



ASECAP DAYS 2024

Road User Charging (RUC) in Europe An opportunity or a Threat? Greek Case Study

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Road Usage Charging (RUC)-Definition



A Road usage tax for road maintenance & development



A tax based on the driven distance
(pay what I use)



A replacement of the fuel tax



A Congestion control tool



An Environmental fee imposition

Fundamental Definition

Extended Definition

RUC-An alternative charging method for Greece?

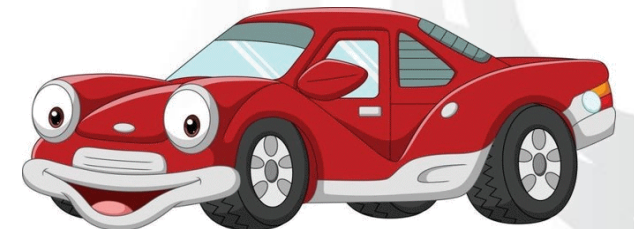
What is the total Cost for Road Usage e.g.15,000Km/Year



TAX-/Fee	(€)
Gas Tax (9L/100Km)	945.00
Avg Annual Usage Tax	250.00
Toll Fee (50% of Kms in Tollways ->7,000Km)	450.00
Total Cost	1,645.00

Equivalent to a Road Usage Charging of 0,11eurocent/Km

(0,68 USD/Km in pilot projects in USA)



But...Is it applicable??

Existing Annual Revenue from Road Usage in Greece

Environmental Tax

Annual Usage Tax

Vehicle emission
(vehicles registered after 2010)
Engine Cubic Capacity
(vehicles registered before 2010)

Revenue:
1.7B€/Year
(AADE Greek Tax Authority)

Gas Tax
(& Other charges)

0,82€/liter
41% of the final price
Revenue:
4.3B€/Year
(AADE Greek Tax Authority)

State

Toll Fee
(All the Main National Roads are
Tollways)

VAT from Toll Revenue
Revenue:
187.96 M€/Year

**A total of 6.2B€/year
for the State**

≈10% of the Total State's Annual Revenue!

Concessions

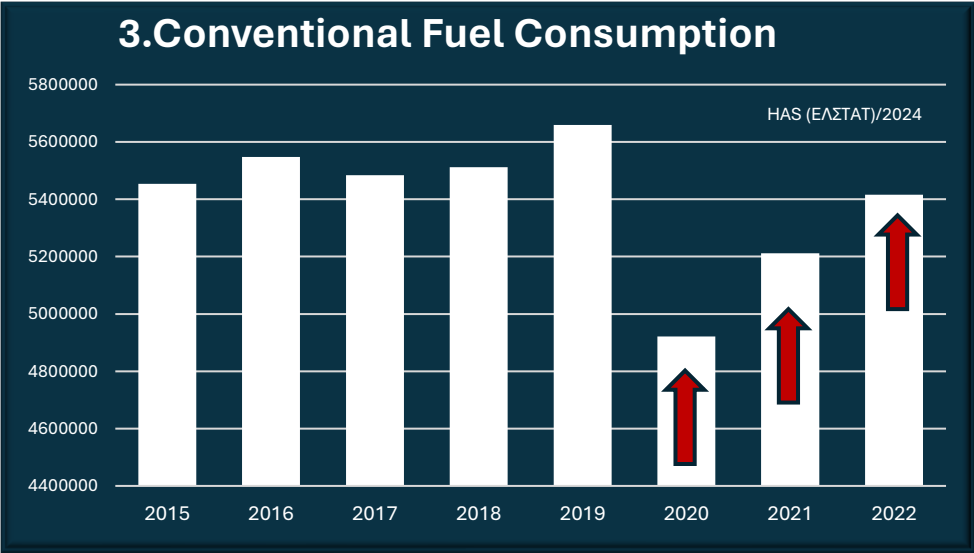
Toll Fee
(All the Main National Roads are
Tollways)

Toll Revenue
Revenue:
779.99 M€/Year *
(+7,2% 2022)
(*HELLASTRON 3/2024)

Greek State Revenue from Road Usage –Threats?

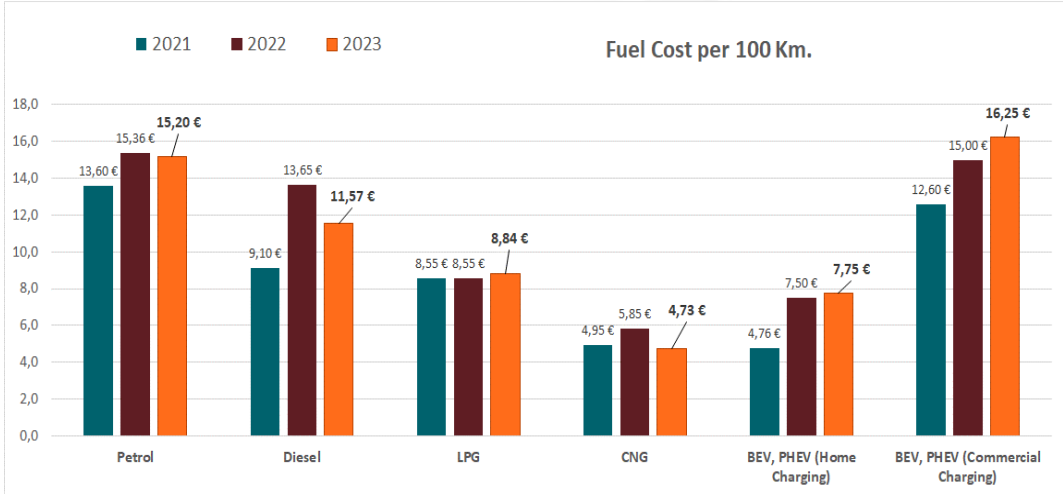
1. Low penetration of HEV BEV & PHEV in Greece

6,704,305 Total Vehicles
91.5%
Conventional Fuels
(ACEA 01/2024)



+3,5% Estimated for 2023

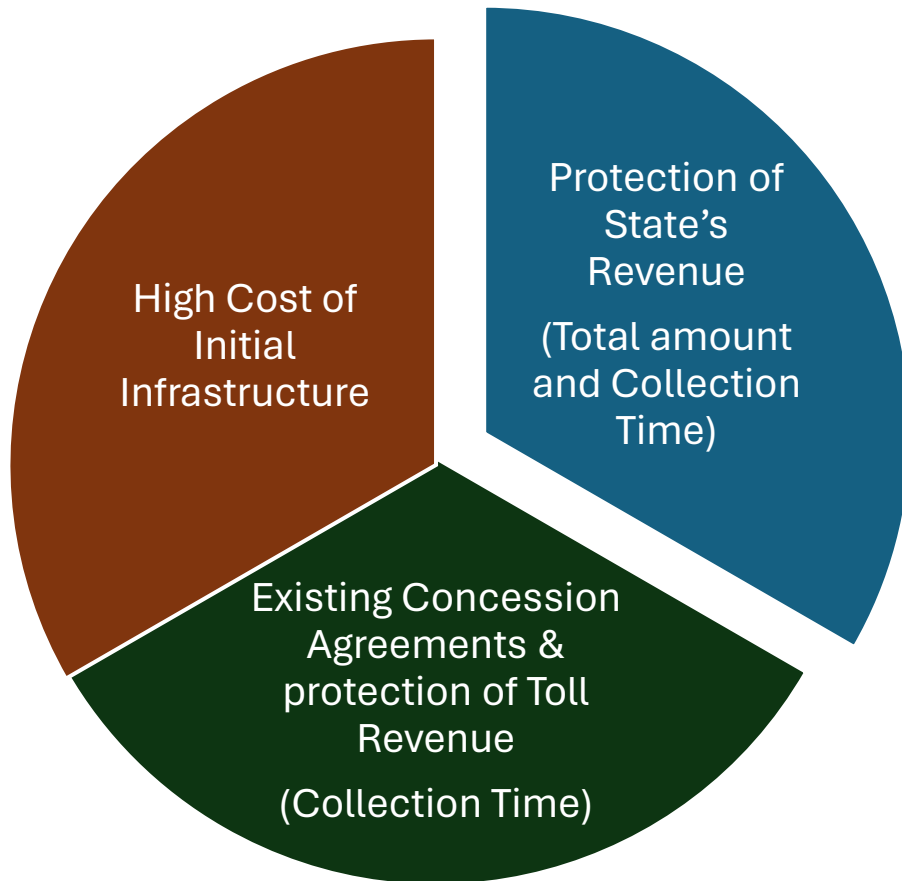
2. High Cost for BEV & PHEV Ownership & Commercial Charging



*Assumptions: Vehicle 1,2cc 96Hp, with the following Consumption: a) Petrol 8,0 L/100Km b) Diesel 6,5L/100Km c) LPG 9,5 Kg/100Km d) CNG 4,5 Kg/100Km, e), Avg. Charging: 25 kWh



RUC-An alternative charging method for Greece-Barriers



So, the main barrier for RUC in Greece is State's Revenue Protection

RUC-Is it an alternative charging method for Greece?

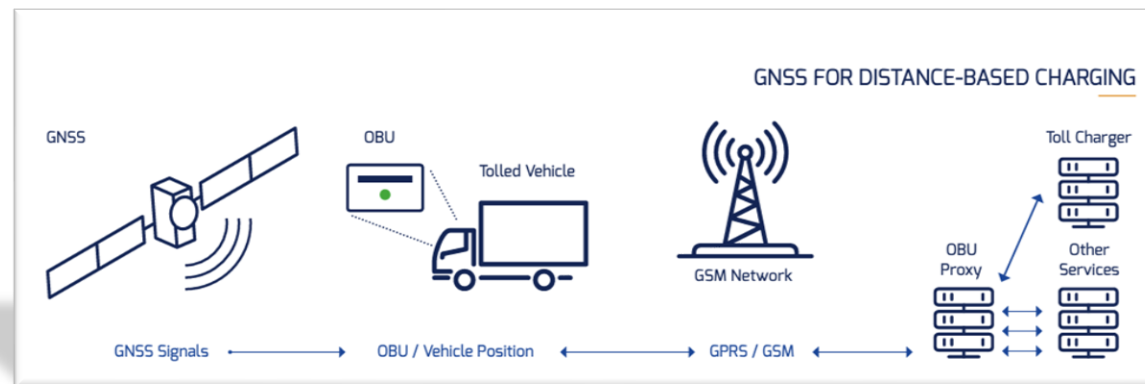
Based on the fundamental definition of RUC
It is not an alternative for the next 5-10 years

BUT

What about the extended definition of
RUC?

RUC- for Environmental fee imposition?

- For HGVs is an obligation according to EU regulation.
- RUC is the best approach for the HGVs Environmental fee charging



- However, some critical issues should be addressed (e.g. interoperability with the existing tolling system).

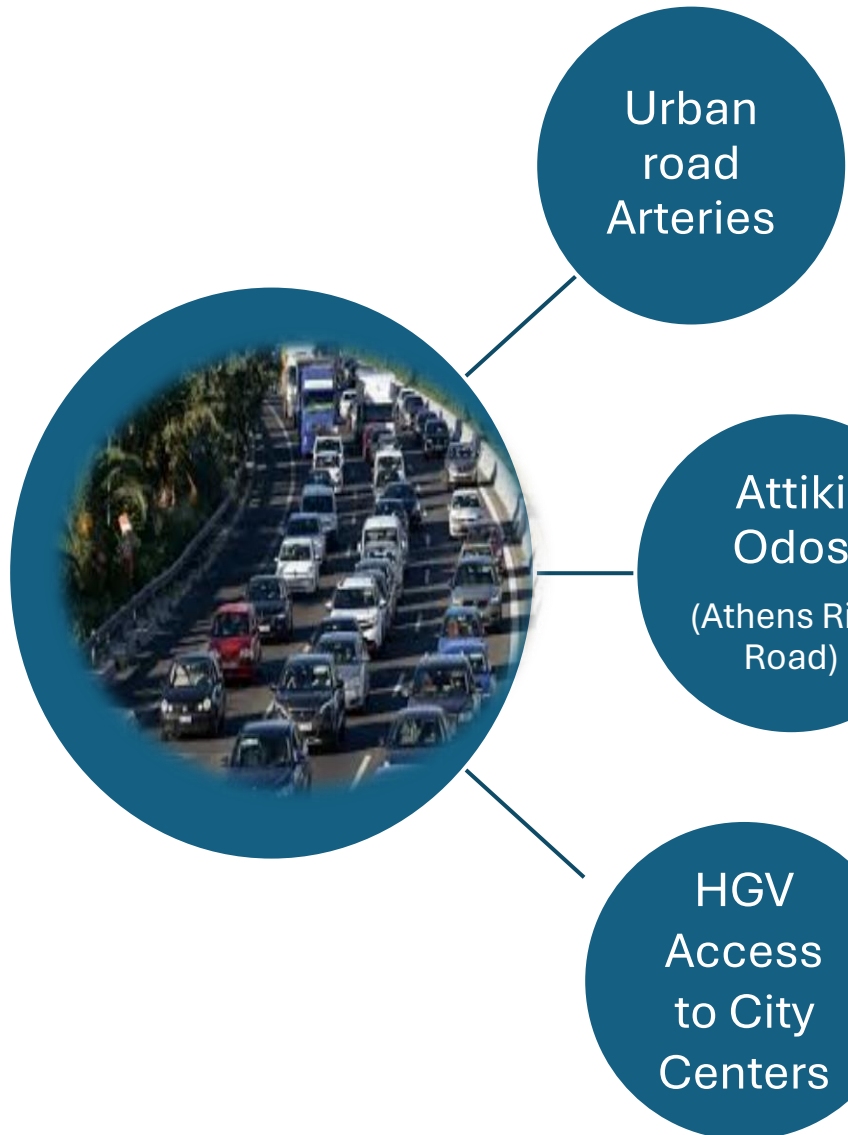
RUC- for Environmental fee imposition-Advantages



- Development of the national infrastructure for RUC,
- Elaboration of required institutional framework,
- Creation of state's mechanism for supervision and revenue collection,
- Creation of synergies with toll operators for interoperability (EETS context)
- Deployment of various charging policies for HGVs as pilot programs for the future generalized application

A great opportunity for the toll operators who have the experience of installing and operating integrated electronic “toll” collection mechanisms!!

RUC- as a Congestion control tool ?



Urban
road
Arteries

- Congestion is a major issue with serious consequences for the socio-economic life in big cities in Greece,
- Mass transportation system is under development,
- High political cost for possible “congestion charging”

Attiki
Odos
(Athens Ring
Road)

- Last years Attiki Odos (Athens Ring Road) is one of the most congested roads in Athens.
- It would be the most effective application of RUC to address this problem, but
- In the new concession agreement, a **flat fee** is specified for the first years of the operation.
- But in the future..

HGV
Access
to City
Centers

- A feasible approach to regulate and monitor the HGV’s traffic in city centers and congested areas

RUC- Application in Greece, Conclusions

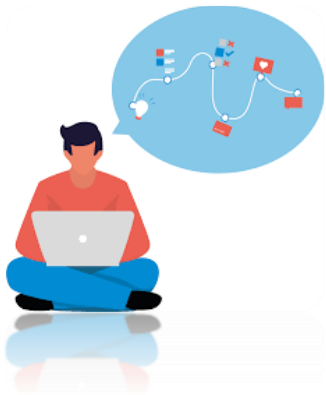
Strengths:

- The fairest, transparent and efficient approach for road usage charging,
- Permits Deployment of various charging policies enhancing the social equity,
- Permits Deployment of policies promoting sustainable mobility,
- A valid and effective approach for HGV Environmental fee imposition
- A promising approach for congestion control,



Weaknesses

- Lack of experience of a full implementation in any country,
- Partially incompatible with existing tolling concessions in Greece,
- Demands significant investments that can only be realized with the participation of the private sector,
- Wrong application can lead to social inequalities or exclusions as well as to disruption of healthy competition



RUC- Application, Conclusions

Threats:

- Under conditions could be considered as a threat for the state's revenue
- Causes a significant lag in state's revenue collection
- Need for Reversal and Renegotiation of the existing concession contracts,
- Disturbance of the existing interoperability system operating in Greece



Opportunities:

- Public Private Partnership for the development of the required infrastructure and the operation of the HGV environmental fee charging system as a pilot application of RUC,
- Integration of the existing Greek Interoperability in the EETS context,
- New stream of revenue for the Toll Operators within the context of a sustainable mobility from Value Added Services offered to the tollway users (park & ride, synergies with Mass transit services, etc.)



Thank you!



Manos Vrailas

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President, Nea Odos & Kentriki Odos

Title: *Road User Charging (RUC) in Europe – An opportunity or a Threat?*

When: *Tuesday, May 14*

Parallel Session 1 - Tolling schemes and CO2 reduction for net zero targets, 13:45-14:45

Moderator: René Moser, Managing Director and Senior Expert in Corporate Strategy, Innovation and International Affairs, ASFINAG, Austria

- *Manos Vrailas, Hellastron, Greece - Road User Charging (RUC) in Europe – An opportunity or a Threat?*
- *Bern Datler, ASFINAG, Austria - **Introduction of CO2-Tolling** in Austria - on January 1, 2024 Challenges and Opportunities*
- *Matthew Daus, University Transportation Research Center, City University of New York at The City College of NY, USA - **New York city Congestion Pricing***
- *Javier Martinez Ordonez, Vialivre S.A., Portugal - Satelise ®: **A Smart Mobility Solution for Road User Charging**. Results of the pilot project in Portugal (2020-2022)*
- *Alessandro Taddei, Telepass, Italy - **Telepass experience in providing services in brand new CO2 Tolling schemas***

Duration: 10min, 10-12 Slides

Deadline: **29th of April 2024**