KOŠICE INTERNATIONAL AIRPORT

DECARBONIZATION ROADMAP

May 2024

2050
NET ZERO

FOREWORD

Climate change remains a critical global challenge, characterized by rising temperatures, extreme weather events, and shifts in ecosystems. International cooperation efforts, like the Paris Agreement, aim to mitigate its impacts, but urgent action is needed to reduce greenhouse gas emissions and adapt to changing conditions.

Like many countries, Slovakia faces the consequences of climate change, including altered precipitation patterns and the increased frequency of heatwaves. Efforts to combat climate change in Slovakia include renewable energy development, energy efficiency improvements, and initiatives to enhance resilience in vulnerable sectors like agriculture and forestry.

Alongside airports worldwide, Košice International Airport is acknowledging its role in climate change and implementing measures to reduce the environmental footprint. These initiatives include investing in renewable energy sources, improving energy efficiency in airport operations, and exploring sustainable aviation fuels to mitigate greenhouse gas emissions from air travel.

Košice Airport is an international airport serving the entire region of Eastern Slovakia. With three legacy carriers (Austrian Airlines, LOT Polish Airlines, SWISS) and two low cost airlines (Ryanair, Wizz Air) it is the airport with the best connectivity in the country.

Košice Airport is the only privatised airport in Slovakia, with Vienna International Airport owning the 66% majority and the remaining 34% owned by the Slovak Republic.

As Košice Airport continues to grow, it remains committed to responsible development. Recognizing the need for sustainable practices, the airport prioritizes environmental and social responsibility alongside its expansion efforts. This dedication ensures that as it strives for further growth and connectivity, it does so with a mindful approach towards its impact on the environment and the community it serves.

Thomas Dworschak, BSc.
Chairman of the Management Board

Ing. Tomáš Jančuš, PhD.
Member of the Management Board

Ing. Štefan Fedák
Member of the Management Board

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SUSTAINABILITY VISION

To become a model airport that harmoniously integrates sustainability, cultural richness, and the economic potential of Eastern Slovakia.

SUSTAINABILITY STRATEGY

Achieve Net Zero CO_2 by 2040

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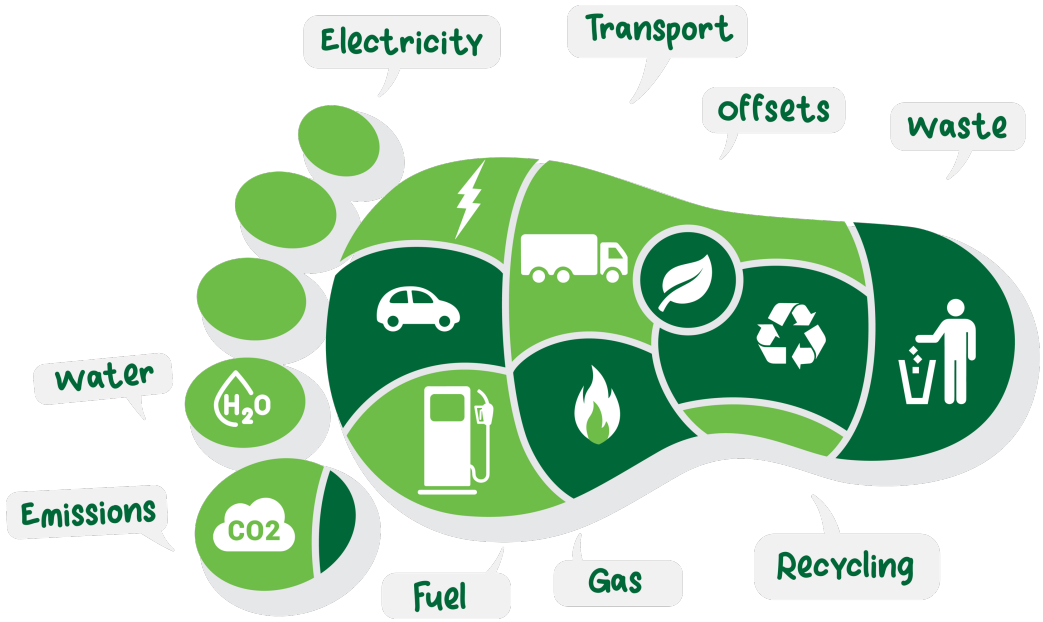
Our carbon footprint



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Carbon footprint of Košice Airport in 2019 (Base Year)

SCOPE 1 SCOPE 2

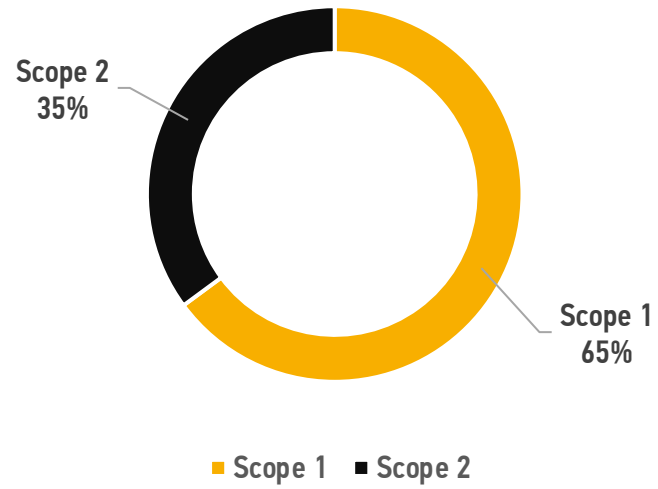
CALCULATIONS BASIS

Based on the real-data provided by Košice Airport, total GHG emissions were calculated. Methodology of GHG protocol.
The Scope 2 is calculated based on location based and market based methods.

Total GHG emissions in FY2019

Scope	Source	tCO_2e
Scope 1	• *Cooling (refrigerant leaks)* • *Heating* • *Owned vehicles* • *Solar electricity production by the company*	708.77
Scope 2 (*location based*)	• *Purchased Electricity*	316.70
Scope 2 (*market based*)		383.41
TOTAL (***location based***)		**1025.46**
TOTAL (***market based***)		**1092.18**

Share of scopes in total GHG emissions in FY2019*



COMMENTARY

The proportion of emissions in Scope 1 and 2 corresponds to activities emitting emissions in the company. Scope 1 accounts for more than half of the company's total emissions, as the airport uses a local stationary natural gas unit for heating and hot water production.

**The graph represents Scope 2 emissions calculated with a market-based method.*

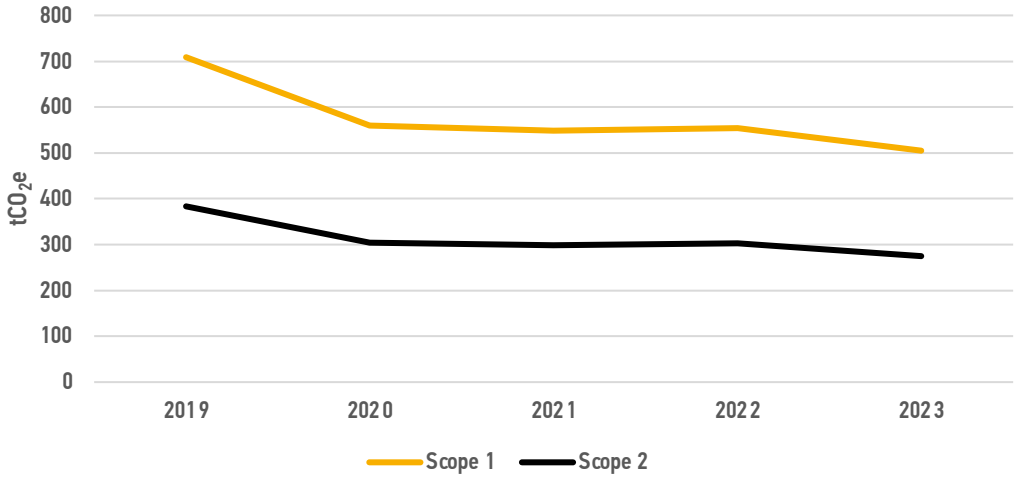
Carbon footprint of Košice Airport 2019 – 2023

SCOPE 1 SCOPE 2

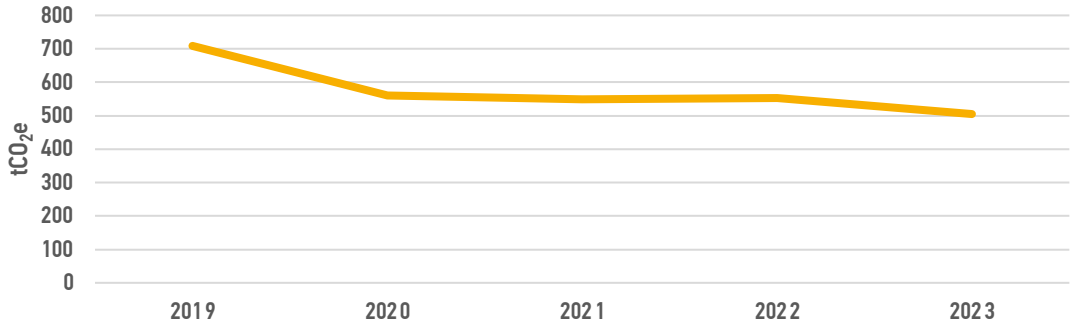
Emissions decrease over time

Total Carbon footprint GHG Scope 1 and 2 emissions in FY2019-FY2023

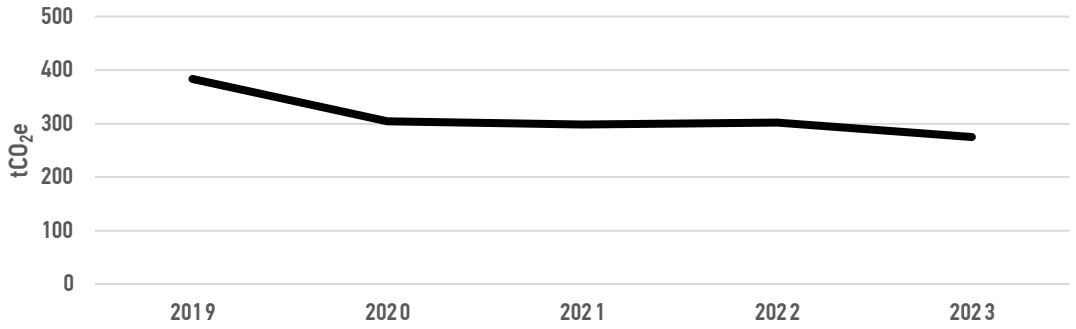
SCOPE 1 AND SCOPE 2 *(MARKET BASED)*



SCOPE 1



SCOPE 2 (MARKET-BASED)



COMMENTARY

The trend in the development of emissions of the carbon footprint is positive for the environment and the amount of GHG emissions is decreasing over the years. This is due to both efforts to optimize energy use and to increase the share of emission-free electricity production on the market.

Decarbonization of Košice International Airport

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SCOPE 1 SCOPE 2

DECARBONIZATION ROADMAP

2019
- The base year is set as the earliest possible one for which we possess data

2024
- Detailed calculation of carbon footprint for 2023 - 2019
- Košice Airport has set a NetZero commitment until 2040.

2026
- Review all the major decarbonization measures and their forecasted impact.

2030
- Replacement of the central boiler room, each building will have own heat pump,
- Decarbonization of car fleet -> transition to vehicles without GHG emissions
- Central energy management system for improved efficiency
- Photovoltaic panels, including energy storage
- Finishing the LED retrofitting

2035
- Refurbishment of the main terminal
- HVAC refurbishment for the main terminal
- Additional charging stations for EVs

2040 NetZero
- Continuous monitoring and improvement of building operation (adjusting consumptions, building insulation)
- The only purchased electricity is green (emission free, renewable)
- Offsetting remainder of Scope 1 emissions to achieve Net Zero

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Trajectory to decarbonization

SCOPE 1 SCOPE 2

Košice Airport understands its role in decarbonization of the aviation industry and believes that no matter the size of the individual players, it is necessary for everyone to take an active part.

The foundational approach to decarbonization prioritizes reducing resource consumption at its source, aiming to minimize energy and material use wherever possible. Next, it focuses on enhancing efficiency to ensure that the resources still in use are optimized for maximum performance with minimal waste. Finally, decarbonization strategies emphasize offsetting emissions through carbon capture or reforestation and incorporating renewable energy sources to replace traditional fossil fuels.

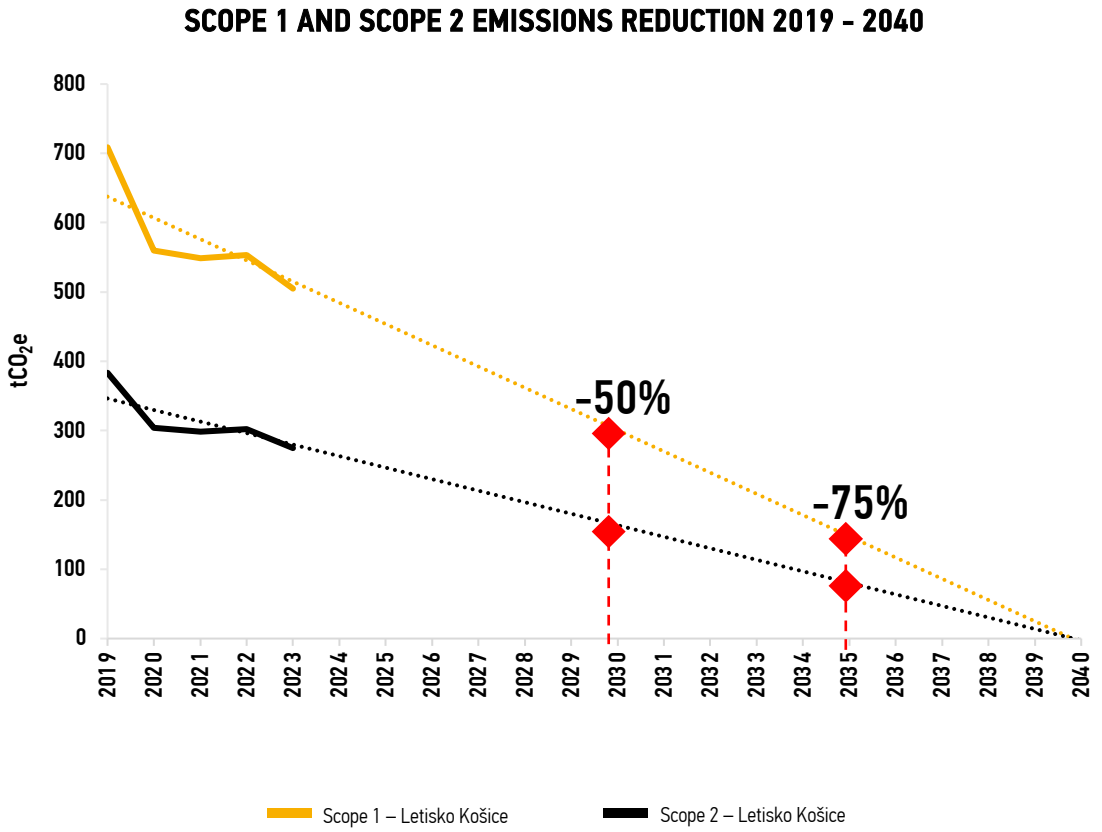
We will aim to actively decarbonize our directly controlled emissions (emissions in Scope 1 and Scope 2). For emissions in these scopes the airport decided to commit to Net Zero Carbon in **2040**.

Interim milestones on the trajectory are now set in 5-year windows.

> **2030 – 50%** reduction against the baseline

> **2035 – 75%** reduction against the baseline

We intend to review our decarbonization efforts on a yearly basis through recalculation of our carbon footprint.



Measures for reaching the targets

Largest proportion of emissions within Scope 1 comes from the heating of our buildings with natural gas.

SCOPE 1

GHG Scope 1 emissions reduction is centered around improving conditions of the buildings and the equipment used for heating.

Timeline	Carbon footprint [Absolute value; tCO_2e]	Reduction against baseline year
2019 – baseline year	708.77	-
2023 – latest data year	504.90	28.8%
2026 – revision year	*Reviewing all the major decarbonization measures and their forecasted impact*	
2030 – 1st milestone	~ 355	50%
2035 – 2nd milestone	~ 178	75%
2040 – target year	0	100%

Short-term measures
- Replacement of the central boiler room, each building will have own heat pump,
- Decarbonization of car fleet -> transition to vehicles without GHG emissions
- Central energy management system for improved efficiency

Mid-term measures
- Refurbishment of the main terminal
- HVAC refurbishment for the main terminal

Long-term measures
- Continuous monitoring and improvement of building operation (adjusting consumptions, building insulation)
- Revision of the impact of short and mid term measures and development of new measures

The only source of the emissions in Scope 2 is purchased electricity. The electricity is used for lighting, cooling and general electric equipment.

SCOPE 2

GHG Scope 2 emissions reduction is centered around installation of alternative sources of electricity and improving efficiency of electrical energy use.

Timeline	Carbon footprint [Absolute value; tCO_2e]	Reduction against baseline year
2019 – baseline year	383.41	-
2023 – latest data year	274.82	28.3%
2026 – revision year	*Reviewing all the major decarbonization measures and their forecasted impact*	
2030 – 1st milestone	~ 191	50%
2035 – 2nd milestone	~ 97	75%
2040 – target year	0	100%

Short-term measures
- Photovoltaic panels, including energy storage
- Finishing the LED retrofitting
- Central building energy management system

Mid-term measures
- Additional charging stations for EVs

Long-term measures
- Continuous monitoring and improvement of building operation (adjusting consumptions, building insulation)
- Revision of the impact of short and mid term measures and development of new measures

OUR COMMITMENT

Our airport has made a steadfast commitment to achieving NetZero greenhouse gas emissions by 2040, aligning with the global imperative to limit the average temperature increase to 1.5°C above pre-industrial levels. This ambitious target is a testament to the airport's dedication to environmental stewardship and its recognition of the urgent need for action in the face of climate change. By investing in cutting-edge sustainable technologies, enhancing energy efficiency across operations, and transitioning to renewable energy sources, the airport is setting a high standard for the aviation industry. The initiative encompasses a comprehensive range of measures, including the advancement of sustainable aviation fuels, electrification of ground support equipment, and rigorous carbon offsetting programs. The airport's strategy is not only about reducing its own footprint but also about inspiring and facilitating broader industry-wide changes that are vital for a sustainable future.

To meet these goals, the airport has outlined a decarbonization roadmap that includes short-term, mid-term, and long-term objectives, ensuring continuous progress towards the NetZero target. This involves collaborating with airlines, regulatory bodies, and other stakeholders to foster a collective approach to carbon reduction. The airport is also actively engaging in reforestation and conservation projects that contribute to carbon sequestration, while simultaneously working to reduce waste and improve water management. By setting quantifiable targets and regularly reporting on progress, the airport maintains transparency and accountability in its journey towards sustainability. Moreover, it is exploring innovative solutions such as the use of artificial intelligence and data analytics to optimize operations for maximum environmental benefit. The airport's proactive stance on climate action reflects a deep-rooted commitment to future generations and the health of our planet, recognizing the critical role aviation plays in the global effort to combat climate change.

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