Ministry of Infrastructure
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Contact
Persoonsgegevens

Date 05 September 2023
Subject Ban on combustion engine mopeds

Dear Persoonsgegevens,

With over 70% of the European Union's population residing in cities and urbanisation steadily increasing, European mobility and transport systems are increasingly facing traffic-related challenges such as **congestion, CO_2-emissions and hazardous air quality**.[1] These issues are highlighted throughout various EU communications and policies.[2] For example, **standards on CO_2** are explicitly mentioned as '**key policy-drivers'** in the transition towards zero emission mobility in road transport. Also the EU's 2020 Sustainable and Smart Mobility Strategy highlighted the importance of the uptake of zero emission vehicles.[3] The transition towards zero emission of several modalities such as cars, vans and trucks is already on the agenda, and regulation on curbing CO_2-emissions of these modalities have been published already (or even adopted).[4] It is clear that serious effort is being undertaken by the European Union in promoting zero-emission mobility, paving the way for a greener and more sustainable future. Yet, a promising modality has been underrepresented here – **electric mopeds**.

At this moment, sales of electric mopeds have steadily increased in the Netherlands. In 2017, only 3% of the total new moped sales were electric, whereas in 2022, this figure reached 46%.[5] EU-wide there is also a significant growth, with electric mopeds making up 17% of the total sales in 2021, growing to 34% in 2022.[6]

The fast uptake of the zero emission variant of mopeds shows great potential for future market developments. However, without clear rules concerning the final phase of the transition, these figures might stagnate in the coming years, making it difficult to achieve a climate-neutral fleet of mopeds by 2050. Although the euro-legislation on two- or three-wheel vehicles had a tremendous impact on cutting back on (CO_2-) emissions of fossil mopeds over the years, it is not enough to enable market parties to make the final leap transitioning to 100 percent zero emission.[7]

[1] Mobility strategy and action plan | European Commission
[2] For instance the *Sustainable and Smart Mobility Strategy*, the *European Green Deal*, the *Zero Pollution Action Plan*, and the *New EU Urban Mobility Framework.*
[3] Sustainable and smart mobility strategy | European Parliament
[4] CO_2 emission performance standards for cars and vans | European Commission
[5] Half of new scooters emission-free | BOVAG (Dutch)
[6] Sales of electric motorcycles and scooters in Europe in 2022 |epaddock.it
[7] Research implies that there will remain a consumer demand for combustion engine mopeds. Therefore there will always

The current framework regulation on approval and market surveillance of two- or three-wheel vehicles and quadricycles does not suffice in achieving zero emissions, as this does not mention explicit emission limit values for CO_2.[8] Another, and perhaps even more urgent problem then CO_2-emissions, is the contribution of fossil fuel mopeds to emissions of carbon monoxide (CO) and hydrocarbon (HC) emissions, as well as high levels of exhaust particles. These emissions of mopeds are still relatively high as compared to other (larger) vehicles, and negatively impact both public health and the living environment.[9] Fossil fuel mopeds especially pose a risk to users of active mobility who are exposed to peak concentrations, such as cyclists and pedestrians. Cyclists and pedestrians inhale a higher dose of air pollution due to their increased minute ventilation.[10]

As a result of these abovementioned problems, the Dutch Government has together with market parties committed itself to two agreements: (1) making sure that 100% of the new sales of mopeds with a maximum speed of 25 km/h are zero emission in 2025 (in Dutch this particular category is rather popular and referred to as 'Snorfietsen') and (2) striving for 100% of all new moped sales being zero emission in 2030.[11] In order to be able to attain these targets and to keep on track of climate neutrality in the mobility sector, the Dutch government is looking into the possibility of a legislative **ban on the sale of combustion engine mopeds in the coming years.** Hereby taking in account sufficient time for the market to anticipate on this policy change and providing sufficient help to low-income consumers to buy a zero emission alternative. Before the Dutch government announces this policy option to the House of Representatives in October, **we would like to ask for the support of DG Grow on our national ambitions**. We hope to receive your written feedback on the policy option we draw in this letter.

The Dutch government is aware that the Regulation (EU) No. 168/2013 has provided little room for member states to impose national prohibitive rules. However, Chapter 12 of Regulation (EU) No. 168/2013 (Article 46) at the same time does offer an exception that allows denial of market access to vehicles if there is a *"serious risk to the health or safety of persons or to other aspects of the protection of public interests covered by this Regulation"*. It is due to both the risks to public health, and the protection of public interests by taking mitigation measures against climate change, that the Dutch government is considering a ban on the sale of new mopeds with a combustion engine. The annex further elaborates on the anticipated legal basis of this intended policy measure. In the annex it is further argued why alternative policy options lack this clarity and are therefore less effective.

This letter calls upon the Directorate General GROW to recognize the importance of the electric moped as a key component in the transition towards an integral zero emissions mobility system and an improved air quality. A clean alternative of the moped, together with active mobility and other small electric vehicles, can also play an essential role in the accessibility of our congested urban environment throughout the entire EU. By embracing electric alternatives with a clear zero CO_2 standard, **the Netherlands can lead the way towards cleaner, more sustainable urban**

remain a market for combustion engine mopeds, without government intervention.
[8] Regulation (EU) No. 168/2013 (consolidated version) | European Union
[9] Mopeds in the urban environment | TNO (Dutch)
[10] The contribution of moped emissions to ultrafine and fine particle concentrations on bikelanes | Zuurbier *et al.*, 2019
[11] Dutch Climate Agreement | Klimaatakkoord (Dutch)

mobility, igniting the path to achieve the EU's ambitious zero emission goals and a healthier living environment.
We hope that this letter has shown that the need for a transition towards zero emission mopeds is evident, easily attainable, and urgent. We are looking forward to the reaction of the directorate general regarding this letter.

Yours sincerely,

DIRECTOR GENERAL OF GENERAL DIRECTORATE MOBILITY

Persoonsgegevens

Bestuurskern
Prog.dir. Duurzame Mobiliteit
DuMo 2

Date
5 September 2023

Annex

With the aim of protecting public health and to mitigate measures against climate change the following two approaches for a legislative ban on the sale of combustion engine mopeds are to be followed.

Public health

The Framework Regulation (No. 168/2013) is based on the internal market clause (Article 114 TFEU). However, Article 114 TFEU also simultaneously allows, in paragraphs 4 to 6, the possibility to deviate from the harmonized arrangement under certain conditions. Since the last amendment of Regulation (EU) No. 168/2013, an important study has been published concerning the contribution of moped emissions to ultrafine and fine particle concentrations on bike lanes (Zuurbier *et al.*, 2019; footnote 10 in letter). The aim of this research was to quantify the contribution of both two-stroke and four-stroke moped emissions to air pollution concentrations on bike lanes. The researchers recommend a switch from combustion engine mopeds to electric powered mopeds as the policy option having the largest effect of lowering the contribution of moped emissions to air pollution on bike lanes. Although it is to be expected that the today's fleet emissions are decreased since the data collection of the research in 2016, still cyclists' exposure to air pollution can be greatly impacted by the remaining moped emissions. Due to their engagement with physical activity cyclists have increased minute ventilation, resulting in a relatively high inhalation of polluted air. The Dutch government expects that a ban on combustion engine moped can have an important role in the long-term protection of the health of its many cyclists throughout the country.

Public interest: mitigation measures against climate change

As stated before, the Framework Regulation is based on the internal market clause (Article 114 TFEU). In accordance with the Framework Regulation (Article 6), Member States cannot prohibit, restrict or impede the placing on the market, registration of or entry into service of vehicles, systems, components or separate technical units on grounds related to aspects of their construction and functioning covered by this Regulation. The Dutch government observes that while the Framework Regulation does set emission limit values for CO, NO_x, and hydrocarbons, it does not include CO_2. Instead, there are only rules regarding the obligation to measure and report emissions (also see implementing regulations 134/2014 and 2016/1824). From this, the Dutch government infers that the Framework Regulation does not exhaustively harmonize CO_2 emission standards, leaving room for member states to establish their own rules regarding emission limit values for CO_2. The Dutch government intends to capitalize on this flexibility and proposes setting the CO_2 'zero emission' standard - thus effectively implementing a ban on the sale of vehicles with internal combustion engines - as previously described under the section 'public health.'

The Dutch government considers a ban on the sale of mopeds with internal combustion engines as the only reasonable possibility to achieve an emission-free fleet of mopeds by 2050, without incurring disproportionate costs for large-scale subsidies for demolition of fossil mopeds or other buy-back schemes. Generally, mopeds have a lifespan of around ten years, according to industry organizations. However, there is a significant group of consumers whose vehicles depreciate less rapidly. Recent research conducted on behalf of the Dutch government, which has not yet been published, indicates that one-quarter of moped consumers own

vehicles that are over ten years old. Approximately 1 in 10 even possess mopeds that are 15 years or older. To ultimately achieve a nearly emission-free fleet by 2050, a ban on new sales must be initiated in a timely manner.

Policy alternatives
With the ban on combustion engine mopeds, we want to make zero emission mopeds the norm. Other alternative policy options lack this clarity and are therefore less effective. The Dutch government is well aware that Member States have the possibility already to restrict access of vehicles with combustion engines to urban centers based on EU emission legislation criteria (e.g., the Directive on National Emission Ceilings or the Ambient Air Quality Directives). Although those type of policies are also an important contributor to zero emission mobility *within* and near the restricted access areas, they are not sufficient to tackle the health problems on the busy Dutch (bike) lanes *outside* those zones. It is not only the urban areas in which we strive for a climate neutral fleet, but also in the suburban and rural areas we need to provide a clear signal.
To minimize interference with the free movement of goods, proportionate to the protected objective, the Dutch government intends to engage in discussions with Dutch industry organizations about a reasonable timeframe for the ban on new sales, allowing the market sufficient time to anticipate on this intervention.

Belang van de staat [redacted]

EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR INTERNAL MARKET, INDUSTRY, ENTREPRENEURSHIP AND SMES

The Director-General

Brussels
GROW.I.2/MN

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The Netherlands

Cc: Persoonsgegevens
Ambassador
Permanent Representation of the Netherlands to the EU

Dear Persoonsgegevens

Thank you for your letter dated 5 September 2023, in which you share the Dutch Government's reflections on a possible ban on the sales of combustion engine mopeds to promote zero-emission mobility and protect public health.

As you know, since 1 January 2021, all motorcycles and mopeds sold in the European Union (EU) must meet the Euro 5 environmental standard. Some niche segments (i.e. enduro and trial motorcycles, three-wheeled mopeds designed for utility purposes and light quadricycles) have been granted additional lead time and will have to comply with the Euro 5 environmental standard as of 1 January 2024. This brings the pollutant emissions of L-category vehicles (i.e. mopeds, motorcycles, tricycles and quadricycles) to the same level as Euro 6 cars.

Moreover, durability provisions and evaporative emission levels are equally becoming more stringent. The motorcycle industry has invested heavily in research and product development to develop Euro 5 compliant motorcycles equipped with technologies such as 3-way catalysts with oxygen sensor controls, complex electronic engine management systems, advanced fuel injection and variable valve timing and lift technologies. Another important innovation is the progressive introduction of a second stage on-board diagnostic (OBD), allowing advanced identification and flagging of malfunction and deterioration of emission control systems. At the same time, a lot of progress has been made on industry side to bring to market motorcycles with electric population systems.

Furthermore, a comprehensive policy is needed to stimulate demand for zero emission vehicles, without barriers across our single market, while fully respecting the Union's

international obligations. As confirmed in your letter, the sales of electric mopeds are steadily increasing in the last years. In 2022, electric mopeds represented 46% of the total new mopeds sales in the Netherlands and 34% of the total sales in the EU. Challenges, however, still lie ahead for consumers to access and use electrically chargeable powered two-wheelers in a satisfactory manner, especially when it comes to affordability, safety and charging infrastructure.

Regarding the policy intention to ban the sales of combustion engine mopeds in the Netherlands to facilitate the transition to zero emission mobility, I would like to remind that such national measure(s) would need to be notified under the procedure set out by the Single Market Transparency Directive 2015/1535 ([1]). This will allow the Commission, as well as other Member States, to issue reactions (comments or detailed opinions) in the context of a more transparent review process. In the absence of a notified measure from the Dutch authorities, the Commission services are not in the position to fully assess the implications of the intended policy option on the internal market.

According to Article 6(3) of Regulation (EU) 168/2013 on approval and market surveillance of two- or three-wheel vehicles and quadricycles ([2]), Member States have the obligation not to prohibit, restrict or impede the placing on the market, registration or entry into service of vehicles, on grounds related to aspects of their construction and functioning covered by this Regulation, if they satisfy its requirements, except in the cases provided for in Chapter XII (vehicles, systems, components and separate technical units suspected of presenting a serious risk or non-compliance). Consequently, mopeds complying with the Regulation (and its implementing and delegated acts) are lawfully placed on the market and should in principle freely circulate within the Union.

We have also noted that the intended measure is of a general nature and not limited in time or to certain region(s) where issues with air pollution are present. Therefore, further analysis would be needed to establish whether the same climate and air quality objectives as that pursued by the intended measure could not be effectively and sufficiently achieved by means other than a complete ban on the sales of mopeds with combustion engines in the coming years.

We remain open to continue the dialogue with the Dutch authorities, as well as with the other Member States in the dedicated fora on the ways to support the transition towards attaining the Union’s increased climate neutrality goals in the mobility ecosystem.

Yours sincerely,

Persoonsgegevens

([1]) Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services, OJ L 241, 17.9.2015, p. 1.

([2]) Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles, OJ L 60, 2.3.2013, p. 52.

c.c.: Persoonsgegevens [redacted]

Electronically signed on 24/11/2023 18:29 (UTC+01) in accordance with Article 11 of Commission Decision (EU) 2021/2121