

Sustainable Airport Mobility Plan

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01 BASIC PROJECT INFORMATION

Project name

Sustainable Airport Mobility Plan (SAMP)

Partners involved

Brussels Airport Company, LuxMobility, Transport operators, Airport companies, Public authorities

Implementing airport / site

Brussels Airport
Replicated at Toulouse Airport

Period tested

2022: Development
2023: Implementation
2023 - ...: Monitoring and implementation of actions

Project lead / contact

LuxMobility
Brussels Airport Company

02 OBJECTIVE

What are we trying to solve or tackle with this project?

Develop a Sustainable Airport Mobility Plan (SAMP) to improve accessibility for passengers, employees and visitors while supporting modal shift and reducing car dependency.

The project addresses congestion, limited integration between transport modes and public transport challenges. It provides a structured framework and roadmap to strengthen the airport's role as an intermodal mobility hub.

Success criteria:

- Implementation of SAMP measures
- increase sustainable mode share
- reduce staff and passenger mobility CO₂
- improve airport accessibility
- prove the planning approach can be replicated at another airport.

03 APPROACH (HOW WE TESTED)

Test set-up & method

Brussels Airport defined 48 SAMP measures covering passenger, employee and cargo mobility.

Actions were progressively implemented through cycling infrastructure, EV charging, public transport improvements, shared mobility, mobility information tools and awareness campaigns.

The project created a structured roadmap for sustainable airport accessibility and was also replicated at Toulouse Airport.



Data & measurement

KPIs include sustainable mode share, CO₂ for BAC staff, airport staff and passengers, satisfaction with train access and transport information, SAMP measures implemented and additional initiatives launched.

Risks & mitigations

Risks:

- Fragmented internal ownership
- Inconsistent mobility data
- Dependence on transport operators/authorities
- Public transport gaps for shift work
- Persistent car dependency and congestion.

Mitigation: central coordination and stakeholder engagement.

Limitations

Modal shift takes time and is affected by external factors outside airport control. Passenger CO₂ rose with traffic growth despite better modal split.

Some measures depend on authorities, operators, budgets and long-term behaviour change.

04 RESULTS & IMPACT

Key results

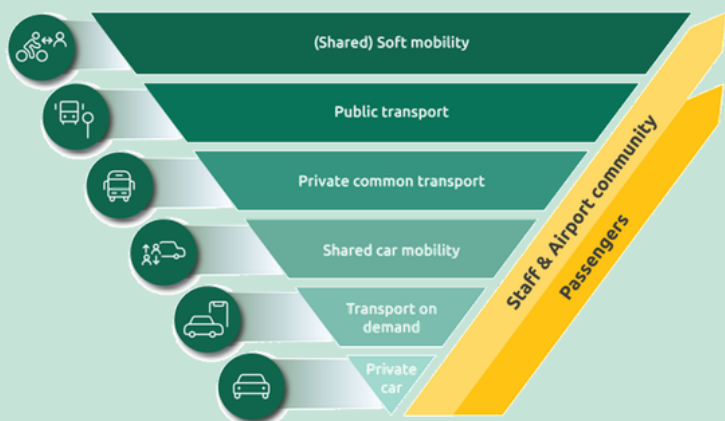
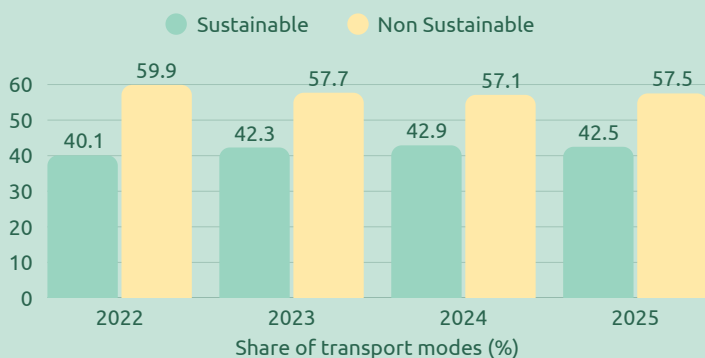
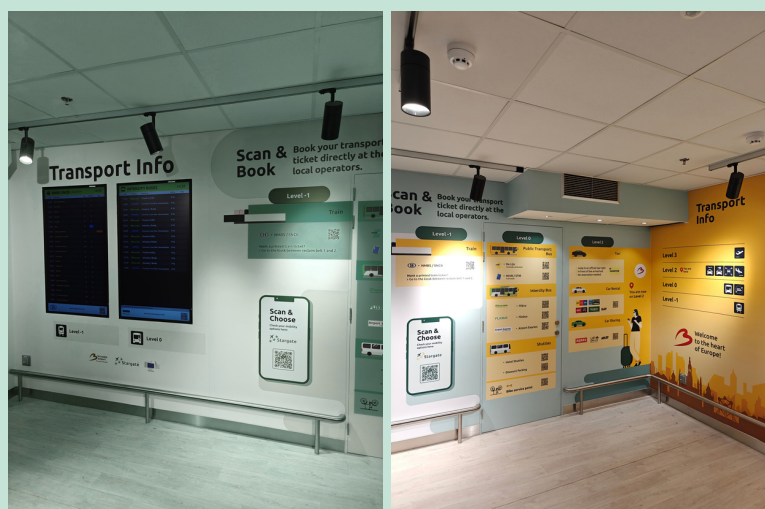
Brussels Airport defined 48 SAMP measures; by 2025, 32 were implemented and 18 extra initiatives were launched.

Sustainable transport mode share increased from 40% in 2022 to 42% in 2025.

BAC staff CO₂ fell from 2,265 tCO₂e in 2023 to 2,084 in 2024; airport staff CO₂ fell from 48,105 to 32,928 tCO₂e.

Train access stayed highly rated at 4.34/5, and satisfaction with transport information improved from 3.60/5 to 3.81/5.

The SAMP also enabled continued action beyond the original project scope.



05 RATINGS (QUICK ASSESSMENT)

Deployment Approach

How standardised is the solution: can it be deployed off the shelf, or does it require extensive customization?

Off The Shelf Custom-Built

Investment Magnitude

From low-cost deployment to major investment.

Low Investment (less than €10k) High Investment (more than €15mio)
OPEX CAPEX

Sector Readiness

From non-existing or emerging standards, regulations, and certification pathways to fully established industry practices.

Emerging Framework Established Framework

Innovation Maturity

How does the solution score in terms of maturity, from low TRL experimental/pilot-stage to high TRL market-ready.

Experimental Market-Ready

Operational Impact

Does the innovation deliver targeted improvements or rather drastically transform processes and/or operations.

Incremental Improvement Transformational Change

Notes

The SAMP provides a structured framework to improve airport accessibility and support modal shift for passengers, employees and visitors.

Through a combination of stakeholder engagement, mobility data analysis and scenario development, the project establishes a long-term vision for sustainable airport access.

The methodology has proven transferable to other airport environments and supports both strategic decision-making and implementation of concrete mobility measures.

06 NEXT STEPS / RECOMMENDATION

Recommendation:

Continue implementing and monitoring the SAMP while promoting its replication at other airports, adapted to local mobility needs, governance and stakeholder contexts.

Next steps:

- Complete and monitor remaining measures at the implementing airports.
- Transfer the SAMP methodology to other airports, starting with a local mobility baseline and stakeholder mapping.
- Define clear governance, targets and data ownership.
- Exchange lessons and monitor progress through a common KPI framework.

Links:

<https://www.brusselsairport.be/nl/sustainability/strategic-priorities/the-airport-as-an-intermodal-transport-hub/SAMP>