

## SUMMARIES REZIMEA

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### <sup>1</sup> THE COSTS-BENEFITS ANALYSIS OF ELECTRIC AND HYBRID VEHICLES IN THE SERBIAN TRANSPORT SECTOR

UDC: 629.133.65:521.355.8

**Abstract:**

This paper presents a cost-benefit analysis of different introduction strategies, as well as different elements thereof, for different kinds of electric vehicles, including hybrid vehicles. A cost-benefit analysis is a tool for comparing effects, positive and negative, of different activities or projects. A cost-benefit analysis is undertaken for increasing the number of various kinds of electric and hybrid vehicles in the Serbian transport sector. It is found that, although the local and regional environmental costs will decrease, this is generally not socially profitable for purely (battery) electric passenger cars. We also found that hybrid cars which are not grid-chargeable, i.e. that have a relatively small battery pack, appears to be much more promising, due to their high fuel efficiency and modest additional production cost. We also analyse city-based hybrid delivery trucks and hybrid bus, which seem to have an even larger potential profitable.

**Keywords:** cost-benefit analysis, electric vehicles, hybrid vehicles, consumer surplus

### ANALIZA TROŠKOVA-KORISTI ZA ELEKTRIČNA I HIBRIDNA VOZILA U TRANSPORTNOM SEKTORU SRBIJE

UDC: 629.133.65:521.355.8

**Rezime:** Ovaj rad predstavlja analizu troškova i dobiti povodom različitih strategija uvođenja, kao i različitih elemenata koji iz toga proizilaze, za različite vrste električnih vozila, uključujući hibridna vozila. CBA je sredstvo za poređenje pozitivnih i negativnih dejstava različitih aktivnosti i projekata. Analiza troškova i dobiti preduzima se radi povećanja broja različitih vrsta električnih i hibridnih vozila u srpskom transportnom sektoru.

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<sup>1</sup> Received: January 2009  
Accepted: May 2009

Primljen: Januar 2009.god  
Prihvaćen: Maj 2009.god

Došlo se do zaključka da, iako bi se lokalni i regionalni ekološki troškovi smanjili, to generalno ne bi bilo profitabilno za čisto električna putnička vozila (sa akumulatorom). Takođe smo otkrili da hibridni automobili koji nemaju mogućnost ponovnog punjenja, t.j. imaju relativno mali akumulator, deluju mnogo povoljnije zbog njihovog velikog stepena iskorišćenosti pogona i skromnih dodatnih troškova proizvodnje. Mi takođe analiziramo gradske hibridne dostavne kamione i hibridne autobuse, za koje se čini da imaju još veću profitabilnost.

**Ključne reči:** cost-benefit analiza, električna vozila, hibridna vozila, potrošački višak