

BÉKÉSCSABA PROJECT PROPOSAL

Project title: *CitySens - Smart Mobility & Clean Air Data Platform*

Lead Partner: Municipality of Békéscsaba

Looking for partners: Cities and organisations interested in smart mobility solutions, urban data platforms, cycling promotion, air quality improvement, citizen engagement and digital tools.

Project concept:

Békéscsaba aims to implement key actions defined in its strategic documents, like Sustainable Urban Mobility Plan (SUMP), Sustainable Energy and Climate Action Plan (SECAP), Cycling Network Plan and Air Quality Plan through an integrated, data-driven Smart City approach. The project focuses on developing a **digital urban decision-support system** that combines real-time mobility and environmental data, enabling cities to design more effective, evidence-based policies.

Planned activities

1. Urban air quality monitoring network

- Deployment of multiple sensor stations across the city (including industrial areas)
- Measurement of key pollutants
- Geographic Information System (mapping and public data access)
- Policy recommendations based on real-time environmental data

2. Smart parking system

- In-ground parking sensors detecting free parking places
- Real-time parking information via mobile/web interface
- Reduction of unnecessary traffic caused by parking search
- Contribution to emission reduction

3. Smart cycling ecosystem

- Bicycle traffic counters on key routes
- Data-driven cycling heatmaps and usage analysis
- Identification of safety-critical locations and infrastructure gaps
- Digital route planner prioritising safety and air quality
- Gamification tools (reward systems, incentives for cycling)

4. Move Smart – Breathe Clean community programme

In parallel, the project will include strong citizen engagement and awareness-raising actions to promote sustainable mobility choices. This will encourage residents to shift towards active and low-emission transport modes. The programme will include cycling campaigns, urban mobility challenges and inclusive events where not only cyclists but also users of micro-mobility and rolling sports (such as inline skating) can participate. These activities will connect behavioural change with real-time environmental data, helping citizens to better understand how their mobility choices impact air quality.

Expected impact

- Reduced congestion and more efficient urban traffic
- Improved air quality
- Increased share of sustainable mobility (cycling and „micro-mobility“)
- Stronger integration of Smart City solutions into urban governance
- Transferable and scalable model for other European cities

URBACT added value

- Builds on existing local action plans (SUMP, SECAP, air quality plan)
- Strong focus on **implementation** (not planning)
- Promotes **integrated and cross-sectoral approach**
- Supports **peer learning and transferability** across cities