CARBON MANAGEMENT PLAN 2023–2026

PRISHTINA INTERNATIONAL AIRPORT ADEM JASHARI

Limak KOSOVO

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GLOSSARY OF TERMS

Within this document there are a number of terms and expressions which require definition.

1. **Greenhouse gases (GHG):** Gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds.
   Note: GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6).
2. **Aviation emissions:** Aviation emissions include only the emissions from aircraft (both from domestic and international operations) including all phases of flight and APU use.
3. **Greenhouse effect:** Most mainstream scientists believe a human – driven increase in "greenhouse gases" is increasing the effect artificially. These gases include carbon dioxide, emitted by fossil fuel burning and deforestation, and methane.
4. **Greenhouse gas report:** Stand-alone document intended to communicate an organization or project's GHG related information to its intended users.
5. **Baseline GHG emissions inventory:** A comprehensive, quantified list of an organization's greenhouse gas emissions and sources for the initial reporting year (base year). The baseline GHG inventory is the level of greenhouse gas emissions against which future GHG inventories are compared.
6. **Absolute GHG emissions target:** A target defined by a reduction in absolute emissions over time.
7. **Relative GHG emissions target:** A target defined by a reduction in the ratio of emissions and a business metric over time. In the case of airports, it is expressed as tonnes of CO2 per passenger.
8. **GHG target:** The level of greenhouse gas emissions that a company intends to reduce by a specific date as part of its commitment.

ABBREVIATIONS

ACA	Airport Carbon Accreditation
ICAO	International Civil Aviation Organization
PIA	Prishtina International Airport
LKIA	Limak Kosovo International Airport
CMP	Carbon Management Plan
GHG	Greenhouse Gases
IMS	Integrated Management System
tCO_2e	Tones Carbon Dioxide Equivalent
tCO_2	Tones Carbon Dioxide
$kgCO_2$/Pax.	Kilogram Carbon Dioxide per Passenger
EMS	Environmental Management System
EnMS	Energy Management System
RFFS	Rescue Fire Fighting Service
ICT	Information Communication Technology
ATC	Airport Traffic Control

REFERENCE DOCUMENT

ACA	Airport Carbon Accreditation / Application Manual / Issue 13
GHG	Greenhouse Gas Protocol / Calculation Tools
IEA	International Energy Agency/ Factor emissions
Carbon Trust	Energy Management Matrix
NASA	Global Climate Change/ effects
EnMS	Energy Management Manual/ 4.4 Energy Planning
ACERT	ACERT Tool v6.0
ICAO	Carbon Emissions Calculator

Message from Board Member & CEO

Limak Kosovo International Airport is moving ahead in the aviation industry amid the current expansion of its new terminal to accommodate at least 4.5 million passengers. New facilities, new partners, and a new strategy for building a better airport made 2011-2022 a busy and memorable period for LKIA.

Limak Kosovo International Airport is firmly committed to sustainability and carbon management as key pillars of the business strategy. We recognize the urgent need to address climate change and actively work towards reducing our carbon footprint.

Our commitment is demonstrated through setting ambitious targets. We have established clear and measurable targets to reduce our greenhouse gas emissions. These targets reflect our dedication to taking significant action to mitigate climate change.

We understand that achieving our carbon management goals require adequate resources, therefore we have allocated the necessary financial and human resources to support the implementation of this Carbon Management Plan. This ensures that sustainability initiatives are integrated into our day-to-day operations and that we have the necessary tools and expertise to drive meaningful change. We ensure that sustainability considerations are integrated into all levels of decision-making processes, including evaluating the environmental impact of our operations as well as considering sustainable alternative and opportunities for innovation.

We believe that maintaining carbon neutrality requires collective actions, therefore we actively engage our employees, stakeholders, and partners to build a strong collaboration in order to advance sustainability initiatives, reduce our carbon footprint and share the best environmental practices.

We are proud to be part of the Airport Carbon Accreditation as the only institutionally endorsed carbon management certification programme for airports and being accredited with the Level 3+ Neutrality while looking forward to achieving the highest level, respectively Transition in the near future.

By demonstrating continuous commitment to carbon management, we aim to lead by example and inspire positive change within our industry. Through these actions, we are dedicated to making a meaningful contribution towards a low-carbon future and ensuring the long-term sustainability of our company.

Haldun Fırat Köktürk

Board Member & CEO

Limak Kosovo International Airport J.S.C

Executive summary

Limak Group of Companies, the foundations of which have been laid in 1976 with Limak Construction, continues its activities in the fields of construction, tourism, cement, infrastructure and energy investments, energy contracting, aviation and food in 13 countries with over 45 thousand employees, including its partnerships, as of 2015. Outside Turkey, the Group conducts the management of Prishtina International Airport "Adem Jashari" and electricity distribution activities in Kosovo.

Prishtina International Airport "Adem Jashari" (PIA) was acquired in 2010 by Limak and Airports de Lyon management and Services under a 20-year construction, operation, and transfer contract. At Prishtina International Airport, in addition to the terminal and parking lot management, Limak Kosovo also conducts the management of the ground operations, cargo and PAT (runway, apron, taxiways) operations and their maintenance and repair. Limak, acquiring 90% shares of the airport with this transfer, has taken the new terminal building and ancillary facilities into operation within a short period of two years within the scope of an investment. In addition to the new terminal building with an indoor area of 42 thousand square meters, implemented in the international norms, equipped with environment friendly and smart building technology, the construction of the 110 thousand m^2 apron and the new air traffic control tower, rehabilitation of the airport transportation roads, construction of the parking lot with a capacity of 1.750 vehicles, fuel tanks and connection roads have been realized.
Since 2014, when Limak first started to operate with the new terminal, it has increased its passenger's number by 113%, reaching nearly 3 million in 2022.

LKIA is committed to expanding the route network from Prishtina International Airport, encouraging the commercial airlines to operate new routes from/to PIA utilizing the capacity, and continuing the sustainable development, increasing the overall passenger volume and promoting economic growth for LKIA through the Incentive Program 2022-2024 which is in compliance with the related regulations of Civil Aviation Authority of the Republic of Kosovo and the Public Private Partnership Agreement signed between Republic of Kosovo and LKIA.

I. LKIA CARBON MANAGEMENT PLAN

1.1 Introduction

Prishtina International Airport "Adem Jashari" as a sustainable company is certified with ISO 9001:2015 Quality Management System (QMS), ISO 14001:2015 Environmental Management System (EMS), ISO 50001:2018 Energy Management System (EnMS), ISO 27001:2013 Information Security Management and ISO 10002:2018 Complaints Handling System (CHS). Implementation of ISO standards is the common practice and is the key part of management strategy for development and continuous improvement of the quality of services at LKIA.

This is the third edition of the Carbon Management Plan for Prishtina International Airport. This plan sets out the Airport's strategic direction on carbon management until 2026 in line with guidance document of Airport Carbon Accreditation, GHG Protocol, ISO 14001, ISO 14604-1 and ISO 50001.

The Carbon Management Plan will be updated and reviewed not less frequently than 3 years.
This Plan enables LKIA to:

- Understand the impact of carbon emissions
- Create a plan to reduce carbon emissions
- Implement, review, and update the plan
- Communicate activities and implementations to stakeholders

1.2 Purpose of This Plan

The purpose of the Plan is to demonstrate the continuous commitment towards reducing carbon emissions impacts against its 2018 baseline and meaningful efforts by Prishtina International Airport to reduce its emissions in line with the set target and policy statement. Reducing these emissions is vital when faced with growing global concern of climate change. We are implementing practical solutions to reduce the airport's carbon footprint, integrating energy conservation, efficiency, and generation.
The Plan covers Scope 1 and Scope 2 emissions as direct emissions and Scope 3 emissions that are generated by third parties as indirect emissions. All these emissions are defined annually in the carbon footprint report.

1.3 Our Low Carbon Vision

Pristina International Airport's objective is to reduce its carbon emissions and achieve best practice in carbon management from operations within the control of the airport, with the ultimate target of getting accredited with the highest level of ACA, respectively Level 4+ Transition. Carbon Management is a key factor in decisions about how we deliver our services, and in our work with partners, stakeholders, and communities.
LKIA is committed to use the best environmental practices and increase the cooperation with airport partners and stakeholders to accelerate the rate of footprint reduction. As air traffic continues to increase, we need to consider the growth limit of our country to maintain a well-balanced and sustainable company. Prishtina International Airport now can demonstrate that it is contributing to the voluntary action the aviation industry is taking to reduce its impact on the environment.

Good carbon management delivers clear benefits:

- It reduces the impact of carbon emission on the environment
- It reduces operating costs
- It enhances environmental reputation

All of these will be delivered by constantly working and encouraging our partners, stakeholders, and communities, managing our resources robustly and sharing resources and facilities where is appropriate, creating a culture that promotes innovation and new ways of doing things and continually improving the quality of our services.

II. PIA CARBON MANAGEMENT IMPLEMENTATION PLAN

Prishtina International Airport Carbon Management Plan sets out the organization structure, self-assessment, steps, projects, responsibilities, resources, and carbon management initiatives to meet the carbon reduction target. By taking these steps and actions set out at Energy and Carbon Management Program, we continue to reduce our emissions through our activities.
In order to be able to take a more strategic viewpoint on greenhouse gas (GHG) emissions at the Prishtina International Airport and reduce these emissions, it is relevant to understand and to measure the activities and processes which generate these emissions. PIA established 2018 as a base year for GHG emissions and removals for comparative purposes or to meet GHG program requirements or other uses of the GHG inventory.

Prishtina International Airport's carbon reduction strategy is based on the following strategic themes:

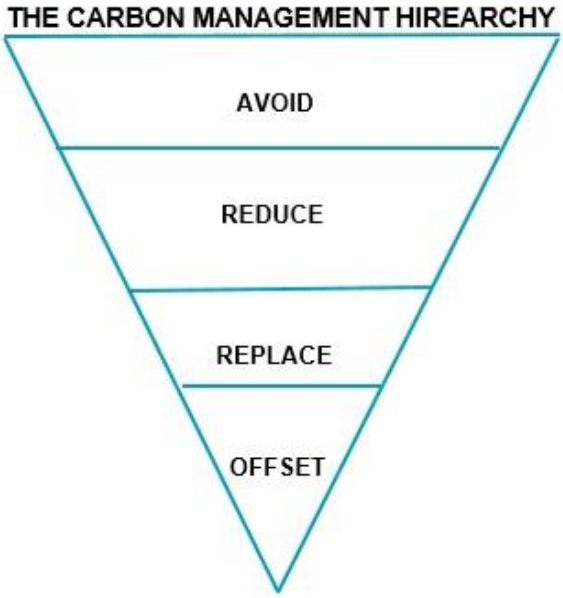


Fig 1. *Carbon Management Hierarchy*

2.1 PIA's Inventory Boundaries

Limak Kosovo International Airport's operational structure can be understood by dividing operations into airside operations and landside operations. The Aerodrome land is 393.68 hectares referred to LKIA Aerodrome Services and Operations Manual (8th edition). LKIA has overall control of both operations, except ATC Tower activities that are controlled by authority of the state.
LKIA airside operations: Runways, taxiways, aprons, aircraft remote parking position, aircraft ground power supply, planning and other airside activities and maintenance.
LKIA terminal and landside operations: Operation and maintenance of terminal building, including car park area, power distribution center, heating and cooling, water and wastewater treatment plant operation and maintenance.

Plan of the aerodrome location in relation to Prishtina

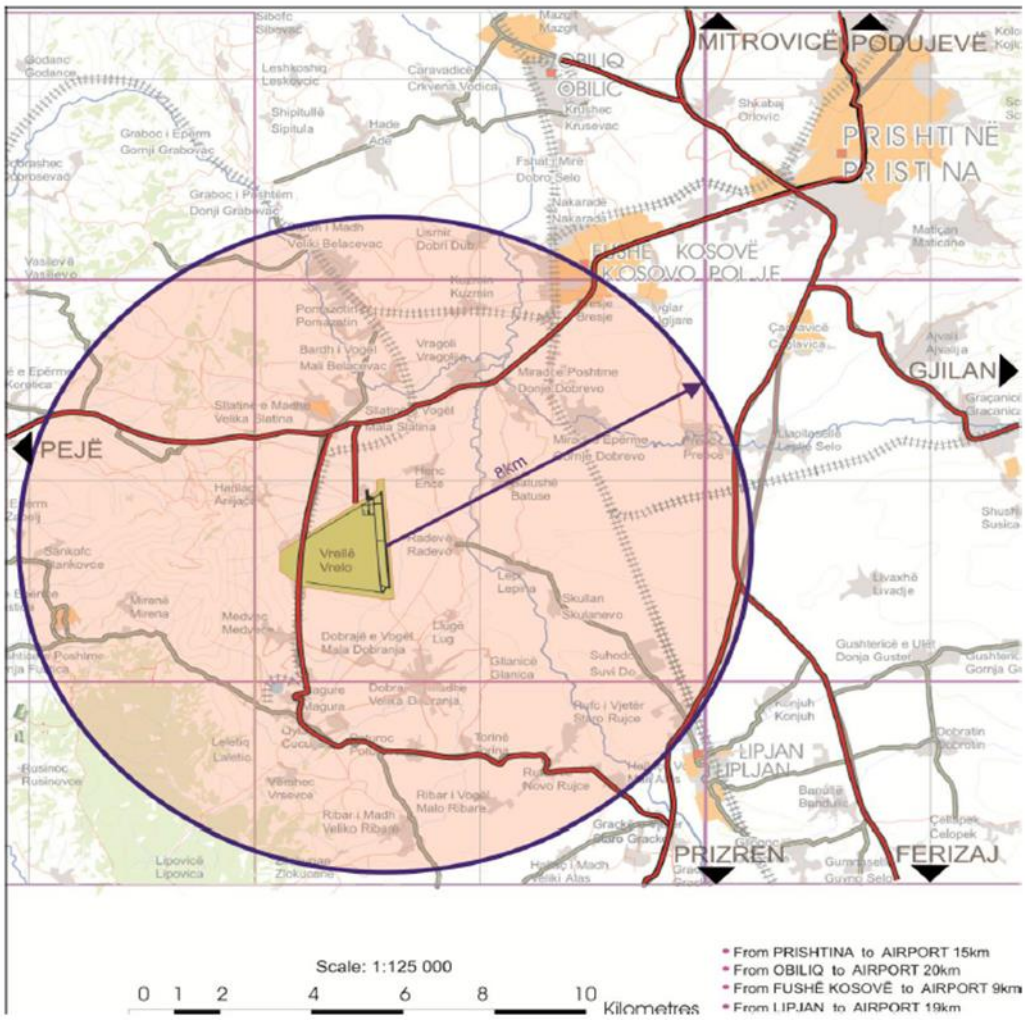


Fig. 2 Plan of the aerodrome location in relation to Prishtina

2.2 Emission Sources

In the Carbon Management Plan 2023-2026, are presented all emissions from scope 1, scope 2 and scope 3. All emission sources under airside and landside operations that are in consistency with Scope 1 and Scope 2 are the responsibility of LKIA, while Scope 3 emissions are indirect emissions that are not controlled by LKIA, therefore only monitored, and reported.

- ✓ SCOPE 1

  Direct emissions from sources that Prishtina International Airport owns or controls, as;

  1. Stationary Sources
     - Heating facilities
     - Emergency generators
     - Firefighting exercises

  2. Mobile Sources
     - Transport (landside and airside operations)

3. Process Emissions
   - Water management
4. Other
   - Leaks from plants
   - De-icing

Wastewater treatment system emissions are not calculated because of the minor amount of emissions, while refrigerants (compounds used for refrigeration and air condition) are taken into account just in case of leaks.

✓ SCOPE 2

Greenhouse gas emissions from purchased electricity, where emissions are generated externally but attributed to energy consumption at the airport. Sold purchased electricity (purchased electricity sale is metered) to third parties are net off from Scope 2 emissions, these netted off emissions are included in Scope 3 emissions as Sold Electricity.

✓ SCOPE 3

All other indirect emissions which are as a consequence of the activities of the organization but occur from sources not owned or controlled by the airport.
Emissions that are not owned and controlled by the airport but are reported every month are as follow:

- Flights emissions/LTO Cycle
- Employee transport (private cars)
- Employee transport (bus/service)
- Freight transport (Cargo-Export)
- Municipality waste
- Passenger cars
- Business travel
- Sold electricity
- Sold water

2.3 Carbon Management Initiatives

Prishtina International Airport "Adem Jashari" has identified a number of different carbon reduction initiatives, actions and projects related to the strategic theme and the implementation of these actions will aim to deliver the carbon reduction targets outlined within this document. A detailed list of these projects, actions and initiatives is shown in Table 1. of this document.

Initiatives					
No	*Subject*	*Action*	*Responsible*	*Status*	*Progress update*
1	Monitor the efficiency of heating, ventilation, and cooling systems	By monitoring and reporting energy performance.	Automation System & Energy Management	Continuously	*Reference procedure: (LKIA-PR-EMU-01) Section 6.4 Heating and Cooling System*
2	Lighting plan	Creating a lightning plan according to flights and sunset time	Automation System & Energy Management	Continuously	*Reference procedure: (LKIA-PR-EMU-01) Section 6.1 Lightning System*
3	Monitoring outdoor lights	Self-audit according to lighting plan	Automation System & Energy Management	Continuously	*Reference procedure:* (LKIA-I-EMU-02)
4	Monitoring lighting sensors	Lighting Sensor Verification Log	Technical Group & Energy Management	Continuously	*Reference procedure: (LKIA-F-EMU-02)*
5	Fuel conserving	Driver education on fuel conserving driving and implementation of no-idling regulation	Energy Management	Continuously	*Development of the Minimize Engine Idling Time Instruction (LKIA-I-EMU-03)*
6	Arrange public transport	Public transport arranged for all employees and passengers	Municipalities/Airport	Ongoing	https://trafikurban-pr.com/linja-e-aeroportit
7	"Green" vehicles	The purchase of electric equipment GSE and other shall be environmentally friendly considering CO_2 emissions.	Top Management & Procurement Department	Continuously	*Purchase of the following airport equipment demonstrates the continues implementation of "Green" vehicles initiatives: Painting machine GRACO 250 DC Crack filling machine VIMPO VCF 400. Pushback (Diesel) (2 pieces) GPU mobile diesel (1 piece) Passenger's stairs solar/electric (3 pieces)*
8	"Zero idling zones"	Creating "Zero idling zones" including TAXI and BUS services	Energy and Carbon Management	Ongoing	*Taxi, Bus, and Rental zones are defined* within the PIA area
9	Environmental Calendar	Implementing Environmental Calendar and improving it with new activities	Environmental Management	Continuously	

10	Increasing Lightning Efficiency	Replacing broken lights with LED in Terminal, Parking and Apron Area to increase energy efficiency	Top Management and AGL/Electric & Electronic Unit	Ongoing	*Until all old lights are replaced with LED*
Actions					
No	***Subject***	***Action***	***Responsible***	***Status***	***Progress update***
1	Temperatures will be set to a standard of 22C - 24C for indoor areas	Heating and Cooling Operation	Energy Management	Done	*Reference procedure (LKIA-I-EMU-01) Heating and Cooling Operation Instruction for Energy Management*
2	Some of the elevators will be shut down, stairs will be in use	Environmental Calendar	All Staff	Every year	*An initiative taken as part of the environmental day's celebration*
3	Laptops will be bought instead of computers	Green/Procurement Policy	Procurement & ICT Department	Continuously	*In reference to: ICT Green Policy*
4	Engine idling for vehicles will be set to minimum time before operation	Energy Management Program	All Units	Done	*Development of the Minimize Engine Idling Time Instruction (LKIA-I-EMU-03)*
5	Integrated Management System audit program	Implementation of environmental, energy and carbon management system	Energy management	Continuously	
6	Annual reports	Preparing annual energy management and carbon footprint report	Energy and Carbon representatives	Continuously	
7	Review meetings	Conduct regular meetings to review CMP progress and implementation	Climate change committee	Continuously	*Climate Change Committee meeting are regularly held between Energy Management System Representative, Environmental Management System Representative and Carbon Management Representative.* *As a recent organizational chart change, these systems are merged into one Unit, respectively as OHS, Environment & EnMS Unit, as a result of constant collaboration.*
8	Waste management	Increasing the figures of recycling waste / Waste Management Plan	Environmental Management	Continuously	*Waste Management Plan (LKIA-D-EMS-02)*

9	Water management	Water saving initiatives	OHS, Environment and EnMS Unit in cooperation with Mechanic and Building Maintenance Unit	Continuously	*Water saving awareness emails, annual audits, and daily/hourly control of its consumptions. Yearly environmental objective* https://www.facebook.com/airportpristina/photos/a.147500821278874/3146409178982094/
10	Awareness program	Implement "Environmental Management Systems" Orientation Training for PIA staff	Environmental Management, Energy Management and Carbon Management Representatives	Continuously	
11	Awareness program	Implement an Environmental Orientation awareness training for stakeholders .	Environmental Management, Energy Management and Carbon Management Representatives	Continuously	
12	Apply control measures / Evaluate Impacts	Monitoring and implementing all requirements according to ISO 5000, ISO 14001, and Airport Carbon Accreditation	Environmental Management, Energy Management and Carbon Management Representatives	Continuously	
13	Green Procurement policy	Implementing green procurement policy	Procurement Department	Continuously	*When purchasing new equipment, the green procurement policy is implemented taking in consideration the environmental aspects.*
14	New VIP Building	Construction of new VIP Building according to sustainable technology	Top Management	Done	*This project was changed by completely renovating the existing VIP Building.*
15	Runway extension	Extension of the runway	Top Management	Done	*The finalization of this project was publicly announced.* https://www.facebook.com/airportpristina/posts/pfbid02Ss15DKKPFfPZRCFizQtV2XVDGCx3B7Mb4zBEe4tg1gLUmiyNHc4nVC8zmJdUEPttl https://caa.rks-gov.net/en/aeroporti-nderkombetar-i-prishtines-adem-jashari-pajiset-me-certifikaten-e-operimit-te-aerodromit-per-aeroplane-me-te-medhenj-kategoria-icao-code-e-dhe-sistem-te/

16	Enhancement of Passenger Screening Area	Restructure of Passenger Screening Area	Top Management	Done	
17	Cargo Services	New Building of Export Warehouse	Top Management	Done	*Completed in January 2023*
18	Improvement of RFFS Station	New Fire Fighting Service Team Living and Administrative Areas	Top Management	Done	*Completed in February 2023*
19	New Building for De-icing operations	New De Icing and Equipment Hangar, Hot Water Storage System	Top Management and M&BM Unit	Done	
20	Improvement of Security and Screening Services	New CCTV System	Top Management	Done	
Projects					
No	***Subject***	***Action***	***Responsible***	***Status***	***Progress update***
1	Solar Plant	1.9 Mw Solar Energy System Installation	Top Management	In process	*To be completed in February 2024*
2	Passenger Self Service Systems	Self-Check in Kiosks Self Service Bag Drop with Additional Belt Systems area. Automatic Boarding Gates Biometric Passenger Flow System	Top Management	In process	*To be completed in 2024*
3	Ground Handling Services Equipment	New Aircraft De Icing Truck	Top Management and Contract & Procurement Management Unit	In process	*To be delivered for winter season 2023/2024*
4	Improvement of Security and Screening Services	New Baggage Screening X-Ray / Explosive Detection Systems	Top Management	In process	*To be activated in July 2023*
5	New building for Rent a Car companies	Over 1.000 sqm new Rent a Car Area Building connected to the Terminal and Replace of Rent a Car Stores	Top Management	In process	*To be completed in September 2023*
6	Improving infrastructure	Over 2.000 sqm Remote (Bus) Gate Area to increase the Boarding Gate Number from 8 to 12	Top Management	In process	*To be completed in March 2024*
7	Improving infrastructure	Rebuild and enlargement of Gate 2	Top Management & Planning, Engineering and Development Unit	In process	*To be completed in August 2023*
8	Improving infrastructure	Runway Strip to comply with EASA	Top Management & Planning, Engineering and Development Unit	Ongoing	*To be completed in September 2024*
9	Improving infrastructure	D Apron redesign of Parking Stand	Top Management & Planning, Engineering	Pending	

			and Development Unit		*Planned to start in April/Mar 2024*
10	Improving infrastructure	Resurfacing of Runway	Top Management & Planning, Engineering and Development Unit	Pending	*Planned to start in September/October 2023*
11	CIP Lounge Renovation	CIP Lounge Renovation and enlargement	Top Management	Pending	*Planned to start in September/October 2023 and finish by the end of the year*
12	Security and Screening Service	New Card Access System	Top Management	Pending	*Planned to start at the end of 2023 and finish in 2024 March/April*

Table 1. *Initiatives, actions, and projects of Prishtina International Airport*

III. CARBON MANAGEMENT PLAN IMPLEMENTATION STRATEGY

3.1 Introduction

To be able to take a more strategic viewpoint on greenhouse gas emissions at Pristina International Airport "Adem Jashari" and reduce these emissions it is important to understand and measure the activities and processes which generate these emissions. LKIA, through the Energy and Carbon Management Policy, is committed to continuously improve energy efficiency and will take a series of measures to reduce energy consumption and carbon emissions at the airport. To improve the efficiency of management systems, besides the long-term targets, Prishtina International Airport annually sets new Environmental, Energy and Carbon Management Objectives.

3.2 Setting Targets

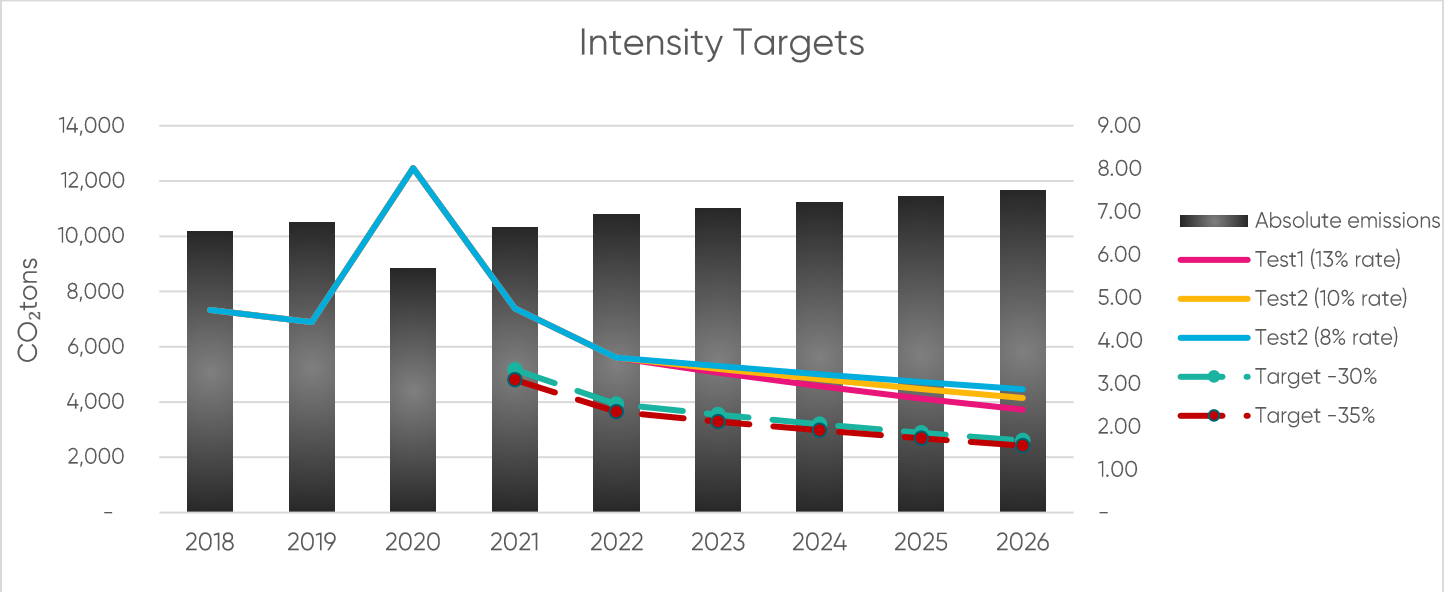
Based on the estimated passenger traffic development 2014-2022 and baseline emission calculation of 2018-2022 PIA has set long intensity targets for carbon reduction. Targets are calculated as scope 1 and scope 2 targets.

Intensity targets are defined by reduction in the ratio of emissions and a business overtime. In PIA's case the target is expressed as tonnes of CO_2 per passenger.
Based on intensity emission targets analysis PIA will aim to cut its emissions ($kgCO_2$/Pax.) about 30 % - 36% by the year 2026.
The table and graphic of Scope 1 and Scope 2 target determination is showed as below:

SCOPE 1 and SCOPE 2 TARGET DETERMINATION					
	Relative decrease from the reference year				Improvement indicator
	2018-2023	2018-2024	2018-2025	2018-2026	Average 2018 - 2026
Test 1 (13% rate)	30.92%	37.64%	43.71%	49.19%	3.27
Test 2 (10% rate)	29.03%	34.19%	38.98%	43.43%	3.39
Test 3 (8% rate)	27.72%	31.73%	35.53%	39.11%	3.48

(30% – 36%)

Table 2. *Setting targets of Scope 1 and Scope 2 calculations*



Graph 1. *Intensity targets*

As seen from the graphic and table of target analysis for Scope 1 and Scope 2 carbon emissions forecast expressed in $kgCO_2$/Pax, PIA aims to cut its emissions 30-36**%** by the year 2026. Worth mentioning is that the data of year 2020 have been excluded from the analysis as due to the pandemic they do not express realistic values neither for carbon emissions nor for passenger number.
To achieve the carbon target identified above a range of different approaches will need to be taken across the airport. These approaches are identified within this document as strategic themes. These themes are;

- Strategic approach
- Monitoring, targeting, and reporting
- Policy review
- Strategic investment
- Activities on carbon reduction

3.3 Strategic Approach

Prishtina International Airport has adopted a series of core values for carbon management. These include a statement of concern for sustainability and the relationship with the environment. On that basis, an Energy and Carbon Management Policy has been developed that is reviewed regularly by relevant representatives.
The aim of our policy is to display the organization's commitment to being environmentally friendly. By identifying airport activities which are high energy consumers and those that emit high levels of carbon, it makes us able to create a framework which enables us to be efficient. Procurement policy of green electricity also has been established by Prishtina Airport. The purpose of procurement policy is purchasing energy efficient products and services which operate more effectively than conventional ones and reducing the company's energy costs.
Carbon emission at LKIA needs to be seen as the responsibility of the whole airport. Taking strategic approach to carbon management and ensuring that actions on carbon emissions are considered within key strategic document will be build ownership of the issues amongst departments in LKIA.

3.3.1 Monitoring, targeting, and reporting

Monitoring our progress on reducing carbon emissions and reporting this to management, staff and stakeholders will play an important part in reducing carbon emissions.

3.3.2 Policy Review

LKIA provides the energy and carbon management policy that is relevant to reducing our energy and carbon footprint. The policy is reviewed every three years to ensure that is supports and sustains the reduction in CO_2 emissions.

3.3.3 Strategic Investments

LKIA is committed to investing in new technology to achieve reductions in carbon emissions. The investment will encompass energy efficiency; better design; and where possible, renewable technologies.

3.3.4 Activities on carbon reduction

LKIA aims to embed carbon reduction throughout the organization as part of its aim to become a sustainable organization. Actions to reduce the airport's carbon footprint will be delivered through the adoption of energy efficiency measures, low carbon energy solutions and potentially, the utilization of renewable energy. Carbon reduction will also be promoted in other ways, through for example waste management initiatives; encouraging sustainable transport; increase engagement and cooperation of staff, stakeholders, and passengers to achieve our objectives.

IV. METHODOLOGY

The carbon emissions are estimated on a monthly basis, throughout the year to establish a trend line. Prishtina International Airport's Greenhouse Gas emission footprint is calculated using the guidance of Greenhouse Gas Protocol (http://www.ghgprotocol.org/) and all of process is done under the guidance manual: Airport Greenhouse Gas Emissions Management (http://www.aci.aero/Publications/Full-Publications-Listing/Guidance-Manual-Airport-Greenhouse-Gas-Emissions-Management) and Airport Carbon Accreditation Application Manual Issue 13 (http://www.airportcarbonaccredited.org/).

1. Stationary combustion (fuel) and transport calculations are done by Greenhouse gas protocol tools. While the purchased electricity is calculated manually because the Republic of Kosovo in not specified at the table. Therefore, its emission factor is taken from ACERT Tool v6.0 Grid under "Other Europe".
   a) Stationary Sources includes heating facilities, emergency generators and firefighting exercises. The raw data for heating facilities is provided in liters. There are six monitoring points for heating fuel, while for carbon management they are calculated as total as one point per month. As while raw data for emergency generators are provided in liters with three monitoring points. Data for fire exercises are provided by RFFS Unit as CO_2 in kilogram and are calculated monthly.
   b) Mobile sources include all vehicles that operate at airside and landside areas owned and controlled by airport. Raw data are calculated according to Greenhouse Gas Protocol Tool defining mode of transport (road), type of activity data (fuel) and fuel amount.
   c) Process emissions are presented by amount of water that are calculated according to DEFRA water treatment factor ($kgCO_2e$).
   d) De-icing is calculated manually through emission factor from ACERT Tool v6.0.
   e) The raw data for purchased electricity is provided in kWh. There are three main bills that cover all areas of the airport.

2. Scope 3 emissions.
   a) Flights emissions are one of the biggest contributors. They are calculated annually by using ACERT Emission Calculation Tool created by ACI (Airports Council International). Raw data

are calculated according to Detailed Aircraft Data section by entering aircraft movements with aircraft type.

b) Employee private cars, employee bus, passenger transport, cargo/export, municipality waste all of them are calculated based on Greenhouse Gas Protocol Tools.

c) Electricity consumption and water consumption are sold to stakeholders for use in their activities for this reason metered amount of water and electricity are netted off from Scope 2 and Scope 1 and are calculated as Scope 3 with the same method.

d) Emissions released from Construction Site are calculated based on constructions that are present time by time. These emissions are calculated according to Greenhouse Gas Protocol Tools.

Note: All calculations and analysis are included in the LKIA Carbon Footprint Annual Report.

GREENHOUSE GAS PROTOCOL

User supplied data							GHG emissions (tonnes)			
Source ID	Sector	Fuel type (e.g., solid fossil)	Fuel	Amount of fuel	Units (e.g., kg or kWh)	Heating value basis	CO_2	CH_4	N_2O	All GHGs (tonnes CO_2e)
Gnrt Jan	Energy	Liquid fossil	Gas/Diesel oil	364	litres (l)	Not applicable	0.974	3.944E-05	7.889E-06	0.977
Gnrt Feb	Energy	Liquid fossil	Gas/Diesel oil	126	litres (l)	Not applicable	0.337	1.365E-05	2.731E-06	0.338
Gnrt Mar	Energy	Liquid fossil	Gas/Diesel oil	170	litres (l)	Not applicable	0.455	1.842E-05	3.684E-06	0.456
Gnrt Apr	Energy	Liquid fossil	Gas/Diesel oil	151	litres (l)	Not applicable	0.404	1.636E-05	3.272E-06	0.405
Gnrt May	Energy	Liquid fossil	Gas/Diesel oil	757	litres (l)	Not applicable	2.026	8.203E-05	1.641E-05	2.033
Gnrt Jun	Energy	Liquid fossil	Gas/Diesel oil	0	litres (l)	Not applicable				
Gnrt Jul	Energy	Liquid fossil	Gas/Diesel oil	181	litres (l)	Not applicable	0.484	1.961E-05	3.923E-06	0.486
Gnrt Aug	Energy	Liquid fossil	Gas/Diesel oil	2246	litres (l)	Not applicable	6.011	2.434E-04	4.868E-05	6.031
Gnrt Sep	Energy	Liquid fossil	Gas/Diesel oil	0	litres (l)	Not applicable				
Gnrt Oct	Energy	Liquid fossil	Gas/Diesel oil	1974	litres (l)	Not applicable	5.283	2.139E-04	4.278E-05	5.301
Gnrt Nov	Energy	Liquid fossil	Gas/Diesel oil	0	litres (l)	Not applicable				
Gnrt Dec	Energy	Liquid fossil	Gas/Diesel oil	1571	litres (l)	Not applicable	4.205	1.702E-04	3.405E-05	4.219

Fig. 3 Example of Greenhouse Gas Protocol calculation tools

V. RESPONSIBILITIES FOR ENERGY AND CARBON MANAGEMENT

Carbon Management is an ongoing improvement process that evolves along the way to achieve the objectives through undertaking greater challenges. To support the implementation of carbon management and energy management, all the necessary financial and human resources are allocated by the top management.

As mentioned before, operations in LKIA require high energy resources including fuel and purchased electricity that are planned and formalized according to operational baselines. Energy baseline figures are calculated according to historical and existing energy usage trends, system specifications in terms of energy consumption plus capacities. Power settings, operational weight and saving measures in mechanical and electrical systems, vehicles, equipment, and machinery directly affect future energy planning figures.

Carbon Management monitoring process is described as follow;

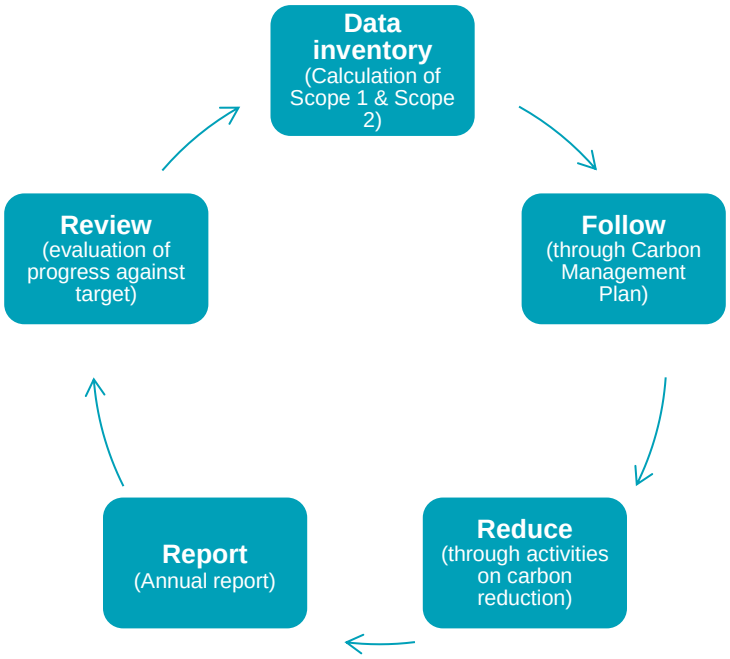


Fig. 4 Carbon Management monitoring and targeting process model

Based on the diagram, Carbon Management representative is responsible for this process while technical departments are responsible for providing data for calculations of Scope 1, Scope 2 and Scope 3, and support the carbon reduction projects whether technical or raising awareness. PIA follows the latest airport mechanical and electrical technologies and infrastructures to improve our energy performance. Because of the new building and advanced technology, the opportunity for savings is minimal. Key importance for the development and continuous successful implementation of Carbon Management is the development of EnMS, responsible for reducing energy consumption, and moving forward the development of renewable energy sources projects.
Regular Energy/Carbon Management reviews are made to ensure that progress is being made and that policy, strategy and action plan document are up-to-date and relevant.
Carbon Management Plan is prepared, revised, and distributed by the representative of Carbon Management.
LKIA Unit Managers / Supervisors will ensure the implementation of the Carbon Management rules and requirements for emission reduction within their area of responsibility.

Climate Change Committee has been established. The Committee composed of three mandatory members (Environmental, Energy and Carbon Management representatives), recommended members (Top Management, Chief Operations Officer), as well five other members (Ramp Unit Representative, RFFS & Wildlife Unit Representatives, Automation and Special System Representative, M&BM Unit Representative) on request, to address climate change issues, and to stay updated on environmental trends.

VI. COMMUNICATION, AWARENESS AND TRAINING

The success of the carbon management plan is highly dependent on the competencies and participation of employees and other stakeholders.
All green initiatives need to start with raising awareness of greenhouse gases, our impacts, and the issues we face with respect to global warming and climate change. However, each organization differs in respect to industry and operational activities.

Our awareness sessions are a short sharp presentation targeted at all employees. To take carbon measurement and management in-house, we offer full training regarding greenhouse gases to all staff as well as continual briefing. Example of training slides have been included in Appendix C. Expect regular trainings for its employees, PIA offers trainings for its stakeholders that are located in the airport area, in order to increase the collaboration and build an environmental culture.
Basic training "Environmental Orientation Training" is part of LKIA Training Program for all of those who start working at PIA. For employees and passengers to be constantly aware of saving energy and other topics related with environmental issues, awareness stickers have been placed in the terminal in specific places, exp. near light switches, in operational areas per idling etc. remaining everyone on anytime to stay green.
A more attractive way of raising awareness and increasing the engagement of employees and stakeholders is the development and implementation of 'Environmental Calendar'. In this Calendar are included all yearly environmental day, for each of them are shared awareness emails and when possible organized environmentally friendly activities for staff and stakeholders.

VII. SELF-ASSESSMENT/AUDITING

Prishtina International Airport keeps track of its progress and continuously identifies areas for improvements while using Energy Management Matrix by Carbon Trust.

Fig. 5 Energy Management Matrix by Carbon Trust

In this figure are shown areas in which we find possibilities of further improvements to achieve targets that are set in this management plan.
Annually Energy Management System Representative and Environmental Management System Representative performs internal audits for all PIA units whose operations are related to energy and environmental management systems.

APPENDIX A (Monitoring, targeting, and reporting)

	ENERGY MANAGEMENT UNIT	Nr.	LKIA -F-QM-11
		Page	1 of 1
	IMS INTERNAL REVIEW REPORT	Revision Nr.	03
		Revision Date	16APR2021

Audit Number:	Name according to audit plan:			Review Date:
Audit Team:		Requirements:		
		Checklist:		
Summary and comments:				
Number of identified non-conformities:		**Signature of auditor:**		**Date:**
0 Mayor	**0 Minor**	**1 Observations**		
Due date for rectification of above Observations and signature of Auditee:				
Closing meeting – meeting notes and other signatures:				

*Maximum allowed time for rectification of the findings qualified as "Observations" is 90 days

This form is used for internal energy management system internal audit review report.

PRISHTINA INTERNATIONAL AIRPORT ADEM JASHARI Limak KOSOVO	ENERGY MANAGEMENT UNIT	Nr.	LKIA -F-EMU-05
		Page	1 of 1
	EnMS SITE VISIT REPORT	Revision Nr.	00
		Date	19JUN2015

This table contains information gained from periodical site visits performed by EnMS team.

Audit Number:	**Visited sites**:	**Audit Date**:
Audit Team:	**Requirements**:	
Audit photos		
(photo)	(photo)	
(description)	(description)	
Summary and comments:		
(summary)		
Number of identified non-conformities:	**Signature of auditor:**	**Date:**
Follow-up audit required: **Yes No**	**Result of site visit follow-up:**	**Energy NC required:** **Yes No** **NC number:**

This form contains information gained from periodical site visits performed by EnMS Team (Energy Management Team).

APPENDIX B (Energy and carbon management policy)

Prishtina International Airport "Adem Jashari"
Limak Kosovo International Airport J.S.C

ENERGY AND CARBON MANAGEMENT POLICY

The Management of Limak Kosovo International Airport J.S.C (LKIA) and all its employees are committed to give the best services at all landside and airside operations to its passengers, airlines, and stakeholders. Being aware of the environmental impact of our operations, carbon reduction and energy saving are a high priority.

Energy and Carbon Management is considered fundamental to our operations, and we take a proactive approach on being efficient on energy resources and reducing our emissions.

The aim of our policy is to display the organization's commitment in being environmentally friendly. By identifying airport activities which emit carbon and consume energy, we are able to develop a framework which enables us to be more efficient. We also make sure that we continually comply with all current environmental legislation of the Republic of Kosovo.

Our focus is to use the latest efficient technologies and considering lower carbon alternatives while contributing to the planet's sustainable development.

In order to achieve the aim of our policy, the main tasks include:

- Identify and monitor energy inefficiency and carbon emissions in our activities
- Setting energy and carbon reduction targets that are challenging and achievable
- Continually review the results of our actions towards the achievement of our energy and carbon objectives
- Promote environmental awareness and responsibility amongst employees and stakeholders, by providing regular trainings and using a variety of communication types
- Ensuring that those we work with, respectively our stakeholders, understand and engage in our commitment to reduce the energy consumption and carbon emissions

LKIA top management will periodically review the performance of energy and carbon management activities and progress towards our targets. The energy and carbon management policy are regularly communicated to our employees and reviewed by the top management for its continuing suitability. Additionally, this policy is publicly shared.

LKIA Board Member & CEO
Haldun Firat Köktürk

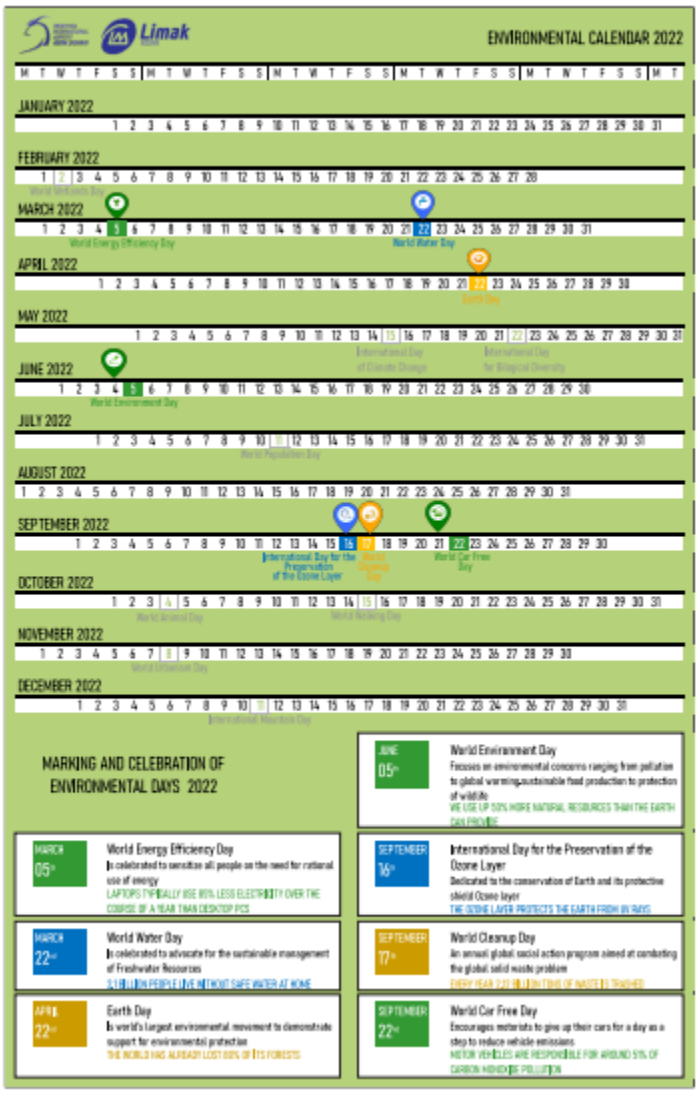
Signature:

Date: 06 September 2022

APPENDIX C (Communication, awareness, and training)

This represents the Environmental Management Systems – Orientation Training

APPENDIX C (Communication, awareness, and training)



This represents the annual environmental calendar containing all international days regarding the environment.