from aircraft accounted for 99.76% of the total emissions, and among the GHG emissions from ground operations, purchased electricity accounted for 94.2%. Therefore, on the path towards net-zero carbon emissions, the focus will be on the two aspects of "aircraft operations" and "ground operations".

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
In terms of aircraft operations, referring to the resolution to achieve net-zero carbon emissions by 2050 proposed by the International Air Transport Association (IATA) in October 2021, the use of sustainable aviation fuel (SAF) will be one of the most critical carbon reduction practices for the airline industry based on the analysis.
As for ground operations, referring to the national carbon reduction policy of reducing carbon by 30% in 2030, coordinated and promoted by the Environment Committee, the short-, medium- and long-term goals for the use of sustainable aviation fuel and renewable energy (green electricity) were formulated to achieve the gradual reduction of carbon emissions. The progress of achieving the goals is reviewed annually and adjustment is made on a rolling basis.

The financial analysis method is calculated by dividing the cost of annual SAF consumption and the cost of green power by the annual revenue.

The annual revenue, fuel consumption, and power consumption are calculated based on the operation level in 2019, when operations were not affected by the COVID19 epidemic. Assume revenue in 2025 and 2030 are as same as revenue in 2019.

Estimated targets of SAF and renewable energy (green power) are:
2% use of SAF and 10% use of renewable energy by 2025 (we estimate 1.6 % decrease in Scope1 emission compared to 2019)
5% use of SAF and 30% use of renewable energy by 2030 (we estimate 4 % decrease in Scope1 emission compared to 2019)

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	11	89205
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
89205

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
10000000000

Investment required (unit currency – as specified in C0.4)
28500000

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Even though EVA Air is not listed by the Environmental Protection Administration as a registered source of emissions (required to conduct inventory), the company began to conduct voluntary inventories of GHG emissions in 2011, and completed the third party verification process for the 2016 ISO 14064-1 GHG emission data. In accordance with the emission data provided by the government's related projects, the quantified data mainly includes aviation fuel, automobile gasoline and diesel fuels, and each office's total power consumption, to further understand and respond early to the greenhouse gas emission status and trend.
Employee engagement	The Company conducts environmental education on climate change and major environmental issues, and promotes it through EVA Air's internal website, allowing every employee can get the latest information on environmental and energy management at any time.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
No

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
5917024

Comment
Scope 1 occupies over 99% of the overall emission.

Scope 2 (location-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
12144

Comment

Scope 2 (market-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
12144

Comment
EVA Air did not purchase any renewable energy in the base year. The market-based emission is therefore the same with location-based.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1761694

Comment

Scope 3 category 2: Capital goods

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
193605

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
4485

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
247

Comment

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
70

Comment

Scope 3 category 6: Business travel

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
59

Comment

Scope 3 category 7: Employee commuting

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
623

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
17

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3 category 15: Investments

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
28365

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
4489866

Start date
January 1 2022

End date
December 31 2022

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
4127119

Start date
January 1 2021

End date
December 31 2021

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
12329

Scope 2, market-based (if applicable)
12329

Start date
January 1 2022

End date
December 31 2022

Comment

Past year 1

Scope 2, location-based
12228

Scope 2, market-based (if applicable)
12228

Start date
January 1 2021

End date
December 31 2021

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1956303

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
We use the "Scope 3 evaluator" developed by GHG protocol which is publicly available on the official website. The data input is the expenditure of purchased goods and services.

The purchased goods and services include food, electronics and audio visual, inland transport, postal and communication. The data obtained from value chain partner are about 50% for calculation.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
235959

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
We use the "Scope 3 evaluator" developed by GHG protocol which is publicly available on the official website. The data input is the expenditure of purchased goods and services.

The purchased capital goods include electronics and audio visual, transportation vehicle. The data obtained from value chain partner are about 50% for calculation.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
3547

Emissions calculation methodology
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

The activity data of the fuel-and-energy were the total consumption amount of electricity and fuel in the reporting year. All activity data were from the suppliers and the emission factors were announced by Taiwan EPA. The data obtained from value chain partner are about 50% for calculation.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
26

Emissions calculation methodology
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
50

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

We estimate the transportation distance and delivery weight from each trip from our supplier in the reporting year. The emission factor of each vehicle is from Taiwan EPA. The data obtained from value chain partner are about 50% for calculation.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
75

Emissions calculation methodology
Average data method
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

Total weight of waste production is used for the activity data and emission factor is for incineration treatment announced by Taiwan EPA. The data obtained from value chain partner are 100% for calculation.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
18

Emissions calculation methodology
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

Most GHG emissions of our business travel by aircraft is included in our scope 1 inventory. The figure above reveals the emission from other airline company. The data obtained from value chain partner are 100% for calculation.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
6830

Emissions calculation methodology
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

The distance and vehicle type for employee commuting are investigated by random survey in the reporting year. The emission factors are from either Taiwan EPA or the Governmental Transportation Departments. The data obtained from value chain partner are 100% for calculation.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We do not have upstream leased assets.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
137

Emissions calculation methodology
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
75

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

We estimate the transportation distance and delivery weight from each trip to our customer in the reporting year. The emission factor of each vehicle is from Taiwan EPA. The data obtained from value chain partner are about 75% for calculation.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are a service provider company without solid products for our customer.

Use of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are a service provider company without solid products for our customer.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are a service provider company without solid products for our customer.

Downstream leased assets

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
86

Emissions calculation methodology
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
75

Please explain
We use the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" developed by WRI&WBCSD in 2011 to estimate the GHG emission by multiplication from activity data and emission factor.

We estimate the transportation distance and delivery weight from each trip to our customer in the reporting year. The emission factor of each vehicle is from Taiwan EPA. The data obtained from value chain partner are about 75% for calculation.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We do not have franchises.

Investments

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
21483

Emissions calculation methodology
Site-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain
Calculated based on the subsidiary's electricity consumption and shareholding ratio.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There was no source of emissions from this category.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There was no source of emissions from this category.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date
January 1 2022

End date
December 31 2022

Scope 3: Purchased goods and services (metric tons CO2e)
1010071

Scope 3: Capital goods (metric tons CO2e)
184755

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
3576

Scope 3: Upstream transportation and distribution (metric tons CO2e)
26

Scope 3: Waste generated in operations (metric tons CO2e)
79

Scope 3: Business travel (metric tons CO2e)
3.2

Scope 3: Employee commuting (metric tons CO2e)
8853

Scope 3: Upstream leased assets (metric tons CO2e)
0

Scope 3: Downstream transportation and distribution (metric tons CO2e)
111

Scope 3: Processing of sold products (metric tons CO2e)
0

Scope 3: Use of sold products (metric tons CO2e)
0

Scope 3: End of life treatment of sold products (metric tons CO2e)
0

Scope 3: Downstream leased assets (metric tons CO2e)
0

Scope 3: Franchises (metric tons CO2e)
0

Scope 3: Investments (metric tons CO2e)
20888

Scope 3: Other (upstream) (metric tons CO2e)
0

Scope 3: Other (downstream) (metric tons CO2e)
0

Comment

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
35.41

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
4502195

Metric denominator
unit total revenue

Metric denominator: Unit total
127142

Scope 2 figure used
Location-based

% change from previous year
18.45

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Other emissions reduction activities
Divestment
Acquisitions
Mergers
Change in output
Change in revenue
Change in methodology
Change in boundary
Change in physical operating conditions
Unidentified

Please explain
Compared with 2021, total revenue increased in the 2022, by 33.4%. EVA Air's gross emissions are 4,139,518 metric tonnes in 2021 and 4,489,866 metric tonnes in 2022, respectively, indicating an increase by 8.8%.

In 2021, gross emission is 4,139,347 metric tonnes together with the revenue of TWD 95,332 million, meaning the intensity in 43.42 metric tonnes / million revenue.

In 2022, gross emission is 4,502,195 metric tonnes together with the revenue of TWD 127,142 million, meaning the intensity in 35.41 metric tonnes / million revenue.

The intensity decreased from 43.42 metric tonnes / million revenue in 2021 to 35.41 metric tonnes / million revenue in 2022 indicating a decrease by 18.45%.

C-TS6.15

(C-TS6.15) What are your primary intensity (activity-based) metrics that are appropriate to your emissions from transport activities in Scope 1, 2, and 3?

Aviation

Scopes used for calculation of intensities
Report just Scope 1

Intensity figure
0

Metric numerator: emissions in metric tons CO2e
1745510.6

Metric denominator: unit
p.km

Metric denominator: unit total
12530049250

% change from previous year
65

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.
The scope 1 emissions for passenger flight operations are 659166.6 and 1745510.6 metric tonnes in the previous year and the reporting year, increased by 164.8%.

The thousand RPK are 1,642,246,619 and 12,530,049,250 in the previous year and the reporting year, increased by 663%.

Therefore, the intensity p.km decreased by 65%, from 0.000401381 in the previous year to 0.000139306 in the reporting year.

The reasons for change is better fuel efficient because more passengers travelled and operation recovery during 2022 after ease of COVID-19.

ALL

Scopes used for calculation of intensities
Report just Scope 1

Intensity figure
0.734

Metric numerator: emissions in metric tons CO2e
4384290

Metric denominator: unit
t.km

Metric denominator: unit total
5973358045

% change from previous year
10

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.
The t.km in this question we defined as same as Revenue Tonne Kilometre (RTK)
The scope 1 emissions for operational aviation activity, including operational passenger and cargo transportation are 4,031,269 and 4,384,290 metric tonnes in the previous year and the reporting year, increased by 8.8%. Non-operational flights such as training, test and delivery are excluded here.
RTK are 4,932,945,344 and 5,973,358,045 in the previous year and the reporting year, increased by 21%.
Intensity are 0.817 and 0.734 in the previous year and the reporting year, decreased by 10%.
The reasons for change is better fuel efficient because revenue increased in 2022.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	4473697.802	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	4976.867	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	11189.989	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	1.716	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Taiwan, China	4489866

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Aviation	4489390
Non-aviation	476

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	4489390	<Not Applicable>	

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Taiwan, China	12329	12329

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
EVA Nankan Park (headquarters)	9648	9648
EVA Air Taipei Building	428	428
Bonded Warehouse Building	1784	1784
Other Offices	470	470

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	12329	12329	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	EVA AIR did not purchase or consume renewable energy in the reporting year.
Other emissions reduction activities	89205	Decreased	2.16	EVA Air's gross emissions are 4,139,518 metric tonnes in the previous year and 4,502,195metric tonnes in the reporting year. Total of 362,677 metric tonnes increased in the reporting year, by 8.8%. All emissions reduction activities implemented in the reporting year contribute 89,205 metric tonnes reduction, indicating -2.16% change compared with the previous year. The results show that the performance of energy conservation measures is validated. The calculation is: (89,205/4,139,347)*100 = 2.16%
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	451882	Increased	10.96	EVA Air's gross emissions are 4,139,518 metric tonnes in the previous year and 4,502,195metric tonnes in the reporting year. Total of 362,677 metric tonnes increased in the reporting year, by 8.8%. The business growth in the reporting year contributed 451,882 metric tonnes increase, indicating +10.96% change compared with the previous year. The calculation is: (451,882 /4,139,347)*100 = 10.96%
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 30% but less than or equal to 35%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	16489710	16489710
Consumption of purchased or acquired electricity	<Not Applicable>	0	24221	24221
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	16513931	16513931

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Coal

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
16489539

MWh fuel consumed for self-generation of electricity
170

MWh fuel consumed for self-generation of heat
16489369

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
171

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
171

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
16489710

MWh fuel consumed for self-generation of electricity
170

MWh fuel consumed for self-generation of heat
16489540

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	170	170	0	0
Heat	16489540	16489540	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
Taiwan, China

Sourcing method
None (no active purchases of low-carbon electricity, heat, steam or cooling)

Energy carrier
<Not Applicable>

Low-carbon technology type
<Not Applicable>

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
<Not Applicable>

Tracking instrument used
<Not Applicable>

Country/area of origin (generation) of the low-carbon energy or energy attribute
<Not Applicable>

Are you able to report the commissioning or re-powering year of the energy generation facility?
<Not Applicable>

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Taiwan, China

Consumption of purchased electricity (MWh)
24221

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

C-TS8.5

(C-TS8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Activity
Aviation

Metric figure
0.033

Metric numerator
Liters of fuel

Metric denominator
Available seat.km

Metric numerator: Unit total
689523400

Metric denominator: Unit total
20615761655

% change from last year
3

Please explain
The total fuel consumption for passenger transportation 260,388,450 and 689,523,400 liter in the previous year and the reporting year, increased by 164%.

The ASK are 8,205,187,792 and 20,615,761,655 in the previous year and the reporting year, decreased by 151%
Therefore, the fuel intensity of passenger transportation increased by, from 0.032 in the previous year to 0.033 in the reporting year.

The reasons for change is:
After the COVID19 epidemic, the government has gradually loosened border control and epidemic prevention measures. Therefore, the number of flights will gradually resume in 2022, and the overall carbon emissions increased.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Other, please specify (Water consumption)

Metric value
125778

Metric numerator
Absolute total water withdrawal in cubic meter

Metric denominator (intensity metric only)

% change from previous year
3.5

Direction of change
Please select

Please explain
Water consumption is an indicator involved in our environmental management system.

The total tap water consumption were 130,432 and 125,778 in the previous year and the reporting year, respectively.

The % change from previous year, therefore, by 3.5% decrease.

EVA Air's operating sites in Taiwan receive running water from the local water utility company and do not utilize surface water, groundwater, or seawater sources. All wastewater discharged by the Company is classified as general domestic wastewater and is directed to the government's wastewater treatment facilities. Additionally, the Nankan Park facility has implemented rainwater and condensate water recycling systems. In 2022, a cooling tower water recycling and reuse system was introduced, resulting in a significant increase in water reutilization efficiency. The system recycled 3,767 cubic meters of water that year, contributing to reduced reliance on running water.

C-TO9.3/C-TS9.3

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Activity
Aviation

Metric
Fleet adoption

Technology
Other, please specify (Introduction of new model aircraft)

Metric figure
15

Metric unit
Other, please specify (Number of 787 aircraft in 2023)

Explanation
EVA Air has started to introduce the 787 Dreamliners since 2018. We expect to introduce twenty-one 787 aircraft by the end of 2023. The Boeing 787 Dreamliners are made with a large quantity of composite materials, including lightweight carbon fiber, which are applied in the fuselage, wings, engine blades, etc. The percentage of such materials accounts for more than 50% of the total weight, drastically reducing the weight of the fuselage. Also, the new materials are less readily subject to fatigue and corrosion compared with the traditional aluminum alloy; this helps to reduce maintenance costs. In addition, LED lighting is used to replace fluorescent lamps, reducing about half of the electricity consumption. With the latest model of GEnx engine manufactured by General Electric, the adoption of new aircraft reduces fuel consumption and greenhouse gas emissions by 20%.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Activity
Aviation

Technology area
Other, please specify (Introduction of new model aircraft)

Stage of development in the reporting year
Large scale commercial deployment

Average % of total R&D investment over the last 3 years
9.3

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)
10031333330

Average % of total R&D investment planned over the next 5 years
10

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
In response to changing market demands, we continuously implement the introduction of environmentally friendly and fuel-efficient new aircraft to replace old ones. In recent years, we have gradually introduced 777 freighters and 787 passenger aircraft. Compared to the older models such as 747 freighters and others, these new aircraft offer approximately a 20% improvement in fuel efficiency

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
ISO 14064-1.pdf

Page/ section reference
1~2

Relevant standard
ISO14064-1

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
ISO 14064-1.pdf

Page/ section reference
1~2

Relevant standard
ISO14064-1

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
ISO 14064-1.pdf

Page/ section reference
1~2

Relevant standard
ISO14064-1

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Downstream transportation and distribution
Scope 3: Downstream leased assets

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
ISO 14064-1.pdf

Page/section reference
1~2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C1. Governance	Other, please specify (Introduction of TCFD)	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C2. Risks and opportunities	Other, please specify (Introduction of TCFD)	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C3. Business strategy	Other, please specify (Introduction of TCFD)	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C4. Targets and performance	Progress against emissions reduction target	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C5. Emissions performance	Emissions reduction activities	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C8. Energy	Energy consumption	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.
C12. Engagement	Other, please specify (Customer engagement)	AA1000 AS	The data are disclosed in page XX of 2022 CSR report.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS
UK ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
0

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
4812

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
122

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

UK ETS

% of Scope 1 emissions covered by the ETS
0

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
27

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
22

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

(1). EVA Air continues to pay attention to the adjustment of EU regulations and the situation. In 2020, the Brexit was completed. After the Brexit, UK put UK ETS into effect. These regulations resulted in carbon trading expenses and operational management costs.

(2). Continue to pay attention to the development of the EU ETS, UK ETS and ICAO CORSIA regulations and participate in relevant international or domestic conferences each year to develop appropriate project responses. To make sure 100% compliance with international regulations to ensure the Company's competitiveness

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of a carbon tax

1,500 TWD per tonne of carbon emission

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations

Scope(s) covered
Scope 1
Scope 2

Pricing approach used – spatial variance
Uniform

Pricing approach used – temporal variance
Static

Indicate how you expect the price to change over time
<Not Applicable>

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
1500

Business decision-making processes this internal carbon price is applied to
Operations
Risk management
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
In February 2023, the Taiwan Environmental Protection Administration announced that the "Greenhouse Gas Reduction and Management Act" would be amended to the "Climate Change Response Act" and enacted the goal of net zero emissions by 2050. EVA Air pays constant attention to the formulation of relevant laws and regulations at home and abroad so as to adjust the long-term effects on the overall aviation supply chain. We expect to establish an internal carbon pricing system through external carbon trading regulations to dynamically adjust our climate change response strategies, reduce greenhouse gas emissions, optimize fuel efficiency, develop low-carbon investments, grasp low-carbon opportunities, and promote supply chain carbon reduction so as to fulfill our responsibility to protect the Earth's environment.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change
Provide training, support, and best practices on how to make credible renewable energy usage claims

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% of supplier-related Scope 3 emissions as reported in C6.5
100

Rationale for the coverage of your engagement
EVA Air revised the internal procurement procedures with “Supplier Partnership Social Responsibility Policy for Sustainable Development ” by the President in 2015. The international sustainability criteria such as environment, human rights, labor practices and social impact were incorporated as the main items of consideration for selecting new suppliers. We hope that we can encourage our suppliers to make joint efforts to fulfill corporate social responsibility through our procurement policies and practices, combined with sustainable standards.

In order to continuously improve the sustainability of its supply chain, EVA Air requires suppliers to sign the Supplier Code of Conduct (SCoC). In 2021, the signing rate of tier 1 suppliers and critical suppliers reached 100%.

Impact of engagement, including measures of success
(1). Impact of engagement:
In order to implement sustainable risk management for suppliers, EVA Air has formulated supplier auditing measures, which require on-site audits of high-risk and critical suppliers. The goal was to audit 19 critical suppliers and complete online audits. Among the defects found in the audit, most were overtime issues or fines imposed for inadequate safety and health equipment and measures over the last three years, and incomplete equipment records. The suppliers were requested to make improvement and the improvements were followed up and confirmed. All the issues have been improved, and sustainability performance has greatly improved.

(2). Measure of success:
In order to understand and grasp the sustainability status of the overll supply chain, we have formulated the Sustainability Assessment Questionnaire (SAQ) according to the procurement procedure manual. Through the questionnaire, we evaluate the sustainability risks of suppliers. Then based on the survey results, we conduct on-site audit of high-risk and key suppliers to determine their actual conditions, provide recommendations and request improvements to be completed within a time limit. In 2021, questionnaires were issued to tier 1 suppliers and critical suppliers (tier 1 and non-tier 1), and the response rate was 100%.
In 2021, EVA Air increased the SAQ score of high-risk suppliers from 60 to 70 to improve the sustainability of its suppliers. However, the overall supply chain sustainability risk survey results still did not contain any high-risk suppliers with a score lower than 70 points. Therefore, the results of the sustainability risk assessment had to be analysed. The bottom of 1% suppliers with the lowest scores, which potentially had the highest risk were selected to be audited, in an effort to further evaluate their potential risk factors, including being punished for violating various laws and regulations, property damage caused by major incidents, and labor working conditions. After communicating with and providing counselling to the suppliers, their performances were greatly improved. We will continue to follow up and provide guidance to the suppliers to put in the necessary efforts that will result in improvements in the relevant aspects.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
100

Please explain the rationale for selecting this group of customers and scope of engagement
EVA Air is the first to roll out a "Green Travel" EVA Carbon Offset Program in Taiwan, in which passengers can make donations based on the calculated carbon emissions of their flight to offset the CO2 created during their flight and achieve "zero-carbon travel" that we promote to 100% customers.

The "Green Travel" EVA Carbon Offset Program is a formal collaboration between EVA Air and ClimateCare, the renowned British climate management and sustainable development company. The carbon discharge coefficient per kilometer (or mile) for each passenger is calculated according to the carbon emissions calculation guidelines published by the International Civil Aviation Organization (ICAO), using fuel consumption and passenger capacity data of various EVA Air aircraft models. After a ticket purchased at the EVA Air global website, passengers can go to the dedicated website (evaair.climatecare.org) to calculate their carbon emissions based on the seating class, flight distance, and number of passengers. The passenger may select to donate an equal or optional amount in support of ClimateCare's international carbon reduction project and complete the "zero-carbon travel"

Impact of engagement, including measures of success
(1). Impact of engagement:
Since the system went live in May 2017 until the end of 2022, a total of 276 tonnes of CO2e had been offset. We hope to gradually expand our influence in the future, and encourage more passengers and staff to develop the correct attitude to protecting the earth's resources.

(2). Measure of success:
The project will initially focus on the international carbon reduction projects and gradually expand to domestic projects. All the carbon reduction projects through ClimateCare have been certified by independent institutions using international standards including the Gold Standard (GS) or the Voluntary Carbon Standard (VCS) in order to reduce the global carbon dioxide emissions or improve the living environment of impoverished regions.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement
Waste reduction and material circularity

Description of this climate related requirement
Suppliers should adopt efficient operating model to minimize the adverse effects on the environment, and should protect natural resources, minimize the use of hazardous substances, and promote resource recycling and reuse.

(1). Permits and Compliance: Suppliers should obtain all required environment permits, licenses, approvals and other associated documents, and should fully comply with the relevant laws and regulations during the operation period and update the aforementioned documents in a timely manner.
(2). Pollution Prevention and Energy/Resource Conservation: In the process of material production and service provision, the emission of pollutants should be minimized or eliminated, and the generation of waste should be reduced so as to achieve the efficient use of resources.
(3). Hazardous and Harmful Substances: Hazardous and harmful substances should be identified and controlled to ensure their safe handling, transport, storage, use, recycling, reuse and disposal.
(4). Waste and Emission: The associated management system should be in place to ensure the safe handling, transport, storage, recycling, reuse and management of the emission of waste, exhaust gas and wastewater. In compliance with relevant regulations, any waste, wastewater or exhaust gas that may adversely affect human or environment health should be properly managed, controlled and treated before being discharged to the surroundings.

% suppliers by procurement spend that have to comply with this climate-related requirement
99

% suppliers by procurement spend in compliance with this climate-related requirement
100

Mechanisms for monitoring compliance with this climate-related requirement
Off-site third-party verification
On-site third-party verification
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement
Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

The airport authority of EVA Air's home base, Taiwan Taoyuan International Airport, decide to conduct a new restriction on vehicles which limit the cars within the airport electronic cars only. The restriction is expected to be launched from 2021. The project is aimed to improve the air quality of underground baggage handling area and reduce carbon footprint in airport.

We fully support Taiwan Taoyuan International Airport Corporation's effort in conducting electronic cars in airside of airport, but still concern about the basic facility (e.g. charging station) of airport. Besides that, it is also expected that the airport authority tries to collect the suggestion from most of the users before the restrict being finally implemented to mitigation proposition may face.

EVA Airline has formulated and released an energy policy as attached.
EVA-Air-Environmental-and-Energy-Policy.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

(1). Through CSC Committee:
Realizing the importance of corporate social responsibility, EVA Air especially established the "Corporate Sustainability Committee" (the "CSC") in order to ingrain the philosophy of sustainable governance and effectively implement various sustainability-related actions. The President, the Director on Board, serves as the Chair of the Committee, and is responsible for implementing the corporate social responsibility policies and specific plans for sustainable governance. The CSC meeting is held quarterly to have general discussions on the aspects of economics, environment and society, e.g. climate change risks and opportunities. After identifying the responsibilities of each division, a variety of issues are then passed on to each relevant authorized team, which communicates with the stakeholders via various channels, and sets annual goals for the improvement projects. The specific implementation results of each improvement project are tracked by the CSC and quarterly reported to the Board of Directors.

(2). Follow environment policy:
Under the CSC, EVA Air formed the "Environment Committee", which is EVA Air's highest decision-making supervisory unit for corporate sustainability and environment management policy. The Committee is divided into four task groups: fuel conservation, environment, energy, and carbon rights; the Committee members consist of the heads, or their authorized agents, of the Corporate Planning Division, Flight Operations Division, Finance Division, General Affairs Department, Cabin Crew Division, Cabin Service Division, Operation Management Department, Engineering & Maintenance Division and Corporate Safety, Security & Environment Division. The Committee convenes at quarterly meetings to discuss the status and achievement performance of all responsible duties, ensures the effectiveness of the Company's environment and energy management guidelines and policies, effectively reduces the adverse global impact of GHG emissions. The execution of related operation about climate change issues should be quarterly reported to Board of Directors meeting every year by President who is the Chairman of CSC.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers
The “Regulations of Civil Air Transport Enterprise " and the " Regulations Governing General Aviation "

Category of policy, law, or regulation that may impact the climate
Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate
Climate-related targets
Emissions – CO2
International agreement related to climate change mitigation

Policy, law, or regulation geographic coverage
National

Country/area/region the policy, law, or regulation applies to
Taiwan, China

Your organization’s position on the policy, law, or regulation
Neutral

Description of engagement with policy makers
In cooperation with ICAO CORSIA, the Civil Aeronautics Administration, Ministry of Transportation and Communications of R.O.C formulates CORSIA policies, and regularly holds review meetings. Airline operators, National Accreditation Body, scholars, and relevant government authorities are all invited to participate and provide relevant policy suggestions.
When the Ministry of Transportation announced the revision of the “Regulations of Civil Air Transport Enterprise " and the " Regulations Governing General Aviation " regarding carbon emission monitoring, reporting and verification under the CORSIA mechanism, airliners are invited to provide opinions or suggestions.

Details of exceptions (if applicable) and your organization’s proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization’s engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
Driven by a clear CORSIA mechanism, the possibility of domestic SAF production will increase in the future

C12.4

(C12.4) Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document

Page/Section reference
Governance: P82
Strategy: P82
Risks & opportunities: P135-136
Emissions figures : 83
Emission targets: P23
Other metrics: P87

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues	<Not Applicable>

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	Under the Corporate Sustainability Committee, EVA Air formed Environment Action Team (aka Environment Subcommittee), which is operated through “Environment Committee”. Environment Committee is EVA Air’s highest decision-making supervisory unit for environment and energy management. Biodiversity issues will be discussed in CSC if necessary.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to avoidance of negative impacts on threatened and protected species	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
TNFD – Taskforce on Nature-related Financial Disclosures

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
In 2023, following the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), a questionnaire survey was conducted to quantitatively assess the biodiversity and natural environment significance for 30 critical suppliers. The aim was to understand the dependence on and impacts of their operational activities and locations on biodiversity and the natural environment.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
TNFD – Taskforce on Nature-related Financial Disclosures

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
In 2023, following the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), a questionnaire survey was conducted to quantitatively assess the biodiversity and natural environment significance for 30 critical suppliers. The aim was to understand the dependence on and impacts of their operational activities and locations on biodiversity and the natural environment.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Law & policy

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Please select

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Governance Impacts on biodiversity Risks and opportunities Biodiversity strategy	

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	President (Director on Board)	Director on board

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

(1). About EVA AIR

Since its establishment for 33 years, EVA Air has upheld its corporate principles of “Challenge, Innovation and Teamwork”, insisting on rigorous flight safety, service quality and corporate sustainability. In 2022, we pragmatically faced the impacts of the COVID-19 pandemic, the Ukraine-Russia war, inflationary pressures, and labor shortages. We capitalized on the gradual reopening of borders and the recovery of the passenger market by steadily increasing passenger flights. Meanwhile, we flexibly utilized the belly capacity of passenger aircrafts and provided customized cargo services, resulting in record-high cargo revenue for the year. The profitability for the year also surpassed that of 2021. After three years of pandemic challenges, EVA Air has demonstrated operational resilience and forged a more robust business structure. Moving forward, EVA Air will continue to maintain a balanced operation strategy between passenger and cargo development. Moreover, we will optimize our fleet and network planning to achieve the highest efficiency and effectively respond to market changes and challenges.

EVA Air is actively concerned about global warming issues and proactively implements various energy-saving measures to respond to the global aviation industry's goal of achieving net-zero carbon emissions. We are committed to promoting net-zero carbon emission plans in both "flight operations" and "ground operations" while sustainable aviation fuel plays a crucial role in carbon reduction. At the same time, we continuously improve fuel policies, optimize fuel usage for flight planning, and other measures. Setting carbon reduction targets in different stages (short, medium, and long term) incorporated with the "Green Travel Carbon Offset Program" to achieve the goal of "net-zero carbon flying by 2050" and create a vision for sustainable airline.

(2). Management system certification and environmental policies

The Environmental Committee is in responsible for practical operations for the EVA Air Corporate Sustainability Committee’s Environmental Action Team. The Committee is the unit that implements the Company's environmental and energy decision-making and management. They supervise setting of environmental protection and energy management goals and targets; promote management plans and performance management; and regularly report to the Board of Directors. They help internalize concepts of environmental sustainability into every phase of our operations. The committee is divided into three task forces: SAF, Environment and Energy, and Carbon Credit. These task forces consist of department/division heads who serve as permanent members. Regular meetings are held on a quarterly basis to review the implementation status and achievements of respective responsibilities, thus ensuring the effectiveness of the Company's environmental and energy management policies and operations. The aim is to effectively mitigate the negative impacts of greenhouse gas emissions on the global environment and establish a positive international image for EVA Air as a sustainable and green enterprise.

The various fuel conservation measures are planned and executed by the Fuel Conservation Group. The measures include fuel efficiency analysis of various aircraft models and selecting the most suitable aircraft models based on long-, mid-, short-range flight routes and the number of passengers. Furthermore, the fuel conservation plans involve topics such as the modernization of fleets, weight reduction of aircraft, flight operations and aircraft maintenance. The performance of fuel conservation measures are also shared with Environment Committee.

(3). Introducing TCFD to Manage Environmental Risks and Opportunities

Task Force on Climate-Related Financial Disclosures (TCFD) develops suggestions for more beneficial and efficient climate-related disclosures. We implement the four main core elements of TCFD framework, identifying and controlling high risk factors caused by climate change and extreme climates, and expand risk monitoring to all environmental aspects. EVA Air assesses the negative impact, the impact target, and the impact strength of every major environmental risk, and discloses response measures for all currently identified environmental risks from the aspects of "the highest level of management and duties, the strategic plan, the risk management action, and the goal". Moreover, we provide educational trainings and comprehensive information, adopt risk manage procedures and fully grasp various hazard information. In addition, we identify opportunities for the company’s operations resulting from climate change. We actively establish strategies and management measures to properly and timely pursue any development opportunities with potential short, mid-, or long-term benefits to the Company’s business.

SC0.1

(SC0.1) What is your company’s annual revenue for the stated reporting period?

	Annual Revenue
Row 1	127142232154

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
DHL Group

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Commodity

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e

8912.1

Uncertainty (±%)

Major sources of emissions
Aviation fuel

Verified
No

Allocation method
Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member
304968949

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
EVA Air provides DHL cargo delivery services. In 2022, the cargo revenue from DHL accounted for about 0.34% of the total cargo revenue. The EVA Air's total carbon emission from cargo transportation is 2638779.674 tonnes. Based on the proportion of revenue, DHL carbon emissions accounts for about 8912.1 tonnes.

Requesting member
McKinsey & Company, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
237.4

Uncertainty (±%)

Major sources of emissions
Aviation fuel

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
4335377

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
Mckinsey is one of EVA Air corporate member. In 2022, the air ticket revenue from Mckinsey accounted for about 0.014% of the total passenger revenue. The EVA Air's total carbon emission from passenger transportation is 1745510.60 tonnes. Based on the proportion of revenue, Mckinsey carbon emissions accounts for about 237.4 tonness.

Requesting member
KBR Inc

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
0.3

Uncertainty (±%)

Major sources of emissions
Aviation fuel

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
6222

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
KBR is one of EVA Air corporate member. In 2022, the air ticket revenue from KBR accounted for about 0.00002% of the total passenger revenue. The EVA Air's total carbon emission from passenger transportation is 1745510.60 tonnes. Based on the proportion of revenue, KBR carbon emissions accounts for about 0.3 tonnes.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

We have never disclosed such information, but we have emission intensity of cargo or passenger transportation available in 2022 Sustainability Report

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Doing so would require we disclose business sensitive/proprietary information	Revenue from other business partner may be sensitive

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We already have the ability to allocate, and no further development is required.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.
100

SC4.2a

(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

Name of good/ service
Passenger and Cargo air transportation

Description of good/ service
The main service of EVA Air are passenger and cargo air transportation

Type of product
Final

SKU (Stock Keeping Unit)
The unit is kg CO2e/ RTK

Total emissions in kg CO2e per unit
0.73

±% change from previous figure supplied

Date of previous figure supplied

Explanation of change

Methods used to estimate lifecycle emissions
Please select

SC4.2b

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

SC4.2c

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
Passenger and Cargo air transportation	Initiative 1	Net-Zero Carbon Emissions by 2050	Planned	6129942000

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?
No

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Non-public

Please confirm below
I have read and accept the applicable Terms