

4th Annual Report on Environmental Strategy

FRAPORT GREECE - Aegean Sea Regional Airports - Cluster B

July 2020





Contents

List	of Ab	obreviations	6
Exe	cutiv	e Summary	7
1.	Intro	oduction	8
1	1.	Fraport Greece - Overview	8
1	2.	Concession Agreement Requirements	9
1	3.	Structure of the Environmental Strategy	9
2.	FG's	s Environmental and Social Policy	10
3.	Lega	al and Stakeholders requirements	11
3	3.1.	Legal requirements	11
3	3.2.	Approved Environmental Terms	13
3	3.3.	Stakeholder requirements	14
	3.3.	Stakeholders categories – External and Internal	14
	3.3.	2. Roles and responsibilities	16
4.	Airp	ort Environment and Location	17
4	.1.	Rodos Airport "Diagoras" (RHO)	17
4	.2.	Kos Airport "Ippokratis" (KGS)	17
4	.3.	Santorini Airport (JTR)	18
4	.4.	Mikonos airport (JMK)	18
4	.5.	Mitilini Airport "Odysseas Elytis" (MJT)	19
4	.6.	Samos Airport "Aristarchos of Samos" (SMI)	19
4	.7.	Skiathos airport "Alexandros Papadiamantis" (JSI)	20
5.	Plan	nning for the future	21
5.1	. In	nminent Works Progress	21
5	5.1.1.	Completed works	21
	Skia	thos (JSI)	21
	Sam	nos (SMI)	23
	Miti	ilini (MJT)	25
	Rod	los (RHO)	26
5	5.1.2.	On-going works	27
	Kos	(KGS)	27



	Mikonos (JMK)				
	Sai	ntorini (JTR)	28		
5.	2.	How is the environment impacted?	29		
5.	3.	Achievements and on-going actions	30		
	5.3.1	What has already been achieved	30		
	5.3.2	On-going actions	32		
6.	Su	stainable Development	34		
	6.1.	Overview and Objectives – Environmental and Social Management System	34		
	6.2.	Environmental dimension as incorporated in planning and designs	35		
7.	So	il Management	38		
	7.1.	Overview	38		
	7.2.	Soil Management Action Plan	38		
	7.3.	Achievements	39		
8.	Su	rface water and Groundwater	41		
	8.1.	Overview	41		
	8.2.	Water Management Plan	41		
	8.3.	Achievements	42		
9.	Bio	odiversity	45		
	9.1.	Overview	45		
	9.2.	Biodiversity Management Action Plan	46		
	9.3.	Achievements	46		
10).	Cultural Heritage	50		
	10.1.	Overview	50		
	10.2.	Cultural Heritage Management Plan	50		
	10.3.	Achievements	51		
13	l	Air Quality	53		
	11.1.	Overview	53		
	11.2.	. Protective actions	53		
	11.3.	Achievements	55		
12	2.	Noise	57		
	12.1.	Overview	57		
	12.2.	Noise Management Plan	57		
	12.3.	Achievements	59		



13.	Was	te Management	61
13.1		Overview	61
13.2	! .	Waste Management Plan	62
13.3	١.	Achievements	64
14	Cond	clusion	66



List of Abbreviations

Term	Definition
ACA	Airport Carbon Accreditation
ACI	Airports Council International
CA	Concession Agreement
CCD	Concession Commencement Date
CEMP	Construction Environmental Management Plan
EASA	European Aviation Safety Agency
EBRD	European Bank for Reconstruction and Development
EC	European Community
EIB	European Investment Bank
ESMS	Environmental & Social Management System
E&S	Environmental and Social
FG	Fraport Greece
GG	Government Gazette
HRADF	Hellenic Republic Asset Development Fund
HAF	Hellenic Air Force
IFC	International Finance Corporation
ISO	International Organization for Standardization
RFF	Rescue Fire Fighting
SEP	Stakeholder Engagement Plan
WWTP	Waste Water Treatment Plant

Executive Summary

The 4th "Annual Report on Environmental Strategy" depicts Fraport Greece's (FG) compliance to the Environmental Requirements set in the Concession Agreement, thirtynine months after the Concession Commencement Date of the 11th of April 2017.

The Environmental Strategy outlines the methods to control environmental impacts during the implementation of infrastructure upgrades and growth in operations in response to the 2017 Master Plans. Additionally, it details the ongoing high quality environmental management of the airports.

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

The environmental aspects addressed are:

- sustainable development,
- soil management,
- surface and groundwater quality,
- biodiversity,
- cultural heritage,
- air quality,
- noise and
- waste management.

Potential impacts are presented for every environmental aspect, along with preventive actions.



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. At the time of the Concession Commencement Date, full payment of the €1.234 billion upfront concession fee was made by **FG**, linked with the transfer of operations at the 14 airports. Along with the upfront concession payment, an annual fixed concession fee of initially €22.9 million and a variable annual concession fee of on average 28.5% of the operational profit will be paid every year.

Two separate, almost identical concessions were granted by the Greek State in an international tender process, each applying to seven of the 14 airports ("Cluster A" and "Cluster B").

FG consists of two concession companies with their corporate seats in Athens, 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), a third company with its corporate seat in Athens, 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 staff and contracting of advisors or suppliers.

The Athens headquarters employ more than 200 people and a total of 653 people are employed by **FG** at the 14 airports (November 2019).

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

Cluster B under the Concession Agreement of Aegean Sea Regional Airports, includes the following 7 airports:

- Rodos (RHO)
- Kos (KGS)
- Santorini (JTR)
- Mikonos (JMK)
- Mitilini (MJT)
- Samos (SMI) and
- Skiathos (JSI)



1.2. Concession Agreement Requirements

FG has entered into a 40-year Concession Agreement (CA) with the Hellenic Republic, represented by the Hellenic Republic Asset Development Fund (HRADF). The Concession Agreement was ratified by means of the Law 4389/2016 (GG 94/A/27.05.2016).

The Concession Agreement, according to Article 13. Environment Protection – 13.2 Environmental Requirements – §13.2.2 requires the Concessionaire to compile, throughout the Concession Period, an annual report on environmental strategy, which shall be submitted to the State within three (3) months of the Concession Commencement Date (CCD) and each anniversary thereof. The Concessionaire is also obliged to create and maintain an internet site where the aforementioned report shall be published.

1.3. Structure of the Environmental Strategy

The Environmental Strategy outlines the airports' methods to control environmental impacts during the implementation of infrastructure upgrades and growth in operations in response to the 2017 Master Plans and details the ongoing high quality environmental management of the airports. The objectives and time framed targets outlined in this Environment Strategy 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:



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 and social policy for all our business locations (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:

- 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 and socially responsible approach to environmental challenges in respect of cost-effectiveness, economic viability and sustainability.
- We encourage the development and dissemination of environmentally 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. Protection of natural environment, (including wildlife management);
- 2. Resource use and waste minimization,
- **3.** Waste management (hazardous, non-hazardous);
- **4.** Wastewater management;
- 5. Energy management, carbon emissions and climate change;
- **6.** Pollution prevention and emergency response;
- 7. Noise management and control; and
- **8.** 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 and Stakeholders requirements

3.1. Legal requirements

National legislation, in accordance to the European Directives, govern largely the environmental aspects of airport activities and act as a foundation for environmental programming and performance.

Apart from national legislation, **FG**, abides by the E&S Designated Performance Requirement, which means the applicable Alpha Bank Performance Standards as per the 25.7.2016 E&S Policy, the IFC Performance Standards; the EBRD Designated Performance Requirements and the EIB. The environmental guidelines of each bank are publicly disclosed.

In the interest of responsible and sustainable environmental management, **FG** will endeavor to meet or exceed additional self-imposed standards, including the adoption of applicable international regulations. Tenants at **FG** airports are also required to uphold the same standards.

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	
JMD 5825/2010	B 407	Building Energy Efficiency Code	Directive 91/2002/EC & 31/2010/EC	
	W	/aste management		
Law 4042/2012	A 24	Protection of the environment through criminal law, on waste management	Directive (WFD) 2008/99/EC & 2008/98/EC	
PD 82/2004	A 64	Management of used mineral oils		
PD 109/2004	A 75	Management of used vehicle tire		
JMD 41624/2057/E103/2 010	B 1625	Management of batteries		
JMD 23615/651/Δ103/2014	B 1184	Management of Waste Electrical and Electronic Equipment (WEEEE)		
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 and aircraft noise			
JMD 211773/2012	B 1367	Environmental and aircraft noise	Directive (END) 2002/49/EC	



			Greece	
Greek Legislation No	GG	Content	European Legislation	
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		
	Env	vironmental Liability		
PD 148/2009	A 190	Environmental liability for the prevention and remedy of environmental damage.	Directive (ELD) 2004/35/EC	
	ı	Air pollutants	<u> </u>	
JMD 14122/549/E.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	
Nature Conservation				
PD 67/81	A 23	Protection of wild flora and fauna		
Law 3937/2011		Conservation of Biodiversity		
Archaeology and sites of cultural interest				
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 F4/1305/1974, F1/17831/1971, FYF2/133551/2008		
	Ele	ctromagnetic fields		
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 patterns adjusted to the specifications of each airport, in order to defend all environmental aspects.

Table 2: Approved Environmental Terms Decisions of Cluster B airports.

Airport	Environmental Terms Approval
RHO	 32648/04.11.1994 as it has been extended and modified by the following: 100425/17.01.2006 23983/11.05.2016 37974/07.12.2017 6304/20.03.2018 72087/2629 / 09.01.2019
KGS	• 32649/04.11.1994 as it has been modified and extended by the following: o 106589/08.08.2006 o 197968/03.05.2012 o 6126/16.03.2018
JTR	 51227/25.10.2016 as it has been modified by the following: 1758/23.01.2018
ЈМК	• 32650/04.11.1994 as it has been modified and extended by the following: o 103324/18.04.2006 o 175511/15.10.2014 o 39773/26.09.2017 o 2976/02.02.2018
MJT	 81441/20.12.2002 as it has been extended and modified by the following: 23984/11.05.2016 1004/16.01.2018
SMI	 106454/14.03.2000 as it has been modified by the following: 131852/27.10.2010 3704/12.02.2018
JSI	 68597/24.06.1999 as it has been renewed extended and modified by the following: 106193/11.07.2008 120306/11.01.2010 37970/22.12.2017 5778/13.03.2018 6306/20.03.2018



3.3. Stakeholder requirements

FG, as a community-based organization, values the relationships build with business partners and local communities.

As the stages of project implementation evolve, stakeholder engagement is carried out and planned. Prior to the start of construction activities, a site specific plan Stakeholder Engagement Plan (SEP) was developed for each airport.

The SEP outlines a systematic approach to stakeholder engagement that helps Fraport Greece develop and maintain over time a constructive relationship with the stakeholders throughout the duration of the Concession period.

Each plan contains information on the following:

- specific works that will take place at each airport;
- stakeholders who may be affected or interested in the works;
- indicative timeline for any consultation activities;
- communication tools and
- details of grievance process and contacts and local contact information.

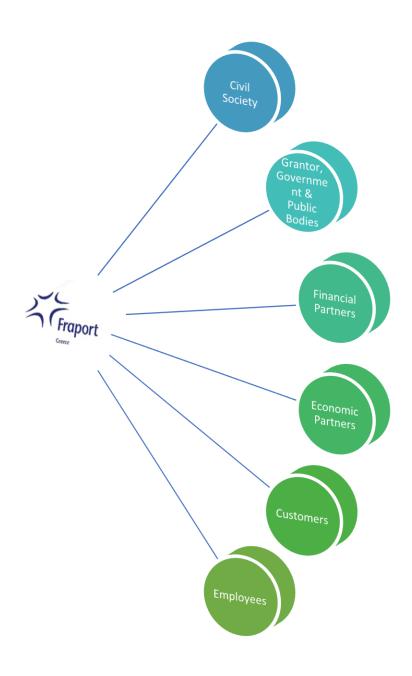
3.3.1. Stakeholders categories – External and Internal

The relevant stakeholders identified per category are:

Table 3: Stakeholder categories.

External		
Civil Society	Local communities, authorities, media, Vulnerable groups, NGO's	
Grantor Government and Public Bodies	Greek Government, HCAA, HRADF, HAF, European Institutions, Professional and Scientific Organizations, Independent Authorities	
Financial Partners	Shareholders, Lenders (EBRD, EIB, IFC, BSTDB, Alpha Bank)	
	Internal	
Economic Partners	Service Providers, Contractors, Sub-contractors	
Customers	Passengers, Airlines, Ground Handlers, Fuel Handlers, Retailers	
Employees	FG personnel, Labour organizations and unions, 3 rd parties personnel	





Graphic 1: FG's Stakeholder categories



3.3.2. Roles and responsibilities

Role	Responsibility		
Fraport Greece	 Overall responsibility for implementing the environmental requirements specified by the legislation and the Environmental and Social Management Plan. Auditing compliance of contractors and airport users (concessionaires, tenants, ground handling service providers, etc.) with the relevant environmental obligations. Reviewing and/or approving contractors' and airport users' environmental management plans. Promoting best practice environmental management to airport users and contractors. 		
EPC Contractor	 Complaint management at construction sites. Available information on line: http://www.intrakat.gr/en/contact/subsidiary-and-branches-addresses/fraport-construction-sites/ 		
Airport Users	 Responsible for preventing environmental harm. Meeting statutory environmental requirements. Ensuring appropriate plans and/or systems are in place to manage environmental risks posed by their activities. 		



4. Airport Environment and Location

4.1. Rodos Airport "Diagoras" (RHO)

Rodos Airport "Diagoras" is situated approximately 14km south-west of the capital city of Rhodos.

The airport is located within the boundaries of the proclaimed archaeological site "Archaeological site of Asomatos Kremasti, Paradisi Mountain and Rodos Airport" (GG 1979/B`/8-11-1999).



Figure 1: RHO airport location - https://www.rho-airport.gr/en/.

4.2. Kos Airport "Ippokratis" (KGS)

Kos Airport "Ippokratis" is located near the village of Antimacheia in the Irakleides region of Kos Island, approximately 27km south-west of Kos Town.

The island's history is vast, from ancient times, as it is the birthplace of Ippokratis, the father of medicine, up until the Ottoman Era and the Italian rule.

A significant part of the NW part of the airport is within the limit of proclaimed archaeological site (GG 1387/B/22-10-2001) of "Antimachia". In addition, the church of Saint Charalabos is sited within airport boundaries.



Figure 2: KGS airport - https://www.kgs-airport.gr/en.



4.3. Santorini Airport (JTR)

Santorini Airport is located, close to Kamari village only 6 km from the island's capital, Thira and 2.5 km East of Mesaria.

Santorini, one of the world's most popular tourist destinations, is a natural part of the active volcanic center of the South Aegean and is essentially an active volcano in a "dormant" state. Its current morphology, a caldera, was created after a volcanic eruption dated in the Bronze Era. The island is a protected geosite and includes the protected area of "Nea kai Palia Kameni- Profitis Ilias" Natura 2000 GR4220003 (SCI).

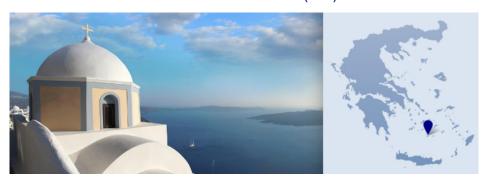


Figure 3: JTR airport - https://www.jtr-airport.gr/en.

4.4. Mikonos airport (JMK)

Mikonos Airport is located 4 km south east of the town of Mikonos (Chora), a journey of about 10 minutes. Mikonos is one of the most touristic islands of Greece and attracts a large number of visitors in spring, summer and fall.

Mikonos is recognised as a Site of Exceptional Natural Beauty (MD C/848/40, GG 329/B/31-3-1980) and rewards the visitor with a unique Cycladic landscape.



Figure 4: JMK airport - https://www.jmk-airport.gr/en.



4.5. Mitilini Airport "Odysseas Elytis" (MJT)

Mitilini Airport "Odysseas Elytis" is located on the South-East side of the Island of Lesbos, around 7 km from the town of Mitilini and is sited parallel to the coast.

Mitilini is well known for its historical past, even the airport area is a proclaimed archaeological site "Mitilini airport" (GG 978/B/1991).



Figure 5: MJT airport - https://www.mjt-airport.gr/en.

4.6. Samos Airport "Aristarchos of Samos" (SMI)

Samos Airport "Aristarchos of Samos" is located 3 km from the town of Pythagoreio and 14 km from the capital of the island, the town of Samos, formerly known as Vathi.

Samos combines natural beauty consisting of vast green areas of vineyards and crystal blue waters along with a large historical past, the birthplace of the philosopher Pythagoras, the home of Pythagoreio (GG 598/B/1984), Heraion (GG 209/AAP/2012), and the Eupalinian aqueduct, a marvel of ancient engineering.

Samos also has rich fauna and is the home of the protected, under the EU provisions, species of the Golden Jackal (canis aureus).



Figure 6: SMI airport - https://www.smi-airport.gr/en.



4.7. Skiathos airport "Alexandros Papadiamantis" (JSI)

Skiathos Airport "Alexandros Papadiamantis" is located on the east side of the island of Skiathos in the Western Aegean Sea, around 2 km from the capital of the island.

Skiathos is a touristic destination and attracts a large number of visitors in the summer months. The island is known for its natural beauty and clear blue waters as the entire Sporades group.

Recently an archeological discovery was brought to light in Kefala peninsula, near the airport, consisting of fort relics, houses and tombs.

The island includes the protected area of "Nisides Aspronisos, Argos, Maragos, Repi, Tsougkria, Tsougkriaki kai sea area of Skiathos and Skopelos Islands" Natura 2000 GR1430009 (SPA).



Figure 7: JSI airport - https://www.jsi-airport.gr/en.



5. Planning for the future

5.1. Imminent Works Progress

FG is investing a total of at least €415 million in airport infrastructure until 2021, for both Clusters A & B, followed by maintenance and traffic-driven capacity investments during subsequent years of the project.

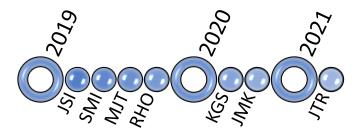


Figure 8: Timeline of final completion of Imminent Works.

5.1.1. Completed works

So far, four (4) out of seven (7) airports of Cluster B have been successfully delivered to operations, with all of the Imminent Works completed.

Skiathos (JSI)

- ✓ Terminal building expansion and refurbishment of existing.
- ✓ New RFF station almost in the same location.
- ✓ Remodeling of the existing parking areas and traffic reconfiguration.
- ✓ Relocation of fuel handler's offices and storage areas.
- ✓ New Ground Services Equipment (GSE) parking area.



Figure 9: Aerial view of the landside area.





Figure 10: Terminal T1 landside façade.

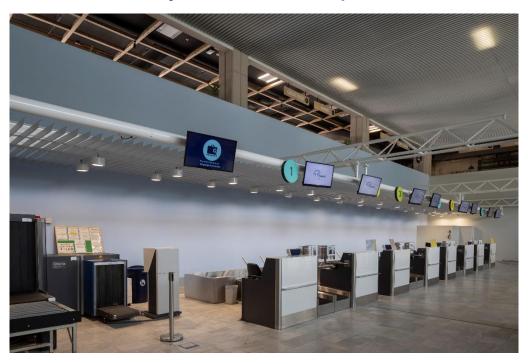


Figure 11: Terminal T2 interior, check in area.





Figure 12: New RFF building.

Samos (SMI)

- ✓ Terminal expansion.
- ✓ New RFF station in a new location.
- ✓ New sewerage Pumping Station. New blue water collection tank and connection with municipality's network.
- ✓ Remodelling of the existing parking areas and traffic reconfiguration.
- ✓ New solid waste collection area.
- ✓ New Ground Services Equipment (GSE) parking area.





Figure 13: Overview of SMI airport, airside area.

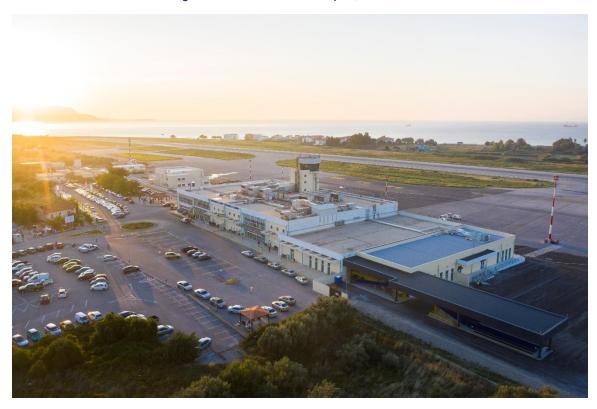


Figure 14: Overview of SMI airport, landside area.





Figure 15: Terminal landside area façade..

Mitilini (MJT)

- ✓ New terminal building in a new location.
- ✓ New RFF in a new location.
- ✓ New Parking areas and traffic reconfiguration.
- ✓ New Waste Water Treatment Plant.
- ✓ New solid waste collection area.
- ✓ New Ground Services Equipment (GSE) parking area.
- ✓ Relocation of Aeroclub.



Figure 16: MJT airport, lanside area.



Rodos (RHO)

- ✓ Terminal refurbishment.
- ✓ New RFF building.
- ✓ Remodeling of the existing parking areas and traffic reconfiguration.
- ✓ New solid waste collection area.
- ✓ New Ground Services Equipment (GSE) parking area.



Figure 17:RHO airport, landside area.



5.1.2. On-going works

Kos (KGS)

- > Terminal expansion and refurbishment.
- New RFF station in a new location.
- Apron expansion.
- Remodeling of the internal roads and existing parking areas, new parking areas and traffic reconfiguration.
- Connection to Municipal sewage network.
- New solid waste collection area.
- New Ground Services Equipment (GSE) parking area.



Figure 18: KGS airport future landside façade.

Mikonos (JMK)

- > Terminal expansion and refurbishment of the existing.
- New RFF in a new location.
- ➤ Remodeling of the existing parking areas and traffic reconfiguration
- New entrance roundabout.
- Expansion of the Ground Services Equipment (GSE) parking area
- Relocation of fuel handlers' offices.





Figure 19: JMK airport future terminal landside façade.

Santorini (JTR)

- > Terminal expansion and refurbishment of the existing.
- New RFF in the same location.
- New parking area.
- Installation of new Pumping Station and sewerage connection pipe with the municipality WWTP.
- New solid waste collection area.
- New Ground Services Equipment (GSE) parking area.



Figure 20: Future JTR terminal landside façade.



5.2. How is the environment impacted?

Aspect	Impact
Physical Environment	All the imminent works are located within each airport's existing boundary. During construction of the proposed works no major issue from dust is anticipated.
Subsurface and Soil	Soil compaction generally occurs during most of the construction activities involving heavy machinery, especially when the soil is wet. The main impact during construction occurs from the excavation due to the construction of the expansion works. It is expected that the morphology and the surface characteristics of the surrounding area do not have major impacts during the construction of the imminent works.
Water Resources	Possible water pollution sources are the storm water runoff of the construction site, or other runoff and possible accidental oil or fuel leakage. Water consumption for construction purposes is considered not significant. Regarding the urban wastewater, the estimated loads from the construction site are not expected to significantly affect each airport's area.
Landscape & Visual Amenity	During construction there will be impacts on landscape and visual amenity but these are not considered significant and are short – term and totally reversible. It should be noted that the proposed works are designed to be consistent and enhance the area's aesthetics.
Acoustic Environment	The proposed works are likely to result in local noise disturbance from construction activities and machinery. No significant impact (noise or vibration) is expected on residential properties from blasting and hammering as the majority of these activities will take place within the terminals.
Solid Waste / Toxic and Dangerous Waste	For the waste produced during construction, the estimated quantities do not affect the existing management methods.
Socioeconomic Environment	For the socioeconomic environment, opportunities and benefits are expected from the construction of the proposed works. Significant employment positions will occur during construction.



Aspect	Impact
	Potential sites within the Project footprint will be investigated further prior to construction. Any findings are being addressed in cooperation with the Local Archaeological Authorities.
Cultural Heritage	

5.3. Achievements and on-going actions

5.3.1. What has already been achieved

Prior to Imminent Works commencement

- ✓ <u>Approved Master Plans for all seven airports.</u> An ultimate overall layout that will best utilize the potential of the airport campus and optimize the use of existing infrastructure that best fits the expected traffic volume and characteristics over the next 20 years.
- Modified Approved Environmental Terms per airport. The modified terms include the Imminent Works and provide measures and guidelines in order to ensure the preservation of the environment and the minimization of the environmental impacts.
- ✓ Assessment of existing contamination, via an <u>Environmental Baseline Survey</u> was conducted in every airport, in order to record: soil contamination, surface and underground water contamination and waste disposal
- ✓ Environmental Baseline Survey of Waste Water Treatment Plants (WWTP) for the evaluation and monitoring of the effectiveness of the existing WWTPs, are located in Mitilini (MJT) and Rodos (RHO). It is worth mentioning that the KGS plant has ceased operations and a connection to the municipal network is achieved. For the meantime sewage is transferred to the Municipal WWTP. Improvements are implemented for the existing facilities in order to upgrade them.
- Development and start of implementation of the Environmental & Social Management System (ESMS) of FG, in accordance to the ISO 14001 standard, including appropriate risk identification, assessment, performance monitoring and control for all airports.
- ✓ <u>Climate Change Resilience Study</u> in order to identify and ensure that climaterelated risks and opportunities are identified early on and managed effectively, by integrating the findings of this study in the airport's Master Plans.



Construction related

- Following an extensive evaluation <u>Asbestos Management Plan</u> is under implementation and distributed at all the airports in order to manage the risks from Asbestos Containing Materials (ACMs) and minimize asbestos related health hazards to all personnel working on or visiting airport sites. The procedures described in the plan cover all facilities under the control of FG within the Concession Areas during performance of construction and / or maintenance.
- Approved Construction and Environmental Management Plans (CEMP). In total 7 Construction Management Plans have been implemented, an overall for the entire Cluster and a Site Specific plan for each airport individually. Each plan shall address all environmental procedures, protocols and processes in order to conduct the works in accordance with all applicable Laws, Regulations, Permits and ensure the same to be consistent with Best Industry Practice. The basic principle of this CEMP is the construction of the project aiming at the environmental protection and classification of the project among the most environmentally friendly projects in Greece. This CEMP is a live document to be developed further during the Project in accordance with the requirements of the DCC and the modified Environmental Terms of each airport.
- Approved Health and Safety Manual and Health and Safety Plans for the Construction. In total 7 Construction Health and Safety Site Specific Plans implemented for each airport and an overall for the entire Cluster, Health and Safety Manual. The manual and plans (for each site) depict the Contractor's requirements regarding Health and Safety in alignment with Greek legislation OHSAS 18001, as well as FG's requirements.

Annual basis (reference period 2019-2020)

- Noise Monitoring for the peak period of 2019 at each airport, which included on site 24 hour measurements and raw data collection. The measurement period was from July 2019 until September 2019. The monitoring included data evaluation followed by calculation of L_{den} and L_{night} noise contours via special modelling software and presentation of the subsequent noise trends.
- ✓ <u>Air Quality Monitoring</u> for the peak period of 2018 in all 7 airports. Monitoring of air pollutants that are typically associated with airports mainly from the combustion of jet fuel and airport vehicles. The pollutants measured included sulphur dioxide (SO₂), nitrogen dioxide (NO₂), benzene (C₆H₆), particulate matter (PM₁₀ & PM₂,₅) and ozone (O₃).
- ✓ <u>Interim Air and Noise Monitoring Plan:</u> Starting back in 2017 and in cooperation with the National and Technical University of Athens an Interim Air and Noise Monitoring Plan was implemented for each airport and was included as an Annex in the EIA Studies. The two (2) year interim plan proposed a comprehensive air



pollution and noise monitoring system approved via the Environmental Terms. The Plan has already been implemented for the first two years (2018 and 2019).

- Permanent Air and Noise Monitoring Plan: According to the Environmental Terms after the end of the two (2) year implementation period, a Technical Report was submitted to the Ministry for Environment and Energy with proposals for the future monitoring plan, based on acquired data evaluation and legislative requirements. The proposal is currently under review by the Ministry of Environment and Energy.
- ✓ Certifications according to "Airport Carbon Accreditation" programme and Verification statements according to EN ISO 14064:1. For each airport in cluster B, a carbon footprint report was prepared for reference year 2018. The two airports of Cluster B RHO (Rodos) and MJT (Mitilini) that joined in 2019 the Airport Carbon accreditation programme and their carbon management processes earned the accreditation level of Mapping, level 1, renewed their status. Developed by Airports Council International (ACI) Europe, the Airport Carbon Accreditation programme is the only voluntary global standard for CO₂ reporting and management especially for airport operators. In 2020 one more airport of Cluster B, SMI (Samos) airport filed for the Level 1 certification.
- Five airports of Cluster B, are certified for <u>Greenhouse Gases (GHG)</u> total emissions according to the requirements of <u>EN ISO 14064-1</u>, an international standard that specifies requirements for the quantification and reporting of greenhouse gas emissions and their reductions.
- ✓ As per Greek and European legislative requirements, <u>Energy Audits</u> were implemented during 2018 for every Cluster B airport.

5.3.2. On-going actions

- Monitoring plans for each of the following environmental aspects:
 - o air quality (including CO2 emissions),
 - o noise,
 - surface and groundwater quality,
 - o soil

The frequency of the monitoring is being set according to the respective Environmental Terms.

- Annual Environmental Bulletins: The monitoring results are included in the Annual Environmental Bulletins, which are published on FG website as per the requirements of the Environmental Terms for each airport of Cluster B.
- <u>Waste Management</u>: implementation of integrated waste management at all airports for non-hazardous waste, taking into consideration the necessities of each airport, as well as the obligations imposed by the Environmental Terms and the general Environmental Legislation.
- Recycling of Hazardous Waste: In compliance with the relative legislation regarding waste management and recycling FG is cooperating with Alternative



Management Systems in order to manage the recycling of hazardous waste such as:

- Used Mineral Oils,
- Used Tires,
- Waste from Electric and Electronic Equipment (WEEE),
- Batteries and Accumulators.
- Other hazardous waste are handled ad hoc after being identified with their respective codes as per the European Waste Catalogue.
- Construction Environmental Management Plan updates. As mentioned before the site specific CEMP is a live document to be developed further during the Project in accordance with the requirements of the DCC and the modified Environmental Terms of the Whole Project as officially approved by the Ministry of Environment & Energy.
- <u>Wildlife Management Plans</u>: reference to wildlife hazards, risk assessments, actions to eliminate the wildlife strike risk and biodiversity conservation.
- Monitoring of Greenhouse Gases (GHG): Quantification of Greenhouse Gas emissions (baseline) for all seven airports based on ISO 14064-1:2006, Greenhouse Gas Protocol and ACI Guidance Manual.
- Soil Remediation: in identified contaminated areas by the EBS commenced in 2019 and is being concluded in 2020 at Kos (KGS), Samos (SMI) and Rodos (RHO) Airports. Ex-situ method was used in order to remediate the contaminated areas and achieve the quality limits set by HCAA and the National and Technical University of Athens (NTUA).



6. Sustainable Development

6.1. Overview and Objectives – Environmental and Social Management System

Company Objectives:

The objective of **FG** is the safe, secure, and efficient management of the 7 Greek Regional Civil Airports of Rodos (RHO), Kos (KGS), Santorini (JTR), Mikonos (JMK), Mitilini (MJT), Samos (SMI) and Skiathos (JSI).

FG provides the infrastructure and the 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 passenger experience for airport users, thus creating new business opportunities for concessionaires and service providers; as well as to make our 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:

- We communicate our environmental policy to all employees and persons working on our behalf.
- We communicate this policy and the results of our activities to our Shareholders and to Second and Third parties as appropriate, and to the Public.
- We maintain and continuously improve our environmental policy and management system.
- We set objectives and targets for the environment.
- The environmental 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 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 standard, **FG** has identified the key environmental and social aspects for the following areas:

Pollution Prevention: noise, vibrations, storm water, wastewater, non-hazardous waste, hazardous waste, hazardous materials (handling & storage), 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.

Also, through the development of the airport masterplans, **FG** minimized the need for land acquisition and mitigated or eliminated any degradation or disturbance of landscape features, disturbance of wildlife habitats or altering of heritage buildings and monuments.

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 is in compliance with all ordinances, statutes and regulations of the Greek State Agencies and European Union policy and legislation related to the protection of the environment, as required for enterprises as ours.

The approved EPC Contractor, the ground handling services providers as well as the fuel handlers in the airports hold ISO 14001 certification or equivalent.

The EPC agreement requirements specify that the contractor shall elaborate and enforce a project specific Construction Environmental Management Plan (CEMP).

6.2. Environmental dimension as incorporated in planning and 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 made to tenants during audits on methods to reduce their energy and resource consumption and waste generation.

FG inspects each airport, tenant, contractor and operator activities. Where excessive resource consumption is observed, airport operators are required to monitor and reduce this consumption.

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.
- Adjustable energy consumption to variable load demand (variable flow systems).
- Energy recovery systems in the air-handling units' design and free cooling and night cooling mode concepts.
- Installation of active power harmonic filters.
- Upgrade to low energy consuming lighting fixtures and automated lighting controls.
- Energy Management System in connection for monitoring energy consumption, providing trends and correlation data and introducing effective related controls.
- Energy Balance report as design deliverable that will constitute the base line for the elaboration of the Energy Management System.

Water Conservation and Quality

- Site-wide drainage and wastewater monitoring schemes as appropriate. Landscaping that features xeriscape and drought-tolerant species.
- Monitoring to track water consumption.
- Storm water pollution prevention plan for all new construction.
- Spill traps/management, oil separators and closed fuel delivery systems as foreseen in the environmental terms.
- Refurbishment of existing Waste Water Treatment Plants and connection to local sewage network for KGS.

Resources (materials and waste management)

Selection of materials that reflect our sustainability approach consider, when possible, the following criteria:

- Reuse of building & appropriate excavation materials onsite
- Future use of lower biochemical oxygen demand (BOD) de-icing materials.
- Use of nontoxic pest-control products.
- Use of construction materials & interior finishes with high recycled content and low VOC paints is encouraged.

The CEMP's for all airports include Construction Waste Management Plans which are based on the principles of Reduce, Re-Use, Recycle. To this end the re-use of materials (e.g. in backfilling) is being set in force in order to minimize the materials that end up in landfills. Likewise recycling of materials through Alternative Management Systems is implemented.

Energy conservation is promoted also in all construction sites by following simple practices. Finally biodiversity is preserved through the implementation of an Alien Invasive Species Management Plan.

To minimise recourses consumption as well as material transport FG is installing temporary plants for the production of asphalt and construction demolition plants to achieve re-use of excavation material on site.



Table 4: Targets for sustainable development.

Target	Timeframe
Implementation of the ESMS to continuously improve the environmental performance of FG	Continuous process (in yearly intervals)
Establishment of Carbon Management Plan to reduce emission	After Imminent Works Completion
Implementation of an EMS according to ISO 50001	Upon completion of IW



7. Soil Management

7.1. 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 hydrocarbon spills, landfill activities and constituents of firefighting foams.

Some activities that could affect soil are:

- Construction and earthworks.
- Grounds maintenance 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.
- Demolishing buildings containing hazardous materials.
- Surrounding land use.

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.

7.2. Soil Management Action Plan

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).

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 contaminated sites.
- Decontamination of polluted zones and soil remediation.
- Activities with the potential to contaminate soil or groundwater will undergo a risk assessment to inform appropriate management procedures.



The Construction Environmental Management Plan (CEMP) includes a specific Erosion & Sedimentation Control Plan. This plan contains environmental management objectives, mitigation measures, inspection and reporting requirements relating to soil and water quality. The plan incorporates requirements from the Environmental Terms, as well as the national and European legislation.

The main objectives of the Plan are

 Prevent the loss of soil during construction by storm water runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.

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.

Target	Timeframe
Remediation of any identified pre- existing contaminated areas	Within 2020
Re-use of excavation and demolition products	In imminent and future works

Table 5: Targets for soil management

7.3. Achievements

Some of the achievements so far include:

- ✓ Environmental Baseline Survey (EBS) in order to identify pre-existing contaminated areas, in all FG airports by specialized who personnel conducted on site visits. The main pollutants were various products of hydrocarbons and contaminated soil by pathogenic microorganisms.
- ✓ Soil remediation in identified contaminated areas by the EBS has been successfully completed in Kos (KGS), Samos (SMI), Mikonos (JMK), Mitilini (MJT) and Rodos (RHO) Airports.

The techniques used were both in-situ and ex-situ, depending on the area and extent of contamination. The in-situ technique was performed in order to remediate the soil's vadose zone that would prevent any further contamination of the groundwater by leaching processes. The target limits, in order to deem the remediation successful were set by HCAA in cooperation with the National Technical University of Athens (NTUA).

The ex-situ technique included removal of the contaminated soil and rehabilitation to its prior condition.



A grand total of 85 tn of contaminated soil were removed from RHO and SMI. These quantities were collected by a licensed collector, were treated as contaminated soil (European Waste Catalogue code 17 05 03*) and were disposed and recovered as per the relevant legislation for hazardous waste.

Fuel handler's sites in Mikonos (JMK), Mitilini (MJT) and Rodos (RHO) Airports also performed in situ remediation, with the necessary equipment, also abiding by the set limits by HCAA and NTUA.

▼ FG through the Soil Erosion and Sedimentation Plan has managed a high
percentage of re-use of excavation and demolition materials for backfilling or use
of aggregates.



8. Surface water and Groundwater

8.1. Overview

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

All the airports of Cluster B 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.
- Aircraft refuelling.
- Equipment 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 sewerage collection and wastewater treatment.

These activities may cause:

- Contamination from spillage, leakage or seepage into storm water infrastructure.
- Disturbance of known and potentially contaminated sites.
- Changes to the upstream or downstream flooding regime and possible disturbance of 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 disturbance of local fauna and flora.

8.2. Water Management Plan

FG is developing water management procedures 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 chemical analyses are conducted at licensed and certified 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 handling procedures.
- Installation and maintenance of storm water treatment devices (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 (imminent works).
- Drainage infrastructure designed and modelled to prevent potential flood impacts.

The Construction Environmental Management Plan includes a specific Erosion & Sedimentation Control Plan. This plan contains environmental management objectives, mitigation measures, inspection and reporting requirements relating to soil and water quality. The plan incorporates requirements from the Environmental Terms, as well as the national and European legislation.

Table 6: Target for water management

Target	Timeframe
Install storm water quality protection infrastructure (oil-separators, sand traps) as necessary	Up to 2021 (Imminent Works completion)
Water management procedures.	Ongoing - Annually

8.3. Achievements

- ✓ Water Quality Monitoring Program: which consists of chemical analyses of surface and groundwater samples in predefined positions within the airport throughout the year.
 - The chemical analyses are performed by certified laboratories. The FG personnel that conducts the sampling also has received appropriate training.
 - A total of 18 samples of surface runoffs and 14 samples from monitoring wells in all 7 Cluster B airports are analysed for various chemical



- parameters including but not limited to pH, BOD₅, 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 21 SMI storm water runoffs sampling.

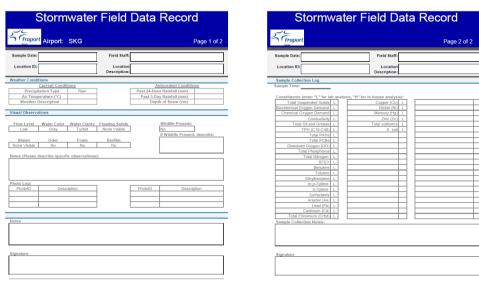


Figure 22: Storm water field data record. Airport Engineers have received relevant training in order to perform the sampling. Part of the sampling is the filling in of the relevant field data record per sample.

✓ All the Waste Water Treatment Plants (WWTP) have undergone heavy maintenance works while the detail design includes either the connection to the Municipal Sewage Network or the construction of new high end on site facilities.



- Kos (KGS) Airport was connected to the local sewage network since 2019,
- Rodos (RHO) has undergone additional works and is operating successfully
- Mitilini (MJT), has an upgraded Wastewater Treatment Plant of secondary treatment and the treated effluent will be re-used within the airport for irrigation purposes for the months of March to October. The remaining months the effluent will be transferred to the municipal WWTP.
- ✓ Environmental Baseline Survey (EBS) in order to identify pre-existing contaminated areas, in all FG airports by specialized who personnel conducted on site visits. The main pollutants were various products of hydrocarbons and contaminated soil by pathogenic microorganisms.
- ✓ Groundwater remediation in identified contaminated areas by the EBS has been successfully completed in Rodos (RHO) and Mitilini (MJT) Airports. The task was undertaken by the Fuel Handlers.

The in-situ technique was performed in order to remove dissolved contaminants, such as petroleum hydrocarbons and chlorinated hydrocarbons, form the groundwater. The technique is based on the logic of "pump and treat". The target values, in order to deem the remediation successful were set by HCAA in cooperation with the National Technical University of Athens (NTUA).



9. Biodiversity

9.1. Overview

FG values greatly the protection of the ecosystems and plans to:

- Appropriately manage biodiversity values across the network of its 14 airports
- Reduce probable impacts to surface water (lakes, lagoons and sea) and groundwater from airport operations
- Protect and enhance the ecological values of conservation areas

Wildlife Hazard Management & Biodiversity Conservation

Each airport has its own Wildlife Hazard Management Programme (WHMP), tailor made to the local environmental conditions. The WHMP refers to:

- Wildlife hazards identification on and off-airport (up to an area of 13km radius)
- Risk assessment of wildlife strikes
- Actions to eliminate the wildlife strike risk
- Biodiversity conservation initiatives

An annual report for each FG airport is submitted to the Hellenic Civil Aviation Authority (HCAA), including data related to:

- Monthly distribution of wildlife hazards on airport
- Statistics analysis of wildlife strikes
- · Wildlife strike risk assessment
- Wildlife management measures (including conservation and control)

An annual Wildlife Strike Committee Meeting is held at Rodos Airport "Diagoras" (RHO) (airport at higher risk for wildlife strike) in order to discuss with the airport users and external stakeholders about issues related to wildlife hazard management and biodiversity conservation.

FG manages biodiversity at the airports and works to reduce the potential impact of its operations on the biodiversity of the surrounding area.

Some activities likely to affect biodiversity at each airport may be:

- Grounds maintenance activities including vegetation clearing
- Weed and animal pest control
- Vehicle or aircraft movements
- Construction and demolition works

These activities could affect the:

- Biodiversity
- Weed and animal pest species
- Fragmentation of habitat from clearing associated with new developments
- Foraging or breeding habitat



Native species from weed, pest and fire management activities

9.2. Biodiversity Management Action Plan

Actions that can be protective of biodiversity values are:

- Extend wildlife monitoring to include less charismatic species, such as insects, amphibians, invertebrates and reptiles and enter all data into the database of the Biodiversity Management System
- Systematic monitoring of bird species and populations on and off-airport (up to an area of 13km radius) with emphasis on bird behavior (e.g. nesting, roosting, flight behavior)
- Enrichment of wildlife monitoring methods with field surveys and wildlife trail camera traps
- Grassland management could be targeted towards enhancing the grass areas on airport; attention should be paid on the number and abundance of protected flora species or wildflowers and on practices against the growth of invasive species
- Continuous training and seminar awareness of the FG Operations Personnel on Wildlife Hazard Management & Biodiversity Conservation
- Enhancement of bird species identification skills from the operations airside personnel, with regular support from the Wildlife Hazard Management Team
- CEMP's prepared for relevant construction projects addressing potential biodiversity impacts

Table 7: Targets for biodiversity

Target	Timeframe
Land use monitoring on and off-airport	Ongoing - within 3rd year of operations
Wildlife surveys on and off-airport	Ongoing – within 3rd year of operations

9.3. Achievements

Some of the achievements so far include:

An educational awareness video about snakes and their ecological importance has been distributed to all firefighting departments at the Fraport Greece operated airports. Snakes are considered wild protected species with a beneficial and very important role for the balance and health of ecosystems. Mr. Strachinis, an expert herpetologist, speaker of the seminar, talked about the numerous benefits that snakes offer to humans, the flora and the fauna. Snakes not only protect the crops but also the public health by controlling the populations of rodents, insects and arthropods, all of which are often carriers of diseases that can affect humans as



- well. Mr. Strachinis focused on the identification of snakes and the appropriate actions in case of a poisonous bite.
- Stray animal presence at the airside poses a serious hazard to aircraft safety. Special traps are used to capture and safely translocate stray dogs and cats from the airside to areas away from the airport, in collaboration with the municipality. An awareness video was created to educate the Fraport Greece personnel and other stakeholders about dog behavior, safe handling and appropriate translocation of stray dogs to other areas, within the municipality borders. Mr Paraschis, a certified dog trainer, was the speaker and video presenter
- On-site training about Wildlife Hazard Management was provided at SKG airport. Operations personnel of FGA and FGB was selected to gain further experience on wildlife monitoring and control, bird species identification, as well as on data analysis and decision making process with the aim to finally share such information to their airport colleagues
- ✓ Presentation of the Environmental Services at Fraport Greece Airports during the ACI Europe Environmental Strategy Committee Meeting in Paris. The presentation focused on the construction project and the biodiversity conservation initiatives
- ✓ A donation was made to Lalitsa Non-Profit Organization, to carry out small scale educational activities to different local social groups, visiting groups and associations.

First time observed species

During the period 11/7/2019-11/07/2020, several bird species have been observed for the first time at FGB airports or its surroundings. In particular:

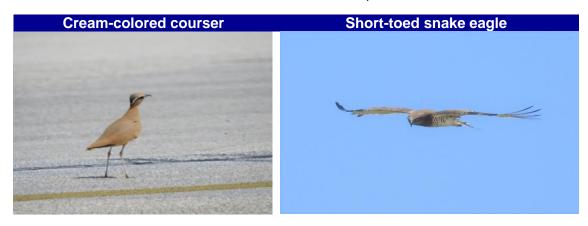
- On 10th April 2020, Great white pelicans (Pelecanus onocrotalus) were observed in St. George lake, southeast of Skiathos Airport "Alexandros Papadiamantis" (JSI)
- On 15th April 2020, Cream-colored courser (Cursorius cursor), which is considered to be a rare visitor to Greece, appeared in RHO Airport. In addition, Lesser kestrel (Falco naumanni), European roller (Coracias garrulus) and Short-toed snake eagle (Circaetus gallicus) were observed for the first time at RHO Airport in March, May and June 2020 respectively

"Steady" visitors

Red-footed falcon (Falco vespertinus) and Eleonora's falcon (Falco eleonorae) appearance has been recorded for the third consecutive year at RHO Airport, during the spring migration.



Table 8 Birds observed at FGB airports.



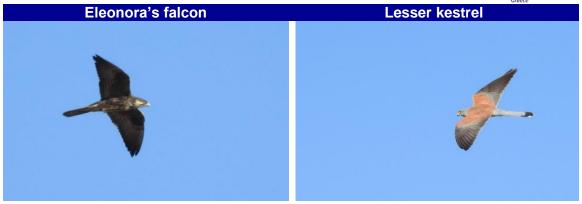














10. Cultural Heritage

10.1. 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 applications 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 will heritage legislation, associated statutory approvals and the provisions of the concession agreement; and
- Educating FG staff 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.

10.2. 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 where necessary.
- Maintain the existing building structure, envelope, and interior non-structural elements of a historic building or contributing building in a historic district.

Almost all of the airports of Cluster B are in proximity of cultural heritage important values (e.g. proclaimed archaeological sites, churches, monasteries, sites of important aesthetic value etc.), as described in Chapter 4.1.

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

- Grounds maintenance activities including vegetation clearing and slashing.
- Construction and demolition works.

A key measure to manage the cultural heritage values at the Airport is the ongoing implementation of the whole of the airports Cultural Heritage Management Plan CHMP, which includes:

Cultural heritage awareness training for staff and contractors.



 Preparation and implementation of project-specific CEMPs for relevant projects that affect cultural heritage values.

Table 9: Cultural Heritage targets.

Target	Timeframe
Coordinate with Hellenic Ministry of Culture and Sports to develop corporate level cultural heritage procedure including chance finds procedure (in accordance with the requirements of Article 15 of the CA).	During Imminent Works
Increasing awareness by FG staff 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

10.3. 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
- to 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 the Contractor and other parties to define its own chance find procedures appropriate to the nature and scale of their construction works.

- The Ministry of Culture has granted approvals for all airports of Cluster B concerning excavations. The relevant decisions also state that the **presence of an archaeologist** is mandatory during all excavation works. These actions essentially ensure the identification and detailed understanding of heritage values within proposed development areas.
- ✓ Proper Handling of antiquities discovered during construction. At Kos airport (KGS) excavations for the foundation of the new terminal buildings uncovered antiquities on three occasions. The first time a plank (90cm diameter) and two handle baskets dated back to the Roman period (4th and 3rd century BC) were uncovered and on two other occasions' fragments of amphora were also discovered. The items are currently in the possession of the relevant archaeological authority at Kos.
- ✓ As per the SMI Environmental Terms a study for the restoration of the church of Agia Pelagia as well as the ancient burial monument that is within the airport boundary was implemented within 2019. The results of the study have been submitted to the relevant archaeological authorities.
- ✓ The Central Architectural Council has approved the new designs for all seven (7) airports.



11. Air Quality

11.1. Overview

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

Some activities that generate air emissions include:

- Aircraft ground operations including refuelling.
- Vehicle and equipment operations.
- Use of air-conditioners, pumps and generators.
- General Aviation maintenance, including spray painting and paint stripping activities, workshop activities and cleaning operations using organic solvents.
- Use of ground power units and auxiliary power units.
- Grounds maintenance, including vegetation removal and weed control.
- 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.
- Offensive or concerning odours (e.g. fuel odours).

11.2. Protective actions

Measures to manage potential impacts to air quality include:

- Environmental awareness and inductions.
- Monitoring plan and implementation of the measures imposed by the Environmental Terms. The plan includes type and frequency of monitoring parameters and monitoring equipment. The gathered 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.
- Appropriate collection and disposal of ozone- depleting substances from airconditioning units.
- Maintenance of vehicles and equipment to prescribed standards.

The CEMP's include a **Dust Management Plan** for relevant construction projects addressing potential local air quality impacts including dust control measures.

In order to eliminate the environmental impacts to ambient air quality during construction, the following measures are implemented according to the Environmental Terms of the project:

- 1. Use of the excavated material for land filling inside construction site, taking into consideration:
 - the content of the material and the possibility to use it as it is or with enrichment



- the position of the temporary storage areas
- 2. The necessary material for the construction of the project, that it is impossible to derive from the excavations, is transferred from existing and legal quarrying, which complies with the Environmental Terms. The mitigations measures include the following options:
 - Surface watering or equivalent measures, will be applied on disturbed land at construction sites and other unpaved surfaces to reduce particle suspension by vehicles.
 - Covered trucks to prevent dust dispersion.
 - Wheel washing from mud and dust before leaving the construction site as required.
 - Fencing the entire area of the construction site, to limit the dispersion of dust and other pollutants during the construction works.
 - Measures to prevent spreading of solid in case of rainfall such as configuration of soil.

Additionally the Contractor has created an **Indoor Air Quality Management plan** in order to address the dust issues from the indoors construction works. The plan includes dust suppression measures and is modified accordingly for each site.

FG is also planning the phased replacement of terminal package air-conditioners that use ozone depleting substances.

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.

FG is regularly inspecting the airport, tenant and contractor activities. Where there are unacceptable air emissions caused by their operations, airport operators are required to undertake relevant measures to monitor, manage or remediate the impacts.

Target

Ensure appropriate servicing and maintenance of equipment.

Air monitoring plan for all airports –

Quantification of CO₂

Join Airport Carbon Accreditation Program for 1 airport (SMI)

Timeframe

Ongoing – Throughout the concession period

Ongoing

Annually

2020

Table 10: Targets for air quality



11.3. Achievements

- ▼ FG has already implemented an Interim Monitoring Plan for Air Quality in cooperation with the National and Technical University of Athens. The Plan was submitted to the Ministry of Environment and Energy as an Annex to the Modification EIA studies.
- ✓ Air Quality Measurements were conducted from July to September 2019 at all 7 airports.

The monitored pollutants were Sulphur dioxide (SO₂), nitrogen dioxide (NO₂), benzene (C_6H_6), particulate matter (PM₁₀ & PM_{2,5}) and ozone (O₃).

- Air Quality Modelling was conducted in all Cluster B airports. Using the software a) US FAA Emissions & Dispersion Modeling System (EDMS) and b) US EPA AERMOD concentrations and respective contours were calculated for the following pollutants:
 - Nitrogen oxides (NO_x)
 - Sulphur oxides (SO_x)
 - Particulate matter (PM₁₀)
 - Benzene (C₆H₆)

Input data included passenger traffic as depicted in Air Traffic Movements (ATMs), meteorological data, ground handling equipment etc. for the peak period and annual

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 B.

✓ Proposal of permanent Air Quality Monitoring program to the Ministry of Environment and Energy for approval.

The proposal includes:

- installation of permanent monitoring stations at RHO,
- annual monitoring campaigns at KGS, JMK, JTR and MJT,
- monitoring campaigns once every 3 years at SMI and JSI.
- ✓ Quantification of Greenhouse Gas emissions (baseline) for the all seven (7) airports.

The methodology followed for the quantification of GHG emissions was based on:

 Airport Carbon Accreditation Guidance Document, Issue 11, February 2019.



- ISO 14064-1 Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
- Greenhouse Gas Protocol, WRI (GHG Protocol Corporate Accounting and Reporting Standard, Revised Edition, and GHG Protocol Project Quantification Standard).
- Guidance Manual: Airport Greenhouse Gas Emissions Management, ACI, 2009.

The emissions include the GHG emissions for all direct emissions (Scope 1) and indirect emissions from consumption of purchased electricity, heat or steam (Scope 2) produced within the boundaries of each airport based on the definitions of the HG protocol.

The following table shows the total emissions (Scope 1 and 2) per airport for the year 2019:

Airport	IATA Code	Total emissions (t CO ₂)
Rodos	RHO	7.088,3
Kos	KGS	1.656,9
Santorini	JTR	1.417,7
Mikonos	JMK	1.189,5
Mitilini	MJT	922,8
Samos	SMI	1.183,0
Skiathos	JSI	998,5

Table 11: Total CO₂-emissions 2019 per airport

✓ Rodos, Mitilini and Samos have earned the accreditation level 1 of MAPPING. The remaining airports have also received Greenhouse Gas emissions verification statement according to ISO 14064.

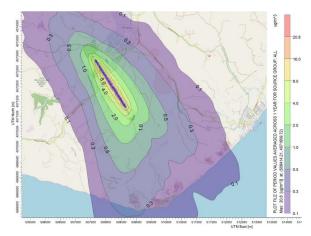


Figure 23: Yearly concentrations of SOx at KGS airport.



12. Noise

12.1. Overview

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

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 and imminent works, noise will be carefully managed to reduce off-site impacts.

FG manages noise in such a manner to ensure it does not cause nuisance to, or adversely affect, neighbouring receptors. Activities could generate noise may be:

- Aircraft landing and take-off procedures.
- Aircraft ground running and idling on aprons.
- Aircraft maintenance and testing activities.
- · Fixed and mobile equipment.
- General airport and infrastructure maintenance activities.
- Internal road network traffic.
- Tenant and operator activities.
- Construction and demolition works (temporary only for the duration of imminent works implementation).

These activities could cause:

- Nuisance to airport operators and the community
- Disruption in roosting and breeding behaviour of local fauna.

12.2. Noise Management Plan

FG is producing a noise management plan during the operational period, for each airport.

The Monitoring Plan and the implementation of the proposed measures is imposed by the Environmental Terms. The plan includes type and frequency of monitoring parameters and monitoring equipment. The gathered 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 in response to airport operational matters and tenant feedback.
- Regular servicing and maintenance of vehicles and equipment.

Implementing noise control measures through CEMPs as standard. The CEMP's include a Noise Management Plan in order to keep noise levels to acceptable limits.

The Contractor proceeds to the following steps:

- 1. Estimate the positions of the construction areas where the activities will be executed considering also the planned timetable of activities.
- 2. If activities are suspected or estimated to exceed the noise criteria, the contractor will investigate the probability to change the timetable activities, so that the noisiest works do not occur simultaneously in a particular area of the construction area and except for summer period, as the windows of the buildings are open. However, the modified timetable will not exceed the total construction time of the project.
- 3. In case that there is no possibility to modify the timetable of the project, the contractor will investigate the occasion to reduce the duration of the noisy activities, and / or proceed with the following measures:
 - Screening and reduction of construction noise with noise barriers, especially at areas close to sensitive noise zones is foreseen where exceeding limits.
 - Measures to regulate the movement of the trucks inside and outside the construction area. In order to do so, the contractor will define the routes of the trucks

FG regularly inspects the airport, tenants and contractor and operator activities. Airport tenants, contractors and operators are required to ensure appropriate systems and procedures are in place to manage specific noise-related environmental risks associated with their activities.

Table 12: Targets for noise management

Target	Timeframe
Noise Monitoring Plan and implementation of it.	Ongoing
Timely investigation of any reported inappropriate noise generation	When required



12.3. Achievements

- ✓ Interim Monitoring Plan for Noise in cooperation with the National and Technical University of Athens. The Plan was submitted to the Ministry of Environment and Energy as an Annex to the Modification Dossiers of the EIA studies.

 Moreover, in the aforementioned studies Noise Modelling was presented depicting the expected noise levels in relation to the passenger forecast for upcoming years. The Interim Monitoring Plan for Noise was implemented for 2019 as follows:
- ✓ Noise Measurements were conducted from July to September 2019 at all 7 airports. L_{den} and L_n indicators were measured and the respective data evaluated.
- ✓ Noise Levels Modelling was conducted in all Cluster B airports. Using special modelling software L_{den} and L contours were calculated and the subsequent noise trends were presented.

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



Figure 24: KGS noise monitoring: (Lden noise contours).

✓ Proposal of permanent Noise Monitoring program to the Ministry of Environment and Energy for approval.

The proposal includes:

- o installation of permanent monitoring stations at RHO (2 stations),
- o annual monitoring campaigns at KGS, JMK, JTR and MJT,
- o monitoring campaigns once every 3 years at JSI and SMI.
- ✓ 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 are received. After a complaint is received the Quality, Environment, Health and Safety and Department undertakes the actions to verify the source of the problem and implement all necessary corrective actions.



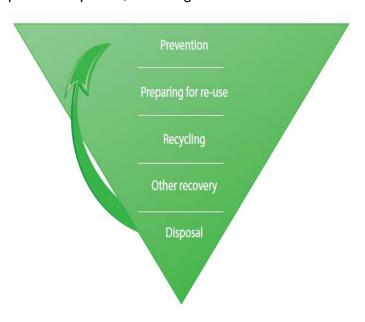
13. Waste Management

13.1. 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.

The main objective is to promote waste minimization where possible. Waste segregation at the source has already started airports and is planned to be promoted for all personnel and tenants.

Recycling and re-use are both of great importance for **FG** and will be implemented throughout the operational period, including construction works.



Graphic 2: FG's waste management hierarchy

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

All kinds of waste have the potential to cause harm to persons, property and the environment. As a result, they should be handled in an appropriate manner. Where feasible, **FG** is substituting, reducing or eliminating the use of hazardous materials and those used are appropriately recycled 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 asked to ensure that the management of waste is safely carried out, through direct cooperation with an



authorized public or private waste collector or through FG's central waste management system, where applied.

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.
- Vehicle refuelling at the service station.
- Aircraft, vehicle and mechanical plant and electrical equipment maintenance.
- · Construction, earthworks and demolition.
- Quarantine operations.
- General airport operation, construction, maintenance and landscaping including weed and animal pest control.

These activities could cause:

- Release of hazardous materials, leading to water, land and air contamination.
- Human and ecosystem health impacts.

13.2. 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 special waste bins for separation of paper and cardboard, metals, plastics, glass, and biowaste, where feasible.
- Dedicated areas for the collection and storage of recyclable materials
- Hazardous waste disposed and recycled properly by certified handlers.
- Waste containers around the airport for passengers and tenants transferred to onsite waste containers and then transported to offsite treatment or disposal facilities.

FG's Health and Safety procedures – detail procedures have been developed in relation to storage, handling and disposal of waste, asbestos and other hazardous materials, maintenance of asbestos register, Health and Safety incident reporting, etc.

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.

FG regularly inspects airport users' and contractors' activities to check environmental risks associated with their activities in relation to hazardous materials are being managed appropriately.

Management of hazardous materials is also addressed through CEMPs for relevant construction projects. A Construction Waste Management Plan has been created and is in in force along with a Hazardous Substances Management Plan in all 7 airports.



The Construction Waste Management Plan aims to reduce construction and demolition waste disposed of in landfills by recovering, reusing, and recycling materials.

The main objectives of the plan are:

- · Diversion of waste from Landfill.
- Backfilling of inert materials produced during earthworks on site.
- Establishment of separate collection facilities (skips, collection points) for segregated or comingled recyclable materials in accordance with Environmental Terms.
- Cooperation only with fully licensed carriers and receptors.
- Selection of appropriate construction materials that will ensure maximization of reuse and recycling.
- Reduce waste where possible.
- Reuse materials where possible.

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, interceptor trap maintenance, environment 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.

In regards to asbestos materials an Asbestos Management Plan is being implemented were the following actions are included:

- Labelling of the materials as asbestos containing materials.
- Notification of the personnel working in the vicinity of these materials.
- No disturbance of the asbestos materials.
- Proactive painting of the external surfaces with plastic painting (optional).
- Optimal solution: Programmed removal of the asbestos materials by a specialized and licensed company.
- Following asbestos removal the premises must be assessed conducting visual inspection and air monitoring in accordance with relevant Greek legislation for issuing Clearance Certificates Certificates of Reoccupation. The assessment should be carried out by independent laboratory accredited by Hellenic Accreditation System (ESYD) for asbestos air sampling and analysis. The Hazardous Substances Management Plan (HSMP) forms part of the comprehensive suite of management plans that have been prepared for the construction phase of the Project. This document outlines the hazardous substances that are to be used or stored as part of the construction activities, and how the risks associated with these substances are to be managed.



The plan has been prepared for two distinct purposes:

- to provide information to the construction team as to acceptable management methodologies during the construction phase, and
- to provide information to the consenting authorities to demonstrate that the possible risks as a result of storage and use of hazardous substances have been considered and will be appropriately managed by the construction team.

Table 13: Targets for waste management

Target	Timeframe
Establishment of integrated waste management in all airports, with focus on sorting at source and materials recovery.	Ongoing
Drafting Waste Management Plans for all airports.	Ongoing
Monitor chemical storage and handling practices during internal and tenant audits.	As per internal and tenant audit schedule
Monitor availability of up-to-date Materials Safety Data Sheets at points of use during internal and tenant audits.	As per internal and tenant audit schedule

13.3. Achievements

- Cooperation with private and public authorities for the integrated management of non-hazardous waste, with focus on sorting at source of paper and cardboard, plastics, metals, glass and biowaste, in order to maximize materials recovery.
- ✓ Cooperation with Alternative Management Systems for the recycling of hazardous waste such as oils, batteries, tires, electronic and electrical equipment.
- ✓ Equipment for storage of Hazardous Waste for all 7 airports.

Part of the overall waste management and it's main objectives FG proceeded to purchasing of new containers for the storage of hazardous waste until they are safely removed from the airports and dispatched for recycling.

The containers were for the following types of waste:

- Large Batteries and Accumulators
- Used mineral oils

For the barrels of the used mineral oils, oil spill pans were also purchased in order to minimize the risk of a spillage. Informative stickers were also purchased for each of the containers.

✓ Sampling of equipment containing PCB and safe removal and management. Electrical devices that were recorded as possibly obtaining PCB's were sampled by licensed companies. Upon confirmation that were PCB free, the devices were recycled as scrap material.





Figure 25: Barrels for used oils stored indoors. The used oils are sent for recycling to the respective Alternative Management System.



Figure 256: Large batteries and accumulators container ready to be sent for recycling





Figure 27: Sampling of PCB containing devices by specialized personnel, at MJT airport.



14. Conclusion

The 2020 Environmental Strategy Report is not a business as usual strategy. The commitments, goals and initiatives will be challenging to plan, launch and deliver.

FG will monitor and report annually on progress against the goals and the lessons learned and will seek regular feedback and input on how to improve.