

Energy Consumption and GHG Production in Railway and Road Passenger Regional Transport

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Abstract : Paper deals with the modeling and simulation of energy consumption and GHG production of two different modes of regional passenger transport - road and railway. These two transport modes use the same type of fuel - diesel. Modeling and simulation of the energy consumption in transport is often used due to calculation satisfactory accuracy and cost efficiency. Paper deals with the calculation based on EN standards and information collected from technical information from vehicle producers and characteristics of tracks. Calculation included maximal theoretical capacity of bus and train and real passenger's measurement from operation. Final energy consumption and GHG production is calculated by using software simulation. In evaluation of the simulation is used system 'well to wheel'.

Keywords : bus, consumption energy, GHG, production, simulation, train

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