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Transportation law in the use of electric bicycles and motorcycles

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Abstract

This article has the purpose of providing an analysis of the arrangements related to the use of electric vehicles in Indonesia and to understand the requirements that must be met for parties who drive electric vehicles so that they have legality when driving electric vehicles. The method used in this study uses a legal study with a normative juridical type, with a statutory approach in order to discuss legal issues in this journal. This study found that arrangements related to electric vehicles in Indonesia have actually been regulated since 2019 through a Presidential Regulation. However, in the absence of specific arrangements related to the limitative understanding of these electric bicycles and motorbikes, clarity regarding whether their status can be aligned with conventional motorbikes (using electricity) causes people to freely use them on the highway, including being used by children. Related to the legalization of the use of electric bicycles or motorcycles on the highway, the party using the electric motor should have a type C driving license. However, there is no limitative definition of electric vehicles, especially electric bicycles and motorcycles, and no socialization that the status of electric vehicles is the same as conventional vehicles. So ordinary people certainly will not know that there are requirements that must be met. Especially in the rules described above that children aged 12 and 15 are allowed to use electric vehicles under parental supervision. Meanwhile, the age requirement in making a type C driver's license is 17 years. This of course creates new problems, namely norm conflicts.

Keywords: Transportation law, electric vehicles, driver's license

Introduction

Air pollution is increasing day by day, leading to a decline in air quality in terms of human life. One of the causes of poor air quality is emissions from vehicles using environmentally friendly motors, for example diesel or fossil fuel vehicles. In addition to the use of fossil fuels causing air pollution due to the combustion process of motor vehicles, it is also reduced because it is continuously sought after for daily living needs and the price of fossil fuels continues to rise every year, based on the year of inflation in the country (Andriani & Yuliasuti, 2013) ^[2].

In line with the rapid times and technology that continues to develop dynamically, many man-made innovations have sprung up as a support to facilitate people's daily activities. One of these innovations is developing in the field of transportation, because many types of vehicles have emerged that use electric power to drive them (Indriyani *et al.*, 2021) ^[6].

The solution in reducing air pollution caused by the use of fuel oil, it is the reason why ecological vehicles are often found that do not use fuel oil, but use electric batteries to replace fuel. Electric motors have more advantages than conventional motors because they do not use fuel oil (Subekti *et al.*, 2023) ^[13].

Several types of electric vehicles are innovations that continue to develop, besides that the Indonesian government has supported electric vehicles by establishing an electric car battery factory which began to be formed in early 2021. This increases people's desire to use environmentally friendly electric vehicles than before (Ramadhina & Najicha, 2022) ^[11].

Seeing the benefits of using electric motorbikes, many are now interested in using electric motorbikes as a means of transportation that helps in facilitating daily activities (Indriyani *et al.*, 2021) ^[6]. Problems arise because the use of electric motors is different from traditional motorcycles that use fuel oil that has been tested and generally accepted at the level of safety of vehicle operation. Until now, there are no specific rules related to the legality of the use of vehicles, especially electric bicycles and motorbikes in Indonesia in "Law Number 22 of 2009 concerning Road Traffic and Transportation.

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This uncertainty causes it to be not uncommon for electric bicycles to be used by children. This norm vacuum causes multiple interpretations for the wider community, because it equates electric bicycles with ordinary bicycles, so children easily use these electric bicycles on the road. In addition, there is no explanation regarding the difference between electric motors and electric bicycles, as well as the legality of use and requirements for use on the highway. This norm void certainly results in legal uncertainty regarding the legality of using electric bicycles and motorcycles on the highway.

This paper is original; which has the hope that it can contribute and play a role related to the process of improving or the process of developing science. Some previous studies that have conducted studies on electric vehicles include the first, found in the Journal of Legal Fatwa has the title "Implementation of the Use of Electric Bicycles in Pontianak City in the Perspective of Transportation Law" (Nim, 2023) ^[8]. Second, found in the Journal of Master of Law Science entitled "The Existence of Migo Transportation, A Legal Sociology Approach" (Jatmiko *et al.*, 2023) ^[7]. The third is Simbur Cahaya entitled "Analysis of Electric Scooters as Vehicles in Indonesia: A Normative Legal Review" (Nugraha *et al.*, 2021) ^[9].

This paper aims to provide an analysis of the regulations related to the use of electric vehicles in Indonesia and to understand the requirements for using electric bicycles or motorbikes on the highway from the perspective of transportation law.

Research Methods

This study is a juridical-normative type. This type of research is used in the study of secondary materials (Efendi & Ibrahim, 2018) ^[5]. This article talks about the urgency of regulating the use of electric bicycles and motorcycles on the road. In the nature of normative fiqh, writing is also said to be a procedure that from a normative point of view starts from the logic of fiqh to obtain the truth related to it, after which it can explain the regulation of the expansion of meaning (Tan, 2021) ^[14]. The use of electric bicycles and motorcycles on highways is quickly regulated. This paper is carried out with a statute approach (statutory approach) in the process of studying the problems of this paper. This paper uses legal sources in the form of primary, secondary, and tertiary legal materials. This article is descriptive-analytical in nature, namely providing an overview of the problems faced and analyzing the legal products involved to provide answers to the problems presented in this article.

Results and Discussion

Regulations Related to the Use of Electric Vehicles in Indonesia

Nowadays, vehicles have become indistinguishable from humans. It can also be called if the vehicle is one of the means in supporting human life. As a means of going somewhere, doing work, fulfilling daily needs must require a means of transportation (Ali *et al.*, 2019) ^[1]. In such a situation and in view of several environmental factors, the government does not remain silent. The government and various related agencies have implemented several measures to reduce emissions and air pollution due to the presence of motorized vehicles (Romadhon & Subekti, 2023) ^[12]. One of them is by developing environmentally friendly electric vehicles made by local children (Rahman, 2013) ^[10].

The development of electric vehicles specifically in electric

cars was first introduced during the reign of "President Susilo Bambang Yudhoyono", precisely in 2012 led by the then Minister of State-Owned Enterprises, "Dahlan Iskan". A young Indonesian named Ricky Elson, was assigned to develop and produce electric cars made in the country. Ricky Elson's efforts were not in vain, he made an electric car named "Selo" which was successfully presented at the "APEC Summit in Bali in 2013", in addition to "Selo", Ricky also successfully designed the "Tuxuc" car. Unfortunately, on the other hand, the development of the car experienced obstacles and was stopped because it failed the emission test and was considered to cause losses to the state. In President Jokowi's era, the process of developing electric vehicles has begun again. In addition to reducing air pollution, it also aims to develop and enable Indonesian youth to participate in the production and production of electric vehicles (Rahman, 2013) ^[10].

The government provided support for the implementation of electric vehicles in Indonesia by drafting "Presidential Regulation (Perpres) Number 55 of 2019 concerning the Acceleration of the Battery-Based Electric Motor Vehicle Program" on "12 August 2019" as a basis for using and producing electric vehicles. The Ministry of Transportation has actually also made "Minister of Transportation Regulation Number 45 of 2020 concerning Certain Vehicles Using Electric Motor Drives". This regulation was made in response to the absence of regulations regarding the use of certain electric cars, so that the regulation can be used as a foundation in both the central and regional government.

In addition, related to electric vehicles, it is actually also regulated in "Article 6 of Government Regulation Number 55 of 2012 concerning Vehicles" which explains that every vehicle used on the road must fulfill the technical requirements containing the composition. "Article 7 of Government Regulation Number 55 of 2012 concerning Vehicles letter b" further clarifies that what is meant by the arrangement in Article 6 paragraph (2) letter a, one of which is the driving motor. Then it is clarified in "Article 12 paragraph (1) of Government Regulation Number 55 of 2012 concerning Vehicles" if the driving motor as stated in Article 7 letter b "Government Regulation Number 55 of 2012 concerning Vehicles" includes: "a. combustion motor; b. electric motor; c. combination of combustion motor and electric motor".

The Ministry of Energy and Mineral Resources also issued "Regulation of the Minister of Energy and Mineral Resources (ESDM) Number 13 of 2020 concerning the Provision of Electric Charging Infrastructure for Battery-Based Motor Vehicles". The regulation was stipulated on "August 4, 2020" by the Minister of Energy and Mineral Resources, and promulgated on "August 7, 2020". One of the most important issues with electric cars is electric charging and adequate infrastructure to charge electric cars. This is explained in Ministerial Regulation No. 13/20.

Other than that, President Jokowi also issued a regulation on tax payments for electric vehicles. In "Government Regulation (PP) 74/2021 concerning Amendments to Government Regulation No. 73/2019 concerning Taxable Goods Classified as Luxury in the Form of Motor Vehicles, if electric vehicles will be subject to different taxes and imposed based on the technology and batteries used. This regulation was emphasized and promulgated on "July 2, 2021" and effectively took effect on "October 16, 2021".

However, in the absence of specific regulations related to the

limitative definition of these electric bicycles and motorcycles, clarity regarding whether their status can be aligned with conventional motorcycles (using electricity) causes people to freely use them on the road, including being used by children.

Requirements for Using an Electric Bike or Motorcycle on the Road

The use of electric vehicles in this country is already known to be on the rise (Aziz *et al.*, 2020) ^[3]. In addition, there is a Presidential Regulation regarding the "acceleration of the battery-based electric motor vehicle program" for road transportation. For this reason, with the increasing number of electric vehicles, a new question arises whether electric bicycles and electric motorcycles require a motor vehicle registration certificate (STNK), for example, other means of transportation that use fuel to be used on the road such as cars; motorbikes; and buses (Beritno, 2022) ^[4].

Every vehicle owner who drives on the highway is required to have a Vehicle Certificate as one of his vehicle documents. Until now, only the Vehicle Registration Certificate or STNK is known for gasoline-fueled motor vehicles, so people who use electric motorcycles do not know whether electric motorcycles require a Vehicle Registration Certificate or STNK or not. Referring to "Article 64 paragraph (1) of Law Number 22 of 2009 concerning Road Traffic and Transportation", which in the article explains that "All vehicles moving on the road must be registered by the owner". So electric motorcycles also need a Vehicle Registration Certificate (STNK) to be able to drive on the road. Electric motorcycles require a Vehicle Registration Certificate (Surat Tanda Nomor Kendaraan or STNK) as confirmed in "Government Regulation Number 55 of 2012 concerning Vehicles".

Meanwhile, in "Regulation of the Minister of Transportation Number 45 of 2020 concerning Certain Vehicles with Electric Motor Drives", the conditions for using electric motors are regulated as stated in "Article 4 of the Regulation of the Minister of Transportation Number 45 of 2020 concerning Certain Vehicles" with Electric Motor Drives, which reads as follows:

1. "Every person who uses a certain vehicle (electric motor) as referred to in Article 2 paragraph (1) of the Minister of Transportation Regulation Number 45 of 2020 concerning Certain Vehicles with Electric Motor Drives must comply with the provisions:
 - Wearing a helmet.
 - The age of the user is at least 12 (twelve) years old.
 - Not allowed to carry passengers except those equipped with passenger seats.
 - Not allowed to make modifications to motor power that can increase speed.
 - Understand and comply with traffic procedures including.
 - Using certain vehicles in an orderly manner by paying attention to the safety of other road users.
 - Giving priority to pedestrians.
 - Maintaining a safe distance from other road users.
 - Driving a particular vehicle with full concentration".

In the case of certain vehicle users aged 12 (twelve) years up to 15 (fifteen) years, certain vehicle users must be accompanied by an adult". In "Article 3 of the Minister of Transportation Regulation Number 45 of 2020 concerning Certain Vehicles with Electric Motor Drives" further regulates

that electric motors must meet safety requirements, including: "a) headlight; b) taillight or reflector; c) left and right reflectors; d) braking system functioning properly; e) horn or bell; and f) maximum speed is 25 km/h (twenty-five kilometers per hour)".

Based on the above, it can be concluded that the legality of using electricity on the road is almost the same as conventional vehicles that use fuel oil to drive or drive the engine, while electric motors do not use fuel oil, but electricity to the battery, which is then used to drive or operate the electric motor. To legalize the use of electricity on the road, electric motorcycle riders must at least have a driver's license or SIM C, in accordance with "Article 288 paragraph (2) of Law Number 22 of 2009 concerning Road Traffic and Transportation", besides that electric motorcycle users must also have a motor vehicle registration certificate in accordance with the contents of "Article 64 paragraph (1) of Law Number 22 of 2009 concerning Road Traffic and Transportation", which in "Article 64 paragraph (1) of Law Number 22 of 2009 concerning Road Traffic and Transportation" explains that all vehicles moving on the road must be registered by the owner. In addition, electric motorcycle users who do not have a SIM or SIM-C are prohibited from driving on the road.

However, by not regulating the limitative definition of electric vehicles, especially electric bicycles and motorbikes, and the absence of socialization that the status of electric vehicles is the same as conventional vehicles. Then ordinary people certainly will not know that there are requirements that must be met. Especially in the rules described above that children aged 12 and 15 are allowed to use electric vehicles under parental supervision. Meanwhile, the age requirement in making a type C driver's license is 17 years. This of course creates new problems, namely norm conflicts.

The principle of legality is one of the main principles of organizing a legal state such as Indonesia, and it is based on Article 1 (3) of the 1945 Constitution which states "Indonesia is a state of law". The principle of legality means that the law is the basis of all actions that the government wants. This is in accordance with H.D. Van Wijk's opinion that a government governed by law is a government given power by law or constitution. The absence of a foundation of authority granted by law as a positive right causes all actions of public officials to have no power that leads to law. For this reason, special rules are needed in the form of laws related to the use of electric vehicles on the highway, especially on electric bicycles and electric motorbikes. This is intended so as not to cause a vacuum of norms and conflicts of norms, so as to provide legal certainty regarding the legality of using electric vehicles on the highway.

Conclusion

Regulations related to electric vehicles in Indonesia have actually been regulated since 2019 through a Presidential Regulation. However, in the absence of specific arrangements related to the limitative definition of these electric bicycles and motorcycles, clarity regarding whether their status can be aligned with conventional motorcycles (using electricity) causes people to freely use them on the highway, including being used by children. For the legality of using electricity on the highway, electric motorcycle users must at least have a driver's license or type C driver's license. However, by not regulating the limitative definition of electric vehicles, especially electric bicycles and motorcycles, and the absence

of socialization that the status of electric vehicles is the same as conventional vehicles. Then ordinary people certainly will not know that there are requirements that must be fulfilled. Especially in the rules described above that children aged 12 and 15 are allowed to use electric vehicles under parental supervision. Meanwhile, the age requirement in making a type C driver's license is 17 years. This of course creates new problems, namely norm conflicts.

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