

Accelerating Energy Transition through the Introduction of Alternative Fuels Infrastructure

Miloš Kuzman

Serbian Energy Law Association, Pjarona de Mondezira 30, Belgrade

Abstract - The increasingly visible consequences of climate change are a sign that urgent actions must be performed to reduce the negative effects that affect the accelerated warming of our planet. Energy reforms are moving in the direction of the increasing presence of renewable energy sources in the energy mix, in which, with certain preconditions, renewable and energy-efficient vehicles occupy an important place. A prerequisite for a more significant presence of renewable vehicles in traffic is, among other things, the guarantee of security of supply of alternative fuels. In order for alternative fuels to be available to all users, it is necessary to provide adequate infrastructure that will be present to the necessary extent throughout the geographical area of the country. This paper will discuss the possibilities, preconditions and obligations of introducing alternative fuels infrastructure in the Republic of Serbia. Special emphasis will be placed on electricity and hydrogen as fuels for which it is necessary to provide adequate infrastructure as soon as possible. Finally, conclusions and recommendations will be presented in anticipation of the adoption of regulations related to the deployment of alternative fuels infrastructure.

Key words - alternative fuels, electric vehicles, hydrogen, energy transition

I INTRODUCTION

When electric vehicles are mentioned, few interlocutors lack an opinion on the subject. While some believe that electric vehicles are the transportation means of the future, others are critical regarding the role these vehicles should play in traffic. Skepticism is particularly present when discussing the availability of these vehicles, their price, battery life, and charging speed. One of the questions raised is the source of the electricity used to power these vehicles, specifically whether these vehicles are indeed the vehicles of the future if the electricity for their charging is generated from fossil fuels [1].

In the Republic of Serbia, electric vehicles first appeared on the streets before they found their place in regulations. Moreover, charging stations for electric and hybrid vehicles began operating before amendments to the Energy Law were adopted in 2021, which introduced the charging service for electric and hybrid vehicles as a new institute. In the meantime, regulations have been enacted that provided subsidies for the purchase of electric and hybrid vehicles at a time when the number of charging stations in the Republic of Serbia could be counted on one hand.

The expert public, especially those dealing with the transition to

renewable energy sources, is interested in the speed of the transition from traditional to renewable-powered vehicles and the creation of prerequisites to achieve this transition as quickly as possible [2]. Additionally, due to the increasing prevalence of alternative fuels that can be both renewable and non-renewable, such as biogas and green hydrogen, questions arise regarding their more comprehensive regulation in domestic legislation. This expert community does not overlook the previously raised issues, but addresses their resolution along the way, with a clear goal in mind – reducing the impacts of climate change. One of the prerequisites for a greater presence of alternative fuel vehicles in traffic is the existence of adequate infrastructure for their charging.

This paper will examine the current situation regarding the development of infrastructure for alternative fuels and the creation of conditions for its improvement, especially concerning electricity and hydrogen as types of alternative fuels. Special emphasis will be placed on the regulations of the European Union (hereinafter: EU) in this area, and the need for mutual consistency of regulations related to infrastructure for alternative fuels with other regulations will be presented. The paper will also consider the appropriateness of adopting these regulations and provide recommendations that lawmakers could consider when contemplating the solutions that these regulations should bring.

II INFRASTRUCTURE FOR ALTERNATIVE FUELS IN THE REGULATION OF THE REPUBLIC OF SERBIA

Energy Law

The current Energy Law ("Official Gazette of the RS", Nos. 145/2014, 95/2018 – other law, 40/2021, 35/2023 – other law, 62/2023 and 94/2024) stipulates in Article 146a that the distribution system operator is obliged to cooperate on a non-discriminatory basis with any natural or legal person who owns, develops, or operates electric vehicle chargers, in connection with their connection to the grid, ensuring that the negative feedback impact of chargers on the distribution system is kept to a minimum [3]. It is prescribed that the connection of publicly accessible and private electric vehicle charging points to the distribution system is regulated by a Government decree and by the distribution system operating rules, and that the distribution system operator, as a rule, may not own, develop, or operate electric vehicle chargers, except in cases where it possesses chargers solely for its own needs. From the above provisions, it is clear that the Energy Law does not contain provisions related to electric vehicle charging infrastructure, but only prescribes the

obligations of the distribution system operator regarding the connection of charging stations to the power system.

Law on Planning and Construction

At the end of 2023, the legislator recognized the need to begin adopting regulations related to alternative fuel infrastructure. This was done through amendments to the Law on Planning and Construction ("Official Gazette of the RS", Nos. 72/2009, 81/2009 – corr., 64/2010 – Constitutional Court decision, 24/2011, 121/2012, 42/2013 – Constitutional Court decision, 50/2013 – Constitutional Court decision, 98/2013 – Constitutional Court decision, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 – other law, 9/2020, 52/2021 and 62/2023 – hereinafter: LPC), which in Article 2, paragraph 1, item 18 defines the concept of electromobility as a specific form of ecological transport, through the use of electric vehicles that predominantly use electric energy as their driving power [4]. Furthermore, the same article, in items 38 and 59, defines an electric vehicle charging point as a location where one or more electric vehicles can be charged or where the battery of one or more electric vehicles can be replaced, and an electric vehicle charger as a device that may be installed on land or within a facility used for public or private purposes.

Article 145, paragraph 4 of the LPC further stipulates, among other things, that requests for the issuance of a decision approving the execution of works on electric vehicle chargers located within fuel supply stations for motor vehicles on public roads are to be decided upon by the competent authority of the local self-government unit in whose territory the facility in question is situated. Article 201, paragraph 7 of the LPC provides that the competent minister shall prescribe in more detail the content, manner, and procedure for preparing spatial and urban planning documents, including the spatial plan for areas of special purpose for the construction of electric power facilities, as well as the minimum number of electric vehicle charging points.

It is particularly important to mention the independent Article 85 of the LPC, which stipulates that the owners of fuel supply stations for motor vehicles located on state roads of category Ia are obliged to align their operations with the provisions of the LPC within two years from the date of entry into force of the bylaw regulating the installation of electric vehicle chargers. The same article further prescribes that the Energy Agency of the Republic of Serbia (hereinafter: AERS) shall regulate in more detail the manner of supply and billing of the electricity delivered for the operation of electric vehicle chargers.

Although the LPC is highly significant, as it introduced for the first time into domestic legislation provisions concerning alternative fuel infrastructure, it regulates exclusively the infrastructure related to electric vehicle chargers, and not vehicles powered by other alternative fuels, such as hydrogen, for example.

Furthermore, more detailed provisions concerning electric vehicle infrastructure are expected to be established through the adoption of a bylaw, which should set out the obligations of fuel station owners. Considering the increasing diversity and development of various types of alternative fuels, it is expected

that future amendments to the LPC will include provisions addressing the infrastructure for other alternative fuels besides electricity.

III TOWARDS THE ADOPTION OF THE LAW ON THE DEPLOYMENT OF ALTERNATIVE FUEL INFRASTRUCTURE

In 2023, the EU adopted Regulation 2023/1804 on the deployment of alternative fuels infrastructure (hereinafter: the Regulation), which has been in effect since 2024 [5]. The Regulation forms part of the EU's "Fit for 55" legislative package, aimed at reducing net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels, with the ultimate goal of achieving EU climate neutrality by 2050. It should be noted that the Regulation repealed the earlier Directive 2014/94 on the deployment of alternative fuels infrastructure (hereinafter: the Directive), which indicates that the EU has been addressing these issues for more than a decade [6]. The Regulation sets out the targets that EU Member States must meet when introducing publicly accessible alternative fuels infrastructure [7].

The adoption of the Regulation followed the situation in which EU Member States had been developing alternative fuel infrastructure in different ways, resulting in uneven development of charging and refuelling infrastructure across the EU, ultimately leading to infrastructure that was not adequately adapted to users' needs. Since the objectives of the Directive had been too broadly defined, the infrastructure development policies of EU Member States varied significantly in both approach and level of advancement, which led to considerable disparities, including those of a technical and pricing nature.

Given that the Republic of Serbia has yet to adopt regulations concerning alternative fuel infrastructure, it is necessary for the legislator to incorporate solutions aligned with those established by the Regulation, while also taking into account the fundamental objectives set out in the Directive. At the end of 2024, the Ministry of Construction, Transport and Infrastructure forwarded a working draft of the Law on the Deployment of Alternative Fuels Infrastructure to the relevant professional community and business entities, announcing its forthcoming adoption [8]. Therefore, it is important here to highlight the key concepts introduced by the Directive, and especially by the Regulation, which the future law should encompass.

The content of the Directive and the Regulation clearly indicates that the aforementioned law should include: objectives for establishing the necessary alternative fuels infrastructure in transport for road vehicles, stationary aircraft, trains, and inland waterway vessels; rules for developing a national policy concept for the establishment and development of alternative fuels infrastructure in transport; minimum requirements for the construction of alternative fuels infrastructure and charging points; common technical specifications for charging and alternative fuel supply points; requirements regarding user information; payment requirements related to alternative fuels infrastructure; and requirements for maintaining records on alternative fuels infrastructure. Such a comprehensive scope of the future regulation would indicate the legislator's intention to regulate this topic as fully as possible, although it remains to be seen how much of this matter would be governed directly by the

law and how much would be specified through subordinate regulations.

The definition of alternative fuels in the Regulation is also very comprehensive. Alternative fuels are defined as fuels or energy sources that are used, at least in part, as a substitute for fossil fuel sources in powering transport vehicles and contribute to the decarbonization of transport and the improvement of the environmental parameters of the transport sector, which include, among others: alternative fuels for road vehicles, trains, inland waterway vessels, and zero-emission aircraft (electricity, hydrogen, ammonia); renewable fuels (fuels from biomass, including biogas and biofuels, synthetic and paraffinic fuels, including ammonia, produced from renewable energy sources); and non-renewable alternative fuels and transitional fossil fuels (natural gas in gaseous form as compressed natural gas and in liquid form as liquefied natural gas, liquefied petroleum gas, and synthetic and paraffinic fuels produced from non-renewable energy sources).

From the above definition, it follows that the future law should include not only renewable energy sources in alternative fuels but also non-renewable energy sources, such as liquefied natural gas, which is both necessary and useful during the transitional period of the energy reform in which the Republic of Serbia currently finds itself. Although biofuels, such as biomethane, are still in their early stages of development in Serbia, it would be beneficial for them to be regulated by the new law in order to create the prerequisites for their further development in advance.

In general, alternative fuels infrastructure can be of a public or private nature, whereas the Regulation and the Directive do not address private alternative fuels infrastructure. Private infrastructure, in the case of electric charging, is not unfamiliar and is generally regulated under general legislation, while special attention by the legislator would need to be given to private infrastructure for other alternative fuels, if it is at all possible to establish such infrastructure under existing regulations. The Regulation defines publicly accessible alternative fuels infrastructure as infrastructure located at a site or area that is open to the general public, regardless of whether the infrastructure is on public or private land, whether restrictions or conditions apply regarding access to the site or area, and regardless of the applicable terms of use for the alternative fuels infrastructure.

It is appropriate for the future law to also address small electric vehicles, such as electric bicycles, mopeds, motorcycles, tricycles, and quadricycles, as their specific characteristics require a different regulatory approach compared to standard electric vehicles. Additionally, such legal provisions must be aligned with regulations governing road traffic safety to prevent conflicting interpretations of sectoral legislation. This would significantly open the way for the development of the electro mobility concept in the Republic of Serbia and promote small electric vehicles as an alternative means of participating in transport.

A charging point is defined in the Regulation as a fixed or mobile facility connected to the electricity system or isolated from it, used for charging the batteries of electric vehicles, which may

have one or more connectors to accommodate different connector types, while at any given moment only one electric vehicle battery can be charged. The Regulation recognizes charging points with a power output above 22 kW as high-power charging points, and those with a power output below 22 kW as low-power charging points, excluding devices with an output of 3.7 kW or less whose primary purpose is not electric vehicle charging. These provisions, along with other provisions that will be included in the future law regarding technical characteristics and other requirements for charging points, will provide clear guidance to AERS in establishing rules for the supply and billing of electricity for electric vehicle charging.

It is important to emphasize that the Directive contained clear guidelines for the introduction and development of alternative fuels infrastructure that each EU Member State should follow, which specifically include:

- (a) an assessment of the current status and future development of the alternative fuels market in transport and of alternative fuels infrastructure, taking into account an intermodal approach to alternative fuels infrastructure and, where relevant, cross-border continuity;
- (b) national individual and overall targets for the deployment of alternative fuels infrastructure across all modes of transport, ensuring compliance with minimum infrastructure requirements;
- (c) measures necessary to achieve the national, individual, and overall targets referred to in the previous point;
- (d) measures to promote the introduction of alternative fuels infrastructure in public transport services;
- (e) measures to promote and facilitate the deployment of charging points for light and heavy vehicles at privately owned locations that are not publicly accessible;
- (f) incentive measures to support additional use of alternative fuel vehicles;
- (g) measures to improve alternative fuels infrastructure in urban hubs, particularly regarding publicly accessible charging points for all types of vehicles, especially stations for charging small electric vehicles, taking into account underdeveloped municipalities;
- (h) measures to ensure a sufficient number of publicly accessible high-power charging points;
- (i) necessary measures to ensure that the deployment and operation of charging points, including the geographical distribution of bidirectional charging points, contribute to the flexibility of the energy system and the integration of renewable energy sources into the electricity system;
- (j) measures to ensure that publicly accessible charging points and alternative fuels supply points are accessible to elderly persons, persons with reduced mobility, and persons with disabilities;
- (k) measures to remove barriers related to planning, permitting, procurement, and management concerning alternative fuels infrastructure;

- (l) a review of the current status and measures for deploying alternative fuels infrastructure in ports, including international passenger terminals on inland waterways;
- (m) a review of the current status and measures for deploying alternative fuels infrastructure in rail transport; and
- (n) a review of the current status and measures for deploying alternative fuels infrastructure at airports.

Although the Directive is no longer in force for EU Member States, it would be highly beneficial for such provisions to be included in the future law of the Republic of Serbia. This would establish a clear obligation for the state to continuously and comprehensively assess issues relevant to the development of alternative fuels infrastructure and to identify optimal solutions.

The general rules for electric vehicles in the Regulation provide that on national roads forming part of the core indicative Trans-European Transport Network, as well as on parking areas, rest stops, fuel stations, and toll stations along these roads, publicly accessible electric vehicle charging stations for light vehicles must be installed by the road managers in each direction of travel, at a maximum distance of 60 km from each other. At each publicly accessible aggregated charging site for light vehicles, a total output power of at least 400 kW and at least one charging point with an individual output power of at least 150 kW must be provided by 31 December 2025, and a total output power of at least 600 kW with at least two charging points of at least 150 kW each must be provided by 31 December 2027. Special rules are established for heavy vehicles, as well as for roads with lower light vehicle traffic. It is important to note that in the Republic of Serbia, the necessary planning documents specifying locations for alternative fuels infrastructure have not yet been adopted, which is a prerequisite for applying these rules from the Regulation if they are incorporated into the future law.

The Regulation further establishes technical requirements for the installation of electric vehicle charging infrastructure, as well as rules for its use and payment, specifying obligations for operators of publicly accessible charging points. Prices charged by operators of publicly accessible charging points must be reasonable, easily and clearly comparable, transparent, and non-discriminatory. For publicly accessible charging points with an output of 50 kW or more, the ad hoc price charged by the operator is based on the price per kWh of electricity delivered. For publicly accessible charging points with an output below 50 kW, operators must clearly and simply display information about the ad hoc price, including all its pricing components, so that end users are aware of them before starting the charging session. The applicable pricing components should be presented in the following order:

- (a) price per kWh;
- (b) price per minute;
- (c) price per charging cycle; and
- (d) any other applicable price components.

Since the method of charging payment is only generally regulated by the Regulation, it is up to the legislator or another

act based on the law to make any further specifications if necessary.

Following the example of electricity, the Regulation sets out rules concerning the infrastructure for supplying road vehicles with hydrogen, although longer deadlines for the implementation of these rules are provided in the case of hydrogen. Thus, on national roads that are part of the core Trans-European Transport Network, the road manager is obliged to ensure the installation of publicly accessible hydrogen refuelling stations at intervals of no more than 200 km, with a total capacity of at least one ton per day and equipped with a pump operating at 700 bar, by 31 December 2030. Furthermore, in each urban node, it is necessary to ensure the introduction of at least one publicly accessible hydrogen refuelling station within the same timeframe. Special rules are also prescribed for establishing hydrogen infrastructure in areas with reduced traffic intensity.

The Regulation further establishes rules for infrastructure for liquefied natural gas for road vehicles, rules for supplying electricity from shore in ports or international passenger terminals on inland waterways, and rules for supplying electricity to stationary aircraft, as well as rules concerning railway infrastructure. For the purposes of monitoring the development of alternative fuel infrastructure and informing users, the establishment of a register of alternative fuel infrastructure is foreseen. A system of rules for informing users of alternative fuel vehicles has also been developed; among other things, it is prescribed that operators of publicly accessible charging points and alternative fuel supply stations, or providers of mobility services, are obliged to provide users free of charge with available static and dynamic data on the alternative fuel infrastructure they manage or on services associated with that infrastructure.

The law to be enacted based on the Regulation should establish a systematically organized framework for the development of alternative fuel infrastructure in the Republic of Serbia. Since the law is still in the drafting stage, this paper presents only a conceptual overview of what the Regulation and the Directive envisage, while an analysis of specific legal provisions will follow only after the law is adopted. In drafting the law, careful attention must be paid to ensuring consistency with the LPC and the Energy Law, as any discrepancies between them could lead to delays in implementation and, consequently, slower establishment of infrastructure solutions. Additionally, the Regulation provides detailed rules for infrastructure related to electricity, hydrogen, and liquefied natural gas, while other alternative fuels mentioned in the Regulation are not sufficiently elaborated and should also receive due attention in the drafting of the law and corresponding subordinate legislation.

IV ALIGNMENT OF THE LAW ON THE INTRODUCTION OF ALTERNATIVE FUEL INFRASTRUCTURE WITH OTHER REGULATIONS

The very mandate of the ministry responsible for transport to enact regulations related to alternative fuels indicates that sectoral regulations in this area will be incorporated within transport legislation. This is clearly reflected in the text of the Integrated National Energy and Climate Plan of the Republic of Serbia for the period up to 2030, with a vision to 2050

(hereinafter: INECP), which states that the main instrument for promoting energy efficiency in the transport sector will be the provision of tax incentives for the purchase of energy-efficient vehicles in both passenger and freight transport, as well as the expansion of public transport infrastructure and infrastructure for the types of alternative fuels being promoted [9]. The INECP anticipates that by 2030 approximately 44,800 electric vehicles (passenger and light commercial vehicles) will be registered, while the contribution of biofuels will remain dominant, with a particular increase in the share of advanced biofuels by 2030.

The INECP clearly states that a special emphasis in the transport sector will be placed on promoting electro mobility, meaning that the necessary legal framework will be adopted and the design and installation of the required electric vehicle charging infrastructure will be ensured. Furthermore, it is stipulated that the promotion of alternative fuels will be supported by the development of the necessary infrastructure for all incentivized types of alternative fuels, with a maximum level of alignment with policy measures integrated into the renewable energy dimension. Additionally, for the field of electro mobility, the INECP foresees the preparation of a dedicated action plan for the electrification of passenger and freight transport, roads, and infrastructure, with an emphasis on the development of the legal framework and the use of various financial instruments. This clearly indicates that the adoption of the Law on the Establishment of Infrastructure for Alternative Fuels can be expected in the coming years.

Furthermore, the INECP foresees the introduction of specific tax incentives to stimulate the purchase of energy-efficient vehicles, including vehicles that use alternative fuels, as well as subsidies and special excise duties. From this, it follows that regulations concerning public finances will need to undergo the necessary amendments in parallel with the adoption of regulations related to infrastructure for alternative fuels. Considering that general subordinate acts in this area already exist, particularly regarding subsidies for the purchase of electric and hybrid vehicles, it is necessary for the legislator to continue the good practice established in this field [10].

Additionally, innovative initiatives related to electric vehicles and their charging strategies will be supported, with an emphasis on electricity consumption from renewable energy sources, as well as hydrogen produced from renewable energy sources. Corresponding initiatives will also be launched for the development of innovative technologies for biofuels as renewable fuels for sustainable transport (road and aviation fuels).¹ From the above, it is evident that in the coming decades,

electricity will face strong competition in its share of alternative fuels on the market, which will inevitably also impact the diversification in the development of the necessary charging infrastructure.

The adoption of the Law on the Establishment of Infrastructure for Alternative Fuels will lay the foundations in this area of law. However, without simultaneous amendments and the adoption of related regulations, these provisions will not be sufficiently effective or applicable. Therefore, the first step following the adoption of INECP is the development and mutual alignment of strategies in the energy sector, with particular attention to energy efficiency and renewable energy sources, transport sector strategies, strategies related to the adoption of planning documents and building regulations, and strategies in the field of public finance, as the fundamental strategic documents that will ensure the development of electro mobility and, consequently, the development of infrastructure for alternative fuels. In addition, it is crucial to ensure alignment with public procurement regulations, environmental protection regulations, and industrial safety regulations [11]. Special attention must be paid to the adoption and implementation of technological standards in this field, without which the proper application of the adopted regulations will not be possible.

V CONCLUSION

How many times have we found ourselves, at the last moment during a journey, realizing that we do not have enough fuel to reach our intended destination and urgently need to find a fuelling station? With the development of electric vehicle chargers that citizens can privately own and use to charge at home, such situations will be reduced. However, for other alternative fuels, it is unlikely that technological advancements will soon allow for home-based refuelling. Therefore, public alternative fuel stations are of great importance, and it is not surprising that this challenge is being strategically addressed on a global level.

When it comes to electric and hybrid vehicles, the role of the electricity distribution system operator will be significant in the process of connecting vehicle charging stations to the electricity distribution network. Therefore, the regulations governing this process must be adopted—or amended—and harmonized as soon as possible. It is particularly important for the distribution system operator to be informed about the plans for the development of alternative fuel infrastructure, especially regarding the planned increases in charging station capacities, as this will enable them to adequately and strategically prepare for the upcoming connection procedures.

By introducing the provisions of the Regulation into Serbian legislation, the legislator will contribute to the development of alternative fuel infrastructure. However, all the specificities of the domestic legal system should be taken into account, and the legal solution should be adapted to actual needs and circumstances. This particularly applies to planning documents, which must be aligned with the future regulation as soon as

¹ The initiatives to be launched include: (a) the development of advanced liquid and gaseous biofuels through biochemical processes or from indigenous microorganisms and primary energy from renewable energy sources; (b) the demonstration of advanced liquid and gaseous biofuels through biochemical/thermochemical/chemical conversion from sustainable biomass and/or indigenous microorganisms and primary energy from renewable energy sources; (c) the development of other liquid and gaseous fuels (excluding hydrogen) through thermochemical/chemical/biochemical/electrochemical conversion of neutral energy carriers with renewable energy sources; (d) the demonstration of other liquid and gaseous fuels (excluding hydrogen) through thermochemical/chemical/biochemical/electrochemical conversion of neutral energy carriers with renewable energy sources; and (e) the production of

renewable hydrogen via water electrolysis using electricity from renewable energy sources.

possible to ensure that infrastructure can be constructed smoothly in accordance with legal requirements. Strategic planning of resources for law implementation must not be overlooked, such as ensuring a sufficient number of trained professionals in the relevant fields. Likewise, attention should be paid to the needs and capacities of the transport, traffic, and electricity systems in each specific case to ensure that the law is implemented in an optimal manner according to available resources.

The future Law on the Establishment of Alternative Fuel Infrastructure will most likely set only the minimum requirements that operators of alternative fuel stations must meet, which will certainly not prevent operators from continuously improving the operation of charging stations and finding more efficient and innovative solutions. Only through the joint efforts of all participants and users in the implementation process will the regulations be effectively enforced, ultimately accelerating the energy transition and shortening the path toward climate neutrality, to which the Republic of Serbia has committed through international agreements and local legislation.

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AUTOR

Miloš Kuzman – Serbian Energy Law Association, Belgrade, milos.kuzman@upes.rs, ORCID [0000-0002-9769-9713](https://orcid.org/0000-0002-9769-9713)

Ubrzanje energetske reforme uvođenjem infrastrukture za alternativna goriva

Rezime - Sve vidljivije posledice klimatskih promena su znak da se intenzivno mora raditi na smanjenju negativnih efekata koje utiču na ubrzano zagrevanje naše planete. Energetske reforme idu u pravcu sve veće prisutnosti obnovljivih izvora energije u energetsom miksu, u kome važno mesto, uz određene preduslove, zauzimaju vozila na obnovljiv i energetski efikasan pogon. Preduslov za značajnije prisustvo vozila na obnovljiv pogon u saobraćaju predstavlja, između ostalog, i garancija sigurnosti snabdevanja alternativnim gorivima. Kako bi alternativna goriva bila dostupna svim korisnicima, potrebno je omogućiti adekvatnu infrastrukturu koja će biti prisutna u potrebnoj meri na celokupnom geografskom području države. U ovom radu biće reči o mogućnostima, preduslovima i obavezama uvođenja infrastrukture za alternativna goriva u Republici Srbiji. Posebna pažnja u radu će biti posvećena električnoj energiji i vodoniku kao gorivima za koje je potrebno u najskorije vreme obezbediti adekvatnu infrastrukturu. Na kraju će biti predloženi zaključci i preporuke u susret donošenju propisa koji se odnose na uvođenje infrastrukture za alternativna goriva.

Ključne reči - alternativna goriva, električna vozila, vodonik, energetska tranzicija