Efficient use of energy in the light of optimal public passenger transport

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Abstract:

Solving problems related to the effective use of Public Passenger Transport (PPT) are opportunities, among other things, for:
- energy savings,
- reduction of greenhouse gas emissions,
- reducing congestion, etc.

These positive effects can be further enhanced by the following measures:
- by adapting public passenger transport to the needs of the population,
- by selecting such PPT vehicles that use alternative propulsion technologies according to the terrain configuration.

Efficient public passenger transport is achieved through the optimization procedures of the static and of the dynamic part.

In addition, by choosing the most advanced vehicle propulsion technologies in the PPT system, we aim to achieve additional energy savings and reduction of greenhouse gas emissions.

The article presents research in the field of selection of vehicle propulsion technologies in the PPT system focusing on optimization procedures taking into account the configuration of the terrain and the characteristics of the infrastructure base.

The described model of establishing efficient public passenger transport is an important tool for the efficient management of this PPT, which is under the responsibility of the Ministry of Infrastructure in the Republic of Slovenia.

It is proposed that such research be continued and be included in the tendering procedures for awarding concessions in the PPT area in the Republic of Slovenia. This kind of research would also have the greatest effects on efficient use of energy for achieving optimal PPT implementation.

Keywords:
Public Passenger Transport, Energy savings, Alternative propulsion technologies