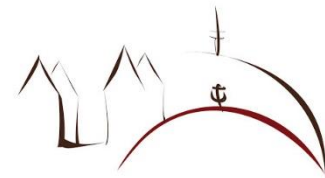




**TükeBUSZ**  
*Együtt célba érünk!*



Pécsi Városfejlesztési  
Nonprofit Zrt.

# Public transport development in Pécs

*Financed by the Integrated Transport Operational Programme*

Pécs Urban Development Nonprofit Private Limited Company



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**31 March, 2021**

## The Pécs Urban Development Nonprofit Private Limited Company

- The nonprofit company is responsible for planning and implementation of the municipality's EU-projects and is fully owned by the Municipality of Pécs. Number of employees: 18 persons.
- The company's main operation direction is the complex project management, particularly in the following development areas: transport development, energetic modernization, tourism development, social urban rehabilitation.
- Until last summer the company's employees drew down more than 30 billion HUF EU-subsidy, thus ensuring the feasibility of the development projects.
- In addition, the company's other main task is the preparation of the next EU-cycle's development projects.

## Project background, project aims

Pécs is the centre of Baranya County and the South-Transdanubian Region, and - with more than 142 thousands residents - is the fifth largest city in Hungary.

One of the main goal of the Europe 2020 strategy is to reduce the greenhouse gas emission with at least 20%. To contribute to fulfill this aim, Pécs set the undermentioned aims:

1. Increasing of public transport's attraction
2. Reduction of emission
3. Prevention of deterioration of air quality.



The electric buses have no local emission, so a such procurement helps to achieve the above-mentioned aims. This new infrastructure contributes to establish a more sustainable city and raise the chance to win the „European Green Capital” award in the near future.



# Milestones

|                                 |                    |
|---------------------------------|--------------------|
| Application submission:         | 10 May, 2017       |
| Requested and awarded grant:    | 1.7 billion HUF    |
| Subsidy contract:               | 13 September, 2017 |
| Sales contract:                 | 29 August, 2019    |
| Ceremonial bus takeover:        | 31 July, 2020      |
| Beginning of test period:       | 3 August, 2020     |
| Entry into service of vehicles: | 18 September, 2020 |



## Project elements

- Procurement of 10 urban low-floored solo buses with exclusively electric drive through a public procurement procedure; the selected subcontractor was the BYD Europe B.V.
  - The public procurement procedure contained the installation of the related charging infrastructure.
  - Site development, which contained the construction of a 600 m<sup>2</sup> industrial hall;
- Unit prices: a bus with the related charging infrastructure costed 145,1 million HUF.





## Main physical attributes of the electric buses

- The buses are 12 meters-long, two-axle, three-door and the number of seats are 64.
- The vehicles are equipped with automatic air-conditioning and a camera system which are capable making outside and inside records.
- The energy supply of a bus is based on a 348 kilowatt hours lithium-iron-phosphate accumulator.
- The accumulator's capacity on a daily run is approx. 300 km.
- The bus charging is possible through an AC-Type 2 plug, which is in the back of the bus.
- The buses are running on two, singly 150 KW high performance BYD wheel-hub engine.



# Operational experiences at the Tüke Busz Private Limited Company

- The local public transport operator is the Tüke Busz Private Limited Company which is fully owned by the Municipality of Pécs.
- The new e-buses were put into operation in the varied terrains of Pécs and these particularly affect the vehicles' transport performance: towards the outer east districts the energy recovery is lower because of the long straights - so the range is shorter.
- However, the topographic characteristics of the city make the buses' energy management more effective: a vehicle in downward run brakes more, so (thanks to the regenerative brake system) it sends back energy to the power supply to reduce the overall power consumption.
- On average, the buses produce one KWh per km energy consumption on fleet level, even in colder periods.



## Operational experiences at the Tüke Busz Private Limited Company

- Based on the operational experiences, the e-buses are capable to perform the average traffic forda-tasks.
- It's important to note that the buses also provide adequate and safety transport alternative for the passengers with wheelchair.
- The vehicles have 24 pieces of fixed passenger seats.
- These new, air conditioned e-buses were entered into service in the traffic routes of the city's east-west axis and traffic routes towards the Mecsek Hill.
- It should be noted that the buses have a range of 280 km with one charging, even in the routes towards the Mecsek Hill, but more than once hapenned that the daily run exceeded the 300 km.

**Conclusion:** the buses produce the factory data, also in real operating conditions.







**Thank you for  
your attention!**

**For more information, please do not hesitate to contact us:**

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