FRAPORT TAV
ANTALYA TERMİNAL İŞLETMECİLİĞİ A.Ş.

COMPANY CARBON REPORT
2009-2021

CONTENT

Preface

Climate Change is one of the most important environmental challenges of this century. In 2009, our country assumed responsibility by signing the Kyoto Protocol and signing the Paris Climate Change Agreement in order to protect the climate by reducing of emissions of greenhouse gases. According to the latest statistical data 16% of total greenhouse gas emissions from the transportation sector, while 2-3% of this ratio is due to the aviation sector.

We are as Fraport TAV Antalya Terminal Management (FTA) committed to protect the Climate. With our responsive widening policy; Antalya Airport started the accreditation process in August 2009 and was accredited for Level-1 "Mapping" in 2010. Antalya was then accredited with Level-2 "Reduction" for the measures described in the Carbon Management in 2011. In one year time (2012) achieved the Level-3 "Optimization" by developing stakeholder engagement plan and reduced the emission. The Company renewed the Level-3 certificate for 2013 and 2014. In 2015 decided to offset of the entire Scope 1 and 2 emissions. Due to pandemic situations the Neutrality 3+ Level certificate extended with untill May 2022..

The total emission of the airport is analyzed, a very important part is caused by aircraft movements, partly by passenger surface transportation, partly by Terminal Operations activities (FTA), and a small part by ground handling vehicles and personnel transportation. FTA is shared 4% of total emission. The figures are indicated that the highest emission arises from electricity consumption, which is purchased and used for FTA's activities.

Basic Principles for Carbon Reporting

The basic principles which are defined by ISO 14064 standards are implemented in the company.

- Relevance
- Completeness
- Consistency
- Transparency
- Accuracy

FTA Commitment- Policy and Objectives

FTA is committed to reduce own and stakeholders' carbon emission. The top management and all team members at FTA has been aware of the threats posed by climate change for some time, but have been equally aware of the inherent opportunities available from engagement in high quality carbon management. Besides, FTA always to be active in encouraging emissions' reductions to the third parties.

Long Term Targets

To develop NetZero Carbon policy for 2050.

To reduce each year CO_2 emissions by the end of 2026.

To produce our own electricity by using friendly environment sources

Efficient process management in light of FTA CMP

FTA has built on three milestones of its carbon emissions policy. According to our policy, carbon targets have been defined as the ***Long, mid*** and ***Short*** term.

a) To reduce direct (Scope 1-2) emissions and avoid the generation of additional CO_2 emissions as a result of company activities

b) To make collaboration with stakeholders to reduce indirect (Scope-3) emissions,

c) To achieve Zero Carbon (Carbon Neutrality).

FTA is aware of the targeted management of CO_2 emissions and appropriate monitoring are a prerequisite.

To produce electrical energy with sources that cause the least emission in order to make a sustainable carbon management, to purchase the needed energy from renewable sources. To use new technology products to manage energy in the most effective way, to prioritize energy saving projects, to reduce water consumption, to effectively manage the waste water treatment system, to increase recycling, to fly economy class during personnel business trips. Preferring the use of electric vehicles in airport transportation and airside operations. Also cooperation with stakeholders, leadership of sectoral foundations.

Mid- Short Term Targets

To reduce scope 1-2 CO_2 emission per pax by %1 in 2022 compared to 3 years average

To reduce electricity concumtion %1,5 compared 2021

To produce 35% of total electricity consumption with TRIGEN in 2022

To perform 2% improvement for recycling of total waste.

To revise stakeholders engagement plan to reduce Scope 3 emission

FTA Accreditation Process

Determination of the Carbon Sources and Responsibilities

The Greenhouse Gas Protocol (GHG Protocol) defines emissions as direct or indirect.
Direct emissions, are owned or controlled by the reporting entity. Indirect emissions are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

FTA categorized these direct and indirect emissions into three broad scopes.

Scope 1

- Stationary sources
- Onsite power generation–Trigen Power Plant- uses NG
- Heating and cooling energy
- Refrigeration leaks
- Onsite waste water treatment
- Ground vehicles (Own car onsite)

Scope 2

- Purchased electricity (Tenants-DHMI excluded)

Scope 3

- Business travel
- DHMI fire exercise
- Aircraft movements (ATM) ICAO Airport Air Quality Guidance Manual (Doc No. 9889)
- Passenger access
- Airport Staff access
- Ground vehicles (Ground handlings, catering, fuel companies..etc)
- Other CO_2 emission sources

All these sources' data are collected systematically and insert to the model to calculate emissions by scopes.

Carbon Footprint Mapping

Carbon mapping is the act of identifying the sources of carbon emission caused by the activities of the enterprise and calculating the total amount of emission. Carbon emission is calculated with respect to the GHG (sera gases) ISO 14064 standard. The yearly carbon emission that is produced as a result of FTA's activities is obtained both as an absolute value, and as a relative ratio. **"Unit ton"** is used when the CO_2 emission is calculated in absolute value; whereas "**% kg per pax"** is used for relative ratio.

In order to calculate the emission rate that is output due to our company's tasks and responsibilities rising from the managerial contract the sources are clustered under 3 scopes.

Carbon Footprint Report (CFR)

The "Carbon Footprint Report" (CFR) is prepared each year within the scope of ISO 14064-1 and ACAS guiding document and it is verified according to ISO 14064-3 by means of an independent audit firm in every year. The inputs of the report include all the following data; emission-causing energy consumption which is in project scope, emission rates created by air conditioning (heating/cooling), waste decomposition and waste water treatment plants, material usage, business trips of employed personnel, vehicles used for transferring to/from airport, fuel consumption of company vehicles. The ACI ACAS guiding document is the main reference when preparing the CFR.

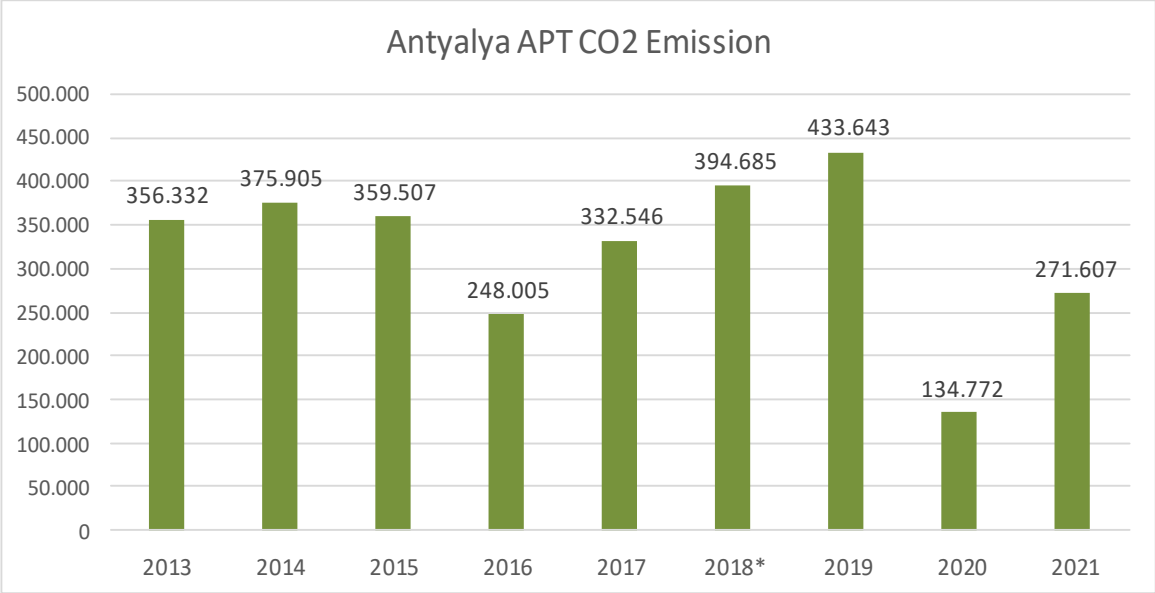
Due to the pandemic COVID-19, the preparation of the CFR for 2020 was delayed by the ACI, the validity period of the certificate was extended until 2022.

Carbon Management Plan (CMP)

The "Carbon Management Plan" (CMP) is that prepared as one of the requirements of ACA Program Level-2 is revised in every three years. Verification is performed each year within the scope of the newly revised (in 2020) ACA Program. The company draws the outline of handling energy management, decreasing carbon emission; cooperating with other stakeholders, and defining short-term, mid-term and long-term carbon targets. The CMP preparation is extensively described in article 2.5 of the ACI ACAS guiding document. FTA CMP has been prapared and shared with partners.

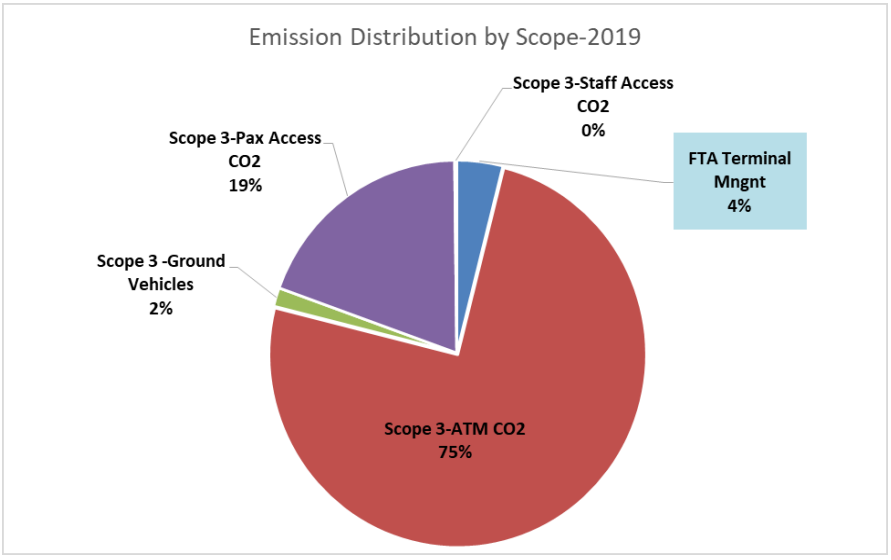
Antalya Airport's Yearly Emission Data

Since the organization started its total emission reporting in 2013, the **Graph 1** includes the total emission data for the years 2013-2021 in Antalya Airport. While the total emission at Antalya Airport was 356,332 tCO_2 in 2013, it was 433.643 tCO_2 in 2019 and it was 271.607 tCO_2 in 2021. The main reason for the emission amount seen in the graph is the changes in the number of aircraft movements.



Graph 1

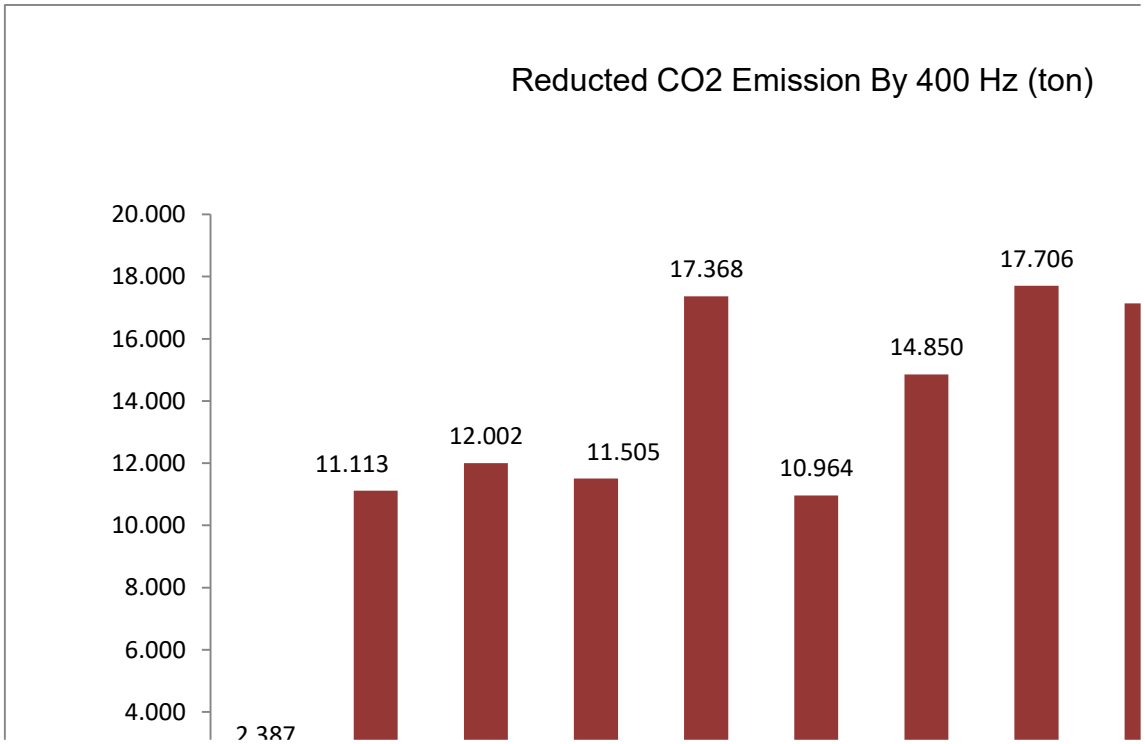
Graph 2 demonstrates among the Antalya Airport's entire CO2 emissions in 2019 is 75% comes from the operation of aircraft (taxi, takeoffs and landings as well as use of APUs), 19% of total emission comes from passenger, 2% comes from staff access and ground vehicles' fuel consumptions. Only 4% of total CO2 emission comes from activities of FTA (scope 1 + 2). This 4% emission resulting from FTA activities has also been analyzed in terms of its sources and reduction plans have been made.



Graph 2

Stakeholders Engagements and Scope 3 Emission Reduction

FTA has clearly demonstrated its commitment to widening the scope of its carbon management programme to include stakeholders at the airport since its initial Stakeholder Engagement Plan was developed in 2011 and revised in 2019. As indicated in Graph 3 the saved CO2 emission improved year by year comparison the departed aircraft. The Graph 3 shows how much CO_2 removed from the atmosphere by this way. In the beginning (2011) of the project 2.387 tCO2 was saved by using the 400Hz terminal facilities, 17.143 tCO2 was saved in 2019 and 9.684 tCO2 was saved by using the facilities in 2021. Thanks to FTA **Bridge Package Project** to decrease of aircraft emission during the ground time. This example is good practice to demonstrate how we are reducing scope 3 emissions with our partners.



Graph 3

In scope of our Stakeholder Engagment Plan FTA has identified to do actions to reduce carbon emission in collobrative ways with airlines, ground handling companies, aircraft re-fuelling companies, staff and passenger access bus providers. Besides, has been developed training program for FTA employees and third party staff.

CO2 Reduction Implementations at FTA

- Lighting, heating and cooling systems work by editing the values of working hours are tracked from the automation system.
- The use the smallest CO2 emission value (natural gas) to produce electric energy.
- Heating and Cooling on a regular basis by measuring the energy loss is prevented.
- Light sensors are used,
- LED used for Lighting

- Fuel consumption is monitored from the automation of systems. Operational planning is an important tool.
- Energy Management Team has been set to walking check and developed saving projects.
- The control of chimney emissions and filters are done periodically.
- All existing monitors in the company had exchanged with more saving once.
- Public monitors are used in save modes and love energy consuming.
- FTA provide the access facilities to employees. In addition, FTA offers public transportation to all employees. Only allowed to use euro diesel on these buses.
- The Waste Water Treatment System is operated with full efficiency. pH value of effluent water is measured every day and its laboratory analysis is conducted monthly basis.
- Waste Management Plan is prepared to provide recycling efficiency.
- Terminal operating systems are established as a tool for energy saving.
- Effective periodic maintenance is implemented for all existing systems.
- Training and social activities is a continuous process in order to improve environmental awareness.

Respectfully Yours,

Antalya, 01.04.2022

Dr. Musa GÜNGÖREN

Quality Manager