



5th Conference on Sustainable Urban Mobility Virtual CSUM2020

17-19 June 2020

A comparative gap analysis for electromobility and alternative fuels



Presenter: Foteini Orfanou

Authors: Foteini Orfanou, Panagiotis Papantoniou, Eleni Vlahogianni, George Yannis

Sponsors

Silver



Bronze



Media



With the support of



ΜΕΤΕΡΕΚΑ ΔΕΛΤΑΙΑΣ
ΕΡΕΥΝΗΤΙΚΟ ΚΕΝΤΡΟ
ΜΕΤΕΡΕΚΑ ΔΕΛΤΑΙΑΣ



Gold





Introduction

- Electric and alternative fuels Vehicles
 - CO₂ emissions reduction
 - Better life quality
 - Energy consumption reduction
 - Noise levels reduction
- In European Level
 - Sales of BEV increased by 50% (2017)
 - Sales of plug in hybrid increased by 35% (2017)
 - Penetration rate still below 1%





Scope

- Promotion of electromobility and alternative fuels
 - Detection of obstacles hindering this promotion
 - First step → GAP Analysis
- Gap Analysis in 9 European Regions
 - Progress achieved
 - Deficiencies identification
 - Fields to be further enforced





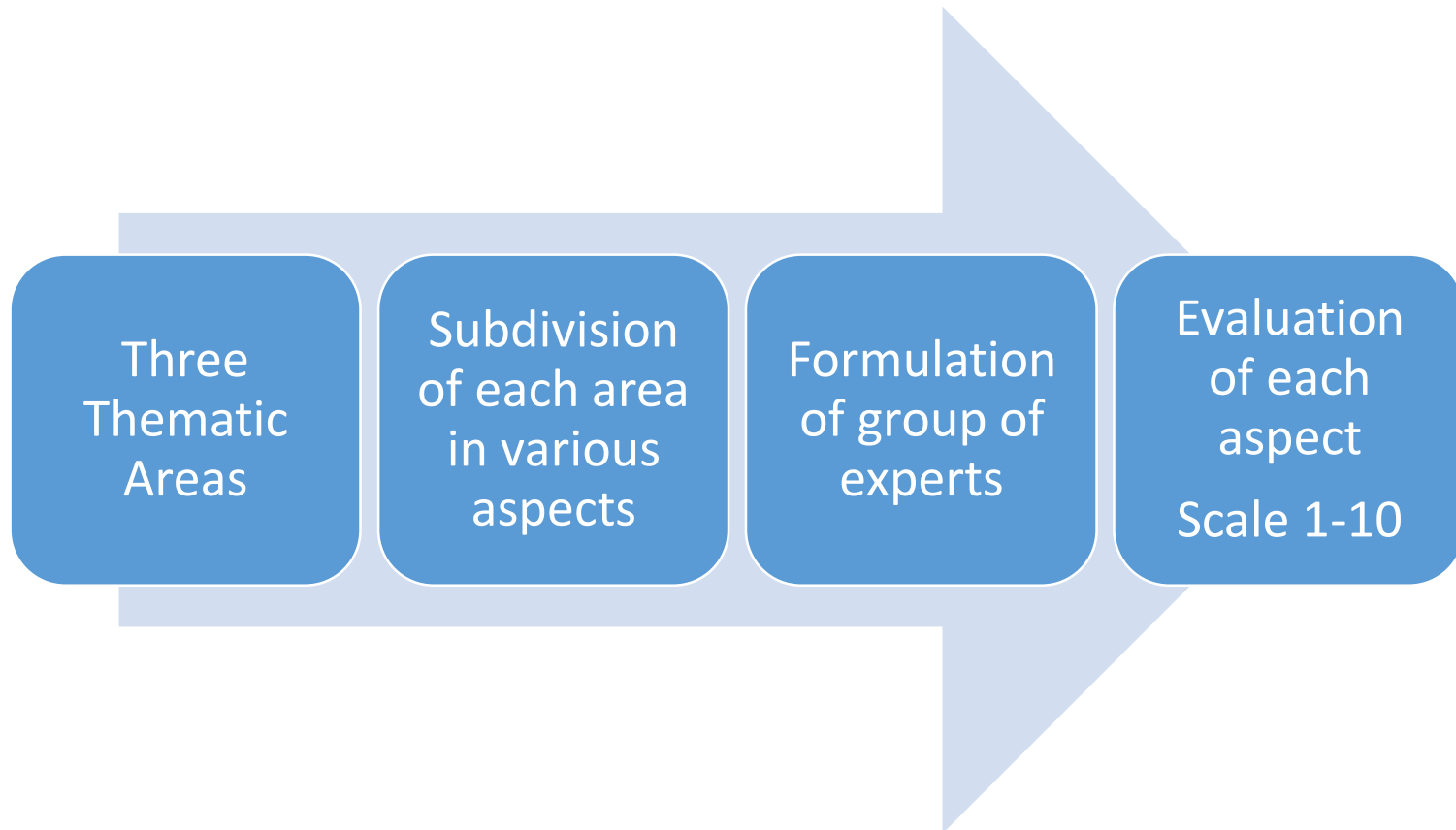
Study Area

- 9 European regions
 - Province of Brescia (IT)
 - Calabria Region (IT)
 - Regional Development Agency of Gorenjska (SI)
 - Region of Attica (GR)
 - Flemish Government Department Environment (BE)
 - Regional Council of Kainuu (FI)
 - Rogaland County Council (NO)
 - Bucharest-Ilfov Regional Development Agency (RO)
 - Zemgale Planning Region (LV)



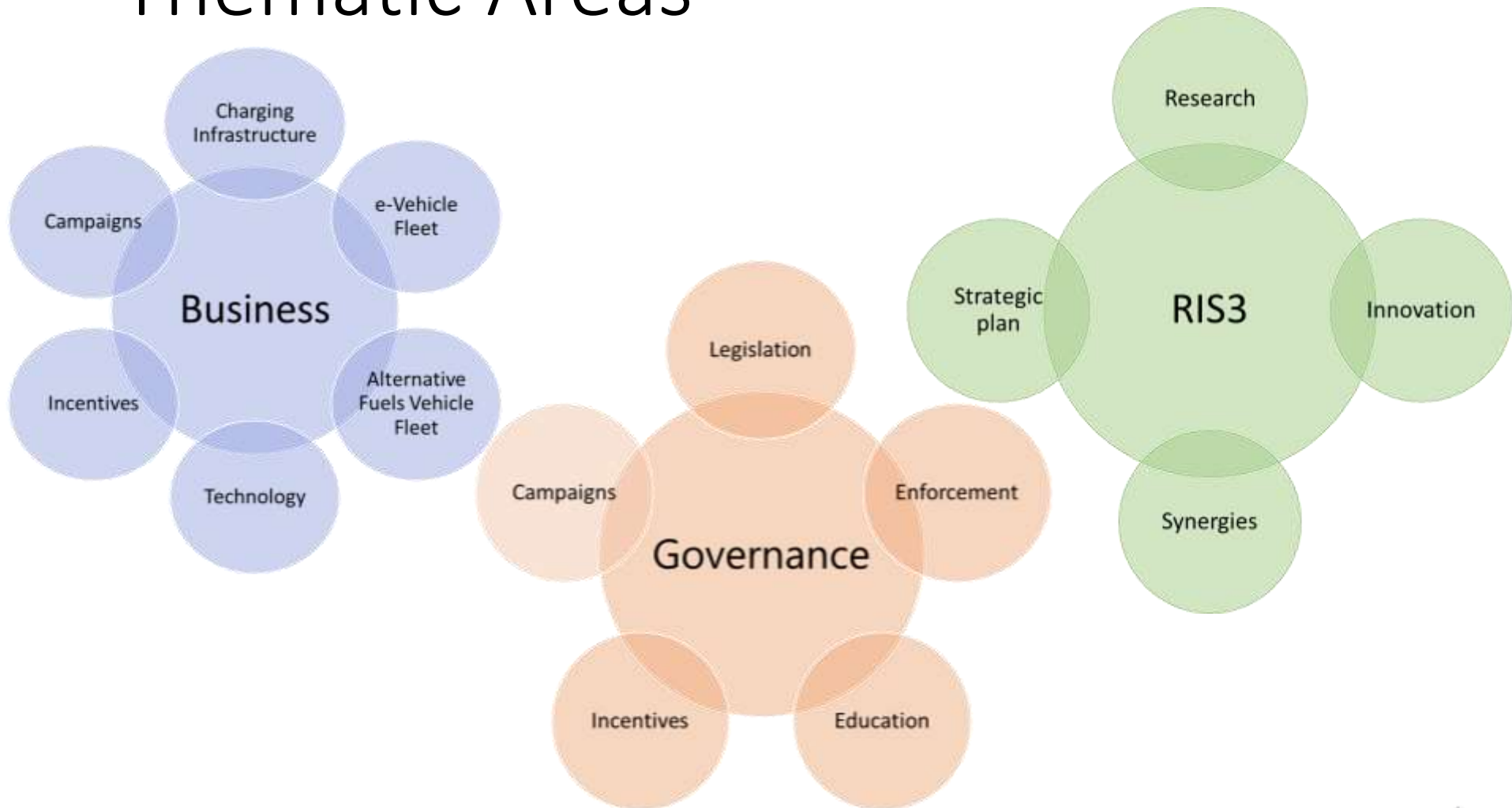


Methodology





Thematic Areas














Group of Experts

- For each partner region
- Deep knowledge
- Working in
 - Industry
 - National/Regional/Local public authorities
 - Academia/Research
 - Business Association
 - Infrastructure – Public Service
 - General body














Results - Business

European Region		CI*	EV** Fleet	AFV*** Fleet	Technology	Incentives	Campaigns
	Brescia	5	4	2	8	5	2
	Calabria	4	3	1	5	4	4
	Gorenjska	9	1	1	4	6	2
	Attica	2	2	3	4	2	3
	Flanders	8	5	5	5	7	4
	Kainuu	4	3	1	5	3	2
	Rogaland	8	8	8	7	9	6
	Bucharest-Ilfov	8	5	5	4	8	4
	Zemgale	5	2	2	4	2	3

- Charging infrastructure: 4 out of 9 regions have achieved significant progress
- Number of electric and alternative fuels vehicles: very low in almost all regions
- Incentives given: high scores for Flanders, Bucharest – Ilfov and Rogaland
- Campaigns: very low scores for all regions
- Calabria and Attica lowest performance in this thematic area




Results - Governance

European Region	Legislation	Enforcement	Education	Incentives	Campaigns
 Brescia	6	7	2	3	3
 Calabria	5	5	5	4	5
 Gorenjska	8	8	5	8	5
 Attica	3	2	2	2	3
 Flanders	5	4	8	8	8
 Kainuu	7	5	7	4	2
 Rogaland	8	8	6	10	7
 Bucharest-Ilfov	6	6	5	6	4
 Zemgale	2	3	6	2	5

- Rogaland: Highest scores in almost all aspects
- Flanders and Gorenjska in the second and third place
- Legislation: low scores for Attica, Zemgale, Calabria and Flanders
- Incentives and Campaigns: not a priority for most regions



Results – RIS3

European Region	Research	Strategic Plan	Synergies	Innovation
 Brescia	8	6	4	8
 Calabria	5	5	5	5
 Gorenjska	7	9	6	8
 Attica	3	2	2	2
 Flanders	8	7	7	7
 Kainuu	8	9	7	8
 Rogaland				
 Bucharest-Ilfov	6	6	7	6
 Zemgale	4	7	3	3

- Most regions significant progress
- Attica and Zemgale lowest scores
- Research: remarkable steps for Brescia, Flanders and Kainuu
- Strategic Plan: highest score for Gorenjska and Kainuu
- Synergies: need to be more promoted





Conclusions

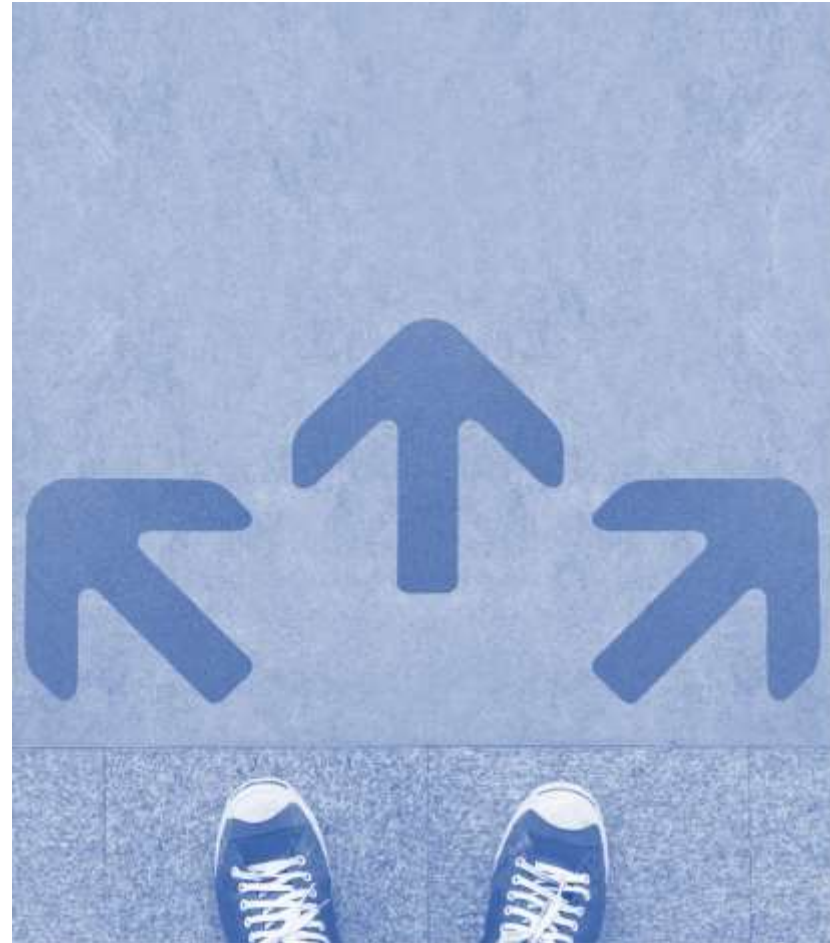
- Identification of deficiencies
- Gap Analysis in 9 European Regions
- Most Regions need to elaborate more on many aspects
 - Legislation
 - Incentives
 - Campaigns
 - Infrastructure
 - Synergies
- Rogaland highest scores
- Attica, Zemgale, Kainuu and Calabria lowest ones





Next Steps

- Formulation of Recommendations
- Formulation of Regional Action Plan
 - Concrete Actions
 - Inspiration for other regions or municipalities



Thank you very much for your attention

Foteini Orfanou, Panagiotis Papantoniou, Eleni Vlahogianni,
George Yannis

National Technical University of Athens

forfanou;ppapant;elenivl;geyannis@central.ntua.gr



Sponsors

Silver

Gold



Bronze



Media



With the support of

