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White paper **URBAN MOBILITY** Planning Liveable Cities



Public Dialogue
on the Sustainable Use of
Energy in South-East Europe

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Introduction

The increase of urban population in the global level and the future trends show that there will be ever-increasing pressure on urban areas and infrastructure. This trend doesn't exclude Albania, the urban areas population of which exceeded for the first time that of rural areas in 2011, according to Census data (INSTAT, 2011). Internal migration towards urban areas is mainly concentrated in the big cities of western lowland and especially in the capital city, Tirana, which has faced a significant increase compared to the 220,000 residents in 1991 (Aliaj, et al., 2003). This increase, somewhat uncontrolled, has created a big pressure in the urban infrastructure of main cities. One of the sectors that has a lot of pressure is also that of transport and urban mobility. Rapid growth regarding number of private vehicles, as well as the urban development and densification, combined with a public transport that can't fulfill all mobility needs of the community negatively affect the urban population (Pojani, 2011). The traffic jam, the environmental pollution and especially air pollution which is caused by greenhouse gases emitted by vehicles have a direct impact in the health of citizens, both physically and physiologically.

These global trends that are manifested even in the local environment (Albania) led to the increase of awareness for the sustainable development of urban mobility. In this regard, the change is related both to the mobility planning paradigm, which has to be more comprehensive and integrated, and to the typology of interventions in the territory that goes beyond the limited spectrum of interventions in road infrastructure and transport in general. The attention towards urban mobility was increased not only regarding the general and local government level, but also in the international level. EU has shown a continued attention, especially after 2010, about the sustainable development of urban mobility and this is proved by numerous strategic and informing documents.

Similarly, EU Member States have taken initiatives at both national and local levels to improve the quality of mobility. These initiatives range from preparing strategic documents and plans for sustainable mobility development to physical and infrastructural intervention at the urban level. Major cities like Copenhagen, Vienna, Munich are leaders in terms of good sustainable mobility development practices. This trend is also observed in countries that have recently joined the EU, as in the case of Slovenia, Slovakia and Croatia. Several initiatives, which have not yet materialized on the ground, have been taken also in Albania, at national and local strategic level (Shkodra and Tirana Municipalities) that aim to improve the mobility situation.

This White Paper on Urban Mobility aims to increase the knowledge and awareness of parliamentarians, central and local decision makers, as well as citizens, who need to work together to implement measures that can change their living space in order to improve the quality of life and to make it healthier. Urban mobility cannot be considered a design task of local authorities, without having a comprehensive approach of relevant actors in central institutions as well as in urban communities.

Sustainable urban mobility

The urban areas population growth has also a great influence regarding climate change, beyond the pressure exercised in the infrastructural systems and in the expanding and densification of cities. Around 25% of CO₂ emissions come from the transport of people and goods (European Commission, 2011). Finding sustainable transport solutions is one of the biggest challenges for cities, but also one of the biggest opportunities to move to an urban development system with lower carbon emissions. The development of sustainable urban mobility requires, among other things, a change in the paradigms of dealing with mobility and in the governing mindset (Lyons, 2018). Basically, the transition from the use of private vehicles to the creation of opportunities for the use of public transport, walking, bicycles, rail transport as well as technological interventions to decarbonize vehicles is required to ensure sustainable mobility (ibid). So, in essence, sustainable urban mobility requires a solution that allows for the mobility of people, goods and services, but at the same time helps mitigate the different climate impacts and offers opportunities for a healthier and sustainable lifestyle for all.

The approach to sustainable mobility on global level comes as a result of several initiatives that have been ratified even in Albania. In this way, the Paris Agreement on Climate Change, agreed between the 190 member states, requires a commitment to reduce greenhouse gas emissions so that global warming can stay below 2 °C, at best 1.5 °C (United Nations, 2015). Transport, being amongst the major contributors to emissions, is one of the sectors most affected by this agreement. So, the climate change crisis has increased attention to environmental issues and care to mobility. Meanwhile, the United Nations Sustainable Development Goals, respectively Goal 11 for Sustainable Cities and Communities (UNDP, 2015), and the United Nations Urban Agenda (United Nations, 2017), also require increased attention to issues of sustainable urban mobility. Both documents require an integrated and comprehensive approach so that can provide solution for urban mobility issues, where environmental elements intertwined with social and economic elements. Thus, in order to be sustainable, urban mobility has to be accessible to all and promote a healthy movement, apart from reducing greenhouse gas emissions.

As a leader in the global arena commitment in connection to climate change and sustainability of the planet, the EU has expanded its attention even in regard to mobility and sustainable urban development. In September 2009, the European Commission adopted the Urban Mobility Action Plan (European Commission, 2009). The Action Plan proposed about 20 measures to encourage and support local, regional and national authorities in achieving their goals for the sustainable development of urban mobility. This was the first time that the Commission provided a comprehensive support package in this area. In March 2011, the European Commission published the "White Paper - Roadmap for a Single European Transport Area", the main goal of which is to guide long-term transport policies, that includes reducing carbon emissions by 60% and taking away from

cities the conventional vehicles that use fuel (European Commission, 2011). In addition, it adopted in December 2013 the “Urban Mobility Package”, which reinforces the commitment of member states to take concrete action in this regard and provide professional and financial assistance to cities in improving the urban mobility situation.

The concept of designing sustainable urban mobility plans (SUMP) is part of the package. Another EU strategic initiative is the Urban Agenda, otherwise known as the Amsterdam Pact, which represents a strategic agreement between the commission and the ministers responsible for urban development in member states. The urban agenda has 12 objectives in terms of urban development and one of them relates to the development of sustainable urban mobility. For the matter in question, the target is to increase the sustainability and efficiency of mobility, while policies should be focused on public transport, soft mobility (walking, cycling and public spaces), accessibility (for people with disabilities, elderly, youth and children) and efficient transport with good local and regional connections (European Commission, 2016). The urban agenda will be implemented through various thematic partnerships, with one of the most important being sustainable urban mobility.

Policies and strategic approach

One of the main approaches to supporting sustainable urban mobility is the drafting of Sustainable Urban Plans. Originally promoted by the European Commission, these plans are turning into essential practices for local authorities. Sustainable Urban Mobility Plans are a way to address transport-related problems in urban areas from a strategic point of view. They provide a new paradigm in planning by promoting a shift from car-oriented planning to the people-focused planning that supports sustainable transport models (Okraszewska, et al., 2018; Van Acker, et al., 2016).

The EU views SUMP as a comprehensive approach to developing sustainable transport systems and changing mobility behavior at local and regional level. PMQU also aims at vertical (between different levels of government) and horizontal (between different sectors) policy integration to ensure sustainable urban development. Some of the key elements of SUMPs include setting clear goals and objectives, developing a long-term vision and plan for clear implementation, an assessment of the existing situation and future performance; balanced and integrated development of all modes, horizontal and vertical integration; a widespread approach during the drafting, as well as continuous monitoring, reviewing and reporting, all organized in a quality assurance system (European Commission, 2013). Furthermore, the following table provides a comparison between traditional transport planning and the new approach required by SUMP:

Table 1- Difference between Traditional Planning and SUMP

Traditional planning of city	Sustainable planning of city traffic system
Main subject of the process is infrastructure	Infrastructure is one of the means for achievement of broader goals
Project planning	Strategic and goal based planning
Non-transparent decision making	Transparent decision making through inclusion of the public
Main aims are flow and speed	Main aims are accessibility and quality of life
Focus on traffic	Focus on people
Intensive investment planning	Cost-effectiveness efficient planning Satisfying traffic demand
Satisfying traffic demand	Managing traffic demand
Focus on big and expensive projects	Focus on effective and gradual improvement
Domain of traffic engineers	Interdisciplinary approach, integration of sectors for environment and space
Choice of traffic projects without strategic evaluation	Strategic assessment of options based on set objectives and aims

Source: (Arsensio, et al., 2016; European Commission, 2013); adapted by authors.

In the framework of the initiatives and measures envisaged for sustainable urban mobility, some interesting cases that can serve as inspiration in Albania as well are listed below:

1- Promoting intermodality

One of the main policies pursued by cities within the SUMP is the promotion of intermodality. In simpler terms, intermodality is the interconnection of different modes of urban transport such as bus, subway, tram, bicycle and increasing walking accessibility. In this regard, one of the main initiatives is the introduction of integrated tickets which allow the transition from one type of transport to another and the exchange between the lines. In this case, as part of social policies, integrated subscription ticket may also be mentioned, which provide greater accessibility of citizens to public transport services (Kamargianni, M., et al., 2016). Vienna is definitely one of the champions on European level regarding this.

In 2014, as part of a public referendum (transparent decision making) a unified price of 1 Euro / day was set for all citizens using annual public transport subscription ticket (Buehler, et al. 2017). Similar cases can be mentioned from the Balkans, where Zagreb, for example,

applies an integrated ticket for public transport by tram and bus (Sojat, D., et al., 2017). Similar elements are seen in Slovenia, where Ljubljana, through its mobility plans, has managed to improve the quality of movement in the city, through more flexible and better quality public transport, where the main achievements are the introduction of the modern electronic payment system; expansion of city bus routes (some for suburban areas) and real-time information on bus arrival times at relevant stations (CIVITAS, 2019).

2- Electric buses

The Clean Bus Deployment Initiative was launched by the European Commission in 2017, while the Clean Bus Europe Platform was launched in 2019 (ELTIS, 2019). Both these initiatives aim at support and build capacity for the application of policies for decarbonisation of public transport buses at the local level. Some 80 cities have signed the agreement and are taking measures to electrify the bus fleet. An example near the Balkans is Slovenia, where in the city of Maribor it is being worked closely with TAM bus manufacturers to convert the city bus fleet (TAM-Motors, 2019). A similar case comes from the city of Zagreb, where it is offered a very good combination of the Electric Tram System and the bus system. Finally, even the bus fleet is being converted into electric buses (Sojat, D., et al., 2017).

3- Bike lanes

Following a study conducted at European level, more than 30% of car trips to Europe are performed for distances below 3km, while 50% are performed for distances less than 5km (Pape, M., 2016). In both cases, using the bike would be a healthier and more environmentally friendly method. Countries of northwestern Europe, Denmark, Sweden, the Netherlands and Germany have a very old tradition in cycling. Urban infrastructure has been continuously adapted to allow for safe coexistence on the road between different modes of transport. In the Netherlands, Germany, Spain and Belgium, SUMP policies have been introduced and the concepts of dedicated Bike Boulevards, which are dedicated roads and cover long traffic areas, are being developed (CIVITAS, 2016).

It is also important, within the development of bike lanes, that they are connected to their parking spaces (especially near public institutions or business areas), have a continuous network, have safe crossings at intersections or roundabouts, and are interconnected with other modes of transport. A similar approach has been followed in Slovenia and Ljubljana respectively. The main measure was the introduction of a system for renting bicycles and investing in relevant infrastructure. The bike rental system includes a network of 51 stations with 510 bicycles, which are free for the first hour of use. The bike system is available 24 hours a day, 7 days a week and enables easy day and night use. The number of registered users currently is over 32,000 (CIVITAS, 2019; ELTIS, 2014).

4- Pedestrian zone

Pedestrianization of streets and central areas of cities is a process that has received particular attention in recent years. Related to good economic logic, the creation of pedestrian spaces linked to various commercial services is a good combination for the

development of urban centers. Different European cities have adopted similar policies. For example, Freiburg in Germany has gradually pedestrianized the city center. This policy was initially opposed by local vendors, but after the implementation of the first project, and the change of opinion, pedestrianization became a success story (Buehler & Pucher, 2011).

Strasbourg has undertaken similar policies. In both cases, the fact that pedestrian zones are associated with riding bicycles is an additional impetus to use them. Such examples may be drawn from different cities in Vienna, with the iconic intervention on the Mariahilfstrasse Street (Viennacouver, 2015), Copenhagen with the Strøget area (the longest pedestrian route at the urban level), etc. (European Commission, nd). In Ljubljana pedestrian zones have also been added. Pedestrian zones have increased in recent years and this has brought even more liveliness to downtown streets. Four new pedestrian bridges have been constructed on the Ljubljanica River (CIVITAS, 2019; ELTIS, 2014). Electric-powered vehicles referred to as Kavalirs, provide transportation services for the elderly in the pedestrian zone.

Pedestrianization, however, needs to be looked at on a macro level, to find a solution at the urban traffic network level first. As can be seen from these examples, it clearly needs to be coordinated and tackled with within other Sustainable Urban Mobility Plan (SUMP) policies.

5 - Low Emission Zones

An approach that is gaining ever-increasing popularity in Europe is the designation of Low Emissions Zones (LEZs). These urban areas serve not only to regulate traffic but also have a significant impact on improving air quality. There are about 250 European cities that have started experimenting with this kind of policy within their SUMPs (GIZ, 2014). LEZs vary from country to country, but the basic principle is to restrict vehicles that enter in a given area under certain conditions or by imposing a charge on the “polluter pays” principle. The conditions that may be set vary on the type of vehicles that are allowed to enter an area, the year of cars’ manufacturing and the fees paid to access an area. One of the key elements for the success of the LEZs relates to the support that authorities give to certain stakeholders that need to access the area but lack the solvency or ability to adapt to the new rules. In this case, the authorities provide both financial support and various adaptation trainings.

Current Situation in Albania

Current legislation and national strategies in the field of transport and territorial planning in Albania are guided towards European directives (acquis communautaire) and current best practice of the European Union. "National Plan for European Integration", approved by the Decision of the Council of Ministers no. 42, dated 25.01.2017, constitutes the core document for setting priorities, planning, coordinating and monitoring the fulfilment of obligations in the framework of the implementation of the Stabilization and Association Agreement. The Ministry of Transport and Infrastructure has prepared and integrated into

this national plan Chapters 14 "Transport Policy" and 21 "Trans-European Networks", which include even the legal basis for planning sustainable urban mobility in our cities.

Strategic Documents

- Transport Sector Strategy and Action Plan 2016 - 2020;
- National Strategy on Air Quality (DCM No. 594, dated 10.09.2014);
- National Air Quality Management Plan (DCM No. 412, dated 19.6.2019)

Legislation

- "Road Code of the Republic of Albania" (Law No. 8378, dated 22.07.1998, as amended with Law no. 10488, dated 05.12.2011)
- "On Territory Planning and Development" (Law No. 107/2014)
- "On environmental noise assessment and management" (Law No. 9774, dated 12.07.2007)
- "On the assessment of ambient air quality and the requirements for certain pollutants related to it" (DCM No. 352, dated 29.04.2015).

Regarding the Strategic Framework in Albania, a positive step is the drafting of the Local General Plans (LGPs). Currently, out of 61 municipalities, 37 have approved their LGPs, 9 are in process of approval while 16 are being drafted (NTPA, 2019). As part of the LGPs, mobility, public transport service and road infrastructure issues were addressed in almost all municipalities. However, LGPs have a much broader purpose, and therefore it is necessary to design SUMP to deal with mobility separately.

Regarding the drafting of the Sustainable Urban Mobility Plans in Albania, Shkodra is the first city that has started work in this regard, drafting the first studies on the urban mobility situation. Currently, the Municipality of Shkodra is working on the draft of a Sustainable Urban Mobility Plan for the city. The Municipality of Tirana has also undertaken several initiatives in this regard. Following the drafting of the LGP, the Sustainable Development Strategy and the Green City Action Plan have been developed. Both of these documents provide a strategic framework from an environmental point of view and transport policies as well. Currently, Tirana has begun designing its SUMP, due to support of GIZ. The drafting of the Sustainable Urban Mobility Plan will help provide more sustainable solutions to the problems encountered as well as the appropriate involvement of the public in these measures, while ensuring the proper legitimacy for the decisions made.

It is worth mentioning that Tirana has the greatest pressure in terms of mobility, which comes as a result of its population and the large number of vehicles in circulation, amounting to about 175,000 private cars and about 250,000 vehicles of various types (Tirana Municipality, 2018a; 2018b). For this reason, a number of mobility measures had

to be taken in parallel with these strategy-making initiatives. One of the main initiatives is the construction of more than 30km of dedicated bicycle lanes and over 25km of dedicated bus/taxi and emergency vehicles as part of the Tirana Road Network (Tirana Municipality, 2018). These interventions have certainly increased road safety and the citizens' will to bicycles by citizens. Beyond this, the Municipality of Tirana has undertaken measures regarding parking management by imposing tariffs on the main streets of the capital. In terms of parking, another action that deserves praise is the introduction of parking cards for residents of the area. In this way, parking on the inner streets of different areas is dedicated for area residents. Such an action is expected to discourage the circulation of private vehicles and support sustainable mobility modalities such as public transport, walking and cycling. Infrastructure interventions have also been carried out with regard to the pedestrianization of some areas, such as in the case of Skanderbeg Square or New Bazaar.

Nevertheless, it is worth noting that the initiatives so far, not being incorporated into a comprehensive strategy, have led to additional challenges, especially for Tirana, which proves the real need for a holistic and integrated approach as in the case of SUMP. For example, the expansion of bicycle and emergency lanes has brought about a reduction of sidewalk and street parking spaces. As a result, the pressure for parking has increased resulting in an increase in traffic congestion. Although parking spaces have been added in some parts of Tirana, mainly underground, they are still unable to meet the high demand for parking. Bicycle lanes have strengthened road safety, which is reflected in an increase of bike users throughout the city. But given that the network is still incomplete, and due to the aggressive driving culture in general, cycling remains at the limits of scepticism for many citizens. However, one of the main factors affecting cycling remains environmental pollution, and especially urban air quality. The addition of construction sites combined with fuel quality has resulted in significant air pollution, which sometimes exceeds limits. Although Albania has one of the most aggressive oil taxes, the authorities fail to guarantee an acceptable quality. Gas emissions from vehicles are very harmful to the health of citizens. Also, although a significant amount of the taxes levied on oil goes to carbon tax, interventions to improve air quality are relatively limited.

Meanwhile, public transport in Tirana itself fails to meet all the needs of citizens. As reported by the Tirana municipality, about 25% of the citizens' use the public transport service, which has the highest density and frequency in the city of Tirana, while for the rural areas the jurisdiction of the municipality is more limited and incomplete (Municipality of Tirana, 2016). There are 14 bus lines and 305 buses operated by private entities in Tirana. A bus ticket costs ALL 40/ride and is not limited in time, as long as the citizen does not get off the bus or changes bus line. The fact that different routes require different tickets, although at a unified price, makes the public transport system less attractive. Also, adding to this fact the quality of the buses or their emissions, the factors to not use them become even more important, pushing citizens to use private vehicles.

The above indicates that although some positive measures have been taken to improve urban mobility, project, the approach through projects and lack of coordination by a SUMP have reduced the potential impact of these initiatives.

Conclusions and Recommendations

The main aim of this white paper on Urban Mobility is to increase knowledge and awareness of central and local parliamentarians and decision makers, as well as citizens, who need to cooperate in implementing measures that can change their living environment to improve the quality of life and make it healthier. Policies at global and EU level have increased attention to issues of urban mobility, particularly related to the impact on the environment and climate change, as well as the implications that urban mobility has on citizens' health. Drafting of Sustainable Urban Mobility Plans is an approach and an instrument that is widely advocated at all levels. In contrast to the previous approaches, SUMPs offer a comprehensive solution, a long-term vision and at the same time actual solutions for the improvement and sustainable development of urban mobility.

Various European cities have begun designing and implementing SUMPs by applying coordinated policies for public transport, decarbonisation of transport, expansion of healthy transport modes etc. One thing is clear, that these policies need to be well coordinated and developed through a broad process and public participation. Their success depends directly on their communication with the stakeholders and their awareness. With regard to Albania, it can be said that the legislation and the strategic approach have already advanced. Particularly, in the context of approximation to EU policies, important steps have also been taken in terms of transport policies. At the local level, some municipalities have begun to take action on mobility issues, particularly Tirana and Shkodra. However, the challenges are multifaceted and must be dealt with in a coordinated way between the central and the local level.

Some recommendations:

- 1- Municipalities should be supported in drafting SUMPs as a strategic document to solve mobility problems.
- 2- Capacities at local level should be built so that transport planning can make a qualitative leap from infrastructure planning to sustainable mobility planning.
- 3- Municipalities should draft SUMPs through a transparent and inclusive process, both with public in general, and with other stakeholders.
- 4- SUMPs should be drafted in coordination with the LGPs predictions and serve as an added value in the planning process.
- 5- The necessary institutional structures for the drafting and implementation of the SUMPs should be established.

6- SUMP's policies should be based on the characteristics of the country for which they are drafted and then should be coordinated with each other.

7- Beyond the financial support for the drafting of SUMP's, municipalities should also be provided with financial opportunities for their implementation. Given the capacity gaps at the local level, and in particular to collect funds through international projects, municipalities need to be supported during the application process.

Meanwhile some policies that can be adhered to at both local and central level relate to:

- 1- Better quality inspection of fuels used in Albania
- 2- Establishment of air monitoring equipment on major urban road axes, intersections, or high traffic flow areas. This would provide a qualitative step in terms of developing evidence-based policies.
- 3- Establishment of Public Transport Terminals.
- 4- Intermodality in cities by combining public transport with pedestrian and cycling spaces.
- 5- Regulation of public transport stops to provide comfort, protection from bad weather, and basic information on public transport schedule.
- 6- Integration of ticketing systems that allow moving from one bus line to another. Adding daily, three-day or weekly ticketing alternatives.
- 7- Establishment of dedicated lanes for bicycles, public transport and emergencies. These need to be coordinated to create network continuity.
- 8- Increase of the fund dedicated to sustainable mobility. About EUR 20 million come from the carbon component of the fuel tax. A part of these funds should go towards sustainable mobility. Transparency of this funds' spending should also be increased.
- 9- Measures should be taken to decarbonize public transport by promoting its electrification. Although there is a huge cost, there are various European funds that assist cities in these initiatives.
- 10- Mobility policies should be comprehensive and appropriate for all age groups and persons.
- 11- Mobility policies should be interconnected and have efficient and accessible public parking systems.
- 12- To reduce emissions in traffic-congested areas, the application of the LEZs can be seen. This requires preliminary feasibility studies from both the infrastructure and the financial point of view.

References

- NTPA, 2019. Progress of General Local Plans [online] <http://planifikimi.gov.al/index.php?id=43> [Accessed on: 12 November 2019]
- Arsenio, E., Martens, K., Di Ciommo, F., 2016. Sustainable urban mobility plans: Bridging climate change and equity targets? *Research in Transportation Economics*, 55 (1), pp 30-39
- Aliaj, B., Lulo, K., Myftiu, G., 2003. *Tirana, The Challenge of Urban Development*. Tiranw: Cetis
- Buehler, R., Pucher, J., Altshuler, A., 2017. Vienna's Path to Sustainable Transport. *International Journal of Sustainable Transportation*, 11, (4), pp. 257-271
- Tirana Municipality, 2016. Indexing of City Transport Tariffs in the Municipality of Tirana, Tirana: Municipality of Tirana
- Tirana Municipality, 2018a. Tirana [Online] https://tirana.al/uploads/2019/3/20190304142936_szhqbt-2018-2022-30-e-miratar-per-web-finale.pdf [Accessed 12 November 2019].
- Tirana Municipality, 2018b. *Green City Action Plan*. Tirana: EBRD and Austrian Federal Ministry of Finance.
- Buehler, R., Pucher, J., 2011. Sustainable Transport in Freiburg: Lessons from Germany's Environmental Capital. *International Journal of Sustainable Transportation*, 5, pp. 43–70
- CIVITAS, 2016. *Smart Choices for Cities: Cycling in the City*. Policy Note, Brussels: European Commission
- CIVITAS, 2019. *Ljubljana*, [online] <http://www.civitas.eu/city/ljubljana> [Accessed on: 12 November 2019]
- ELTIS, 2014. *Participatory Planning and Promotion of Sustainable Mobility in Ljubljana with Emphasis on Safe and Increased Bicycle Use in Ljubljana/Slovenia* [online] <https://www.eltis.org/discover/case-studies/participatory-planning-and-promotion-sustainable-mobility-ljubljana-emphasis> [Accessed on: 12 November 2019]
- ELTIS, 2019. *Clean Bus Deployment Initiative* [online] <https://www.eltis.org/in-brief/news/clean-bus-deployment-initiative> [Accessed on: 12 November 2019]
- European Commission, nd. *Reclaiming city streets for people Chaos or quality of life?* Brussels: European Commission, DG Environment
- European Commission, 2009. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Action Plan on Urban Mobility*. Brussels: European Commission
- European Commission, 2011. *White Paper- Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system*. Brussels: European Commission
- European Commission, 2013. *A Concept for Sustainable Urban Mobility Plans to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions-Together Towards Competitive and Resource-Efficient Urban Mobility*. Brussels: European Commission

- European Commission, 2016. EU Urban Agenda- The Pact of Amsterdam. Brussels: European Commission
- GIZ, 2014. *Low Emission Zone (LEZ) Vehicle Travel Restriction to Improve Air Quality in Inner Cities*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- INSTAT, 2011. *Albania- Population Projections 2011-2020*. Tirana: INSTAT
- Lyons, G., 2018. Getting Smart About Urban Mobility – Aligning the Paradigms of Smart and Sustainable. *Transportation Research Part A: Policy and Practice*, 115 (1), pp. 18-29
- Kamargianni, M., Li, W., Matyas, M., Schäfer, A., 2016. A Critical Review of New Mobility Services for Urban Transport. *Transportation Research Procedia*, 14, pp. 3294 – 3303
- Okraszewska, R., Romanowska, A., Wołek, M., Oskarbski, Jacek., Birr, K., and Jamroz, K., 2018. Integration of a Multilevel Transport System Model into Sustainable Urban Mobility Planning. *Sustainability*, 10 (1), pp. 479-499
- Pojani, D., 2011. *TRAFFIC! Invasion of Tirana by vehicles (how to break free)*. Tirana: EPOKA University
- Sojat, D., Brčić, D., Slavulj, M., 2017. Analysis of public transport service improvements on tram network in the City of Zagreb. *Technical Gazette*, 24 (1), pp. 217-223
- TAM-Motors, 2019. *The Electric Bus Comes to Town* [online] <https://www.tam-motors.eu/the-electric-bus-comes-to-town/> [Accessed on: 12 November 2019]
- United Nations, 2015. *Paris Agreement*. United Nations
- United Nations, 2017. *New Urban Agenda- Habitat III*. Quito, Ecuador: United Nations
- UNDP, 2015. *Sustainable Development Goals*. United Nations Development Program
- Van Acker, V., Goodwin, P., Witlox, F., 2016. Key Research Themes on Travel Behaviour, Lifestyle and Sustainable Urban Mobility. *International Journal of Sustainable Transportation*, vol. 10 (1): 25-32
- Vienncouver, 2015. A Tale of Two Cities: Vienna's Mariahilferstraße combines Pedestrian Zone and Shared Space, [online] <https://www.vienncouver.com/2015/01/viennas-begegnungszone-shared-space-program/> [Accessed on: 12 November 2019]
- Pape, M., 2016. *Moving Cycling Forward: A Coordinated Approach to Cycling for Local and Regional Authorities in the EU*. European Parliamentary Research Service



White paper

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