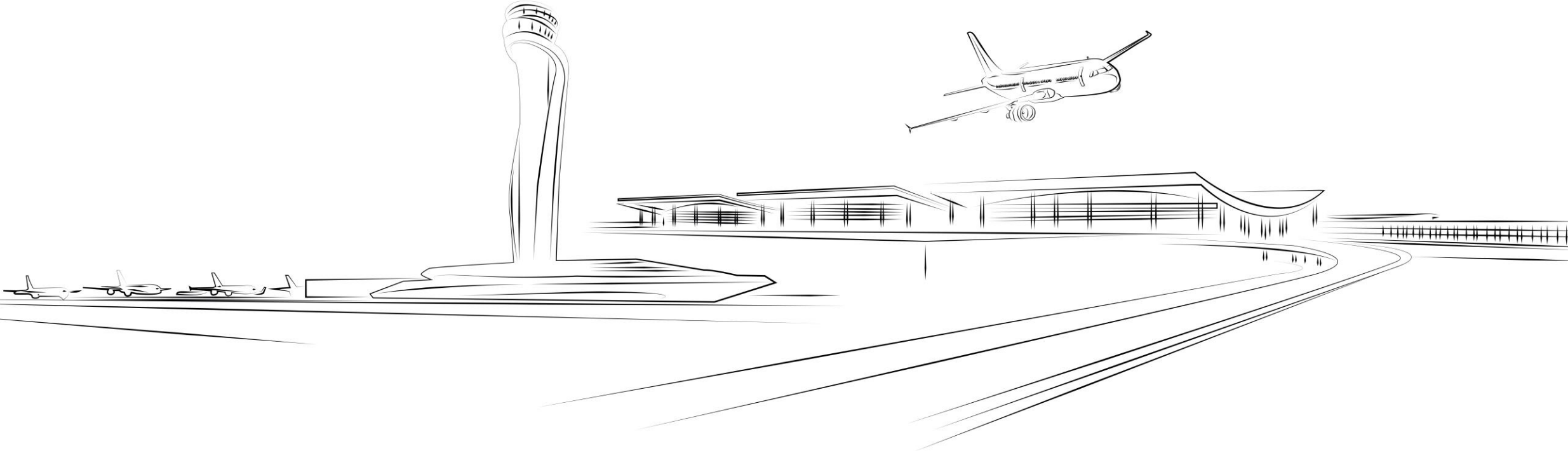




REPUBLIC OF TÜRKİYE
MINISTRY OF TRANSPORT AND INFRASTRUCTURE
General Directorate of State Airports Authority





State Airports Authority



Who we are?

- *Governmental Organisation
- *ANS Provider
- *Airport Operator





State Airports Authority



- Regulation and control Türkiye's airspace
- DHMI is the responsible authority in Türkiye for the provision of Air Traffic Services (ATS) within the entire territory of Türkiye, including its territorial waters as well as the airspace over the high seas.





State Airports Authority



- *There are 57 Airports serving to Civil Aviation
- *Directly responsible for 50
- *Central Organisation and Airport Directorates





State Airports Authority



- *Airport Department
- *Management of Environment and Sustainability
- *Environmental Unit at Airports





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In addition to legislations we must obey on environmental issues, we have a Project called “Carbon Free Airport”

*Airport Carbon Accreditation (ACA) Programme

Turkey’s airport authority fights against Climate Change.

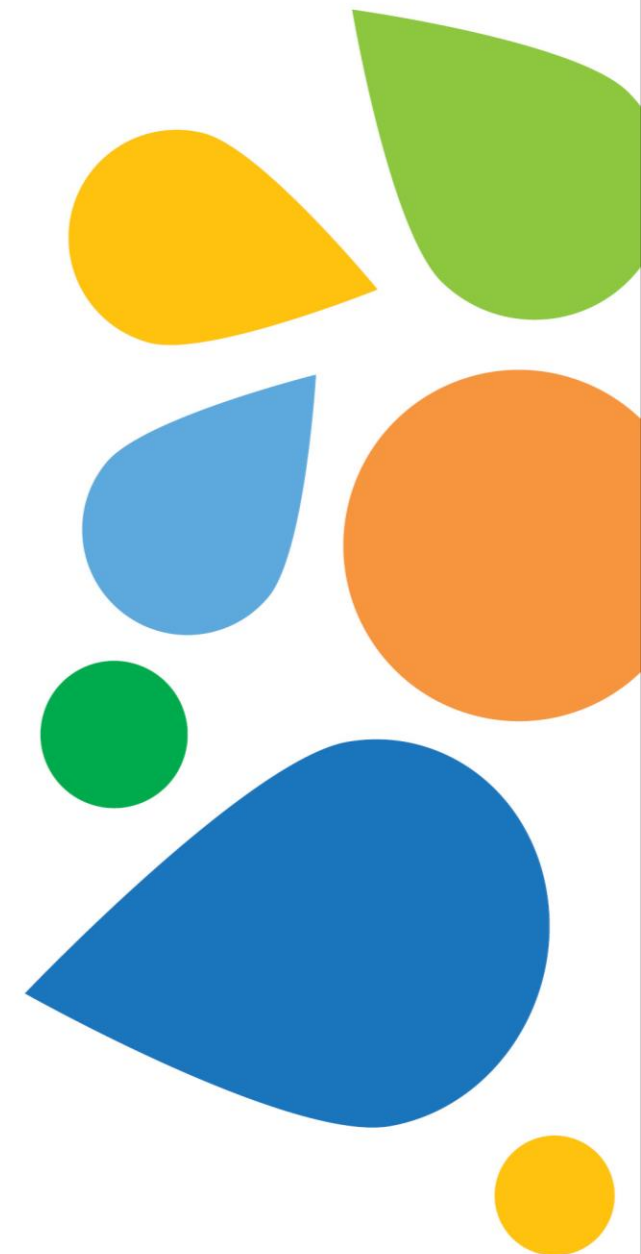
In addition to eco friendly identity we proudly announce that **Carbon Free Airport Project** has begun.

**DHMi Works,
Carbon Footprint Reduces!**





The global standard for airport carbon management



OVERVIEW

- Launched in 2009 by ACI EUROPE
- Developed by airports, for airports – based on cross-sectoral carbon management standards
- Only global carbon management standard for airports
- Independently administered
- Institutionally recognised
- Gone global as of 2014



June 2009
Europe

June 2013
Africa

November 2014
Latin America & Caribbean

December 2023
Level 5



November 2011
Asia-Pacific

September 2014
North America

November 2020
Levels 4/4+



GOVERNANCE

ACI EUROPE has the **overall responsibility** for ACA, and manages it in close cooperation with the other ACI regions and support by ACI World.



The **independent programme Administrator** guides airports through the application process (i.e., help desk), reviews and approves accreditations and oversees the appointment and training of verifiers.



An **independent Advisory Board** determines policy direction, oversees the programme's development and encourages external recognition. The Board is comprised of institutional representatives from the fields of aviation and environment.



A **technical Task Force** meets twice a year to review technical issues, make recommendations and ensure that the programme is aligned with international standards and developments, as well as evolving airport needs. The Task Force is comprised of airport representatives from selected accredited airports, ACI regional representatives and the Administrator. It is chaired by E. Fleuti, Zurich Airport.

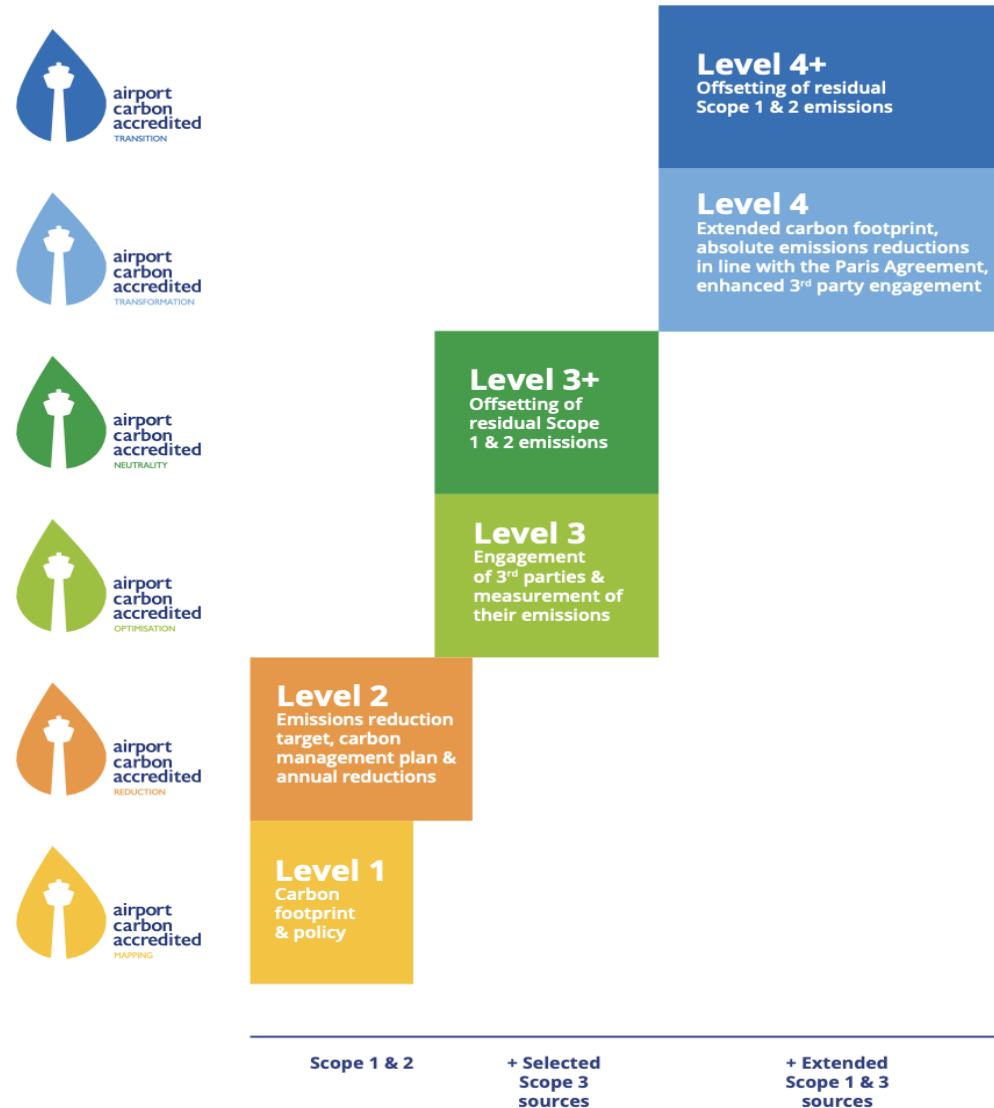


OBJECTIVES

- Provide **technical guidance** for airport carbon management
- Create a framework for public **recognition** of airports' efforts
- Show industry **leadership**
- Create a **community** of airports engaged in climate action



STRUCTURE



BENEFITS FROM THE ACCREDITATION

1

Identify the **sources** of airport emissions.

2

Achieve real and **measurable emissions reductions**.

3

Inspire **bold climate initiatives**.

4

Streamline internal processes.

5

Think and **act strategically** regarding carbon management.

6

Join forces with third parties to enhance climate action.

7

Share best practices and learn from other airports.

8

Drive operational and cost **efficiencies**.

9

Elevate the **public credibility** of the airport.

10

Boost **employee motivation**.

11

Access **green finance**.

12

Become part of a **global** industry effort.



EMISSION SCOPES



Which emissions can occur at an airport?

Scope 1

Emissions from airport controlled sources

- 01 Vehicles/ground support equipment belonging to the airport
- 02 On-site waste management
- 03 On-site waste water management
- 04 On-site power generation
- 05 Firefighting exercises
- 06 Boilers, furnaces
- 07 De-icing substances
- 08 Refrigerant losses

Scope 2

Emissions from purchased electricity

- 09 Off-site electricity generation
 - A Heating
 - B Cooling
 - C Lighting

Scope 3

Emissions from upstream and downstream value chain

- 10 Goods: water, materials, products, ... (Cat. 1)
- 11 Services: construction, shuttle, ... (Cat. 1)
- 12 Capital goods: Buildings, surfaces, vehicles (Cat. 2)
- 13 Energy & Fuels production offsite (Cat. 3)
- 14 Waste & waste water management (Cat. 5)
- 15 Staff business travel (Cat. 6)
- 16 Staff Commute (Cat. 7)
- 17 Aircraft and APU operation, flights and MRO (Cat. 11)
- 18 3rd party vehicles/ground support equipment and de-icing (Cat. 11)
- 19 Passenger travel to the airport (Cat. 11)
- 20 Cargo, goods to the airport (Cat. 11)
- 21 Tenant energy and electricity (Cat. 13)
- 22 Franchises (Cat. 14)
- 23 Investments (Cat. 15)

Note: The presented list of possible emissions sources at the airport is not exhaustive. Furthermore, the operational structure of every airport is different. Therefore, not all of the depicted emissions sources are present at every airport.

Design: inextramis.be - Illustrations: stock.adobe.com



KEY PRINCIPLES

- **Performance:** emissions reductions to be demonstrated as of Level 2
- **Reductions before offsetting**
- **Continuous improvement:** yearly/three-yearly accreditation renewals
- **Double assessment** of accreditation applications: by programme Administrator WSP and independent third-party verifiers



Key reference material



541 airports

Accredited globally

67

Airports
accredited
in North America

72

Airports
accredited
in Latin America
& Caribbean

287

Airports accredited
in Europe

85

Airports
accredited
in Asia-Pacific &
Middle East

30

Airports
certified
in Africa

Welcoming
4,6 billion
passengers a
year

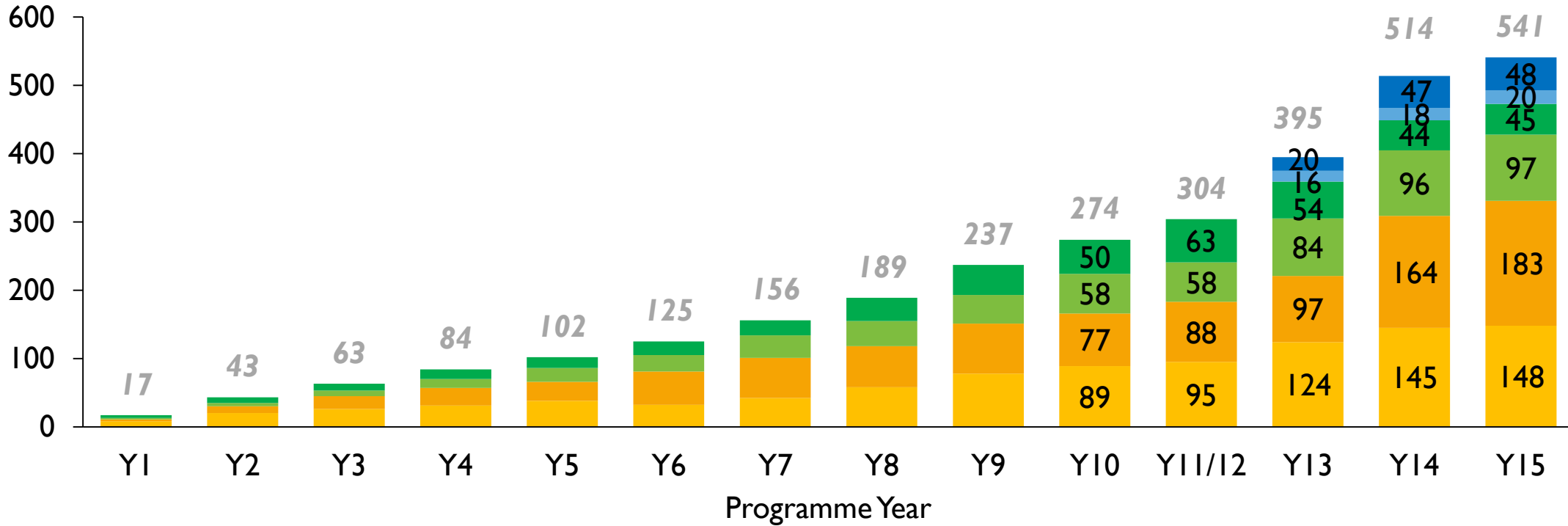
In 90
countries
across the
world

45,8% of
global air
passenger
traffic



541 accredited airports globally

■ Level 1
 ■ Level 2
 ■ Level 3
 ■ Level 3+
 ■ Level 4
 ■ Level 4+



COMING UP

- **ACA Level 5**



- Certifying “**Net Zero Carbon Balance**” on Scopes 1 & 2
- Full emissions calculation and roadmap to achieve Net Zero **Scope 3**
- Completing the Offsetting Manual to include **Offset Carbon Removal** solutions (for residual emissions only)





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A Short Video of ACA



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*541 accredited airport around the Worldwide

*50 accredited airports with different level in Türkiye

- MAPPING



Determine emissions sources within the operational boundary of the airport company. Calculate the annual carbon emissions. Compile a carbon footprint report.

» Learn more

33 Airports Level 1 Mapping

- REDUCTION



All of the above plus:
Provide evidence of effective carbon management procedures.
Show quantified emissions reductions.

» Learn more

13 Airports Level 2 Reduction

- OPTIMISATION




All of the above plus:
Widen the scope of carbon footprint to include third party emissions.
Engage third parties at and around the airport.

» Learn more

1 Airports Level 3 Optimisation

- NEUTRALITY



All of the above plus:
Offset remaining emissions for all emissions over which the airport has control with high quality carbon credits.

» Learn more

3 Airports Level 3+ Neutrality





*Applying via aca@wsp.com (WSP is authorised company)

*Select Level

*Annual Passenger Number

*Pay Fee

*Get an Account

*Find a Verifier

The screenshot shows the login page for the Airport Carbon Accreditation online tool. The page has a blue header with the logo and text: "Airport Carbon Accreditation Submit, Renew & Upgrade your Application". Below the header, there is a login form with the following fields and buttons:

- Username field: "Please enter a valid username" with the value "konya.aca@dmi.gov.tr".
- Password field: "Please enter a valid password" with masked characters "*****".
- Login button: "Login".
- Forgot password link: "Forgotten your details? Click here".
- Registration link: "Click here to register".

At the bottom of the page, there are two sections:

- "Get In Touch": "If you require further information about Airport Carbon".
- "Stay Informed": "Enter your email address here to keep up to date with our latest news".



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Application Page

*Draft

*Verifier Review

*Airport Review

*Admin Review

*Approval

Accreditation Level
Footprint
✓ Verification Credentials
✓ Organisational Boundary
✓ Operational Boundary
✓ Verify: Boundaries
✓ Benchmarks
✓ Carbon Footprint
✓ Verify: Carbon Footprint
Management
✓ Carbon Reduction Policy
✓ Verify: Application Completion
Verification Summary
Submit

Draft	Verifier Review	Airport Review	Admin Review	Approved
-------	-----------------	----------------	--------------	----------

Application Overview

Application Details

Date Started	25 Nov 2022
Airport	KonyaAirport
Airport Band	
Accreditation Level	Level 1
Questions Answered	17
Questions Remaining	0
Verifier	Okay Kayhanli
Verification Type	Verification completed off-site

Uploaded Documents

Footprint	
Organisational Boundary	
KONYA Havalimani Karbon Envanter Raporu 2021.docx	[Added by Airport] [Added at Draft stage]
Carbon Footprint	
Elektrik Kapsam 2 KONYA .2021.xlsx	[Added by Airport] [Added at Draft stage]
Hareketli Yanmali Kap 1 KONYA 2021.xlsx	[Added by Airport] [Added at Draft stage]
Sabit Yanmali Kapsam 1 KONYA.2021.xlsx	[Added by Airport] [Added at Draft stage]
DHMI_Konya Airport_Emission-2021.xlsx	[Added by Airport] [Added at Airport Review stage]
Management	
Carbon Reduction Policy	
Integrated Environmental Company Policy.jpg	[Added by Airport] [Added at Draft stage]
ISL.CYS.PRJ.KARBONSUZ HAVALIMANI PROJESİ UYGULAMA ESASLARI DOKÜMANI.tr.en.docx	[Added by Airport] [Added at Draft stage]

Application Report

Download PDF Report [Download](#)



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*ACA Calculations

- *Scope 1
- Stationary Combustion
- Transport Tools
- Scope 2
- Purchased Electricity
- Sold Electricity

DHMI ADANA AIRPORT GHG EMISSIONS		
SCOPE-1	Heating Boiler	308,363
	Generator	32,669
	Fire Drills	2,726
	Diesel Cars	103,368
	Gasoline Cars	4,461
	Gasoline Vehicles	3,110
	Diesel Vehicles	1,029
	Employee Transportation	57,822
	Scope 1 Total	513,548
SCOPE-2	Purchased Electricity	4.262,137
	Sold Electricity (Tenants)	511,826
	Sold Electricity (THY DOCO)	285,689
	Sold Electricity (TGS)	67,240
	Sold Electricity (HAVAŞ)	57,874
	Sold Electricity (THY OPET)	23,870
	Sold Electricity (ÇELEBİ)	6,476
	Sold Electricity (POAŞ)	25,828
Scope 2 Total	3283,334	
Scope 1+ Scope 2		3796,882



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Total GHG Emissions, exclude Biofuel CO2 (metric tonnes CO2e)	80,625
Biofuel CO2 Emissions (metric tonnes)	0

Activity Data The default emission factors are sourced from the US EPA Climate Leaders program or from the UK DEFRA (for air travel only).

Status	Source Description	Region	Mode of Transport	Scope	Type of Activity Data	Activity Data					Error Messages	GHG Emissions							
						Vehicle Type (For air transport, see footnote)	Distance Travelled	Total Weight of Freight	# of Passenger	Units of Measurement		Fuel Used	Fuel Amount	Unit of Fuel Amount	Fossil Fuel CO2 (metric tonnes)	CH4 (kilograms)	N2O (kilograms)	Total GHG Emissions, exclude Biofuel CO2 (metric tonnes CO2e)	Biofuel CO2 Emissions (metric tonnes)
Equipment Gasoline	Other	Road	Scope 1	Fuel Use						Gasoline*Litre	891.19 Litre				2.021			2.021	
Employee Transport	Other	Road	Scope 1	Vehicle Distance (e.g. Road Transport)	Light Goods Vehicle - Diesel - Year 1980-present	15326				litre/kilometre					5.985			5.985	
Diesel Vehicles	Other	Road	Scope 1	Fuel Use						On-Road Diesel Fuel	25021.87 Litre				68.295			68.295	
Gasoline Vehicles	Other	Road	Scope 1	Fuel Use						Gasoline*Litre	2483.5 Litre				5.853			5.853	

- Scope 1
- Transport Combustion
- Equipments
- Employee Transport
- Vehicles

Status	Source Description	Region	Mode of Transport	Scope	Type of Activity Data
	Equipment Gasoline	Other	Road	Scope 1	Fuel Use
	Employee Transport	Other	Road	Scope 1	Vehicle Distance (e.g. Road Transport)
	Diesel Vehicles	Other	Road	Scope 1	Fuel Use
	Gasoline Vehicles	Other	Road	Scope 1	Fuel Use



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Mitigation Measures:

Renewable Energy Investments

Solar Pannels





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Mitigation Measures:

Renewable Energy
Investments





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Mitigation Measures:

3 airports Tri-generation plant where electricity is generated by natural gas.





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Mitigation Measures:

Converting Heating Systems

From Fuel Oil to Natural Gas (LNG,LPG, CNG)

Replacing end-of-life systems with energy efficient systems.





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Mitigation Measures:

Lighting and HVAC ([Heating, ventilation, and air conditioning](#)) processes are all being controlled via automation.





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Mitigation Measures:

The ground services and other vehicles at the airport are changing to electric vehicles





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Mitigation Measures:

Usege of 400 hz and GPU for energy to aircraft instead of APU





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Mitigation Measures:

Converting to LED lighting Terminal and Outdoor





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Mitigation Measures:

Converting to LED
lighting Terminal and
Outdoor





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Mitigation Measures:

Greening works inside and outside the airport terminal





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ACI Europe Net Zero 2050 Commitment





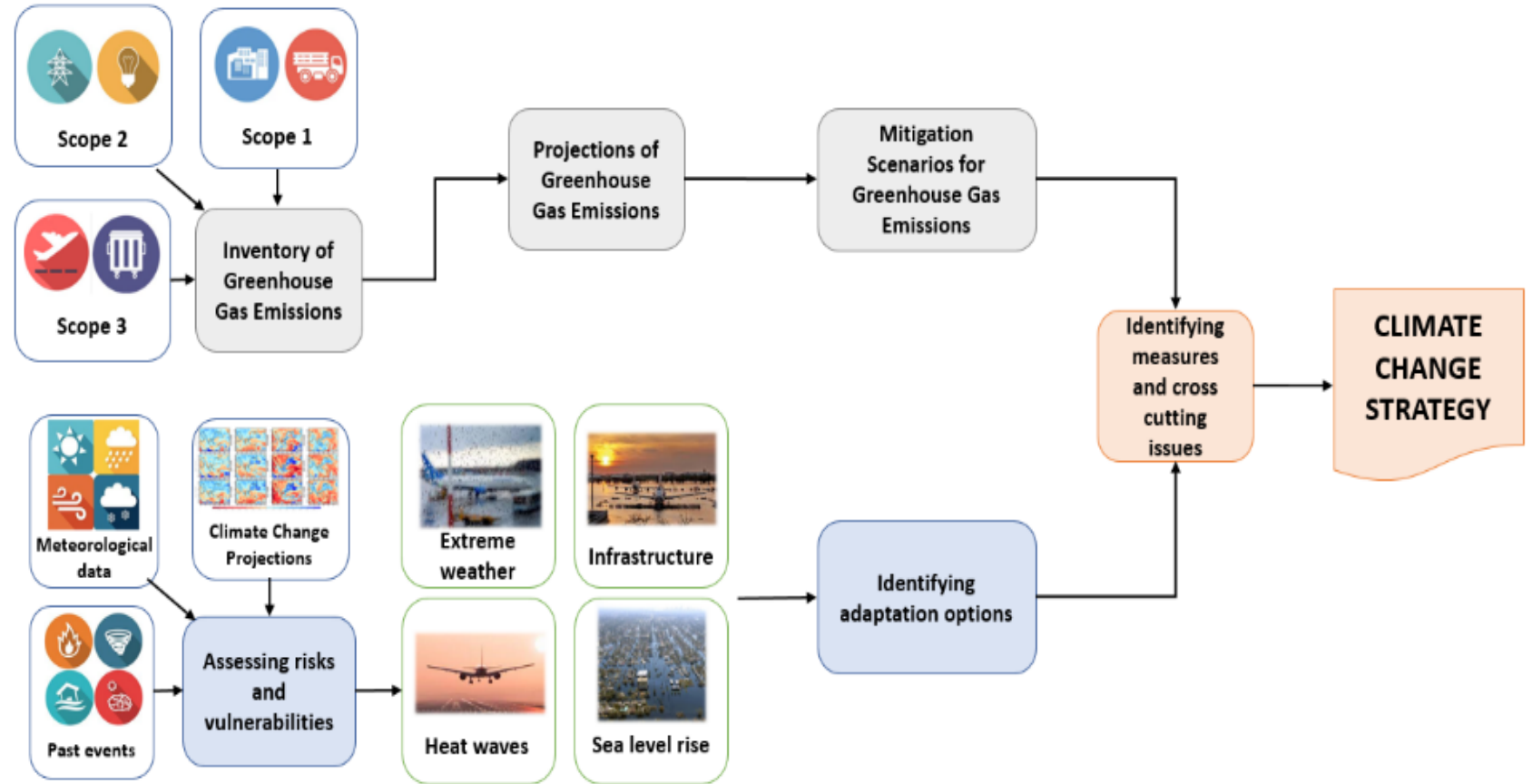
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Mitigation Measures:

Project: Preparation of Climate Change Strategies for airports

The Scientific And Technological Research Council Of Türkiye





Thanks for listening