

ACI Net Zero Roadmap

Scope 1+2

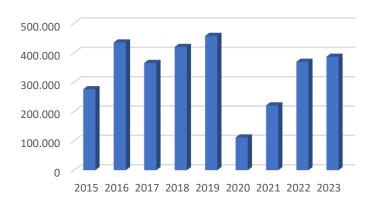
June 2024



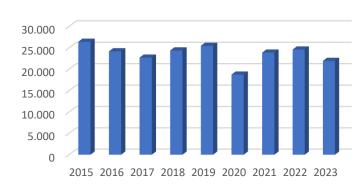




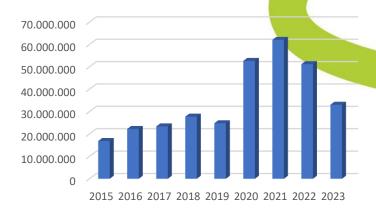




Evolution movements: 2015 - 2023



Evolution handled cargo, kg



Ostend-Bruges Airport

- ₹ Regional airport with 3.200 m runway
- ₹ Part of the international group EGIS
- * Focus areas: scheduled services & cargo flights









OST Environmental Policy (ISO 14001 since 2013) (carbon reduction March 2018))



ACI Net Zero 2050 commitment 2019

ACA level 1 April 2021

Carbon Reduction Targets 2021 (EGIS: 2030 -30% (baseyear 2019))

Carbon management plan (March 2023 - update June 2024)



ACA level 2 April 2024

Carbon Net Zero Roadmap (Scope 1+2) June 2024

To do: Stakeholder Engagement Plan December 2024

To do: Certification process ACA level 3 April 2025



CERTIFICATE of ACCREDITATION

Valid until the 26th April 2023

This is to certify that *Airport Carbon Accreditation*, under the administration of WSP, confirms that the carbon management processes at



OSTEND-BRUGES INTERNATIONAL AIRPORT

implemented by Egis Group





www.airportCO2.org

have earned the accreditation level of **MAPPING**, in recognition of the airport's actions to address its CO₂ emissions, as part of the Global airport industry's response to the challenge of Climate Change.

Olivier Jankovec Director General ACI EUROPE Simon Clouston Director WSP

CLIMATE CHANGE



ADAPTATION

- Make a climate risk assessment to identify the effect of climate change on the airport
- Establish a Climate Adaptation Plan

MITIGATION

- Measure yearly scope 1-2-3 GHG emissions to obtains the ACA certification level 3+ in 2028 at the latest
- Implement actions to reduce these emissions, to participate in the overall goal of reducing by 5% each year EGIS' carbon emissions up to 2030 (base year 2023):
 - Be certified ISO 14 001 and ISO 50 001
 - Perform an energy audit
 - Always replace equipment by the most energy efficient solutions available (such as LED)
 - Switch to e-vehicles and install EV charging stations on both airside and landside area
 - Offer alternative options to the use of APUs
 - Perform a feasibility study for the installation of solar panels

Associated Indicators

- tCO2e
- kWh consumed/purchased
- Number of E-vehicles
- %LED lights
- · kWp of PV installed
- % of stand equipped with 400Hz systems
- % of actions from Climate Adaptation Plan implemented



Carbon Management Plan: themes

Environmental calender – targets (ACA certification + reduction targets OST, EGIS, ACI)

Monitor the efficiency of heating, ventilation, and cooling systems

Green mobility – E-vehicles – bike friendly airport

Awareness - Zero idling - energy-reporting

Green procurement

Water and Waste management

Fuel efficiency

Airside infrastructure

Renewable energy – solar panels

Building - isolation (roof, wall, windows) - lighting







Long term – short term CO₂ targets



	baseyear	amount CO2 baseyear target	GOAL ton CO2	timing
EGIS	2019 location based	1187min 30%	83	2030
EGIS	2019market based	1076min 30%	75	2030
EGIS Strategy map	2023 location based	773,5min 5% every year		2030
EGIS Strategy map	2023 market based	841,5min 5% every year		2030
Net zero 2050		min 100%		2050
Environmental permit (under construction)	2019 location based	1187min 90%?	11	.9 2034
Environmental permit (under construction)	2019market based	1076min 90%?	10	2034



Carbon emissions: baseyr 2019 – ACA application yr 2023

Carbon Emissions Figures

Please enter your scope 1 and 2 carbon emissions, where year 0 corresponds to the carbon emissions for the year of application.

Location based

Year -3	Year -2	Year -1	Average of historic data	Year of application (Year 0)	Less than average?			
Absolute footprint (tCO ₂) for emissions under the airport's Scope 1 and 2 emissions only.								
1187	993	850	1010	774	Yes			

Market based

Year -3	Year -2	Year -1	Average of historic data	Year of application (Year 0)	Less than average?			
Absolute footprint (tCO ₂) for emissions under the airport's Scope 1 and 2 emissions only.								
1076	1060	916	1017	842	Yes			











New gas condensation heat boilers (08/2022)

- Min 128 ton CO₂
- Min 20% gas
- Min 45% electricity for HVAC



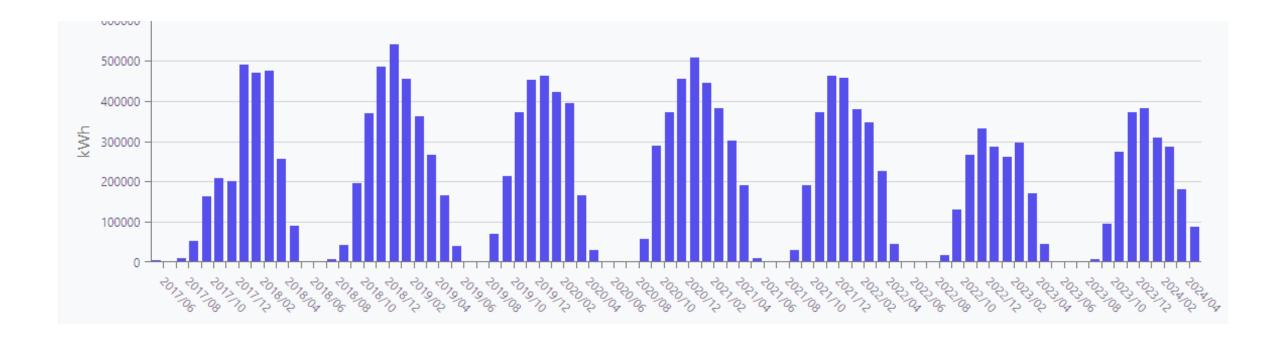












Gas condensation heat boilers (08/2022)

- Reduction 128 ton CO₂
- Reduction consumption 20% gas
- Reduction min 45% electricity HVAC partim

Waste and watermanagement

- Dopper bottle for each employee (2021)
- Free water water dispensers (2021-2023)
- Awareness



Green Mobility – Green Purchase- EV Charging Plan









Airside infrastructure -Runway renovation (25 January-29 March 2024)

Runway renovation – 100% LED – power efficient regulators





Solar park Energy Vision (2024-2026)

- Number of solar panels: 66,200 of 605 Wp
- Capacity: 40,05 MWp
- Annual output : 37.000 MWh
- Expected yearly CO2 savings: 9.600 ton
- Surface: 303.864 m²
- Energy Community: www.stroomvantzeetje.be



Energy renovation towerbuilding

- Asbest removal
- Isolation walls
- New windows
- 2023-2025



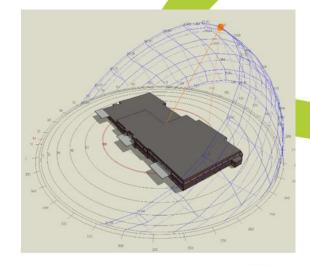


ROAD TO LEVEL3

- * Carbon management plan: actions, initiatives, projects concerning:
 - ★ Submetering electricity/gas (2024)
 - * Renewal chiller pax building (2025)
 - * Replacement Aerofresh cooling (2025)
 - Building automation and monitoring system (HVAC) (2025)
 - ₹ Electricity contract : 100% green energy (renewable) (2026)
- Carbon Net Zero Roadmap
- * Stakeholder Engagement Plan December 2024
- **★** ACA level 3 certification april 2025







emaze:::

ROAD TO CARBON NET ZERO (1)

- Carbon management plan: actions, initiatives, projects concerning:
 - Submetering electricity/gas (2024)
 - Renewal chiller pax building (2025) + AC: 102 t CO₂ decrease (study 2019)
 - Replacement Aerofresh cooling (2025): amount t CO₂ decrease under assessment
 - Building automation and monitoring system (HVAC) (2025): 33 t
 CO₂ decrease (energy study EMAZE 2019)
 - Energy study (EGIS 2024)





ROAD TO CARBON NET ZERO (2)

- * Carbon management plan: actions, initiatives, projects concerning:
- * Electricity contract : 100% green energy (renewable) (2026):
 - * EF residual mix: 149,8 g $CO_2/kWh \rightarrow 100\%$ renewable electricity: EF 15 g $CO_2/kWh \rightarrow$ from 382 ton CO_2 to 38 ton CO_2 (90% reduction)
- * Fuel vehicles:
 - ★ Gasoline/diesel to electricity (100% renewable energy)
 - * Heavy vehicles (100% HVO100 90% reduction CO₂)







Eric Dumas

CEO – LEM Antwerpen NV CEO – LEM Oostende-Brugge NV

eric.dumas@egis.fr

http://www.ostendairport.aero

http://www.antwerpairport.aero

ir. Isabel Dobbelaere

Environment
LEM Oostende-Brugge NV
Nieuwpoortsesteenweg 889
8400 Oostende
Belgium
Isabel.Dobbelaere@ostendairport.aero

www.egis-group.com

www.egis.fr

http://egis-airports-network.com



