

ICF Airports Committed Carbon Emission Reduction

We will continue to reduce emissions of Carbon Dioxide (CO₂). Our aim is for the site to be carbon neutral for energy use and fuel consumption by;

- ✚ reducing energy consumption with new technological solutions,
- ✚ producing our own electricity,
- ✚ increasing the environmental awareness for the effective use of resources.

CARBON FOOTPRINT MAPPING 2010

We are awarded to Airport Carbon Accreditation Scheme by ACI at level 1 – Mapping in August 2010.

Organizational Boundary / Scoping

The activities included in the carbon footprint, as required by the ACI scheme and under the direct responsibility of ICF Airports are as follows:

Scope 1

- ✚ Energy – Stationary Sources
- ✚ On-site Stationary Combustion Facilities
- ✚ Business travel
- ✚ Process Emissions (Wastewater Treatment)
- ✚ Ground Vehicles

Scope 2

- ✚ Emissions from purchased electricity, less metered tenanted sales and DHMI electricity consumption in terminal buildings

Scope 3

- ✚ DHMI activities - Fire fighting exercises

CARBON REDUCTION 2011

ICF Airports is awarded to Airport Carbon Accreditation Scheme by ACI at level 1 – Mapping in 2010 as the 18th airport in Europe. Carbon Management Plan is prepared in 2011.

How we will realize this amount reduction;

ICF has now started the process of identifying where future emissions savings can be found. In the short-term these will come from the delayed opening of a new electricity generation power plant in 2011, known as TRIGEN which will generate all future electricity requirements at the airport and will result in improved carbon efficiencies. This is due to the lower carbon intensity value of the Liquid Natural Gas which will be used to generate electricity, compared to the carbon intensity value of grid purchased electricity in Turkey and fewer losses in transmission.

2010 Carbon Footprint Calculations

The basis of the comparative footprint study reflects relative changes in emissions based on appropriate normalization factors.

Growth exceeded expectations at Antalya Airport in 2010. Passenger numbers grew by 3,454,509 to 22,144,161 (+18.48%). This was enabled in part due to additional terminal capacity with the opening of an extended Domestic Terminal, providing an additional 16,121 m² floor space

Long Term Targets



to reduce specific CO₂ - emissions by 25% (in 2024)



to produce our own electricity by using low carbon fuel

compared to the old terminal. The Domestic Terminal is adjoined to Terminal 1 at the airport, which was also partially extended in the process, with a resulting 2,587 m² extra capacity in Terminal 1. In total therefore terminal capacity increased by 18,708 m² in 2010.

Carbon Dioxide emissions for which ICF are directly responsible at Antalya Airport grew by 4,264.14 tones in 2010 compared to the adjusted 2009 footprint (+29.5%). This resulted in an emissions intensity footprint increase from 0.77kg CO₂ per passenger to 0.84kg CO₂ per passenger.

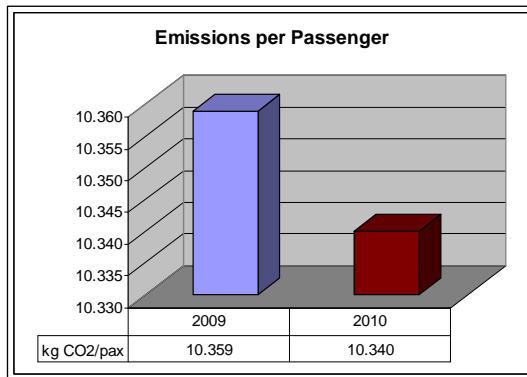
Greenhouse Gas Emissions (tones CO ₂)	2009	2010
Scope 1	1,034.02	1,379.89
Scope 2	7,015.66	9,461.40
Total Scope 1,2 Emissions	8,049.69	10,835.29
Emissions per Passenger (CO₂/pax)	1.0359 kg	1.0340kg

- The total Carbon footprint for ICF has risen from 14,446.38 to 18,710.51 tones CO₂, a 29.5% annual increase and a 12.9% increase on the 2 year average.

- Normalized against **Total passenger numbers (including non-ICF controlled areas)**, which showed an increase of 18%, the relative footprint has increased from 0.77 to 0.84kgCO₂/pax, a 9.3% annual increase.

- The comparative study; which focuses on areas of the airport under ICF direct control during the data period, shows that the comparative total footprint increased from 8,049.69 to 10,835.30 tones CO₂, a 34.61% annual increase.

- However, emissions relative to **passenger numbers within areas controlled by ICF** (which increased by 34.84% during the period) show a small reduction in relative emissions from 1.0359 to 1.0340kgCO₂/pax, a **0.18% decrease**.



IMPLEMENTATIONS AT ICF AIRPORTS

- ✚ Lighting, heating and cooling systems work by editing the values of working hours are tracked from the automation system.
- ✚ Light sensors are used,
- ✚ Lighting is by measuring the unnecessary lighting is limited.
- ✚ Vehicle and equipment maintenance is done periodically and regularly monitored by internal or external audit teams.
- ✚ The control of chimney emissions and filters
- ✚ The use of less carbon emissions of the fuel (LNG, natural gas)
- ✚ Heating and Cooling on a regular basis by measuring the energy loss is prevented.
- ✚ Fuel consumption is monitored from the automation of systems working hours. Operational planning is an important tool.
- ✚ All existing monitors in the company had exchanged with more saving once.
- ✚ Public monitors are used in save modes and love energy consuming.
- ✚ ICF Airports provide the access facilities to employees. In addition, ICF Airports 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 everyday and its laboratory analysis is conducted once a month.
- ✚ Terminal operating systems are established energy - saving systems.

Short Term Targets



to be carbon neutral for energy across the site in 2015



to reduce carbon emission per pax by 2% compared to 2010



to reduce electricity consumption 2% in 2011

OUR INVESTMENTS REGARDING ENVIRONMENT AND ENERGY SAVING

ICF Airports invested approximately 26.3 million EUR for environmental and operational purposes. In addition, an annual amount of 1 million EUR has been allocated to this issue until the end of the year 2024.

✚ Tri-Generation Plant

The most important investment is TRIGEN Power Plant of ICF Airports, constructed in 2010. The Tri-generation is 90% efficient. It is the simultaneous production of cooling, heating and power, in one process and the most environmentally-friendly method of generating energy. The financial dimension of this investment is about 7.3 mil €, The capacity of the system is 8,00 MWe.



ICF Airports continuously invests in state-of-the-art sustainable technology with recent establishment of an energy-efficient TRIGEN Power Plant.

- ✚ **New Power Plan is 7 mil €**
- ✚ **Heating and Cooling Center approximately 2 mil €,**
- ✚ **Waste Water Treatment Center approximately 1,5 mil €**
- ✚ **Infrastructure investment for New Domestic Terminal is 4,4 mil €**
- ✚ **Virtualization server is the other important investment in the company. The financial dimension of this investment is about 10,000 €.**

FUTURE PROJECTS

The investment program of ICF Airports includes several projects in the future that will produce benefits for climate protection.

- ✚ Solarium energy power plant.
- ✚ Led lighting system.
- ✚ Within the project waste separation plant will be re-designed.
- ✚ Charging points for passenger automobiles in the car parks will be installed.
- ✚ Support to stakeholders for joining carbon accreditation scheme

Our Policy



controlling the creation of wastes



ensuring efficient uses of resources and prevention of pollution



climate protection and reducing greenhouse gas emissions arising from our activities each year