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Towards sustainable mobility in Romanian cities

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Sustainable Urban Mobility

Why is there a need for a Sustainable Urban Mobility?

- Globally, transportation in general and unsustainable mobility behaviour is a determining factor for:
 - climate change
 - environment
 - health
 - economic development
- Sustainable urban mobility trends
 - reduce the negative impact associated with the increased urban mobility
 - provide affordable mobility options for people
 - help achieve global sustainability goals by promoting more environmentally-friendly modes of transport.
- In Romania, the transport sector represents the biggest polluter in cities.









Sustainable Urban Mobility in the EU*

- Sustainable mobility is one of the main challenges facing cities in the EU
- The EU is investing substantial amounts to help cities improve their mobility and make it more sustainable
- The main source of EU funding for urban mobility is the European Structural and Investment Fund (ESIF).
- In managing urban mobility the EU Commission's role is limited,
- In 2013 it provided the Urban Mobility package
- The EC has issued a range of policy documents and guidance
- The EC has increased the funding it provides to projects in this area.
- In six years (i.e.2020) after the Commission's call for a significant change form the MS, there is no clear indication that cities are fully engaged in changing their approaches.











Sustainable Urban Mobility in the EU*

- No clear trend towards more sustainable modes of transport.
- No significant reduction in private car usage despite the existing initiatives to expand the quality and quantity of public transport.
- GHG emissions due to road transport have been steadily increasing, however, some air quality indicators have slightly improved.
- Many cities still exceeding EU safety thresholds.
- Limited take-up of the commission's guidance in terms of preparing SUMPs.
- Urban mobility policies at local levels were not always coherent with the aim of more sustainable urban mobility. There were positive initiatives towards sustainable urban mobility requiring considerable political efforts to win citizens` acceptance.
- Projects were not as effective as intended weaknesses in project design and implementation (not always based on sound urban mobility strategies, often lacked fundamental data and appropriate analyses, relevant targets and coordination with both other plans of neighbouring municipalities).











Sustainable Urban Mobility in the EU

- In 2021, the EC adopted the 'Efficient & Green Mobility Package', providing municipalities the support for the transition to cleaner, greener, and smarter mobility, in line with the objectives of the European Green Deal.
- Among the 4 proposals that are set to modernize the EU's transport system one is the set up of:
 - The new Urban Mobility Framework addressing the main challenges (congestion, emission, noise) and guiding cities to:
 - Cut emissions and improve mobility, including via SUMPs.
 - Develop public transport, walking and cycling.
 - Prioritize zero-emission solutions for urban fleets
 - Create and modernize multimodal hubs,
 - Introduce new digital solutions and services.
- In 2022, the EC will propose a Recommendation to EU MS for the development of national plans to assist cities in developing their mobility plans.







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Urban Transport in Romania Main characteristics

- There is an increase in transports, both in terms of passenger and freight transport.
- Structure of Romanian urban transportation:
 - road
 - rail (trams) inner city (mostly) and peri urban (very few lines)
 - river (Timisoara)
- Road transport has an overwhelming share used for:
 - ➤ urban
 - short-distance transport: commuting (increasing trend).
- Sharing schemes still underdeveloped:
 - ➤ carpooling
- Urban mobility as service in increasing demand:
 - e-scooter/bike renting
 - Uber/Bolt type services
- Challenges:
 - outdated infrastructure (increases operating costs)
 - poor road network (even lack of roads in several new residential areas)
 - urban rail network underdeveloped
 - high demand for deliveries (mostly by car; increasing trend by bike but data shows that mostly in big cities)











Urban Transport in Romania Public transportation in Romanian cities

Public transportation means are the calling cards of cities and good indicators of a city's development level:

Main public transportation means in cities:

- Buses (overwhelmingly diesel/some electric)
- Trolley buses (12 cities, phasing out trend)
- Trams (14 cities mostly in large urban agglomerations)
- Metro (Bucharest in place, Cluj Napoca foreseen)

Characteristics:

- Out of date fleet (esp. Bucharest, mid size cities)
- New buses in almost all large cities: lasi, Timisoara, Cluj Napoca, Oradea
- Electric buses: some operating, more to be introduced:
 - Turda is the first city (2019) to operate fully with electric buses
 - According to 2019 contracts 500 foreseen in 22 cities
 - According to 2021 initiatives another 81 in 7 cities









Urban Transport in Romania National fleet – passenger cars

- 6,9 mil passenger cars registered in Romania (2019) (National Institute of Statistics).
- 0,35 passenger cars per inhabitant in Romania in 2019 (comparatively in the EU – 0,54 regional average).
- The highest average annual growth in passenger car number per 1000 inhabitants over the period 2000-2019 happened in Romania (5.7%).

EU Member States with the highest and lowest number of passenger cars per thousand inhabitants, 2019



Number of passenger cars per thousands inhabitants, 2000 and 2019









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Urban Transport in Romania National fleet

- 16.5 years is the average age of the car fleet one of the oldest in the EU - average 11.5 years.
- 78,6% of the registered cars more than 10 years old.
- Main reasons:
 - Old cars are not being taxed (no environmental tax or similar)
 - Purchasing power of an average citizens (low average income levels)
- Initiatives of The Ministry of Environment to tackle this issue: "Car scrapping" Programme (trade-in allowance type) start in 2005. Yearly moderately growing allocated budget (turning point in year 2010)
 - In 2022 there are 2 directions of the programme
 - Scrapping Classic (scrapping bonus value up to maximum 1800 € + different types of bonuses
 - Scrapping Plus (trade in value 10800 € (for full electric), 5200 € (hybrid)
- Through the Recovery and Resilience Plan Romania targets to remove further 250,000 vehicles.











Sustainable Urban Mobility in Romania Challenges for cities

- Romanian cities face similar challenges related to transport sector as their EU counterparts
- Large urban agglomerations but also mid-sized cities with an accelerated economic development face difficulties caused mainly by unsustainable road transportation.
- Other decisive causes for mobility related issues in Romanian cities:
 - The unprecedented increase in mobility and transportation demands
 - Increase in the number of vehicles in the cities
 - Poor organization of transport activities (outdated means of transportation, poor regional/local interconnectivity, etc)
 - Underdeveloped urban public transportation (with few exceptions)
 - Urban planning not in line with the needs of urban development
 - Unsustainable mobility behaviour of citizens









Sustainable Urban Mobility in Romania Challenges for cities

As result Romanian cities face:

- Increasing number of traffic jams:
- Increasing number of road accidents/incidents
- High pollution levels caused by transportation
- High level of noise caused by traffic
- Lack of parking spaces
- Lack of spaces dedicated to parks/ green environments

Effects:

On the citizens:

- High number of people with health issues (respiratory problems etc)
- Increasing the occurrence of road rage incidents
- Lack of spaces in the city (pedestrian areas, green environments)
- Overall a lower level of standard of life

On the business environment:

- Delays in deliveries/business schedules
- Increase in the costs of transportation











Sustainable Urban Mobility in Romania City initiatives - Cycling

- Lack of infrastructure main reason why Romanians still prefer cars.
- Increase of people riding bikes (health/eco awareness, escape from traffic, costs).
- Increase in bike deliveries (no pollution/no sidewalk blocking)
- Growing demand for bike lanes
- City decision makers are open to implement bike lanes but:
 - Politically risky to disrupt motorized traffic
 - Lack of professional that design cycling lanes to be coherent, direct, attractive, safe, comfortable
- There are city initiatives in terms of lane construction:
 - Cluj Napoca (good design), Arad (good network), Alba Iulia (good network), Alba Iulia (good network esp. in the outskirts), Oradea (transborder bike lanes)
- Bike sharing schemes are implemented (Alba Iulia)
- Cities implemented projects, however many of them with faulty design
 - Safety [panels not adapted to the speed zones/hazardous areas], not wide enough, lack of parking infrastructure.
- Many cities rolled our awareness raising campaigns (Alba Iulia, Brasov, Cluj Napoca etc)





Sustainable Urban Mobility in Romania City Parking Status

- Romania has approximately 1.2 million public parking spaces (755,000 are residential parking spaces in urban areas).*
- Many are just assigned by markings
- Few cities have built dedicated parkings underground/multistorey
 - (Cluj, Oradea, Brasov, Iasi, Bucharest)
- Very few park and rides (Bucharest)
- Rates for residential parking varies between
 - 6€ and 24 € in small towns; 14 € and 40 € in large cities
 - subscription 3 € /month și 200 € /month
 - hourly ticket from 1 € to 2,1 € (Bucharest, Cluj Napoca)
- Revenue **can** be generated from the use of parking lots and fines:
 - Cluj-Napoca (revenues)
 - Oradea (fines "efficient parking management")
- Notable: Brasov highest of public parking spaces dedicated to people with disabilities.
- Few public parking dedicated for e-vehicles.
 - small and medium-sized cities greater no. showing openness to ecoefficiency trends.

*according to an analysis by Vegacomp Consulting.

Sustainable Urban Mobility in Romania City initiatives - Parking

- Most cities (especially mid and large ones) approach parking policies.
- Cities which elaborated their SUMPs usually have a dedicated section for parking.
- Common measures that Romanian cities put forward for implementation in their parking strategies:
 - Construction of dedicated (underground/multistorey parking lots)
 - Creation of Park&Rides
 - Creation of controlled parking zones (convenient for business reasons) with fares encouraging short term parking
 - Discourage street parking
 - Construction of new buildings only if a number of parking is also ensured
 - Development of residential parking areas with limited access to other user groups

Barriers for local authorities:

- Lack of resources for larger scale constructions
- Lack of institutional support
- Inconsistencies with other policies/legislation
- Politically risky.

Sustainable Urban Mobility in Romania City initiatives – public transportation

Main measures undertaken or foreseen to be implemented by larger/mid size cities:

- Modernise and make public transportation more attractive
 - better organisation of routes
 - better interconnectivity with other transportation means
 - upgrade to eco friendly means
- Modernise/diversify payment methods
- Ensure dedicated lanes for public transportation
- Introduction of touristic routes (e-vehicles)

Sustainable Urban Mobility in Romania City initiatives – attracting private companies

Ensure a friendly business environment for companies that operate in the transportation field:

- e-scooter/e-bike sharing
- mobility as a service providers cars (Uber/Bolt)
 Offer incentives/tax cuts for companies approaching
 sustainable mobility measures:
 - Implementing ride sharing schemes
 - Implementing ride to work schemes

Sustainable Urban Mobility in Romania City initiatives – SMART solutions in mobility

Cities have adopted:

- Adaptive sincronisation of traffic lights and passenger crossings with the aim to prioritize public transportation as well as passengers and bikes
- Online parking accessibility monitoring to offer realtime data on available parking spaces and to be able to book one online
- IT management system of public transportation
- Promotion of journey planner software (Moovit)

Sustainable Urban Mobility in Romania City Initiatives – Organisation of awareness raising

Cities are engaged in regular (annual) event organizations approaching mobility having as main objectives:

- Raising awareness of the population for positive attitudes towards healthy living by adopting alternative mobility (walking and cycling)
- Presenting sustainable mobility alternatives to urban dwellers
 Types of events
 - Car free days/week
 - Sustainable mobility week
 - Events dedicated for schools

Sustainable Urban Mobility in Romania Policy instruments at local level

- SUMPs (Sustainable Urban Mobility Plans) have been elaborated by several Romanian municipalities.
- SECAPs (Sustainable Energy and Climate Action Plans) within the CoM initiative. Transport sector, as an important domain in all these SEAPs has to be efficiently integrated and its measures promoted as it has a strong impact in terms of reducing energy consumption, urban pollution and it increases the living standard of the citizens. There are measures that promote sustainable urban mobility especially in public transport
- E-mobility Action Plans the first 4 E-mobility Action Plans were elaborated in Romania with the support of ALEA in the framework of the EU project EMOBILITY WORKS (IEE) for the municipalities of Alba Iulia, Baia Mare, Bistrița, Ploiești - the frontrunners of e-mobility domain in Romania starting the implementation of emobility actions.

Sustainable Urban Mobility in Romania Local policy instruments – SUMPs

Main directions at local level:

- Development of public transport integrated, efficient and accessible
- Development of road networks for efficient use of public space, reorganization of traffic, improvement of safety and environmental conditions
- Encouragement of cycling
- Encouraging and increasing the comfort of pedestrian
- Implementation of efficient and integrated parking strategy
- Increasing the integration between urban planning and transport in areas with high levels of traffic
- Intermodality
- SMART mobility management
- Urban logistics
- Strenghtening of administrative capacity

Sustainable Urban Mobility in Romania Local policy instruments – SEAPs/SECAPs

The transport sector is the sector most targeted to be decarbonised by the local authorities in their SEAPs/SECAPs

Among the main common measures to reduce pollution levels through transport are:

- optimization of the road networks (construction of ring roads, beltways; better linking existing roads)
- modernization of the municipal/public transportation fleets)
- modernization of the commercial and private car fleet
- raising the electrification level for urban transportation (vehicles/charging stations)

Sustainable Energy Action Plans

Sustainable Urban Mobility in Romania Local policy instruments – Harmonising SECAPs and SUMPs

SUMPs and SECAPs can work together – by harmonizing them.

ALEA implemented SIMPLA Sustainable Integrated Multi-sector PLAnning project whose aim was to harmonise the 2 plans based on a methodology elaborated by the project partnership Main benefits of harmonized elaboration of SECAP/SUMP:

- Reduction of duplicate actions
- Use of a single common database at local level to assess and monitor the impact
- Reduction of the implementation time of the proposed measures
- Stronger impact of proposed measures
- Mutual justification of investments through integrated assessment of their effects
- Reduction of costs and time spent planning, implementing and monitoring

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Sustainable Urban Mobility in Romania Local policy instruments – E-Mobility Action Plans

Fields of action and measures identified

1 Municipal fleet and municipal charging infrastructure

- Acquisition of e-scooters (ex. local police) with dedicated charging stations
- Implementation of charging points in public areas for municipal and public e-vehicles
- Acquisition of an electric minivan for the Municipality
- 2 Private e-vehicle transportation systems for touristic services
 - Implementation of e-bike/e-scooters sharing/renting network with charging points
 - Implementation of a collective electric transport system
 - E-bike renting systems
- **3** Public transportation
 - Implementation of an e-bike transportation system for students/employers
 - Acquisition of electric buses for public transportation with charging stations
- 4 Private operators' fleet and charging infrastructure
 - Acquisition of e-vehicles by the local taxi companies
 - Charging points/stations in private areas (commercial centers)
- 5 Legislation/Incentives
 - Local tax cuts for e-vehicle owners
 - Parking spaces free of charge for e-vehicles

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E-Mobility in Romania Status of EV market

As for figures of the EV market in Romania (Registered vehicles at the Romanian Automobile Register) at present there are 12800 electric vehicles.

*20<mark>22 (Jan-Feb) – 1055</mark>

- E-mobility overall in Romania is still at the beginning.
- The electric vehicle market is still underdeveloped compared with other EU countries.
 - Few e-vehicle models available (but the trend is rapidly changing)
 - Long delivery times (9 month +)
- Poor charging infrastructure all over the country Challenges for a boost of electric cars in Romanian market:
 - High purchase price of EVs (compared with Romanian average income levels)
 - Few charging stations/points installed.
 - Prejudicies (autonomy)

In 2021, 13% more EVs were registered than in the previous 10 years combined.

Înmatriculări anuale EV în România

E-Mobility in Romania The future of EV market in Romania

Considering the trend there is a high level of development foreseen in the future in terms of EV acquisitions:

Main motivators:

- High fuel prices (1,66 average price of standard gasoline, 1,90 diesel)
- Presence of low cost variants (Dacia Spring after trade-in 12.000)
- Growing market of e-vehicles
 - More than 30 models are foreseen to be available
 - Diversified range of products (low cost to high end luxury)
- Growing number of e-charging points (mainly private)
- Increase confidence levels of the public in the use of EVs especially for urban travels

Sustainable Urban Mobility in Romania Charging stations Romania

E-Mobility in Romania

E-mobility and local authority engagment

Romanian LAs generally show interest in taking up e-mobility measures:

- for promoting e-mobility among citizens
- for strengthening their "green" status

Common measure to be implemented by many Romanian Las:

acquisition of e-buses for public transportation

Challenges for strong uptake e-mobility in Romanian cities:

- Insufficient knowledge (i.e., prejudices: autonomy, battery longevity).
- Limited own budget of municipalities
 - to acquire EVs (meeting the needs of a local authority)
 - to set up public charging stations

Notable project implemented by a small Romanian municipality (Ciugud commune in Alba County

E-Mobility in Romania

Financing E-mobility for local authorities

Funding/financing opportunities

- The main objective of the "NRRP/2022/C10 Local Fund promoting recharging infrastructure for electric vehicles" is to support the development in Romania of a publicly accessible charging infrastructure for battery electric vehicles to stimulate EV market penetration and reduce the impact of transport on the environment.
- Budget allocated to this scheme is €214.5 mil. non-reimbursable financing (min. €50,000/beneficiary and max. €2 mil./beneficiary).
- National programme launched at the end of 2021 by The Administration for Environmental Funds - Charging stations for electric vehicles in localities dedicated to municipalities and other public institutions

Note: There is a limited capacity and experience among LAs to elaborate strong emobility related project proposals for funding in available schemes/programmes.

Thank you for your attention!

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