

Zsolt Pálmai

South Transdanubian Regional
Innovation Agency Nonprofit Ltd.

Developing a strategy to support the procurement and operating of an e-bus fleet



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This article underlines that government policies and investments are crucial drivers and, at the same time, clear indications of the support to be provided for e-bus deployment. Within eBussed, South Transdanubia in Hungary works as a learning region that has recognized the importance of such initiatives and has made successful preparations. This article introduces the Green Strategy of Tüke Busz Plc, the public transport organization of Pécs, the regional capital city of South Transdanubia with 143,000 inhabitants.

A professional framework is needed to assist bus operators and maintenance authorities in developing a local e-bus fleet development concept. It also plays a significant role in preparing for the procurement and operation of the public transport e-bus fleet.

Implementing the objective

Starting with the analysis of the baseline mobility needs of the city of Pécs, the local municipality identified green and environmentally friendly transport as its goal. The roots leading to this strategic decision date back to the late 2000s and had several preparatory stages – elaborating a successful CIVITAS project by the city municipality of Pécs, for example.

The most important of these steps was the elaboration of the Green Strategy of Tüke Busz Plc in 2016. This strategy established the exact foundations for the procurement of e-buses in Pécs and also took into account the major ecosystem factors of e-bus mobility development in the city.

The main stakeholders and beneficiaries

Tüke Busz Plc owns the strategy, whilst its main beneficiaries are the municipality of Pécs, the passengers of the Tüke Busz Plc. and the University of Pécs. This latter conducts e-mobility-related research also based on operating the local e-bus fleet.

The core idea of the strategy

The Green Strategy of Tüke Busz Plc. is a strategic document available in Hungarian. Its table of contents addresses the following status analysis or decision-making points:

- description of the current status: the bus fleet in operation, air pollution in Pécs, environment protection activities of Tüke Busz Plc., and its contribution to decreasing air pollution including a detailed inventory of the obtained results,
- definition of the main decision-making points of the bus fleet change, the introduction of different investment options and financial needs, also the issues of sustainability, recommendations,
- electronic ticketing and other information technology solutions, such as status analysis, intervention areas (for example, onboard use of e-tickets, fleet operation, information for passengers, future trends, implementation issues, international benchmarks),
- analysis of the main problem areas in the operation of Tüke Busz Plc., such as air pollution of the bus fleet, traffic management, and schedule, use of fuels, measurement of bus consumption, consequences of the up-to-date (modern) bus fleet,
- integration of the novelties into the operation of the Tüke Busz Plc., and their impacts or consequences, such as PR, marketing, staffing issues, and awareness-raising.



Green Strategy advertisement. Source Tüke Busz Plc

The elaboration of the strategic document was assigned to and delivered by a local external mobility expert company. When it comes to the delivery of the strategy, it is the management and the operative staff of Tüke Busz Plc. in charge of planning and operating or maintaining the fleet that takes responsibility and action.

The strategy as a local success story in Pécs

The Green Strategy of Tüke Busz Plc. serves as an initiative within the local public transport organization to become greener and more sustainable. The focus point is the deployment and the widening of the use of e-buses at Pécs while examining the core aspects around that. The strategy firstly targets the management of the company, indirectly all other city-level stakeholders to lay down the foundations of the e-bus deployment at Pécs.

Partners contributing to the delivery of the strategy are the Municipality of Pécs City of County Rank and the Pécs Urban Development Plc. The former owns 100 % of the Tüke Busz Plc., and exercises ownership and delegation rights. It also undertakes financing responsibilities that are crucial when it comes to developments and procurements. The municipality department of urban management is responsible for the integration of the e-bus deployment issues as those are elaborated in the Green Strategy of Tüke Busz Plc. into the development concept or documents of the city.

In addition to owning Tüke Busz Plc., the Municipality of Pécs City owns also 100 % of the Pécs Urban Development Plc. As the urban project company, it deals with the preparation and implementation of the approved developments – including the delivery of public procurements – that are authorized by the general assembly of the local municipality. It is also the Pécs Urban Development Plc. that constantly consults with the municipality-owned companies on their planned projects and developments. In such a capacity it enhances well the aspirations laid down in the Green Strategy.

Beyond the above two organizations, the strategy initiates the teaming up of the concerned public and private stakeholders, especially subcontractors' actors. Without them, it is not possible to deliver such complex development that the deployment of e-buses requires.

The innovation potential within the Green Strategy

The Green Strategy responds well to the challenges of public transport in urban areas, such as air pollution and noise, local competition with individual mobility, and quality of service. In such a context the strategy provides an in-depth analysis of the local issues and responds to those with an e-bus mobility-based solution. The pros and cons of this alternative transport mode are also taken into consideration as part of the strategy.

The process innovation content is reflected in the fact that the transition to e-bus mobility requires significant changes to be introduced in the management and operation of a local public transport organization. The product innovation is also definable as follows: the Green Strategy stipulated the utilization of modern mobility technology to be delivered by the electric buses.

Last but not least, the added value of such a strategy is that the use of electric buses in Pécs' local public transport results in more favourable air pollution figures being registered. The operating costs of the Pécs bus fleet also decrease significantly. The acceptance of e-buses by the local inhabitants is at high levels.

How to provide leverage beyond the content of the strategy?

As a kind of baseline incentive, the strategy provided content-wise spillovers toward the Sustainable Urban Mobility Plan of Pécs. The Green Strategy was also taken into consideration when a project proposal co-financed within the Integrated Transport Development Operational Programme was elaborated and submitted for the purchase of 10 electric buses, a new depot, and its connection to the local electricity grid. These developments have become a reality from 1 September 2020, when 10 K9UB-type BYD e-buses are operating daily in Pécs.



The 10 new BYD e-buses in Pécs. Source: Government of Hungary, Facebook

www.interregeurope.eu/ebused

eBused project supports regions in the transition towards low-carbon mobility and more efficient public transport in Europe by promoting the use of e-buses.