

# Green Public Bus Transportation Solutions in Szombathely

## Szombathely - Hungary

### Short description

This Local Green Deal (LGD) focuses on advancing Szombathely's environmental and mobility strategies by prioritizing public transportation over individual car use. The initiative aims to reduce CO2 emissions, improve environmental quality, and foster a greener urban environment. By enhancing the appeal and accessibility of public transport, the LGD sets ambitious goals to transform mobility patterns within the city. The key targets of this LGD include a 15% reduction in CO2 emissions by 2030 and a 20% increase in public transport usage by 2028, compared to 2022 levels. These objectives align with Szombathely's commitment to sustainability and support the broader goal of creating a more eco-friendly and efficient urban transport system. This initiative provides significant benefits to all stakeholders. For Szombathely, it helps achieve critical climate targets and promotes sustainable urban development. For partners like Blaguss, it supports their mission to advance public transportation solutions, boosting competitiveness and contributing to long-term environmental goals. Together, this partnership drives meaningful change by encouraging a shift toward sustainable mobility and fostering a healthier, greener city for all.



### Industry/Sector

- Mobility & transport

### Parties of LGD/Participating parties

- Blaguss Agora Hungary Ltd.

## Scope of LGD

- Introduce an e-bus pilot program with at least 3 electric midi buses by 2026
- Install 10 electric vehicle (EV) charging stations at key public transport hubs by 2027
- Achieve a 20% increase in public transport usage by 2028 compared to 2022 levels
- Transition 50% of the municipal fleet to electric vehicles by 2028.

## Concrete measures/commitments

The LGD is contributing to the following strategic documents:

- the Sustainable Urban Mobility Plan of Szombathely (SUMP)
- the complex economic and urban development strategy, Szombathely2030;
- the Sustainable Energy and Climate Action Plan of Szombathely (SECAP);
- partly the Hydrogen Strategy of Szombathely

# Integrated Mobility Solutions

## Szombathely - Hungary

### Short description

Szombathely is committed to leveraging Local Green Deals (LGDs) to accelerate sustainable urban mobility, aligning with the European Green Deal's goals. The city aims to enhance public transport and promote greener last-mile solutions to foster a more sustainable, efficient, and inclusive transportation network. Through this LGD, the city collaborates with Lime Technology Kft. and Blaguss Agora Hungary Kft. to integrate public bus services with Lime e-scooters, improving connectivity, reducing environmental impact, and increasing the adoption of sustainable transport options.



### Industry/Sector

- Mobility & transport

### Parties of LGD/Participating parties

- Blaguss Agora Hungary Ltd.
- Lime Technology Ltd.

## Scope of LGD

- Introduce integrated solutions between public bus transport and Lime e-scooters.
- Address and green the "last-mile" challenge post-bus travel.
- Increase the number of users of both systems.
- Promote sustainable urban mobility through targeted initiatives.

## Concrete measures/commitments

The LGD is contributing to the following strategic documents:

- the Sustainable Urban Mobility Plan of Szombathely (SUMP)
- the complex economic and urban development strategy, Szombathely2030;
- the Sustainable Energy and Climate Action Plan of Szombathely (SECAP).

## PBN: green hydrogen

### Szombathely - Hungary

#### Short description

The Local Green Deal (LGD) in Szombathely is a strategic collaboration aimed at fostering sustainability through the development of a green hydrogen ecosystem. The initiative focuses on green energy and renewables, specifically the **production, storage, and usage of green hydrogen for transportation and logistics**. It includes constructing a 1 MW solar power plant, a hydrogen production system, refuelling infrastructure, and deploying 38 hydrogen-powered vehicles. The project seeks to reduce CO2 emissions by 1,275 tons annually, contributing to the city's goal of a 35% reduction in emissions, while also enhancing regional collaboration, innovation, and economic growth.



#### Industry/Sector

- Energy & renewables

#### Parties of LGD/Participating parties

- The Municipality of Szombathely City with County Rights
- Pannon Business Network Association (PBN)

#### Scope of LGD

- The scope of Szombathely's LGD focuses on the **green energy and renewables sector**, with an emphasis on **developing a comprehensive green hydrogen ecosystem**. This includes the production of green hydrogen through

a 1 MW solar power plant and an electrolysis system, alongside the necessary infrastructure for hydrogen storage and refuelling, including a hydrogen refuelling station and mobile fuelling systems. The LGD also targets the **deployment of 38 hydrogen-powered vehicles across public transport, city operations, and logistics**. It aims to achieve an annual reduction of 1,275 tonnes of CO2 emissions, contributing to Hungary's national target of integrating 10,000 tonnes of green hydrogen into the transportation sector by 2030. Additionally, the LGD seeks to foster regional and interregional **partnerships**, drive **technological innovation**, and promote **local economic development** through research and job creation.

## Concrete measures/commitments

The **Municipality of Szombathely City with County Rights** commits to

- installing a 1 MW peak capacity solar power plant for renewable electricity production and developing a 1 MW electrolysis system for green hydrogen production, including water and hydrogen purification systems.
- installing hydrogen and oxygen compressors, an oxygen cooling system, a cryogenic oxygen storage unit, and a hydrogen storage system, establishing a hydrogen refuelling station (350 bar) and a mobile fuelling system, and integrating 38 hydrogen-powered vehicles into city operations, including public transport buses, waste transport vehicles, public cleaning vehicles, forklifts, and trucks.
- allocating 2.15 hectares of land for the project, including space for the solar plant and hydrogen production facilities and collaborating with stakeholders to facilitate implementation.

**PBN** commits to

- participating in establishing the solar power plant and electrolysis system for green hydrogen production, coordinating the setup for hydrogen and oxygen storage, compressors, and refuelling infrastructure, and managing the demonstration and educational initiatives to raise awareness about green hydrogen technology among Szombathely's citizens.
- leveraging expertise in project writing and management to secure funding and ensure effective implementation and driving regional and interregional cooperation with public and commercial stakeholders to decarbonise the transportation sector.

# Towards the Vision for Green Corridors

## Szombathely - Hungary

### Short description

The Local Green Deal focuses on the built environment, transport, and mobility sectors. Its objectives include transforming Thököly Imre Street, a busy street in Szombathely, into a green alley. This transformation aims to promote decarbonized transportation by encouraging cycling and walking, reduce urban heat effects through greening and nature-based solutions, enhance public spaces to foster inclusivity and citizen well-being, and build a digital twin of the street to model and analyze the changes. The impact ambitions of this initiative are multifaceted. Environmentally, it seeks to reduce urban heat by 15-20%, improve air quality, and lower CO2 emissions. Socially, the project focuses on creating inclusive, safe, and vibrant public spaces for the community. Economically, it aims to support local businesses by increasing foot traffic, fostering green job creation, and encouraging community engagement.



### Industry/Sector

- Construction & built environment

### Parties of LGD/Participating parties

- Chamber of Engineers of Vas County,
- KTI Hungarian Institute for Transport Sciences and Logistics Nonprofit Ltd,
- Pannon Business Network Association

### Scope of LGD

- Create pedestrian walkways, shaded by trees and flanked by green infrastructure

- Incorporate permeable pavements and rain gardens to improve stormwater management and biodiversity
- Install smart urban tools, such as smart pedestrian crossings, real-time air quality sensors and mobility management systems
- Develop community spaces for social activities, public art, and cultural events
- Heat Map Analytics by regular assessments comparing temperature data from the “Green Corridor” with traditional park zones
- Establishing well-connected mobility hubs that combine walking paths, cycling stations, and electric shuttle services
- Incorporating e-scooter and e-bike sharing stations strategically placed along the green alley to encourage more eco-friendly transit options
- Traffic counting and review
- As part of long-term visioning, Szombathely will consider the use of autonomous electric vehicles along the green corridor
- Creating an app to guide users to the coolest, least congested routes and available amenities along the corridor

## Concrete measures/commitments

The LGD is contributing to the following strategic documents:

- the Sustainable Urban Mobility Plan of Szombathely (SUMP)
- the complex economic and urban development strategy, Szombathely2030
- the Sustainable Energy and Climate Action Plan of Szombathely (SECAP)
- the Sustainable Urban Development Strategy of Szombathely