8th ANNUAL REPORT ON ENVIRONMENTAL STRATEGY

Cretan, Continental Greece and Ionian Sea Regional Airports - Cluster A

Fraport Regional Airports of Greece A S.A.

July 2023 - July 2024

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List of Abbreviations

ACA	Airport Carbon Accreditation
ACI	Airports Council International
AQMS	Air Quality Monitoring Station
CA	Concession Agreement
CCD	Concession Commencement Date
E&S	Environmental and Social
EASA	European Aviation Safety Agency
EBRD	European Bank for Reconstruction and Development
EC	European Community
EIB	European Investment Bank
ESMS	Environmental & Social Management System
FG	Fraport Greece, i.e. jointly the three legal entities of: 1. Fraport Regional Airports of Greece A S.A. (FGA) 2. Fraport Regional Airports of Greece B S.A. (FGB) 3. Fraport Regional Airports of Greece Management Company S.A. (FGM)
FGA	Fraport Regional Airports of Greece A S.A.
FGB	Fraport Regional Airports of Greece B S.A.
FGM	Fraport Regional Airports of Greece Management Company S.A.
GG	Government Gazette
GHG	Green House Gases
HAF	Hellenic Air Force
HRADF	Hellenic Republic Asset Development Fund
HW	Hazardous Waste
IFC	International Finance Corporation
IPCC	Intergovernmental Panel for Climate Change
ISO	International Organization for Standardization
MP	Measurement Point
NMT	Noise Monitoring Terminal
PCB	Polychlorine Byphenils
RFF	Rescue Fire Fighting
SEP	Stakeholder Engagement Plan
SNM	Strategic Noise Map

WWTP	Waste Water Treatment Plant

Executive Summary

The 8th "Annual Report on Environmental Strategy of Cluster A" provides information on how Fraport Greece (FG) has met the Environmental Requirements of the Concession Agreement (CA) for the Upgrade, Maintenance, Management and Operation of Cretan, Continental Greece and Ionian Sea Regional Airports ("Cluster A" airports), with reference to the period July 2023 – July 2024.

The report outlines the practices followed by FG to control the potential environmental impacts from both operational and construction activities that took place at the airports and presents the ongoing high quality environmental management of FG.

Via a set of objectives and targets, with specific timeframe, this Environmental Strategy Report provides a framework to ensure that social, economic, and environmental goals are reflected in the development and daily operation of each airport.

1. Introduction

1.1. Fraport Greece - Overview

Fraport Greece (FG) was established in 2015 and is responsible for maintaining, operating, managing, upgrading and developing 14 regional airports in Greece over a period of 40 years.

The operational transfer of the airports to **FG** took place on April 11th, 2017.

FG consists of two concession companies, one company for Cluster A named "Fraport Regional Airports of Greece A S.A." ("Fraport Greece A", **FGA**) and one company for Cluster B named "Fraport Regional Airports of Greece B S.A." ("Fraport Greece B", **FGB**).

Fraport Regional Airports of Greece Management Company S.A. (**FGM**), is acting as management company and is responsible for central functions on behalf of Fraport Greece A and Fraport Greece B, such as employment of personnel and contracting of advisors and/or suppliers.

FGM employs 214 persons, whereas a total of 299 persons are employed by **FGA** at the 7 airports of Cluster A (July 2024).

The shareholders of **FG** are Fraport AG Frankfurt Airport Services Worldwide, Copelouzos Group and European Marguerite 2020 Fund.

Cluster A under the Concession Agreement of Cretan, Continental Greece and Ionian Sea Regional Airports, includes the following seven (7) airports:

- Thessaloniki "Makedonia" (SKG)
- Kerkira "Ioannis Kapodistrias" (CFU)
- Zakinthos "Dionisios Solomos" (ZTH)
- Kefallinia "Anna Pollatou" (EFL)
- Aktion (PVK)
- Kavala "Megas Alexandros" (KVA) and
- Chania "Ioannis Daskalogiannis"(CHQ)

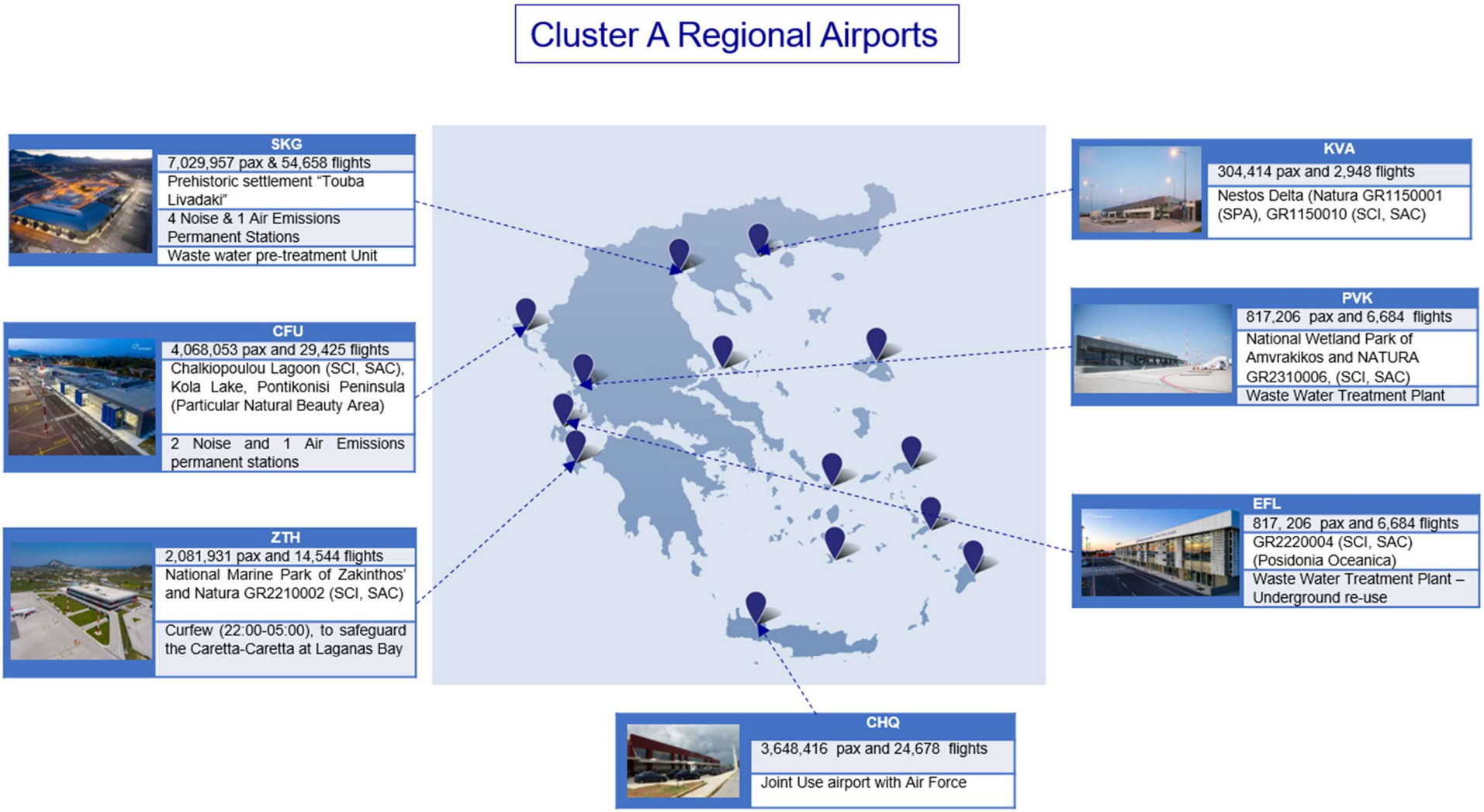


Figure 1: Fraport Greece Cluster A Airports

1.2. Structure of the Environmental Strategy Report

The Environmental Strategy Report outlines the airports' approach to control environmental impacts during operation and details the ongoing high quality environmental management of the airports. The objectives and time-framed targets outlined in this Report provide a framework to ensure that social, economic, and environmental goals are reflected in the development and daily operation of each airport.

Environmental aspects addressed are:

- Soil Quality
- Surface Water and Groundwater Quality
- Biodiversity
- Cultural Heritage
- Air Quality/ Emissions
- Noise
- Waste and Wastewater Management and
- Climate Change

For every environmental aspect, the potential impacts are presented, along with preventive measures.

2. FG's Environmental and Social Policy

The Management of **FG** has adopted an integrated Environmental & Social Policy for all our business units (headquarters and airports), having defined environmental and social protection as one of our main company goals. Environmental & Social Protection is the responsibility of all employees who need to realize the importance of their duties, take active participation in meeting the common goals and willingly commit to the results of their activities. In this context:

In this context:

- we are managing, operating and developing our units in an environmentally and socially responsible way in compliance with the applicable laws, regulations and other commitments;
- we are promoting greater environmental and social responsibility by training our employees and providing awareness programs for all concerned parties;
- we support a precautionary approach to environmental and social challenges in respect of cost-effectiveness, economic viability and sustainability;
- we encourage the development and dissemination of environmentally and socially friendly practices and technologies by applying environmental and social criteria when selecting goods and services;
- we engage in a regular dialogue with our community stakeholder groups and we incorporate their concerns and points of view in our corporate decision-making process. We communicate closely with our partners in the air transport value chain and work together to develop joint strategies and concepts directed towards continual improvement of environmental performance.

To meet our goals and targets towards sustainability we focus on the following key aspects:

1. Nature and biodiversity protection;
2. Wildlife trafficking prevention;
3. Resource use and waste minimization;
4. Waste management (hazardous, non-hazardous);
5. Wastewater management;
6. Energy management, carbon emissions and climate change;
7. Pollution prevention and emergency response;
8. Noise management and control;
9. Traffic management.

In the framework of the climate change aspect, we engage to manage and reduce our carbon emissions. In order to achieve this goal we calculate and report the direct and indirect Greenhouse Gas Emissions from all the emission sources in the airports' boundaries, based on the GHG Protocol (scope 1 and 2).

3. Legal & Other Requirements

3.1. Legal Requirements

The environmental management of **FG** satisfies the requirements of the national and European legislation and complies with standards, requirements and regulations of international organizations. In this context, specialized action plans are designed and implemented in the context of the continual improvement of the environmental performance of the organization.

Similar standards are followed by anyone else operating at the airports operated by **FG**, i.e. the so-called "Airport Users".

Table 1: Core Environmental Legislation as amended and in force

Greek Legislation No	GG	Content	European Legislation
General			
Law 1650/1986	A 160	Protection of the environment in Greece	
Law 4014/2011	A 209	New framework for the environmental permitting procedure	
Law 4685/2020	A 92	Modernization of the Environmental legislation	Directives 2018/844 and 2019/692
Law 4843/2021	A 193	Incorporation of EU Directive (E) 2018/2002	Directive 2018/2002 and 2018/1999
Law 4936/2022	A 105	National Climate Law - Switching to Climate Neutrality and Adapting to Climate Change, Urgent Provisions to Deal with the Energy Crisis and Protect the Environment	
Law 4964/2022	A 150	Clauses for the simplification of environmental permitting procedure	
JMD 5825/2010	B 407	Building Energy Efficiency Code	Directives 91/2002/EC and 31/2010/EC
JMD YPEN/DIPA/137497/9234/2024	B 77	Evaluation criteria of essential or not change factor of the environmental impacts in cases of differentiation of air transport projects environmentally licensed.	
Waste Management			
Law 4042/2012	A 24	Protection of the environment through criminal law, on waste management	Directives 2008/99/EC (WFD) and 2008/98/EC
Law 4819/2021	A 129	Integrated framework for waste management	Directives 2018/851 and 2018/852

Greek Legislation No	GG	Content	European Legislation
PD 82/2004	A 64	Management of used mineral oils	
PD 109/2004	A 75	Management of used vehicle tire	
JMD 41624/2057/E103/2010	B 1625	Management of batteries	
JMD 23615/651/Δ103/2014	B 1184	Management of Waste Electrical and Electronic Equipment (WEEEE)	
JMD YPEN/DDA/81490/1650/2021	B 4382	Incorporation of EU Directive 2018/849 for amending Directives 2000/53 / EC on end-of-life vehicles, 2006/66 / EC on batteries and accumulators and waste batteries and accumulators	
MD YPEN/DD A/36464/547/2023	B 2217	Extended Producer Responsibility Program for vehicle tires in application of par. 4 of article 72 of Law 4819/2021	
JMD YPEN/DNEP/36928/2227/2018		Modification of MD 23615/651 / E.103 / 8-5-2014 “Defining rules, terms and conditions for the alternative management of waste electrical and electronic equipment (AHHE), in accordance with the provisions of Directive 2012/19 / EC " on waste electrical and electronic equipment (AHHE) "	
JMD 36259/1757/E103/2010	B 1312	Management of Construction and Demolition Waste (CDW)	
JMD 13588/725/1985	B 383	Measures conditions and restrictions on hazardous waste management.	Directive 91/156/EC
Environmental & Aircraft Noise			
Directive (END) 2021/1967/EC		Commission Implementing Decision (EU) 2021/1967 of 11 November 2021 setting up a mandatory data repository and a mandatory digital information exchange mechanism in accordance with Directive 2002/49/EC of the European Parliament and of the Council	
Directive (END) 2021/1226/EC		Commission Delegated Directive (EU) 2021/1226 of 21 December 2020 amending, for the purposes of adapting to scientific and technical progress, Annex II to Directive 2002/49/EC of the European Parliament and of the Council as regards common noise assessment methods	
Directive (END) 2020/367/EC		Commission Directive (EU) 2020/367 amending Annex III to Directive 2002/49/EC of the European Parliament and of the Council as regards the establishment of assessment methods for harmful effects of environmental noise.	

Greek Legislation No	GG	Content	European Legislation
JMD ΥΠΕΝ/ΔΝΕΠ/27136/1793/2018	B 108	Environmental and aircraft noise	Directive (END) 2015/996/EC
JMD 211773/2012	B 1367	Environmental and aircraft noise	Directive (END) 2002/49/EC
JMD 13586/724/2006	B 384	Environmental Noise	Directive (END) 2002/59/EC
PD 80/2004	A 63	Noise management at EU airports	Directive 2002/30/EC
PD 1178/81	A 291	Measurements and checks on aircraft noise	
Environmental Liability			
PD 148/2009	A 190	Environmental liability for the prevention and remedy of environmental damage.	Directive (ELD) 2004/35/EC
Air Quality			
ΥΠΕΝ/ΔΚΑΠΑ/47808/892		Instructions regarding the installation of air pollution monitoring stations	
JMD 14122/549/Ε.103/2011	B 488	Ambient air quality	Directive 2008/50/EC
JMD 22306/1075/Δ103/2007	B 920	Target values and limits for assessment of concentrations of arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in atmospheric gases	Directive 2004/107/EC
Biodiversity			
PD 67/81	A 43	Protection of wild flora and fauna	
Law 3937/2011	A 60	Conservation of Biodiversity	Directive 92/43/EC
Archaeology & Sites of Cultural Interest			
Law 4858/2021	A 220	Ratification of the Code of Legislation for the protection of antiquities and cultural heritage in general.	
Law 3028/2002	A 153	Cultural heritage protection	
Wastewater			
JMD 145116/2001	B 354	Establishment of Measures, Conditions and Procedures for the Re-use of Waste Water and other provisions	
JMD 191002/2013	B 428	Amendment of JMD 145116/2011, which abolishes the relevant permit	
MD E1b/221/65	B 138	Emissions standards and limits of wastewater discharged into water intended for bathing and any other use except from water consumption. As modified by MD Γ4/1305/1974, Γ1/17831/1971, ΓΥΓ2/133551/2008	
Electromagnetic Fields			

Greek Legislation No	GG	Content	European Legislation
Decision 661/2012	B 2529	Procedures on licenses of land based antennas	

3.2. Approved Environmental Terms

According to the applicable national legislation, each airport operates under Approved Environmental Terms, which ensure the optimal operation of the airport in regards to protecting the environment.

The terms set limits, guidelines and monitoring schemes adjusted to the specifications of each airport, in order to defend all environmental aspects.

Table 2: Approved Environmental Terms Decisions of Cluster A airports

Airport	Environmental Terms Approval
SKG	• **105214/17.11.2000** as it has been modified by the following: ○ **125887/08.05.2007** ○ **204012/05.10.2011** ○ **12763/10.03.2016** ○ **9322/09.05.2018** ○ **80002/5297/30.08.2021** ○ **82165/5432/01.08.2023**
CFU	• **11945/08.03.2017** as it has been modified by the following**:** ○ **7208/30.03.2018** ○ **123235/8107/23.11.2022** ○ **56546/3776/02.04.2024**
CHQ	• **51226/25.10.2016** ○ **5100/05.03.2018** ○ **62349/4292/17.06.2022** ○ **72735/4749/05.07.2023**
ZTH	• **43392/96/17.02.1997** as it has been modified and extended by the following: ○ **127597/02.07.2010** ○ **175512/15.10.2014** ○ **36893/24.11.2017** ○ **77331/5227/25.07.2022** ○ **34978/2444/02.04.2024**
EFL	• **32647/94/09.05.1995** as it has been modified and renewed by the following: ○ **106586/08.08.2006** ○ **151698/04.09.2015** ○ **24341/19.05.2017** ○ **39772/26.09.2017** ○ **36368/20.12.2017** ○ **85360/3423/07.03.2019** ○ **57139/3842/24.05.2023**
PVK	• **11543/07.03.2017** as it has been modified by the following: ○ **50502/08.12.2017** ○ **133953/8672/16.12.2022**
KVA	• **84821/95/08.07.1996** as it has been modified and renewed by the following: ○ **105624/14.11.2006** ○ **200818/23.07.2012** ○ **172044/09.04.2014** ○ **24353/19.05.2017**

Airport	Environmental Terms Approval
	○ **37774/20.12.2017** ○ **55723/3711/19.05.2023**

3.3. Stakeholder Requirements

FG, values the relationships build with business partners and local communities. Meaningful Stakeholder Engagement is the basis for building strong, constructive, and responsive relationships that are essential for the successful management of a project's environmental and social issues.

This is achieved by the establishment and implementation of a corporate Stakeholder Engagement Framework (SEF) defining the established and implemented process between FG and stakeholders during the whole life-cycle of the project.

Local (airport specific) Stakeholder Engagement Plans (SEPs) are in place for every FG operated airport, outlining how FG communicates and seeks feedback from stakeholders in each location. The local SEPs are designed to guide stakeholder consultations leading up to all activities of the operation of each airport. The overall goal is to implement a well-managed, open and meaningful stakeholder dialogue, sharing of information and knowledge to build long-term synergies and collaboration with local communities.

Each local (airport-specific) SEP has the following structure:

- updated list and classification of concerned (affected or interested) stakeholders;
- past stakeholder engagement events, incl. relevant feedback;
- provisioned dates and type of upcoming stakeholder engagement events;
- communication tools per event; and
- note about the grievance policy.

➢ Stakeholder Identification

The concerned stakeholders at each **FG** operated airport were identified during the project preparation phase, as well as via the relevant Social Baseline Studies conducted in years 2017-2018 and is continuously updated.

The current list of concerned stakeholders of each airport is listed in the relevant local SEP, which is a “live” document maintained by FG. Both the SEF and the site-specific (local) SEPs are regularly reviewed and updated as necessary, ensuring that FG is aware of those that should be involved in the engagement process.

The groups of stakeholders as per the relevant mapping of FG are the following:

- Local community
- Airport Users
- State Authorities and Institutions
- Non-Governmental Organizations (NGOs)
- Professional Associations
- Scientific and Environmental Organizations
- Media
- Vulnerable Groups

4. Sustainable Development

4.1. Overview & Objectives – Environmental & Social Management System

Company Mission:

The objective of **FGA** is the safe, secure, and efficient management of the seven (7) Greek Regional Civil Airports of Thessaloniki (SKG), Kerkira (CFU), Zakinthos (ZTH), Kefallinia (EFL), Aktion (PVK), Kavala (KVA) and Chania (CHQ).

FG provides the infrastructure and necessary services for meeting, sending off and serving of airplanes, passengers, visitors, baggage, cargo and mail according to the best practices and the applicable legislation.

FG aims to create a pleasant experience for airport users, thus creating new business opportunities for concessionaires and service providers; as well as to make the airports attractive and environmentally friendly destinations for passengers, tour operators and airlines in the region.

We constantly improve the quality of our services, productivity and environmental performance in order to keep our market place in the long term.

FG ensures that:

- the Environmental & Social Policy is communicated to all employees and persons working on **FG's** behalf;
- this policy and the results of the activities are communicated to the Shareholders, to Second and Third parties as appropriate, and to the Public;
- this policy and the relevant Management System (ESMS) is developed, implemented, reviewed and systematically improved to achieve continual improvement of performance in the Environmental fields, setting appropriate objectives and targets;
- this policy is reviewed on an annual basis.

Requirements

FG has incorporated, as applicable, international environmental and social standards (EIB, EBRD, IFC, etc.), as well as policies and guidelines of its shareholders (mostly by Fraport AG) in the development of its own respective Environmental & Social Management System (ESMS) in order to address the environmental and social impacts and issues associated with each airport project.

In the context of the ESMS, which has been based on the ISO 14001:2015 requirements, **FG** has identified the key environmental and social management issues for the following areas:

- Pollution Prevention: noise, vibrations, storm water, wastewater, non-hazardous waste, hazardous waste, hazardous materials, soil/groundwater protection (leaks & spills), air emissions.
- Community Health, Safety & Security
- Biodiversity Conservation
- Resource Efficiency (water, energy, raw materials)
- Cultural Heritage

for which, it takes the appropriate control and monitoring measures.

FG, through promotion of sustainable growth of air-travel, is supporting local communities by boosting regional financial activity and job creation. The Project is enhancing sustainable local working conditions and hiring, both by **FG** and business partners.

The ESMS complies with all ordinances, statutes and regulations of the Greek State Agencies and European Union policy and legislation related to the protection of the environment.

The ground handling services providers as well as the fuel handlers in the airports hold an International Standard ISO 14001:2015 or equivalent.

For construction projects the contractors must elaborate and enforce a project specific Health Safety & Environmental Plan.

4.2. Environmental Provisions as incorporated in Planning & Designs

Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific environmental risks associated with their activities from resources consumption. Tenants are encouraged to conserve energy through KENAK, the Greek state “Regulation on the Energy Performance of Buildings” and the technical guidelines issued by the Technical Chamber of Greece to be applied to all new and extensively renovated airports buildings. Recommendations are provided to tenants during audits on methods to reduce their energy and resource consumption and waste generation.

➢ Energy

Energy conservation as already incorporated in the design is achieved through:

- terminal use minimization during winter period by isolating unnecessary parts of the buildings with minimal use;
- protection of the building against outdoor adverse conditions by enhancing shell insulation specification, solar protection glazing and / or external shading;
- use of natural light preferred where possible;
- high efficiency chilled and hot water production equipment; and

- adjustable energy consumption to variable load demand (variable flow systems).

➢ Water Conservation and Quality

- monitoring of water quality,
- monitoring water consumption;
- spill management, oil separators and closed fuel delivery systems as foreseen in the environmental terms.

➢ Resources (materials and waste management)

The following criteria are used, when possible for the selection of materials that reflect our sustainability approach:

- reuse of building & appropriate excavation materials onsite;
- use of lower biochemical oxygen demand (BOD) de-icing materials;
- use of nontoxic pest-control products.

5. Soil Quality

5.1. Overview

FG's objective is to protect soil from airport activities and appropriately manage and/or rehabilitate any contaminated sites.

The majority of contaminated sites are associated with historic activities on and off each airport including spills, landfill activities and constituents of firefighting foams.

Some activities that could affect soil are:

- construction and earthworks;
- landscaping activities including vegetation removal and weed control;
- storage, handling, use and disposal of hazardous materials:
- aircraft refuelling, vehicle and aircraft wash down;
- aircraft, vehicle, mechanical plant and electrical equipment maintenance;
- car parking;
- waste management infrastructure, storage and disposal; and
- surrounding land use activities.

These activities could cause:

- contamination from spillage, leakage, seepage, or residual runoff from hardstand areas;
- migration of existing contamination from the original source through natural pathways or disturbance during construction;
- erosion.

5.2. Soil Management Monitoring Program

FG is regularly inspecting the airport, tenant, contractor and operator activities. Where there is soil or groundwater contamination caused by their operations, airport operators are required to undertake relevant measures to monitor, manage or remediate the contamination (obligation imposed by the Approved Environmental Terms and the polluter-pays principle).

According to article, 13.4 of the Concession Agreement **FG**, aims to remediate any identified pre-existing contamination within the concession sites.

Actions to manage potential impacts to soils include:

- periodic measurement campaigns to evaluate soil pollution and surveys of polluted sites as well as to monitor potential pollution;
- remediation of contaminated zones;

- activities with the potential to contaminate soil or groundwater will undergo a risk assessment to inform appropriate management procedures;
- procedures and resources in place to immediately treat accidental spillages.

Table 3: Targets for soil management

Target	Timeframe
Coastline Monitoring for erosion	In Thessaloniki as appropriate after the completion of State Works
Environmental Baseline Report (repetition)	Scheduled for 2025
Investigation for PFA's Baseline Report	2025

6. Surface Water & Groundwater Quality

6.1. Overview

FG's objective is to protect surface water and groundwater from airport activities and appropriately manage or rehabilitate any contaminated sites.

The majority of the airports of Cluster A, with the exception of Chania (CHQ), are near coastal areas and are typical of coastal environments. Being close to the sea, surface and groundwater levels and quality can be susceptible to quality and quantity alterations affected by sea level rise, tidal influences and flooding.

In addition, some activities that could affect water quality may be:

- changes to the drainage network, leading to increased flow velocities or reduced flood storage capacity;
- development that creates increased impermeable areas and increased runoff;
- construction, earthworks and vegetation removal;
- weed and pest control;
- refuelling;
- vehicle and aircraft cleaning;
- aircraft, vehicle and equipment maintenance;
- collection, storage, handling, use and disposal of hazardous materials;
- waste management infrastructure and storage;
- upstream land uses;
- known and potentially contaminated sites;
- potential malfunction of sewage system and wastewater treatment installations.

These activities may cause:

- pollution from spillage, leakage or seepage into storm water infrastructure;
- Impact on known and potentially contaminated sites;
- changes to the upstream or downstream flooding regime and possible impact on local water drills;
- increased flow velocities, leading to erosion;
- creation of mosquito-breeding habitat leading to public health risks;
- attraction or spread of pest animals and weeds;
- possible impact local on fauna and flora.

6.2. Water Monitoring Program

FG is developing water monitoring programs aiming to eliminate any potential surface and groundwater environmental disturbance.

Potable, surface and groundwater quality is monitored at various sites regarding various physicochemical parameters by sampling:

- terminal water network;
- monitoring boreholes;
- surface water across the airports (open drainage system).

All analyses are conducted at contracted accredited laboratories.

Measures to manage potential impacts to surface water and groundwater quality include:

- implementation of water protection measures as described in the Environmental Terms for each airport;
- spill response and reporting procedures;
- waste management procedures;
- installation and maintenance of storm water treatment infrastructure (oil-separators and sand traps);
- tenant and construction audits with routine inspections;
- incorporation of existing surface water and groundwater information during planning of the new developments;
- drainage infrastructure designed and modelled to prevent potential flood impacts.

Table 4: Target for water quality monitoring

Target	Timeframe
Water management monitoring programs	Ongoing - Annually
Investigation of quality parameters and evaluation of monitoring program case study SKG	Scheduled for second half of 2024
Environmental Baseline Report (repetition)	Scheduled for 2025
Assessment study for 6 years water quality monitoring (remaining airports)	2025

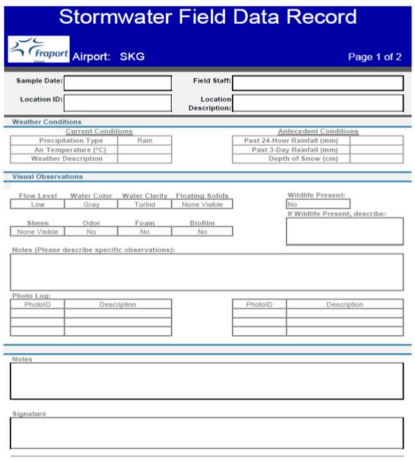
6.3. Achievements

✓ Water Quality Monitoring Program**:** which consists of laboratory analyses of surface and groundwater samples taken in predefined positions within the airport throughout the year.

- The analyses are performed by accredited laboratories. FG personnel has received appropriate training to conduct sampling.
- Samples of surface runoffs and samples from monitoring wells in all 7 Cluster A airports are analysed for various chemical parameters including but not limited to pH, BOD_5, COD, DO, TSS, TN, TP, heavy metals, TPH, PAHs, oil & fats, BTEX and PCBs.
- Fuel handlers conduct their monitoring analyses as per the Environmental Terms requirements. **FG,** in cooperation with the Fuel Handlers, monitors the results and undertakes proper actions if necessary.

Figure 2: KVA storm water run-off sampling

Figure 3: EFL storm water runoffs sampling



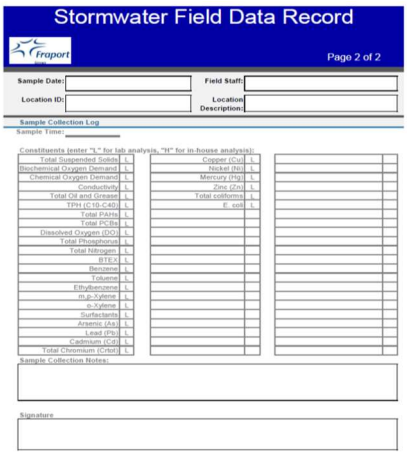


Figure 4: Storm water field data record. Airport Engineers have received relevant training in order to perform the sampling. Post sampling the airport staff fills in the relevant form.

✓ All the Waste Water Treatment Plants (WWTP) are monitored for treated effluent quality and re-use is performed in certain cases.

7. Wildlife Hazard Management & Biodiversity Conservation

7.1. Overview

The Wildlife Hazard Management Programme is designed and implemented for each airport operated by Fraport Greece, in compliance with regulatory framework and tailor made to the local environmental conditions. Aktion Airport and Chania Airport "Ioannis Daskalogiannis" are excluded as per the provisions of the Concession Agreement.

Wildlife hazard identification, assessment and management on and off-airport aims to reduce the presence of species constituting a risk to flight safety. Understanding of how each species uses a habitat is key for the development of an effective wildlife hazard management programme as well as for biodiversity conservation initiatives.

The Biodiversity Conservation Programme provides a framework within which Fraport Greece opts to manage biodiversity at the airport areas and its close vicinity. This Fraport Greece programme continually improves its performance in the specific environmental aspect, under the framework of the Environmental & Social Management System (ESMS). The programme includes the Biodiversity Conservation Action Plan 2021-2025 for the 14 regional airports operated by Fraport Greece and aims to meet the below objectives:

1. ***Biodiversity Conservation Objective:*** to conserve the airport biodiversity for non-hazardous species
2. ***Grassland Preservation Objective:*** to preserve the existing grassland areas of the airport and their botanical diversity
3. ***Wetland Conservation Objective:*** to conserve open-water areas not attracting hazardous birds
4. ***Marine Environment Conservation Objective:*** to conserve significant coastal/marine habitat and species of airport surrounding areas
5. ***Conservation of Local Charismatic Species:*** protection and showcase of charismatic or endangered species present at airport surrounding areas (e.g. Golden jackal)

7.2. Biodiversity Conservation Action Plan

For the achievement of the objectives set, a number of actions take place which include:

➢ ***Actions in terrestrial ecosystems***

- Extension of wildlife monitoring to include apart from birds, mammals, amphibians, reptiles insects and invertebrates in order to acquire a comprehensive database of the biodiversity of the airports and their close vicinity in a 5 year timespan from 2021-2025.
- Systematic and thorough monitoring of bird species, their populations and their reproduction on and off-airport up to an area of 13km radius.
- Participation in tackling illegal animal and plant trade in airports.
- Monitoring bat species presence at airports.
- Monitoring the presence of bird species in difficult to access areas and at night hours with the use of acoustic recorders.
- Trapping, ringing and relocation of Common Kestrels that are active in Thessaloniki airport to a suitable habitat away from it.

Figure 5: Ringed common Kestrel at Thessaloniki airport

- Common Kestrel stomach content and pellet analysis at SKG airport in order to study the species' diet, and the adoption of conservation measures to limit the possibility of collision with aircraft.
- Monitoring of mammals like the Golden Jackal inside airport boundaries with the use of camera traps.
- Monitoring of the reproductive population of the Crested Lark at Thessaloniki airport.
- Recording of the airport vegetation and identification of plant species that can be used as positive botanical indicators, e.g. orchids.
- Continuous communication and coordination of the above mentioned actions between the wildlife team and the airside supervisors of the airports.
- Dissemination of results of the biodiversity program in relevant scientific conferences.

Cooperation with the Aristotle University of Thessaloniki for the implementation of dissertations inside the boundaries of Thessaloniki and Kavala airports.

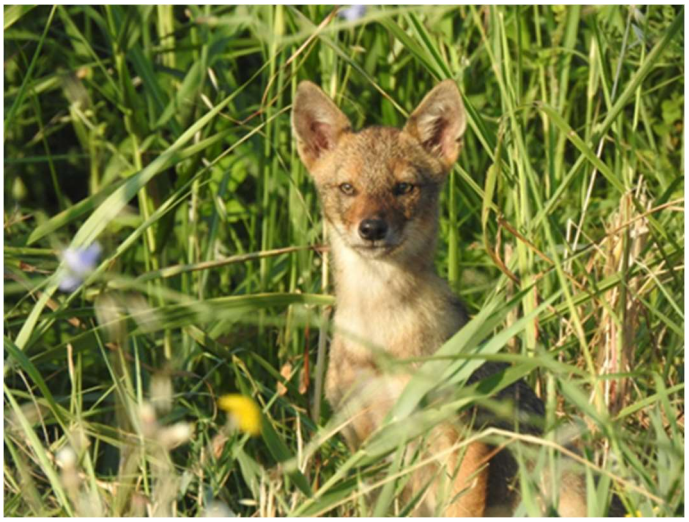


Figure 6: Golden Jackal at Kavala airport

- ***Actions in marine ecosystems***

  Monitoring of the benthic communities of marine environments near Kerkira and Aktio airports. Detailed reference of the actions for the achievement of the above mentioned targets are included in the Biodiversity Conservation Program.

7.3. Achievements

- ***Monitoring of bat species active at Thessaloniki airport***

Seven bat species were recorded with the use of acoustic recorders at Kavala airport.

- ***Monitoring of the benthic communities of marine environments near airports***

Monitoring and recording of the benthic communities near Thessaloniki and Kavala airports has been completed.

- ***Implementation of dissertations inside the boundaries of Thessaloniki and Kavala airports in cooperation with the AUTH***

A dissemination regarding the ecotope types of Thessaloniki airport has been submitted and presented.

8. Cultural Heritage

8.1. Overview

The sustainable and respectful management of the heritage values will be achieved by:

- developing and maintaining a detailed knowledge of the heritage values that exist within and in the proximity of FG's concession areas;
- identifying heritage values early on in the development process so that those heritage values can be considered, remain undisturbed and protected;
- developing and submitting solutions under relevant legislation, in consultation with relevant stakeholders, to impact those heritage values when that cannot be avoided;
- developing and implementing procedures for appropriately managing heritage values using the guiding principles of avoid, protect and mitigate;
- ensuring compliance with heritage legislation, associated statutory approvals and the provisions of the concession agreement; and
- educating **FG** personnel of the heritage values that exist within and in the proximity of **FG's** concession areas and the appropriate actions when interacting with these values.

8.2. Cultural Heritage Management Plan

FG's management of cultural heritage is following procedures laid out in the Concession Agreement, consistent with the following practices:

- ❖ test excavations to determine the existence of Antiquities;
- ❖ vibration monitoring as per relevant environmental terms;
- ❖ maintain the existing building structure, envelope, and interior non-structural elements of a historic building or contributing building in a historic district.

Some of the airports of Cluster A are in proximity of cultural heritage important values (e.g. proclaimed archaeological sites, churches, monasteries, sites of important aesthetic value etc.). Especially in the case of Kerkira (CFU) the proclaimed archaeological site of "Old Kerkira Town or Palaiopoli" (GG 178/AAP/2012) boundaries lie within the NE boundary of the concession area.

Activities with the potential to affect cultural heritage at the airports include any ground disturbing activities that could damage known or unknown heritage value. These would include:

- landscaping activities;
- construction/demolition works that cause ground vibrations.

Table 5: Protection of cultural Heritage targets

Target	Timeframe
Develop and maintain a heritage database within and in the proximity of FG's concession areas	Revised as necessary
Increasing awareness by FG personnel and airport tenants of the diverse heritage values within FG's concession areas, the importance of these values and the process to protect these values	Ongoing
Vibrations monitoring plan for Thessaloniki Airport (SKG) archaeological site "Toumpa Livadaki"	Annually

8.3. Achievements

- ✓ Catalogue with relevant heritage sites for each airport.
- ✓ The catalogue was part of the Heritage Action Plan that was implemented by **FG** and includes the following (where applicable) per airport:
  - ✓ Archaeological places and their relevant protection zones.
  - ✓ Places of significance to the cultural and spiritual beliefs.
  - ✓ Artefacts and the remains of important structures.
  - ✓ Sites of exceptional beauty and traditional settlements.
  - ✓ Architectural landmarks & buildings of beauty and/or importance.
- ✓ Chance Finds procedure, (part of the Heritage Action Plan) aims to address the possibility of Antiquities becoming exposed during ground altering activities within the Concession Areas of the 14 Regional Airports and to provide protocols to ensure that the Antiquities are documented and protected as required.

  The purpose of the procedure is to:
  - ➢ avoid significant adverse impacts to antiquities;
  - ➢ describe the provisions for managing chance finds through a chance find process, which will be applied in the event that cultural heritage is subsequently discovered.

  This procedure includes guidelines and minimum requirements for all involved parties to define their own chance find procedures according to the nature and scale of their construction works.
- ✓ Annual report for vibration monitoring for Thessaloniki Airport (SKG) archaeological site "Toumpa Livadaki"

9. Air Quality

9.1. Overview

FG manages airport operations in a way that prevents air emissions causing a nuisance or harm to neighbouring areas.

Some activities that generate air emissions include:

- aircraft ground operations including refuelling;
- vehicle and equipment operations;
- use of air-conditioners, pumps and generators;
- use of ground power units and auxiliary power units;
- construction and demolition works.

These activities could cause:

- air emissions, including greenhouse gases and potentially ozone depleting substances;
- reduced visibility (mainly from dust or smoke);
- public nuisance or health issues;
- odours (e.g. fuel odours).

9.2. Air Quality Monitoring Program

Measures to manage potential impacts to air quality include:

- environmental awareness and inductions;
- monitoring program and implementation of the measures imposed by the Environmental Terms. The program includes type and frequency of monitoring parameters and monitoring equipment. The collected data are being evaluated, air pollutant contours are being calculated, and the subsequent trends are being presented. Relevant measures will be adopted in case of limits exceedance.
- proper maintenance of vehicles and equipment.

Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific air quality environmental risks associated with their activities.

Table 6: Targets for air quality monitoring

Target	Timeframe
Ensure appropriate maintenance of vehicles and equipment	Ongoing – Throughout the concession period
Air Quality Monitoring Program for all airports	As per E.T.s

9.3. Achievements

The results of the monitoring program are included in the Annual Environmental Bulletins and published on FG website as per the requirements of the Environmental Terms for each airport of Cluster A.

- ✓ Permanent air quality monitoring stations (AQMS) at SKG (one station) and CFU (one station).
- ✓ Annual monitoring campaigns with mobile stations at CHQ, EFL and ZTH.

10. Noise

10.1. Overview

Noise requirements apply to noise associated with ground-based airport activities and aircraft landing and take-off procedures as well as ground running on apron.

Noise receptors surrounding the airport that could be affected are predominantly the surrounding or adjacent in some cases, urban areas and local fauna.

During maintenance works, appropriate practices and measures are undertaken to reduce impact.

FG manages noise in such a manner to minimise nuisance to, or adversely affect, neighbouring receptors. Activities that generate noise may be:

- aircraft landing and take-off procedures;
- aircraft ground running;
- aircraft maintenance and testing activities;
- fixed and mobile equipment operation;
- general airport and infrastructure maintenance activities;
- internal road network traffic;
- tenant and operator activities;
- construction and demolition works (temporary only for the duration of future works implementation).

These activities could cause:

- nuisance to airport operators and the community;
- impact on roosting and breeding behaviour of local fauna.

10.2. Aircraft Noise Monitoring Program

FG is producing a noise monitoring program during the operational period, for each airport.

The monitoring plan and the implementation of the proposed measures is defined by the Environmental Terms. The plan includes type and frequency of monitoring parameters and monitoring equipment. The collected data are evaluated, noise contours are calculated, and the subsequent noise trends are presented. Corrective actions are implemented in case of limit exceedance.

Measures to manage potential impacts from noise emissions include:

- environmental awareness and inductions;
- recording, investigation and follow-up of noise enquiries;
- implementing operational procedures for noise- generating activities;

- tenant and construction audits;
- aircraft ground running policy and review of the policy
- maintenance of vehicles and equipment.

Table 7: Targets for noise monitoring

Target	Timeframe
Noise Monitoring Plan	As per E.T.s
Timely investigation of any exceedances reported and/or complaints	When required
Strategic Noise Mapping	SNM 2027 for Thessaloniki Airport "Makedonia" –
Balanced Approach Study for CFU	Ongoing

10.3. Achievements

The results of the monitoring program are included in the Annual Environmental Bulletins and published on FG website as per the requirements of the Environmental Terms for each airport of Cluster A.

- ✓ Permanent noise monitoring terminals (NMT) at SKG (four NMTs) and CFU (two NMTs). Data are stored in an online server and monitored by FG's Environmental section contractor.
- ✓ Annual monitoring campaigns with mobile stations at PVK, KVA CHQ, EFL and ZTH according to E.T.s.

Figure 7: Noise monitoring terminal at Corfu (CFU) airport (MP01)

- ✓ In addition to the measurements, noise level predictions were performed using simulation software and noise contour maps are created (L_{den} and L_{night}) to identify population and buildings within settlement boundaries that are subject to noise levels higher than the limit values according to E.T.s.

FG has set up a communication channel for the public via two email accounts (info@fraport-greece.com & environmental@fraport-greece.com) where complaints (e.g. for noise) or even proposals for improvement can be submitted After a complaint is received, related to environmental noise, the Environmental Management Section undertakes the actions to verify the source of the problem and implement all necessary corrective actions if necessary.

11. Waste Management

11.1. Overview

FG ensures that management (collection, storage, and safe post-management) of waste materials (hazardous and non-hazardous) is carried out in accordance with applicable legislation, standards and State planning for waste management.

Recycling and re-use are both of great importance for **FG** and are being implemented, where possible, in both operational and construction waste.

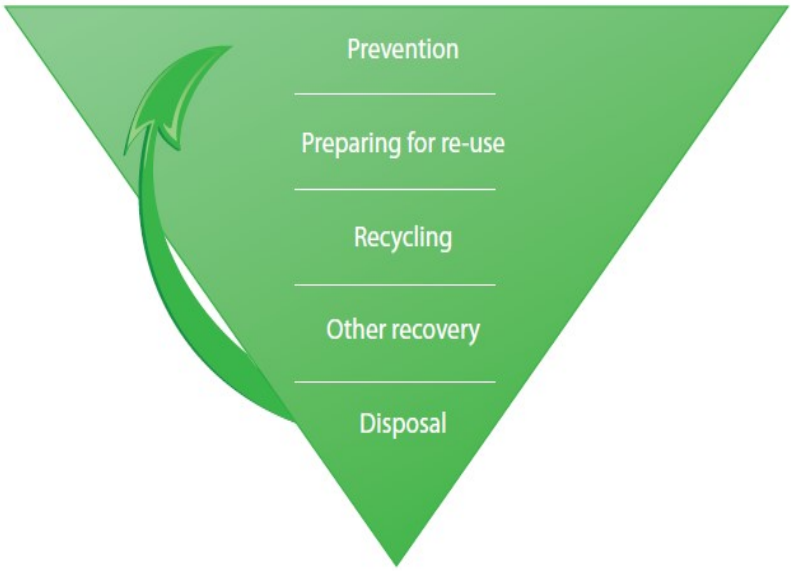


Figure 8: FG's waste management hierarchy

The main objective is to promote waste minimization and maximize recovery of materials where possible.

With regards to Municipal Solid Waste (MSW), sorting at the source is implemented in all airports, with focus on the four (4) basic categories of recyclables (paper, plastics, metals and glass), residual MSW and bulky waste. Separate bio-waste management is under development.

Airport operations inevitably produce solid waste on a daily basis from a variety of users involving personnel, passengers, tenants and handlers. Also, a variety of hazardous materials are used such as lubricant and mineral oils, batteries and accumulators, Electric and Electronic Equipment, etc.

Where feasible, FG is substituting, reducing or eliminating the use of hazardous materials and those used are appropriately managed according to relative legislation.

Airport users who produce or receive waste from individuals or other parties retain the responsibility for its management. Therefore, they are required to ensure that the management of waste is safely carried out, through direct cooperation with licensed public or private waste collector or through

FG's central waste management system, where applied. Especially for MSW, FG established a Central MSW Management System at all airports.

Some activities related to hazardous materials may be:

- bulk fuel storage and handling including aviation, unleaded and diesel fuels;
- aircraft refuelling, vehicle and aircraft wash down;
- aircraft, vehicle and mechanical plant and electrical equipment maintenance;
- construction, earthworks and demolition works;
- general airport operation, construction, maintenance and landscaping including weed and animal pest control.

These activities could cause:

- accidental release of hazardous materials, leading to water, land and air contamination;
- human and ecosystem health impacts.

11.2. Waste Management Plan

Waste Management procedures have been developed so that all waste streams are properly identified, segregated and treated, along the following lines:

- Separation of solid waste types at the point of generation (sorting at source): use of separate collectors (bins, containers, press-containers) for separation of paper and cardboard, metals, plastics, glass, and bio-waste, where feasible.
- Dedicated areas for the collection and storage of recyclable materials.
- Hazardous waste disposed properly by licensed handlers.
- Waste containers around the airport for passengers and tenants - transferred to onsite waste containers and then transported to offsite treatment or disposal facilities.

Airport users and contractors are also required to ensure appropriate systems and/or procedures are in place to manage specific environmental risks associated with their activities and abide by the relevant legislative requirements for waste management.

Hazardous materials in relation to **FG's** activities are managed under different mechanisms depending on the nature of the activity.

These mechanisms are included in:

- Environmental Management Plan – includes procedures for spill response, environmental incident reporting, tenant audits, etc.
- Airport Emergency Response Plan – detailed procedures for dealing with major incidents in relation to hazardous materials, fuel and oil spills.

Table 8: Targets for waste management

Target	Timeframe
5% increase of 2023 MSW recovery rate comparing with 2022 (Cluster A)	▲5,9% (achieved) New target to be set in Q3 2024.
Monitor chemical storage and handling practices during internal audits	As per audit schedule
Monitor availability of up-to-date Safety Data Sheets at points of use during internal and tenant audits	As per audit schedule
HW collection point for all airports (FG HW only)	Q2 2025
Non Hazardous Waste yards for all airports	Q2 2025

11.3. Achievements

- ✓ Integrated management of non-hazardous waste, with focus on sorting at source of paper and cardboard, plastics, metals, glass and bio-waste, in order to maximize materials recovery.
- ✓ Management and recycling (where feasible) of hazardous waste including oils, batteries, electronic and electrical equipment, via Alternative Management Systems and private licensed collectors.

12. Climate Change

12.1. Overview

FG manages airport operations in order to prevent the emissions of GHG, while also looking at the airports resilience to climate change.

12.2. Calculation & reduction of GHG emissions

Measures to manage and reduce emissions include:

- environmental awareness and inductions;
- upgrading the electricity management system
- maintenance and renewal of vehicles and equipment according to established standards and new technologies
- planning of installation of photovoltaic systems.

Table 9: Targets for emissions reduction

Target	Timeframe
Quantification of CO_{2eq} emissions	Yearly
CO_{2eq} reduction (Scope 1 and 2)	42,0% reduction by 2030* 80,7% reduction by 2040* Net zero by 2045

** Note: These reduction targets are for emissions of FGA, FGB & FGM and base year is 2018.*

12.3. Achievements

- ✓ Elaboration of Masterplan de-carbonization
- ✓ All airports are maintaining the ACA accreditation Level 1 - Mapping.
- ✓ Elaboration of Risk and Climate Change Resilience Study

Fraport Greece (FG) incorporated in the Master Plans of the seven (7) Regional Airports a "Climate Change Resilience Study" in 2017. This study was updated in 2022 in cooperation with the National Observatory of Athens (NOA). The key objective of this review is to ensure that climate-related risks affecting the concession airports are identified early on and managed effectively, through the integration of its findings in the airport's Master Plans.

The risk assessment was a desk-based due diligence review and the analyses by NOA covered three different time periods: short term (2022-2031), medium term (2032-2041) and long term (2042-2056).

The regional Climate Change (CC) projections followed the IPCC intermediate mitigation scenario, RCP4.5 (Representative Concentration Pathway limited climate mitigation) and the IPCC high emission scenario, RCP8.5 (no climate mitigation policies).

Table D.3: Risk and Climate Change (CC) Resilience Review of Thessaloniki Airport.

Risk ID	Risk source; CC indicator	Risk	Grading (2022-2031) RCP4.5/8.5	Grading (2032-2041) RCP4.5/8.5	Grading (2042-2056) RCP4.5/8.5	Justification for Risk grading	Adaptation measures
1	Temperature; T_{max}> 35 °C	Flashpoint (38°C) of aviation fuel exceeded on very hot days - potential fire hazard.				An incident of this type could have safety implications for the airport. Thessaloniki currently experiences 20 days when temperatures exceed 35°C; in the long-term there will be up to 11-12 additional very hot days. The risk is deemed amber for both short-term and long-term periods because it can have some impact on the airport infrastructure, functionality, and level of service or operations might be downgraded, but it is within acceptable/manageable levels.	Spill reporting and clean-up procedures should be regularly reviewed / updated, and technical services must be on alert during hot days. If needed, suspension of day-time refuelling is an extreme measure to consider.

Figure 9: Risk assessment table

The results of this study were published in the ECAC NEWS 2024 spring issue (https://www.ecac-ceac.org/news/ecac-news).

Fraport Greece plans to continue the risk assessment in a site specific level, per airport.

13. Conclusion

FG continues to actively monitor and report on progress against the goals and the lessons learned and seeks continual improvement of its environmental performance.

Analytical results of the various monitoring programs are included in the Annual Environmental Bulletins, which are published on **FG** website (https://www.fraport-greece.com/eng/sustainability/environmental-strategy/environmental-bulletins) as per the relevant environmental requirements for each Cluster A airport.