EUROPEAN
COMMISSION

Strasbourg, 16.12.2025
SWD(2025) 1060 final

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT REPORT

Accompanying the document

Proposal for a Regulation of the European Parliament and of the Council

on Clean Corporate Vehicles

{COM(2025) 994 final} - {SEC(2025) 994 final} - {SWD(2025) 1061 final}

Table of contents

Glossary

Term or acronym	Meaning or definition
ACEA	European Automobile Manufacturers' Association
AFIR	Alternative Fuels Infrastructure Regulation
BEV	Battery electric vehicle
CfE	Call for Evidence
CSRD	Corporate Sustainability Reporting Directive
CVD	Clean Vehicles Directive
EAFO	European Alternative Fuels Observatory
EEA	European Environment Agency
EU ETS2	EU Emissions Trading System covering CO2 emissions from fuel combustion in buildings, road transport and additional sectors (mainly small industry)
GDP	Gross Domestic Product
HDV	Heavy-duty vehicle
LDV	Light-duty vehicle
OEM	Original Equipment Manufacturer
OPC	Open public consultation
RRP	Recovery and Resilience Plan
SDG	Sustainable Development Goal
SMEs	Small and medium-sized enterprises
TCO	Total cost of ownership
V2G	Vehicle-to-grid
ZEV	Zero-emission vehicle

1. INTRODUCTION: POLITICAL AND LEGAL CONTEXT

This Impact Assessment accompanies a new legislative proposal on clean corporate vehicles. The accelerated uptake of zero-emission vehicles (ZEVs) in corporate fleets is important for supporting the decarbonisation of the European road transport sector, while safeguarding the competitiveness of the European automotive industry and ensuring an overall fair transition through the accelerated build-up of second-hand markets for ZEVs.

1.1. Political Context

The automotive sector is a key European industry. In 2024, the sector accounted for roughly EUR 1 trillion of GDP, a third of private research and development investment in the EU and it provides direct and indirect employment to 13 million Europeans. For commercial vehicles, European lorries makers account for more than 40% of the world market[1]. Road transport is the dominant transport mode in the EU, accounting in 2023 for 52.6% of total freight transport activity and 81.2% of passenger transport activity, while being responsible for 22.6% of EU greenhouse gas emissions[2] and 35% of total NOx emissions[3].

At present, the automotive and road transport sectors are undergoing a structural transformation. The shift to sustainable mobility and zero-emission powertrains is accelerating, driven by global competition and regulatory requirements that address the need to reduce emissions from road transport in order to achieve the EU's climate and air quality objectives. The **European Green Deal Communication**[4] and the **European Climate Law**[5] set out the steps towards climate-neutrality by 2050 and the need to reduce transport greenhouse gas emissions by 90% by 2050, relative to 1990. The **Sustainable and Smart Mobility Strategy**[6] recognised that this systemic change requires almost all road transport vehicles in the EU to be zero-emission by 2050 and announced targeted actions to boost the uptake of ZEVs in corporate and urban fleets.

To help secure global competitiveness of the European automotive sector and maintain a strong European production base, the Commission adopted on 5 March 2025 the **Industrial Automotive Action Plan**[7]. Under the overall umbrella of the Clean Industrial Deal, the Plan sets out a strategic industrial policy framework to help the automotive industry master the transition to sustainable and smart mobility that lies ahead. In this context, the **Decarbonise Corporate Fleets Communication**[8] further exemplified the key role of corporate vehicles, given their larger market share and significant impact on the second-hand vehicle market[9], where the majority of Europeans are getting their vehicles from[10]. It also noted that accelerating the uptake of zero-emission vehicles in corporate fleets will not only further reduce transport emissions but can also be a tool benefitting the competitiveness of European automotive sector by increasing demand, and it concluded that further action is needed The Commission President in the 3rd Strategic Automotive Dialogue

---

[1] COM(2025) 95 final; Statista Market Insights, January 2025
[2] Statistical pocketbook 2025 - European Commission
[3] Air pollution in Europe: 2024 reporting status under the National Emission reduction Commitments Directive | Publications | European Environment Agency (EEA)
[4] Communication on the Green Deal
[5] Regulation (EU) 2021/1119
[6] Sustainable and Smart Mobility Strategy
[7] Industrial Action Plan for the Automotive Sector
[8] Communication: Decarbonise Corporate Fleets
[9] "Corporate vehicle" shall be understood as any vehicle registered by a legal entity, as opposed to "private vehicles" that are registered by a physical person. "Corporate fleet" should be understood as two or more corporate vehicles registered, owned and/or used by the same legal entity.
[10] Joint Research Centre, Zacharof, N., Nur, J., Kourtesis, D., Krause, J. and Fontaras, G. (2025), A review of the used car market in the European Union, https://data.europa.eu/doi/10.2760/3237256

on 12 September 2025[11] confirmed the need for action on accelerating uptake of zero-emission vehicles in corporate fleets.

Through its potential to reduce emissions, this initiative will contribute towards the United Nations Sustainable Development Goal (SDG) 13 "Take urgent action to combat climate change and its impacts". It will also indirectly support Sustainable Development Goal (SDG) 3 "Ensure healthy lives and promote well-being for all at all ages", target 3.9 (substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination).

1.2. Legal Context

At present, there is no EU-level initiative specifically targeting corporate vehicle fleets. Corporate vehicles are, however, affected by other EU legislation, most notably the CO_2 emission performance standards for vehicles[12], the Clean Vehicles Directive[13], the EU Emissions Trading Scheme for road transport (EU ETS2)[14], Energy Taxation Directive[15] and the Eurovignette Directive[16]. The uptake of ZEV in corporate fleets is also supported through the provisions on deployment of recharging and refuelling infrastructure under the Alternative Fuels Infrastructure Regulation[17].

On the supply-side, the CO_2 emission performance standards for light-duty vehicles (cars and vans) and heavy-duty vehicles define a clear trajectory towards the gradual decarbonisation of new registrations. By 2035 all new light-duty vehicles must achieve zero tailpipe emissions[18], while emissions of new heavy-duty vehicles (most lorries and certain coaches) must be reduced by 45% in 2030 and by 90% by 2040[19]. In addition, for urban buses, 90% of the new registrations must be zero-emission by 2030 and 100% by 2035[20]. These measures fully cover the supply-side, ensuring that an increasing offer of ZEVs becomes progressively available across the EU over the next decade.

Certain aspects of the CO_2 emission performance standards for light-duty vehicles are subject to review, in parallel with this initiative[21]. The two initiatives are complementary, as they both aim to support a fair and effective transition towards a decarbonised road transport, addressing barriers currently faced by vehicle manufacturers while maintaining the broad approach and ambition. The CO_2 standards act on the supply-side incentivising vehicle manufacturers to put on the market zero-emission vehicles, while the clean corporate vehicles initiative aims at ensuring demand for such vehicles especially in those market segments where the effectiveness in reducing emissions is higher. The revision of the CO_2 standards introduces flexibility to mitigate non-compliance risks while staying the course on the transition. The two initiatives are therefore coherent and working towards the same objective, since the clean corporate vehicles initiative will provide greater certainty about the level of demand for ZEVs that manufacturers can expect from the market

---

[11] President von der Leyen chairs third Strategic Dialogue with the European Automotive Industry
[12] Regulation (EU) 2023/851 and Regulation (EU) 2024/1610
[13] Directive (EU) 2009/33/EC
[14] EUR-Lex - 02003L0087-20230605 - EN - EUR-Lex
[15] https://eur-lex.europa.eu/eli/dir/2003/96/oj/eng
[16] Directive - 2022/362 - EN - EUR-Lex
[17] Regulation - 2023/1804 - EN - EUR-Lex
[18] Regulation (EU) 2023/851
[19] Regulation (EU) 2024/1610
[20] While for light-duty vehicles and for urban buses the contribution of each vehicle to meeting the targets is broadly similar, the significant difference between different types ('sub-groups') of lorries (e.g. between a 7.5 tonnes rigid lorry intended primarily for urban deliveries and a 40 tonnes truck and trailer intended for long haul) means that the calculation of their contribution to a manufacturers' emissions requires the use of payload weighting factors, reflecting the respective usage and total emissions.
[21] Revision of the CO2 emission standards for cars and vans

segments that are capable of a faster and more efficient transition. Together, the two initiatives will create a more favourable legal framework for the competitiveness and sustainability of the EU road transport sector.

In addition, the EU ETS2[22] establishes a carbon price signal to incentivise emission reductions, while the Eurovignette Directive[23] contributes by ensuring that road charging schemes reflect environmental externalities. EU ETS2 will cover and address the CO_2 emissions from fuel combustion in buildings, road transport and additional sectors (mainly small industry not covered by the existing EU ETS). The ETS2 will complement sectoral policies, also helping Member States achieve their emission reduction targets under the Effort Sharing Regulation (ESR)[24]. There are synergies between this initiative and the ETS2. On one hand, this initiative is expected to drive a higher uptake of zero-emission vehicles relative to the baseline, avoiding pressure on the carbon prices. On the other hand, the carbon price set by the ETS2 will provide a market incentive for investments in zero-emission mobility. Both co-legislators have introduced a postponement of ETS2 by one year, to 2028, in their respective positions on the 2040 climate target proposal, amending the European Climate Law. The synergies between the two initiatives remain the same, even if the start of the ETS2 is postponed by one year. Even with one year delay for ETS2, Member States remain legally obliged to meet their binding 2030 targets under the Effort Sharing Regulation, ensuring that the EU stays on course to climate neutrality. In this context, it should also be noted that under the Effort Sharing Regulation Member States are already putting in place measures covering the transport sector. This initiative aims to further bolster those efforts.

Currently, the main demand-side measure on road transport vehicles is the Clean Vehicles Directive (CVD)[25]. The CVD requires Member States to ensure that clean vehicles[26] represent a minimum share of all public procurement on their territory over two five-year periods. The Directive applies to all procurement of vehicles by a Contracting Authority or Contracting Entity under EU public procurement rules, including purchases, lease-purchase, rental or services contracts[27], but it does not define the concept of "public fleet". As a result, coverage varies significantly across vehicle types: public procurement accounts for over 70% of buses, below 5% of lorries and 1% of light-duty vehicles[28]. Therefore, while a significant share of urban buses falls within the scope of the CVD, the majority of light-duty vehicles and lorries are outside its coverage.

The Alternative Fuels Infrastructure Regulation sets binding minimum targets for rollout of recharging and refuelling infrastructure to support the required uptake of alternative fuel vehicles across all transport modes and in all EU Member States[29].

EU level demand-side measures to support the transition to zero-emission corporate vehicles and to complement the supply-side measures in place, are limited in coverage, and have a strong impact mostly on the market segment of urban buses. In addition, the support frameworks at national level for corporate ZEV are fragmented, as further explained in section 2.2. For this reason, this impact assessment focuses on demand-measures focusing on cars, vans and lorries.

---

[22] ETS2: buildings, road transport and additional sectors - Climate Action
[23] Directive - 2022/362 - EN - EUR-Lex
[24] Effort sharing 2021-2030: targets and flexibilities - Climate Action
[25] Directive (EU) 2009/33/EC
[26] Under the CVD, as of 2025 "clean vehicles" include zero-emission light-duty vehicles and heavy-duty vehicles fuelled by alternative fuels. The Directive also includes specific targets for zero-emission buses.
[27] Additionally, because the CVD only regulates public procurement that is already reported in the procurement TED Database, it was possible to make use of this existing reporting framework. A similar reporting framework does not exist for corporate fleets.
[28] SWD(2017) 366 final, Impact Assessment accompanying the Clean Vehicles Directive revision
[29] Regulation - 2023/1804 - EN - EUR-Lex

1.3. Market Context

In 2023, approximately one million companies were registered in the EU as road transport operators, of which 600,000 companies in haulage and 474,806 companies in passenger transport[30]. However, corporate vehicles are used much more broadly, as companies across different economic sectors[31] own or operate them, contributing to a very large and diverse EU road vehicle fleet.

1.3.1. Corporate vehicles in the overall EU road vehicles market

In 2023, there were almost 290 million vehicles on European roads, of which approximately 250 million cars, 30 million vans, 0.7 million buses and coaches, and 6 million lorries[32]. Each year, around 10 million new cars, 1.5 million new vans, 30 thousand new buses and coaches and 300 thousand new lorries are registered in the EU. While around 42% of new car sales on the European vehicle market are to citizens (i.e. physical persons who purchase a vehicle in their own name), the rest of the cars, around 90% of the vans, and almost all buses, coaches, and lorries are purchased by corporate actors[33]. These include companies buying vehicles for their own use, leasing companies and financial institutions buying vehicles to lease them to individuals or other companies, as well as rental and taxi companies, which acquire vehicles to provide mobility services. It is important to note that, due to their shorter initial ownership duration and faster turnover, corporate cars represent a significantly higher share of new registrations than of the stock of vehicles on European roads. The market for trucks is substantially different from that of cars and vans, as there are no real privately registered vehicles, but corporate vehicles represent the almost totality of new registrations.

1.3.2. Market structure and characteristics of corporate fleets

While the term "corporate vehicle" can be used to identify any vehicle registered by a legal entity (as opposed to citizens), this definition includes a broad range of very different vehicles, operators, fleets, and business models. Corporate vehicles can be divided into a set of broad categories based on the type of vehicle and activity, as presented in the Table 1 and further explained below. Understanding the market structure and characteristic of corporate vehicles is essential for assessing the impacts of possible regulatory intervention.

Table 1: Subcategories of vehicles as share in the corporate vehicle new sales in 2024

Category	Leasing and long-term rental	Company car	Manufacturer self-registrations	Rental	True Fleets (other)
Cars	41.4%	20.7%	19.7%	15.5%	2.7%
Vans[34]	32.0%		10.9%	7.3%	49.7%
Lorries	5.1%		5.6%	4.8%	84.5%

Source: Dataforce database; Note: For cars and vans, the data coverage for all subcategories is available for 11 Member States (BE, CZ, DK, FR, IT, LV, LT, NL, PL, SK, ES), with for leasing and long-term rental category data is not available for 16 Member States, including the biggest automotive market (DE).

Leasing fleets. Leasing companies own large fleets of vehicles that they lease to other companies (large as well as SMEs) and/or to citizens. This category presents significant overlaps with some of the others, as for

[30] Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates [sbs_ovw_act].
[31] For example, the vans used by service providers such as electricians, plumbers, or gardeners to reach their clients and provide their services are also corporate vehicles.
[32] ACEA Report - Vehicles on European roads 2025
[33] Source: Dataforce database. More details on the Dataforce database are provided in Annex 4 (section 1).
[34] For vans the category of "true fleets" is recorded differently across Member States; the figure presented here is the aggregate of the relevant categories.

example company cars and vehicles used in true fleets are often procured through leasing[35]. This includes both operating and financial leasing; in both cases, the leased vehicle remains in the ownership of the leasing company but in the case of financial leasing the risks and rewards of ownership are transferred to the lessee. Financial leasing generally entails a purchase option for the lessee at the end of the contract period. Operating leasing is essentially a long-term rental agreement and often involves a full-service package including maintenance and insurance. For companies, the balance sheet treatment between operating and financial leasing can vary, with implications for their tax and credit ratings, depending on the legal and fiscal framework in each Member State[36].

Car leasing fleets represent a large share of corporate car fleets (more than 40% of new corporate registrations in 2024), as shown in the table above. This means that about 2.4 million new cars on the European market are leased to corporate customers every year. This is a consolidated market, dominated by a relatively small number of large operators managing the large majority of the market such as multi-brand lessors Ayvens, Arval, Alphabet (BMW) and Athlon (Daimler) and the four European manufacturers' captives, Volkswagen Financial Services, RCI Bank and Services (Renault), Free2Move Lease (PSA) and Leasys (Fiat). Customers in the leasing sector are split roughly into around two thirds large companies and one third SMEs and citizens[37]. Leasing companies typically resell their cars after 3-5 years[38], resulting in a relatively fast turnover to the second-hand market. The type of actors involved in the leasing of vans and lorries are similar to those of cars, but the market is significantly smaller, both in terms of number of vehicles involved and market shares. Citizens represent only a negligible share of van and lorries leasing clients.

Company cars. These are vehicles provided by an employer to an employee as a benefit-in-kind, which the employee can drive for both business and private purposes. They typically have a slightly higher yearly mileage than the average, especially when the employer also provides coverage of the fuel costs as a benefit-in-kind. Company cars are often procured through leasing, so that there can be a significant overlap with leasing fleets as described above[39]. They usually benefit from fiscal incentives that are not available to vehicles purchased by citizens – this is often a key driver in the choice to provide such a benefit-in-kind as opposed to a corresponding increase in salary. These benefits usually apply in a similar way irrespective of whether the car is procured by the employer through purchase or leasing.

Rental fleets. Rental companies rent cars or other vehicles to other companies or citizens. The rental of different vehicle types (cars, vans, etc.) presents noticeable differences. In particular, while car rental is mostly touristic or business, van rental primarily represents a logistics and mobility option for companies. The car rental market is rather concentrated as 90% of the market (in car rental sales) is estimated to be controlled by five main players: Europcar Mobility Group (with its brands Europcar and Goldcar, 29%), Sixt SE (21%), Avis Budget Group Inc (17%), The Hertz Corp (13%) and Enterprise Holding Inc (10%)[40]. A significant share of the revenue in the car rental industry is generated at airport

---

[35] This means that a share of the cars in the category "leasing" in the table presented above are used as company cars or true fleets, in addition to those already identified as such.

[36] Felix Kirsch, Marius Biedka, Ben White, "Consideration of light duty vehicle leasing in relation to the cost effectiveness of LDV CO2 regulation", Ricardo Energy & Environment, Final Report for the European Commission, DG Climate Action, 2016 https://climate.ec.europa.eu/system/files/2016-11/ldv_leasing_en.pdf

[37] https://www.arval.com/sites/default/files/inline-files/Arval%20investor%20presentation%20Mars%202025vdef.pdf https://www.ayvens.com/-/media/ayvens/public/cp/files/events/annual-shareholders-meetings/assemblee-generale-2025/2024_ayvens_urd_en_mel_250411.pdf?rev=2bba65cf20c1407f99fa0ba575ddcbc5; targeted consultation.

[38] Targeted stakeholders' consultation – this figure is representative of the sector based on inputs provided by the interviewed leasing companies and their associations.

[39] This means that a share of the cars in the category "leasing" in the table presented above are used as company cars, in addition to those already identified as such.

[40] Euromonitor (2021) in Europcar (2021) Universal registration document, as well as UK Competition and Market Authority (2015), Short-term car rental in the European Union, in European Commission, Ipsos, Tetra Tech, VVA

locations. Major rental companies indicate that their share of revenue generated at airport represents more than half of their total revenues, and that airport stations tend to have a significantly higher revenue per vehicle than other locations[41].

Vehicles registered by manufacturers themselves. This includes e.g. showroom and test vehicles. These vehicles reach the second-hand market very quickly (usually under a year since first registration, with comparatively small mileage). Their market share varies significantly across different Member States, depending among others on the presence and relative size of vehicle manufacturers, going from less than 3% in some Member States to almost 30% in others[42].

True fleets. This category includes all vehicles registered by companies and used for their own commercial activities. This includes a number of very different types of vehicles, entities, and business cases, including for example:

- Urban mobility on-demand service car fleets (taxis, ride-hailing, car sharing); these fleets have a strong link with local and urban mobility and typically operate on the basis of licences setting conditions for their operation. Approximately 370,000 companies operated taxis in 2022, the vast majority of which are micro-enterprises[43]. A significant share of these fleets operates primarily in large cities[44].
- Service cars and vans: the cars and vans used by companies to transport equipment and provide services[45]. Because service cars and vans are operated by companies whose main activity is not transport, there are no precise statistics about the number of companies involved at the EU level.
- Logistics fleets: these include the fleets of lorries and vans used to distribute goods. Lorries are almost exclusively registered by companies, so that corporate fleets represent the almost totality of the market; true fleets represent the vast majority of corporate lorries fleets. Logistics fleets are used for long-haul transport and for regional distribution, as well as for last-mile and urban delivery. Large van fleets are typically operated by postal services, e-commerce, large retailers, etc. especially for last-mile and urban delivery. 600,000 companies operate in the road haulage sector, including both large logistics companies operating fleets of tens or hundreds of lorries, and SMEs operating a few or even a single lorry. 87% of

---

(2024) Information gathering for assisting the European Commission in complying with its obligations under Article 40 ("reporting") of Regulation (EU) 2017/2394 on Consumer Protection Cooperation – Case study on car rental

[41] For instance, for Avis Budget Group Inc, the share of revenue generated at airports as a percentage of total revenue in 2024 was 67% (Avis Budget Group Annual report 2024). For the Hertz Corporation, the figure in 2024 was 55% (Hertz annual report 2024). For Europcar Mobility Group, airport stations are one of the main sources of revenue, as such stations generally make higher revenue per unit than stations located elsewhere; in total, airport locations account for 19% of the total number of stations, but for 37% of the revenue (excluding franchises) (Europcar Mobility Group, 2021 Universal Registration Document).

[42] In some Member States, these vehicles represent a significant share of the market: for example, in Germany their share was 29.4% of the total car new registrations in 2024, as in Germany often car companies provide cars to their employees for usage and then they are sold to the private market as "Jahreswagen" (annual cars) or "Werkswagen" (factory cars). In other Member States, however, in particular those where major vehicle manufacturers have a more limited manufacturing presence, the share of vehicle registered by manufacturers themselves is significantly lower: for example, in DK and IE, which have no significant local car production, this category represents less than 3% of the total market.

[43] Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates [sbs_ovw_act].

[44] For example, in 2021 there were 61,500 taxis and 40,000 ride-hailing drivers in France, most of them operating in Île-de-France: 80% of ride-hailing trips taking place in France that year were in that region, and Île-de-France had an average of 17 taxis per 10,000 inhabitants, compared to a national average of 9. UITP, Global taxi and ride-hailing figures 2024 (https://www.uitp.org/publications/global-taxi-ride-hailing-figures-2024/).

[45] These include large fleets of cars and vans operated e.g. by engineering or telecom companies for their repair works, by a company's drivers for the management's business travels, as well as individual vehicles registered by service providers such as plumbers, furniture vendors, local farmers, sales representatives, or professionals such as lawyers or doctors. In this latter case, the distinction between a service car and a company car is often subtle, as the same vehicle might be used both as a service vehicle and a private one.

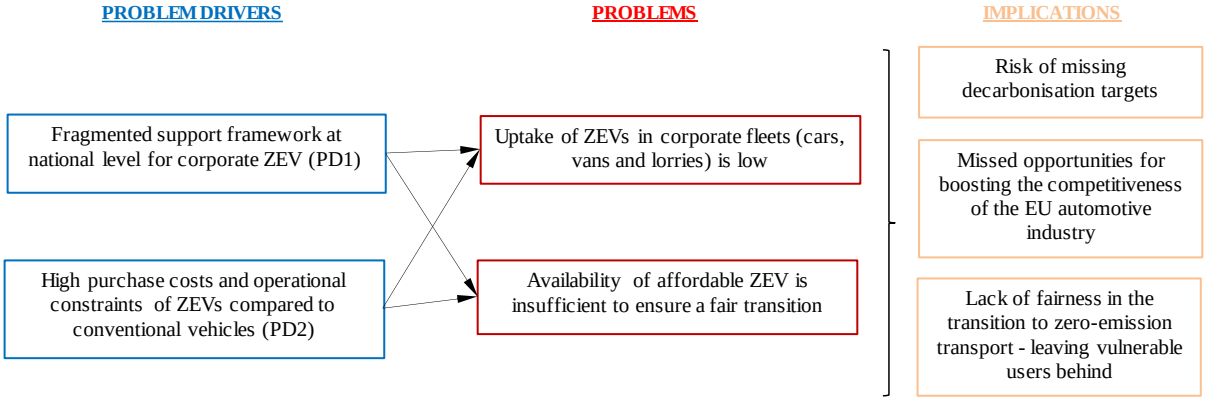
companies operating in this sector are micro-enterprises[46]. Large companies typically subcontract a significant part of their road haulage activities (more than 80% according to industry representatives) to other companies, both large and SMEs. This takes the form of contracts between shipping companies and both large and small transport operators; the latter also often sub-contract part of the activity to smaller operators, so that it is common to have three or four levels of sub-contracting between the company that owns the goods to be transported (the so-called "shipper") and the enterprise that owns and operates the lorries that are actually transporting and delivering those goods[47].

The vehicles in true fleets can either be purchased or leased by the companies that operate them, and in many cases leasing is the preferred option, especially for cars and vans. There is a significant overlap between this category and the leasing fleets described above, also in the way vehicles are recorded in statistics on corporate vehicle types[48].

2. PROBLEM DEFINITION

The problem, problem drivers and implications that are relevant for this initiative are presented in Figure 1.

Figure 1: Overview of problem drivers, problems and consequences



Source: European Commission

2.1. What are the problems?

The problems that this initiative aims to tackle are the **low uptake of ZEVs in corporate fleets** (cars, vans and lorries), and the **insufficient availability of affordable ZEVs to ensure a fair transition**. Due to their high share in new vehicle registrations, and their specific characteristics in terms of vehicle operations, corporate vehicles have a significant potential to accelerate the uptake of zero-emission vehicles in the EU in

[46] Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity [sbs_sc_ovw].
[47] During the targeted consultation, the five logistics companies and three haulers' associations interviewed highlighted the significant variety of contracts used for this type of sub-contracting, in terms of the type and duration of the contract (with significant difference between long-term scheduled services covering several months and spot market where a specific transport service is procured with short notice) as well as the inclusion of other specific conditions (for example whether the haulier is allowed to further sub-contract part of the service). The type and content of the contracts used can vary significantly between sectors and type of goods transported, as well as between long-haul and last mile within the same business. In some cases, there is also significant seasonal variability, for example with a substantially higher share of spot contracts in parcel delivery services around festivities.
[48] While exact details vary across Member States depending on how data are collected and analysed, in many cases a leased corporate vehicle used in a true fleet (e.g. a furniture vendor's van, or a taxi) will be recorded as part of the leasing fleet only, potentially leading to an underestimation of the actual size of "true fleets".

order to increase transport emission reductions, to boost the competitiveness of the European automotive industry and to ensure a fair transition (by increasing the uptake of ZEV in the second-hand market).

A substantial strengthening of demand for ZEVs from corporate fleets is needed to provide greater certainty about the level of demand for ZEVs that manufacturers can expect from these market segments, that are capable of a faster and more efficient transition. The 2030 targets under the CO_2 standards for cars, vans and lorries require an accelerated uptake of zero-emission vehicles in the next years. Without further regulatory intervention at the EU level that enables clear market direction for the uptake of ZEV in corporate fleets at national level, the potential of the corporate vehicles to contribute to the necessary demand will remain underexploited. This is because they represent a significant share of new registrations, they display higher mileage and faster turnover. However, it should be noted that this is a targeted initiative and other initiatives under preparation, such as the Industrial Accelerator Act, are better placed for addressing the competitiveness of the European automotive industry.

Problem 1: The uptake of zero-emission vehicles in corporate fleets (cars, vans and lorries) is low

Corporate vehicles represent around 58% of new registrations of cars[49], around 90% of new registrations of vans[50] and virtually all new registrations of lorries[51]. Despite differences among subcategories (e.g. leasing fleets, company cars, and true fleets), the share of zero-emission vehicles in corporate fleets remains low at close to 17% of new registrations for cars, 8% for vans and 3.7% for lorries in the first half of 2025[52].

In 2024, the share of ZEVs in new registrations by **leasing fleets** was 16%, somewhat higher than both the overall market average (13.6%) and the average in new corporate registrations (14%). Some of the main multi-brand lessors report significantly higher ZEVs shares in both fleets and new registrations compared to the market average[53]. In the first half of 2025 the share of ZEV in new registrations by leasing fleets increased to 17.8% (with the overall market average of ZEVs rising to 15.5%)[54].

A large share of company cars and service vehicles, such as taxis, are often leased rather than purchased. The share of ZEVs offered by large leasing companies can therefore significantly impact the choices of other corporate fleets managers. A low share of ZEVs in the available leasing options may represent a bottleneck for the decarbonisation of road transport operations, while a higher share could accelerate uptake and adoption of ZEVs across corporate fleets and in the private market, including through faster availability of second-hand ZEVs.

Company cars and **true fleets** of cars operated directly by firms recorded ZEVs shares in new registrations of 17% and 18%, respectively, in 2024, and 24% and 20% respectively in the first half of 2025[55]. While above the overall market average, these shares remain insufficient to fully capture the emissions reduction potential of high-mileage corporate vehicles. Vehicles in some true fleets are responsible for a disproportionately high share of emissions compared to other use cases, due to their particularly high yearly mileage[56]. A faster shift to ZEV in those fleets could substantially reduce real-world road transport

[49] Vehicles of category M1 in accordance with Regulation 2018/858
[50] Vehicles of category N1 in accordance with Regulation 2018/858
[51] Vehicles of category N2 or N3 in accordance with Regulation 2018/858
[52] Source: Dataforce database and European Alternative Fuels Observatory
[53] https://www.arval.com/sites/default/files/inline-files/Arval%20investor%20presentation%20Mars%202025vdef.pdf https://www.ayvens.com/-/media/ayvens/public/cp/files/events/annual-shareholders-meetings/assemblee-generale-2025/2024_ayvens_urd_en_mel_250411.pdf?rev=2bba65cf20c1407f99fa0ba575ddcbc5
[54] Dataforce database
[55] Dataforce database
[56] For example, the associations representing taxi and ride-hailing services that were interviewed as part of the targeted stakeholders' consultation indicated typical yearly mileages of around 80,000-120,000 km among their members, with

emissions, irrespective of whether the vehicles are leased or purchased.

Rental car fleets recorded only 5% of ZEVs in new registrations in 2024, significantly below both the overall market average and the average share of ZEVs in new corporate registrations, and 6.1% in the first half of 2025[57]. Rental vehicles typically have comparatively high yearly mileage, which increases their potential impact on real-world emissions reductions. Furthermore, among different corporate fleets, short-term (few days to few weeks) rental cars are usually among the fastest to reach the second-hand market, typically in less than a year[58]. As a result, a higher share of ZEVs in these fleets could accelerate both emission reduction and enhance the affordability of ZEVs for citizens. Vehicles used for short-term rentals, such as rental car fleets at airports, other multimodal hubs or tourist areas represent a significant share of the car rentals. They can play a pivotal role in increasing the visibility of ZEV solutions, offering an opportunity to experience zero-emission technology, and addressing existing user concerns such as range anxiety. However, at present, the low share of ZEVs in rental fleets limits the realisation of these benefits, and the potential for emission reductions, and improved affordability of ZEVs remains largely untapped.

Vehicles registered by manufacturers themselves accounted for 12% of ZEVs in new car registrations in 2024 slightly below the overall market average, and 18% in the first half of 2025[59].

Logistics fleets recorded a share of 8.2% ZEVs in new registrations of vans, and 3.4% ZEVs in new registrations of lorries in 2024 (3.7% in the first half of 2025)[60]. According to ACEA, 73% of road freight tonnage is carried over distances of less than 150 km - well within the range of existing ZEVs models - while less than 2% gets carried over 1,000 km[61]. As a result, the potential for emission reductions and transition to ZEVs remains largely underexploited.

While only limited published figures are available, and there are significant differences in mileage between different types of corporate fleets, interviews with associations representing taxi and ride hailing services, consistently indicated typical yearly mileages of around 80,000-120,000 km among their members, while leasing and rental companies also generally indicated significantly higher mileage than private vehicles. These figures are consistent with available sectoral publications[62]. A further indirect confirmation comes from the usage patterns of vehicles: private cars generally spend more than 90% of the time parked, and less than 10% in use[63] whereas for example a taxi or a delivery van typically spends at least 8 hours per day in use on every working day of the year, resulting in significantly higher yearly mileage.

Overall, the low share of ZEV in new registrations of corporate vehicles limits the decarbonisation potential of high-mileage vehicles, slows the diffusion of ZEVs in the second-hand market, and results in missed opportunities to improve energy efficiency and reduce costs.

---

noticeable variations by country and by area of operation – in particular between major cities, smaller cities, and rural areas.

[57] Dataforce database

[58] Based on interviewed rental companies and their associations.

[59] Dataforce database

[60] European Alternative Fuels Observatory

[61] https://www.acea.auto/files/ACEA_trucks_fact_sheet_Feb2025.pdf .

[62] https://www.gtl-taxi.be/6_34_0_0_0_FR_Fonctions_du_taxi https://www.journaldunet.com/mobilites/1494709-la-constante-evolution-des-vtc-et-des-taxis/ https://www.taxi-point.co.uk/post/what-s-the-annual-average-mileage-for-a-taxi-driver-and-how-does-it-vary-from-region-to-region https://news.belgium.be/sites/default/files/legacy/media/source68983/Rapport_Kilometers_2017_FR.pdf

[63] https://www.racfoundation.org/wp-content/uploads/standing-still-Nagler-June-2021.pdf https://www.energy.gov/eere/vehicles/articles/fotw-1356-august-19-2024-household-vehicles-were-parked-95-typical-day-2022 https://www.transportenvironment.org/articles/driverless-cars-increase-congestion-could-cut-massive-parking-times

The low uptake of ZEVs in corporate fleets is seen as a relevant problem by consulted stakeholders: in the 2024 open public consultation (OPC), more than half of the 267 respondents[64] expressed the view that the current share of ZEVs registered by corporate entities is not sufficient to put road transport on the path to adequately contributed towards the climate neutrality target for 2050, and between 38% and 47% (depending on the type of vehicle) of respondents who expressed an opinion on whether corporate vehicles should switch to ZEVs faster than private vehicles either agreed or strongly agreed with this idea.

Problem 2: The availability of affordable zero-emission vehicles is insufficient to ensure a fair transition

Affordability here looks at barriers that do not enable a fair transition, which include situations where a ZEV alternative is not available for the type of planned vehicle acquisition. This is for example because a suitable low-end ZEV model is not yet available on the market (linked to the prevalence of high-end models in the first groups of ZEVs reaching the EU market), because ZEVs are not yet sufficiently available on the second-hand market (linked to the limited time since their increased market uptake), or because more convenient options such as leasing or long-term rental do not yet offer ZEVs for the desired models. In these cases, the prospective user is facing an initial higher capital cost for a similar type of vehicle. In order to switch from a conventional to a zero-emission vehicle the prospective user would also be required to change the planned way of acquiring the vehicle (e.g. buying a higher-end vehicle, buying a new vehicle instead of a second-hand one, or buying a vehicle instead of leasing it), resulting in further additional costs. This effectively limits the capacity of citizens and SMEs to transition to ZEVs. The limited availability of ZEV on the second-hand market is particularly important in light of the fact that 75% of the total yearly registrations of cars are registrations of used cars[65].

Currently, the portfolio of zero-emission car models is still focused on the higher end of the market and smaller, more affordable models have started to enter the market only recently[66]. In the absence of tailored financing solutions, the higher purchase cost of new zero-emission vehicles represents a significant barrier to their uptake, particularly for SMEs, even in cases where the total cost of ownership (TCO) is competitive[67]. These barriers result in missed opportunities for TCO savings and for competitiveness. The second-hand vehicle market is significantly larger than the market for new vehicle registrations in the EU: in the four largest vehicle markets (France, Germany, Italy, Spain), new cars represent on average only a third of total annual sales[68,69]. Based on national statistics available for 15 Member States[70], 75% of the registrations of

---

[64] 160 out of 267 for cars, 165 for vans, 149 for lorries; Greening corporate fleets

[65] Based on national statistics available for 15 Member States (BE, DK, DE, EL, FR, HR, IT, LU, HU, MT, AT, CY, LV, NL and SE).

[66] EUROSTAT data shows that between 2023 and 2024 the value of extra-EU imports of battery-electric cars into the EU fell by around one-third, while plug-in hybrid imports declined only marginally (-6%) and the value of imports of internal combustion vehicles increased. More than half of electric car imports are coming from China, but at the same time, trade and market data (JATO and Dataforce) indicate that Chinese manufacturers have sharply increased exports and registrations of plug-in hybrids to the EU, following the introduction of specific tariffs on battery electric vehicles. Overall, in the first months of 2024, passenger vehicles trade balance with China marked a deficit of EUR 1.2 billion, with imports of automotive parts from China increasing by around EUR 4 billion between 2021 and 2024 (+66%), compared to a decline in exports to China of around 50%. This is due to a 30-35% price differential between European and Chinese products (Made in Europe Local content policy for the European automotive industry. Gerpisa, April 2025). US manufactured vehicles are very rarely imported into the EU, and they don't have a big role on the market. US companies have set up production facilities in Europe (Ford and Tesla).

[67] As noted by the Association of Automotive Parts Distributors and Producers (SDCM) in the feedback to the Call for Evidence: "The high upfront costs of electric vehicles and charging infrastructure impose a significant financial strain on SMEs, already grappling with rising logistics costs."

[68] Joint Research Centre, Zacharof, N., Nur, J., Kourtesis, D., Krause, J. and Fontaras, G. (2025), A review of the used car market in the European Union, https://data.europa.eu/doi/10.2760/3237256

[69] For example, in Germany, 6,479,953 second-hand car transaction were reported in 2024, against 2,817,331 new cars that entered the stock (Source: Kraftfahrt-Bundesamt - English). In the same year, in Italy, there were 3,096,198 used-

cars are registrations of used cars. Availability of ZEVs on the second-hand markets is therefore crucial to accelerate their uptake, especially in the short-term when new ZEVs remain more expensive[71]; this is particularly relevant for lower income households, which are more likely to purchase second-hand vehicles[72]. At present, however, the share of ZEVs in the second-hand market remains limited due to their relatively recent commercial availability. Consumer organisations note that the current low availability of ZEV on this market hinders consumers' capacity to benefit from potential savings offered by these vehicles[73]. Moreover, ZEVs currently depreciate faster than conventional vehicles, principally due to rapid technological progress in ZEVs[74]. While this trend improves the competitiveness[75] of new ZEV models compared to conventional ones, it also accelerates the perceived obsolescence of older ZEV models. During the Call for Evidence[37] (CfE) that was open for feedback between 25 July and 8 September 2025[76], 24.6% (117) of those that responded indicated concerns about uncertain resale values and the early-stage nature of second-hand markets for ZEVs, which raises capital costs and leasing rates.

Cars purchased by citizens typically take longer to reach the second-hand market than corporate cars. Across the largest EU car markets, the turnover of second-hand battery electric cars does not significantly differ from the overall average turnover of cars[77]. Corporate vehicles should therefore play a critical role in accelerating the availability of second-hand ZEVs, due to their faster turnover. Rental cars are normally re-sold within one year[78] and leased vehicles generally reach the second-hand market within 3-5 years[79], either as a second-hand sale or as second-hand leasing. The second-hand market also plays a key role for commercial vehicles: while large companies tend to buy new vans and lorries, those vehicles are typically re-sold after a few years, mostly to SMEs. Thus, the share of ZEV in new corporate van and lorries registrations by large companies is a critical factor in determining the availability of affordable ZEV options for SMEs and smaller logistics operators.

Consumer associations have highlighted the significant economic benefits of second-hand ZEVs[80]. However, the limited time since most zero-emission models were launched, together with the relatively low share of ZEV in corporate fleets with high vehicle turnover, means that the availability on the second-hand

---

car ownership transfers compared to 1,558,704 new passenger car registrations (source: https://unrae.it/files/Comunicato_Stampa_UNRAE_mercato_auto_usate_Dicembre_2024_67bc591cedf1a.pdf)..

[70] National statistics for BE, DK, DE, EL, FR, HR, IT, LU, HU, MT, AT, CY, LV, NL, SE.

[71] Gautam, P.; Pode, G.; Pode, R.; Ayetor, G.K.; Diouf, B. Depreciation in the Electric Vehicle Transition: Sustainability of the Second-Hand Electric Vehicle Market. Vehicles 2024, 6, 2044–2074. https://www.mdpi.com/2624-8921/6/4/101

[72] Kris Vanherle (TML), Robert Vergeer (CE), "Data gathering and analysis to improve the understanding of 2nd hand car and LDV markets and implications for the cost effectiveness and social equity of LDV CO2 regulations", Final Report for DG CLIMA, 2 May 2016; Gautam, P.; Pode, G.; Pode, R.; Ayetor, G.K.; Diouf, B. Depreciation in the Electric Vehicle Transition: Sustainability of the Second-Hand Electric Vehicle Market. Vehicles 2024, 6, 2044–2074. https://www.mdpi.com/2624-8921/6/4/101

[73] https://www.beuc.eu/position-paper/electrifying-company-fleets-lower-mobility-costs-consumers

[74] Gautam, P.; Pode, G.; Pode, R.; Ayetor, G.K.; Diouf, B. Depreciation in the Electric Vehicle Transition: Sustainability of the Second-Hand Electric Vehicle Market. Vehicles 2024, 6, 2044–2074. https://www.mdpi.com/2624-8921/6/4/101

[75] Through faster decrease in costs and increased performance.

[76] Clean corporate vehicles. The Call for evidence was published initially in English with all the other language translations published on 11 August 2025.

[77] Joint Research Centre, Zacharof, N., Nur, J., Kourtesis, D., Krause, J. and Fontaras, G. (2025), A review of the used car market in the European Union, https://data.europa.eu/doi/10.2760/3237256

[78] Information provided by the rental companies interviewed as part of the targeted stakeholder consultation.

[79] Information provided by interviewed leasing companies and their association in the targeted stakeholders' consultation.

[80] BEUC estimates that new electric cars registered in 2024 will deliver between EUR 262 and EUR 849 savings per year for their future second and third owners compared to an equivalent petrol car. Source: https://www.beuc.eu/position-paper/electrifying-company-fleets-lower-mobility-costs-consumers

market remains very limited. Regarding key barriers to ZEV uptake, 138 respondents to the CfE (38.7%) have identified the low availability of suitable ZEV models for specific use cases. Heavy- and medium-duty operators emphasise that current ZEV options for some long-haul and demanding duty cycles remain limited or operationally challenging, in particular for specific routes or missions that require carrying heavy loads, due to current ZEV range or weight trade-offs[81]. Some also report model gaps or long delivery times for specific configurations.

The faster turnover of corporate vehicles compared to private ones means that a higher share of ZEVs in this segment could accelerate the availability of zero-emission options on the second-hand market[82]. This would increase access to more affordable ZEV options, including for lower-income and vulnerable users. The limited share of ZEVs in corporate fleets - especially for rental cars with particularly quick turnover - results in very limited access to ZEVs by lower income and vulnerable users, including both households and SMEs. Member States with a heavy reliance on imported second-hand vehicles are particularly impacted by this[83].

Some leasing companies also offer options to lease second-hand ZEVs after the expiry of the first lease, as an alternative to selling them, partly as a strategy to manage higher depreciation[84]. Such offers contribute to the availability of affordable ZEVs on the second-hand market and present comparable advantages to a second-hand purchase in terms of cost.

Problem 2 is affected by a number of other factors addressed by other initiatives, that are outside the scope. However, there are specific aspects that are not sufficiently addressed by other initiatives, such as the current very limited availability of second-hand ZEVs, which has been highlighted among others by consumer organisations and NGOs, or the very limited availability of ZEVs among leasing vehicles. The current market conditions therefore effectively prevent citizens and SMEs, for whom buying a new vehicle can represent a significant barrier in terms of cash flow and financial availability, from switching to ZEVs. Other relevant initiatives, such as CO_2 standards for vehicles, Eurovignette Directive, or ETS2, only have a very limited impact on these aspects.

2.2. What are the problem drivers?

Problem driver 1: Fragmented support framework at national level for corporate ZEV

Problem driver 1 concerns the fragmented support framework at national level for corporate ZEV. This fragmentation concerns: 1) the overall level of ambition of national policies for zero-emission vehicles in corporate fleets that vastly differ among Member States and 2) the measures in support of their uptake that differ as well. This leads to uneven level playing field in the EU internal market, including the fact that several Member States do not make use of suitable market levers (e.g. vehicle taxation, road tolling exemptions, etc.) or continue with harmful subsidy practices, because there is no clear long-term market direction that pushes national and regional authorities to take action.

In a study examining five Member States it is estimated that those Member States spend more than EUR 40

[81] The electric vehicles either do not have enough battery range or have weight limitations, so using them for specific routes or work schedules that are particularly difficult, e.g. heavy loads, frequent stops, or long hours tasks is difficult.
[82] T&E briefing on corporate fleets 2023
[83] An analysis of intra-EU second-hand vehicles trade is provided in Velten, Eike Karola, Clemens Brauer, and Jan-Erik Thie, (2020), 'Used Vehicle Trade and Fleet Composition in Europe'. European Environment Agency (EEA) within the framework service contract EEA/ACC/18/001/LOT1. Ecologic Institute and Fraunhofer IS. https://www.ecologic.eu/sites/default/files/publication/2021/2632-01-Ecologic-ISI-UsedVehiclesStockTrade-March2020-final.pdf
[84] Information provided by interviewed leasing companies and their association in the targeted stakeholders' consultation.

billion annually on subsides or fiscal incentives supporting the company car market (registration tax, annual vehicle tax, VAT treatment etc.), most of which benefit conventional vehicles[85]. Although these measures differ across Member States, certain types of support are prevalent in nearly all Member States. These subsidies and fiscal support schemes often hinder the transition of corporate fleets to ZEVs, as they continue to favour the purchase and operation of conventional ones. The impact is particularly pronounced for corporate cars, which often benefit from favourable tax treatments and their classification as an in-kind benefit.

The study mentioned above highlighted that Member States provide fiscal incentives in the form of tax reductions for both the employer and the employee when a company car is procured by the employer. Employees typically benefit from a lower benefit-in-kind tax rate, reduced social security taxes on the benefit-in-kind, and lower taxation on the benefit-in-kind on fuel for private use covered by the employer. Company cars are also often subject to lower ownership and registration taxes. Collectively, these incentives still tend to favour conventional vehicles, reducing the financial attractiveness of ZEVs for both employees and employers.

Some Member States have introduced measures to promote the uptake of ZEVs in corporate fleets, and the market impact of such incentive measures is pronounced. Still, these remain fragmented and do not provide a consistent EU-level framework capable of accelerating the transition to zero-emission corporate vehicles across different fleet types. A summary of the incentives for corporate ZEV at Member State level is provided in Annex 10. For large fleet operators active across different Member States - such as leasing, rental or large logistics companies - this fragmentation makes it more cumbersome to strategically plan the switch to ZEVs across the whole fleet and operation, which delays decarbonisation efforts. 174 of the respondents to the CfE (36.6%) reported that existing tax rules and incentives are either insufficient, inconsistent across Member States, or volatile, undermining business cases and long-term fleet planning.

Respondents to the 2024 OPC[86] identified national taxation and fiscal measures as key incentives for increasing the share of ZEVs in corporate fleets. Specifically, 65% of respondents considered fiscal factors – including vehicle registration tax, yearly vehicle tax and fiscal treatment of vehicles – as important in determining the willingness of fleet operators to include ZEVs in different types of fleets. However, the persistence of tax and other incentives supporting conventional vehicles in corporate fleets combined with the fragmented support for ZEVs across Member States, mean that the overall stimulus for fleet electrification remains insufficient.

Problem driver 2: Current higher purchase costs and operational constraints of zero-emission vehicles compared to conventional vehicles

Higher purchase cost as described in problem driver 2 is meant to depict the typical situation where conventional and zero-emission vehicles with the required characteristics are available, but the zero-emission vehicles have a significantly higher cost. This higher purchase cost has an impact on the business case of corporate vehicles, either directly in terms of total cost of ownership (TCO), or indirectly in terms of difficulties to access finance to cover the higher initial capital cost.

The share of ZEV in new corporate vehicles is limited by a combination of economic costs and operational constraints: in order to be competitive with conventional vehicles, ZEVs would in many cases require either reduced costs or better enabling conditions reflecting the specific corporate fleets' operational requirements.

From an economic perspective, the choice of a commercial vehicle is usually primarily guided by TCO

[85] Company car fossil fuel subsidies in Europe - T&E 2024
[86] OPC - Greening corporate fleets

considerations. ZEVs currently have higher purchase costs and lower operation costs, already resulting in a competitive TCO for some use cases, but not yet for others. Even in cases where the TCO of a ZEV is competitive with that of a conventional one, however, the current high initial investment cost can represent a significant barrier, especially in the absence of tailored financing solutions. This is particularly the case for SMEs, as they are often not considered bankable for obtaining commercial debt solutions for the purchase of zero-emission vehicles.

This issue was highlighted by 344 of the respondents to the CfE (72.3%) who stated that ZEVs still have higher purchase prices and uncertain total cost of ownership (e.g., residual values, financing terms), especially in use cases with specific operational requirements.

In addition, 259 of those that provided feedback to the CfE (54.4%) indicated that a key barrier to the uptake of ZEV is charging infrastructure availability, particularly where fleets require predictable turnaround times. Some corporate vehicles - in particular some true fleets, such as urban mobility on demand fleets, and logistics fleets of vans and lorries - have specific operational requirements in terms of hours of operation, mileage, etc. In cases where sufficiently fast and/or dedicated recharging infrastructure is not available for a given fleet of corporate vehicles, this may result in an effective increase of their operational costs by lowering their effective utilisation rate, thus reducing their TCO competitiveness compared to conventional vehicles[87]. The deployment of sufficient minimum infrastructure to support the uptake of ZEV in all EU Member States is outside the scope of this initiative, and will be ensured by the Alternative Fuels Infrastructure Regulation[88]; however, the availability of infrastructure for the general vehicle fleet may not in itself be sufficient to meet the specific operational needs of some individual corporate fleets, with the result that for those fleets the shift to ZEVs implies higher operational costs and will not happen in the absence of targeted support measures such as financial incentives balancing those extra costs and improving their TCO competitiveness.

Other operational requirements (e.g. need to access low- and zero-emission zones, road charges exemptions, access to specialized lanes and requirements in the concession or licencing procedures) and the way zero-emission vehicles are treated in that context – including in relation to favourable conditions and incentives offered to specific corporate vehicle types – offer opportunities to make zero-emission corporate vehicles more attractive and increase their TCO competitiveness. For example, the possibility to operate in a zero-emission zone might make ZEVs more attractive for a logistics company (e.g. for last-mile urban deliveries). An easier access to concessions and licencing in a given urban area could similarly make the choice of a ZEV option more attractive for taxi or ride-hailing companies. However, these incentives are often not being sufficiently exploited by the relevant local, regional and national authorities, and the lack of a coordinated approach further limits their impacts.

It should be noted that operational constraints do not prevent the use of ZEVs, but they make it less economically viable: the ZEV models available on the market allow all types of activities currently

[87] For example, the capacity of car rental fleets to switch to ZEVs can be limited by local factors, such as availability of recharging infrastructure. The current operation of conventional rental car fleets is dependent on the possibility of providing clients with a full tank at the start of the rental: the car is then either returned with a full tank by the previous client or refuelled by the operator in between rentals. During high-season for leisure travel or in destinations particularly busy for business travel, vehicles spend limited time parked between rentals - rental companies indicate that this is often less than one hour - and an extra fee is usually charged when the returned vehicle requires refuelling. Petrol stations are often available in the vicinity of the rental car parking area, allowing clients to refuel the car shortly before returning it. When switching to electric vehicles, meeting some of these operational requirements will require additional effort in the short term. The current fast turnaround between rentals cannot be ensured with slow charging only. In order to avoid significantly longer waiting times between rentals, the use of fast chargers will be required. It is also likely that more vehicles would be returned with the battery less than completely full, unless there is sufficient availability of fast recharging infrastructure in the vicinity. More vehicles will therefore need to be recharged at the car rental facilities.

[88] Regulation - 2023/1804 - EN - EUR-Lex

performed by conventional vehicles, but in some cases their limitations in terms of range and required recharging time will result in reduced operation time, and therefore (indirectly) higher operation costs. For example, under certain circumstances a zero-emission lorry might need to spend extra time recharging along the route or between deliveries, resulting in e.g. the duration of a 9-hour trip increasing to 10 hours, or a rental car might need to increase the time between two consecutive rentals from 1 to 1.5 hours, to allow time for full recharging. A taxi operated by a driver who does not have access to overnight charging near his home might need to rely on public fast charging, with higher electricity prices. These operational constraints result in additional operation costs, which together with the higher purchase costs of ZEVs, result in higher TCO.

2.3. How likely is the problem to persist?

Problem 1: The uptake of zero-emission vehicles in corporate fleets (cars, vans and lorries) is low. This problem is expected to subside over time as manufacturers will need to increase the share of ZEVs in order to meet the emission reduction targets under the CO_2 emission performance standards, inevitably resulting in a higher share of ZEVs also in the corporate market. However, it would still be relevant until 2035 for cars and vans and at least until 2040 for lorries.

Problem 2: The availability of affordable zero-emission vehicles is insufficient to ensure a fair transition. In the absence of EU-level intervention, this problem is likely to subside over time as manufacturers will need to increase the share of ZEVs including in the more affordable segments in order to meet the emission reduction targets under the CO_2 emission performance standards. However, it would still be relevant until at least 2030 for new cars and vans and until 2035 for new lorries. On the second-hand market, the problem is likely to persist longer: even as the share of zero-emission vehicles increases and more affordable models reach the market, the time gap between private vehicles first registration and availability on the second-hand market will result in this problem persisting until at least 2036.

Problem driver 1: Fragmented support framework at national level for corporate ZEV. Without EU level action, Member States are expected to retain their current fiscal frameworks, providing an overall insufficient stimulus for the switch to zero-emission vehicles. On average, they are expected to continue at least partially to subsidise fossil fuels use, and market signals promoting zero-emission corporate vehicles will remain only partially effective due to their fragmented approach. The share of ZEVs among company cars will remain low in several Member States, while the fragmented approach will hinder the full switch to ZEVs by large fleet operators active across different Member States, such as leasing companies, rental companies and large logistics companies.

Problem driver 2: Current higher purchase costs and operational constraints of zero-emission vehicles compared to conventional vehicles. In the absence of EU-level intervention, the barriers delaying the large scale switch to ZEVs in corporate fleets are expected to persist, resulting in a slower uptake of zero-emission solutions. SMEs in particular will keep facing significant barriers in access to commercial debt finance for the higher capital expenditure of a ZEV, which will not be sufficiently compensated by existing operational and fiscal incentives. While over time the purchase cost of ZEVs will decrease and their market shares increase in both corporate fleets and private registrations, the trajectory will remain significantly lower than would be needed to fully exploit the emission reduction opportunities offered by a faster transition.

3. WHY SHOULD THE EU ACT?

3.1. Legal basis

The legal basis for this initiative is Article 91 of the Treaty on the Functioning of the European Union (TFEU), which enables the EU to lay down common rules applicable to international transport and to improve the functioning of the internal market in the transport sector. Corporate fleets often operate across

borders, and the absence of common requirements for the uptake of ZEVs creates a risk of fragmented national approaches and unequal conditions of competition. EU legislation adopted under Article 91 TFEU would support the decarbonisation of the transport sector while ensuring coherent internal market functioning for mobility and logistics services.

3.2. Subsidiarity: Necessity of EU action

National measures alone cannot ensure a level playing field and support a stronger demand push that is needed now to get to the required acceleration of zero-emission vehicle markets in the EU. Without an overall regulatory push at the EU level that commits all Member States to take measures to support transport actors in their transition to zero-emission mobility, national market support and implementation structures remain divergent and of different ambition, not utilising fully the effectiveness and efficiency potentials embodied in key market levers such as fiscal incentives and support schemes; this would maintain a non-predictable policy environment within the internal market that increases information cost for key transport actors and hinders cost-effective implementation of zero-emission fleet transitions. Moreover, diverging national action may disadvantage fleets operating across borders and limit the efficient allocation of zero-emission vehicles in the internal market. These challenges cannot be effectively solved by individual Member States acting alone.

3.3. Subsidiarity: Added value of EU action

EU-level action will ensure market certainty and demand for zero-emission vehicles from corporate fleet operators, helping companies operating in multiple Member States, thus creating a predictable demand signal for vehicle manufacturers and charging infrastructure providers. It would also support more equitable access to zero-emission vehicles across Member States and facilitate more efficient achievement of EU-wide climate targets. 216 respondents to the CfE (45.4%) emphasise that firm EU signals would strengthen European manufacturing and supply chains, support job creation, and sustain industrial leadership in zero-emission technologies. Furthermore, existing EU-level supply-side measures (CO_2 emission performance standards for road transport vehicles) would be complemented more effectively by demand-side measures taken at the same level than by national measures. EU-level action can also ensure a faster impact on the market, thanks to clearer and harmonised market signal. This is of crucial importance given the urgent need to safeguard the competitiveness of the EU automotive industry and the need to accelerate the uptake of zero-emission vehicles in second-hand markets in the EU.

4. OBJECTIVES: WHAT IS TO BE ACHIEVED?

4.1. General objectives

In view of the problems identified in section 2, the general objective of the initiative is to support the decarbonisation of the EU road transport sector, while safeguarding the competitiveness of the European automotive industry and ensuring a fair transition. This is coherent with other EU transport decarbonisation policies, contributes towards SDG 13 ‘Take urgent action to combat climate change and its impacts’ and indirectly supports Sustainable Development Goal (SDG) 3 ‘Ensure healthy lives and promote well-being for all at all ages’. A shift towards zero-emission road transport is essential to contribute towards the economy-wide 55% greenhouse gas emissions reduction target for 2030, the proposed climate target for 2040[89], and achieve climate-neutrality by 2050, in line with the European Climate Law[90]. It is also essential for the future growth and global competitiveness of the EU automotive sector, as highlighted in the Clean

[89] COM(2025) 524 final
[90] Regulation - 2021/1119 - EN - EUR-Lex

Industrial Deal[91] and the Industrial Automotive Action Plan[92].

4.2. Specific objectives

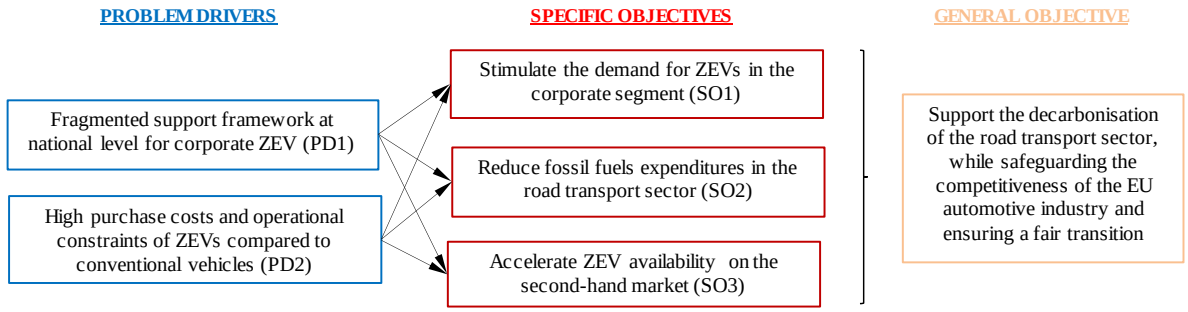
Each of the three specific objectives of the initiative are designed to address the two problems and the two problem drivers described in section 2. They complement each other to help achieve the general objective:

- *SO1: Stimulate the demand for ZEVs in the corporate segment*. This specific objective addresses problem drivers 1 and 2. It aims to ensure a consistent framework across the EU for the uptake of corporate ZEV, reducing the current fragmentation, while providing certainty and thus promoting the competitiveness of the EU automotive industry. It complements the supply-side instruments of the CO_2 standards for light- and heavy-duty vehicles and the Alternative Fuels Infrastructure Regulation, which addresses the rollout of recharging and refuelling infrastructure in the EU.

- *SO2: Reduce fossil fuels expenditures in the road transport sector*. This specific objective, addressing problem drivers 1 and 2, aims to ensures a higher reduction of fossil fuels consumption through a faster deployment of ZEVs in corporate fleets. Because of their higher yearly mileage compared to private vehicles, corporate ZEVs are expected to bring higher fossil fuel savings, contributing to road transport decarbonisation and competitiveness thanks to the lower TCO of corporate ZEVs compared to conventional corporate vehicles.

- *SO3*: *Accelerate the ZEV availability on the second-hand market*. This specific objective aims to render ZEVs more affordable, in particular for citizens and SMEs. The lower purchase price of second-hand ZEVs can offer opportunities to switch to this option for a significantly higher number of citizens and transport operators, allowing them to benefit from their lower TCO compared to conventional vehicles[93]. Furthermore, by increasing the availability of second-hand ZEVs across the EU, this specific objective helps making them more affordable through intra-EU trade also in those Member States where the second-hand vehicle market is predominant and national incentives are not sufficient to make new ZEVs competitive, thus contributing to a more balanced progress towards road transport decarbonisation across the EU.

Figure 2: General and specific objectives and their links to problem drivers



Source: European Commission

SO1, SO2 and SO3 are interrelated. However, it should be noted that SO1 could be fully achieved at the same time with a partial achievement of SO2 and SO3, or at the same time with their full achievement. This

[91] Clean Industrial Deal Communication
[92] Industrial Action Plan for the Automotive Sector
[93] The availability of second-hand ZEV leasing options will be considered as equivalent to second-hand ZEV purchase, as they bring comparable benefits in terms of affordability

depends on the type of fleets for which an increase in ZEV is required. For example, if the increase in ZEVs required to meet SO1 would take place exclusively in true fleets such as taxis and ride-hailing, this would contribute significantly to SO2 (due to the high mileage of those vehicles) but only to a limited extent to SO3 (taxis are not among the corporate fleets that reach the second-hand market fastest, although they still do so faster than private cars). Conversely, if SO1 would be achieved exclusively through an increase in ZEVs in rental cars, the contribution to SO3 would be significant (because of the very fast turnover to second-hand market), but the contribution to SO2 would be more limited (because their yearly mileage is lower than that of taxis).

The three specific objectives further contribute to ensuring the achievement of the general objective of the initiative: to support the decarbonisation of the EU road transport sector, while safeguarding the competitiveness of the European automotive industry and ensuring a fair transition. In this context, EU content requirements are expected to contribute towards the achievement of the general objective by safeguarding the competitiveness of the European automotive industry. However, it should be noted that this is a targeted initiative and other initiatives under preparation, such as the Industrial Accelerator Act, are better placed for addressing the competitiveness of the European automotive industry.

5. WHAT ARE THE AVAILABLE POLICY OPTIONS?

5.1. What is the baseline from which options are assessed?

Section 2.1 identifies two main problems, namely the low uptake of ZEV in corporate fleets (cars, vans and lorries) and the insufficient availability of affordable zero-emission vehicles on the second-hand market, which is the primary mean of vehicle purchase for SMEs and citizens. Despite differences among subcategories (e.g. leasing fleets, company cars, and true fleets), the share of zero-emission vehicles in corporate fleets remains low at close to 17% of new registrations for cars, 8% for vans and 3.7% for lorries in the first half of 2025[94].

As explained in section 2.1, corporate fleets are very important for conditioning ZEV registrations in the EU as they are responsible for 58% of new registrations of cars, around 90% of vans and virtually all new registrations of lorries. A substantial strengthening of demand for ZEVs from corporate fleets is needed to provide greater certainty about the level of demand for ZEVs that manufacturers can expect from these market segments, that are capable of a faster and more efficient transition. The 2030 targets under the CO_2 standards for cars, vans and lorries require an accelerated uptake of zero-emission vehicles in the next years. Without further regulatory intervention at the EU level that enables clear market direction for the uptake of zero-emission vehicles in corporate fleets at national level, the potential of the corporate vehicles to contribute to the necessary demand will remain underexploited. Section 2.3 explains that although the problems are expected to subside over time, without EU level action, problem 1 is likely to remain relevant until 2035 for cars and vans and at least until 2040 for lorries, while problem 2 is likely to persist until 2030-2035 for new cars, vans and lorries and at least until 2036 on the second-hand market (because of the time gap between vehicles first registration and availability on the second-hand market).

In line with the Better Regulation toolbox (Tool #60), the baseline has been designed to include the initiatives of the 'Fit for 55' package[95] and the proposed amendment of the European Climate Law to include a 2040 climate target for the EU[96], of reducing the EU's net greenhouse gas emissions by 90% by 2040 relative to 1990, with a limited contribution towards the 2040 target of high-quality international credits of 3% of 1990 EU net emissions. It also reflects the revised CO_2 emission performance standards for

[94] Source: Dataforce database and European Alternative Fuels Observatory
[95] Delivering the European Green Deal - European Commission
[96] COM(2025) 524 final

heavy-duty vehicles[97], the new Euro 7 standards[98], the revised TEN-T Regulation[99], as well as the initiatives part of the Greening Freight package[100] and Roadworthiness package[101]. It also reflects the National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025. The baseline scenario assumes no further EU level intervention beyond the current fragment support framework at national level for corporate ZEV. More details on the baseline scenario assumptions and results are provided in Annex 4 (section 2).

The baseline also incorporates perspectives on potential future developments captured in the 2022 Strategic Foresight Report[102] and during a foresight workshop organised by DG MOVE and JRC on 10 February 2025, analysing the impacts of the megatrends and drivers of change on the EU transport sector[103]. In particular, the projected transport activity draws on the long-term population projections from Eurostat and GDP growth from the *Ageing Report 2024*[104].

In the baseline scenario, EU transport activity is projected to grow post-2020, following the recovery from the COVID-19 pandemic. Road transport would maintain its dominant role within the EU by 2050, despite its lower modal share over time. Road passenger transport activity (expressed in passenger-kilometres)[105] is projected to grow by 7% between 2015 and 2030 (15% for 2015-2050), while road freight transport activity (expressed in tonne-kilometres)[106] by 32% during 2015-2030 (52% for 2015-2050). Transport activity for rail is projected to grow significantly faster than for road, driven in particular by the completion of the TEN-T core network by 2030 and of the comprehensive network by 2050, supported by the Connecting Europe Facility[107], Cohesion Fund and ERDF funding, but also by measures of the 'Fit for 55' package[108] and the Greening Freight package.

The share of ZEV in new registrations for corporate cars is projected to increase from 17% in 2025 to 31% in 2029 and 61% in 2030, while for vans from around 8% in 2025 to 30% in 2029 and 52% in 2030[109].

---

[97] Regulation (EU) 2024/1610
[98] Regulation - 2024/1257 - EN - EUR-Lex
[99] Regulation - EU - 2024/1679 - EN - EUR-Lex
[100] Green Deal: Greening freight for more economic gain with less environmental impact (europa.eu).
[101] Updated rules for safer roads, less air pollution and digital vehicle documents
[102] COM(2022) 289 final
[103] https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en#explore
[104] DG ECFIN, 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) - Economy and Finance
[105] Covering passenger cars, buses and coaches and power-two wheelers.
[106] Covering heavy goods vehicles and light commercial vehicles.
[107] Regulation - 2021/1153 - EN - EUR-Lex
[108] These measures increase to some extent the competitiveness of rail relative to road and air transport.
[109] Overall, the shares of ZEV in the new registrations of cars and vans for 2029 assume some anticipation of the CO_2 emission standards for 2030 in the baseline scenario. According to Regulation (EU) 2023/851 and Commission Implementing Decision (EU) 2023/1623, the CO_2 targets on vehicle manufacturers for new cars and vans for the period 2025-2034 are defined as follows: (i) Cars: 93.6 g CO_2/km (2025-2029) and 49.5 g CO_2/km (2030-2034); (ii) Vans: 153.9 g CO_2/km (2025-2029) and 90.6 g CO_2/km (2030-2034). In addition, a temporary flexibility has been added in 2025. Rather than having to comply with the CO_2 emissions targets annually, for the years 2025, 2026 and 2027, manufacturers' compliance will be assessed based on their performance over the entire three-year period. The temporary flexibility is also reflected in the baseline. Meeting the CO_2 target for 2025-2029 is estimated to require a share of ZEV in new registrations for cars of around 25% and for vans of around 19%, while meeting the CO_2 target for 2030-2034 a share of ZEV in new registrations for cars of around 60% and for vans of around 50%. For 2029, vehicle manufacturers are required to comply with the same CO_2 target level as in 2025-2027 (including the temporary flexibility), and therefore they could choose to comply with the minimum shares of ZEV in new registrations for cars and vans that are needed for meeting the CO_2 standards. On the other hand, considering the large difference between the shares of ZEV required for meeting the CO_2 targets in 2025-2029 and in 2030-2034, vehicle manufacturers could

From 2035, all new light-duty vehicles (cars and vans) must achieve zero tailpipe emissions due to the CO_2 emission standards regulation, and thus the share of ZEV in new registrations of cars and vans is 100%. For lorries (virtually all corporate), the new registrations of ZEV are projected at around 7% in 2029, 24% in 2030 and going up to 77% by 2050 in the baseline scenario. Taking into account the payload weighting factors under the CO_2 emission performance standards[110], the new zero-emissions registrations for regulated lorries are projected at 9% in 2029, 30% in 2030 and around 90% by 2050.

The share of ZEV in the overall cars fleet is projected at 13% in 2030, going up to 83% in 2050 in the baseline scenario, while for vans at 10% in 2030 and 82% in 2050, and for lorries at around 2% in 2030 and 48% in 2050 (around 2% in 2030 and 57% in 2050 taking into account the payload weighting factors under the CO_2 emission performance standards). Of this, for corporte cars the share of ZEV is projected at 30% in 2030 and 98% in 2050, due to the shorter initial ownership duration and faster turnover of the corporate vehicles. For corporate vans, which represent around 90% of the total, the share of ZEV in the fleet is projected at 11% in 2030 and 84% by 2050. These developments are mainly driven by the CO_2 standards Regulation, supported by the Alternative Fuels Infrastructure Regulation and incentives for ZEV at national level, in line with State aid rules, if applicable. NOx emissions from road transport are projected to reduce by 72% in 2030 relative to 2015 (99% reduction for 2015-2050), while particulate matter (PM2.5) emissions would decrease by 48% in 2030 relative to 2015 (95% reduction for 2015-2050).

In line with the Better Regulation toolbox, the baseline assumes that all legislation in place and proposed by the Commission is fully implemented, including the ETS2 which caps the emissions from road transport and buildings, and the Renewable Energy Directive setting targets for renewable energy in transport as well as mandates for renewable fuels of non-biological origin (RFNBO) and advanced biofuels. Vehicle manufacturers are assumed to comply with the CO_2 emission performance standards for new vehicles throughout the time horizon considered. Member States and transport operators also comply with other requirements included in the existing legislation. The EU climate targets for 2030, 2040 and 2050 are met in the baseline and the CO_2 emissions from road transport are projected to decrease by 27% by 2030 relative to 2015, and be close to zero by 2050, thanks to the large-scale uptake of zero-emission vehicles and some use of renewable and low-carbon fuels.

Driven by the recovery of the transport activity following the COVID-19 pandemic, the most recent available statistics (for 2023) show no progress in the reduction of CO_2 emissions from road transport relative to 2015. In case vehicle manufacturers do not meet their CO_2 emission targets, or Member States and transport operators do not fully comply with other legal requirements, or consumers delay the acquisition of new vehicles, the reduction in the CO_2 emissions from road transport would be lower than projected in the baseline. In this case, other transport modes (where emissions are harder to abate) or other sectors would need to deliver higher emission reductions to meet the EU climate targets for 2030, 2040 and 2050. However, as explained above, in line with the Better Regulation toolbox, the baseline assumes the implementation of existing policies.

In addition, in the baseline the benefits of higher uptake of ZEV by large companies remain untapped. As corporate vehicles typically have comparatively high yearly mileage, their higher uptake increases the potential impact on real-world emissions reductions.

---

choose to gradually increase their registration of ZEV in 2029 beyond what is required by the CO_2 standards, to anticipate the preparation for meeting the 2030 target.

[110] In the context of CO_2 emission standards for heavy-duty vehicles, lorry classes such as 9-RD (regional delivery), 5-LH (long-haul), and others are used to define vehicle configurations and typical usage profiles for compliance and target-setting purposes under Regulation (EU) 2019/1242. These classifications help align emissions targets with real-world operations across various duty cycles.

5.2. Description of the policy options

5.2.1. Possible policy options and preliminary screening of options

As a first step, a comprehensive list of possible policy measures and options was established after consultations with stakeholders, expert meetings, and the Commission's own analysis. This list was subsequently screened based on the likely effectiveness, efficiency and proportionality of the proposed measures in relation to the given objectives, as well as their legal and technical feasibility.

5.2.2. Discarded policy options

Based on internal assessment and on information received in the context of the CfE and targeted stakeholder consultations, several options have been discarded. This includes setting mandatory targets for the minimum share of ZEV in all corporate fleets above a certain size. In such option all companies would be required to report on the number of vehicles they owned each year, and those owning more than a certain number of vehicles would need to ensure that a minimum share of those are ZEV. This option was not considered proportionate due the very high administrative costs and the risk of imposing stringent targets on fleets for specific use cases where the ZEV availability is still limited; for example, fleets with specific use cases and operational requirements which are not yet met by ZEV models currently available on the market might be unable to meet the mandatory share of ZEVs.

The setting of mandatory targets for the minimum share of ZEVs in specific types of corporate fleets (e.g. leasing or taxis) was also discarded on the basis of insufficient internal consistency, due to the very high risk of unintended consequences and avoidance action. For example, setting mandatory targets on leasing fleets might lead some operators and clients to shift from vehicle leasing to other financial solutions, or result in clients with a preference for conventional vehicles to decide to purchase rather than lease a vehicle. Setting mandatory targets for taxi companies and/or ride-hailing companies that own the vehicles of their fleet might damage their competitiveness compared to ride-hailing companies using a higher share of their drivers' private vehicles. This option was expected to show low effectiveness as a result of the limited scope, as a result of covering only some types of corporate fleets.

Voluntary commitments by large shippers and large fleet operators to meet a minimum share of zero-emission vehicles by a given date were also discarded, because they were considered insufficient to address the identified problems and problem drivers. Another discarded option was a Commission Recommendation on the taxation of corporate vehicles i.e. providing favourable fiscal treatment of zero-emission corporate vehicles compared to conventional ones, given that suggestions on fiscal levers were already presented in Decarbonise Corporate Fleets Communication[111] in March 2025.

The possibility of particularly requiring vehicle-to-grid (V2G) capability for corporate vehicles in scope was also discarded as at this stage of development it was not considered proportionate and efficient, given that parts of the required technical specifications on the vehicle side are not yet standardised[112], this capability is not widely implemented on electric vehicles on the market, and there is no technical requirement for

[111] Communication: Decarbonise Corporate Fleets

[112] Currently, this capability is not widely implemented on electric vehicles on the market and there is no technical requirement for electric vehicle manufacturers to include it in vehicle type-approval documentation. Therefore, Member States have no mechanism at their disposal to verify technical compliance of electric vehicles equipped with it. Moreover, in many Member States essential parts of grids readiness is not given, starting with the necessary wide rollout of smart meters, but also other aspects of fully digitalising grids. The upcoming Electrification Action Plan, expected in early 2026, will set out the steps needed to inform the Commission about the concrete vehicle-to-grid technical requirements to be included in future type-approval legislation and, therefore, ensure a harmonised adoption of vehicle-to-grid capable vehicles.

electric vehicle manufacturers to include it in vehicle type-approval documentation. Furthermore, vehicle-to-grid capability requirements would be very difficult to implement in the context of this proposal, and importantly, may interfere with other relevant legislative frameworks in this field (e.g. EU type approval legislation). The benefits of such requirement would vary significantly from one fleet to another, depending on the type of vehicle and its use case.

Other options were discarded due to the higher administrative costs and comparable benefits to some of the retained options, or insufficient internal and/or external coherence in relation to e.g. the CO_2 emission performance standards for heavy-duty vehicles[113]. Annex 7 provides an overview of all options discarded and a justification for not retaining them.

5.2.3. Retained policy options

Two main groups of policy options have been retained for further analysis (PO1 and PO2), each including three different levels of ambition for the uptake of zero-emission cars, vans and lorries. The two groups of policy options were designed to address all problem drivers and specific objectives.

The analysis of possible options and inputs from stakeholders highlighted the need to maintain sufficient flexibility and avoid the risk of imposing mandatory targets on individual fleets. Both groups of policy options address this by not targeting directly individual fleets, but providing key enablers for the corporate fleets transition to ZEVs: the first group of options (PO1) sets targets for Member States, enabling clear market direction which will require Member States to activate key national policy levers such as incentives for ZEV uptake in corporate fleets through differentiated vehicle and income taxation or e.g. favourable road charging regimes, if such measures are not in place already. Under this group of options Member States retain full flexibility for the implementation pathway under the binding overall target, leaving hence greater initial uncertainties about different regulatory approaches at national level, but ensuring greater flexibility and minimising the risk of imposing strict targets on specific fleets whose operational requirements cannot yet be met with ZEVs. The second group of options (PO2) follows the same approach for cars and vans but mobilises demand for ZEV trucks through a binding target on minimum shares of ZEVs in transport activities of large companies, thus addressing certain companies directly, which increases certainty of the implementation pathway, while still not directly setting mandatory targets for individual transport operators. This approach aims to provide certainty of demand from large shippers for freight transport services performed through ZEVs; it relies on this guaranteed demand from shippers to push transport operators to increase the share of ZEVs in their fleets.

Both groups of policy options (PO1 and PO2) consider the same approach for cars and vans, with national targets set on Member States for the share of zero-emission cars and vans in yearly new corporate vehicles registrations by large companies in their territory. PO1 and PO2 also consider the same three different levels of ambition for cars and vans. The difference between PO1 and PO2, as explained above, comes from the approach for lorries. While PO1 uses the same design for lorries as for cars as vans (with national targets set on Member States for the share of zero-emission lorries in yearly new corporate vehicles registrations by large companies in their territory), in PO2 large companies will need to ensure that a certain share of the tonne-km of activity performed on their behalf with lorries is performed with ZEVs. Large companies are in the focus of PO2 due to their comparatively stronger ability to accelerate the transition to zero-emission lorries. However, all transport activity performed on behalf of large companies is in the scope of PO2, including own activity, direct sub-contracting and indirect sub-contracting as explained below.

PO1 is expected to address all problems and problem drivers, without imposing disproportionate burdens on market actors. PO1 was designed taking into account the trade-off between expected impacts and flexibility

[113] Regulation (EU) 2024/1610

in view of a highly diverse market structure and use cases. Options going beyond the kind of national targets foreseen by PO1, and setting mandates for individual fleets or operators might better ensure that the objectives are met, but they would not provide sufficient flexibility. Additionally, they carry significant risks of unintended consequences, including setting targets that cannot be met by certain operators with specific requirements and use cases, and would be expected to result in significant administrative burden. On the one hand, it was considered that the approach of setting the mandate not directly on the fleet operators, but on shippers (in PO2), would reduce the extent of some of those risks, by creating stable demand for freight activity performed by ZEV rather than a direct mandate on individual SMEs performing transport services. Unlike the options setting targets on specific operators or fleets, that were discarded, the setting of shippers' mandates in PO2 was explicitly and repeatedly supported by some key stakeholders and noted in some of their submissions to the CfE[114]. For this reason, it was deemed necessary to retain this option for lorries and assess its impacts.

PO1 and PO2 are expected to lead to a more balanced contribution towards the achievement of SO1 (Reduce fossil fuels expenditures in the road transport sector), SO2 (Reduce fossil fuels expenditures in the road transport sector) and SO3 (Accelerate ZEV availability on the second-hand market) than other discarded policy options.

Table 2 presents the key elements of each policy option, together with the associated specific objective and the problem driver they address, while the policy options are described in detail below.

Table 2: Overview of the key elements of the policy options

	Specific objectives / Problem drivers	PO1A	PO1B	PO1C	PO2A	PO2A	PO2C
Target setting							
Cars and vans: targets for Member States based on percentage of new zero-emission vehicles registrations by large companies (modulated by Member State based on the GDP per capita and the current share of ZEV in the fleet)	PD1, PD2, SO1, SO2, SO3	√	√	√	√	√	√
target level							
low ambition		√			√		
medium ambition			√			√	
high ambition				√			√
Lorries: target for Member States based on percentage of new zero-emission vehicles registrations by large companies (same for all Member States)	PD1, PD2, SO1, SO2, SO3	√	√	√			
target level							
low ambition		√					
medium ambition			√				
high ambition				√			
Lorries: minimum target for the share of zero-emission lorries in large companies' transport activity (same for all large companies)	PD1, PD2, SO1, SO2, SO3				√	√	√
target level							
low ambition					√		
medium ambition						√	
high ambition							√
Reporting and monitoring							

[114] E-mobility Europe, Transport&Environment, ACEA

	Specific objectives / Problem drivers	PO1A	PO1B	PO1C	PO2A	PO2A	PO2C
Annual reporting by Member States of percentage of new zero-emission cars, vans and lorries registrations, based on data from national vehicle registries	PD1, SO1	√	√	√			
Annual reporting by large companies of the share of the tonne-km of activity performed on their behalf with zero-emission vehicles	PD1, SO1				√	√	√
Reporting by Member States to be facilitated by the extension of the central register maintained by the European Environment Agency for CO_2 standards for vehicles	PD1, SO1	√	√	√	√	√	√
Monitoring enforcement by Member States authorities	PD1, SO1				√	√	√
Vehicles covered by the policy option							
Cars, vans and lorries		√	√	√	√	√	√

Policy option 1 (PO1) sets binding minimum targets for Member States on the share of zero-emission vehicles (cars, vans and lorries) in yearly new corporate vehicles registrations by large companies in their territory.

PO1 will require each Member State to ensure that, starting from 2029, a certain share of new registrations of corporate cars, vans, and lorries by large companies in its territory during that year is zero-emission. Corporate vehicles registered by SMEs are hence not included in the scope.

In order to meet these national targets, Member States will have to put in place measures to increase the demand of corporate ZEVs from large companies, thus contributing to SO1 (Stimulate the demand of ZEVs in the corporate segment). The design of the measures is under the discretion of the Member State. The resulting increase in the share of ZEVs in corporate fleets with a high yearly mileage, such as true fleets, contributes to SO2 (Reduce fossil fuels expenditures in the road transport sector). At the same time, PO1 addresses SO3 (Accelerate ZEV availability on the second-hand market) by accelerating the deployment of ZEVs in corporate fleets with a shorter first ownership period, such as rental and leasing fleets, and vehicles registered by vehicle manufacturers. The additional ZEVs in those fleets are expected to rapidly reach the second-hand market (either as sales or as second leasing), increasing the availability of ZEV options for citizens and businesses relying on second-hand vehicles.

The minimum national targets are set at different levels of ambition for cars, vans, and lorries, to reflect the different level of technology and market development, as well as the differences in targets for the respective vehicle categories under the CO_2 emission performance standards. It is also necessary to take into account the specific situation and characteristics of different Member States, in relation to both their economy's ability to address the higher initial capital costs of ZEVs, and the level of ZEV deployment in their vehicle registration. However, this consideration needs to be balanced with the need to avoid undue market distortion. Cars and vans are primarily used within the Member State where they are registered, and the markets for vehicles and services are mostly segmented by Member State[115]. For these vehicles, the level of

[115] The evidence base supporting the claim that cars and vans are primarily used within the Member State where they are registered and the markets for vehicles and services are mostly segmented by Member State is based on the characteristics and legal and operational requirements of different types of corporate fleets. Several types of true fleets, such as taxi, ride-hailing, and car sharing, operate on the basis of local permits and licences that limit their geographical area of activity, so that they are effectively never operating across borders. In the case of rental cars, most companies impose cross-border fees or other limitations for cross-border operation (https://wayrent.com/blog/cross-border-car-rentals-in-europe-rules-fees-and-how-to-do-it-right/), and information collected through stakeholders' interviews and desk research in preparation of a proposal on cross-border rentals (Taking car rentals into other EU countries – rules) indicates that one-way cross-border rentals (where the vehicle is returned in

ambition set for the EU as a whole can be modulated across Member States. The target for each Member State is calculated starting from the overall EU target, modulated on the basis of the share of ZEV in new registrations in each Member State in 2024 and the GDP per capita, with equal weighting. GDP per capita is considered a good proxy for the economic capacity of operators within Member States to afford higher capital costs of ZEVs, while the share of ZEVs in new registrations represents a proxy for the presence of the necessary enabling conditions (vehicle availability, deployment of recharging infrastructure).

For each Member State, the distance from the EU average was calculated for both GDP per capita and the share of ZEVs in new registrations in 2024. The average between those two factors was then calculated, giving them equal weighting.

Table 3: Calculation of modulation factors for Member States

	% of ZEV in new registrations, M1+N1 (2024)	% of ZEV divided by EU average	GDP per capita (EUR per capita)	GDP per capita divided by EU average	Modulation (50% BEV and 50% GDP weighting)	Modulation factor
Austria	16.58	1.32	52760	1.33	1.32	1.30
Belgium	25.48	2.03	51810	1.30	1.67	1.30
Bulgaria	3.54	0.28	16110	0.41	0.34	0.70
Croatia	2.49	0.20	21740	0.55	0.37	0.70
Cyprus	6.96	0.55	34490	0.87	0.71	0.80
Czechia	4.50	0.36	29440	0.74	0.55	0.70
Denmark	46.81	3.73	65650	1.65	2.69	1.30
Estonia	4.65	0.37	28740	0.72	0.55	0.70
Finland	27.59	2.20	49100	1.24	1.72	1.30
France	15.14	1.21	42590	1.07	1.14	1.20
Germany	12.70	1.01	50830	1.28	1.15	1.20
Greece	6.32	0.50	22560	0.57	0.54	0.70
Hungary	6.80	0.54	21570	0.54	0.54	0.70
Ireland	12.08	0.96	104510	2.63	1.80	1.30
Italy	3.99	0.32	37180	0.94	0.63	0.70
Latvia	6.84	0.54	21610	0.54	0.54	0.70
Lithuania	5.62	0.45	27150	0.68	0.57	0.70
Luxembourg	25.72	2.05	126910	3.20	2.62	1.30
Malta	20.91	1.67	39330	0.99	1.33	1.30
Netherlands	27.31	2.17	62380	1.57	1.87	1.30
Poland	2.98	0.24	22560	0.57	0.40	0.70
Portugal	18.30	1.46	26700	0.67	1.06	1.00
Romania	6.21	0.49	18560	0.47	0.48	0.70
Slovakia	2.30	0.18	24000	0.60	0.39	0.70
Slovenia	5.26	0.42	31490	0.79	0.61	0.70
Spain	5.32	0.42	32590	0.82	0.62	0.70
Sweden	33.27	2.65	52600	1.32	1.99	1.30
EU27	12.55		39710			

a different Member State from the one where it is picked up) represent less than 1% of all rentals, and that most Member State either prohibit or restrict the rental of vehicles registered in another Member State. Under current car registration rules, rental cars returned in a different country than the one in which they are registered and rented may need to be immediately re-registered in the country of use, or immediately brought back to the country of origin (by lorry, by rail or with the help of a specific driver) except in the rare cases when a customer can be found immediately in the country of destination for a return trip. These different re-registration procedures in Member States yield extra costs for car rental companies that are passed through to the citizens, and limit their cross-border use. Finally, targeted interviews with logistics operators clearly indicate that vans are used for local and regional distribution (with the vehicle picking up and delivering between local hub and customers), while transport between different hubs (which includes all long-haul and cross-border activities) is performed with lorries.

To ensure balanced development and minimise market fragmentation, while still reflecting differences between Member States, modulation factors were applied to Member States on the basis of the resulting calculation, as provided in the table below.

Table 4: Distance from the EU average and the modulation factor

Distance from EU average (GDP per capita and ZEV shares, equal weighting)	≤ 0.7	0.7 – 0.9	0.9 – 1.1	1.1 – 1.3	≥1.3
Modulation factor	0.7	0.8	1	1.2	1.3

On the other hand, international transport represented 38.7% of road freight transport in 2023, expressed in terms of tonnes-kilometres[116]. Setting differentiated national targets for these vehicles would carry a significant risk of distorting the market, by encouraging the registration of new vehicles used for this purpose in Member States with lower levels of ambition. For these vehicles, therefore, this option foresees the same level of ambition across all Member States.

For lorries, it is also necessary to refer to the payload weighting factors under the CO_2 emission performance standards, so that different sub-groups[117] are counted correctly for the purpose of meeting the targets. This is necessary to ensure that the proposal effectively contributes to transport emission reductions and helps vehicle manufacturers meet the CO_2 emission performance standards targets.

In order to ensure compliance with the targets, Member States will review their policy mix and adopt measures that can stimulate a quick market response. They will have flexibility to promote a faster shift to ZEV in corporate vehicles by reducing ZEV's TCOs through fiscal and financial incentives, as well as by improving operational conditions (e.g. ensuring higher availability of recharging points at key locations), thus effectively reducing operation costs, or by setting mandatory targets for specific entities. They will be able to use any measures they deem necessary to this aim, including e.g. modifying the taxation of corporate vehicles in favour of ZEVs, more favourable road tolling, introducing requirements in licencing for specific passenger transport services (e.g. taxis, ride-hailing), improving enabling conditions such as availability of dedicated recharging points at specific locations or preferential access to parking. Because the targets are set on Member States, and they have different measures available to stimulate ZEVs in corporate fleets, this approach is not expected to lead to the kind of unintended consequences that would result from strict mandatory targets on individual entities – such as a greater use of sub-contracting or as switch between leasing and ownership – but to Member Stats primarily taking measures to make it more economically convenient to switch to ZEVs. Even in the case of Member States deciding to set mandatory targets for specific types of companies or fleets, however, the risk of potential indirect and unexpected impacts can be considered lower than for target setting at European level. National authorities have a better understanding of the fleets operating on their territory, as the complexity is lower and information and data are more easily available, and they can make full use of existing monitoring and reporting schemes – for example in the context of their fiscal system – to minimise the additional administrative burden.

Monitoring and reporting will be ensured directly by the Member States, by extracting the relevant data from their vehicle registries and submitting it yearly to the Commission, and further addresses SO1 (Stimulate the demand of ZEVs in the corporate segment). While Member States are already able to differentiate corporate from private vehicles in their registry, the exclusion of corporate vehicles registered by SMEs would require

[116] Statistical pocketbook 2025 - Mobility and Transport - European Commission

[117] In the context of CO_2 emission standards for heavy-duty vehicles, truck classes such as 9-RD (regional delivery), 5-LH (long-haul), and others are used to define vehicle configurations and typical usage profiles for compliance and target-setting purposes under Regulation (EU) 2019/1242. These classifications help align emissions targets with real-world operations across various duty cycles.

a one-off adaptation of Member States' registries. This reporting will be performed in the framework of the the central register for CO_2 standards for vehicles maintained by European Environment Agency (EEA). There will be no need for companies to submit any reports to public authorities.

The three sub-options of policy option 1 (PO1A, PO1B and PO1C) are only different in terms of the levels of ambition for the targets for cars, vans and lorries. All other elements are the same. The EU level targets for PO1A, PO1B and PO1C are provided in the tables below, while the modulated targets for cars and vans for different Member States are included in Annex 8.

Policy option 1A (PO1A): low ambition for the targets for cars, vans and lorries

Table 5: Minimum target level for ZE new corporate vehicle registrations by large companies in PO1A (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	35%	65%	100%	100%	100%	100%
Vans*	25%	55%	100%	100%	100%	100%
Lorries	10%	40%	65%	95%	95%	95%

Policy option 1B (PO1B): medium ambition for the targets for cars, vans and lorries

Table 6: Minimum target level for ZE new corporate vehicle registrations by large companies in PO1B (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	45%	70%	100%	100%	100%	100%
Vans*	35%	60%	100%	100%	100%	100%
Lorries	15%	45%	70%	95%	95%	95%

Policy option 1C (PO1C): high ambition for the targets for cars, vans and lorries

Table 7: Minimum target level for ZE new corporate vehicle registrations by large companies in PO1C (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	50%	75%	100%	100%	100%	100%
Vans*	45%	65%	100%	100%	100%	100%
Lorries	20%	50%	75%	95%	95%	95%

Policy option 2 (PO2) sets binding minimum targets for Member States on the share of zero-emission cars and vans in yearly new corporate vehicles registrations by large companies in their territory, and a binding minimum target for the share of zero-emission lorries in large companies' transport activities.

For cars and vans, PO2 follows the same approach as PO1, with national targets set on Member States for the share of zero-emission cars and vans in yearly new corporate vehicles registrations by large companies in their territory. For lorries, however, PO2 applies directly to all large companies (companies with at least 250 employees and EUR 50 million turnover)[118], irrespective of their economic field of activity (i.e. 54,219 large

[118] Large companies as defined by Eurostat; Glossary:Enterprise size - Statistics Explained - Eurostat

companies[119]). These companies will be required to report yearly the total road freight transport activity performed on their behalf – both by their own lorries and by direct and indirect sub-contractors – in tonne-km, and ensure that a minimum share of that activity has been performed with zero-emission lorries.

PO2 addresses SO1 (Stimulate the demand of ZEVs in the corporate segment) by requiring each Member State to ensure that, starting from a given year, a certain share of new registrations of corporate cars and vans by large companies in its territory during that year are zero-emission, and by creating demand by large companies for freight transport services performed with ZEV. By increasing the share of ZEVs in logistics fleets and other corporate fleets with a high yearly mileage, PO2 will contribute to SO2 (Reduce fossil fuels expenditures in the road transport sector). At the same time, it will also address SO3 (Accelerate the ZEV availability on the second-hand market) by accelerating the deployment of ZEVs in corporate car and van fleets with a shorter first ownership period, such as rental and leasing fleets, and vehicles registered by vehicle manufacturers.

Large companies will need to ensure that a certain share of the tonne-km of activity performed on their behalf with lorries is performed with ZEVs. Large companies are in the focus of this option due to their comparatively stronger ability to accelerate the transition to zero-emission lorries. All transport activity performed on behalf of a large company is in the scope, including:

- **Own activity**: all freight transport activity performed by lorries operated directly by the company. The company will record every tonne-km of activity performed by each of its lorries, and it will yearly report the total activity and the share of this activity performed by ZEVs.
- **Direct sub-contracting**: all freight transport activity performed by lorries operated by a sub-contractor on behalf of the company, irrespective of whether the sub-contractor is itself a large company or an SME. Every sub-contractor will record every tonne-km of activity performed by each of its lorries, attribute it to the relevant client (e.g. in the case of a lorry transporting goods for different clients, the activity in tonne-km will have to be split correctly between the different clients) and report it to the client.
- **Indirect sub-contracting**: all freight transport activity performed by lorries operated by a sub-contractor of a company working directly or indirectly on behalf of the large company, irrespective of whether the sub-contractors are large companies or an SME themselves[120]. Every sub-contractor will record every tonne-km of activity performed by each of its lorries, attribute it to the relevant client (e.g. in the case of a lorry transporting goods for different clients, the activity in tonne-km will have to be split correctly between the different clients), and report it to the client, who in turn will report it to its client, until the report reaches the large company that is directly in the scope.

Most large companies perform a relatively low share of their road freight transport activity through own fleets and generally rely on sub-contracting for the vast majority of their freight transport needs[121]. In order to meet their target, large companies will therefore need to ensure not only a certain share of ZEVs in their own fleet, but also that a certain share of the activity they procure – directly or indirectly – is performed by ZEVs. To this aim, they will effectively need to ensure that their direct and indirect sub-contractors, the vast majority of which are SMEs and micro-enterprises[122], have in their fleets the number of zero-emission

[119] Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity [sbs_sc_ovw]
[120] It is common for logistics companies to have four or five levels of sub-contracting: the main company will contract its transport activity to another company, which in turn will sub-contract part of that activity to another company, and so on. All levels of sub-contracting are included in the scope of PO2, and all need to report their activity accordingly.
[121] Typically, above 80% according to industry representatives.
[122] 87% of companies in this sector are micro-enterprises. Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity [sbs_sc_ovw]

lorries needed for complying with the targets for their transport activities. This option therefore impacts the whole road freight transport sector, while it sets the legal obligation only for large companies.

For the purpose of reporting, the share of freight transport activity performed on behalf of large companies, PO2 refers to the rules set out in the context of corporate sustainability reporting[123] to determine how different legal entities have to be considered (e.g. legal entities under ownership/control of another legal entity, different legal entities under the same ownership, franchises, subsidiaries across different Member States, different legal entities belonging to the same group, etc.). These rules need to ensure that all parts of a company, including all local branches across different Member States, are covered, and that no double-counting occurs across Member States.

All transport companies, including SMEs, that directly or indirectly provide freight services by lorry to large companies will need to monitor and report their activity in terms of tonne-km performed by type of vehicle, in order to allow the large company to monitor and report compliance with its target. In practical terms, every company providing freight transport services to a large company in scope will therefore be required to report the precise tonne-km of the service performed, and the share of those tonne-km performed with ZEV, taking into account both the transport services performed directly by its own trucks and drivers, and those it has sub-contracted to another entity. Where the transport activities of a large company rely on multiple layers of sub-contracting, which is a common business practice, each sub-contractor will need to collect and consolidate the relevant information from its own sub-contractors, and report it to its clients. The large company will then consolidate data provided by all its sub-contractors in a report to be submitted to the relevant Member State.

Because the target is set in terms of tonne-km, neither the large company nor the sub-contractors need to use specific methodologies to calculate the fuel consumption or greenhouse gas emissions linked to specific transport activities. The data to be collected and reported is limited to the tonne-km of activity and whether the lorry that performed it is a ZEV.

For cars and vans, Member States will have to report the share of ZEV in new corporate vehicle registrations by large companies in the same was as for PO1. For lorries, they will also be required to compile reports from all large companies established on their territory and submit them yearly to the Commission. Monitoring enforcement will be performed based on sample verification of the correctness of companies' reporting. Member States' reports will be submitted in the framework of the central register for CO_2 standards for vehicles maintained by EEA, which will face limited costs to expand and manage the database.

The three sub-options of policy option 2 (PO2A, PO2B and PO2C) are only different in terms of the levels of ambition for the targets for cars, vans and lorries, as described below. All other elements are the same.

Policy option 2A (PO2A): low ambition for the targets for cars, vans and lorries

For cars and vans, the PO2A targets are the same as PO1A targets, while for lorries the targets are for large companies on the share of their freight activity performed by zero-emission lorries in tonnes kilometre.

Table 8: Minimum target level for ZE new corporate vehicle registrations by large companies in PO2A (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	35%	65%	100%	100%	100%	100%
Vans*	25%	55%	100%	100%	100%	100%

[123] Corporate Sustainability Reporting Directive

Year	2029	2030	2035	2040	2045	2050
Lorries, % of tonnes kilometre	3%	5%	14%	30%	50%	68%

Policy option 2B (PO2B): medium ambition for the targets for cars, vans and lorries

For cars and vans, the PO2B targets are the same as PO1B targets, while for lorries the targets are for large companies on the share of their freight activity performed by zero-emission lorries in tonnes kilometre.

Table 9: Minimum target level for ZE new corporate vehicle registrations by large companies in PO2B (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	45%	70%	100%	100%	100%	100%
Vans*	35%	60%	100%	100%	100%	100%
Lorries, % of tonnes kilometre	4%	6%	16%	32%	52%	70%

Policy option 2C (PO2C): high ambition for the targets for cars, vans and lorries

For cars and vans, the PO2C targets are the same as PO1C targets, while for lorries the targets are for large companies on the share of their freight activity performed by zero-emission lorries in tonnes kilometre.

Table 10: Minimum target level for ZE new corporate vehicle registrations by large companies in PO2C (*modulated by Member State)

Year	2029	2030	2035	2040	2045	2050
Cars*	50%	75%	100%	100%	100%	100%
Vans*	45%	65%	100%	100%	100%	100%
Lorries, % of tonnes kilometre	5%	7%	18%	34%	54%	72%

In relation to problem driver 1, PO1 and PO2 define a clear target structure that ends the fragmentation and provides clear market direction at national level. As a consequence of having to ensure compliance with the targets, Member States will have to review their policy mix and adopt measures that can stimulate a quick market response. In this context, experience from Member States with more mature zero-emission corporate fleet markets will inform the policy choices in other Member States and lead to a greater coherence of the policy mix across the Member States. The 2024 OPC clearly underlined the relevance of fiscal and financial incentives for the transition to clean corporate fleets. However, in full respect of subsidiarity and proportionality, PO1 and PO2 do not intend to harmonise the national support measures, but rather to provide clear market direction for support of clean corporate fleets.

In relation to problem driver 2, in PO1 for cars, vans and lorries and in PO2 for cars and vans, Member States have flexibility to promote a faster shift to ZEV in corporate vehicles by reducing ZEV's TCOs through fiscal and financial incentives, as well as by improving operational conditions (e.g. ensuring higher availability of recharging points at key locations), thus effectively reducing operation costs. The Communication "Decarbonising Corporate Fleets"[124] presented a series of measures that Member States can take to address these operational constraints. The setting of national targets will foster all Member States to make better use of relevant and proven support measures.

[124] COM (2025) 96

A summary of different stakeholder groups' views in terms of (a) overall attitude towards the need to act and the ZEV transition in general, (b) ZEV mandates, and (c) vehicle tax/financial incentives is presented below:

- Electric charging and hydrogen refuelling infrastructure providers are generally supportive of the transition towards zero-emission mobility and typically accept mandates, albeit with caveats. They argue that clear demand signals help de-risk infrastructure investments if they are coupled with realistic ramp-up periods. They support incentives accelerating network build-up and fleet uptake (support for capital costs, grid-connection facilitation, targeted operating support in low-utilisation phases). Main concerns relate to charging infrastructure scale-up and reliability, grid-side bottlenecks (grid capacity and energy supply), and policy design to streamline permitting and connection. A number of stakeholders in this group underscore the positive case for incentives/tax measures crowding-in private investment.

- Civil society representatives tend to favour incentives that are targeted and time-limited, particularly those that are CO_2-based or removing preferential treatment for non-ZEVs, to avoid rewarding high emitters. Their reasons centre on climate urgency, public-health benefits, and consumer protection, while acknowledging the need for support measures (i.e. for lower-income users and SMEs) and infrastructure readiness. Main concerns relate to the ambition and design of mandatory targets (ensuring environmental effectiveness while preventing loopholes), coupled with the need for reliable, widely-available recharging infrastructure and incentives to accelerate adoption of ZEV without regressive impacts.

- Companies using transport and logistics services are more cautious or negative towards fleet mandates, with many arguing that binding quotas would transfer risks to buyers without solving operational bottlenecks, such as limited range, recharging time, or infrastructure availability. Some could conditionally support mandates if targets would be progressive, with sectoral flexibility. On incentives, there is conditional support for instruments that lower total cost of ownership (e.g., tax depreciation, toll relief, bonus–malus system linked to CO_2 emissions), provided they are predictable and technology-neutral. Main concerns relate to the charging availability/reliability as well as upfront risks for total cost of ownership. Operational planning and depot readiness also features strongly, where companies manage on-site charging for contractors or captive fleets.

- Final customers (road transport passengers, private companies for their employees), appear frequently critical of the ZEV transition and object to strict mandates or avoid taking a firm position. They lean towards incentives where these are customer-oriented (purchase grants, tax credits, toll exemptions) but warn against regressive designs. Main concerns relate to charging availability/reliability as well as total cost of ownership. They also share concerns about second-hand/residual values of company cars.

- Financial institutions and leasing stakeholders are sceptical and take critical positions on mandates. They view incentives favourably when these reduce financing risk (e.g., credit guarantees, depreciation rules, insurance/tax treatment that recognises lower running emissions). Main concerns relate to residual value of vehicles and second-hand market depth, which is a driver for pricing of leases and risks. They also share concerns on upfront risks and uncertainty related to total cost of ownership. They call for policy predictability to reduce risk premia and avoid abrupt changes stranding contracted fleets. In particular, leasing companies call for stable incentives and taxation rules.

- Logistics services companies show mixed to negative reactions to mandates and suggest that, if mandates are introduced, there should be derogations for specific duty cycles and realistic timelines targeting heavy and long-haul segments. On the other hand, incentives receive support when targeted at depot charging, last-mile operations, and load-factor-sensitive use cases, as well as when cross-border tolling/taxation is harmonised. Main concerns relate to operations: charging availability/reliability, technology suitability (range/payload for time-critical operations), and depot readiness. Several stakeholders of this group also call for enhanced grid capacity and connection lead times at logistics hubs.

- Public authorities often show support for mandates as a tool to align corporate fleets with climate objectives, with caveats in relation to proportionality, subsidiarity, and administrative feasibility. They tend to favour incentives that are CO_2-consistent, temporary, and fiscally responsible, and that avoid distortion across Member States or breaching state-aid constraints. Main concerns relate to policy design and proportionality (workability of targets, data/monitoring burdens) and the need to remove practical barriers to delivery (grid capacity and energy supply, permitting, and public-realm constraints for chargers' rollout).

- Rental companies are mostly critical of mandates in the short-term, citing utilisation volatility, rapid model turnover, and uncertain residual value of vehicles. They support incentives that defray early-phase costs and stimulate demand (tax treatment, parking/zone access benefits), while calling for robust charging at airports, stations, and city hubs. Main concerns relate to vehicle availability and lead times to replace large fleets, residual value/second-hand markets, charging reliability (particularly for customers without home/depot charging). Many also quote concerns on total cost of ownership due to uncertainties about residual value of vehicles and split benefits (i.e. it is customers rather than rental companies that benefits from lower operation costs).

- Road haulage operators predominantly see mandates as impractical. According to them, if mandates are introduced, substantial flexibilities for heavy-duty, long-haul, and cross-border operations would be necessary. They support incentives when these are aimed at infrastructure along freight corridors and capital costs for vehicles, and energy-price stability. They also ask for technology neutrality for certain segments, such as long-haul lorries. Main concerns relate to technology performance and use-case suitability for heavier/long-haul duty cycles, charging/refuelling infrastructure (including high-power lorry charging), grid capacity at depots, as well as interest in alternative technologies (hydrogen/biomethane).

- Passenger transport companies are broadly supportive of the transition but often critical of the proposed measures. More than one third of respondents from this group would accept mandates with caveats where cities provide enabling conditions (charging access, zone rules, procurement support), while another third is critical of mandates. They favour incentives that reduce downtime and cost (rapid-charging availability, tariff structures, targeted grants for professional drivers). Main concerns relate to charging availability/reliability (as queueing and downtime directly erode earnings), total cost of ownership (high utilisation means small cost differences matter), and policy design (seeking pragmatic timelines/exemptions where infrastructure is not yet mature).

- Vehicle and transport equipment manufacturers (OEMs). This group typically supports mandates, albeit with caveats, favouring predictable, gradual trajectories that align with industry's planning, supply chains, and type-approval timelines. They support incentives that stimulate early demand, scale supply chains, and accelerate infrastructure (including grid connections), while being negative towards permanent subsidies that distort competition. Main concerns relate to vehicle availability and lead times (supply-chain constraints), and technology suitability across segments. This group requests stable, predictable policy and incentive frameworks to plan production and product roadmaps, and highlight the need for grid capacity and infrastructure rollout certainty to synchronise supply with feasible demand.

The above thematic analysis is predominantly based on the CfE analysis. Section 3 of Annex 2 describes the limited data collection in the context of the OPC done in preparation of the Communication "Decarbonise Corporate Fleets". This was mainly due to a high share of non-responses across many questions included in the OPC questionnaire.

While a considerable number of replies (483) was submitted as feedback to the CfE, engagement of specific fleet categories was low across the whole stakeholder consultation activities. Many specific fleet categories

saw more than 60% of respondents either not answering or expressing no opinion, limiting the usefulness of disaggregated data.

6. WHAT ARE THE IMPACTS OF THE POLICY OPTIONS?

This section summarises the main expected economic, social and environmental impacts of each policy option. The assessment of impacts draws on multiple data sources[125], including the targeted stakeholders' consultation and open public consultation, and findings from desk research. The proposed options are assumed to be implemented from 2029 onwards, so the assessment has been undertaken for the 2029-2050 period and covers the EU Member States. Costs and benefits are expressed as present value over the 2029-2050 period, using a 3% discount rate. All costs and benefits are expressed in 2023 prices.

The main model used for developing the baseline scenario and assessing the impacts of the policy options is the PRIMES-TREMOVE transport model by E3-Modelling, a specific module of the PRIMES model. The PRIMES model has a successful record of use in the Commission's energy, transport and climate policy assessments. In particular, it has been used for the impact assessments underpinning the Communication on a 2040 climate target[126], the "Fit for 55" package (e.g. for the revision of the EU ETS Directive, the Alternative Fuels Infrastructure Regulation, the revision of the Regulation setting CO_2 standards for cars and vans, the revision of the Renewable Energy Directive)[127], the impact assessments accompanying the 2030 Climate Target Plan[128] and the Staff Working Document accompanying the Sustainable and Smart Mobility Strategy[129], the Commission's proposal for a Long Term Strategy[130] as well as for the 2020 and 2030 EU's climate and energy policy framework. It was also used for developing the baseline scenario underpinning the impact assessment accomanying the revision of the Clean Vehicles Directive in 2017[131].

The assumptions used for developing baseline scenarios that underpin impact assessments in the energy, transport and climate policy ares, are consulted regularly with Member States and other stakeholders in the context of the so-called Reference scenario process. The baseline scenario underpining this initiative builds on the work on the EU Reference scenario process 2025, that is currently ongoing. In this context, the PRIMES-TREMOVE model has been calibrated on the latest available statistics. The macro-economic projections, the energy price projections and the technology assumptions have been consulted with Member States during a meeting of the Reference scenario expert group on 5 June 2024. In addition, bilateral meetings with Member States took place between September 2024 and April 2025 to discuss the national policies to be reflected, based on the updated National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025.

The technology assumptions, that drive the magnitude of the impacts on costs and benefits, are based on a rigorous literature review carried out by E3-Modelling in collaboration with the JRC and building on studies conducted for the Commission and used in previous impact assessments on related topics[132]. Continuing the approach adopted in the long-term strategy in 2018 and for the Reference Scenario 2020, the Commission consulted on the technology assumptions with Member States and stakeholders in 2024. In particular, technology assumptions were discussed with Member States during a meeting of the Reference scenario expert group on 5 June 2024. They also benefited of a dedicated consultation workshop with stakeholders,

---

[125] Ricardo (2025), Support study on the impacts of an initiative on clean corporate vehicles
[126] EUR-Lex - 52024DC0063 - EN - EUR-Lex (europa.eu)
[127] Delivering the European Green Deal | European Commission (europa.eu)
[128] SWD(2020)176 final
[129] EUR-Lex - 52020SC0331 - EN - EUR-Lex (europa.eu)
[130] Source: 2050 long-term strategy (europa.eu)
[131] Register of Commission Documents - SWD(2017)366
[132] Sources include: ACEA, BloomberNEF, Goldman Sachs, ICCT, IEA, Ricardo, DEA, other scientific publications.

held on 22-23 October 2024. It should be noted that the technology assumptions consulted, including costs, refer to those related to vehicles but also power generation, production of fuels such as renewable fuels of non-biological origin (RFNBO) and biomass production pathways and costs. These assumptions, together with the policies included in the baseline (e.g. the Renewable Energy Directive), drive the evolution of electricity and RFNBOs prices over the projection period. They also determine, together with the policies assumed, the magnitude of the impacts on capital and fuel costs in the baseline and in the policy options.

The estimates of the total costs and benefits due to this initiative cannot be directly compared to projections of other impact assessments on similar topics (e.g. ETS2, Alternative Fuels Infrastructure Regulation, CO_2 standards for cars and vans, Clean Vehicles Directive etc). This is because the policy options of each of these impact assessments are different. However, it should be noted that over time (e.g. in 2020 at the time of the preparation of the EU Reference scenario 2020[133], in 2023 at the time of the preparation of the impact assessment accompanying the 2040 climate target[134] and more recently in 2024 in the context of the EU Reference scenario process 2025) the technology costs assumptions have been updated in line with the market developments, accounting for lower technology costs for renewable and zero-emission technologies.

The modelling captures the overall adjustment costs and adjustment costs savings for businesses for the implementation of the targets. However, the way the adjustment costs and costs savings are distributed among different operators within a Member State, and what potential further indirect impacts these might have, will depend on what national measures are put in place which is not known at this stage. Therefore, the uncertainty related to the distribution of the costs needs to be acknowledged.

Further details on the methodological approach, together with results by stakeholder group for specific years and by Member State, are provided in Annex 4.

6.1. Economic impacts

This section provides the economic impacts of the policy options on businesses, citizens, national public authorities and the European Environment Agency (EEA). It also provides an assessment of impacts on competitiveness, small and medium enterprises (SMEs), functioning of the internal market and competition, innovation, territorial impacts and digital by default.

6.1.1. Impacts on businesses

This section describes the impacts on affected businesses, which primarily include road transport operators but also vehicle manufacturers, companies making use of transport and logistics services and other businesses (i.e. buyers of goods transported by road).

Impacts on new ZEV registrations. All policy options that set targets on new registrations of corporate vehicles achieve their objectives without significantly affecting the overall level of ambition the CO_2 emission standards for vehicles set for vehicle manufacturers, as reflected in the baseline. For cars and vans, the interplay of corporate and private demand is relevant: in all policy options, the higher uptake of ZEV in new registrations by large companies can be compensated by lower uptake by SMEs and citizens (i.e. private buyers) relative to the baseline until 2035, so that manufacturers do not exceed their emission reduction targets[135].

---

[133] EU Reference Scenario 2020 - European Commission

[134] https://climate.ec.europa.eu/document/download/e1ae0c6c-aa6a-4757-9c27-6f8bdc83bcb8_en?filename=policy_strategy_targets_2040ct_technology_assumptions.zip

[135] Vehicle manufacturers' reaction to the increase in corporate demand for ZEVs coming from the policy options could be two-fold. They can keep their share of ZEVs in line with the CO_2 emission performance targets, reducing the share of ZEV for citizens and

As shown in Table 11, the accelerated uptake of zero-emission cars and vans by large companies is highest in PO1C and PO2C (around 995,000 additional zero-emission cars in 2029 and 865,000 in 2030, relative to the baseline, and around 117,000 additional zero-emission vans in 2029 and 104,000 in 2030), due to the higher level of ambition of the targets for large companies in these policy options. From 2035 onwards, all new light-duty vehicles (cars and vans) must achieve zero tailpipe emissions, due to the CO_2 emission standards, and thus there is no change in the number of new ZEV registrations relative to the baseline. By design, for cars and vans, the impacts of PO2A, PO2B and PO2C are similar to those of PO1A, PO1B and PO1C, respectively. For lorries, the targets on new ZEV registrations by large companies have the highest acceleration impact in PO1C (around 10,000 additional zero-emission lorries in 2029, 15,000 to 16,000 for 2030-2035 and 6,000 in 2040), driven by the high ambition targets on new registrations. In PO2A, PO2B and PO2C the impact on new ZEV registrations is higher for SMEs[136] than for large companies as the burden is shifted to sub-contractors of large companies (mostly SMEs).

Table 11: Number of ZEV in new registrations by large companies in the policy options relative to the baseline (in thousand vehicles)

	PO1A				PO1B				PO1C			
	2029	2030	2035	2040	2029	2030	2035	2040	2029	2030	2035	2040
Cars	493	533	0	0	824	693	0	0	995	865	0	0
Vans	28	57	0	0	70	80	0	0	117	104	0	0
Lorries	3	8	8	6	6	12	12	6	10	15	16	6
Total	525	598	8	6	901	785	12	6	1,122	984	16	6
	PO2A				PO2B				PO2C			
	2029	2030	2035	2040	2029	2030	2035	2040	2029	2030	2035	2040
Cars	493	533	0	0	824	693	0	0	995	865	0	0
Vans	28	57	0	0	70	80	0	0	117	104	0	0
Lorries	8	4	15	2	13	2	30	9	19	5	35	14
Total	529	595	15	2	907	775	30	9	1,132	973	35	14

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Impacts on second-hand ZEV markets. All policy options are expected to lead to higher uptake of ZEV in the second-hand market, thanks to the shorter initial ownership duration and faster turnover of the corporate vehicles. The uptake of zero-emission second-hand cars and vans is higher in PO1C/PO2C (1.2 million cars on average per year over 2031-2050 and 193,000 vans) and PO1B/PO2B (899,000 cars and 145,000 vans) relative to PO1A/PO2A (595,000 cars and 104,000 vans), due to the higher number of new ZEV registered by large companies in these options that reach the second-hand market faster (see Table 12). For cars, the main group benefiting of the increase is that of citizens (although SMEs also benefit), while for vans that of SMEs[137]. For lorries, the impact is higher in PO2 (121,000 zero-emission lorries on average per year over 2031-2050 in PO2A, 159,000 in PO2B and 204,000 in PO2C) relative to PO1 (23,000 lorries in PO1A, 34,000 in PO1B and 48,000 in PO1C), due to the broader scope of targets covering large companies' transport activities. The main stakeholder group benefiting is that of SMEs. The overall increase in the zero-

---

SME sales, or they could maintain the current share of ZEVs in those sales, leading to an overall increase in the share of ZEVs and higher emission savings than mandated by the CO_2 emission performance standards. In the assessment of the impacts of the policy options, a conservative approach has been followed, assuming that the vehicle manufacturers do not increase the overall share of ZEVs in their new registrations. This is in line with the related CO_2 standards impact assessment and does not carry any risk of a negative impact on the overall climate targets because the lower uptake of new ZEV by SMEs and citizens is compensated by a higher uptake of new ZEV by the large companies. In addition, as corporate vehicles typically have comparatively high yearly mileage, this increases their impact on real-world emissions reductions.

[136] For SMEs, in PO2A, around 22,000 additional zero-emission lorries are estimated for 2029 relative to the baseline, 20,000 for 2030 and 22,000 for 2040; in PO2B, around 34,000 additional zero-emission lorries are estimated for 2029, 28,000 for 2030 and 20,000 for 2040; in PO2C, around 50,000 additional zero-emission lorries are projected for 2029, 41,000 for 2030 and 19,000 for 2040 relative to the baseline.

[137] See section 4 of Annex 4 for more detailed results, including the split of second-hand cars and vans between citizens, large companies and SMEs and for lorries between large companies and SMEs.

emission second-hand cars, vans and lorries is the highest in PO2C (1.6 million ZEV on average per year over 2031-2050), followed by PO1C (1.4 million ZEV), PO2B (1.2 million ZEV) and PO1B (1.1 million), while PO1A and PO2A result in lower uptake (721,000 in PO1A and 819,000 in PO2A).

Table 12: Number of ZEV in second-hand ZEV markets in the policy options relative to the baseline, expressed as annual average over 2031-2050 (in thousand vehicles)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Cars	595	899	1,206	595	899	1,206
Vans	104	145	193	104	145	193
Lorries	23	34	48	121	159	204
Total	721	1,078	1,448	819	1,203	1,604

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

The increase in the zero-emission second-hand cars, vans and lorries, expressed as annual averages over a five-year period relative to the baseline, is provided in Table 13.

Table 13: Number of ZEV in second-hand ZEV markets in the policy options relative to the baseline, expressed as annual averages over 2031-2035, 2036-2040, 2041-2045 and 2046-2050 (in thousand vehicles)

	PO1A				PO1B				PO1C			
	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50
Cars	461	1,078	688	152	715	1,621	1,027	234	885	2,180	1,431	328
Vans	24	149	162	81	44	205	220	112	64	267	288	154
Lorries	4	18	28	40	6	29	45	56	9	41	65	77
Total	488	1,245	878	273	764	1,855	1,292	401	958	2,488	1,784	559
	PO2A				PO2B				PO2C			
	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50
Cars	461	1,078	688	152	715	1,621	1,027	234	885	2,180	1,431	328
Vans	24	149	162	81	44	205	220	112	64	267	288	154
Lorries	30	100	157	196	40	134	208	254	57	175	265	319
Total	514	1,327	1,007	429	798	1,960	1,455	599	1,006	2,622	1,985	802

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Impacts on the uptake of ZEV in the vehicle stock. All policy options are expected to result in overall higher uptake of ZEV in the vehicle stock due to the faster deployment of ZEV in the second-hand markets. For cars and vans, the impact is more pronounced in PO1C/PO2C (around 1.1 million additional zero-emission cars in 2030, 2.5 million cars in 2040 and 1.5 million in 2050, and 111,000 additional zero-emission vans in 2030, 358,000 vans in 2040 and 98,000 in 2050) than in PO1A/PO2A and PO1B/PO2B due to the higher ambition of the targets. For lorries, the uptake of ZEV in the stock is higher in PO2 relative to PO1 for all sub-options due to the broader scope of the targets[138]. Table 14 shows the increase in the number of ZEV in the total stock in the policy options relative to the baseline, of which the increase in the corporate vehicle stock. The reason for the lower increase in the zero-emission corporate cars in the stock post-2040 relative to the baseline is that by 2040 zero-emission cars already represent 85% of the corporate car stock in the baseline.

Table 14: Number of ZEV in the vehicle stock in the policy options relative to the baseline (in thousand vehicles)

	PO1A			PO1B			PO1C		
	2030	2040	2050	2030	2040	2050	2030	2040	2050
Cars	477	1,019	606	852	1,698	1,018	1,084	2,531	1,541
Corporate	825	333	20	1,273	505	31	1,575	708	44
Vans	37	182	47	75	262	67	111	358	98
Corporate	43	192	51	84	270	70	123	363	98

[138] See section 4 of Annex 4 for more detailed results, including the split of total stock for cars and vans between citizens, large companies and SMEs and for lorries between large companies and SMEs.

Lorries	3	27	45	6	42	59	9	63	81
	PO2A			PO2B			PO2C		
	2030	2040	2050	2030	2040	2050	2030	2040	2050
Cars	477	1,019	606	852	1,698	1,018	1,084	2,531	1,541
Corporate	825	333	20	1,273	505	31	1,575	708	44
Vans	37	182	47	75	262	67	111	358	98
Corporate	43	192	51	84	270	70	123	363	98
Lorries	54	205	267	77	269	332	115	338	407

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Impacts on costs and costs savings for businesses. PO2A, PO2B and PO2C are expected to result in one-off and recurrent administrative costs and recurrent enforcement costs for businesses. All policy options would also lead to adjustment costs and adjustment cost savings, as well as to changes in fuel tax expenditures. Table 15 shows the recurrent and one-off costs and costs savings for businesses and Table 16 the one-off costs and costs savings, expressed as present value over 2029-2050 relative to the baseline. Each category of costs and cost savings is discussed below.

Table 15: Recurrent and one-off costs and cost savings for businesses in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.0	0.0	0.0	41.36	41.35	41.35
Enforcement costs	0.0	0.0	0.0	0.004	0.004	0.004
Adjustment costs	24.5	32.7	40.8	36.6	47.9	61.7
Capital costs	7.4	10.3	13.4	22.5	31.2	41.8
Fuel costs	9.9	12.4	14.5	9.8	11.6	13.1
Other operation costs	7.1	10.0	12.9	4.3	5.1	6.8
Increase in tax expenditures	9.7	12.3	14.3	5.4	6.3	6.8
Adjustment costs savings	32.9	45.7	59.2	30.7	40.9	53.5
Capital costs savings	14.3	19.6	24.4	8.8	11.9	14.9
Fuel costs savings	10.5	14.8	19.9	13.3	18.2	24.0
Other operation costs savings	8.0	11.3	14.9	8.6	10.8	14.6
Reduction in tax expenditures	17.8	25.6	34.6	26.5	36.3	47.8
Net benefits (+) or net costs (-)	**16.4**	**26.3**	**38.7**	**-26.1**	**-18.4**	**-8.6**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 16: One-off costs and cost savings for businesses in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.0	0.0	0.0	0.06	0.06	0.06
Adjustment costs (capital costs)	7.4	10.3	13.4	22.5	31.2	41.8
Adjustment costs savings (capital costs savings)	14.3	19.6	24.4	8.8	11.9	14.9
Net benefits (+) or net costs (-)	**6.9**	**9.3**	**10.9**	**-13.7**	**-19.4**	**-27.0**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

One-off and recurrent administrative costs for businesses. The options based on national targets (PO1A, PO1B, PO1C) are not expected to create administrative burden for businesses, as the reporting is done by Member States on the basis of existing national vehicle registers. The potential further indirect impacts these might have, will depend on what national measures are put in place. Member States that will make use of tax policy as the main instrument to achieve the targets will minimise potential indirect negative impacts for businesses. For example, adapting the fiscal and financial incentives for corporate fleets, which have proven very effective for Member States to rapidly increase the share of ZEVs in new corporate registrations, will not result in additional administrative burden for businesses. Similarly, measures to reduce operational constraints of ZEVs will not result in administrative burden for businesses. Even in the case where Member States decide to set mandatory targets for businesses, they have the possibility to ensure the necessary

monitoring and reporting through existing national measures and reporting frameworks, for example in the context of taxation, so as to avoid the need to create dedicated reporting and minimise administrative burden. The targets set by France are an example of such measure. Because of national competence on taxation regimes, setting similar targets for businesses at the EU level would result in significantly higher administrative burden than at national level.

In PO2A, PO2B and PO2C businesses will face administrative costs, both one-off and recurrent, since these policy options imply a new reporting activity for lorries. Detailed explanations on the estimation of the administrative costs by Member State are provided in Annex 4 (section 3).

One-off administrative costs are expected for large companies in PO2A, PO2B and PO2C for extending their IT systems to include a relevant field to collect the required data from sub-contractors (i.e. tonne-km of activity performed and whether the lorry that performed it is a ZEV) and for updating the templates for the contracts with the sub-contractors performing transport activities on their behalf. On average, EUR 1,000 per large company is assumed to be needed for extending the IT systems. Considering the number of large companies (54,219) in industry, construction and market services in the EU[139], the total one-off costs for the extension of their IT systems is estimated at EUR 54.22 million in 2029. In addition, half a day is expected to be needed per company to update the templates for the contracts with the sub-contractors. Assuming 7.2 working hours per day on average[140] and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals) in 2023 prices[141], the total one-off costs for updating the templates for the contracts are estimated at EUR 6.24 million in 2029. Thus, the total one-off administrative costs for large companies in PO2A, PO2B and PO2C are estimated at EUR 60.46 million in 2029.

Recurrent administrative costs are expected in PO2A, PO2B and PO2C for both large companies and SMEs for reporting the activity performed (i.e. tonne-km) and whether the lorry that performed it is a ZEV. As explained in section 5.2.3, most large companies perform a relatively low share of their road freight transport activity through own fleets and generally rely on sub-contracting for the vast majority of their freight transport needs[142]. All transport companies, including SMEs, that directly or indirectly provide freight services by lorry to large companies will need to monitor and report their activity in terms of tonne-km performed by type of vehicle, in order to allow the large company to monitor and report compliance with its target to the national authorities.

For large companies, it is assumed that one minute per lorry per working day is needed to report the type of vehicle and activity performed (i.e. tonne-km) for the lorries that they own, drawing on feedback from targeted interviews. Considering the evolution of the number of lorries owned by large companies in each policy option[143], assuming 220 working days per year and the tariff rates by Member State for ISCO 8 category (plant and machine operators, and assemblers) in 2023 prices[144], the recurrent administrative costs are estimated at around EUR 22 to 26 million per year in all sub-options (PO2A, PO2B and PO2C). In addition, 5 working days per year are assumed to be needed for collecting data from different parts of the company and from sub-contractors, quality-check, validate, and submit the data to the national public authorities. Using the tariff rates by Member State for ISCO 3 category (technicians and associate professionals) in 2023 prices and the number of large companies, the recurrent costs for collecting the data from different parts of the company are estimated at EUR 62.43 million per year in PO2A, PO2B and PO2C.

---

[139] Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity [sbs_sc_ovw]
[140] Actual and usual hours of work - Statistics Explained - Eurostat
[141] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.
[142] Typically, above 80% according to industry representatives.
[143] Based on PRIMES-TREMOVE model results.
[144] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

For sub-contractors of large companies, based on interviews with industry representatives, 5 minutes per working day per lorry are assumed to be needed to report the type of vehicle and activity performed (i.e. tonne-km). Considering the tariff rates by Member State for ISCO 8 category (plant and machine operators, and assemblers), the recurrent administrative costs for sub-contractors of large companies are estimated at around EUR 2.28 billion in 2029 and 2030, EUR 2.46 billion in 2040 and EUR 2.55 billion in 2050 in PO2A, PO2B and PO2C.

Total recurrent administrative costs for businesses (for large companies and SMEs) are estimated at around EUR 2.37 billion in 2029 and 2030, EUR 2.55 billion in 2040 and EUR 2.63 billion in 2050 for PO2A, PO2B and PO2C. Expressed as present value over 2029-2050, they are estimated at around EUR 41.29 billion in PO2A, PO2B and PO2C, of which EUR 32.13 billion for SMEs. Overall, total one-off and recurrent administrative costs for businesses are estimated at EUR 41.36 billion in PO2A and EUR 41.35 billion in PO2B and PO2C, expressed as present value over 2029-2050, of which EUR 32.13 billion for SMEs in PO2A, PO2B and PO2C.

Recurrent enforcement costs are only expected in PO2A, PO2B and PO2C for cooperating with authorities for verifying the correctness of companies' reporting. One percent of large companies is assumed to be checked per year on average and the check per company is assumed to take 2 working days. Using the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals), the total recurrent enforcement costs are estimated at EUR 0.25 million per year or EUR 4.1 million expressed as present value over 2029-2050. Details on the enforcement costs by Member State are provided in Annex 4 (section 3).

One-off and recurrent adjustment costs and costs savings for businesses. In all policy options, the businesses within the scope will face one-off and recurrent adjustment costs (i.e. one-off capital costs, recurrent fuel costs and other recurrent operation costs) and adjustment cost savings (i.e. one-off capital costs savings, recurrent fuel costs savings and other recurrent operation costs savings) as a result of the targets. However, the level and distribution of those costs and cost savings differs between options. Details on adjustment costs and costs savings for specific years are provided in Annex 4 (section 5) while details on costs by Member State are provided in Annex 4 (section 7).

In PO1A, PO1B and PO1C the demand of new zero-emission vehicles by large companies is expected to increase relative to the baseline (see Table 11). This is projected to result in higher capital costs for large companies relative to the baseline, but at the same time also in fuel costs savings (due to electrification) and other operation costs savings. The higher uptake of ZEV in the second-hand market (see Table 12 and Table 13), thanks to the shorter initial ownership duration and faster turnover of the corporate vehicles, would result in capital costs savings (due to the lower cost of second-hand vehicles), fuel costs savings and other operation costs savings. In addition, depending on how vehicle manufacturers respond to the increase in demand for new ZEV, different indirect impacts can be expected. The increased demand for new ZEVs by large companies might lead to an increase in the total share of ZEVs in new registrations. Alternatively, vehicle manufacturers might keep the total share of ZEV relatively unchanged compared to the baseline, by reducing the offer of ZEVs in new registrations by SMEs. In this latter case, this might result in reduced availability of ZEVs for SMEs and an increase of fuel and other operation costs compared to the baseline, because of the higher share of new conventional vehicles bought by SMEs relative to the baseline. These costs may be lower if vehicle manufacturers decided to increase the overall share of ZEVs in their new registrations. In the assessment of the options, it is conservatively assumed that manufacturers do not exceed their emission reduction targets relative to the baseline and in the short to medium term SMEs favour new conventional vehicles to new ZEV. This results in lower capital costs and higher fuel costs and other operation costs relative to the baseline. At the same time, SMEs would benefit of the higher uptake of ZEV in the second-hand market, as explained above.

The adjustment costs and costs savings in PO1A, PO1B and PO1C reflect the combined effects described above. Total adjustment costs are estimated at EUR 24.5 billion in PO1A, EUR 32.7 billion in PO1B and

EUR 40.8 billion in PO1C (see Table 15), expressed as present value over 2029-2050 relative to the baseline. Around 30% of these adjustment costs in each option (30% in PO1A, 31% in PO1B and 33% in PO1C) are capital costs associated to the uptake of new ZEV by large companies. Fuel costs, related to the uptake of new conventional vehicles by SMEs, represent around 40% of adjustment costs in PO1A, 38% in PO1B and 35% in PO1C, while other operation costs represent another 29% of total adjustment costs in PO1A, 30% in PO1B and 32% in PO1C. Total adjustment costs savings are projected to overcompensate the adjustment costs, and are estimated at EUR 32.9 billion in PO1A, EUR 45.7 billion in PO1B and EUR 59.2 billion in PO1C (see Table 15), expressed as present value over 2029-2050 relative to the baseline. Capital costs savings, due to the uptake of new conventional vehicles by SMEs and higher uptake of second-hand ZEV relative to the baseline, represent around 40% of the total adjustment costs savings (44% in PO1A, 43% in PO1B and 41% in PO1C). As explained above, the higher uptake of new ZEV by large companies and the higher uptake of second-hand ZEV (mostly by SMEs) results in fuel costs savings estimated at EUR 10.5 billion in PO1A, EUR 14.8 billion in PO1B and EUR 19.9 billion in PO1C (32% of the total adjustment costs savings in PO1A and PO1B and 34% in PO1C)[145]. Other operation costs savings due to the higher uptake of new ZEV by large companies and second-hand ZEV, mostly by SMEs, represent another 24% of the total adjustment costs savings in PO1A and 25% in PO1B and PO1C.

In PO1A, PO1B and PO1C the modelling assumes that the targets at Member State level in terms of share of ZEV in new registrations of corporate cars, vans, and lorries by large companies in their territory during that year are met[146]. The modelling captures the overall adjustment costs and adjustment costs savings for businesses for the implementation of the targets. However, the way the adjustment costs and costs savings are distributed among different operators within a Member State, and what potential further indirect impacts these might have, will depend on what national measures are put in place. Therefore, the uncertainty related to the distribution of the costs needs to be acknowledged. Member States that will make use of tax policy as the main instrument to achieve the targets will minimise potential indirect negative impacts for businesses. If Member States decide to put in place mandatory targets for specific operators or fleet types, on the other hand, this can lead to higher risk of indirect impacts for those operators, for example in terms of favouring one type of operation over another (e.g. leasing over purchase, or ride-hailing platforms over ride-hailing companies with ownership of their vehicle fleet). Even in the case of Member States deciding to set mandatory targets for specific types of companies or fleets, however, the risk of this kind of potential indirect and unexpected impacts can be considered lower than for target setting at European level. National authorities have a better understanding of the fleets operating on their territory, as the complexity is lower and information and data are more easily available, and they can make full use of existing monitoring and

[145] Electricity prices play a role in the monetisation of the net fuel costs savings. Building on the common baseline scenario, sensitivity analysis on the electricity prices for 2030 performed in the context of the impact assessment accompanying the revision of the CO_2 standards for cars and vans, shows that in comparison to conventional vehicles, the total cost of ownership for battery electric cars and vans over a 5-year use period remains lower than that for same-segment conventional vehicles, for all segments and user perspectives - in the range of electricity price analysed. This means that the battery electric vehicles remain the least-cost option in terms of total cost of ownership from 2030 onwards and costs savings due to their higher uptake are still expected to materialise, even under the assumption of higher electricity prices.

[146] As modelling technique, a shadow value is used in the model to meet the constraint in terms of share of ZEV in new registrations of cars, vans and lorries, while also meeting the CO_2 standards for new light-duty and heavy-duty vehicles. This shadow value reflects measures that are not specifically identified at this stage. The impacts on costs and costs savings are driven directly by the uptake of ZEV in new registrations. The total cost of ownership encompasses capital costs, fixed and variable operation costs. However, purchase decisions are also influenced by factors such as range anxiety and shadow values (i.e. non-payable financial penalties or incentives representing measures to ensure compliance with targets). These shadow values differ across actors because they are defined separately for each target type, namely the required share of ZEV in new registrations and the CO_2 standards for manufacturers of light-duty and heavy-duty vehicles. This differentiation, combined with differences in variable costs, shapes the choices of corporate fleets and other agents. Moreover, differences in variable costs also drive corporate and non-corporate actors to diverge in their use-phase decisions.

reporting schemes – for example in the context of their fiscal system – to minimise the additional administrative burden.

In most use cases, the TCO of ZEVs is either already competitive with that of conventional vehicles, or only slightly higher – although the initial high investment cost remains a key barrier. In general, ZEVs present a higher initial purchase cost, which can be partly or totally compensated by lower operational costs. However, in cases where they cannot fully meet the specific operational requirements of a given fleet, the operational costs may increase – for example because the vehicle has reduced time in operation because of the need to recharge – which may decrease the competitiveness of their TCO. In cases where the TCO is still higher than that of conventional vehicles, Member States intervention can help make it competitive by reducing initial purchase costs (e.g. through financial incentives such as scrappage schemes or financial support to new purchase), or operation costs either directly (e.g. through reduced annual vehicle taxation) or by ensuring better enabling conditions (e.g. ensuring availability of dedicated recharging points for specific fleets at key locations, such as fast chargers for rental fleets at airports) that will allow a more efficient use of corporate ZEVs. When such measures are in place and result in the TCO of ZEVs being competitive with that of conventional vehicles, fleet operators are generally expected to switch to ZEVs. Given the highly competitive nature of the road transport market, and the low margins of most operators, once the first movers start benefiting from the resulting lower TCO of ZEVs, their competitors will rapidly follow to avoid the risk of losing important market shares. By requiring Member States to ensure a certain share of ZEVs in new corporate registrations by large companies, the initiative will therefore encourage them to introduce changes in the design of financial and fiscal incentives; the effectiveness of such measures has been demonstrated by recent examples of Belgium and Germany, and PO1A, PO1B and PO1C are expected to lead to other Member Stats taking comparable steps.

In PO2A, PO2B and PO2C the impacts on adjustment costs and costs savings for businesses owning cars and vans are the same as in PO1A, PO1B and PO1C, respectively. They however differ significantly for lorries, with adjustment costs estimated at EUR 36.6 billion in PO2A, EUR 47.9 billion in PO2B and EUR 61.7 billion in PO2C and adjustment costs savings of EUR 30.7 billion in PO2A, EUR 40.9 billion in PO2B and EUR 53.5 billion in PO2C (see Table 15), expressed as present value relative to the baseline. Under these options, road freight transport operators are effectively required to ensure that a certain share of their lorries are ZEVs, in order to be able to continue providing transport services to large companies subject to the obligations. Because the target is set based on transport activity – as opposed to new registrations – it effectively translates in a requirement for a share in the vehicle stock, leading both to a comparatively higher share of ZEV in overall new registrations as well as in a push for earlier fleet renewal. While this is expected to lead to higher fuel costs savings (EUR 13.3 billion in PO2A, EUR 18.2 billion in PO2B and EUR 24 billion in PO2C), the initial capital costs are also more significant than in PO1 (EUR 22.5 billion in PO2A, EUR 31.2 billion in PO2B and EUR 41.8 billion in PO2C).

Especially for SMEs – which constitute more than 99% of road transport operators – access to finance required for such initial investment can represent a significant barrier, as banks price high risk premiums for debt finance of zero-emission lorries in view of the nascent status of the market and the lack of wide recharging infrastructure. In some cases, inability to secure financing for the switch to ZEV or the higher costs of financing compared to larger competitors may result in a SME losing important clients in favour of larger operators, leading to a consolidation of the road freight transport market. This impact could be softened by measures taken by large shippers to support SME sub-contractors[147], or by complementary tax relief measures in Member States.

[147] For example, some large shippers set up specific funds to support their SME contractors with the higher purchase cost of ZEV in the early phase of market growth, noting though that such measures would be time-limited.

In some cases, in order for a shipper to meet its target, road transport operators will be required to use ZEVs even in use cases where their TCO is still higher than that of diesel lorries. If the resulting additional costs are reflected in the transport service contract and either taken on by the shipper or passed on to the final customer in the form of an increase in the price of the transported goods, this will not significantly impact the transport operator. If the shipper is not ready to pay a higher price, however, the costs will be passed on to the road transport operator, effectively increasing their operation costs and reducing their profit margin.

Changes in fuel tax expenditures for businesses are projected in all policy options (see Table 15). As explained above, the higher uptake of new ZEV by large companies and second-hand ZEV, mostly by SMEs, are expected to result in fuel costs savings and a reduction in the fuel tax expenditures (EUR 17.8 to 34.6 billion in PO1 and EUR 26.5 to 47.8 billion in PO2). At the same time, the increase in the new conventional vehicles by SMEs in the short to medium term in PO1A, PO1B and PO1C and for cars and vans in PO2A, PO2B and PO2C is projected to result in some higher fuel costs and an increase in the fuel tax expenditures (EUR 9.7 to 14.3 billion in PO1 and EUR 5.4 to 6.8 billion in PO2)[148].

Net benefits/costs for businesses. PO1A, PO1B and PO1C are expected to result in net benefits for businesses in the scope. The highest benefits are estimated for PO1C (EUR 38.7 billion), followed by PO1B (EUR 26.3 billion) and PO1A (EUR 16.4 billion), expressed as present value over 2029-2050. On the other hand, PO2A, PO2B and PO2C are expected to result in net costs (EUR 26.1 billion in PO2A, EUR 18.4 billion in PO2B and EUR 8.6 billion in PO2C), mainly due to the administrative costs.

Other impacts on vehicle manufacturers. Vehicle manufacturers are not directly impacted by PO1. While they are not directly targeted under PO2 either, they are among the large companies included in its scope, as vehicle manufacturers also command significant volumes of shipped goods. As such they are subject to the targets and impacted in a similar way to other large companies. At the same time, all options will provide indirect benefits to vehicle manufacturers. In order to comply with the emission reduction targets set in the CO_2 emission performance standards for light- and heavy-duty vehicles, manufacturers need to ensure that a certain share of the new vehicles they register every year is zero-emission. By ensuring a minimum level of demand for such vehicles from the corporate sector, all options will reduce individual manufacturers' risk of not meeting their targets, while at the same time creating greater certainty and better conditions for investment in ZEV manufacturing capacity. This is particularly relevant for manufacturers of lorries, which have to meet ambitious CO_2 standards for heavy-duty vehicles in 2030, but where the market is less mature compared to cars and also vans. While vehicle manufacturers will benefit from improved demand for corporate ZEVs and greater certainty allowing better planning of investments in ZEV manufacturing capacity, EU vehicle manufacturers might miss part of these benefits as a result of competition from third country manufacturers. This risk is less pronounced on the market for lorries, where EU manufacturer have clearer advantages and higher market shares, while on the cars and vans market competition with third countries is stronger. In the car market, EU manufacturers have a comparatively stronger presence in the corporate than in the private market. Individual manufacturers will benefit differently depending on their respective market position and role in various segments of the automotive market, and how exposed they are to direct competition from third countries, but also how broad the presence of those competitors in different markets and how strong the brand loyalty of fleet managers. These differences are reflected in manufacturers' answers to the CfE and to the targeted stakeholder consultation.

Other impacts on businesses that are not directly targeted by the proposal. Other businesses that are not directly targeted by the proposal – either because they are not active in transport or because they are not

[148] The changes in fuel tax expenditures relative to the baseline are driven by changes in fuel costs. Excise duty rates and other tax incentives are kept unchanged relative to the baseline. This is because it is not possible to anticipate the type of measures that Member States would put in place under PO1 and for cars and vans under PO2.

within the scope of the policy options – will still be indirectly impacted by changes in the prices of goods transported by road resulting from the different options.

The policy options that do not set a mandatory target for individual companies (PO1A, PO1B, PO1C) are not expected to bring further impacts on services and goods, as individual companies will retain the ability to choose whether and how to switch to ZEV in accordance with their use case and business plan. Meeting the targets under these options will largely be done by companies with use cases where the TCO of ZEVs is competitive with that of conventional vehicles.

On the other hand, PO2A, PO2B and PO2C will require all large companies to ensure a minimum share of ZEV in the freight transport services performed on their behalf. This means that, in some cases, shippers will have to use or require their hauliers to use ZEVs even in use cases where their TCO is still higher than that of diesel lorries, leading to an overall increase in their logistics costs. The way these additional costs are distributed between the shippers, hauliers, and final customers will depend on the choices of individual shippers, as described above. This type of impact and its distribution among different actors cannot be adequately captured in modelling, but a recent market assessment estimated that shippers requiring hauliers to use ZEVs could face up to a 30% increase in their freight costs in the short term, which in turn would translate in a price increase of the transported products of up to 3%, unless large shippers at least partially absorbed the higher transport costs in their profit margin[149]. Given that all large shippers would be faced with the same increase in costs, however, their incentive to absorb the costs in their profit margin would be limited.

6.1.2. Impacts on citizens

None of the options are expected to have direct impacts on citizens, as they all target corporate vehicles purchased and used by legal entities. However, all options are projected to have indirect impacts on the market for private cars and vans[150] – both new and second-hand – and some of the options (PO2A, PO2B and PO2C) are also expected to have an indirect impact on the availability and price of services and goods that citizens rely on.

The market for new zero-emission private cars and vans, while not targeted by any of the options, will be indirectly impacted by all of them. Under all options, the demand for zero-emission cars and vans by large companies is expected to increase relative to the baseline. As explained in section 6.1.1, depending on how vehicle manufacturers respond to this increase in demand, different indirect impacts can be expected. The increased demand for ZEVs by large companies might lead to an increase in the total share of ZEVs in new registrations. Alternatively, vehicle manufacturers might keep the total share of ZEV unchanged relative to the baseline, by reducing the offer of ZEVs in new registrations by citizens (and SMEs). In this latter case, this might result in an increase of fuel and other operation costs compared to the baseline, because of the higher share of new conventional vehicles bought by citizens relative to the baseline. These costs may be lower if vehicle manufacturers decided to increase the overall share of ZEVs in their new registration. In the assessment of the options, it is conservatively assumed that manufacturers do not exceed their emission reduction targets relative to the baseline and in the short to medium term citizens favour new conventional vehicles to new ZEV. This results in lower capital costs and higher fuel costs, other operation costs and fuel tax expenditures relative to the baseline for citizens purchasing new vehicles; these impacts are more likely to affect citizens from higher income groups, as they generally have a higher share of new cars[151].

---

[149] https://www.transportenvironment.org/articles/buying-electric-shippers-to-zero-emission-trucking

[150] Around 10% of the vans are owned by citizens according to the Dataforce database.

[151] Gautam, P.; Pode, G.; Pode, R.; Ayetor, G.K.; Diouf, B. Depreciation in the Electric Vehicle Transition: Sustainability of the Second-Hand Electric Vehicle Market. Vehicles 2024, 6, 2044–2074.

On the other hand, the different options are also expected to have impacts on the second-hand car market, on which many citizens[152] rely for the purchase of their cars. A faster increase in the share of ZEV in corporate fleets, and in particular in those with a fast turnover such as rental car fleets is expected to result in higher uptake of second-hand ZEV by citizens and fuel costs and other operation costs savings relative to the baseline, as well as a reduction in the fuel tax expenditures. Since lower income groups are more likely to purchase used cars compared to the population average[153], they are expected to proportionally benefit more from reduction in fuel expenditures coming from a higher availability of zero-emission used cars.

Citizens represent a significant share of car leasing and rental companies' clients. For both of these markets, the fuel costs are incurred by the client, while the vehicle's purchase cost and residual value only affect the vehicle owner. This means that an increase in the share of ZEVs offered on these markets will lead to benefits to citizens in terms of overall fuel cost savings when renting or leasing a vehicle, under all options. This is because ZEVs are more energy efficient than conventional vehicles. However, large rental and leasing companies would be faced with the increased purchase cost of new ZEV and with uncertainties about their residual value, and they are likely to pass through at least part of these costs to their clients, so that these fuel savings are likely to be at least partly offset by an increase in the leasing and rental prices.

Table 17 presents the one-off and recurrent costs and costs savings for citizens in the policy options, expressed as present value over 2029-2050 relative to the baseline[154]. The highest one-off and recurrent adjustment costs savings but also adjustment costs are projected in PO1C and PO2C (EUR 7 billion adjustment costs savings and EUR 10.3 billion adjustment costs), due to their higher level of ambition of the targets, followed by PO1B and PO2B (EUR 4 billion adjustment costs savings and EUR 7.8 billion adjustment costs), and PO1A and PO2A (EUR 2.2 billion adjustment costs savings and EUR 6 billion adjustment costs). This is also the case of changes in fuel tax expenditures, with PO1C and PO2C resulting in EUR 4.6 billion reduction and EUR 4.7 billion increase in fuel tax expenditures relative to the baseline[155].

All options result in **net costs for citizens**, with the lowest net costs in PO1C and PO2C (EUR 3.4 billion expressed as present value over 2029-2050), followed by PO1B/PO2B (EUR 6 billion) and PO1A/PO2A (EUR 6.9 billion).

Table 17: Recurrent and one-off costs and cost savings for citizens in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Adjustment costs	6.0	7.8	10.3	6.0	7.8	10.3
Capital costs	0.6	0.6	0.7	0.6	0.6	0.7
Fuel costs	2.8	3.3	3.6	2.8	3.3	3.6
Other operation costs	2.5	3.9	6.0	2.5	3.9	6.0

https://www.mdpi.com/2624-8921/6/4/101; Kris Vanherle (TML), Robert Vergeer (CE), "Data gathering and analysis to improve the understanding of 2nd hand car and LDV markets and implications for the cost effectiveness and social equity of LDV CO2 regulations", Final Report for DG CLIMA, 2 May 2016

[152] Across the four largest EU markets (France 26%, Germany 34%, Italy 37%, Spain 31%), new cars accounted on average for around one-third of total annual car sales over the last 15 years—implying the used market is roughly twice the size of the new market. European Commission JRC, *A review of the used car market in the European Union* (2025)

[153] Kris Vanherle (TML), Robert Vergeer (CE), "Data gathering and analysis to improve the understanding of 2nd hand car and LDV markets and implications for the cost effectiveness and social equity of LDV CO2 regulations", Final Report for DG CLIMA, 2 May 2016; Gautam, P.; Pode, G.; Pode, R.; Ayetor, G.K.; Diouf, B. Depreciation in the Electric Vehicle Transition: Sustainability of the Second-Hand Electric Vehicle Market. Vehicles 2024, 6, 2044–2074. https://www.mdpi.com/2624-8921/6/4/101

[154] The costs and costs savings for individual years are presented in Annex 4 (section 5) and those by Member State in Annex 4 (section 7).

[155] The changes in fuel tax expenditures relative to the baseline are driven by changes in fuel costs. Excise duty rates and other tax incentives are kept unchanged relative to the baseline.

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Increase in tax expenditures	3.8	4.3	4.7	3.8	4.3	4.7
Adjustment costs savings	2.2	4.0	7.0	2.2	4.0	7.0
Capital costs savings	1.7	2.4	3.1	1.7	2.4	3.1
Fuel costs savings	0.1	1.4	3.6	0.1	1.4	3.6
Other operation costs savings	0.3	0.3	0.2	0.3	0.3	0.2
Reduction in tax expenditures	0.6	2.1	4.6	0.6	2.1	4.6
Net benefits (+) or net costs (-)	**-6.9**	**-6.0**	**-3.4**	**-6.9**	**-6.0**	**-3.4**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 18: One-off costs and costs savings for citizens in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Adjustment costs (capital costs)	0.6	0.6	0.7	0.6	0.6	0.7
Adjustment costs savings (capital costs savings)	1.7	2.4	3.1	1.7	2.4	3.1
Net benefits (+) or net costs (-)	**1.1**	**1.8**	**2.5**	**1.1**	**1.8**	**2.5**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

It should however be noted that although citizens are expected to experience overall net costs, expressed as present value over 2029-2050 relative to the baseline, in the medium to longer term in PO1B/PO2B and PO1C/PO2C they actually experience net benefits, due to the higher ZEV uptake in the second-hand market. In addition, the net costs in the first years of implementation are very limited and estimated at up to EUR 4.8 per vehicle in PO1C/PO2C, up to EUR 4 per vehicle in PO1B/PO2B and up to EUR 3.1 per vehicle in PO1A/PO2A.

Table 19: Net benefits (+) or net costs (-) for citizens per vehicle in 2030, 2040 and 2050[156], relative to the baseline, in EUR (2023 prices)

	PO1A/PO2A			PO1B/PO2B			PO1C/PO2C		
	2030	2040	2050	2030	2040	2050	2030	2040	2050
Net benefits (+) or net costs (-)	-3.1	0.9	-0.4	-4.0	2.6	0.7	-4.8	5.5	2.0

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Citizens will also be affected by changes in the prices of goods transported by road, similar to other businesses as described in section 6.1.1 above. The actual impact will depend on how the additional costs are distributed between shippers, hauliers, and consumers, but as noted for small businesses, recent publications estimate that shippers' mandate as included in PO2A, PO2B and PO2C could translate into a price increase of the transported products unless large shippers at least partially absorb the higher transport costs in their profit margin[157]. These impacts are not expected for the other policy options (PO1A, PO1B, PO1C), as individual companies will retain the ability to switch to ZEV first in those use cases where their TCO is competitive with that of conventional vehicles.

6.1.3. Impacts on national public authorities

One-off and recurrent administrative costs for national public authorities. For PO1A, PO1B and PO1C monitoring and reporting on the targets will be ensured directly by the Member States, by extracting the relevant data from their vehicle registries and submitting it yearly to the Commission. This is also the case of cars and vans under PO2A, PO2B and PO2C. While Member States are already able to differentiate

[156] Net benefits/costs per vehicle are derived by dividing the total net benefits/costs for a specific year by the private vehicle stock in that specific year and policy option, drawing on the PRIMES-TREMOVE results.

[157] Transport and Environment estimates that this would amount to a price increase of up to 3% https://www.transportenvironment.org/articles/buying-electric-shippers-to-zero-emission-trucking

corporate from private vehicles in their registry, the exclusion of corporate vehicles registered by SMEs would require a one-off adaptation of Member States' registries.

One-off administrative costs for national public authorities in all policy options are derived assuming an effort of 0.2 full time equivalents per Member State for adapting the vehicle registers[158]. Considering 220 working days per year and 7.2 working hours per day on average[159], and using the tariff rate per hour by Member State for the ISCO 3 category (technicians and associate professionals) in 2023 prices[160], the total one-off costs for public authorities at EU level are estimated at EUR 0.23 million in 2029 in all policy options.

Recurrent administrative costs for national public authorities. In PO1A, PO1B and PO1C Member States are expected to spend 2 working days per year for extracting, validating, and submitting the data to the Commission/EEA. Considering 7.2 working hours per day on average and the tariff rate per hour by Member State for the ISCO 3 category (technicians and associate professionals), the recurrent administrative costs are estimated at EUR 10,350 per year at EU level. Expressed as present value over 2029-2050 they amount to EUR 0.17 million relative to the baseline.

In PO2A, PO2B and PO2C, for cars and vans the reporting is the same as in PO1. For lorries, public authorities will be required to compile reports from all large companies established on their territory and submit them yearly to the Commission. Around 3.5 hours would be needed to receive, quality-check and collate information from each one of the reporting companies. In addition, 3 working days would be needed per year to compile all information (for cars, vans and lorries), validate, and submit it to the Commission. The total recurrent administrative costs for reporting are estimated at EUR 6.09 million per year. Expressed as present value over 2029-2050 they amount to EUR 99.89 million relative to the baseline. Furthermore, monitoring enforcement will be performed based on sample verification of the correctness of companies' reporting. One percent of large companies is assumed to be checked per year on average and the check per company is assumed to take 2 working days, with total costs for monitoring enforcement estimated at EUR 0.25 million per year, or EUR 4.1 million expressed as present value over 2029-2050.

Total recurrent administrative costs for public authorities are thus estimated at EUR 10,350 per year at EU level for PO1A, PO1B and PO1C and at EUR 6.33 million per year in PO2A, PO2B and PO2C. Expressed as present value over 2029-2050 they are estimated at EUR 0.17 million in PO1A, PO1B and PO1C and at EUR 103.99 million for PO2A, PO2B and PO2C relative to the baseline.

Impacts on energy tax revenues for national public authorities. In the baseline scenario the energy tax revenues from cars, vans and lorries are projected to decrease from EUR 189.3 billion in 2029 to EUR 54.2 billion in 2050, driven by the higher uptake of ZEV over time. On one hand, due to the assumed shift from new ZEVs to new conventional vehicles in the short to medium term by citizens and SMEs, some additional tax revenues are expected relative to the baseline due to an increase in fossil fuel use (EUR 13.5 to 18.9 billion in PO1 and EUR 9.2 to 11.5 billion in PO2)[161]. This is however overcompensated in all policy options by losses in tax revenues (EUR 18.4 billion to 39.1 billion in PO1 and EUR 27.1 billion to 52.4 billion in PO2), due to the uptake of new ZEV by large companies (and SMEs in PO2A, PO2B and PO2C)

[158] This draws on the assumptions for adding new data to the vehicle register used in the impact assessment accompanying the revision of the Roadworthiness Package (SWD(2025) 96 final/2).

[159] Actual and usual hours of work - Statistics Explained - Eurostat

[160] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

[161] As explained above, in the assessment of the options it is conservatively assumed that manufacturers do not exceed their emission reduction targets relative to the baseline and in the short to medium term citizens and SMEs favour new conventional vehicles to new ZEV. This is expected to lead to some increase in the fossil fuel use and energy tax revenues relative to the baseline. However, in net terms, fossil fuel consumption reduces in all policy options relative to the baseline due to higher uptake of new ZEV by large companies (and SMEs in PO2A, PO2B and PO2C).

and the larger deployment of ZEV in the second-hand market, that results in fossil fuel savings. The impact is the highest in PO2C (EUR 52.4 billion) due to its high level of ambition and higher scope.

All policy options result in net costs for national public authorities (EUR 41 billion in PO2C, followed by PO2B with EUR 27.9 billion, PO1C with EUR 20.2 billion, PO2A with EUR 18.1 billion, PO1B with EUR 11.1 billion and PO1A with EUR 4.9 billion), expressed as present value over 2029-2050. It should however be noted that the net costs for national public authorities represent less than 0.02% of the projected EU GDP for 2030 and 2040 in the baseline, as shown in Annex 4 (section 7). This is similar for the entire time horizon.

Table 20: Recurrent and one-off costs and cost savings for national public authorities in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.00	0.00	0.00	0.104	0.104	0.104
For reporting	0.00	0.00	0.00	0.100	0.100	0.100
For monitoring enforcement				0.004	0.004	0.004
Losses in tax revenues	18.4	27.7	39.1	27.1	38.4	52.4
Additional tax revenues	13.5	16.6	18.9	9.2	10.6	11.5
Net benefits (+) or net costs (-)	**-4.9**	**-11.1**	**-20.2**	**-18.1**	**-27.9**	**-41.0**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 21: One-off costs for national public authorities in the policy options, expressed as present value over 2029-2050 relative to the baseline, in million EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.23	0.23	0.23	0.23	0.23	0.23

Source: Ricardo (2025), Support study

The recent examples of Belgium, Germany, Poland and Portugal have demonstrated the capacity of Member States to set up effective measures to incentivise demand for zero-emission vehicles. Because the national targets are modulated based on GDP per capita and the current share of ZEVs in new registrations, they will be set at the same level for Member States with similar starting conditions.

6.1.4. Impacts on the European Environment Agency

Under all options, Member States will be required to submit reports; these will be set in the framework of the central register for CO_2 standards for vehicles that is maintained by EEA. The EEA will face limited one-off and recurrent administrative costs to expand and manage the database under all options. In PO1A, PO1B and PO1C the one-off costs are estimated at EUR 25,000 in 2029 and the recurrent administrative costs at EUR 28,831 (0.25 full time equivalent at AD5 level) per year. Expressed as present value over 2029-2050, the recurrent costs are estimated at EUR 0.44 million and the total one-off and recurrent costs at EUR 0.47 million. In PO2A, PO2B and PO2C the one-off costs are estimated at EUR 50,000 in 2029 and the recurrent administrative costs at EUR 57,662 (0.5 full time equivalent at AD5 level) per year. Expressed as present value over 2029-2050, the recurrent costs are estimated at EUR 0.89 million and the total one-off and recurrent costs at EUR 0.94 million.

6.1.5. Impacts on competitiveness

The policy options have different impacts on the **cost competitiveness** of affected businesses. Overall, as shown in section 6.1.1, PO1A, PO1B and PO1C are expected to result in net benefits for businesses. The highest benefits are estimated for PO1C (EUR 38.7 billion), followed by PO1B (EUR 26.3 billion) and PO1A (EUR 16.4 billion), expressed as present value over 2029-2050. On the other hand, PO2A, PO2B and PO2C are expected to result in net costs (EUR 26.1 billion in PO2A, EUR 18.4 billion in PO2B and EUR 8.6 billion in PO2C), partly due to the administrative costs for reporting on the compliance with the targets (EUR 41.36 billion in PO2A and EUR 41.35 billion in PO2B and PO2C) that fall mostly on SMEs as sub-

contractors of large companies (EUR 32.13 billion in PO2A, PO2B and PO2C). Large businesses are expected to increase their cost competitiveness in all policy options as shown in Table 22, with the highest net benefits projected in PO1C (EUR 59.2 billion), followed by PO1B (EUR 45 billion) and PO2C (EUR 40.8 billion). In particular, those with diversified fleets and easier access to capital are better placed to absorb upfront investment costs and benefit from lower operation costs.

Under PO1A, PO1B and PO1C, the directly affected actors include large road transport operators and other large businesses owning vehicles. Companies already using or well positioned to use ZEVs are expected to become more competitive, due to improved framework conditions for using these vehicles. Lower fuel costs (e.g. particularly when it is possible to recharge in own depots with electricity from own photovoltaic or other forms of electricity generation) and other operation costs will strengthen the cost competitiveness of large companies despite the higher upfront cost for the ZEV purchase, as shown in Table 22.

While PO1 and PO2 do not differ in their effects on cars and vans, under PO2A, PO2B and PO2C the binding mandates for zero-emission lorry use in large companies' transport activities mean that a larger share of companies operating lorries would be required to buy and operate ZEVs even though their market and business model is not currently well-suited for their use[162]. All large companies would incur additional administrative costs for reporting on the use of zero-emission trucks. Lower fuel costs and other operation costs will strengthen the cost competitiveness of large companies despite the higher upfront cost for the ZEV purchase, as shown in the Table 22. However, the burden is expected to be shifted on sub-contractors – mostly SMEs. The impacts on SMEs are discussed in section 6.1.6.

Table 22: Recurrent and one-off costs and cost savings for large companies in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.0	0.0	0.0	9.2	9.2	9.2
Enforcement costs	0.0	0.0	0.0	0.004	0.004	0.004
Adjustment costs	8.3	11.9	15.6	6.5	8.5	11.7
Capital costs	6.4	9.3	12.4	1.9	3.7	5.6
Fuel costs	0.2	0.2	0.2	2.0	2.0	2.5
Other operation costs	1.7	2.3	3.0	2.5	2.7	3.6
Increase in tax expenditures	0.0	0.0	0.0	0.2	0.1	0.1
Adjustment costs savings	23.4	32.7	42.9	18.1	25.8	34.2
Capital costs savings	7.2	9.7	12.2	7.2	9.7	12.2
Fuel costs savings	9.2	12.9	17.3	7.8	11.5	15.8
Other operation costs savings	7.0	10.1	13.4	3.1	4.6	6.2
Reduction in tax expenditures	16.9	24.1	32.0	13.4	20.4	27.6
Net benefits (+) or net costs (-)	**32.0**	**45.0**	**59.2**	**15.6**	**28.4**	**40.8**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 23: One-off costs and cost savings for SMEs in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.0	0.0	0.0	0.06	0.06	0.06
Adjustment costs (capital costs)	6.4	9.3	12.4	1.9	3.7	5.6
Adjustment costs savings (capital costs savings)	7.2	9.7	12.2	7.2	9.7	12.2

[162] For example, some companies performing specialised transport such as some long-distance refrigerated transport or transport of chemicals, or primarily operating long-distance transport in specific remote areas where the recharging infrastructure coverage is not yet sufficient to meet their needs, or companies that are not yet able to secure the necessary grid connection for depot charging options that meet their operational requirements.

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Net benefits (+) or net costs (-)	**0.8**	**0.4**	**-0.2**	**5.2**	**6.0**	**6.6**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Policies boosting ZEV uptake have been a key driver for investments in zero-emission technologies. During 2017-2018, when ambitious policies for the uptake of electric vehicles were implemented in China, investments in e-mobility were reported to be seven times higher in China (EUR 21.7 billion) than in the EU (EUR 3.2 billion). In 2019, with the forthcoming CO_2 standards for 2020 at the time, the EU attracted large investments (around EUR 60 billion) in electric vehicles and batteries, nearly 20 times more than in 2017-2018 and 3.5 times more than in China[163]. Clear regulatory signals sent to the automotive industry have therefore proven to be crucial for delivering and boosting timely investment decisions in electric vehicles.

The automotive industry is expected to benefit in both PO1 and PO2. The competitiveness of the European automotive industry has weakened over the past decade, with business profitability dropping from 7.4% in 2017 to 5.1% in 2023[164]. Regaining competitiveness, especially in the highly dynamic segment of ZEVs, will require significant investments. This is particularly relevant in a context where the sector is undergoing rapid technological transformation and where global competition in ZEV markets is intensifying (already in 2025 every fourth vehicle worldwide sold was electric).The initiative provides greater certainty and facilitates planning of the necessary investments in ZEV production capacity, innovation, and supply chains strengthens the competitive position of EU automotive industry by increasing predictability and long-term demand visibility. A stronger and more predictable domestic market directly strengthens the international positioning of the EU automotive industry.

The initiative also improves the functioning of the internal market by fostering a more integrated EU-wide market for ZEVs. By accelerating ZEV uptake in corporate fleets, the initiative supports market scale effects, strengthens economies of scale in production and reduces market fragmentation arising from heterogenous national fleet electrification dynamics. This in turn improves cross-border market integration and reduces the risk that national markets develop at diverging speeds, thereby contributing to a more level playing field among manufacturers and operators across Member States.

In addition, the initiative contributes to technological diffusion and learning effects. Wider deployment of ZEVs in corporate fleets and their subsequent entry into the second-hand market increases exposure to ZEV technologies across different regions and operational contexts. This in turn accelerates user acceptance, improves operational knowledge and supports innovation, especially in segments where the uptake of ZEVs remains low.

Furthermore, higher and more predictable corporate demand for ZEVs will help vehicle manufacturers achieve their CO_2 emission performance targets and improve capacity utilisation, while also providing greater investment certainty in ZEV production lines.

The international competitiveness of larger companies is expected to increase, as lower fuel costs and other operation costs over the lifetime of the ZEV fleet will impact positively the cost structure of the companies and free resources. Importantly, the increased competitiveness of automotive manufacturers due to a more predictable planning of the transition to ZEVs will also benefit their ability to better position themselves in competitive global markets for ZEVs.

[163] Impact Assessment accompanying the Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) 2019/631 as regards strengthening the CO2 emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition

[164] European automotive industry: What it takes to regain competitiveness, McKinsey, 10 March 2025.

6.1.6. Impacts on small and medium enterprises (SMEs)

The SME check has been performed and is presented in Annex 6. SMEs are not directly affected by PO1. However, assuming that vehicle manufacturers maintain the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards, the increased demand for new ZEVs by large companies will reduce the availability of new ZEVs for SMEs. This in turn would result in lower capital costs and higher fuel and other operation costs in the short to medium term compared to the baseline, due to the higher share of new conventional vehicles bought by SMEs (which have higher fuel costs per kilometre). Actual costs may be lower if vehicle manufacturers voluntarily increase the overall share of ZEVs in their new registrations. At the same time, the faster increase in the share of ZEVs in corporate fleets, particularly in fleets with high turnover such as rental car fleets, is expected to accelerate the uptake of second-hand ZEV for SMEs. This would lead to fuel costs and other operation costs savings for SMEs relative to the baseline. Overall, PO1A would result in net costs of EUR 15.6 billion expressed as present value over 2029-2050, PO1B to net costs of EUR 18.7 billion and PO1C to net costs of EUR 20.5 billion.

In PO2, the targets for shippers will indirectly affect SMEs, which represent the majority of operators providing freight transport services to large companies. To comply with the targets, shippers will require their sub-contractors to provide a share of their services using ZEVs. SMEs providing freight transport services to large companies will therefore face higher capital costs, which may pose serious barrier in terms of access to finance, alongside reductions in fuel and operational costs. In addition, due to the need to monitor and report activity in tonne-km for individual vehicles with sub-contracting arrangements, affected SMEs would face substantial administrative costs, estimated at EUR 32.1 billion in present value over 2029-2050. Overall, PO2 is expected to result in significantly higher net costs than PO1 (EUR 41.7 billion in PO2A, EUR 46.8 billion in PO2B and EUR 49.4 billion in PO2C, expressed as present value over 2029-2050 relative to the baseline).

Table 24: Recurrent and one-off costs and cost savings for SMEs in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Administrative costs	0.0	0.0	0.0	32.1	32.1	32.1
Adjustment costs	16.1	20.9	25.2	30.1	39.4	50.0
Capital costs	1.0	1.0	1.0	20.6	27.4	36.3
Fuel costs	9.7	12.2	14.3	7.8	9.6	10.6
Other operation costs	5.4	7.7	9.9	1.8	2.4	3.1
Increase in tax expenditures	9.7	12.2	14.3	5.2	6.2	6.8
Adjustment costs savings	9.5	12.9	16.3	12.6	15.1	19.2
Capital costs savings	7.1	9.9	12.2	1.6	2.1	2.7
Fuel costs savings	1.3	1.9	2.6	5.6	6.7	8.2
Other operation costs savings	1.0	1.2	1.5	5.5	6.3	8.4
Reduction in tax expenditures	0.8	1.5	2.6	13.1	15.9	20.2
Net benefits (+) or net costs (-)	**-15.6**	**-18.7**	**-20.5**	**-41.7**	**-46.8**	**-49.4**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 25: One-off costs and cost savings for SMEs in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Adjustment costs (capital costs)	1.0	1.0	1.0	20.6	27.4	36.3
Adjustment costs savings (capital costs savings)	7.1	9.9	12.2	1.6	2.1	2.7

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Net benefits (+) or net costs (-)	**6.1**	**8.9**	**11.2**	**-19.0**	**-25.3**	**-33.6**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

It should however be noted that although SMEs are expected to experience overall net costs, expressed as present value over 2029-2050 relative to the baseline, in the medium to longer term in PO1B/PO2B and PO1C/PO2C they are projected to experience net benefits, due to the higher ZEV uptake in the second-hand market. In addition, the net costs are estimated at up to EUR 83.8 per vehicle per year in PO2C, up to EUR 73.7 per vehicle per year in PO2B and up to EUR 63.1 per vehicle per year in PO2A. For PO1A, PO1B and PO1C the costs per vehicle are projected to be lower (up to EUR 21.1 in PO1A, EUR 29.6 in PO1B and EUR 38.5 in PO1C per vehicle per year).

Table 26: Net benefits (+) or net costs (-) for SMEs per vehicle in 2030, 2040 and 2050[165], relative to the baseline, in EUR (2023 prices)

	PO1A			PO1B			PO1C		
	2030	**2040**	**2050**	**2030**	**2040**	**2050**	**2030**	**2040**	**2050**
Net benefits (+) or net costs (-)	-21.1	-3.0	3.7	-29.6	1.9	3.4	-38.5	9.9	3.7
	PO2A			**PO2B**			**PO2C**		
	2030	**2040**	**2050**	**2030**	**2040**	**2050**	**2030**	**2040**	**2050**
Net benefits (+) or net costs (-)	-63.1	-32.3	-10.1	-73.7	-30.5	-7.8	-83.8	-24.7	-3.6

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

6.1.7. Impact on the functioning of the internal market and competition

Impacts on the functioning of the internal market and competition have been assessed qualitatively. The policy options are expected to have a positive impact on the functioning of the internal market. All policy options contribute to a positive development of EU corporate fleet markets, by increasing the spread of ZEVs across all markets, including second-hand markets, and by creating an environment that supports the implementation of transition strategies of EU automotive manufacturers. The faster uptake of ZEV in second-hand markets (see Table 12 in section 6.1.1) is expected to improve the functioning of the internal market by increasing the availability of affordable second-hand vehicles to citizens and SMEs across the Union. The positive impacts on the second-hand market are expected to be the highest in PO2C (1.6 million additional ZEV on average per year over 2031-2050 relative to the baseline), followed by PO1C (1.4 million ZEV), PO2B (1.2 million ZEV) and PO1B (1.1 million), while PO1A and PO2A result in lower uptake (721,000 in PO1A and 819,000 in PO2A). The targets are also expected to support achieving the objectives of other existing instruments under the transport acquis, such as road charging and the exemption for ZEVs under the revised Eurovignette Directive, thereby enhancing the coherence of the internal transport market. In addition, any national support measures for the implementation of the policy options will be assessed under the State aid rules, if applicable (e.g. the General Block Exemption Regulation or the Climate, Energy and Environmental Aid Guidelines).

All policy options are expected to create a better level playing field and competition among large companies, facilitated by the requirement for all Member States to establish improved enabling conditions for the uptake of zero-emission corporate vehicles.

6.1.8. Impacts on innovation and technological development

All options will have a positive impact on innovation and technological development. By stimulating the

[165] Net benefits/costs per vehicle are derived by dividing the total net benefits/costs for a specific year by the vehicle stock owned by SMEs in that specific year and policy option, drawing on the PRIMES-TREMOVE results.

deployment of zero-emission technologies in new corporate vehicle registrations, they create long-term demand certainty and establish a more stable environment for vehicle manufacturers to invest in ZEV innovation and technological development. While innovation in technologies for road transport vehicles is primarily driven by the CO_2 emission performance standards, the options will play a supporting role by stimulating demand in specific corporate fleets use cases and by incentivising the deployment of ZEV models suited to their operational requirements. The wider deployment of ZEVs in the second-hand vehicle markets is also expected to increase their visibility in markets with currently low market penetration rates and to enhance understanding of ZEV use across a broader range of operational contexts. This broader exposure is likely to provide additional impetus for technological development, particularly in the case of lorries. The positive impacts on innovation and technological development are expected to be highest in PO1C and PO2C, due to the highest impacts on the ZEV corporate fleets and second-hand market, followed by PO1B and PO2B, and PO1A and PO2A.

6.1.9. Territorial impacts

There is no inherent bias (positive or negative) of the proposed options towards specific regions or territories of the EU. Differences in economic capacity and ZEV market readiness and maturity across Member States are addressed through the modulation of the national targets for cars and vans under PO1 and PO2. Targets for lorries under both PO1 and PO2 are uniform across Member State. This prevents potential unintended territorial impacts, where different targets might create incentives to register a vehicle used for cross-border freight transport in a different Member State for avoidance purposes. The shares of different types of corporate fleets – as well as the share of private and corporate cars – vary across Member States, typically due to differences in national fiscal measures, which may lead to some differences in scope and impacts across Member States. Due to the structure of the cross-border second-hand vehicle market, the faster availability of ZEVs on the second-hand market is expected to bring slightly higher benefits to Eastern and Southern Member States under all options, with the highest positive impacts in PO1C and PO2C (due to the higher positive impact on the ZEV second-hand market), followed by PO1B and PO2B, and PO1A and PO2A.

6.1.10. Digital by default

All policy options are expected to have a positive impact on the application of the 'digital by default' principle, as the reporting activities by Member States will be facilitated through the extension of the central register on CO2 standards for vehicles, maintained by European Environment Agency.

6.2. Social impacts

This section describes the impacts on health, employment and fundamental rights.

6.2.1. Impacts on health

All options are expected to have positive impacts on the health of the citizens, due to the decrease in air pollutant emissions (NOx and PM2.5) resulting from the replacement of conventional vehicles with zero-emission vehicles, thereby decreasing the health impacts of ambient air pollution. Noise emissions are also expected to slightly decrease, as a greater share of vehicle activity shifts to zero-emissions vehicles. Overall, the external costs savings related to air pollutant emissions and noise are estimated at EUR 1.9 billion in PO2C, followed by PO1C and PO2B (EUR 1.2 billion), PO1B (EUR 0.7 billion), PO2A (EUR 0.6 billion), and PO1A (EUR 0.3 billion) expressed as present value over 2029-2050 relative to the baseline (see Table 27).

Table 27: External costs savings of air pollution and noise emissions in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Air pollution emissions	0.2	0.5	0.8	0.2	0.5	1.0
Noise emissions	0.1	0.2	0.4	0.4	0.7	1.0
Air pollution and noise emissions	**0.3**	**0.7**	**1.2**	**0.6**	**1.2**	**1.9**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

6.2.2. Impacts on employment

None of the options are expected to have significant impacts on the level of employment. There is no measurable change in the level of activity performed by corporate vehicles and their operators; vehicle manufacturers are expected to balance the increased demand for ZEV in corporate fleets with a lower share in private registrations, so that the overall market share of ZEVs and conventional vehicles are not expected to change significantly, meaning that there are no measurable changes in the automotive supply chain deriving from any of the options. The business operation of corporate fleets is also not expected to change substantially under any of the options, so that no option will result in measurable changes in employment in the road transport sector either.

6.2.3. Impacts on fundamental rights

The policy options were assessed to determine if they have an impact on the fundamental rights and/or equal treatment of EU citizens. The starting point of the assessment of the fundamental rights is the Charter of Fundamental Rights of the European Union[166]. All policy options were assessed having regard to the relevant EU instrument and it was concluded that they maintain full respect for human and fundamental rights, and none will have any negative impact thereon.

6.3. Environmental impacts

The analysis of environmental impacts covers impacts on fossil fuel consumption, CO_2 emissions, air pollutant emissions and noise emissions.

Impacts on fossil fuel consumption. All options result in a decrease in the fossil fuel consumption with the highest impacts identified for PO2C due to the high ambition of the target and broader scope of this option. The decrease in the fossil fuel consumption is a consequence of the higher uptake of the ZEV in the fleet. In cumulative terms over 2029-2050, relative to the baseline, the fossil fuel consumption is expected to decrease by 3.4 to 14.6 million of tonnes of oil equivalent (Mtoe) in PO1 (3.4 Mtoe in PO1A, 8 Mtoe in PO1B and 14.6 Mtoe in PO1C) and by 15.8 to 35.3 Mtoe in PO2 (15.8 Mtoe in PO2A, 24.2 Mtoe in PO2B and 35.3 Mtoe in PO2C). The impacts for specific years are provided in Annex 4 (section 4).

Table 28: Cumulative impacts on fossil fuel consumption over 2029-2050 in the policy options relative to the baseline (in million tonnes of oil equivalent and % change to the baseline)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Fossil fuel (Mtoe)	-3.4	-8.0	-14.6	-15.8	-24.2	-35.3
% change to baseline	-0.2%	-0.4%	-0.8%	-0.9%	-1.3%	-1.9%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Impacts on CO_2 emissions, air pollutants and noise. All options are also expected to result in savings in CO_2 emissions and air pollutant emissions, as well as the external costs of noise emissions. PO2C shows the highest impact due to the higher uptake of ZEV in this option. In cumulative terms over 2029-2050, relative to the baseline, the CO_2 emissions savings are estimated at 10 to 43.4 million tonnes (Mt) in PO1 and at 48

[166] https://commission.europa.eu/aid-development-cooperation-fundamental-rights/your-rights-eu/eu-charter-fundamental-rights_en

to 107.1 Mt in PO2. For NOx, the cumulative savings over 2029-2050 are estimated at 15 to 40.2 thousand tonnes (kt) for PO1 and 20.5 to 63.3 kt for PO2. For particulate matter (PM2.5) emissions, the cumulative savings over 2029-2050 relative to the baseline are projected at 0.3 to 1.6 kt in PO1 and 0.6 to 2.4 kt in PO2. The impacts for specific years are provided in Annex 4 (section 4).

Table 29: Cumulative impacts on CO_2 emissions and air pollution emissions over 2029-2050 in the policy options relative to the baseline (in thousand tonnes and % change to the baseline)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
CO_2 emissions (kt)	-9,983.9	-23,693.1	-43,392.1	-47,999.2	-73,546.4	-107,105.5
% change to baseline	-0.2%	-0.4%	-0.8%	-0.9%	-1.3%	-1.9%
NOx emissions (kt)	-15.0	-25.0	-40.2	-20.5	-37.0	-63.3
% change to baseline	-0.2%	-0.3%	-0.6%	-0.3%	-0.5%	-0.9%
PM2.5 emissions (kt)	-0.3	-0.8	-1.6	-0.6	-1.3	-2.4
% change to baseline	-0.1%	-0.2%	-0.3%	-0.1%	-0.3%	-0.5%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

The savings in external costs of CO_2 emissions, for each policy option relative to the baseline, expressed as present value over 2029-2050, are estimated at EUR 1.6 to 6.8 billion in PO1 (EUR 1.6 billion in PO1A, EUR 3.7 billion in PO1B and EUR 6.8 billion in PO1C) and at EUR 7.8 to 16.9 billion in PO2 (EUR 7.8 billion in PO2A, EUR 11.7 billion in PO2B and EUR 16.9 billion in PO1C). The impacts for specific years are provided in Annex 4 (section 4).

Table 30: External costs savings of CO_2 emissions in the policy options, expressed as present value over 2029-2050 relative to the baseline, in billion EUR (2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
CO_2 emissions	1.6	3.7	6.8	7.8	11.7	16.9

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

For air pollution and noise emissions, the savings in external costs expressed as present value over 2029-2050 relative to the baseline, are provided in Table 27 and those for individual years in Annex 4 (section 4).

Regarding the impact on biodiversity, it is considered that the reduction of NOx emissions from road transport may also have positive impact on the health of ecosystems, due to their reduced indirect exposure related to chronic accumulation of nitrogen. This impact, while established in various studies and reviews[167], was however not analysed and quantified for this initiative since it is expected to be indirect and limited.

All policy options are consistent with the environmental objectives of the European Green Deal (though contributing to these objectives at varying degrees as outlined above) and the European Climate Law[168]. All policy options contribute towards Sustainable Development Goals SDG 3 and indirectly support SDG 3 'Ensure healthy lives and promote well-being for all at all ages'. No significant harm is expected on the environment in any of the policy options.

The table below provides a summary of the comparison of the options against the baseline scenario in terms of economic, social and environmental impacts. The following ranking symbols have been used: from '0' (no impact relative to the baseline), to '+' (more positive than the baseline) and '+++' (much more positive than the baseline), and from '-' (less positive than the baseline) to '---' (much less positive than the baseline).

[167] Ricardo (Ricardo-AEA), 2016. The ecological effects of air pollution from road transport: an updated review (NECR199)

[168] Regulation (EU) 2021/1119

Table 31: Summary of economic, social and environmental impacts of options relative to the baseline

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Economic impacts	+	++	+++	--	-	0/+
Businesses	++	++	+++	--	--	-
Net benefits (+) / net costs (-) for businesses (in EUR billion, expressed as present value over 2029-2050 relative to the baseline)	16.4	26.3	38.7	-26.1	-18.4	-8.6
Citizens	-	-	-	-	-	-
Net costs (-) for citizens (in EUR billion, expressed as present value over 2029-2050 relative to the baseline)	-6.9	-6.0	-3.4	-6.9	-6.0	-3.4
Net benefits (+) / net costs (-) for citizens (in EUR per vehicle, in 2030 and 2040 relative to the baseline)	*-3.1 (in 2030) 0.9 (in 2040)*	*-4.0 (in 2030) 2.6 (in 2040)*	*-4.8 (in 2030) 5.5 (in 2040)*	*-3.1 (in 2030) 0.9 (in 2040)*	*-4.0 (in 2030) 2.6 (in 2040)*	*-4.8 (in 2030) 5.5 (in 2040)*
National public authorities	-	-	--	--	--	---
Net costs (-) for national authorities (in EUR billion, expressed as present value over 2029-2050 relative to the baseline)	-4.9	-11.1	-20.2	-18.1	-27.9	-41.0
Net costs (-) for national authorities relative to the baseline (% of projected GDP in 2030 and 2040)	*-0.001% (in 2030) -0.002% (in 2040)*	*-0.002% (in 2030) -0.004% (in 2040)*	*-0.003% (in 2030) -0.01% (in 2040)*	*-0.001% (in 2030) -0.01% (in 2040)*	*-0.003% (in 2030) -0.01% (in 2040)*	*-0.005% (in 2030) -0.02% (in 2040)*
European Environmental Agency (EEA)	-/0	-/0	-/0	-/0	-/0	-/0
Net costs (-) for EEA (in EUR million, expressed as present value over 2029-2050 relative to the baseline)	-0.47	-0.47	-0.47	-0.94	-0.94	-0.94
Impacts on competitiveness	++	++	+++	--	--	-
SMEs	--	--	--	---	---	---
Net costs (-) for SMEs (in EUR billion, expressed as present value over 2029-2050 relative to the baseline)	-15.6	-18.7	-20.5	-41.7	-46.8	-49.4
Net benefits (+) / net costs (-) for SMEs (in EUR per vehicle, in 2030 and 2040 relative to the baseline)	*-21.1 (in 2030) -3.0 (in 2040)*	*-29.6 (in 2030) 1.9 (in 2040)*	*-38.5 (in 2030) 9.9 (in 2040)*	*-63.1 (in 2030) -32.3 (in 2040)*	*-73.7 (in 2030) -30.5 (in 2040)*	*-83.8 (in 2030) -24.7 (in 2040)*
Impacts on the functioning of the internal market and competition	+	++	+++	+	++	+++
Impacts on innovation and technological development	+	++	+++	+	++	+++
Territorial impacts	+	++	+++	+	++	+++
Digital by default	+	+	+	+	+	+
Social impacts	+	+	++	+	++	+++
Impacts on health	+	+	+	+	+	+
External costs savings related to air pollution and noise emissions (in EUR billion, expressed as present value over 2029-2050 relative to the baseline)	0.3	0.7	1.2	0.6	1.2	1.9
Impacts on employment	0	0	0	0	0	0
Impacts on fundamental rights	0	0	0	0	0	0
Environmental impacts	+	+	++	++	+++	+++
Fossil fuel savings (cumulative over 2029-2050 relative to the baseline, in million tonnes of oil equivalent)	3.4	8	14.6	15.8	24.2	35.3
CO_2 emissions savings (cumulative over 2029-2050 relative to the baseline, in million tonnes)	10	23.7	43.4	48	73.5	107.1
Air pollution emissions savings (cumulative over 2029-2050 relative to the baseline, in thousand tonnes)	15.0 (NOx) 0.3 (PM2.5)	25.0 (NOx) 0.8 (PM2.5)	40.2 (NOx) 1.6 (PM2.5)	20.5 (NOx) 0.6 (PM2.5)	37.0 (NOx) 1.3 (PM2.5)	63.3 (NOx) 2.4 (PM2.5)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Noise emissions (external costs savings expressed as present value over 2029-2050 relative to the baseline, in billion EUR)	0.1	0.2	0.4	0.4	0.7	1.0

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7. HOW DO THE OPTIONS COMPARE?

7.1. Effectiveness

The assessment of effectiveness looks at the extent to which the policy options meet the general and specific objectives (SO) of the intervention. Table 32 presents the link between the policy objectives and the assessment criteria.

Table 32: Link between objectives and assessment criteria

General objective	Specific objective	Assessment criteria
Support the decarbonisation of the road transport sector, while safeguarding the competitiveness of the EU automotive industry and ensuring a fair transition	SO1 – Stimulate the demand for ZEVs in the corporate segment	• Increase in the number of ZEV in the corporate segment
	SO2 – Reduce fossil fuels expenditures in the road transport sector	• Reduction in the fossil fuels used by cars, vans and lorries
	SO3 – Accelerate ZEV availability on the second-hand market	• Increase in the number of ZEV on the second-hand market

Concerning SO1 *(Stimulate the demand for ZEVs in the corporate segment)*, both PO1 and PO2 show an increase in the number of ZEV in the corporate segment, particularly in the time period 2030-2040 (see Table 34). PO2C and PO1C show the highest increase relative to the baseline (1.8 million additional ZEV in 2030 and 1.4 million in 2040 in PO2C; 1.7 million additional ZEV in 2030 and 1.1 million in 2040 in PO1C). PO2B and PO1B also significantly contribute towards SO1 (1.4 million additional ZEV in 2030 and 1 million in 2040 in PO2B; 1.4 million additional ZEV in 2030 and 0.8 million in 2040 in PO1B). The contribution of PO2A and PO1A towards SO1 is more limited (0.9 million additional ZEV in 2030 and 0.7 million in 2040 in PO2A; 0.9 million additional ZEV in 2030 and 0.6 million in 2040 in PO1A).

Concerning SO2 *(Reduce fossil fuels expenditures in the road transport sector)*, all policy options result in a reduction of the fossil fuels use in the road transport sector, with a greater contribution from lorries under PO2. PO2C and PO2B contribution towards SO2 is the highest (35.3 million tonnes of oil equivalent (Mtoe) saved in PO2C and 24.2 Mtoe saved in PO2B, cumulative over 2029-2050 relative to the baseline), followed by PO2A and PO1C (15.8 Mtoe saved in PO2A and 14.6 Mtoe saved in PO1C). PO1B and PO1A show a more limited contribution (8 Mtoe saved in PO1B and 3.4 Mtoe saved in PO1A).

All policy options are expected to contribute towards SO3 *(Accelerate ZEV availability on the second-hand market)* as the number of ZEVs in the second-hand market is projected to increase in all options relative to the baseline. PO2C and PO1C show the highest contribution towards SO3 (1.6 million additional zero-emission cars, vans and lorries on average per year over 2031-2050 relative to the baseline in PO2C and 1.4 million in PO1C), followed by PO2B and PO1B (1.2 million additional ZEV on average per year in PO2B and 1.1 million in PO1B). PO2A and PO1A also contribute towards SO3 (0.8 million additional ZEV on average per year in PO2A and 0.7 million in PO1A), although their contribution is more limited.

In addition, regarding the general objective, all policy options result in a reduction in the CO_2 emissions relative to the baseline as shown in section 6.3. By ensuring a consistent framework across the EU for the uptake of corporate ZEV and reducing the current fragmentation, they provide certainty and thus promote

the competitiveness of the EU automotive industry. Finally, they all promote a fairer transition by increasing the availability of second-hand ZEVs across the EU.

There is a trade-off between certainty and flexibility. Setting rigid targets for individual fleets or operators would result in the highest certainty, but it would not provide sufficient flexibility, and it would risk setting targets that cannot be met by certain operators with specific requirements and use cases. Setting national targets for Member States brings less certainty, but significantly more flexibility, compared to targets for individual entities. At the same time, this approach – while not bringing as much certainty as a stronger intervention with targets for individual fleets – still improves certainty and predictability compared to the current situation, where there is no mandatory target either at national or individual fleet level. Member States will set their own measures, but there will be certainty about the trajectory for the transition towards ZEVs in corporate fleets across each Member State.

It is acknowledged that as the national measures necessary to meet the targets for cars, vans and lorries in PO1 and for cars and vans in PO2 are not identified, and that it is presently unknown how effective they will be in reaching the targets, there is uncertainty regarding the level of effectiveness of both PO1 and PO2. The level of uncertainty is higher in PO1 than in PO2 because PO1 focuses on Member States targets for lorries while PO2 sets mandates on shippers.

7.2. Efficiency

Efficiency concerns the 'extent to which objectives can be achieved for a given cost (cost effectiveness)'. The estimates of costs and benefits are summarised in Table 33.

Table 33: Summary of costs and benefits of policy options - present value over 2029-2050 compared to the baseline (in billion EUR, 2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Businesses						
Administrative costs	0.00	0.00	0.00	41.36	41.35	41.35
Enforcement costs	0.00	0.00	0.00	0.004	0.004	0.004
Adjustment costs	24.5	32.7	40.8	36.6	47.9	61.7
Increase in tax expenditures	9.7	12.3	14.3	5.4	6.3	6.8
Adjustment costs savings	32.9	45.7	59.2	30.7	40.9	53.5
Reduction in tax expenditures	17.8	25.6	34.6	26.5	36.3	47.8
Citizens						
Adjustment costs	6.0	7.8	10.3	6.0	7.8	10.3
Increase in tax expenditures	3.8	4.3	4.7	3.8	4.3	4.7
Adjustment costs savings	2.2	4.0	7.0	2.2	4.0	7.0
Reduction in tax expenditures	0.6	2.1	4.6	0.6	2.1	4.6
National authorities						
Administrative costs	0.00	0.00	0.00	0.10	0.10	0.10
Losses in tax revenues	18.4	27.7	39.1	27.1	38.4	52.4
Additional tax revenues	13.5	16.6	18.9	9.2	10.6	11.5
European Environmental Agency						
Administrative costs	0.0005	0.0005	0.0005	0.0009	0.0009	0.0009
External costs savings						
External costs related to CO_2 emissions	1.6	3.7	6.8	7.8	11.7	16.9
External costs related to air pollution emissions	0.2	0.5	0.8	0.2	0.5	1.0
External costs related to noise emissions	0.1	0.2	0.4	0.4	0.7	1.0
Total costs	62.3	84.8	109.2	120.3	146.1	177.4
Total benefits	68.8	98.3	132.2	77.6	106.8	143.2
Net benefits (+) or net costs (-)	6.5	13.6	23.0	-42.7	-39.4	-34.2

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Benefits to costs ratio	1.10	1.16	1.21	0.65	0.73	0.81

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Total costs are projected to be the lowest in PO1A, estimated at EUR 62.3 billion expressed as present value over the period 2029-2050 compared to the baseline, followed by PO1B (EUR 84.8 billion), and PO1C (EUR 109.2 billion). The sub-options of option PO2 all present higher total costs: PO2A is projected to result in EUR 120.3 billion total costs, PO2B in EUR 146.1 billion, and PO2C in EUR 177.4 billion. Adjustment costs for businesses represent the main cost component in PO1A (39.2%), PO1B (38.6%), PO1C (37.4%), PO2B (32.8%) and PO2C (34.8%). Administrative costs for businesses represent the main cost component in PO2A (34.4%), followed by adjustment costs for businesses (30.4%). Administrative costs for businesses also represent a significant share of the total costs in PO2B (28.3%) and PO2C (23.3%). The large share of administrative costs for businesses in PO2A, PO2B, and PO2C is due to the need to monitor and report road freight transport activity performed on behalf of large companies, either by their own fleets or by sub-contractors.

Total benefits are estimated at EUR 68.8 billion for PO1A, EUR 98.3 billion for PO1B, EUR 132.2 billion for PO1C, EUR 77.6 billion for PO2A, EUR 106.8 billion for PO2B, and EUR 143.2 billion for PO2C, expressed as present value over the period 2029-2050 compared to the baseline. For all options, the main benefits come from adjustment cost savings for businesses (47.7% in PO1A, 46.5% in PO1B, 44.8% in PO1C, 39.6% in PO2A, 38.3% in PO2B and 37.3% in PO2C).

Overall, PO1A, PO1B, and PO1C result in **net benefits** compared to the baseline. PO1C shows the highest net benefits, estimated at EUR 23 billion expressed as present value over the period 2029-2050, followed by PO1B (EUR 13.6 billion) and PO1A (EUR 6.5 billion). PO1C also shows the highest benefits to costs ratio (1.21), followed by PO1B (1.16) and PO1A (1.10). All sub-options of PO2 result in **net costs**, with PO2A showing the highest net costs (EUR 42.7 billion), followed by PO2B (EUR 39.4 billion), and PO2C (EUR 34.2 billion). Thus, all sub-options of PO2 result in benefits to costs ratios lower than 1.

It should be acknowledged that as the national measures necessary to meet the targets for cars, vans and lorries in PO1 and for cars and vans in PO2 are not identified, there is uncertainty regarding the efficiency of both PO1 and PO2. In particular, as explained in section 6.1.1, the way the adjustment costs and costs savings are distributed among different operators within a Member State, and what potential further indirect impacts these might have, will depend on what national measures are put in place.

7.3. Coherence

Internal coherence assesses how the various elements of the proposed options are expected to work together to achieve the objectives. All policy options address the identified specific objectives and underlying problem drivers and ensure internal coherence. PO1 performs better in terms of internal coherence, as it covers all market segments of passenger cars, vans, and lorries in a consistent way and provides certainty to markets while allowing Member States sufficient flexibility to adjust the implementation of the targets to their particular circumstances and activate the most relevant national policy levers. On the other hand, PO2 introduces a different approach for lorries, which increases the certainty of the implementation pathway for shippers and hauliers but result in a slightly lower coherence across the road freight transport sector, as vans and lorries – which are often used together as part of large companies' logistics chains – are subject to substantially different measures.

External coherence concentrates on the compliance of the initiative with other EU instruments and relevant EU policies. This initiative has a direct link with the CO_2 emission performance standards for light- and heavy-duty vehicles. There are clear synergies and complementarities between all policy options assessed and the CO_2 emission performance standards for light- and heavy-duty vehicles. All policy options will facilitate the implementation of the CO_2 standards as they increase corporate demand for ZEV, in full

alignment with the scope and ambition of the CO_2 standards. Accelerated ZEV demand under any of the policy options will also help the implementation of the Alternative Fuels Infrastructure Regulation, as increased demand improves the profitability of recharging and refuelling stations. The proposed targets will also support the implementation of key provisions under other policy instruments aimed at decarbonising transport, such as the Eurovignette Directive with the possibility to exempt zero-emission lorries. There are also synergies between this initiative and the ETS2. On one hand, this initiative is expected to drive a higher uptake of zero-emission vehicles relative to the baseline from 2029, avoiding pressure on the carbon prices. On the other hand, the carbon price set by the ETS2 will provide a market incentive for investments in zero-emission mobility. Both co-legislators have introduced a postponement of ETS2 by one year, to 2028, in their respective positions on the 2040 climate target proposal, amending the European Climate Law. The clean corporate vehicles initiative is planned to be implemented starting in 2029 and the synergies between the two initiatives remain the same, even if the start of the ETS2 is postponed by one year. Even with one year delay for ETS2, Member States remain legally obliged to meet their binding 2030 targets under the Effort Sharing Regulation, ensuring that the EU stays on course to climate neutrality. Thus, all policy options are consistent with relevant EU legal instruments and contribute to EU policy priorities.

7.4. Subsidiarity and proportionality

Regarding subsidiarity, as explained in sections 3.2 and 3.3, EU action is justified since action at the national level alone would not lead to the stimulus required to accelerate the uptake of ZEVs in the corporate segment in support of the competitiveness of the EU automotive industry, and would not accelerate the ZEV availability on the second-hand market to the extent necessary to ensure a fair and just transition.

All policy options are assessed to be proportionate, as action at EU level is limited to what is necessary to support the decarbonisation of the EU road transport sector, while safeguarding the competitiveness of the EU automotive industry and ensuring a fair transition. PO1 leaves full flexibility for decisions by public authorities at national level as regards the necessary measures to spur the uptake of ZEV, while ensuring that the proposal's objectives are met[169]. By setting specific targets for large companies, PO2 goes however somewhat beyond what is strictly necessary to ensure that the relevant targets in the road freight transport segment are met because it leads to high administrative costs for businesses (EUR 41.4 billion expressed as present value over 2029-2050 relative to the baseline) for reporting compliance with the targets set.

Table 34 provides a summary of the comparison of the options against the baseline scenario in terms of effectiveness, efficiency, coherence, subsidiarity, and proportionality. The following ranking symbols have been used: from '+' (more effective/efficient/coherent/proportionate than the baseline) to '+++' (much more effective/efficient/coherent/proportionate than the baseline); from '-' less effective/efficient/coherent/ proportionate than the baseline) to '---' (much less effective/efficient/coherent/proportionate than the baseline).

[169] While complying with State aid rules, if applicable.

Table 34: Comparison of options in terms of effectiveness, efficiency, coherence, subsidiarity and proportionality relative to the baseline

Objective	Policy option					
	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Effectiveness	+	++	+++	+	++	+++
Specific Objective 1: Stimulate the demand for ZEVs in the corporate segment						
Increase in the number of ZEV in the corporate segment (increase in the stock of cars, vans and lorries relative to the baseline)	+ (0.9 million in 2030, 0.6 million in 2040 and 0.1 million in 2050)	++ (1.4 million in 2030, 0.8 million in 2040 and 0.2 million in 2050)	+++ (1.7 million in 2030, 1.1 million in 2040 and 0.2 million in 2050)	+ (0.9 million in 2030, 0.7 million in 2040 and 0.3 million in 2050)	++ (1.4 million in 2030, 1 million in 2040 and 0.4 million in 2050)	+++ (1.8 million in 2030, 1.4 million in 2040 and 0.5 million in 2050)
Specific Objective 2: Reduce fossil fuels expenditures in the road transport sector						
Reduction in the fossil fuels used by cars, vans and lorries (cumulative over 2029-2050 relative to the baseline, in millions of tonnes of oil equivalent)	+ (3.4 Mtoe)	+ (8 Mtoe)	++ (14.6 Mtoe)	++ (15.8 Mtoe)	+++ (24.2 Mtoe)	+++ (35.3 Mtoe)
Specific Objective 3: Accelerate ZEV availability on the second-hand market						
Increase in the number of ZEV on the second-hand market (average annual increase in the number of ZEV cars, vans and lorries over 2031-2050, relative to the baseline)	+ (0.7 million)	++ (1.1 million)	+++ (1.4 million)	+ (0.8 million)	++ (1.2 million)	+++ (1.6 million)
Efficiency	+	++	++	---	--	--
Coherence	++	++	++	+	+	+
Subsidiarity and proportionality	++	++	++	+	+	+

7.5. Sensitivity analysis

As the administrative costs for businesses represent the main cost component in PO2A (34.4% of the total costs) and a significant share of the total costs in PO2B (28.3%) and PO2C (23.3%), a sensitivity analysis has been performed in relation to these costs. In the base case, used in the efficiency table in section 7.2, for large companies it is assumed that one minute per lorry per working day is needed to report the type of vehicle and activity performed (i.e. tonne-km) for the lorries that they own, drawing on feedback from targeted interviews. In addition, for sub-contractors of large companies, based on interviews with industry representatives, 5 minutes per working day per lorry are assumed to be needed to report the type of vehicle and activity performed (i.e. tonne-km). The effort required per lorry per working day is estimated based on a series of targeted interviews, summarised in Annex 2. For the sensitivity analysis, two cases have been considered in addition to the base case:

- Low case 1, where the time required for reporting per lorry per working day is 50% lower than in the base case (i.e. for large companies, 0.5 minutes per lorry per working day for the lorries that they own; for sub-contractors of large companies, 2.5 minutes per lorry per working day);

- High case 1, where the time required for reporting per lorry per working day is 50% higher than in the base case (i.e. for large companies, 1.5 minutes per lorry per working day for the lorries that they own; for sub-contractors of large companies, 7.5 minutes per lorry per working day).

The table below presents the impacts on total benefits, total costs, net benefits and benefits to costs ratio by policy option in the base case, low case 1 and high case 2. It shows that this assumption has important impacts on the total costs of PO2 and no impact on the total benefits of PO2, and on the costs and benefits of PO1. The table shows that PO2 is expected to result in net costs under the two additional cases considered. It also shows that the ranking of the policy options is not expected to change in the low case 1 and high case 2 relative to the base case estimates.

Table 35: Summary of costs and benefits of the policy options in the base case, low case 1 and high case 2, expressed as present value over 2029-2050 compared to the baseline (in million EUR, in 2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Total benefits						
Base case	68.8	98.3	132.2	77.6	106.8	143.2
Low case 1	68.8	98.3	132.2	77.6	106.8	143.2
High case 2	68.8	98.3	132.2	77.6	106.8	143.2
Total costs						
Base case	62.3	84.8	109.2	120.3	146.1	177.4
Low case 1	62.3	84.8	109.2	100.2	126.0	157.3
High case 2	62.3	84.8	109.2	140.5	166.3	197.5
Net benefits (+) or net costs (-)						
Base case	6.5	13.6	23.0	-42.7	-39.4	-34.2
Low case 1	6.5	13.6	23.0	-22.6	-19.2	-14.1
High case 2	6.5	13.6	23.0	-62.8	-59.5	-54.3
Benefits to costs ratio						
Base case	1.10	1.16	1.21	0.65	0.73	0.81
Low case 1	1.10	1.16	1.21	0.77	0.85	0.91
High case 2	1.10	1.16	1.21	0.55	0.64	0.73

7.6. Assessment of the impacts of EU content requirements

In order to strengthen domestic industrial production, support decarbonisation in key industry sectors and also promote clean technology products, minimum EU content requirements in public procurement and public support schemes for energy intensive industries and certain products, including e.g. for steel and aluminium contained in vehicles produced in the EU, for batteries manufactured in the EU and for other key vehicle components, have been considered in this assessment. Since the transition to ZEVs in corporate fleets is subject to public financial support in Member States, there is a potential for using this form of public support to help support strengthening domestic value chains in the automotive sector. The role of EU content requirements for public procurement or public support schemes is therefore considered for the policy options under assessment.

Battery electric cars display greater dependence on third countries for any segment or component (inputs) compared to conventional cars. A JRC analysis[170] on the EU value content in the EU automotive production shows that while the European automotive industry primarily relies on EU manufactured input, the latter's share dropped from 92% in 2010 to 89% in 2022. In particular, the production of motor vehicles shows that 87% of the value of an EU-made conventional car comes from the EU, while this value is only 72% for battery electric vehicles[171]. The increased dependency on China in battery electric production compared to

[170] For this specific analysis, ICE includes mild hybrids. EV includes battery electric and plug-in hybrid electric vehicles.

[171] McKinsey & Company (2024). Europe's economic potential in the shift to electric vehicles.

conventional vehicles is particularly relevant. In the absence of EU content requirements, there is a risk that companies would buy a higher share of non-EU produced corporate vehicles.

An assessment has been performed to show the impact of applying EU content requirements to the new corporate ZEVs counted for meeting the targets under PO1 and PO2. More specifically, the EU content requirements considered in this assessment are the following:

- A minimum percentage of Made in EU steel (85% from adoption) and aluminium (70% from adoption) for vehicles in public procurement and subject to public support schemes placed on the EU market;
- Mandatory EU content requirements for batteries of at least four components from adoption (including the battery cell), increasing to 6 components from 2030 (including the battery management system (BMS) and the cathode active material (CAM));
- A minimum percentage of the value of the vehicle, other than battery, is manufactured in the EU (70% from adoption and 75% from 2030).

According to analysis performed by JRC with FIDELIO model, introducing EU content requirements for steel and aluminium in the automotive sector for public procurement and support schemes would lead to a 0.53% reduction of the EU automotive sector's gross value added for 2025-2030, relative to a baseline scenario without EU content requirements[172].

The impacts of including EU content requirements for batteries and other vehicle components under the different policy options have been calculated using the unit cost assumptions provided in Annex 4 (section 8), and applying them to the number of additional corporate ZEVs required to meet the targets under each option compared to the baseline.

Table 36 provides the estimated costs of applying EU content criteria to new zero-emission vehicles in corporate fleets, associated to the policy options, assuming 100% pass through of the costs to vehicle owners. It distinguishes between the costs associated to the battery requirements, presented as a range, and those related to other vehicle components.

The highest costs associated to the EU content requirements are projected in PO2C (EUR 5.5 to 8.6 billion expressed as present value over 2029-2050 relative to the baseline) and PO2B (EUR 5.4 to 8.3 billion), followed by PO2A (EUR 4.3 to 6.5 billion) and PO1C (EUR 3.1 to 5.5 billion). The higher costs in these options are due to the relatively higher number of ZEV in the scope and in PO2 also the higher number of lorries, that bear higher costs per vehicle associated to the requirements on batteries and other vehicle components. More details about the vehicles in scope, and costs estimates for specific years are provided in Annex 4 (section 8).

Table 36: Adjustment costs for businesses due to the EU content requirements, expressed as present value over 2029-2050 relative to the baseline (in billion EUR, 2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Costs related to vehicle components	0.9	1.2	1.5	2.6	3.3	3.3
Costs related to batteries - low estimates	0.9	1.3	1.6	1.7	2.1	2.2
Costs related to batteries - high estimates	2.2	3.1	3.9	3.9	5.1	5.3

[172] FIDELIO stands for Fully Interregional Dynamic Econometric Long-term Input-Output model. It is a dynamic general equilibrium model developed by the JRC that has been used to model the economic and competitiveness impacts of introducing local content requirements for steel and aluminium in the construction, machinery and automotive industries in the EU. For simulating the impacts of local content requirements for aluminium and steel, FIDELIO was used in combination with the FIGARO-E3 database (Cazcarro et al., 2025); a disaggregation of the Eurostat's global FIGARO input-output tables (Remond-Tiedrez and Rueda-Cantuche, 2019) that includes such materials explicitly represented.

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Total costs for businesses - low estimates	1.8	2.5	3.1	4.3	5.4	5.5
Total costs for businesses - high estimates	3.1	4.4	5.5	6.5	8.3	8.6

The summary of the total costs and benefits, including the adjustment costs for businesses (i.e. vehicle owners) due to the EU content requirements, are further compared with the central case, excluding EU content requirements. The analysis shows that even when considering the EU content requirements PO1A, PO1B and PO1C are expected to result in net benefits while PO2A, PO2B and PO2C in net costs, and the ranking of the policy options does not change.

Table 37: Summary of costs and benefits of policy options in the central case, Case 1 and Case 2 expressed as present value over 2029-2050 relative to the baseline (in billion EUR, 2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Central case – excluding EU content requirements						
Total costs	62.3	84.8	109.2	120.3	146.1	177.4
Total benefits	68.8	98.3	132.2	77.6	106.8	143.2
Net benefits (+) or net costs (-)	6.5	13.6	23.0	-42.7	-39.4	-34.2
Benefits to costs ratio	1.10	1.16	1.21	0.65	0.73	0.81
Case 1 – including EU content requirements (low estimates)						
Total costs	64.1	87.3	112.3	124.6	151.5	182.9
Total benefits	68.8	98.3	132.2	77.6	106.8	143.2
Net benefits (+) or net costs (-)	4.7	11.0	19.9	-47.0	-44.8	-39.7
Benefits to costs ratio	1.07	1.13	1.18	0.62	0.70	0.78
Case 2 – including EU content requirements (high estimates)						
Total costs	65.4	89.1	114.6	126.8	154.5	186.0
Total benefits	68.8	98.3	132.2	77.6	106.8	143.2
Net benefits (+) or net costs (-)	3.4	9.2	17.5	-49.2	-47.7	-42.8
Benefits to costs ratio	1.05	1.10	1.15	0.61	0.69	0.77

Overall, the EU content requirements are expected to contribute to the creation of a stable lead market for European steel and aluminium manufacturers, battery manufacturers and electric vehicle component manufacturers, enhancing their competitiveness and helping attract new investments in EU production capacity in those sectors. EU production of all key components of zero-emissions vehicles diversifies critical-mineral and component supply chains and thereby reduce strategic dependence on third-country production, and keeps know-how, and jobs in Europe. In this way, it would also help increase decarbonised and resilient industrial production in the EU manufacturing industry.

8. PREFERRED OPTION

8.1. Identification of the preferred policy options and stakeholder views

All the policy options address the problems identified, their drivers and the specific objectives. However, some options are more effective in achieving the specific and general objectives than others.

The analysis above identifies PO1 as the preferred policy option, as it is considered effective in reaching the policy objectives, it presents net benefits, and it avoids the risk of imposing significant administrative burdens.

PO1 also performs better in terms of subsidiarity and proportionality, as it allows Member States to set the measures that are best suited for the specific market conditions in their territory and enable markets to ramp-up ZEVs in corporate fleets in the most cost-efficient manner while avoiding the administrative cost of setting stringent targets on individual fleets. This policy option is fully coherent with other relevant legislation in the field, particularly the CO_2 standards for light and heavy-duty vehicles.

PO1 sets clear targets for the share of ZEVs in new registrations of corporate vehicles, as supported by NGOs, public authorities, mobility service providers, infrastructure providers, and vehicle manufacturers in the context of the CfE and of targeted stakeholders' consultation, while meeting the requirements of sufficient flexibility for individual operators and fleets expressed by transport operators, companies making use of transport services, and SMEs. By setting binding national targets but leaving flexibility to the Member States on what measures to put in place in order to meet them, this option mobilises the most relevant national policy levers and expectedly particularly those of fiscal and financial support, which have been consistently identified as the most effective by stakeholders. In particular, road hauliers, logistics companies, leasing and rental companies, SMEs, and their respective associations, generally expressed opposition to mandatory targets for individual fleets while highlighting the benefits of incentives and other fiscal and financial support measures. More details on stakeholder views are provided in Annex 2.

The preferred policy option is therefore PO1; the choice between PO1A, PO1B, and PO1C, which only differ in terms of level of ambition of the national targets, will require a political decision. This choice will have implications in terms of the overall costs and benefits for large companies, SMEs, citizens and national authorities. PO1A, PO1B and PO1C would all result in net economic, social, and environment benefits – albeit to varying degrees. The analysis shows that PO1C is the most effective in addressing the objectives, has the highest net benefits, shows the highest benefits to costs ratio and leads to the lowest indirect net costs for citizens among PO1A, PO1B and PO1C. It however also leads to the highest indirect net costs for SMEs and highest losses in tax revenues for national authorities. PO1B also shows relatively high effectiveness and similar benefits to costs ratio with PO1C, leads to somewhat lower indirect net costs for SMEs and lower losses in tax revenues for national authorities and only somewhat higher indirect net costs for citizens. Finally, PO1A has the lowest net benefits and benefits to costs ratio out of PO1A, PO1B and PO1C, but it is still effective in addressing the objectives, and comes with the lowest net costs for SMEs and lowest losses in tax revenues for national authorities while the net costs for citizens are relatively similar to those of PO1B.

Including EU content criteria would increase total costs but PO1A, PO1B and PO1C would still result in net benefits (EUR 3.4 to 4.7 billion in PO1A, EUR 9.2 to 11 billion in PO1B and EUR 17.5 to 19.9 billion in PO1C). Overall, the EU content requirements are expected to contribute to the creation of a stable lead market for European steel and aluminium manufacturers, battery manufacturers and electric vehicle component manufacturers, enhancing their competitiveness and helping attract new investments in EU production capacity in those sectors.

8.2. REFIT (simplification and improved efficiency)

While the initiative introduces a new obligation for Member States in the form of targets for the share of new ZEVs for large companies, the additional administrative burden for public authorities is kept to a minimum. The proposal builds on existing vehicle datasets and modalities that Member States already operate for vehicle registration and statistics, including business and fiscal statistics. While all Member States already have the necessary systems in place to identify new registrations of corporate vehicles, for distinguishing vehicle registered by SMEs or large companies in place, one-off administrative costs are expected. These are estimated at EUR 0.23 million at EU level. This would also allow to improve the ability of Member States to tailor policies to their national market without recurring to ad hoc data requests or bespoke reporting formats. In addition, recurrent administrative costs for reporting by the Member States the compliance with the targets are estimated at EUR 10,350 per year at EU level.

8.3. Application of the 'one in, one out' approach

PO1 is not expected to lead to additional administrative costs for businesses or citizens.

9. HOW WILL ACTUAL IMPACTS BE MONITORED AND EVALUATED?

The Commission services will monitor the implementation and effectiveness of this initiative through a number of actions and a set of core indicators that will measure progress towards achieving the objectives. Five years after the implementation date of the legislation, the Commission services should carry out an evaluation to verify to what extent the objectives of the initiative have been reached.

The monitoring of specific objective 1 (*Stimulate the demand for ZEVs in the corporate segment)* is straightforward. The Commission will monitor this objective based on the reporting of registration figures by Member States under this initiative, based on their vehicle registers.

The monitoring of specific objective 2 (*Reduce fossil fuels expenditures in the road transport sector*) will be done on the basis of Eurostat statistics regarding final energy consumption in road transport, which are well established and regularly reported.

For the monitoring of specific objective 3 *(Accelerate the ZEV availability on the second-hand market*), after the adoption of the legal instrument the Commission will initiate a specific study to analyse the progress per Member State. Results of this assessment will be made available through the Commission's European Alternative Fuels Observatory and hence enable a full access and comparability of the results of the assessment.

The list of indicators and data sources is presented in Annex 9.

ANNEX 1: PROCEDURAL INFORMATION

1. LEAD DG, DECIDE PLANNING/CWP REFERENCES

The lead DG is the Directorate General for Mobility and Transport DG MOVE, Unit B4: Sustainable and Intelligent Transport.

DECIDE reference number: PLAN/2025/477.

The 2020 Sustainable and Smart Mobility Strategy[30] announced the Commission's intention to propose **actions to boost the uptake of ZEV in corporate fleets**. The Commission Work Programme 2023[31] included a legislative or non-legislative initiative under item 9 in Annex I. Consequently, the Communication "Decarbonise Corporate Fleets"[34] was published on 5 March 2025, announcing the Commission's intention to present a **legislative proposal on greening corporate fleets** in the course of 2025 (reiterating a commitment included in the Clean Industrial Deal[33] of 26 February 2025).

2. ORGANISATION AND TIMING

The impact assessment accompanying this initiative started in 2025. The CfE was published on 25 July and remained open for feedback until 8 September 2025[173].

The impact assessment was coordinated by an Inter-Service Group (ISG). The Commission Services participating in the ISG were: the Secretariat-General, the Legal Service, DG for Budget, DG for Climate Action, DG for Communications Networks, Content and Technology, DG for Competition, DG for Economic and Financial Affairs, DG for Employment, Social Affairs & Inclusion, DG for Energy, DG for Environment, Eurostat, DG for Financial Stability, Financial Services and Capital Markets Union, DG for Internal Market, Industry, Entrepreneurship and SMEs, Joint Research Centre (JRC), DG for Justice and Consumers, DG for Regional and Urban Policy, DG for Research and Innovation, DG for Taxation and Customs Union, DG for Trade.

The Inter-Service Steering Group met 3 times: on 9 April 2025, 16 July 2025, and 24 October 2025. It was consulted throughout the different steps of the impact assessment process: notably on the draft CfE and on the draft Staff Working Document.

3. CONSULTATION OF THE RSB

The draft report was submitted to the RSB on 3 December 2025. The Board issued a positive opinion with reservations on 10 December 2025. The recommendations from the Board have been addressed in this final version of the impact assessment report as detailed in the table below.

Table 38: Modifications of the impact assessment report in response to RSB recommendations

RSB recommendations	Modifications to the impact assessment report
Main considerations	
(1) The report does not sufficiently assess the magnitude and persistence of the identified problems and their root causes in view of the	The magnitude and persistence of the identified problems and drivers has been further clarified and the section 5.1 on the dynamic baseline has been

[173] Clean corporate vehicles

RSB recommendations	Modifications to the impact assessment report
dynamic baseline of the existing climate legislation in force. The report is not clear on whether the competitiveness of the EU automotive sector is part of the problem.	reinforced, including explanations on the existing legislation in force and their dynamics over time.
(2) It is not explained how discretion of Member States to determine the specific measures for achieving the targets will address the fragmented support framework. The report does not sufficiently analyse the total cost of ownership of ZEVs including those related to the operational constraints; it is also not clear how the intervention proposes to tackle them.	Further explanations have been added in sections 2.1 and in section 5.2.3, including on the why the chosen measures for meeting the proposed targets address the identified problem driver of a fragmented support framework and the problem driver linked to operational constraints of zero emission vehicles.
(3) The analysis of expected costs and benefits is not sufficiently robust, in particular as the potentially significant costs linked to the different choices taken at national level are not established. In terms of analysis of expected impacts, the report lacks evidence regarding the improvement of competitiveness and improved functioning of the internal market.	Further explanations on the modelling of national measures and acknowledging the uncertainty have been added in section 6.1.1. Clarifications on the administrative costs have also been added in 6.1.1. The uncertainty regarding the costs and costs savings is highlighted in section 7.2 on efficiency and a sensitivity analysis has been performed on the administrative costs for businesses and added in section 7.5. Further analysis on competitiveness and the functioning of the internal market has been added in section 6.1.5 of the report.
Adjustment requirements	
(1) The report should be clearer on what the intervention is supposed to achieve in addition to the existing framework, which also includes the Effort Sharing Regulation (ESR). It should also better substantiate the statement that the identified problems are likely to persist under the dynamic baseline including EU climate targets, ETS2 and all climate measures already in place.	The relation between this initiative, ETS2 and the Effort Sharing Regulation has been explained in section 1.2. Section 2.3 has been amended to clarify that the problems are expected to subside over time. In addition, section 5.1 has been reinforce to explain how the problems identified are expected to develop over time, and a discussion related to the EU climate targets, ETS2 and other climate measures already in place has been included.
(2) The report should clarify whether the intervention does also aim to address problems related to the competitiveness of the EU automotive industry. If competitiveness of the EU automotive industry is added as a problem the report should analyse it, also considering the EU content requirements under the Industrial Accelerator Act in preparation. It should also consider whether the assumption holds that companies will buy primarily EU-produced ZEVs as company cars.	Sections 2 and 4.2 have been amended to explain that this is a targeted initiative and other initiatives under preparation, such as the Industrial Accelerator Act, are better placed for addressing the competitiveness of the European automotive industry. Further explanations have been added in section 7.6 related to the EU-produced ZEVs.

RSB recommendations	Modifications to the impact assessment report
(3) Regarding the underlying causes, the report should thoroughly analyse factors that may affect purchasing choices and the uptake of ZEVs, for example, purchase prices of ZEVs, relative depreciation of value, and operational constraints, including mileage and the availability of charging infrastructure. The report should better explain to what extent and how the problems are related to regulatory or market failures and to what extent the initiative could address the identified problems.	Sections 2.1 and 2.2 have been reinforced to better explain the problems and problem drivers identified. In Section 2.1 it is further explained that problem 2 is affected by a number of other factors addressed by other initiatives that are outside the scope and explains the specific aspects that are not sufficiently addressed by these other initiatives. Explanations are added on the extent the initiative could address the identified problems.
(4) The report should clarify how discretion of the Member States to choose measures for meeting the set targets will address the identified problem driver of a fragmented support framework. The report should also explain how the intervention addresses the identified problem driver linked to operational constraints of zero emission vehicles. The analysis of effectiveness of intervention needs to reflect that the national measures necessary to meeting targets are not identified, and that it is presently unknown how effective they will be in reaching the targets.	Further explanations have been added in sections 2.1 and in section 5.2.3, including on the why the chosen measures for meeting the proposed targets address the identified problem driver of a fragmented support framework and the problem driver linked to operational constraints of zero emission vehicles. An analysis of the uncertainty related to the effectiveness of the policy options has been added in section 7.1.
(5) Taking into account the improved problem definition, the report should analyse a broader range of options as the 2 options presented appear identical except for the target for lorries and explain how option 2 is realistic considering the high administrative and likely adjustment costs for SMEs.	A broader set of policy options has been assessed as explained in section 5.2.2 and Annex 7 but discarded. Section 5.2.2 has been reinforced to further explain the reason these options have been discarded. In addition, an explanation has been added in section 5.2.3 on the reasons for retaining option 2 for further analysis.
(6) The national targets should be presented in the main report and the costs of achieving them should be further analysed and explained. The report should explain the modelling of national measures for each policy option. Taking into account the diversity of actions that Member States might choose to comply with the target as well as the related potentially significant cost (divergences), the report should be clear on the robustness of the figures on costs and cost savings and consequently the benefit-cost ratios. The total cost of ownership and how it likely affects the actions and choices of the actors involved should be assessed in more detail. Considering the impact analysis is largely based on modelling, it should better factor in uncertainties.	The approach for modulating national targets has been added in the section 5.2.3 of the report. Further explanations on the modelling of national measures and acknowledging the uncertainty have been added in section 6.1.1. Clarifications on the administrative costs have also been added in 6.1.1. Costs per Member State are presented in Annex 4 (section 7) and an explanation on their magnitude has been added in the same section. Further explanations on the total costs of ownership have been added in section 6.1.1. The uncertainty regarding the costs and costs savings is highlighted in section 7.2 on efficiency and a sensitivity analysis has been performed on the administrative costs for businesses and added in section 7.5.
(7) The report should further clarify how it	Further analysis on competitiveness, improved

RSB recommendations	Modifications to the impact assessment report
assessed the impact on competitiveness, the improved level playing field and the functioning of the internal market.	level playing field and the functioning of the internal market has been added in section 6.1.5 of the report.
(8) In terms of coherence, the report should clarify how the intervention will interplay with the ETS2, ESR and Alternative Fuels Infrastructure Regulation and allocative efficiency.	Further explanations on coherence have been added in section 7.3.
(9) Stakeholder views should be presented systematically throughout the report in a detailed manner by stakeholder group, including where there are dissenting views and why.	A summary of different stakeholder groups' views in terms of (a) overall attitude towards the need to act and the ZEV transition in general, (b) ZEV mandates, and (c) vehicle tax/financial incentives has been added in section 5.2.3.

4. EVIDENCE, SOURCES AND QUALITY

The impact assessment is based on several sources, using both quantitative and qualitative data, collected from Member States and industry. This includes:

- A support study carried out by an external, independent consultant (Ricardo);
- The Commission's own knowledge in the area, based on continuous dialogue with both Member States and companies active in the sector;
- Stakeholder consultation activities (see Annex 2).

ANNEX 2: STAKEHOLDER CONSULTATION (SYNOPSIS REPORT)

In accordance with the Tool #54 (analysing data and informing policymaking) of the Better Regulation Toolbox, this synopsis report provides an overview of the consultation activities carried out in the context of this initiative.

This annex should only be regarded as an overview of the contributions received during the stakeholder consultation activities in the context of greening corporate fleets initiative and cannot be regarded as the official position of the Commission or of its services. Responses to the consultation activities reflect the views of participating stakeholders and cannot be considered as a representative sample of the views of the EU population.

Section 1 explains the stakeholder consultation strategy, providing an overview of the objective of the consultation activities and the various consultation activities carried out between 2024 and 2025. Section 2 describes the stakeholder mapping strategy, outlining the different groups and interests of the stakeholders, as well as their responsiveness to the consultation activities. Section 3 lists the limitations of the consultation strategy and its related activities. Finally, Section 4 summarises the outcome of the consultation activities, laying out stakeholder views on the identified problems, problem drivers and the proposed policy options.

1. STAKEHOLDER CONSULTATION STRATEGY

The main objective of the stakeholder consultation process was to collect information, data, evidence, and opinions of stakeholders on key issues related to this initiative. These included the state of play of the corporate fleet market, the challenges and possible areas of action, and best practice examples for accelerating the transition to zero-emissions. By considering the stakeholders' views, their practical experience and the data provided, the stakeholder consultation process improves the overall understanding of the issues at stake, thus leading to better quality and credibility of the initiative.

The stakeholder consultation strategy consisted of several activities carried out between 2024 and 2025. The data, evidence and opinions of stakeholders were collected via the following consultation activities:

A **Call for Evidence**[37] (CfE) was open between 25 July and 8 September 2025[174] on the Commission's centralised platform 'Have your say'. It aimed to collect information and views to support the preparation of the present impact assessment. The Commission received 483 responses from 25[175] EU Member States as well as the United Kingdom, United States, Norway, Switzerland, and Brazil. 7 of those were campaigns, and 476 were unique responses. Most answers came from Poland and Belgium, followed by Romania and Germany.

An **Open Public Consultation**[176] (OPC) was open from 6 February 2024 to 8 July 2024 on the Commission's centralised platform 'Have your say'. It allowed the collection of information and views on the state of play of the corporate fleet market and whether the current pace of zero-emission vehicles take-up in corporate fleets is sufficient in the broader context of the transition to zero-emission mobility, as well as aspects related to the overall affordability of zero-emission vehicles and competitiveness of EU market actors. In total, 268 participants responded to the OPC and 111 provided written contributions and position

[174] Clean corporate vehicles. The Call for evidence was published initially in English with all the other language translations published on 11 August 2025.
[175] MT and LU did not provide feedback.
[176] Greening corporate fleets

papers. Most respondents were from businesses and business associations (72%; 192), followed by NGOs (11%; 29), citizens (9%; 23) and public authorities (3%; 9). See the table below for more details on the responses.

Respondents came from 26 EU Member States, with no responses being recorded from Luxembourg. Most replies correspond to Belgium (17.5%; 47), followed by Germany (16%; 43), France (12%; 32), and the Netherlands (8%; 21), Italy (6.5%; 17) with all other Member States having 15 replies or less. There were also participants from non-EU countries, namely Norway (5), the UK (4), the United States (2), Colombia (1) and Switzerland (1). More details on the OPC results are available on the Commission's 'Have your Say'[177] website.

Table 39: OPC and CfE respondents by stakeholder category

Stakeholder category	OPC responses	CfE responses
Company/Business	118	179
Business association	74	156
Non-governmental organisation (NGO)	29	27
EU Citizen	23	96
Public authority	9	9
Other	5	6
Academic/research institution	3	1
Trade union	1	5
Environmental organisation	1	5
TOTAL	**268**	**483**

Targeted stakeholder interviews were carried out between July and October 2025. These served to collect factual information and contextual data on current business practices, operational use-cases, and available data on vehicles and operations from most affected stakeholders. This evidence supports the problem definition and helps to establish the baseline scenario for the impact assessment. 21 interviews were conducted, with 5 large logistics companies, 7 transport operators and associations (of which 5 representing primarily or exclusively SMEs), 5 vehicle leasing and rental companies and associations (3 representing leasing, 2 representing rental), 2 NGOs, 1 consumer organisation and 1 Original Equipment Manufacturer (OEM) association.

In addition to collecting stakeholders' views on the identified problems, different policy options, and their expected impacts, the targeted stakeholder interviews provided detailed information about the market structure and business practices in the different corporate fleet segments, which helped confirm available information from previous studies, and inform the modelling assumptions and analysis. These covered aspects such as: typical fleet composition, vehicle mileage and retention rates for different types of corporate fleets; use cases and operational requirements of different fleets; use of different vehicle types and interactions between own fleet and sub-contractors in the different parts of the logistics chains (e.g. pick up and delivery, line haul, specialised transport of goods); typical contractual arrangements and types of sub-contracting along the different steps of the logistics chains (e.g. long-term contracts and spot contracts, possibility of further sub-contracting, type of contractual requirements concerning type of vehicle and operations, monitoring reporting requirements), share and role of SMEs in different types of fleets and contractual arrangements.

[177] Greening corporate fleets

A Strategic dialogue took place on 17 July 2025. Counting 15 participating stakeholders, it allowed representatives from the automotive industry associations, fleet operators, ride-hailing platforms, component suppliers, leasing companies, and other relevant parties to discuss with representatives from the Commission and establish a common position on some aspects of the electrification of corporate fleets and the broader push towards decarbonisation of road transport. The dialogue emphasized the need for a mix of intelligent policy measures, fiscal incentives, infrastructure investment, and non-binding national targets, while expressing a general preference against binding legislative mandates for light-duty vehicles.

2. STAKEHOLDER GROUPS

The consultation activities listed above targeted a wide range of stakeholders who are concerned by the regulatory intervention into the corporate fleets market. The following classification of **major stakeholder groups** was identified to support the participation of respondents to the various consultation activities, and are referred to in the rest of the annex:

- **Public authorities.** Member States' ministries responsible for corporate fleets related policies in national governments. As such, they will be responsible for the overall implementation of this initiative.
- **Automotive Manufacturers and Suppliers.** Automotive manufacturers and suppliers are key contributors to the design, production, and supply of vehicles and their components. They play a significant role in advancing vehicle technology and promoting innovations such as electrification and decarbonisation. Their insights are crucial in shaping industry standards and ensuring that policies align with technological capabilities and market readiness.
- **Logistics and Mobility Service Operators:** Companies operating commercial transport and delivery fleets across various segments (e.g. freight, parcel, urban logistics), as well as providers of shared or on-demand mobility services. They are key potential users of corporate ZEV fleets and contribute directly to the demand-side uptake under this initiative.
- **Vehicle Rental and Leasing**. Companies offering vehicles to corporate and individual clients through rental or leasing contracts. They act as intermediaries in fleet management and renewal, and can significantly influence the pace and scale of ZEV integration in corporate fleets.
- **Mobility service operators.** Mobility service operators provide shared mobility solutions such as car-sharing, ride-hailing, and on-demand transport services. They manage dynamic fleets and play an important role in promoting the adoption of ZEV.
- **NGOs.** Non-governmental organizations provide advocacy and expertise on sustainable mobility and environmental issues. They contribute to policy discussions and help raise awareness by engaging with stakeholders and the broader public.

The table below summarises the participation of these groups in the various consultation activities as well as both EU and non-EU countries represented by the respondents. The category "others" includes those stakeholder groups who are only indirectly affected by the initiative or those who were less active in the consultation activities, i.e., NGOs, citizens, and academia/research institutes.

Table 40: Participation of main stakeholder groups in the consultation activities

Consultation activity	Public authorities	Automotive Manufacturers and Suppliers including organisations	Logistics and Mobility Service Operators	Vehicle Rental and Leasing	Others	Total	Geographical coverage
Call for Evidence (CfE)	10	44	97	43	282	483	AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI,

Consultation activity	Public authorities	Automotive Manufacturers and Suppliers including organisations	Logistics and Mobility Service Operators	Vehicle Rental and Leasing	Others	Total	Geographical coverage
							SK Non-EU: BR, CH, NO, UK, US
Open Public Consultation (OPC)	9	192			66	268	AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IE, IT, LV, LT, MT, NL, PL, PT, RO, SK, SI, ES, SE Non-EU: UK, US, NO, CO, CH
Strategic Dialogue	–	4	5	2	4	15	Global
Targeted interviews	–	1	12	5	3	21	Global (EU-level associations, multi-national organisations)

3. LIMITATIONS

There are several limitations to the stakeholder consultation process that warrant being mentioned:

- The initial stakeholder consultation phase (beginning with the OPC in 2024) took place in preparation of the Communication "Decarbonise Corporate Fleets" [178] and did not allow to collect **sufficient data on the direct and indirect costs** arising from a legislative initiative in this area. Therefore, complementary targeted consultation activities had to be carried out subsequently.
- The policy options under this initiative were refined after the OPC related to the Communication, and some meetings with stakeholders had taken place. Consequently, **some early consultations did not fully reflect the final policy design**. Nonetheless, a CfE was conducted to specifically support this legislative initiative, allowing stakeholders to share their views on the policy intervention logic and the nature of the possible policy options that could address the problems identified.
- There was a **high share of non-responses and uncertainty across many questions included in the OPC questionnaire**. There was a very high proportion of "no opinion" or non-responses, particularly on the questions related to heavy-duty vehicles and specific fleet types. This suggests significant uncertainty or lack of knowledge among stakeholders, reducing the depth of the collected views.
- There was a **low engagement on specific fleet categories**. The granularity of the OPC questionnaire (e.g. different fleet subtypes like large logistics vans or corporate coaches) was not matched by equally detailed input. Many specific fleet categories saw more than 60% of respondents either not answering or expressing no opinion, limiting the usefulness of disaggregated data.

[178] Greening corporate fleets

4. OUTCOME OF THE CONSULTATION ACTIVITIES

The following sections present a description of stakeholder views on the problems this initiative aims to address, on the problem drivers that have been identified, as well as on the policy options analysed in the context of this initiative.

A) Problems targeted by this initiative

i. The uptake of zero-emission vehicles in corporate fleets (cars, vans and lorries) is low

Stakeholders broadly agree that the uptake of ZEVs in corporate fleets remains too limited to align with the EU's climate and industrial policy goals. According to 49% of respondents to the OPC (131 out of 267 that responded to this question), increasing the share of ZEVs in the total number of vehicles registered in the EU, compared to what would result from the CO_2 emission performance standards alone, is *very relevant* or *relevant*.

When asked about the expected impacts of a faster shift towards ZEVs in corporate fleets, many respondents who replied to the question identified potential *very positive* or *positive* benefits in terms of emission savings (59%; 157) and decrease in price of new and second-hand ZEVs (48%; 112).

In the CfE, 72.3% of respondents (344 of 483) identified high upfront costs and uncertainty over total cost of ownership as major obstacles to the uptake of ZEVs in corporate fleets, while 54.4% of respondents (259 of 483) cited insufficient access to reliable public and depot charging infrastructure. Other barriers include the limited availability of suitable ZEV models for certain operational needs (38.7%; 184 respondents) and uncertainty over vehicle resale values (24.6%; 117 respondents) (especially SMEs, logistics operators, electric vehicles and alternative-fuels refuelling and charging infrastructure providers, logistics services companies, rental companies, road haulage operators, and passenger transport services). Around one-third of the CfE respondents highlighted fiscal measures as a key barrier, with many SMEs and fleet operators stressing that short-term or fragmented incentives undermine investment predictability. These challenges make corporate transition to ZEVs slow and uneven across market segments and Member States, reducing the pace at which cleaner vehicles are deployed.

In the targeted stakeholders interviews, this problem was highlighted particularly by NGOs, OEM and consumer organisations, but all other participants also recognised it. Targeted interviews also showed that some companies are already moving quicker towards ZEV than the overall market, but this is generally the case of few more tightly integrated companies, while those engaged in more distributed business are moving slower. At the same time, some of the logistics companies and transport associations expressed scepticism about the current operational and economic viability of using ZEV for some use cases. Leasing and rental companies associations noted the current uncertainty about ZEV residual values as one of the main barriers preventing a higher share of ZEVs in corporate fleets.

ii. The availability of affordable zero-emission vehicles is insufficient to ensure a fair transition

Stakeholders also emphasised that limited affordability and accessibility of ZEVs hinder a fair and inclusive transition. Many respondents highlighted that the higher purchase price of ZEVs, coupled with uncertain residual values and immature second-hand markets, keeps total ownership costs high particularly for SMEs and smaller operators.

In the 2024 OPC, up to 67% of respondents out of the 247 who answered the relevant questions for specific fleets indicated that cost-related factors - including purchase price, operational expenses, and total cost of ownership - are *very important* or *important* in determining fleet operators' willingness to include ZEVs in

their fleets, especially for goods operation fleets such as vans and lorries[179]. Some respondents to the CfE (5.6%; 27 of 483) expect that, as supply increases and remarketing becomes routine, entry prices and lease rates for second-hand ZEVs will decrease. However, most caution that without stronger policy support and market maturity, affordable options for citizens and small businesses will remain scarce. This situation risks widening disparities between large corporate fleets able to electrify early and smaller operators or households that depend on affordable used vehicles.

This problem was highlighted in particular by consumer and transport operators associations representing SMEs. Leasing companies and associations highlighted the option of second lease of vehicles as a possible solution to address uncertainties about ZEV residual value while providing more affordable leasing options.

B) Problem drivers

i. Fragmented support framework at national level for corporate ZEV

One of the main problem drivers contributing to the low uptake of zero-emission vehicles in corporate fleets is the fragmented and inconsistent support framework across Member States. National, regional, and local policies vary widely in scope and ambition, leading to regulatory uncertainty and limiting cross-border consistency. Moreover, the CO_2 standards for new light- and heavy-duty vehicles focus on the supply side (vehicle manufacturers), with no comparable EU-level legislation targeting the demand for ZEVs.

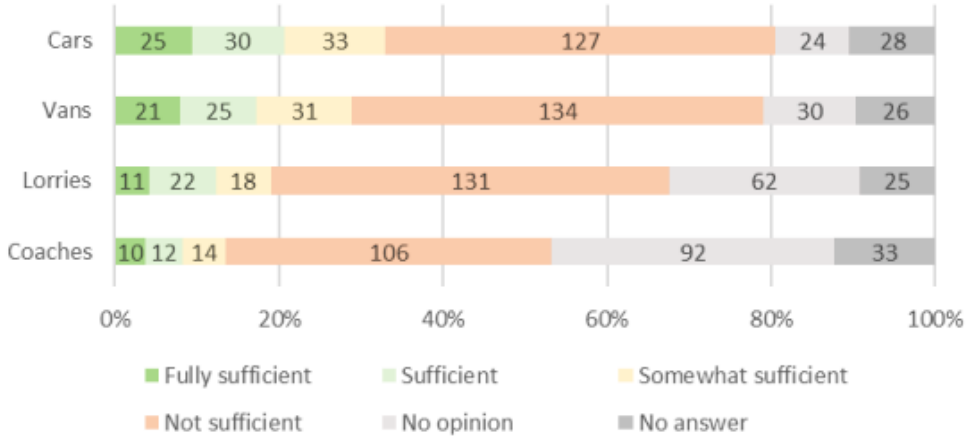
Out of the respondents to the CfE, 36.6% (174 of 483) reported that existing tax rules and incentives are either insufficient, inconsistent across Member States, or volatile, undermining business cases and long-term fleet planning.

These views were echoed in the responses to the OPC. Several stakeholders, including vehicle manufacturers and fleet operators, reported that national policy levers - such as fiscal and non-fiscal incentives supporting fleet purchase decisions - are unevenly applied and often underutilised in many Member States. This results in inconsistent demand signals for ZEVs, despite improvements in larger fleets and among leading companies.

As shown in Figure 3, around half of the 267 respondents to the OPC (47.6% for cars, 50% for vans, 49% for lorries, and 39.7% for coaches) indicated that the current share of ZEV registered by corporate entities is *not sufficient* to meet the European Green Deal targets. The share of respondents who did not answer or expressed no opinion was significantly higher for heavy-duty vehicles compared to light-duty vehicles, indicating greater uncertainty for these vehicle types and further highlighting the fragmented landscape.

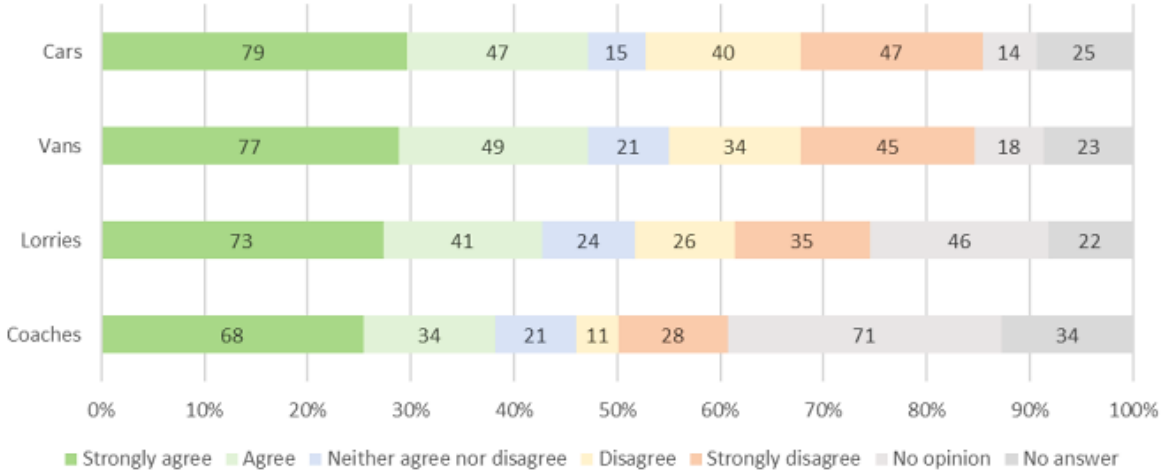
[179] Fiscal factors – including vehicle registration tax, annual vehicle tax and fiscal treatment of vehicles – were considered important by up to 65% of respondents, across nearly all fleets. The availability of infrastructure (both public and private in depots) was considered important by up to 60% of respondents.

Figure 3: Views on whether the share of zero-emission vehicles currently registered by corporate entities is sufficient to fulfil European Green Deal targets (267 OPC respondents)



As shown in Figure 4**Table 16**, when asked whether corporate vehicles should switch to zero-emission options faster than private vehicles, between 38% and 47% of respondents to the OPC (depending on the type of vehicle) *agreed* or *strongly agreed* with this statement. Between 15% and 33% of respondents *disagreed* or *strongly disagreed*. Notably, the share of respondents who did not answer or expressed no opinion was significantly higher for heavy-duty vehicles compared to light-duty vehicles.

Figure 4: Views on the need to switch faster towards zero-emission vehicles in corporate registrations than in private ones (267 OPC respondents)



Participants in the targeted stakeholders interviews also highlighted this issue; in particular, OEM, NGO and transport operators associations highlighted the need to ensure a positive TCO and better access to finance in order to allow an economically viable transition to ZEV in corporate fleets.

ii. High purchase costs and operational constraints of ZEVs compared to conventional vehicles

Corporate vehicles are typically driven more intensively and replaced more frequently than privately owned vehicles. As a result, economic and operational considerations weigh heavily on fleet managers' decisions. While the costs of ZEVs are decreasing, their higher upfront purchase prices remain a significant barrier, particularly in the absence of tailored financing solutions. This is especially true for SMEs, which often face limited access to financial products that could help cover initial investment costs.

A majority of respondents to the CfE (72.3%; 344 of 483) stated that ZEVs still have higher purchase prices and uncertain total cost of ownership (e.g., residual values, financing terms), especially in use cases with specific operational requirements. 8.7% of respondents to the CfE (26 of 483) mentioned that SMEs would be disproportionately affected by ZEV costs.

Operational constraints also play a role. The limited driving range of some ZEV models, charging availability, and specific operational requirements - such as high daily mileage or payload capacity - can limit the suitability of ZEVs for certain use cases, particularly for commercial and high-mileage fleets. Moreover, 38.7% of respondents to the CfE (184 of 483), mostly heavy- and medium-duty operators (e.g. coach), emphasise that current ZEV options for long-haul and demanding duty cycles remain limited or operationally challenging. For specific routes or high-payload missions, current ZEV range or weight trade-offs are challenging. Some also report model gaps or long delivery times for specific configurations.

These economic and operational barriers hinder a stronger uptake of ZEVs in corporate fleets and consequently delay the trickle-down of ZEVs to the second-hand market. This limits the availability of affordable clean vehicles for citizens and SMEs. In the absence of effective EU-level demand-side measures and clear market signals, these issues are likely to persist and will continue to undermine both the decarbonisation of transport fleets and the EU's broader climate and industrial policy objectives.

This problem driver was consistently highlighted by large logistics companies, transport operators and associations, and leasing and rental companies and associations in the context of the targeted stakeholder consultations. Logistics companies noted in particular barriers and delays in the availability of sufficient recharging options for their fleets, both at the depot and on the road; rental companies highlighted the operational constraints of recharging vehicles in a short time between rentals in peak season, as well as the higher purchase costs (which are not compensated by fuel and operational costs savings, as these benefit the clients rather than the rental company) and apparent low demand from customers; leasing companies and associations generally focused on the uncertainty about residual value rather than the purchase cost itself; transport operators noted both the high purchase costs and specific operational constraints, such as insufficient recharging infrastructure availability for taxi and ride-hailing vehicles.

C) Stakeholder positions on the proposed policy options

The following section summarises stakeholder inputs and views on several policy options aimed to address the problem drivers described in the previous section. The section focuses on three themes that emerged as critical from stakeholder responses: benefits of the policy options, impacts on the second-hand market, and monitoring and reporting.

1. Overall position towards policy options

45.4% of respondents to the CfE (216 of 483) emphasise that firm EU signals would strengthen European manufacturing and supply chains, support job creation, and sustain industrial leadership in zero-emission technologies. Among those expressing a clear position, financial-incentive-based options were broadly supported, while support for ZEV mandates was more limited. Opposition to mandates was particularly strong among leasing, rental, and haulage/logistics stakeholders, who cited residual-value risks, operational feasibility, and competitiveness concerns. Conversely, NGOs, public authorities, mobility service providers, infrastructure providers, and OEMs were generally supportive of ZEV mandates, particularly at the corporate level, which they considered as credible demand signals for accelerating fleet decarbonisation.

The analysis indicates that infrastructure providers and civil society representatives exhibited the highest share of support, albeit still below 50% within each group (44% and 38%, respectively). By contrast, final customers (mostly EU citizen) and rental associations expressed the highest share of critical views (71%). SMEs consistently highlighted risks associated with rigid mandates applied before sufficient supply and

charging availability, while expressing strong support for predictable and technology-neutral financial incentives.

During the targeted interviews, stakeholders repeated their positions on the broader options expressed as feedback on the CfE, but specifically NGOs were strongly favourable to the proposal, OEM and consumer associations were generally supportive with caveats. Opinions expressed by large logistics companies, transport operators and associations were mixed, with some opposing any initiative and others indicating support for some measures, with caveats such as requiring flexibility or avoiding stringent mandates. Leasing and rental companies and their associations generally expressed doubts about the need for an EU intervention and its potential impacts, mostly opposing the idea of mandates. Freight transport operators specifically expressed concerns about possible mandates on shippers, noting that they would not expect to be able to pass on the extra costs of switching to ZEV to the shippers.

2. Policy options: benefits, second-hand market, monitoring and reporting

i. Benefits of the policy options

Stakeholders widely acknowledged that the options could contribute to strengthening European manufacturing and supply chains, supporting jobs and demonstrating industrial leadership in zero-emission technologies. Most stakeholder groups highlighted that corporate fleets account for a significant share of new vehicle registrations and mileage, and therefore accelerated fleet electrification could generate meaningful reductions in transport-related CO_2 emissions. 40.3% of those that provided feedback to the CfE (192 of 483) see the proposed policy options as directly accelerating fleet decarbonisation and helping Member States meet climate goals. Civil society and urban passenger transport stakeholders also noted co-benefits in terms of air quality and noise reduction.

Some SME respondents indicated that well-designed options, including continued fiscal support, could soften investment costs and bring total cost of ownership closer to parity with conventional vehicles. Several also emphasised that clear policy direction could stimulate infrastructure deployment and give smaller fleets more certainty when planning fleet renewals.

ii. Impacts on the second-hand market

Several stakeholders expect that ZEV mandates would increase corporate fleet turnover and, in turn, release greater volumes of used ZEVs into the second-hand market.

10.5% of respondents to the CfE (50 of 483) expect that corporate ZEV targets will accelerate new-vehicle uptake and, after the first ownership cycle, release larger volumes of used electric vehicles into the market, expanding choice and buyer confidence. These effects were expected to broaden choice, improve confidence, and enable wider adoption among cost-sensitive buyers, notably SMEs and citizens. According to 26.1% of respondents to the CfE (124 of 483), faster new-vehicle uptake is expected to deepen used-market supply, stabilise residual values, and improve affordability for SMEs and citizens. Stakeholders also highlighted that greater market scale could lead to lower entry prices and leasing costs in the second-hand channel, and, over time, more stable residual values, particularly if battery health reporting and warranties become standardised.

However, many respondents, particularly rental and leasing companies, cautioned that the used-ZEV market remains immature in the short term. Limited availability and price volatility may persist until turnover accelerates and remarketing practices become routine. SMEs highlighted that extended lease durations and ‘second-life’ contracts further delay the entry of ZEVs into the second-hand market, which could undermine affordability and confidence among smaller operators. In targeted interviews, the same was confirmed by several stakeholders.

iii. Monitoring and reporting

Monitoring and reporting requirements arising from ZEV mandates at company level were highlighted as potential sources of administrative burden and cost. Stakeholders expressed concern regarding reporting frequency, system development, and ongoing submission costs. 16.2% of respondents to the CfE (77 of 483) anticipated additional paperwork and ongoing compliance overhead (collection, validation, submissions), warning that new requirements could be disproportionate to the policy gains if not carefully designed. SMEs emphasised that alignment with existing EU frameworks (e.g., CSRD/ESRS, AFIR, CO_2 standards, EU ETS2) and standardised reporting templates would be necessary to avoid duplication. Some CfE respondents (4.2%; 20) warned against burdensome reporting and changing rules and reporting burdens that add risk or cost. Phased implementation, use of digital tools, and proportionate verification rules were frequently cited as important to avoid disproportionate burdens for smaller operators.

ANNEX 3: WHO IS AFFECTED AND HOW?

1. PRACTICAL IMPLICATIONS OF THE INITIATIVE

The primary objective of the initiative is to support the decarbonisation of the road transport sector by accelerating the shift to zero-emission vehicles in corporate fleets, thereby reducing greenhouse gas emissions and air pollutant emissions, supporting the market uptake of zero-emission vehicles and safeguarding the competitiveness of the European automotive industry.

The costs and benefits of the preferred policy option are expected to fall on different stakeholder groups: businesses, citizens and national public authorities.

Businesses will mainly benefit from reduced fuel and other operation costs resulting from the higher share of ZEVs in their fleets in the case of large companies; the reduction in fuel consumption will also lead to lower fuel tax expenditures. Assuming vehicle manufacturers do not exceed the share of ZEV in new registrations required to meet their emission reduction targets under the CO_2 standards, SMEs will be indirectly affected by a lower availability of new ZEVs, deriving from the increased ZEV demand from large companies. A higher share of new conventional vehicles will lead to an increase in fuel and other operation costs for SMEs, which will be partly offset by reductions in fuel and other operation costs deriving from the higher uptake of ZEV in the second-hand market. Businesses will not incur direct additional administrative burdens, as reporting under the preferred policy option will be done by Member States based on the existing national vehicle registers.

Citizens are not directly affected by the preferred policy option, but they may be indirectly affected by the resulting evolution of the ZEVs in different market segments. Assuming vehicle manufacturers do not exceed the share of ZEV in new registrations required to meet their emission reduction targets under the CO_2 standards, the increased demand of zero-emission corporate vehicle will result in a lower number of new ZEVs available for citizens. As a result, citizens that purchase new vehicles will favour conventional vehicles, facing lower capital costs but higher fuel costs and fuel tax expenditures relative to the baseline. On the other hand, citizens that purchase second-hand vehicles will benefit from a higher uptake of second-hand ZEV relative to baseline, resulting in fuel and other operation costs savings. Citizens will also experience overall fuel cost savings when renting or leasing a vehicle, resulting from an increased share of ZEVs in leasing and rental markets; these are likely to be partially offset by increased leasing and rental prices as large rental and leasing companies may face higher purchase costs for new ZEVs and uncertainties about their residual values, which are likely to be partially passed on to their customers.

National public authorities will be able to monitor and report on their national targets by extracting relevant data from vehicle registers and submitting it annually to the Commission, which will entail limited one-off and recurrent administrative costs. Energy tax revenues collected by national public authorities will also be affected. The increased uptake of ZEV by large companies will result in a reduction of tax revenues relative to the baseline, due to the decrease in fossil fuel use. This will be partly offset by some additional tax revenues due to the shift from new ZEV to new conventional vehicles for citizens and SMEs. The faster deployment of ZEV in the second-hand market will also lead to additional fossil fuel savings and associated losses in tax revenues.

From a societal perspective, the initiative brings benefits in terms of reductions in greenhouse gas emissions, air pollutant emissions and noise emissions. These result both from the increase in new ZEVs in vehicle fleets with higher yearly mileage – leading to a higher reduction in real-world fuel consumption and emissions per vehicle – and from the faster availability of second-hand ZEVs, leaving to an overall increase of the share of ZEVs on the roads.

2. SUMMARY OF COSTS AND BENEFITS

2.1. PREFERRED OPTION (PO1A)

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1A)		
Description	***Amount***	***Comments***
Direct benefits		
Adjustment costs savings for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 23.4 billion	Adjustment costs savings due to an increase in the number of new ZEVs in corporate fleets by large companies. Adjustment cost savings for large companies are estimated at EUR 23.4 billion expressed as present value over 2029-2050, relative to the baseline.
Reduction in fuel tax expenditures for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 16.9 billion	Reduction in fuel tax expenditures due to the reduction in fossil fuel consumption resulting from the higher uptake of new ZEVs. The reduction in fuel tax expenditures for large companies is estimated at EUR 16.9 billion expressed as present value over 2029-2050, relative to the baseline.
Indirect benefits		
Adjustment costs savings for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 9.5 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by SMEs, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for SMEs are estimated at EUR 9.5 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 0.8 billion	Reduction in fuel tax expenditures for SMEs due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for SMEs is estimated at EUR 0.8 billion expressed as present value over 2029-2050 relative to the baseline.
Adjustment costs savings for citizens, expressed as present value over 2029-2050 relative to the baseline	EUR 2.2 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by citizens, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for citizens are estimated at EUR 2.2 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for citizens, expressed as present value over 2029-2050 relative to the baseline	EUR 0.6 billion	Reduction in fuel tax expenditures for citizens due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for citizens is estimated at EUR 0.6 billion expressed as present value over 2029-2050 relative to the baseline.
Additional fuel tax revenues for national public authorities, expressed as present value over 2029-2050 relative to the baseline	EUR 13.5 billion	Additional tax revenues for public authorities due to an increase in fossil fuel use, following the assumed shift from new ZEVs to new conventional vehicles in the short to medium term by citizens and SMEs. The additional tax revenues for public authorities are estimated at EUR 13.5 billion, expressed as present value over 2029-2050 relative to the baseline.

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1A)		
Description	***Amount***	***Comments***
Savings in external costs of CO_2 emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 1.6 billion	Indirect benefit to society at large. Savings in external costs of CO_2 emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of CO_2 emissions are estimated at EUR 1.6 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in CO_2 emissions (cumulative over 2029-2050 relative to the baseline)	10 million tonnes	Indirect benefit to society at large. The reduction in CO_2 emissions is estimated at 10 million tonnes, cumulatively over 2029-2050 relative to the baseline.
Savings in external costs of air pollution emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.2 billion	Indirect benefit to society at large. Savings in external costs of air pollution emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of air pollution emissions are estimated at EUR 0.2 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in air pollution emissions (cumulative over 2029-2050 relative to the baseline)	15 thousand tonnes of NOx and 0.3 thousand tonnes of PM2.5	Indirect benefit to society at large. Cumulatively over 2029-2050, the reduction in NOx and PM2.5 emissions is estimated at 15 thousand tonnes and 0.3 thousand tonnes, respectively (relative to the baseline).
Savings in external costs of noise emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.1 billion	Indirect benefit to society at large. Savings in external costs of noise emissions due to the higher uptake of ZEV. The savings in external costs of noise emissions are estimated at EUR 0.1 billion expressed as present value over 2029-2050 relative to the baseline.
Indirect benefits to vehicle manufacturers	Not quantified	Create greater certainty and better conditions for investment in ZEV manufacturing capacity, and reduce individual manufacturers' risk of not meeting their targets under CO_2 standards Regulations.

II. Overview of costs – Preferred option (PO1A)						
	Citizens/Consumers		**Businesses**		**Administrations**	
	One-off	**Recurrent**	**One-off**	**Recurrent**	**One-off**	**Recurrent**
Direct adjustment costs (expressed as present value over 2029-2050 relative to the baseline)	-	-	For large companies: EUR 6.4 billion (capital costs)	For large companies: EUR 1.9 billion (fuel costs and other operation costs)	-	-
Direct administrative costs (expressed as present value over 2029-2050 relative to the baseline)	-	-	-	-	For national administrations: EUR 0.23 million For EEA:	For national administrations: EUR 0.17 million For EEA: EUR 0.44

II. Overview of costs – Preferred option (PO1A)						
					EUR 25,000	million
Indirect costs (expressed as present value over 2029-2050 relative to the baseline)	For citizens: EUR 0.6 billion capital costs	For citizens: EUR 9.1 billion of which: - EUR 5.3 billion fuel costs and other operation costs - EUR 3.8 billion increase in fuel tax expenditures	For SMEs: EUR 1 billion capital costs	For SMEs: EUR 24.8 billion of which: - EUR 15.1 billion fuels costs and other operation costs - EUR 9.7 billion increase in fuel tax expenditures	-	For national administrations: EUR 18.4 billion losses in tax revenues

III. Application of the 'one in, one out' approach – Preferred option (PO1A)			
[M€]	**One-off** (annualised total net present value over the relevant period)	**Recurrent** (nominal values per year)	**Total**
Businesses			
New administrative burdens (INs)	-	-	-
Removed administrative burdens (OUTs)	-	-	-
Net administrative burdens	-	-	-
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For large companies: EUR 6.4 billion capital costs For SMEs (indirect costs): EUR 1 billion capital costs	For large companies: EUR 1.9 billion fuel costs and other operation costs For SMEs (indirect costs): EUR 24.8 billion of which: - EUR 15.1 billion fuels costs and other operation costs - EUR 9.7 billion increase in fuel tax expenditures	
Citizens			
New administrative burdens (INs)	-	-	-
Removed administrative burdens (OUTs)	-	-	-
Net administrative burdens	-	-	-

III. Application of the 'one in, one out' approach – Preferred option (PO1A)			
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For citizens (indirect costs): EUR 0.6 billion capital costs	For citizens (indirect costs): EUR 9.1 billion of which: - EUR 5.3 billion fuel costs and other operation costs - EUR 3.8 billion increase in fuel tax expenditures	
Total administrative burdens	-	-	-

Note: Adjustment costs and other indirect costs are reported for transparency but are not included in the calculation of the net administrative burden, in line with the 'one in, one out' approach.

2.2. PREFERRED OPTION (PO1B)

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1B)		
Description	***Amount***	***Comments***
Direct benefits		
Adjustment costs savings for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 32.7 billion	Adjustment costs savings due to an increase in the number of new ZEVs in corporate fleets by large companies. Adjustment cost savings for large companies are estimated at EUR 32.7 billion expressed as present value over 2029-2050, relative to the baseline.
Reduction in fuel tax expenditures for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 24.1 billion	Reduction in fuel tax expenditures due to the reduction in fossil fuel consumption resulting from the higher uptake of new ZEVs. The reduction in fuel tax expenditures for large companies is estimated at EUR 24.1 billion expressed as present value over 2029-2050, relative to the baseline.
Indirect benefits		
Adjustment costs savings for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 12.9 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by SMEs, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for SMEs are estimated at EUR 12.9 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 1.5 billion	Reduction in fuel tax expenditures for SMEs due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for SMEs is estimated at EUR 1.5 billion expressed as present value over 2029-2050 relative to the baseline.
Adjustment costs savings for citizens, expressed as present value over 2029-2050 relative to the baseline	EUR 4 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by citizens, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for citizens are estimated at EUR 4 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for citizens, expressed as present value over 2029-2050 relative to the baseline	EUR 2.1 billion	Reduction in fuel tax expenditures for citizens due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for citizens is estimated at EUR 2.1 billion expressed as present value over 2029-2050 relative to the baseline.
Additional fuel tax revenues for national	EUR 16.6	Additional tax revenues for public authorities due to an increase in fossil fuel use, following the assumed shift from new ZEVs to new conventional

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1B)		
Description	***Amount***	***Comments***
public authorities, expressed as present value over 2029-2050 relative to the baseline	billion	vehicles in the short to medium term by citizens and SMEs. The additional tax revenues for public authorities are estimated at EUR 16.6 billion, expressed as present value over 2029-2050 relative to the baseline.
Savings in external costs of CO_2 emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 3.7 billion	Indirect benefit to society at large. Savings in external costs of CO_2 emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of CO_2 emissions are estimated at EUR 3.7 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in CO_2 emissions (cumulative over 2029-2050 relative to the baseline)	23.7 million tonnes	Indirect benefit to society at large. The reduction in CO_2 emissions is estimated at 23.7 million tonnes, cumulatively over 2029-2050 relative to the baseline.
Savings in external costs of air pollution emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.5 billion	Indirect benefit to society at large. Savings in external costs of air pollution emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of air pollution emissions are estimated at EUR 0.5 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in air pollution emissions (cumulative over 2029-2050 relative to the baseline)	25 thousand tonnes of NOx and 0.8 thousand tonnes of PM2.5	Indirect benefit to society at large. Cumulatively over 2029-2050, the reduction in NOx and PM2.5 emissions is estimated at 25 thousand tonnes and 0.8 thousand tonnes, respectively (relative to the baseline).
Savings in external costs of noise emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.2 billion	Indirect benefit to society at large. Savings in external costs of noise emissions due to the higher uptake of ZEV. The savings in external costs of noise emissions are estimated at EUR 0.2 billion expressed as present value over 2029-2050 relative to the baseline.
Indirect benefits to vehicle manufacturers	Not quantified	Create greater certainty and better conditions for investment in ZEV manufacturing capacity, and reduce individual manufacturers' risk of not meeting their targets under CO_2 standards Regulations.

II. Overview of costs – Preferred option (PO1B)						
	Citizens/Consumers		**Businesses**		**Administrations**	
	One-off	**Recurrent**	**One-off**	**Recurrent**	**One-off**	**Recurrent**
Direct adjustment costs (expressed as present value over 2029-2050 relative to the baseline)	-	-	For large companies: EUR 9.3 billion (capital costs)	For large companies: EUR 2.6 billion (fuel costs and other operation costs)	-	-
Direct administrative costs (expressed as present value	-	-	-	-	For national administrations:	For national administrations:

II. Overview of costs – Preferred option (PO1B)						
over 2029-2050 relative to the baseline)					EUR 0.23 million For EEA: EUR 25,000	EUR 0.17 million For EEA: EUR 0.44 million
Indirect costs (expressed as present value over 2029-2050 relative to the baseline)	For citizens: EUR 0.6 billion capital costs	For citizens: EUR 11.5 billion of which: - EUR 7.2 billion fuel costs and other operation costs - EUR 4.3 billion increase in fuel tax expenditures	For SMEs: EUR 1 billion capital costs	For SMEs: EUR 32.1 billion of which: - EUR 19.9 billion fuels costs and other operation costs - EUR 12.2 billion increase in fuel tax expenditures	-	For national administrations: EUR 27.7 billion losses in tax revenues

III. Application of the 'one in, one out' approach – Preferred option (PO1B)			
[M€]	**One-off** (annualised total net present value over the relevant period)	**Recurrent** (nominal values per year)	**Total**
Businesses			
New administrative burdens (INs)	-	-	-
Removed administrative burdens (OUTs)	-	-	-
Net administrative burdens	-	-	-
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For large companies: EUR 9.3 billion capital costs For SMEs (indirect costs): EUR 1 billion capital costs	For large companies: EUR 2.6 billion fuel costs and other operation costs For SMEs (indirect costs): EUR 32.1 billion of which: - EUR 19.9 billion fuels costs and other operation costs - EUR 12.2 billion increase in fuel tax expenditures	
Citizens			
New administrative burdens (INs)	-	-	-
Removed administrative burdens	-	-	-

III. Application of the 'one in, one out' approach – Preferred option (PO1B)			
(OUTs)			
Net administrative burdens	-	-	-
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For citizens (indirect costs): EUR 0.6 billion capital costs	For citizens (indirect costs): EUR 11.5 billion of which: - EUR 7.2 billion fuel costs and other operation costs - EUR 4.3 billion increase in fuel tax expenditures	
Total administrative burdens	-	-	-

Note: Adjustment costs and other indirect costs are reported for transparency but are not included in the calculation of the net administrative burden, in line with the 'one in, one out' approach.

2.3. PREFERRED OPTION (PO1C)

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1C)		
Description	***Amount***	***Comments***
Direct benefits		
Adjustment costs savings for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 42.9 billion	Adjustment costs savings due to an increase in the number of new ZEVs in corporate fleets by large companies. Adjustment cost savings for large companies are estimated at EUR 42.9 billion expressed as present value over 2029-2050, relative to the baseline.
Reduction in fuel tax expenditures for large companies, expressed as present value over 2029-2050 relative to the baseline	EUR 32 billion	Reduction in fuel tax expenditures due to the reduction in fossil fuel consumption resulting from the higher uptake of new ZEVs. The reduction in fuel tax expenditures for large companies is estimated at EUR 32 billion expressed as present value over 2029-2050, relative to the baseline.
Indirect benefits		
Adjustment costs savings for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 16.3 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by SMEs, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for SMEs are estimated at EUR 16.3 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for SMEs, expressed as present value over 2029-2050 relative to the baseline	EUR 2.6 billion	Reduction in fuel tax expenditures for SMEs due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for SMEs is estimated at EUR 2.6 billion expressed as present value over 2029-2050 relative to the baseline.
Adjustment costs savings for citizens, expressed as present value over 2029-2050 relative to the baseline	EUR 7 billion	Adjustment costs savings due to higher uptake of second-hand ZEV by citizens, as a result of faster uptake of new ZEV in corporate fleets by large companies. Adjustment cost savings for citizens are estimated at EUR 7 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in fuel tax expenditures for citizens, expressed as present value over	EUR 4.6 billion	Reduction in fuel tax expenditures for citizens due to the higher uptake of second-hand ZEVs. The reduction in tax expenditures for citizens is estimated at EUR 4.6 billion expressed as present value over 2029-2050 relative to the baseline.

I. Overview of Benefits (total for all provisions) – Preferred Option (PO1C)		
Description	***Amount***	***Comments***
2029-2050 relative to the baseline		
Additional fuel tax revenues for national public authorities, expressed as present value over 2029-2050 relative to the baseline	EUR 18.9 billion	Additional tax revenues for public authorities due to an increase in fossil fuel use, following the assumed shift from new ZEVs to new conventional vehicles in the short to medium term by citizens and SMEs. The additional tax revenues for public authorities are estimated at EUR 18.9 billion, expressed as present value over 2029-2050 relative to the baseline.
Savings in external costs of CO_2 emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 6.8 billion	Indirect benefit to society at large. Savings in external costs of CO_2 emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of CO_2 emissions are estimated at EUR 6.8 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in CO_2 emissions (cumulative over 2029-2050 relative to the baseline)	43.4 million tonnes	Indirect benefit to society at large. The reduction in CO_2 emissions is estimated at 43.4 million tonnes, cumulatively over 2029-2050 relative to the baseline.
Savings in external costs of air pollution emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.8 billion	Indirect benefit to society at large. Savings in external costs of air pollution emissions due to the higher uptake of ZEV in the fleet. The savings in external costs of air pollution emissions are estimated at EUR 0.8 billion expressed as present value over 2029-2050 relative to the baseline.
Reduction in air pollution emissions (cumulative over 2029-2050 relative to the baseline)	40.2 thousand tonnes of NOx and 1.6 thousand tonnes of PM2.5	Indirect benefit to society at large. Cumulatively over 2029-2050, the reduction in NOx and PM2.5 emissions is estimated at 40.2 thousand tonnes and 1.6 thousand tonnes, respectively (relative to the baseline).
Savings in external costs of noise emissions, expressed as present value over 2029-2050 relative to the baseline	EUR 0.4 billion	Indirect benefit to society at large. Savings in external costs of noise emissions due to the higher uptake of ZEV. The savings in external costs of noise emissions are estimated at EUR 0.4 billion expressed as present value over 2029-2050 relative to the baseline.
Indirect benefits to vehicle manufacturers	Not quantified	Create greater certainty and better conditions for investment in ZEV manufacturing capacity, and reduce individual manufacturers' risk of not meeting their targets under CO_2 standards Regulations.

II. Overview of costs – Preferred option (PO1C)						
	Citizens/Consumers		**Businesses**		**Administrations**	
	One-off	**Recurrent**	**One-off**	**Recurrent**	**One-off**	**Recurrent**
Direct adjustment costs (expressed as present value over 2029-2050 relative to the baseline)	-	-	For large companies: EUR 12.4 billion (capital costs)	For large companies: EUR 3.2 billion (fuel costs and other	-	-

II. Overview of costs – Preferred option (PO1C)						
				operation costs)		
Direct administrative costs (expressed as present value over 2029-2050 relative to the baseline)	-	-	-	-	For national administrations: EUR 0.23 million For EEA: EUR 25,000	For national administrations: EUR 0.17 million For EEA: EUR 0.44 million
Indirect costs (expressed as present value over 2029-2050 relative to the baseline)	For citizens: EUR 0.7 billion capital costs	For citizens: EUR 14.3 billion of which: - EUR 9.7 billion fuel costs and other operation costs - EUR 4.6 billion increase in fuel tax expenditures	For SMEs: EUR 1 billion capital costs	For SMEs: EUR 38.4 billion of which: - EUR 24.2 billion fuels costs and other operation costs - EUR 14.3 billion increase in fuel tax expenditures	-	For national administrations: EUR 39.1 billion losses in tax revenues

III. Application of the 'one in, one out' approach – Preferred option (PO1C)			
[M€]	**One-off** (annualised total net present value over the relevant period)	**Recurrent** (nominal values per year)	**Total**
Businesses			
New administrative burdens (INs)	-	-	-
Removed administrative burdens (OUTs)	-	-	-
Net administrative burdens	-	-	-
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For large companies: EUR 12.4 billion capital costs For SMEs (indirect costs): EUR 1 billion capital costs	For large companies: EUR 3.2 billion fuel costs and other operation costs For SMEs (indirect costs): EUR 38.4 billion of which: - EUR 24.2 billion fuels costs and other operation costs - EUR 14.3 billion increase in fuel tax expenditures	
Citizens			

III. Application of the 'one in, one out' approach – Preferred option (PO1C)			
New administrative burdens (INs)	-	-	-
Removed administrative burdens (OUTs)	-	-	-
Net administrative burdens	-	-	-
Adjustment costs, expressed as present value over 2029-2050 relative to the baseline	For citizens (indirect costs): EUR 0.7 billion capital costs	For citizens (indirect costs): EUR 14.3 billion of which: - EUR 9.7 billion fuel costs and other operation costs - EUR 4.6 billion increase in fuel tax expenditures	
Total administrative burdens	-	-	-

3. RELEVANT SUSTAINABLE DEVELOPMENT GOALS

3.1. PREFERRED OPTION (PO1A)

IV. Overview of relevant Sustainable Development Goals – Preferred Option (PO1A)		
Relevant SDG	**Expected progress towards the Goal**	**Comments**
SDG 13 (Take urgent action to combat climate change and its impacts)	10 million tonnes of CO_2 emissions avoided cumulatively over 2029-2050 relative to the baseline	The reduction in greenhouse gas emissions will result in cost savings associated with lower climate-related externalities, such as avoided environmental damage and health impacts from climate change. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 1.6 billion relative to the baseline.
SDG 3 (Ensure healthy lives and promote well-being for all at all ages, including target 3.9: *By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.)*	15 thousand tonnes of NO_X and 0.3 thousand tonnes of $PM_{2.5}$ avoided, cumulatively over 2029-2050 relative to the baseline In addition, the savings in external costs of noise emissions are estimated at EUR 0.1 billion, expressed as present value over 2029-2050 relative to the baseline.	The reduction of air pollutant emissions and of noise emissions will result in cost savings associated with improved air quality, reduced health impacts, and enhanced well-being. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 0.2 billion for air pollutant emissions, and at EUR 0.1 billion for noise emissions relative to the baseline.

3.2. PREFERRED OPTION (PO1B)

IV. Overview of relevant Sustainable Development Goals – Preferred Option (PO1B)		
Relevant SDG	**Expected progress towards the Goal**	**Comments**
SDG 13 (Take urgent action to combat climate change and its impacts)	23.7 million tonnes of CO_2 emissions avoided cumulatively over 2029-2050 relative to the baseline	The reduction in greenhouse gas emissions will result in cost savings associated with lower climate-related externalities, such as avoided

IV. Overview of relevant Sustainable Development Goals – Preferred Option (PO1B)		
Relevant SDG	**Expected progress towards the Goal**	**Comments**
		environmental damage and health impacts from climate change. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 3.7 billion relative to the baseline.
SDG 3 (Ensure healthy lives and promote well-being for all at all ages, including target 3.9: *By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.)*	25 thousand tonnes of NO_X and 0.8 thousand tonnes of $PM_{2.5}$ avoided, cumulatively over 2029-2050 relative to the baseline In addition, the savings in external costs of noise emissions are estimated at EUR 0.2 billion, expressed as present value over 2029-2050 relative to the baseline.	The reduction of air pollutant emissions and of noise emissions will result in cost savings associated with improved air quality, reduced health impacts, and enhanced well-being. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 0.5 billion for air pollutant emissions, and at EUR 0.2 billion for noise emissions relative to the baseline.

3.3. PREFERRED OPTION (PO1C)

IV. Overview of relevant Sustainable Development Goals – Preferred Option (PO1C)		
Relevant SDG	**Expected progress towards the Goal**	**Comments**
SDG 13 (Take urgent action to combat climate change and its impacts)	43.4 million tonnes of CO_2 emissions avoided cumulatively over 2029-2050 relative to the baseline	The reduction in greenhouse gas emissions will result in cost savings associated with lower climate-related externalities, such as avoided environmental damage and health impacts from climate change. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 6.8 billion relative to the baseline.
SDG 3 (Ensure healthy lives and promote well-being for all at all ages, including target 3.9: *By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.)*	40.2 thousand tonnes of NO_X and 1.6 thousand tonnes of $PM_{2.5}$ avoided, cumulatively over 2029-2050 relative to the baseline In addition, the savings in external costs of noise emissions are estimated at EUR 0.4 billion, expressed as present value over 2029-2050 relative to the baseline.	The reduction of air pollutant emissions and of noise emissions will result in cost savings associated with improved air quality, reduced health impacts, and enhanced well-being. Expressed as present value over 2029-2050, these costs savings are estimated at EUR 0.8 billion for air pollutant emissions, and at EUR 0.4 billion for noise emissions relative to the baseline.

ANNEX 4: ANALYTICAL METHODS

1. DESCRIPTION OF THE ANALYTICAL METHODS USED

The main model used for developing the baseline scenario for this initiative is the PRIMES-TREMOVE transport model by E3Modelling, a specific module of the PRIMES models. The model has a successful record of use in the Commission's energy, transport and climate policy assessments. In particular, it has been used for the impact assessments underpinning the Communication on a 2040 climate target[180], the "Fit for 55" package[181], the impact assessments accompanying the 2030 Climate Target Plan[182] and the Staff Working Document accompanying the Sustainable and Smart Mobility Strategy[183], the Commission's proposal for a Long Term Strategy[184] as well as for the 2020 and 2030 EU's climate and energy policy framework.

For the assessment of the impacts of the policy options, the PRIMES-TREMOVE model has been used for quantifying the impacts on number of ZEV, on CO2 emissions, on air pollutant and noise emissions, and on adjustment costs/costs savings. An Excel-based tool has been additionally developed in the context of a support study[185], to quantify the impacts on the administrative costs and perform the cost-benefit analysis. The Excel-based tool draws on the Standard Cost Model. The proposed options are assumed to be implemented from 2029 onwards, so that the assessment has been undertaken for the 2029-2050 period and refers to EU27. Costs and benefits are expressed as present value over the 2029-2050 period, using a 3% discount rate.

PRIMES-TREMOVE model

The PRIMES-TREMOVE transport model projects the evolution of demand for passengers and freight transport, by transport mode, and transport vehicle/technology, following a formulation based on microeconomic foundation of decisions of multiple actors. Operation, investment and emission costs, various policy measures, utility factors and congestion are among the drivers that influence the projections of the model. The projections of activity, equipment (fleet), usage of equipment, energy consumption and emissions (and other externalities) constitute the set of model outputs.

The PRIMES-TREMOVE transport model can therefore provide the quantitative analysis for the transport sector in the EU, candidate and neighbouring countries covering activity, equipment, energy and emissions. The model accounts for each country separately which means that the detailed long-term outlooks are available both for each country and in aggregate forms (e.g. EU level).

In the transport field, PRIMES-TREMOVE is suitable for modelling *soft measures* (e.g. eco-driving, labelling); *economic measures* (e.g. subsidies and taxes on fuels, vehicles, emissions; ETS for transport when linked with PRIMES; pricing of congestion and other externalities such as air pollution, accidents and noise; measures supporting R&D); *regulatory measures* (e.g. CO_2 emission performance standards for new light-duty vehicles and heavy-duty vehicles; EURO standards on road transport vehicles; technology standards for non-road transport technologies, deployment of Intelligent Transport Systems) and *infrastructure policies for alternative fuels* (e.g. deployment of refuelling/recharging infrastructure for electricity, hydrogen, LNG, CNG). Used as a module that contributes to the PRIMES energy system model,

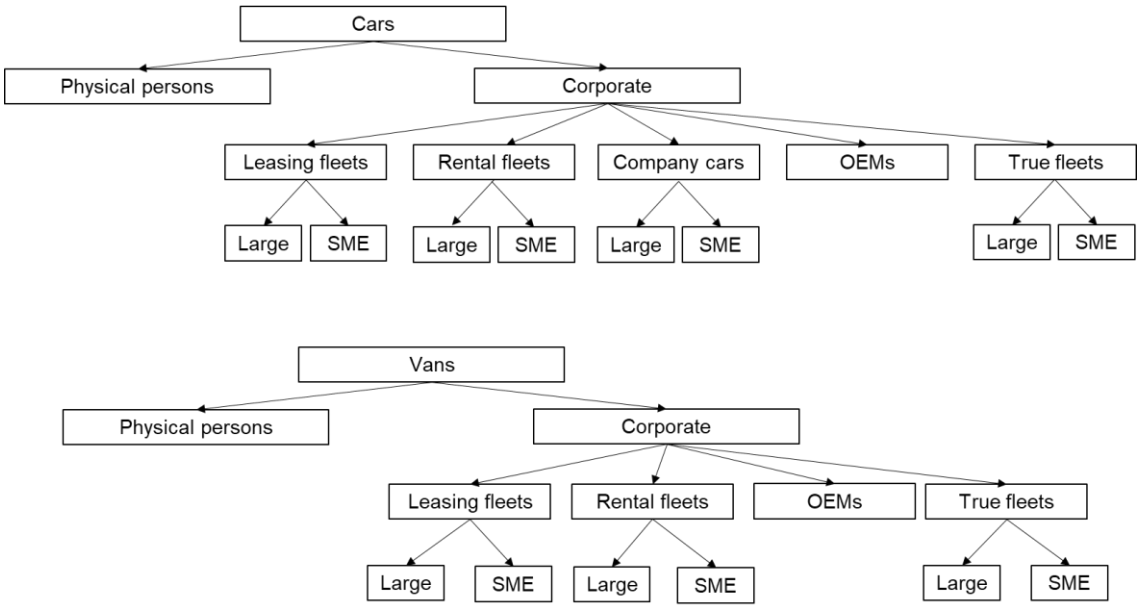
[180] EUR-Lex - 52024DC0063 - EN - EUR-Lex (europa.eu)
[181] Delivering the European Green Deal | European Commission (europa.eu)
[182] SWD(2020)176 final
[183] EUR-Lex - 52020SC0331 - EN - EUR-Lex (europa.eu)
[184] Source: 2050 long-term strategy (europa.eu)
[185] Ricardo (2025), Support study on the impacts of an initiative on clean corporate vehicles

PRIMES-TREMOVE can show how policies and trends in the field of transport contribute to economy-wide trends in energy use and emissions. Using data disaggregated per Member State, the model can show differentiated trends across Member States.

The PRIMES-TREMOVE has been developed and is maintained by E3Modelling, based on, but extending features of, the open source TREMOVE model developed by the TREMOVE[186] modelling community. Part of the model (e.g. the utility nested tree) was built following the TREMOVE model.[187] Other parts, like the component on fuel consumption and emissions, follow the COPERT model.

For the purpose of this impact assessment, the model has been further enhanced to provide for the representation of the corporate fleets. The figures below provide the agents split for cars, vans, buses, coaches and trucks that allows for the representation of the corporate fleets in the model, including the split between vehicles belonging to large companies and SMEs.

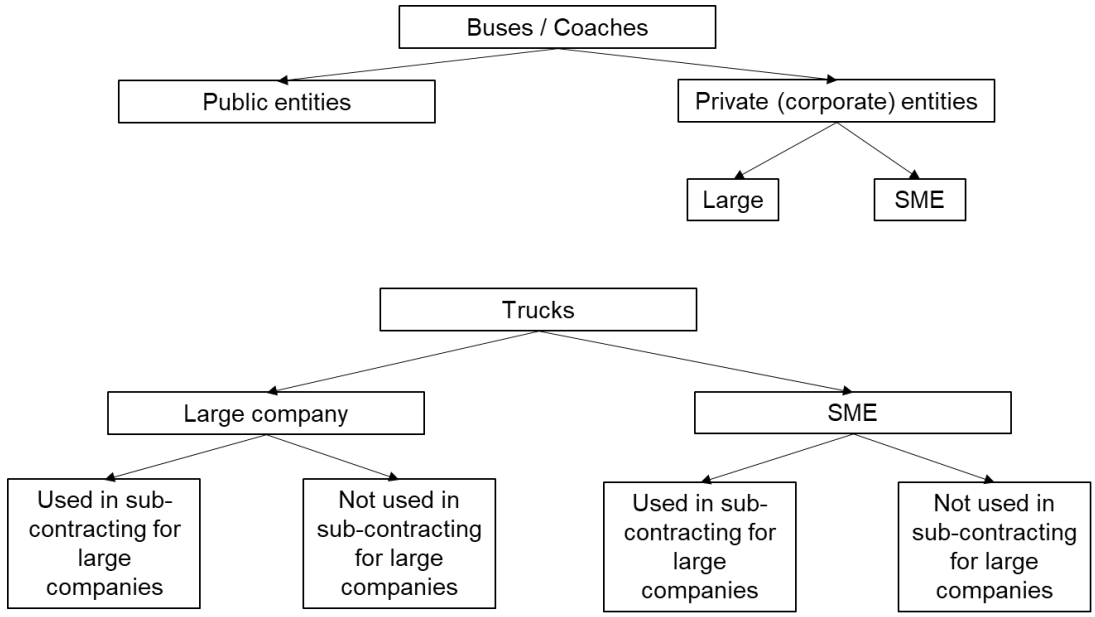
Figure 5: Agents split for cars and vans



[186] https://www.tmleuven.be/en/navigation/TREMOVE.

[187] Several model enhancements were made compared to the standard TREMOVE model, as for example: for the number of vintages (allowing representation of the choice of second-hand cars); for the technology categories which include vehicle types using electricity from the grid and fuel cells. The model also incorporates additional fuel types, such as biofuels (when they differ from standard fossil fuel technologies), LPG, LNG, hydrogen and e-fuels. In addition, representation of infrastructure for refuelling and recharging are among the model refinements, influencing fuel choices. A major model enhancement concerns the inclusion of heterogeneity in the distance of stylised trips; the model considers that the trip distances follow a distribution function with different distances and frequencies. The inclusion of heterogeneity was found to be of significant influence in the choice of vehicle-fuels especially for vehicles-fuels with range limitations.

Figure 6: Agents split for buses, coaches and trucks



The Dataforce database[188] was the main data source used for the calibration of the model to represent the corporate fleets. Dataforce GmbH is a German automotive market intelligence company that is specialised in detailed registration and fleet data for passenger cars and commercial vehicles across more than 40 countries, with particularly deep coverage of the EU27 markets. It combines official vehicle registration statistics with own data collection to build highly segmented datasets by sales channel (private, fleet, leasing, rental, dealer and manufacturer registrations), fleet size, vehicle type, fuel/powertrain, CO_2 emissions, body type, and other attributes. The level of details available for each country varies, but full coverage is available for the biggest markets in the EU. In the corporate fleet segment it is regarded as a reference source – for example, its corporate-fleet statistics are used in various studies[189,190] for analysing company-car and fleet markets.

Data inputs

The main data sources for inputs to the PRIMES-TREMOVE model, such as for activity and energy consumption, come from EUROSTAT databases and from the Statistical Pocketbook EU transport in figures[191]. Excise taxes are derived from DG TAXUD excise duty tables. Other data comes from different sources such as research projects (e.g. TRACCS and New Mobility Pattern projects) and reports. In the context of this exercise, the PRIMES-TREMOVE transport model is calibrated to 2005, 2010, 2015 and 2020-2023 historical data, as well as the most recent data on the structure of the road transport vehicle fleet for the first half of 2025 from the European Alternative Fuels Observatory (EAFO)[192]. For the corporate fleets the data from the Dataforce database has been used, including most recent data for the first half of 2025.

[188] https://www.dataforce.de/en/market-data/
[189] Transport & Environment (2023), The corporate cars problem and what the EU can do about it. Modelling the impact of the Greening corporate fleets initiative.
[190] Wappelhorst, S. & Díaz de Aguilar, S. (2025), Decarbonization of Europe's corporate fleet. ICCT Policy Brief, International Council on Clean Transportation.
[191] Statistical pocketbook 2025 - Mobility and Transport - European Commission
[192] Homepage | European Alternative Fuels Observatory

2. BASELINE SCENARIO

2.1. Main assumptions of the Baseline scenario

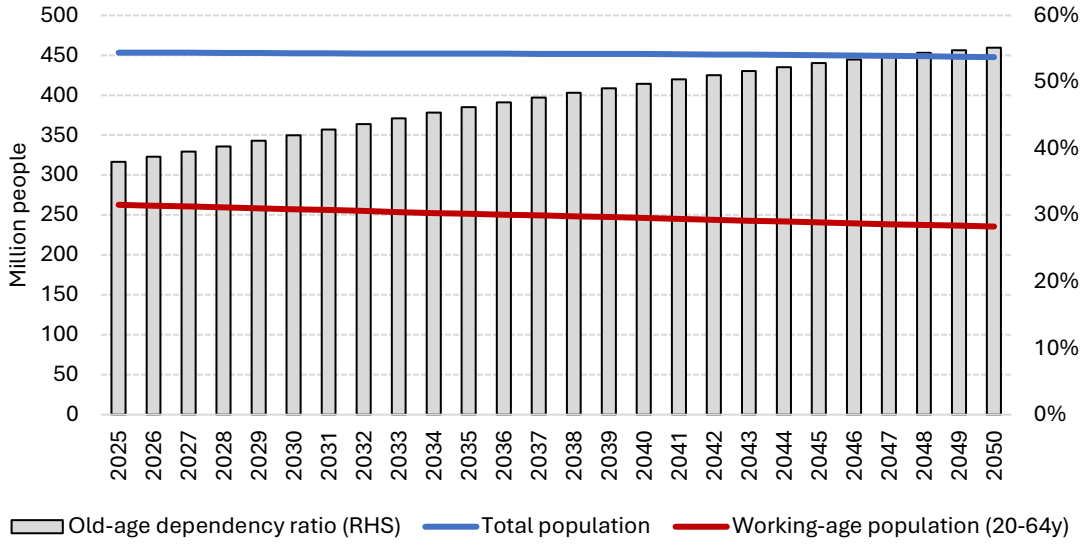
The main assumptions related to economic development, international energy prices and technologies are described below.

2.1.1. Economic assumptions

The modelling work is based on socio-economic assumptions describing the expected evolution of the European society. Long-term projections on population dynamics and economic activity form part of the input to the model and are used to estimate transport activity, particularly relevant for this impact assessment.

Population projections rely on Eurostat's long-term projections (EUROPOP2023)[193]. The EU population is projected to remain broadly stable over the projection period to 2050. However, there is a noticeable trend towards the ageing of the population, with a 10% decline in the working-age population aged 20 to 64 between 2025 and 2050 and an increase in the old-age dependency ratio from 38% to 55.2% (Figure 7).

Figure 7: Population assumptions



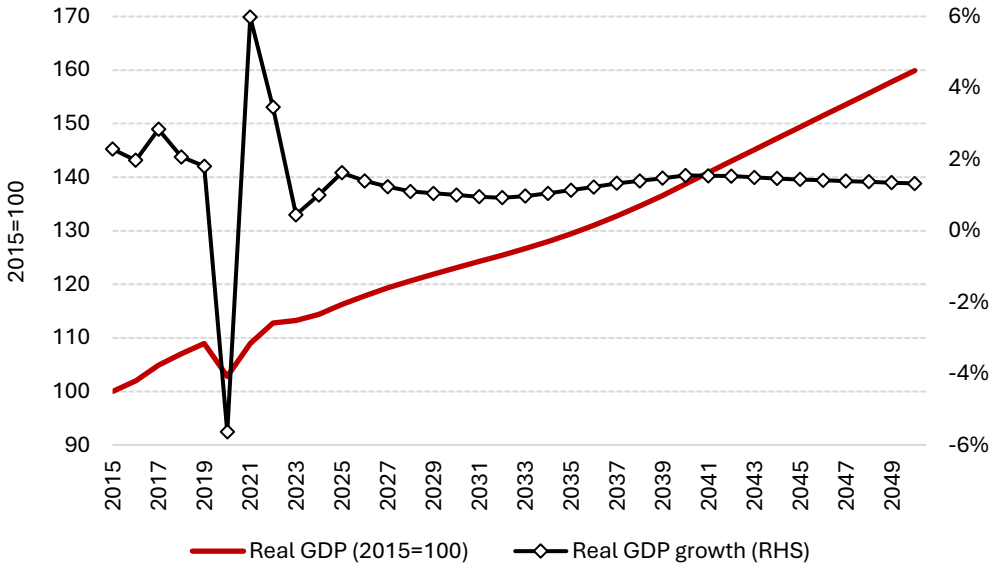
Source: Eurostat

Economic projections have taken place in an unusually unstable context in the past few years, as the EU and world economies were hit first by the COVID pandemic and second by Russia's war of aggression against Ukraine, with the ensuing sharp increase in international energy prices. The GDP projections for 2025 rely on the Spring Forecast[194] of the Directorate General for Economic and Financial Affairs (DG ECFIN). From 2025 onwards, the GDP growth projections converge to those prepared by DG ECFIN for the 2024 Ageing Report[195]. At EU level, real GDP is projected to be 23% higher in 2030 than in 2015, 39% higher in 2040, and 60% higher in 2050 compared to 2015 (Figure 8).

[193] EUROPOP2023 (proj_23n).
[194] DG ECFIN, European Economic Forecast. Spring 2024.
[195] DG ECFIN, 2024 Ageing Report. Economic and budgetary projections for the EU Member States (2022-2070).

Projections on the sectoral composition of GDP were prepared using the GEM-E3 computable general economic model. It is projected that the EU economy will continue to become increasingly services-oriented, with the sector's share rising from close to 74% of total gross value added (GVA) in 2016-2020 to around 75% in 2040 and 76% in 2050. While the share of the transport sector in total GVA declined during the COVID pandemic, the projections assume that this was only a temporary phenomenon, and that the sector's share remains broadly constant at close to 5% of the total. This is consistent with recent economic developments.

Figure 8: EU GDP (2015 = 100) and GDP growth (%)



Source: DG ECFIN

2.1.2. International energy prices assumptions

Alongside socio-economic projections, transport modelling requires projections of international fuel prices. The table below shows the oil prices assumptions of the baseline used in this impact assessment.

Table 41: Oil prices assumptions

Oil	2015	2020	2030	2040	2050
in $'2023 per boe	62.6	48.0	92.8	105.7	131.6
in €'2023 per boe	57.5	44.0	85.2	97.0	120.7

2.1.3. Technology assumptions

Modelling scenarios on the evolution of the transport system is highly dependent on the assumptions on the development of technologies - both in terms of performance and costs. For the purpose of the development of the baseline, these assumptions have been updated based on a rigorous literature review carried out by external consultants in collaboration with the JRC.

Continuing the approach adopted in the long-term strategy in 2018 and for the Reference Scenario 2020, the Commission consulted on the technology assumptions with Member States and stakeholders in 2024. In particular, the technology database of PRIMES-TREMOVE transport model was discussed with Member States during a meeting of the Reference scenario expert group on 5 June 2024. They also benefited from a dedicated consultation workshop with stakeholders, held on 22-23 October 2024.

The battery cost trajectory considered in the baseline is provided in Table 42.

Table 42: Battery cost trajectory (EUR/kWh)

	2020	2025	2030	2035	2040	2045	2050
Battery cost in EUR/kWh	141	97	72	67	63	60	58

2.1.4. Policies in the Baseline scenario

The baseline has been designed to include the initiatives of the 'Fit for 55' package[196] and the proposed amendment of the European Climate Law to include a 2040 climate target for the EU[197], of reducing the EU's net greenhouse gas emissions by 90% by 2040 relative to 1990, with a limited contribution towards the 2040 target of high-quality international credits of 3% of 1990 EU net emissions. It also reflects the revised CO_2 emission performance standards for heavy-duty vehicles[198], the new Euro 7 standards[199], the revised TEN-T Regulation[200], as well as the initiatives part of the Greening Freight package[201] and Roadworthiness package[202]. It also reflects the National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025. The baseline scenario assumes no further EU level intervention beyond the current fragment support framework at national level for corporate ZEV.

The baseline also incorporates perspectives on potential future developments captured in the 2022 Strategic Foresight Report[203] and during a foresight workshop organised by DG MOVE and JRC on 10 February 2025, analysing the impacts of the megatrends and drivers of change on the EU transport sector[204]. In particular, the projected transport activity draws on the long-term population projections from Eurostat and GDP growth from the *Ageing Report 2024*[205].

2.2. Baseline scenario results

In the baseline scenario, EU transport activity is projected to grow post-2020, following the recovery from the COVID-19 pandemic. Road transport would maintain its dominant role within the EU by 2050, despite its lower modal share over time. Road passenger transport activity (expressed in passenger-kilometres)[206] is projected to grow by 7% between 2015 and 2030 (15% for 2015-2050), while road freight transport activity (expressed in tonne-kilometres)[207] by 32% during 2015-2030 (52% for 2015-2050). Transport activity for rail is projected to grow significantly faster than for road, driven in particular by the completion of the TEN-T core network by 2030 and of the comprehensive network by 2050, supported by the CEF[208], Cohesion Fund and ERDF funding, but also by measures of the 'Fit for 55' package[209] and the Greening Freight package.

---

[196] Delivering the European Green Deal - European Commission
[197] COM(2025) 524 final
[198] Regulation (EU) 2024/1610
[199] Regulation - 2024/1257 - EN - EUR-Lex
[200] Regulation - EU - 2024/1679 - EN - EUR-Lex
[201] Green Deal: Greening freight for more economic gain with less environmental impact (europa.eu).
[202] Updated rules for safer roads, less air pollution and digital vehicle documents
[203] COM(2022) 289 final
[204] https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en#explore
[205] DG ECFIN, 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) - Economy and Finance
[206] Covering passenger cars, buses and coaches and power-two wheelers.
[207] Covering heavy goods vehicles and light commercial vehicles.
[208] Regulation - 2021/1153 - EN - EUR-Lex
[209] These measures increase to some extent the competitiveness of rail relative to road and air transport.

The share of ZEV in new registrations for corporate cars is projected to increase from 17% in 2025 to 31% in 2029 and 61% in 2030, while for vans from around 8% in 2025 to 30% in 2029 and 52% in 2030[210]. From 2035, all new light-duty vehicles (cars and vans) must achieve zero tailpipe emissions due to the CO_2 emission standards regulation, and thus the share of ZEV in new registrations of cars and vans is 100%. For lorries (virtually all corporate), the new registrations of ZEV are projected at around 7% in 2029, 24% in 2030 and going up to 77% by 2050 in the baseline scenario. Taking into account the payload weighting factors under the CO_2 emission performance standards, the new zero-emissions registrations for lorries are projected at 9% in 2029, 30% in 2030 and around 90% by 2050.

The projected share of ZEV in new registrations by large companies for cars, vans and for lorries (taking into account the payload weighting factors under the CO_2 emission performance standards) are provided in the tables below.

Table 43: Share of zero-emission cars in new registrations by large companies in the baseline

	2029	2030	2035	2040	2045	2050
Austria	22%	58%	100%	100%	100%	100%
Belgium	29%	60%	100%	100%	100%	100%
Bulgaria	52%	79%	100%	100%	100%	100%
Croatia	22%	61%	100%	100%	100%	100%
Cyprus	72%	87%	100%	100%	100%	100%
Czechia	70%	81%	100%	100%	100%	100%
Denmark	34%	61%	100%	100%	100%	100%
Estonia	8%	50%	100%	100%	100%	100%
Finland	32%	62%	100%	100%	100%	100%
France	21%	57%	100%	100%	100%	100%
Germany	24%	60%	100%	100%	100%	100%
Greece	54%	70%	100%	100%	100%	100%
Hungary	72%	83%	100%	100%	100%	100%
Ireland	51%	71%	100%	100%	100%	100%
Italy	28%	56%	100%	100%	100%	100%
Latvia	17%	60%	100%	100%	100%	100%
Lithuania	21%	55%	100%	100%	100%	100%
Luxembourg	10%	56%	100%	100%	100%	100%
Malta	64%	87%	100%	100%	100%	100%
Netherlands	22%	62%	100%	100%	100%	100%
Poland	28%	42%	100%	100%	100%	100%
Portugal	47%	70%	100%	100%	100%	100%
Romania	48%	74%	100%	100%	100%	100%
Slovakia	18%	58%	100%	100%	100%	100%
Slovenia	50%	60%	100%	100%	100%	100%
Spain	52%	70%	100%	100%	100%	100%
Sweden	64%	76%	100%	100%	100%	100%
EU27	31%	61%	100%	100%	100%	100%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 44: Share of zero-emission vans in new registrations by large companies in the baseline

	2029	2030	2035	2040	2045	2050
Austria	42%	53%	100%	100%	100%	100%
Belgium	44%	55%	100%	100%	100%	100%

[210] Overall, the shares of ZEV in the new registrations of cars and vans for 2029 assume some anticipation of the CO_2 emission standards for 2030 in the baseline scenario.

	2029	2030	2035	2040	2045	2050
Bulgaria	27%	43%	100%	100%	100%	100%
Croatia	37%	48%	100%	100%	100%	100%
Cyprus	86%	91%	100%	100%	100%	100%
Czechia	42%	53%	100%	100%	100%	100%
Denmark	10%	26%	100%	100%	100%	100%
Estonia	37%	51%	100%	100%	100%	100%
Finland	9%	48%	100%	100%	100%	100%
France	24%	53%	100%	100%	100%	100%
Germany	22%	52%	100%	100%	100%	100%
Greece	46%	60%	100%	100%	100%	100%
Hungary	64%	62%	100%	100%	100%	100%
Ireland	65%	64%	100%	100%	100%	100%
Italy	40%	52%	100%	100%	100%	100%
Latvia	28%	36%	100%	100%	100%	100%
Lithuania	38%	50%	100%	100%	100%	100%
Luxembourg	38%	53%	100%	100%	100%	100%
Malta	56%	55%	100%	100%	100%	100%
Netherlands	20%	51%	100%	100%	100%	100%
Poland	42%	53%	100%	100%	100%	100%
Portugal	39%	51%	100%	100%	100%	100%
Romania	41%	51%	100%	100%	100%	100%
Slovakia	35%	48%	100%	100%	100%	100%
Slovenia	38%	51%	100%	100%	100%	100%
Spain	13%	51%	100%	100%	100%	100%
Sweden	38%	49%	100%	100%	100%	100%
EU27	29%	52%	100%	100%	100%	100%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 45: Share of zero-emission lorries in new registrations by large companies in the baseline (taking into account the payload weighting factors under the CO2 emission performance standards)

	2029	2030	2035	2040	2045	2050
Austria	26%	36%	61%	94%	94%	93%
Belgium	2%	23%	51%	90%	91%	90%
Bulgaria	4%	24%	49%	90%	90%	89%
Croatia	6%	31%	61%	94%	93%	93%
Cyprus	5%	28%	55%	94%	92%	91%
Czechia	1%	23%	53%	92%	93%	92%
Denmark	2%	23%	52%	89%	89%	89%
Estonia	7%	26%	51%	91%	91%	90%
Finland	1%	15%	41%	87%	90%	89%
France	18%	35%	60%	93%	91%	90%
Germany	4%	26%	52%	89%	89%	88%
Greece	11%	35%	59%	92%	92%	91%
Hungary	5%	27%	55%	91%	91%	90%
Ireland	5%	28%	56%	92%	92%	90%
Italy	4%	28%	56%	93%	93%	91%
Latvia	5%	27%	53%	91%	91%	89%
Lithuania	8%	28%	54%	91%	92%	89%
Luxembourg	13%	32%	57%	94%	97%	98%
Malta	0%	9%	37%	88%	89%	87%
Netherlands	4%	24%	52%	90%	90%	89%
Poland	17%	39%	62%	93%	94%	93%
Portugal	12%	37%	64%	93%	92%	93%

	2029	2030	2035	2040	2045	2050
Romania	2%	17%	48%	89%	89%	90%
Slovakia	5%	28%	53%	92%	93%	92%
Slovenia	5%	28%	52%	89%	90%	89%
Spain	11%	34%	63%	94%	93%	91%
Sweden	5%	25%	50%	88%	88%	88%
EU27	9%	30%	56%	92%	91%	90%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

The share of ZEV in the overall cars fleet is projected at 13% in 2030, going up to 83% in 2050 in the baseline scenario, while for vans at 10% in 2030 and 82% in 2050, and for lorries at around 2% in 2030 and 48% in 2050 (around 2% in 2030 and 57% in 2050 taking into account the payload weighting factors under the CO_2 emission performance standards). Of this, for corporte cars the share of ZEV is projected at 30% in 2030 and 98% in 2050, due to the shorter initial ownership duration and faster turnover of the corporate vehicles. For corporate vans, which represent around 90% of the total, the share of ZEV in the fleet is projected at 11% in 2030 and 84% by 2050. These developments are mainly driven by the CO_2 standards Regulation, supported by the Alternative Fuels Infrastructure Regulation and incentives for ZEV at national level. NOx emissions from road transport are projected to reduce by 72% in 2030 relative to 2015 (99% reduction for 2015-2050), while particulate matter (PM2.5) emissions would decrease by 48% in 2030 relative to 2015 (95% reduction for 2015-2050).

In line with the Better Regulation toolbox, the baseline assumes that all legislation in place and proposed by the Commission is fully implemented, including the ETS2 which caps the emissions from road transport and buildings, and the Renewable Energy Directive setting targets for renewable energy in transport as well as mandates for renewable fuels of non-biological origin (RFNBO) and advanced biofuels. Vehicle manufacturers are assumed to comply with the CO_2 emission performance standards for new vehicles throughout the time horizon considered. Member States and transport operators also comply with other requirements included in the existing legislation. The EU climate targets for 2030, 2040 and 2050 are met in the baseline and the CO_2 emissions from road transport are projected to decrease by 27% by 2030 relative to 2015, and be close to zero by 2050, thanks to the large-scale uptake of zero-emission vehicles and some use of renewable and low-carbon fuels.

Driven by the recovery of the transport activity following the COVID-19 pandemic, the most recent available statistics (for 2023) show no progress in the reduction of CO_2 emissions from road transport relative to 2015. In case vehicle manufacturers do not meet their CO_2 emission targets, or Member States and transport operators do not fully comply with other legal requirements, or consumers delay the acquisition of new vehicles, the reduction in the CO_2 emissions from road transport would be lower than projected in the baseline. In this case, other transport modes (where emissions are harder to abate) or other sectors would need to deliver higher emission reductions to meet the EU climate targets for 2030, 2040 and 2050. However, as explained above, in line with the Better Regulation toolbox, the baseline assumes the implementation of existing policies.

In addition, in the baseline the benefits of higher uptake of ZEV by large companies remain untapped. As corporate vehicles typically have comparatively high yearly mileage, their higher uptake increases the potential impact on real-world emissions reductions.

3. IMPACTS OF POLICY OPTIONS IN TERMS OF ADMINISTRATIVE COSTS

3.1. Administrative costs for businesses

The options based on national targets (PO1A, PO1B, PO1C) will not directly create any administrative costs for businesses, as the reporting is done by Member States on the basis of existing national vehicle

registration procedures. On the other hand, in PO2A, PO2B and PO2C businesses will face administrative costs, both one-off and recurrent, since the policy options imply a new, additional reporting activity for those market actors.

One-off administrative costs are expected for large companies in PO2A, PO2B and PO2C for extending their IT systems to include a relevant field to collect the required data from sub-contractors (i.e. tonne-km of activity performed and whether the lorry that performed it is a ZEV) and for updating the templates for the contracts with the sub-contractors performing transport activities on their behalf. On average, EUR 1,000 per large company is assumed to be needed for extending the IT systems. Considering the number of large companies in industry, construction and market services in the EU (54,219)[211], the total one-off costs for the extension of their IT systems is estimated at EUR 54.22 million in 2029. In addition, half a day is expected to be needed per company to update the templates for the contracts with the sub-contractors. Assuming 7.2 working hours per day on average[212] and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals) in 2023 prices[213], the total one-off costs for updating the templates for the contracts are estimated at EUR 6.24 million in 2029. Thus, the total one-off administrative costs for large companies in PO2A, PO2B and PO2C are estimated at EUR 60.46 million in 2029.

Table 46: One-off administrative costs for large companies in policy options PO2A, PO2B and PO2C relative to the baseline (in million EUR)

Member State	Extension of the IT system	Update templates for contracts	Total one-off costs
AT	1.53	0.22	1.74
BE	1.51	0.25	1.76
BG	0.76	0.03	0.79
HR	0.44	0.02	0.46
CY	0.13	0.01	0.14
CZ	1.76	0.12	1.87
DK	0.90	0.17	1.08
EE	0.17	0.01	0.18
FI	0.76	0.09	0.85
FR	6.14	0.81	6.95
DE	14.98	2.21	17.19
EL	0.68	0.04	0.72
HU	1.02	0.04	1.06
IE	0.94	0.15	1.09
IT	4.73	0.53	5.26
LV	0.24	0.01	0.26
LT	0.48	0.03	0.50
LU	0.25	0.04	0.29
MT	0.12	0.01	0.13
NL	2.77	0.39	3.16
PL	3.55	0.17	3.72
PT	1.23	0.07	1.30
RO	1.67	0.06	1.73
SK	0.66	0.04	0.70
SI	0.28	0.02	0.30
ES	4.89	0.45	5.34

[211] Source: https://ec.europa.eu/eurostat/databrowser/view/sbs_sc_ovw__custom_17946676/default/table
[212] Actual and usual hours of work - Statistics Explained - Eurostat
[213] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

Member State	Extension of the IT system	Update templates for contracts	Total one-off costs
SE	1.66	0.25	1.91
EU27	**54.22**	**6.24**	**60.46**

Source: Ricardo (2025), Support study

Recurrent administrative costs are expected in PO2A, PO2B and PO2C for both large companies and SMEs for reporting the activity performed (i.e. tonne-km) and whether the lorry that performed it is a ZEV. As explained in section 5.2.3, most large companies perform a relatively low share of their road freight transport activity through own fleets and generally rely on sub-contracting for the vast majority of their freight transport needs[214]. All transport companies, including SMEs, that directly or indirectly provide freight services by lorry to large companies will need to monitor and report their activity in terms of tonne-km performed by type of vehicle, in order to allow the large company to monitor and report compliance with its target to the national authorities.

For large companies, based on interviews with industry representatives, it is assumed that one minute per lorry per working day is needed to report the type of vehicle and activity performed (i.e. tonne-km) for the lorries that they own. Considering the evolution of the number of lorries owned by large companies in each policy option[215], assuming 220 working days per year and the tariff rates by Member State for the ISCO 8 category (plant and machine operators, and assemblers) in 2023 prices[216], the recurrent administrative costs are estimated at around EUR 22 to 26 million per year in all sub-options (PO2A, PO2B and PO2C), as shown in the table below.

Table 47: Recurrent administrative costs for large companies for reporting on activity performed with their own lorries in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	0.42	0.42	0.46	0.51	0.42	0.42	0.46	0.51	0.42	0.42	0.46	0.51
BE	0.66	0.66	0.75	0.85	0.65	0.65	0.75	0.86	0.65	0.65	0.75	0.86
BG	0.03	0.03	0.05	0.08	0.03	0.03	0.05	0.08	0.03	0.03	0.05	0.08
HR	0.13	0.13	0.12	0.14	0.13	0.13	0.12	0.14	0.13	0.13	0.12	0.14
CY	0.06	0.06	0.07	0.08	0.06	0.06	0.07	0.08	0.06	0.06	0.07	0.08
CZ	0.51	0.51	0.58	0.59	0.51	0.51	0.58	0.59	0.51	0.51	0.58	0.59
DK	0.19	0.19	0.20	0.23	0.19	0.19	0.20	0.23	0.19	0.19	0.20	0.23
EE	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.06
FI	0.55	0.55	0.50	0.55	0.55	0.55	0.50	0.55	0.55	0.55	0.50	0.55
FR	2.95	2.95	3.03	3.11	2.95	2.95	3.03	3.11	2.95	2.95	3.03	3.11
DE	6.49	6.49	7.22	7.24	6.49	6.49	7.22	7.24	6.49	6.49	7.22	7.23
EL	0.42	0.42	0.41	0.44	0.42	0.42	0.41	0.44	0.42	0.42	0.41	0.44
HU	0.15	0.15	0.17	0.20	0.15	0.15	0.17	0.20	0.15	0.15	0.17	0.20
IE	0.25	0.25	0.29	0.35	0.25	0.25	0.29	0.35	0.25	0.25	0.29	0.35
IT	3.63	3.63	4.26	4.75	3.63	3.63	4.26	4.75	3.63	3.63	4.26	4.75
LV	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.04
LT	0.11	0.11	0.14	0.15	0.11	0.11	0.14	0.15	0.11	0.11	0.14	0.15
LU	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02
MT	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03
NL	0.52	0.52	0.55	0.61	0.52	0.52	0.55	0.61	0.52	0.52	0.55	0.61
PL	1.77	1.77	1.51	1.57	1.77	1.77	1.51	1.57	1.77	1.77	1.51	1.57
PT	0.09	0.09	0.08	0.07	0.09	0.09	0.08	0.07	0.09	0.09	0.08	0.07
RO	0.38	0.38	0.42	0.46	0.38	0.38	0.42	0.46	0.38	0.38	0.42	0.46

[214] Typically, above 80% according to industry representatives.
[215] Based on PRIMES-TREMOVE model results.
[216] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
SK	0.17	0.17	0.19	0.24	0.17	0.17	0.19	0.24	0.17	0.17	0.19	0.24
SI	0.08	0.08	0.10	0.10	0.08	0.08	0.10	0.10	0.08	0.08	0.10	0.10
ES	2.16	2.16	2.14	2.33	2.16	2.16	2.14	2.33	2.16	2.16	2.14	2.33
SE	0.51	0.51	0.59	0.66	0.51	0.51	0.59	0.66	0.51	0.51	0.59	0.66
EU27	**22.37**	**22.37**	**23.95**	**25.47**	**22.36**	**22.36**	**23.94**	**25.47**	**22.36**	**22.36**	**23.94**	**25.46**

Source: Ricardo (2025), Support study

In addition, 5 working days per year are assumed to be needed for collecting data from different parts of the company and from sub-contractors, quality-check, validate, and submit the data to the national public authorities. Using the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals) in 2023 prices and the number of large companies, the recurrent costs for collecting the data from different parts of the company are estimated at EUR 62.43 million per year in PO2A, PO2B and PO2C as shown in the table below.

Table 48: Recurrent administrative costs for large companies for collecting data from different parts of the company and from sub-contractors and submit the data to the national public authorities in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17
BE	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49
BG	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
HR	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
CY	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
CZ	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
DK	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72	1.72
EE	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
FI	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
FR	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06
DE	22.10	22.10	22.10	22.10	22.10	22.10	22.10	22.10	22.10	22.10	22.10	22.10
EL	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
HU	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
IE	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
IT	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29
LV	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
LT	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
LU	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
MT	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
NL	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
PL	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
PT	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
RO	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
SK	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
SI	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ES	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49
SE	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52
EU27	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**	**62.43**

Source: Ricardo (2025), Support study

For sub-contractors of large companies, 5 minutes per working day per lorry are assumed to be needed to report the type of vehicle and activity performed (i.e. tonne-km), drawing on feedback from the targeted interviews. Considering the tariff rates by Member State for the ISCO 8 category (plant and machine operators, and assemblers), the recurrent administrative costs for sub-contractors of large companies are estimated at around EUR 2.28 billion in 2029 and 2030, EUR 2.46 billion in 2040 and EUR 2.55 billion in

2050 in PO2A, PO2B and PO2C (see Table 49). Of this, for SMEs as sub-contractors of large companies the recurrent administrative costs are estimated at around EUR 1.84 billion in 2029 and 2030, EUR 1.98 billion in 2040 and EUR 2.04 billion in 2050, and for large companies as sub-contractors of large companies at around EUR 447 million in 2029 and 2030, around EUR 479 million in 2040 and around EUR 509 million in 2050 in PO2A, PO2B and PO2C relative to the baseline.

Table 49: Recurrent administrative costs for sub-contractors (large companies and SMEs) of large companies to report the type of vehicle and the activity performed in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	42.3	42.3	46.6	49.9	42.3	42.3	46.6	49.9	42.3	42.3	46.6	49.9
BE	102.8	102.8	111.3	111.8	102.6	102.6	111.3	111.8	102.6	102.6	111.3	111.8
BG	9.3	9.3	11.3	13.1	9.3	9.3	11.3	13.1	9.3	9.3	11.3	13.1
HR	10.5	10.5	11.7	12.5	10.5	10.5	11.7	12.5	10.5	10.5	11.7	12.5
CY	6.5	6.5	7.0	7.4	6.5	6.5	7.0	7.4	6.5	6.5	7.0	7.4
CZ	48.0	48.0	55.0	57.6	48.0	48.0	55.0	57.6	48.1	48.1	55.0	57.6
DK	30.3	30.3	32.4	32.7	30.3	30.3	32.4	32.7	30.3	30.3	32.4	32.7
EE	5.4	5.4	5.6	5.7	5.4	5.4	5.6	5.7	5.4	5.4	5.6	5.7
FI	63.3	63.3	57.3	54.2	63.3	63.3	57.3	54.2	63.3	63.3	57.3	54.2
FR	355.2	355.2	379.0	383.9	355.2	355.2	379.0	383.9	355.2	355.2	379.0	383.9
DE	566.4	566.5	637.8	623.7	566.3	566.4	637.6	623.4	566.2	566.2	637.3	623.1
EL	40.7	40.7	40.0	41.1	40.7	40.7	40.0	41.1	40.7	40.7	40.0	41.1
HU	17.9	17.9	20.6	22.5	17.9	17.9	20.6	22.5	17.9	17.9	20.6	22.5
IE	21.5	21.5	23.0	27.2	21.5	21.5	23.0	27.2	21.5	21.5	23.0	27.2
IT	321.4	321.4	382.0	433.7	321.4	321.4	382.0	433.7	321.4	321.4	382.0	433.7
LV	5.3	5.3	5.4	5.4	5.3	5.3	5.4	5.4	5.3	5.3	5.4	5.4
LT	10.1	10.2	13.3	13.7	10.1	10.2	13.3	13.7	10.1	10.2	13.3	13.7
LU	3.2	3.2	3.7	4.1	3.2	3.2	3.7	4.1	3.2	3.2	3.7	4.1
MT	2.8	2.8	2.4	2.4	2.8	2.8	2.4	2.4	2.8	2.8	2.4	2.4
NL	81.4	81.5	98.3	108.2	81.4	81.5	98.3	108.2	81.4	81.5	98.3	108.2
PL	172.0	172.0	154.0	151.2	172.0	172.0	154.0	151.2	172.0	172.0	154.0	151.2
PT	10.5	10.5	8.9	7.6	10.5	10.5	8.9	7.6	10.5	10.5	8.9	7.6
RO	34.9	35.0	38.0	40.8	34.9	34.9	38.0	40.8	34.9	34.9	38.0	40.8
SK	19.7	19.7	21.6	25.7	19.7	19.7	21.6	25.7	19.7	19.7	21.6	25.7
SI	8.7	8.7	10.4	11.2	8.7	8.7	10.4	11.2	8.7	8.7	10.4	11.2
ES	227.2	227.2	213.5	217.0	227.2	227.2	213.5	217.0	227.2	227.2	213.5	217.0
SE	67.1	67.1	73.6	82.4	67.1	67.1	73.6	82.4	67.1	67.1	73.6	82.4
EU27	**2,284.4**	**2,284.6**	**2,463.7**	**2,546.7**	**2,284.1**	**2,284.4**	**2,463.4**	**2,546.3**	**2,284.0**	**2,284.2**	**2,463.1**	**2,546.0**

Source: Ricardo (2025), Support study

Table 50: Recurrent administrative costs for SMEs as sub-contractors of large companies to report the type of vehicle and the activity performed in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	33.9	33.9	37.4	39.7	33.9	33.9	37.4	39.7	33.9	33.9	37.4	39.7
BE	89.6	89.6	96.3	94.8	89.5	89.5	96.3	94.7	89.5	89.5	96.3	94.7
BG	8.6	8.6	10.4	11.4	8.6	8.6	10.4	11.4	8.6	8.6	10.4	11.4
HR	7.8	7.8	9.2	9.8	7.8	7.8	9.2	9.8	7.8	7.8	9.2	9.8
CY	5.2	5.2	5.5	5.8	5.2	5.2	5.5	5.8	5.2	5.2	5.5	5.8
CZ	37.8	37.8	43.4	45.8	37.8	37.8	43.4	45.8	37.8	37.8	43.4	45.8
DK	26.5	26.5	28.3	28.2	26.5	26.5	28.3	28.2	26.5	26.5	28.3	28.2
EE	4.3	4.3	4.6	4.5	4.3	4.3	4.6	4.5	4.3	4.3	4.6	4.5
FI	52.3	52.3	47.4	43.1	52.3	52.3	47.4	43.1	52.3	52.3	47.4	43.1
FR	296.2	296.2	318.4	321.8	296.2	296.2	318.4	321.8	296.2	296.2	318.4	321.7
DE	436.6	436.7	493.3	478.9	436.5	436.6	493.2	478.7	436.4	436.5	493.0	478.4
EL	32.3	32.3	31.9	32.2	32.3	32.3	31.9	32.2	32.3	32.3	31.9	32.2

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
HU	14.8	14.8	17.2	18.6	14.8	14.8	17.2	18.6	14.8	14.8	17.2	18.6
IE	16.5	16.5	17.2	20.2	16.5	16.5	17.2	20.2	16.5	16.5	17.2	20.2
IT	248.7	248.8	296.8	338.6	248.7	248.8	296.8	338.6	248.7	248.8	296.9	338.6
LV	4.6	4.6	4.7	4.6	4.6	4.6	4.7	4.6	4.6	4.6	4.7	4.6
LT	8.0	8.0	10.4	10.7	8.0	8.0	10.4	10.7	8.0	8.0	10.4	10.7
LU	2.9	2.9	3.3	3.7	2.9	2.9	3.3	3.7	2.9	2.9	3.3	3.7
MT	2.2	2.2	2.0	1.9	2.2	2.2	2.0	1.9	2.2	2.2	2.0	1.9
NL	71.1	71.1	87.3	96.0	71.1	71.1	87.3	96.0	71.1	71.1	87.3	96.0
PL	136.6	136.6	123.8	119.8	136.6	136.6	123.8	119.8	136.6	136.6	123.8	119.8
PT	8.6	8.6	7.3	6.2	8.6	8.6	7.3	6.2	8.6	8.6	7.3	6.2
RO	27.4	27.4	29.6	31.5	27.4	27.4	29.6	31.5	27.4	27.4	29.6	31.5
SK	16.3	16.3	17.8	21.0	16.3	16.3	17.8	21.0	16.3	16.3	17.8	21.0
SI	7.1	7.1	8.5	9.1	7.1	7.1	8.5	9.1	7.1	7.1	8.5	9.1
ES	184.1	184.1	170.7	170.4	184.1	184.1	170.7	170.4	184.1	184.1	170.7	170.4
SE	56.9	56.9	61.9	69.2	56.9	56.9	61.9	69.2	56.9	56.9	61.9	69.2
EU27	**1,837.1**	**1,837.3**	**1,984.7**	**2,037.3**	**1,836.9**	**1,837.1**	**1,984.5**	**2,037.0**	**1,836.8**	**1,837.1**	**1,984.3**	**2,036.8**

Source: Ricardo (2025), Support study

Table 51: Recurrent administrative costs for large companies as sub-contractors of large companies to report the type of vehicle and the activity performed in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	8.4	8.4	9.2	10.3	8.4	8.4	9.2	10.3	8.4	8.4	9.2	10.3
BE	13.1	13.1	15.0	17.1	13.1	13.1	15.0	17.1	13.1	13.1	15.0	17.1
BG	0.7	0.7	1.0	1.7	0.7	0.7	1.0	1.7	0.7	0.7	1.0	1.7
HR	2.6	2.6	2.5	2.7	2.6	2.6	2.5	2.7	2.6	2.6	2.5	2.7
CY	1.2	1.2	1.5	1.7	1.2	1.2	1.5	1.7	1.2	1.2	1.5	1.7
CZ	10.3	10.3	11.6	11.8	10.3	10.3	11.6	11.7	10.3	10.3	11.6	11.7
DK	3.8	3.8	4.1	4.5	3.8	3.8	4.1	4.5	3.8	3.8	4.1	4.5
EE	1.0	1.0	1.0	1.2	1.0	1.0	1.0	1.2	1.0	1.0	1.0	1.2
FI	11.0	11.0	10.0	11.0	11.0	11.0	10.0	11.0	11.0	11.0	10.0	11.0
FR	59.0	59.0	60.6	62.1	59.0	59.0	60.6	62.1	59.0	59.0	60.6	62.1
DE	129.8	129.8	144.5	144.8	129.8	129.8	144.4	144.7	129.7	129.7	144.3	144.7
EL	8.4	8.4	8.1	8.9	8.4	8.4	8.1	8.9	8.4	8.4	8.1	8.9
HU	3.0	3.0	3.4	3.9	3.0	3.0	3.4	3.9	3.0	3.0	3.4	3.9
IE	5.0	5.0	5.8	7.1	5.0	5.0	5.8	7.1	5.0	5.0	5.8	7.1
IT	72.6	72.6	85.2	95.1	72.6	72.6	85.2	95.1	72.6	72.6	85.2	95.1
LV	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8
LT	2.2	2.2	2.9	3.0	2.2	2.2	2.9	3.0	2.2	2.2	2.9	3.0
LU	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4
MT	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NL	10.3	10.3	11.0	12.2	10.3	10.3	11.0	12.2	10.3	10.3	11.0	12.2
PL	35.4	35.4	30.2	31.4	35.4	35.4	30.2	31.4	35.4	35.4	30.2	31.4
PT	1.8	1.8	1.5	1.4	1.8	1.8	1.5	1.4	1.8	1.8	1.5	1.4
RO	7.5	7.5	8.4	9.3	7.5	7.5	8.4	9.3	7.5	7.5	8.4	9.3
SK	3.4	3.4	3.8	4.7	3.4	3.4	3.8	4.7	3.4	3.4	3.8	4.7
SI	1.6	1.6	1.9	2.1	1.6	1.6	1.9	2.1	1.6	1.6	1.9	2.1
ES	43.1	43.2	42.8	46.6	43.1	43.2	42.8	46.6	43.1	43.2	42.8	46.6
SE	10.2	10.2	11.7	13.3	10.2	10.2	11.7	13.3	10.2	10.2	11.7	13.3
EU27	**447.3**	**447.3**	**479.0**	**509.4**	**447.2**	**447.2**	**478.9**	**509.3**	**447.1**	**447.2**	**478.8**	**509.3**

Source: Ricardo (2025), Support study

Total recurrent administrative costs for businesses (for large companies and SMEs, see Table 52) are estimated at around EUR 2.37 billion in 2029 and 2030, around EUR 2.55 billion in 2040 and at around

EUR 2.63 billion in 2050 for PO2A, PO2B and PO2C relative to the baseline (EUR 389 per vehicle in 2029 and 2030, EUR 394 per vehicle in 2040 and EUR 392 per vehicle in 2050). Of this, the total recurrent administrative costs for large companies amount to around EUR 532 million in 2029 and 2030, around EUR 565 million in 2040 and around EUR 597 million in 2050 in PO2A, PO2B and PO2C relative to the baseline (see Table 53).

Expressed as present value over 2029-2050, the total recurrent administrative costs are estimated at around EUR 41.29 billion in PO2A, PO2B and PO2C, of which EUR 32.13 billion for SMEs. Overall, total one-off and recurrent administrative costs for businesses are estimated at EUR 41.36 billion in PO2A and EUR 41.35 billion in PO2B and PO2C, expressed as present value over 2029-2050, of which EUR 32.13 billion for SMEs in PO2A, PO2B and PO2C.

Table 52: Total recurrent administrative costs for businesses (large companies and SMEs) in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	44.9	44.9	49.2	52.6	44.9	44.9	49.2	52.6	44.9	44.9	49.2	52.6
BE	105.9	105.9	114.6	115.2	105.7	105.7	114.5	115.2	105.7	105.8	114.5	115.2
BG	9.6	9.6	11.6	13.4	9.6	9.6	11.6	13.4	9.6	9.6	11.6	13.4
HR	10.8	10.8	12.1	12.8	10.8	10.8	12.1	12.8	10.8	10.8	12.1	12.8
CY	6.6	6.6	7.2	7.6	6.6	6.6	7.2	7.6	6.6	6.6	7.2	7.6
CZ	49.7	49.7	56.7	59.3	49.7	49.7	56.7	59.3	49.7	49.7	56.7	59.3
DK	32.2	32.2	34.3	34.7	32.2	32.2	34.3	34.6	32.2	32.2	34.3	34.6
EE	5.5	5.5	5.7	5.9	5.5	5.5	5.7	5.9	5.5	5.5	5.7	5.9
FI	64.8	64.8	58.8	55.7	64.8	64.8	58.7	55.6	64.8	64.8	58.7	55.6
FR	366.2	366.2	390.1	395.1	366.2	366.2	390.1	395.1	366.2	366.2	390.0	395.0
DE	595.0	595.1	667.1	653.1	594.9	595.0	666.9	652.7	594.7	594.8	666.6	652.5
EL	41.6	41.6	40.8	41.9	41.6	41.6	40.8	41.9	41.6	41.6	40.8	41.9
HU	18.5	18.5	21.2	23.1	18.5	18.5	21.2	23.1	18.5	18.5	21.2	23.1
IE	23.3	23.3	24.8	29.1	23.3	23.3	24.8	29.1	23.3	23.3	24.8	29.1
IT	330.3	330.3	391.5	443.7	330.3	330.3	391.6	443.8	330.3	330.3	391.6	443.8
LV	5.5	5.5	5.6	5.6	5.5	5.5	5.6	5.6	5.5	5.5	5.6	5.6
LT	10.5	10.5	13.7	14.1	10.5	10.5	13.7	14.1	10.5	10.5	13.7	14.1
LU	3.6	3.6	4.1	4.5	3.6	3.6	4.1	4.5	3.6	3.6	4.1	4.5
MT	2.9	2.9	2.5	2.5	2.9	2.9	2.5	2.5	2.9	2.9	2.5	2.5
NL	85.9	85.9	102.8	112.7	85.9	85.9	102.8	112.7	85.9	85.9	102.8	112.8
PL	175.4	175.5	157.2	154.4	175.4	175.5	157.2	154.4	175.4	175.5	157.2	154.4
PT	11.3	11.3	9.6	8.4	11.3	11.3	9.6	8.4	11.3	11.3	9.6	8.3
RO	36.0	36.0	39.0	41.9	36.0	36.0	39.0	41.9	35.9	35.9	39.0	41.9
SK	20.3	20.3	22.2	26.3	20.3	20.3	22.2	26.3	20.3	20.3	22.2	26.3
SI	9.0	9.0	10.7	11.5	9.0	9.0	10.7	11.5	9.0	9.0	10.7	11.5
ES	233.9	233.9	220.2	223.8	233.9	233.9	220.1	223.8	233.9	233.9	220.1	223.8
SE	70.1	70.1	76.7	85.6	70.1	70.1	76.7	85.6	70.1	70.1	76.7	85.6
EU27	**2,369.2**	**2,369.4**	**2,550.1**	**2,634.6**	**2,368.9**	**2,369.2**	**2,549.8**	**2,634.2**	**2,368.8**	**2,369.0**	**2,549.5**	**2,633.9**

Source: Ricardo (2025), Support study

Table 53: Total recurrent administrative costs for large companies in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	11.0	11.0	11.9	13.0	11.0	11.0	11.9	13.0	11.0	11.0	11.9	13.0
BE	16.3	16.3	18.2	20.4	16.2	16.2	18.2	20.4	16.2	16.2	18.2	20.5
BG	1.0	1.0	1.3	2.0	1.0	1.0	1.3	2.0	1.0	1.0	1.3	2.0
HR	3.0	3.0	2.8	3.1	3.0	3.0	2.8	3.1	3.0	3.0	2.8	3.1
CY	1.4	1.4	1.7	1.9	1.4	1.4	1.7	1.9	1.4	1.4	1.7	1.9
CZ	11.9	11.9	13.3	13.5	11.9	11.9	13.3	13.5	11.9	11.9	13.3	13.5

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
DK	5.7	5.7	6.0	6.4	5.7	5.7	6.0	6.4	5.7	5.7	6.0	6.4
EE	1.2	1.2	1.1	1.3	1.2	1.2	1.1	1.3	1.2	1.2	1.1	1.3
FI	12.5	12.5	11.4	12.5	12.5	12.5	11.4	12.5	12.5	12.5	11.4	12.5
FR	70.0	70.0	71.7	73.3	70.0	70.0	71.7	73.3	70.0	70.0	71.7	73.3
DE	158.4	158.4	173.8	174.1	158.4	158.4	173.7	174.1	158.3	158.3	173.6	174.0
EL	9.2	9.2	8.9	9.7	9.2	9.2	8.9	9.7	9.2	9.2	8.9	9.7
HU	3.6	3.6	4.0	4.6	3.6	3.6	4.0	4.6	3.6	3.6	4.0	4.6
IE	6.8	6.8	7.6	8.9	6.8	6.8	7.6	8.9	6.8	6.8	7.6	8.9
IT	81.6	81.6	94.7	105.1	81.6	81.6	94.7	105.1	81.6	81.6	94.7	105.1
LV	0.9	0.9	0.9	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9	1.0
LT	2.5	2.5	3.3	3.4	2.5	2.5	3.3	3.4	2.5	2.5	3.3	3.4
LU	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8
MT	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NL	14.8	14.8	15.4	16.7	14.8	14.8	15.4	16.7	14.8	14.8	15.4	16.7
PL	38.9	38.9	33.4	34.6	38.9	38.9	33.4	34.6	38.9	38.9	33.4	34.6
PT	2.7	2.7	2.3	2.2	2.7	2.7	2.3	2.2	2.7	2.7	2.3	2.2
RO	8.5	8.5	9.5	10.4	8.5	8.5	9.5	10.4	8.5	8.5	9.5	10.4
SK	4.0	4.0	4.4	5.4	4.0	4.0	4.4	5.4	4.0	4.0	4.4	5.4
SI	1.9	1.9	2.2	2.4	1.9	1.9	2.2	2.4	1.9	1.9	2.2	2.4
ES	49.8	49.8	49.4	53.4	49.8	49.8	49.4	53.4	49.8	49.8	49.4	53.4
SE	13.2	13.2	14.8	16.4	13.2	13.2	14.8	16.4	13.2	13.2	14.8	16.4
EU27	**532.1**	**532.1**	**565.3**	**597.3**	**532.0**	**532.0**	**565.3**	**597.2**	**531.9**	**532.0**	**565.2**	**597.1**

Source: Ricardo (2025), Support study

Table 54: Total recurrent administrative costs for SMEs in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	33.9	33.9	37.4	39.7	33.9	33.9	37.4	39.7	33.9	33.9	37.4	39.7
BE	89.6	89.6	96.3	94.8	89.5	89.5	96.3	94.7	89.5	89.5	96.3	94.7
BG	8.6	8.6	10.4	11.4	8.6	8.6	10.4	11.4	8.6	8.6	10.4	11.4
HR	7.8	7.8	9.2	9.8	7.8	7.8	9.2	9.8	7.8	7.8	9.2	9.8
CY	5.2	5.2	5.5	5.8	5.2	5.2	5.5	5.8	5.2	5.2	5.5	5.8
CZ	37.8	37.8	43.4	45.8	37.8	37.8	43.4	45.8	37.8	37.8	43.4	45.8
DK	26.5	26.5	28.3	28.2	26.5	26.5	28.3	28.2	26.5	26.5	28.3	28.2
EE	4.3	4.3	4.6	4.5	4.3	4.3	4.6	4.5	4.3	4.3	4.6	4.5
FI	52.3	52.3	47.4	43.1	52.3	52.3	47.4	43.1	52.3	52.3	47.4	43.1
FR	296.2	296.2	318.4	321.8	296.2	296.2	318.4	321.8	296.2	296.2	318.4	321.7
DE	436.6	436.7	493.3	478.9	436.5	436.6	493.2	478.7	436.4	436.5	493.0	478.4
EL	32.3	32.3	31.9	32.2	32.3	32.3	31.9	32.2	32.3	32.3	31.9	32.2
HU	14.8	14.8	17.2	18.6	14.8	14.8	17.2	18.6	14.8	14.8	17.2	18.6
IE	16.5	16.5	17.2	20.2	16.5	16.5	17.2	20.2	16.5	16.5	17.2	20.2
IT	248.7	248.8	296.8	338.6	248.7	248.8	296.8	338.6	248.7	248.8	296.9	338.6
LV	4.6	4.6	4.7	4.6	4.6	4.6	4.7	4.6	4.6	4.6	4.7	4.6
LT	8.0	8.0	10.4	10.7	8.0	8.0	10.4	10.7	8.0	8.0	10.4	10.7
LU	2.9	2.9	3.3	3.7	2.9	2.9	3.3	3.7	2.9	2.9	3.3	3.7
MT	2.2	2.2	2.0	1.9	2.2	2.2	2.0	1.9	2.2	2.2	2.0	1.9
NL	71.1	71.1	87.3	96.0	71.1	71.1	87.3	96.0	71.1	71.1	87.3	96.0
PL	136.6	136.6	123.8	119.8	136.6	136.6	123.8	119.8	136.6	136.6	123.8	119.8
PT	8.6	8.6	7.3	6.2	8.6	8.6	7.3	6.2	8.6	8.6	7.3	6.2
RO	27.4	27.4	29.6	31.5	27.4	27.4	29.6	31.5	27.4	27.4	29.6	31.5
SK	16.3	16.3	17.8	21.0	16.3	16.3	17.8	21.0	16.3	16.3	17.8	21.0
SI	7.1	7.1	8.5	9.1	7.1	7.1	8.5	9.1	7.1	7.1	8.5	9.1
ES	184.1	184.1	170.7	170.4	184.1	184.1	170.7	170.4	184.1	184.1	170.7	170.4
SE	56.9	56.9	61.9	69.2	56.9	56.9	61.9	69.2	56.9	56.9	61.9	69.2

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
EU27	**1,837.1**	**1,837.3**	**1,984.7**	**2,037.3**	**1,836.9**	**1,837.1**	**1,984.5**	**2,037.0**	**1,836.8**	**1,837.1**	**1,984.3**	**2,036.8**

Source: Ricardo (2025), Support study

Recurrent enforcement costs are only expected in PO2A, PO2B and PO2C for cooperating with the sample verification of the correctness of companies' reporting that will be used by public authorities to monitor enforcement. One percent of large companies is assumed to be checked per year on average and the check per company is assumed to take 2 working days. Using the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals), the total recurrent enforcement costs are estimated at EUR 0.25 million per year in PO2A, PO2B and PO2C, or EUR 4.1 million expressed as present value over 2029-2050.

Table 55: Recurrent enforcement costs for large companies in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
AT	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
BE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CY	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
CZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DK	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FI	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
FR	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
HU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MT	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EU27	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

Source: Ricardo (2025), Support study

3.2. Administrative costs for public authorities

One-off and recurrent administrative costs for public authorities. For PO1A, PO1B and PO1C monitoring and reporting on the targets will be ensured directly by the Member States, by extracting the relevant data from their vehicle registries and submitting it yearly to the Commission. This is also the case of cars and vans under PO2A, PO2B and PO2C. While Member States are already able to differentiate corporate from private vehicles in their registry, the exclusion of corporate vehicles registered by SMEs would require a one-off adaptation of Member States' registries.

One-off administrative costs for public authorities in all policy options are derived assuming an effort of 0.2 full time equivalents per Member State for adapting the vehicle registers[217]. Considering 220 working days per year and 7.2 working hours per day on average[218], and using the tariff rate per hour by Member State for the ISCO 3 category (technicians and associate professionals) in 2023 prices[219], the total one-off costs for public authorities at EU level are estimated at EUR 0.23 million in 2029 in all policy options.

Table 56: One-off administrative costs for public authorities in all policy options, relative to the baseline (in million EUR)

	One-off administrative costs
AT	0.01
BE	0.01
BG	0.00
HR	0.00
CY	0.01
CZ	0.01
DK	0.02
EE	0.01
FI	0.01
FR	0.01
DE	0.01
EL	0.01
HU	0.00
IE	0.01
IT	0.01
LV	0.01
LT	0.00
LU	0.01
MT	0.01
NL	0.01
PL	0.00
PT	0.01
RO	0.00
SK	0.01
SI	0.01
ES	0.01
SE	0.01
EU27	**0.23**

Source: Ricardo (2025), Support study

Recurrent administrative costs for public authorities. In PO1A, PO1B and PO1C Member States are expected to spend 2 working days per year for extracting, validating, and submitting the data to the Commission/EEA. Considering 7.2 working hours per day on average and the tariff rate per hour by Member State for the ISCO 3 category (technicians and associate professionals), the recurrent administrative costs are estimated at EUR 10,350 per year at EU level. Expressed as present value over 2029-2050 they amount to EUR 0.17 million relative to the baseline.

In PO2A, PO2B and PO2C, for cars and vans the reporting is the same as in PO1. For lorries, public authorities will be required to compile reports from all large companies established on their territory and

[217] This draws on the assumptions for adding new data to the vehicle register used in the impact assessment accompanying the revision of the Roadworthiness Package (SWD(2025) 96 final/2), which considers 2.1 full time equivalents for a much larger set of data to be added to the vehicle register.
[218] Actual and usual hours of work - Statistics Explained - Eurostat
[219] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

submit them yearly to the Commission/EEA. Around 3.5 hours would be needed to receive, quality-check and collate information from each one of the reporting companies. In addition, 3 working days would be needed per year to compile all information (for cars, vans and lorries), validate, and submit it to the Commission/EEA. The total recurrent administrative costs for reporting are estimated at EUR 6.09 million per year. Expressed as present value over 2029-2050 they amount to EUR 99.89 million relative to the baseline.

Table 57: Recurrent administrative costs for public authorities for reporting in the policy options, relative to the baseline (in million EUR)

	PO1A/PO1B/PO1C				PO2A/PO2B/PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050
AT	0.001	0.001	0.001	0.001	0.21	0.21	0.21	0.21
BE	0.001	0.001	0.001	0.001	0.24	0.24	0.24	0.24
BG	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
HR	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
CY	0.000	0.000	0.000	0.000	0.01	0.01	0.01	0.01
CZ	0.000	0.000	0.000	0.000	0.11	0.11	0.11	0.11
DK	0.001	0.001	0.001	0.001	0.17	0.17	0.17	0.17
EE	0.000	0.000	0.000	0.000	0.01	0.01	0.01	0.01
FI	0.000	0.000	0.000	0.000	0.09	0.09	0.09	0.09
FR	0.001	0.001	0.001	0.001	0.78	0.78	0.78	0.78
DE	0.001	0.001	0.001	0.001	2.15	2.15	2.15	2.15
EL	0.000	0.000	0.000	0.000	0.04	0.04	0.04	0.04
HU	0.000	0.000	0.000	0.000	0.04	0.04	0.04	0.04
IE	0.001	0.001	0.001	0.001	0.15	0.15	0.15	0.15
IT	0.000	0.000	0.000	0.000	0.51	0.51	0.51	0.51
LV	0.000	0.000	0.000	0.000	0.01	0.01	0.01	0.01
LT	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
LU	0.001	0.001	0.001	0.001	0.04	0.04	0.04	0.04
MT	0.000	0.000	0.000	0.000	0.01	0.01	0.01	0.01
NL	0.001	0.001	0.001	0.001	0.38	0.38	0.38	0.38
PL	0.000	0.000	0.000	0.000	0.16	0.16	0.16	0.16
PT	0.000	0.000	0.000	0.000	0.07	0.07	0.07	0.07
RO	0.000	0.000	0.000	0.000	0.06	0.06	0.06	0.06
SK	0.000	0.000	0.000	0.000	0.04	0.04	0.04	0.04
SI	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
ES	0.000	0.000	0.000	0.000	0.44	0.44	0.44	0.44
SE	0.001	0.001	0.001	0.001	0.25	0.25	0.25	0.25
EU27	**0.010**	**0.010**	**0.010**	**0.010**	**6.09**	**6.09**	**6.09**	**6.09**

Source: Ricardo (2025), Support study

Furthermore, in PO2A, PO2B and PO2C monitoring enforcement will be performed based on sample verification of the correctness of companies' reporting. One percent of large companies is assumed to be checked per year on average and the check per company is assumed to take 2 working days, with total costs for monitoring enforcement estimated at EUR 0.25 million per year, or EUR 4.1 million expressed as present value over 2029-2050.

Table 58: Recurrent administrative costs for public authorities for monitoring enforcement in PO2A, PO2B and PO2C, relative to the baseline (in million EUR)

	PO2A/PO2B/PO2C			
	2029	2030	2040	2050
AT	0.01	0.01	0.01	0.01
BE	0.00	0.00	0.00	0.00
BG	0.00	0.00	0.00	0.00
HR	0.01	0.01	0.01	0.01
CY	0.09	0.09	0.09	0.09

	PO2A/PO2B/PO2C			
	2029	2030	2040	2050
CZ	0.00	0.00	0.00	0.00
DK	0.01	0.01	0.01	0.01
EE	0.00	0.00	0.00	0.00
FI	0.02	0.02	0.02	0.02
FR	0.03	0.03	0.03	0.03
DE	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.02	0.02
HU	0.00	0.00	0.00	0.00
IE	0.00	0.00	0.00	0.00
IT	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00
LT	0.00	0.00	0.00	0.00
LU	0.00	0.00	0.00	0.00
MT	0.02	0.02	0.02	0.02
NL	0.01	0.01	0.01	0.01
PL	0.01	0.01	0.01	0.01
PT	0.00	0.00	0.00	0.00
RO	0.00	0.00	0.00	0.00
SK	0.00	0.00	0.00	0.00
SI	0.00	0.00	0.00	0.00
ES	0.00	0.00	0.00	0.00
SE	0.01	0.01	0.01	0.01
EU27	**0.25**	**0.25**	**0.25**	**0.25**

Source: Ricardo (2025), Support study

Total recurrent administrative costs for public authorities are thus estimated at EUR 10,350 per year at EU level for PO1A, PO1B and PO1C and at EUR 6.33 million per year in PO2A, PO2B and PO2C. Expressed as present value over 2029-2050 they are estimated at EUR 0.17 million in PO1A, PO1B and PO1C and at EUR 103.99 million for PO2A, PO2B and PO2C relative to the baseline.

Table 59: Total recurrent administrative costs for public authorities in the policy options, relative to the baseline (in million EUR)

	PO1A/PO1B/PO1C				PO2A/PO2B/PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050
AT	0.001	0.001	0.001	0.001	0.22	0.22	0.22	0.22
BE	0.001	0.001	0.001	0.001	0.24	0.24	0.24	0.24
BG	0.000	0.000	0.000	0.000	0.03	0.03	0.03	0.03
HR	0.000	0.000	0.000	0.000	0.03	0.03	0.03	0.03
CY	0.000	0.000	0.000	0.000	0.10	0.10	0.10	0.10
CZ	0.000	0.000	0.000	0.000	0.11	0.11	0.11	0.11
DK	0.001	0.001	0.001	0.001	0.17	0.17	0.17	0.17
EE	0.000	0.000	0.000	0.000	0.01	0.01	0.01	0.01
FI	0.000	0.000	0.000	0.000	0.11	0.11	0.11	0.11
FR	0.001	0.001	0.001	0.001	0.82	0.82	0.82	0.82
DE	0.001	0.001	0.001	0.001	2.15	2.15	2.15	2.15
EL	0.000	0.000	0.000	0.000	0.06	0.06	0.06	0.06
HU	0.000	0.000	0.000	0.000	0.04	0.04	0.04	0.04
IE	0.001	0.001	0.001	0.001	0.15	0.15	0.15	0.15
IT	0.000	0.000	0.000	0.000	0.52	0.52	0.52	0.52
LV	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
LT	0.000	0.000	0.000	0.000	0.03	0.03	0.03	0.03
LU	0.001	0.001	0.001	0.001	0.04	0.04	0.04	0.04
MT	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
NL	0.001	0.001	0.001	0.001	0.39	0.39	0.39	0.39
PL	0.000	0.000	0.000	0.000	0.17	0.17	0.17	0.17

	PO1A/PO1B/PO1C				PO2A/PO2B/PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050
PT	0.000	0.000	0.000	0.000	0.07	0.07	0.07	0.07
RO	0.000	0.000	0.000	0.000	0.06	0.06	0.06	0.06
SK	0.000	0.000	0.000	0.000	0.04	0.04	0.04	0.04
SI	0.000	0.000	0.000	0.000	0.02	0.02	0.02	0.02
ES	0.000	0.000	0.000	0.000	0.44	0.44	0.44	0.44
SE	0.001	0.001	0.001	0.001	0.26	0.26	0.26	0.26
EU27	**0.010**	**0.010**	**0.010**	**0.010**	**6.33**	**6.33**	**6.33**	**6.33**

Source: Ricardo (2025), Support study

The total one-off and recurrent administrative costs for public authorities amount to EUR 0.40 million in PO1A, PO1B and PO1C and at EUR 104.21 million, expressed as present value over 2029-2050 relative to the baseline.

4. OTHER DETAILED IMPACTS OF THE POLICY OPTIONS

This section provides more detailed results on the changes in ZEV in the second-hand market and total stock, as well as on the fossil fuel consumption, CO_2 and air pollution emissions and external costs. Table 60 presents the number of ZEV in the second-hand market in the policy options relative to the baseline for 2031-2035, 2036-2040, 2041-2045 and 2046-2050 by different type of vehicle (cars, vans and lorries) and stakeholder group (citizens and corporate for large companies and SMEs). Table 61 presents the number of ZEV in the stock for 2030, 2040 and 2050 in the policy options relative to the baseline by different type of vehicle (cars, vans and lorries) and stakeholder group (citizens and corporate for large companies and SMEs). Table 62 presents the fossil fuel consumption by policy option for specific years, relative to the baseline, while Tables 63 and 64 present the impacts on CO_2 emissions and air pollution emissions and the impacts on external costs of CO_2 emissions, air pollution emissions and noise for specific years.

Table 60: Number of ZEV in the second-hand market in the policy options (difference relative to the baseline), expressed as annual averages over 2031-2035, 2036-2040, 2041-2045 and 2046-2050 (in thousand vehicles)

	PO1A				PO1B				PO1C			
	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50
Cars	461	1,078	688	152	715	1,621	1,027	234	885	2,180	1,431	328
Citizens	333	796	509	110	517	1,189	754	167	639	1,597	1,048	234
Corporate	127	282	179	43	198	432	274	67	246	583	383	95
Large companies	4	8	5	2	7	14	9	3	9	19	14	5
SMEs	123	274	174	41	191	418	264	64	237	564	369	90
Vans	24	149	162	81	44	205	220	112	64	267	288	154
Citizens	1	10	11	5	3	13	14	6	4	17	19	9
Corporate	22	139	151	76	41	192	205	106	60	250	270	146
Large companies	4	24	25	12	7	33	34	17	10	43	45	23
SMEs	18	115	126	64	34	159	171	89	50	207	225	122
Lorries	4	18	28	40	6	29	45	56	9	41	65	77
Large companies	1	3	4	6	1	4	7	9	1	6	10	12
SMEs	3	16	24	34	5	25	38	47	7	34	55	65
Total	488	1,245	878	273	764	1,855	1,292	401	958	2,488	1,784	559
	PO2A				PO2B				PO2C			
	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50	'31-35	'36-40	'41-45	'46-50
Cars	461	1,078	688	152	715	1,621	1,027	234	885	2,180	1,431	328
Citizens	333	796	509	110	517	1,189	754	167	639	1,597	1,048	234
Corporate	127	282	179	43	198	432	274	67	246	583	383	95
Large companies	4	8	5	2	7	14	9	3	9	19	14	5
SMEs	123	274	174	41	191	418	264	64	237	564	369	90
Vans	24	149	162	81	44	205	220	112	64	267	288	154

Citizens	1	10	11	5	3	13	14	6	4	17	19	9
Corporate	22	139	151	76	41	192	205	106	60	250	270	146
Large companies	4	24	25	12	7	33	34	17	10	43	45	23
SMEs	18	115	126	64	34	159	171	89	50	207	225	122
Lorries	30	100	157	196	40	134	208	254	57	175	265	319
Large companies	4	16	26	32	6	22	34	42	9	28	43	52
SMEs	25	84	131	164	34	112	174	212	48	147	222	267
Total	514	1,327	1,007	429	798	1,960	1,455	599	1,006	2,622	1,985	802

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 61: Number of ZEV in the stock in the policy options - difference relative to the baseline (in thousand vehicles)

	PO1A			PO1B			PO1C		
	2030	2040	2050	2030	2040	2050	2030	2040	2050
Cars	477	1,019	606	852	1,698	1,018	1,084	2,531	1,541
Citizens	-347	686	586	-421	1,193	986	-492	1,824	1,497
Corporate	825	333	20	1,273	505	31	1,575	708	44
Large companies	1,026	17	2	1,517	27	3	1,860	38	4
SMEs	-201	315	18	-243	478	28	-284	669	40
Vans	37	182	47	75	262	67	111	358	98
Citizens	-6	-10	-4	-9	-8	-3	-13	-4	0
Corporate	43	192	51	84	270	70	123	363	98
Large companies	85	140	8	150	170	11	221	203	15
SMEs	-42	53	43	-66	100	59	-98	160	83
Lorries	3	27	45	6	42	59	9	63	81
Large companies	11	35	24	18	57	27	25	82	30
SMEs	-8	-8	21	-12	-16	32	-16	-19	50
	PO2A			PO2B			PO2C		
	2030	2040	2050	2030	2040	2050	2030	2040	2050
Cars	477	1,019	606	852	1,698	1,018	1,084	2,531	1,541
Citizens	-347	686	586	-421	1,193	986	-492	1,824	1,497
Corporate	825	333	20	1,273	505	31	1,575	708	44
Large companies	1,026	17	2	1,517	27	3	1,860	38	4
SMEs	-201	315	18	-243	478	28	-284	669	40
Vans	37	182	47	75	262	67	111	358	98
Citizens	-6	-10	-4	-9	-8	-3	-13	-4	0
Corporate	43	192	51	84	270	70	123	363	98
Large companies	85	140	8	150	170	11	221	203	15
SMEs	-42	53	43	-66	100	59	-98	160	83
Lorries	54	205	267	77	269	332	115	338	407
Large companies	12	26	45	15	43	58	24	56	73
SMEs	42	179	222	62	226	274	91	283	334

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 62: Impacts on fossil fuel consumption in the policy options for 2029, 2030, 2040 and 2050 relative to the baseline (in ktoe and % change to the baseline)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Fossil fuel consumption (ktoe)	-134	-386	-418	-77	-374	-1,094	-1,127	-108	-521	-1,524	-2,340	-160
% change to baseline	-0.1%	-0.1%	-0.2%	-0.7%	-0.2%	-0.2%	-0.5%	-1.0%	-0.3%	-0.3%	-1.1%	-1.4%
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Fossil fuel consumption (ktoe)	-198	-567	-3,407	-402	-579	-1,712	-4,783	-490	-961	-2,869	-6,645	-610
% change to baseline	-0.1%	-0.1%	-1.6%	-3.6%	-0.3%	-0.3%	-2.2%	-4.4%	-0.6%	-0.5%	-3.1%	-5.4%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 63: Impacts on CO_2 emissions and air pollution emissions in the policy options for 2029, 2030, 2040 and 2050 relative to the baseline (in kt and % change to the baseline)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
CO2 emissions (kt)	-381	-381	-412	-77	-1,088	-1,089	-1,122	-108	-1,518	-1,520	-2,335	-161
% change to baseline	-0.1%	-0.1%	-0.2%	-0.7%	-0.2%	-0.2%	-0.5%	-1.0%	-0.3%	-0.3%	-1.1%	-1.5%
NOx emissions (kt)	-0.8	-0.8	-0.8	-0.2	-1.3	-1.3	-1.4	-0.3	-1.4	-1.4	-2.4	-0.6
% change to baseline	-0.1%	-0.1%	-0.3%	-0.5%	-0.1%	-0.1%	-0.6%	-0.8%	-0.2%	-0.2%	-1.0%	-1.4%
PM2.5 emissions (kt)	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0
% change to baseline	-0.1%	-0.1%	-0.1%	1.0%	-0.1%	-0.1%	-0.3%	0.8%	-0.1%	-0.1%	-0.6%	0.5%
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
CO2 emissions (kt)	-561	-562	-3,402	-402	-1,706	-1,707	-4,778	-491	-2,862	-2,864	-6,640	-611
% change to baseline	-0.1%	-0.1%	-1.6%	-3.7%	-0.3%	-0.3%	-2.3%	-4.5%	-0.6%	-0.6%	-3.2%	-5.7%
NOx emissions (kt)	1.4	1.4	-1.8	-1.2	0.9	0.9	-2.6	-1.5	0.7	0.7	-4.3	-2.0
% change to baseline	0.2%	0.2%	-0.7%	-3.0%	0.1%	0.1%	-1.1%	-3.8%	0.1%	0.1%	-1.8%	-5.1%
PM2.5 emissions (kt)	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.2	0.0
% change to baseline	0.0%	0.0%	-0.3%	0.3%	0.0%	0.0%	-0.6%	0.0%	-0.1%	-0.1%	-1.0%	-0.5%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 64: Savings in external costs of CO_2 emissions, air pollution emissions and noise emissions in the policy options for 2029, 2030, 2040 and 2050 relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
CO2 emissions	48	48	96	26	137	137	261	37	192	192	543	55
Air pollution emissions	19	19	13	-3	34	34	29	1	40	40	57	7
Noise emissions	5	5	5	2	13	13	14	4	18	18	27	7
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
CO2 emissions	71	71	792	137	215	215	1,112	167	361	361	1,545	207
Air pollution emissions	-26	-26	28	12	-9	-9	48	18	-4	-4	84	27
Noise emissions	33	33	17	11	47	47	25	15	66	66	42	24

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

5. SUMMARY OF COSTS AND COST SAVINGS BY POLICY OPTION AND STAKEHOLDER GROUP

This section provides the costs and costs savings by policy option and stakeholder group for 2029, 2030, 2040 and 2050 relative to the baseline. The present value of the costs and costs savings by stakeholder group over 2029-2050, relative to the baseline, are presented in section 6.1 of the impact assessment.

5.1. Businesses

Table 65: Recurrent and one-off costs and cost savings for businesses in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enforcement costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adjustment costs	1,149	1,151	1,396	384	1,668	1,670	1,938	420	2,211	2,213	2,471	458
Capital costs	276	277	408	168	397	397	689	177	535	535	984	237
Fuel costs	391	392	679	161	552	553	840	196	717	717	966	183
Other operation costs	482	483	309	55	719	720	409	47	959	960	520	37
Increase in tax expenditures	470	470	474	33	644	645	646	26	820	821	789	14
Adjustment costs savings	1,464	1,466	1,767	624	2,368	2,370	2,447	636	3,174	3,177	3,177	659
Capital costs savings	518	519	916	160	873	874	1,259	149	1,175	1,176	1,560	116

Fuel costs savings	549	550	491	273	873	873	694	280	1,145	1,146	958	292
Other operation costs savings	397	397	360	191	622	623	494	207	854	855	659	251
Reduction in tax expenditures	918	919	729	173	1,447	1,448	1,155	179	1,866	1,868	1,696	206
Net benefits (+) or net costs (-)	**764**	**764**	**626**	**380**	**1,502**	**1,504**	**1,018**	**368**	**2,009**	**2,011**	**1,613**	**393**
	PO2A				**PO2B**				**PO2C**			
	2029	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**
Administrative costs	2,430	2,369	2,550	2,635	2,429	2,369	2,550	2,634	2,429	2,369	2,549	2,634
Enforcement costs	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adjustment costs	1,599	1,600	2,397	1,326	2,254	2,256	3,108	1,645	3,208	3,211	3,939	1,888
Capital costs	684	685	1,705	1,138	1,006	1,007	2,394	1,463	1,543	1,545	3,198	1,735
Fuel costs	645	646	482	134	861	862	514	134	1,117	1,118	469	116
Other operation costs	269	270	210	54	387	387	200	47	548	549	272	37
Increase in tax expenditures	424	424	133	33	539	540	130	26	647	648	118	14
Adjustment costs savings	1,077	1,078	1,527	2,244	1,768	1,770	1,929	2,576	2,440	2,442	2,510	2,974
Capital costs savings	339	339	583	100	599	599	707	107	799	799	843	116
Fuel costs savings	497	497	430	1,648	797	798	617	1,909	1,048	1,049	859	2,200
Other operation costs savings	242	242	514	496	372	373	605	560	593	594	807	658
Reduction in tax expenditures	907	908	1,655	967	1,463	1,465	2,193	1,109	1,973	1,975	2,860	1,291
Net benefits (+) or net costs (-)	**-2,469**	**-2,409**	**-1,898**	**-783**	**-1,992**	**-1,931**	**-1,666**	**-620**	**-1,872**	**-1,811**	**-1,237**	**-272**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

Table 66: One-off costs and cost savings for businesses in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				**PO1B**				**PO1C**			
	2029	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**
Administrative costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adjustment costs (capital costs)	276	277	408	168	397	397	689	177	535	535	984	237
Adjustment costs savings (capital costs savings)	518	519	916	160	873	874	1,259	149	1,175	1,176	1,560	116
Net benefits (+) or net costs (-)	**242**	**242**	**508**	**-8**	**477**	**477**	**571**	**-28**	**640**	**640**	**576**	**-121**
	PO2A				**PO2B**				**PO2C**			
	2029	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**
Administrative costs	60.46	0.00	0.00	0.00	60.46	0.00	0.00	0.00	60.46	0.00	0.00	0.00
Adjustment costs (capital costs)	684	685	1,705	1,138	1,006	1,007	2,394	1,463	1,543	1,545	3,198	1,735
Adjustment costs savings (capital costs savings)	339	339	583	100	599	599	707	107	799	799	843	116
Net benefits (+) or net costs (-)	**-406**	**-346**	**-1,122**	**-1,038**	**-468**	**-408**	**-1,686**	**-1,357**	**-805**	**-745**	**-2,355**	**-1,619**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

5.2. National public authorities

In the baseline scenario the fuel tax revenues from cars, vans and lorries are projected to decrease from EUR 189.3 billion in 2029 to EUR 54.2 billion in 2050, driven by the higher uptake of ZEV over time. It should be noted that the losses in tax revenues, presented in the table below, represent around 0.5% of the baseline

in 2029-2030 in PO1A/PO2A, around 0.8% in PO1B/PO2B and around 1% in PO1C/PO2C. Post-2030, the reduction is higher in PO2 (i.e. 1.8% reduction relative to the baseline in PO2A, 2.3% in PO2B and 2.9% in PO2C).

Table 67: Recurrent and one-off costs and cost savings for national public authorities in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.24	0.01	0.01	0.01	0.24	0.01	0.01	0.01	0.24	0.01	0.01	0.01
Losses in tax revenues	918	919	830	182	1,447	1,448	1,477	302	1,866	1,868	2,411	485
Additional tax revenues	774	775	482	33	1,032	1,033	655	26	1,285	1,286	798	15
Net benefits (+) or net costs (-)	**-145**	**-145**	**-348**	**-149**	**-415**	**-415**	**-822**	**-276**	**-581**	**-582**	**-1,613**	**-471**
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	6.56	6.33	6.33	6.33	6.56	6.33	6.33	6.33	6.56	6.33	6.33	6.33
Losses in tax revenues	907	908	1,756	976	1,463	1,465	2,515	1,233	1,973	1,975	3,576	1,570
Additional tax revenues	728	729	141	33	927	928	139	26	1,112	1,113	127	15
Net benefits (+) or net costs (-)	**-185**	**-185**	**-1,621**	**-949**	**-542**	**-543**	**-2,382**	**-1,213**	**-868**	**-869**	**-3,455**	**-1,561**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 68: One-off costs for national public authorities in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.23	0.00	0.00	0.00

Source: Ricardo (2025), Support study

5.3. European Environment Agency (EEA)

Table 69: Recurrent and one-off costs for European Environment Agency in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.05	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.05	0.06	0.06	0.06

Source: Ricardo (2025), Support study

Table 70: One-off costs for European Environment Agency in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.03				0.03				0.03			
	PO2A				PO2B				PO2C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Administrative costs	0.05				0.05				0.05			

Source: Ricardo (2025), Support study

5.4. Citizens

Table 71: Recurrent and one-off costs and cost savings for citizens in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Adjustment costs	389	390	189	154	500	501	324	199	609	610	522	316
Capital costs	137	137	0	0	161	162	0	0	192	192	0	0
Fuel costs	198	199	11	31	257	257	13	8	311	311	16	9
Other operation costs	54	54	179	124	82	82	310	190	106	106	506	307
Increase in tax expenditures	304	305	8	0	388	389	8	0	465	465	9	0
Adjustment costs savings	39	39	295	66	44	44	562	216	47	47	988	460
Capital costs savings	0	0	275	58	0	0	392	66	0	0	529	76
Fuel costs savings	0	0	8	0	0	0	159	142	0	0	452	376
Other operation costs savings	39	39	12	8	44	44	10	9	47	47	6	8
Reduction in tax expenditures	0	0	101	9	0	0	322	124	0	0	715	279
Net benefits (+) or net costs (-)	**-655**	**-656**	**198**	**-79**	**-845**	**-846**	**552**	**141**	**-1,027**	**-1,028**	**1,172**	**423**
	PO2A				**PO2B**				**PO2C**			
	2029	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**
Adjustment costs	389	390	189	154	500	501	324	199	609	610	522	316
Capital costs	137	137	0	0	161	162	0	0	192	192	0	0
Fuel costs	198	199	11	31	257	257	13	8	311	311	16	9
Other operation costs	54	54	179	124	82	82	310	190	106	106	506	307
Increase in tax expenditures	304	305	8	0	388	389	8	0	465	465	9	0
Adjustment costs savings	39	39	295	66	44	44	562	216	47	47	988	460
Capital costs savings	0	0	275	58	0	0	392	66	0	0	529	76
Fuel costs savings	0	0	8	0	0	0	159	142	0	0	452	376
Other operation costs savings	39	39	12	8	44	44	10	9	47	47	6	8
Reduction in tax expenditures	0	0	101	9	0	0	322	124	0	0	715	279
Net benefits (+) or net costs (-)	**-655**	**-656**	**198**	**-79**	**-845**	**-846**	**552**	**141**	**-1,027**	**-1,028**	**1,172**	**423**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 72: One-off costs and cost savings for citizens in the policy options, in 2029, 2030, 2040 and 2050, relative to the baseline, in million EUR (2023 prices)

	PO1A				PO1B				PO1C			
	2029	2030	2040	2050	2029	2030	2040	2050	2029	2030	2040	2050
Adjustment costs (capital costs)	137	137	0	0	161	162	0	0	192	192	0	0
Adjustment costs savings (capital costs savings)	0	0	275	58	0	0	392	66	0	0	529	76
Net benefits (+) or net costs (-)	**-137**	**-137**	**275**	**58**	**-161**	**-162**	**392**	**66**	**-192**	**-192**	**529**	**76**
	PO2A				**PO2B**				**PO2C**			
	2029	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**	**2029**	**2030**	**2040**	**2050**
Adjustment costs (capital costs)	137	137	0	0	161	162	0	0	192	192	0	0
Adjustment costs savings (capital costs savings)	0	0	275	58	0	0	392	66	0	0	529	76
Net benefits (+) or net costs (-)	**-137**	**-137**	**275**	**58**	**-161**	**-162**	**392**	**66**	**-192**	**-192**	**529**	**76**

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

6. SUMMARY OF COSTS AND BENEFITS BY POLICY OPTION INCLUDING THE SPLIT BY VEHICLE TYPE

This section provides the summary of the costs and benefits expressed as present value over 2029-2050 relative to the baseline, by policy option and stakeholder group, also including the split between cars and vans, and lorries.

Table 73: Summary of costs and benefits of policy options including the split by vehicle type - present value over 2029-2050 compared to the baseline (in billion EUR, 2023 prices)

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Businesses						
Administrative costs	0.00	0.00	0.00	41.36	41.35	41.35
Cars and vans	0.00	0.00	0.00	0.00	0.00	0.00
Lorries	0.00	0.00	0.00	41.36	41.35	41.35
Enforcement costs	0.00	0.00	0.00	0.004	0.004	0.004
Cars and vans	0.00	0.00	0.00	0.00	0.00	0.00
Lorries	0.00	0.00	0.00	0.004	0.004	0.004
Adjustment costs	24.5	32.7	40.8	36.6	47.9	61.7
Cars and vans	10.1	12.1	13.7	10.1	12.1	13.7
Lorries	14.3	20.6	27.1	26.5	35.8	48.0
Increase in tax expenditures	9.7	12.3	14.3	5.4	6.3	6.8
Cars and vans	5.3	6.2	6.8	5.3	6.2	6.8
Lorries	4.4	6.0	7.5	0.1	0.1	0.0
Adjustment costs savings	32.9	45.7	59.2	30.7	40.9	53.5
Cars and vans	20.9	29.4	38.9	20.9	29.4	38.9
Lorries	11.9	16.2	20.3	9.8	11.4	14.6
Reduction in tax expenditures	17.8	25.6	34.6	26.5	36.3	47.8
Cars and vans	12.8	19.1	26.4	12.8	19.1	26.4
Lorries	5.0	6.5	8.2	13.7	17.2	21.5
Citizens						
Adjustment costs	6.0	7.8	10.3	6.0	7.8	10.3
Cars and vans	6.0	7.8	10.3	6.0	7.8	10.3
Increase in tax expenditures	3.8	4.3	4.7	3.8	4.3	4.7
Cars and vans	3.8	4.3	4.7	3.8	4.3	4.7
Adjustment costs savings	2.2	4.0	7.0	2.2	4.0	7.0
Cars and vans	2.2	4.0	7.0	2.2	4.0	7.0
Reduction in tax expenditures	0.6	2.1	4.6	0.6	2.1	4.6
Cars and vans	0.6	2.1	4.6	0.6	2.1	4.6
National authorities						
Administrative costs	0.00	0.00	0.00	0.10	0.10	0.10
Losses in tax revenues	18.4	27.7	39.1	27.1	38.4	52.4
Cars and vans	13.4	21.2	31.0	13.4	21.2	31.0
Lorries	5.0	6.5	8.2	13.7	17.2	21.5
Additional tax revenues	13.5	16.6	18.9	9.2	10.6	11.5
Cars and vans	9.1	10.5	11.4	9.1	10.5	11.4
Lorries	4.4	6.0	7.5	0.1	0.1	0.0
European Environmental Agency						
Administrative costs	0.0005	0.0005	0.0005	0.0009	0.0009	0.0009
External costs savings						
External costs related to CO2 emissions, air pollution emissions and noise	1.9	4.3	7.9	8.4	12.9	18.9
Cars and vans	1.7	4.2	7.7	1.7	4.2	7.7
Lorries	0.1	0.1	0.2	6.6	8.7	11.1
Total costs	62.3	84.8	109.2	120.3	146.1	177.4
Total benefits	68.8	98.3	132.2	77.6	106.8	143.2
Net benefits (+) or net costs (-)	6.5	13.6	23.0	-42.7	-39.4	-34.2

	PO1A	PO1B	PO1C	PO2A	PO2B	PO2C
Benefits to costs ratio	1.10	1.16	1.21	0.65	0.73	0.81

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for the administrative and enforcement costs.

7. SUMMARY OF COSTS AND COST SAVINGS BY POLICY OPTION AND STAKEHOLDER GROUP BY MEMBER STATE FOR 2030 AND 2040

This section presents the costs and costs savings by policy option for 2030 and 2040 for businesses, citizens and national public authorities. The net benefits or costs for businesses and citizens relative to the baseline, are also presented per vehicle and as share of GDP, and the net benefits or net costs relative to the baseline for national public authorities are also presented as share of GDP. The preferred policy option (PO1) does not show disproportionate net costs per vehicle or as share of GDP, relative to the baseline, for any Member State or stakeholder group.

7.1. PO1A: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 74: Recurrent costs and cost savings for businesses in PO1A in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	50	37	119	76	107	53	0.02%
BE	35	24	102	80	122	51	0.02%
BG	2	0	2	0	0	0	0.00%
HR	5	0	3	2	-1	-1	0.00%
CY	0	0	0	0	0	-1	0.00%
CZ	24	5	24	1	-4	-2	0.00%
DK	41	12	62	29	38	37	0.01%
EE	1	1	0	1	-1	-4	0.00%
FI	14	7	34	23	36	35	0.01%
FR	153	82	306	197	268	21	0.01%
DE	558	227	466	339	19	1	0.00%
EL	1	0	1	0	0	0	0.00%
HU	16	3	9	1	-8	-5	0.00%
IE	7	3	11	8	10	14	0.00%
IT	50	8	48	11	2	0	0.00%
LV	5	1	1	1	-4	-13	-0.01%
LT	4	1	5	1	1	2	0.00%
LU	9	6	20	18	23	153	0.03%
MT	0	0	0	0	0	2	0.00%
NL	71	31	127	94	119	40	0.01%
PL	10	1	9	1	-2	0	0.00%
PT	3	1	3	1	0	0	0.00%
RO	29	5	24	4	-6	-2	0.00%
SK	5	2	8	3	5	4	0.00%
SI	3	0	4	0	0	0	0.00%
ES	8	2	12	1	3	0	0.00%
SE	48	10	68	28	37	22	0.01%
EU27	1,151	470	1,466	919	764	9	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 75: Recurrent costs and cost savings for businesses in PO1A in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	13	3	91	49	125	59	0.02%
BE	38	22	-20	43	-36	-15	0.00%
BG	8	3	8	3	0	0	0.00%
HR	0	2	58	1	57	88	0.05%
CY	0	4	-2	2	-4	-37	-0.01%
CZ	40	13	99	10	57	23	0.01%
DK	46	10	34	26	5	4	0.00%
EE	1	0	18	0	17	61	0.03%
FI	29	3	37	13	18	16	0.01%
FR	265	20	255	78	48	3	0.00%
DE	423	165	423	269	103	6	0.00%
EL	3	1	16	1	13	6	0.01%
HU	19	13	43	8	19	12	0.01%
IE	8	7	10	9	4	6	0.00%
IT	133	72	187	38	20	2	0.00%
LV	2	3	48	1	44	112	0.08%
LT	5	2	18	4	14	31	0.02%
LU	4	1	13	0	8	46	0.01%
MT	0	0	2	0	3	30	0.01%
NL	150	41	204	107	120	40	0.01%
PL	6	6	72	16	76	8	0.01%
PT	4	2	-8	-1	-16	-7	-0.01%
RO	46	18	48	23	6	2	0.00%
SK	11	5	23	3	9	8	0.01%
SI	11	4	26	3	14	45	0.02%
ES	62	29	67	8	-17	-2	0.00%
SE	70	24	-3	14	-83	-43	-0.01%
EU27	1,396	474	1,767	729	626	7	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.2. PO1A: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 76: Recurrent costs and cost savings for citizens in PO1A in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	30	23	1	0	-52	-13	-0.01%
BE	15	14	1	0	-28	-6	0.00%
BG	0	0	0	0	0	0	0.00%
HR	0	0	0	0	0	0	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	9	6	2	0	-13	-6	0.00%
EE	0	0	0	0	0	0	0.00%
FI	10	10	2	0	-18	-6	-0.01%
FR	84	72	11	0	-145	-4	0.00%
DE	205	153	13	0	-345	-9	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	0	0	1	0	0	0	0.00%
IT	0	0	0	0	0	0	0.00%
LV	2	0	0	0	-2	-4	0.00%
LT	0	0	0	0	0	0	0.00%
LU	3	4	1	0	-5	-13	-0.01%
MT	0	0	0	0	0	0	0.00%
NL	18	13	3	0	-28	-4	0.00%
PL	-1	0	4	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	-1	0	0	0	0	0	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	2	2	0	0	-4	-1	0.00%
EU27	390	305	39	0	-656	-3	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 77: Recurrent costs and cost savings for citizens in PO1A in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	15	0	104	70	159	32	0.03%
BE	19	0	102	77	160	27	0.02%
BG	1	0	-4	1	-5	-2	0.00%
HR	-3	0	13	-3	13	13	0.01%
CY	0	2	-3	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	9	0	10	7	9	4	0.00%
EE	-1	0	2	0	3	4	0.01%
FI	-4	0	-7	-14	-18	-6	-0.01%
FR	23	1	48	25	48	1	0.00%
DE	64	2	-163	-205	-434	-10	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	0	0	3	3	5	3	0.00%
IT	-2	1	8	5	14	0	0.00%
LV	-4	0	16	0	19	29	0.04%
LT	0	0	1	0	1	1	0.00%
LU	1	0	-1	-3	-6	-11	-0.01%
MT	-1	0	2	0	2	6	0.01%
NL	62	0	138	142	217	31	0.02%
PL	4	0	32	15	43	3	0.00%
PT	0	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-3	-5	-6	-3	0.00%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-8	-8	-22	-1	0.00%
SE	5	0	6	8	10	2	0.00%
EU27	189	8	295	101	198	1	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.3. PO1A: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 78: Recurrent costs and cost savings for national public authorities in PO1A in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	76	60	-16	0.00%
BE	0.001	80	38	-42	-0.01%
BG	0.000	0	0	0	0.00%
HR	0.000	2	0	-2	0.00%
CY	0.000	0	0	0	0.00%
CZ	0.000	1	13	12	0.00%
DK	0.001	29	19	-10	0.00%
EE	0.000	1	1	0	0.00%
FI	0.000	23	17	-6	0.00%
FR	0.001	197	154	-44	0.00%
DE	0.001	339	380	41	0.00%
EL	0.000	0	0	0	0.00%
HU	0.000	1	3	2	0.00%
IE	0.001	8	3	-5	0.00%
IT	0.000	11	8	-3	0.00%
LV	0.000	1	1	0	0.00%
LT	0.000	1	1	0	0.00%
LU	0.001	18	9	-9	-0.01%
MT	0.000	0	0	0	0.00%
NL	0.001	94	45	-49	0.00%
PL	0.000	1	1	1	0.00%
PT	0.000	1	1	0	0.00%
RO	0.000	4	5	1	0.00%
SK	0.000	3	2	0	0.00%
SI	0.000	0	0	0	0.00%
ES	0.000	1	2	0	0.00%
SE	0.001	28	12	-17	0.00%
EU27	0.010	919	775	-145	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 79: Recurrent costs and cost savings for national public authorities in PO1A in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	119	3	-116	-0.02%
BE	0.001	120	22	-99	-0.01%
BG	0.000	4	3	-1	0.00%
HR	0.000	-2	2	4	0.00%
CY	0.000	2	5	3	0.01%
CZ	0.000	10	13	3	0.00%
DK	0.001	34	10	-24	-0.01%
EE	0.000	0	0	0	0.00%
FI	0.000	-1	3	4	0.00%
FR	0.001	102	21	-81	0.00%
DE	0.001	63	167	104	0.00%
EL	0.000	1	1	0	0.00%
HU	0.000	0	13	13	0.00%
IE	0.001	12	7	-5	0.00%
IT	0.000	43	73	30	0.00%
LV	0.000	0	3	2	0.00%
LT	0.000	4	2	-2	0.00%
LU	0.001	-3	1	4	0.00%
MT	0.000	0	0	0	0.00%
NL	0.001	249	42	-208	-0.02%
PL	0.000	31	6	-25	0.00%
PT	0.000	-1	2	4	0.00%
RO	0.000	17	18	1	0.00%
SK	0.000	-2	5	7	0.00%
SI	0.000	3	4	1	0.00%
ES	0.000	0	30	30	0.00%
SE	0.001	22	24	2	0.00%
EU27	0.010	830	482	-348	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

7.4. PO1B: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 80: Recurrent costs and cost savings for businesses in PO1B in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	62	43	170	108	172	86	0.03%
BE	45	29	149	117	192	79	0.03%
BG	3	1	3	1	0	0	0.00%
HR	8	1	4	4	-2	-2	0.00%
CY	0	0	0	0	0	1	0.00%
CZ	34	6	32	2	-6	-3	0.00%
DK	57	16	90	42	59	58	0.01%
EE	2	1	0	1	-2	-7	0.00%
FI	19	10	50	35	56	54	0.02%
FR	232	118	490	295	435	34	0.01%
DE	797	309	846	577	317	21	0.01%
EL	2	0	2	0	0	0	0.00%
HU	22	3	13	1	-10	-6	0.00%
IE	10	4	18	13	17	26	0.00%
IT	78	12	76	26	11	1	0.00%
LV	8	1	0	2	-7	-22	-0.02%
LT	8	2	9	3	2	5	0.00%
LU	12	8	26	24	30	202	0.03%
MT	0	0	0	0	0	2	0.00%
NL	98	42	180	133	173	58	0.02%
PL	17	3	16	2	-1	0	0.00%
PT	7	3	7	3	0	0	0.00%
RO	37	7	30	6	-9	-3	0.00%
SK	9	4	14	5	5	5	0.00%
SI	5	1	5	0	0	-1	0.00%
ES	27	6	34	4	6	1	0.00%
SE	72	15	104	46	63	37	0.01%
EU27	1,670	645	2,370	1,448	1,504	18	0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 81: Recurrent costs and cost savings for businesses in PO1B in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	13	3	111	67	163	77	0.03%
BE	55	29	3	66	-15	-6	0.00%
BG	11	3	10	5	0	0	0.00%
HR	2	3	59	2	56	86	0.05%
CY	0	4	-1	2	-4	-36	-0.01%
CZ	59	19	109	16	47	19	0.01%
DK	53	14	51	39	23	22	0.01%
EE	1	0	18	1	17	61	0.03%
FI	37	3	49	17	25	22	0.01%
FR	348	38	434	189	238	16	0.01%
DE	567	213	612	395	227	14	0.00%
EL	8	2	18	2	10	5	0.00%
HU	31	16	51	12	16	10	0.01%
IE	11	10	15	19	13	19	0.00%
IT	216	96	246	57	-9	-1	0.00%
LV	4	3	48	1	42	109	0.08%
LT	10	5	23	7	15	32	0.02%
LU	4	1	14	1	9	51	0.01%
MT	0	0	2	1	3	31	0.01%
NL	174	54	248	146	166	55	0.01%
PL	30	14	95	22	73	8	0.01%
PT	6	2	-7	0	-16	-7	0.00%
RO	68	25	67	33	8	3	0.00%
SK	17	7	26	5	7	6	0.00%
SI	16	6	30	5	12	40	0.01%
ES	112	44	110	22	-24	-3	0.00%
SE	85	31	7	24	-84	-44	-0.01%
EU27	1,938	646	2,447	1,155	1,018	11	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.5. PO1B: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 82: Recurrent costs and cost savings for citizens in PO1B in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	36	27	1	0	-62	-15	-0.01%
BE	18	16	1	0	-33	-7	-0.01%
BG	0	0	0	0	0	0	0.00%
HR	0	0	0	0	-1	-1	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	11	8	2	0	-17	-8	0.00%
EE	0	0	0	0	0	-1	0.00%
FI	14	14	2	0	-25	-8	-0.01%
FR	115	96	13	0	-198	-5	-0.01%
DE	262	195	16	0	-441	-12	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	0	1	0	0	-1	-1	0.00%
IT	1	1	0	0	-2	0	0.00%
LV	3	0	-1	0	-4	-8	-0.01%
LT	0	0	0	0	0	0	0.00%
LU	3	4	1	0	-7	-17	-0.01%
MT	0	0	0	0	0	-1	0.00%
NL	20	15	3	0	-32	-5	0.00%
PL	-1	0	4	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	0	1	0	0	-1	-1	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	3	2	0	0	-6	-2	0.00%
EU27	501	389	44	0	-846	-4	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 83: Recurrent costs and cost savings for citizens in PO1B in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	21	0	149	103	231	46	0.04%
BE	29	0	150	115	235	40	0.03%
BG	1	0	-4	1	-5	-2	0.00%
HR	-2	0	13	-3	12	12	0.01%
CY	0	2	-3	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	14	0	27	20	33	15	0.01%
EE	0	0	2	0	2	4	0.00%
FI	-3	0	-8	-16	-21	-7	-0.01%
FR	59	1	154	100	194	5	0.01%
DE	111	2	-179	-216	-508	-12	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	1	0	8	8	15	8	0.00%
IT	1	1	13	11	21	1	0.00%
LV	-3	0	14	0	17	25	0.03%
LT	0	0	1	0	2	2	0.00%
LU	1	0	1	-2	-2	-4	0.00%
MT	0	0	1	0	0	1	0.00%
NL	81	0	176	186	281	40	0.02%
PL	4	0	32	15	43	3	0.00%
PT	0	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-4	-5	-7	-4	0.00%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-7	-8	-22	-1	0.00%
SE	9	0	28	27	45	11	0.01%
EU27	324	8	562	322	552	3	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.6. PO1B: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 84: Recurrent costs and cost savings for national public authorities in PO1B in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	108	70	-38	-0.01%
BE	0.001	117	44	-72	-0.01%
BG	0.000	1	0	0	0.00%
HR	0.000	4	2	-2	0.00%
CY	0.000	0	0	0	0.00%
CZ	0.000	2	14	13	0.00%
DK	0.001	42	24	-18	0.00%
EE	0.000	1	1	-1	0.00%
FI	0.000	35	24	-12	0.00%
FR	0.001	295	214	-81	0.00%
DE	0.001	577	504	-73	0.00%
EL	0.000	0	0	0	0.00%
HU	0.000	1	3	2	0.00%
IE	0.001	13	5	-8	0.00%
IT	0.000	26	14	-12	0.00%
LV	0.000	2	2	0	0.00%
LT	0.000	3	2	-1	0.00%
LU	0.001	24	12	-12	-0.01%
MT	0.000	0	0	0	0.00%
NL	0.001	133	57	-75	-0.01%
PL	0.000	2	3	1	0.00%
PT	0.000	3	3	0	0.00%
RO	0.000	6	7	1	0.00%
SK	0.000	5	5	1	0.00%
SI	0.000	0	1	0	0.00%
ES	0.000	4	6	2	0.00%
SE	0.001	46	17	-28	0.00%
EU27	0.010	1,448	1,033	-415	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 85: Recurrent costs and cost savings for national public authorities in PO1B in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	170	3	-167	-0.03%
BE	0.001	181	29	-152	-0.02%
BG	0.000	6	3	-2	0.00%
HR	0.000	-1	3	4	0.00%
CY	0.000	2	6	3	0.01%
CZ	0.000	16	19	3	0.00%
DK	0.001	59	14	-45	-0.01%
EE	0.000	1	0	-1	0.00%
FI	0.000	1	3	2	0.00%
FR	0.001	289	39	-250	-0.01%
DE	0.001	179	215	35	0.00%
EL	0.000	2	2	0	0.00%
HU	0.000	4	16	12	0.00%
IE	0.001	27	10	-17	0.00%
IT	0.000	68	98	30	0.00%
LV	0.000	1	3	2	0.00%
LT	0.000	8	5	-3	0.00%
LU	0.001	-2	1	3	0.00%
MT	0.000	0	0	-1	0.00%
NL	0.001	332	55	-277	-0.02%
PL	0.000	38	14	-23	0.00%
PT	0.000	0	2	3	0.00%
RO	0.000	28	25	-3	0.00%
SK	0.000	0	8	8	0.00%
SI	0.000	5	6	1	0.00%
ES	0.000	14	45	31	0.00%
SE	0.001	51	31	-20	0.00%
EU27	0.010	1,477	655	-822	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

7.7. PO1C: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 86: Recurrent costs and cost savings for businesses in PO1C in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	68	45	209	134	229	114	0.04%
BE	58	34	184	146	237	98	0.04%
BG	4	1	4	1	-1	-1	0.00%
HR	10	2	5	5	-3	-4	0.00%
CY	0	0	0	0	0	1	0.00%
CZ	44	7	41	3	-9	-4	0.00%
DK	70	18	112	52	75	74	0.02%
EE	3	1	0	2	-2	-9	0.00%
FI	24	13	62	43	68	65	0.02%
FR	320	154	650	371	547	42	0.02%
DE	1,049	396	1,183	753	492	32	0.01%
EL	4	0	3	1	0	0	0.00%
HU	27	4	17	1	-12	-8	-0.01%
IE	13	5	26	19	26	39	0.00%
IT	107	17	103	39	18	2	0.00%
LV	10	2	1	2	-9	-27	-0.02%
LT	12	3	13	4	2	5	0.00%
LU	16	10	34	28	37	243	0.04%
MT	0	0	0	0	0	3	0.00%
NL	129	54	227	164	209	70	0.02%
PL	28	7	30	7	2	0	0.00%
PT	14	6	13	6	0	0	0.00%
RO	46	8	35	7	-12	-4	0.00%
SK	12	5	17	6	5	5	0.00%
SI	8	1	7	1	-1	-1	0.00%
ES	43	9	53	6	7	1	0.00%
SE	93	19	147	69	103	61	0.02%
EU27	2,213	821	3,177	1,868	2,011	25	0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 87: Recurrent costs and cost savings for businesses in PO1C in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	7	0	132	89	213	101	0.04%
BE	76	36	31	92	11	5	0.00%
BG	14	4	12	7	1	1	0.00%
HR	5	5	60	3	54	83	0.05%
CY	1	4	-1	2	-4	-35	-0.01%
CZ	81	25	118	23	35	14	0.01%
DK	59	18	69	54	46	44	0.01%
EE	2	0	18	1	17	61	0.03%
FI	41	3	65	30	51	43	0.02%
FR	399	26	595	316	487	32	0.01%
DE	721	266	846	567	426	26	0.01%
EL	14	3	20	3	7	3	0.00%
HU	41	19	58	16	15	9	0.01%
IE	18	13	25	31	25	36	0.00%
IT	304	122	299	78	-48	-4	0.00%
LV	6	4	48	2	41	106	0.08%
LT	13	5	25	10	17	35	0.02%
LU	4	1	14	1	10	55	0.01%
MT	0	-1	2	1	3	34	0.01%
NL	201	68	298	191	219	73	0.02%
PL	62	24	123	33	70	7	0.01%
PT	8	2	-6	1	-14	-6	0.00%
RO	81	24	72	43	10	3	0.00%
SK	24	10	31	7	4	4	0.00%
SI	20	7	33	6	11	36	0.01%
ES	166	60	159	39	-28	-3	0.00%
SE	105	40	32	46	-67	-35	-0.01%
EU27	2,471	789	3,177	1,696	1,613	18	0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.8. PO1C: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 88: Recurrent costs and cost savings for citizens in PO1C in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	38	28	0	0	-65	-16	-0.01%
BE	20	17	1	0	-37	-8	-0.01%
BG	0	0	0	0	0	0	0.00%
HR	0	1	0	0	-1	-1	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	12	9	2	0	-19	-9	0.00%
EE	0	0	0	0	-1	-1	0.00%
FI	17	17	3	0	-31	-10	-0.01%
FR	145	118	15	0	-248	-6	-0.01%
DE	325	236	17	0	-544	-15	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	1	2	0	0	-2	-1	0.00%
IT	1	3	0	0	-3	0	0.00%
LV	4	0	-1	0	-5	-9	-0.01%
LT	0	0	0	0	0	0	0.00%
LU	4	5	1	0	-9	-21	-0.01%
MT	0	0	0	0	-1	-2	0.00%
NL	22	17	3	0	-36	-6	0.00%
PL	-1	1	5	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	1	2	0	0	-3	-1	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	5	4	0	0	-9	-3	0.00%
EU27	610	465	47	0	-1,028	-5	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 89: Recurrent costs and cost savings for citizens in PO1C in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	29	0	197	139	306	61	0.05%
BE	43	0	194	154	304	52	0.04%
BG	1	0	-5	1	-5	-2	0.00%
HR	-2	0	12	-3	12	12	0.01%
CY	1	2	-2	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	27	0	48	34	56	25	0.01%
EE	0	0	2	0	2	3	0.00%
FI	2	0	1	-8	-9	-3	0.00%
FR	76	2	236	168	326	8	0.01%
DE	215	2	-61	-83	-360	-8	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	3	0	15	14	26	15	0.00%
IT	4	1	19	16	29	1	0.00%
LV	-3	0	13	0	16	24	0.03%
LT	0	0	1	1	2	2	0.00%
LU	0	0	8	-2	6	11	0.01%
MT	1	0	-1	0	-1	-3	0.00%
NL	101	0	215	228	341	49	0.03%
PL	5	0	32	15	42	3	0.00%
PT	-1	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-4	-6	-8	-5	-0.01%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-8	-8	-21	-1	0.00%
SE	19	0	75	70	125	31	0.02%
EU27	522	9	988	715	1,172	5	0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.9. PO1C: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 90: Recurrent costs and cost savings for national public authorities in PO1C in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	134	73	-60	-0.01%
BE	0.001	146	52	-94	-0.01%
BG	0.000	1	1	0	0.00%
HR	0.000	5	3	-2	0.00%
CY	0.000	0	0	0	0.00%
CZ	0.000	3	15	13	0.00%
DK	0.001	52	26	-26	-0.01%
EE	0.000	2	1	-1	0.00%
FI	0.000	43	30	-14	0.00%
FR	0.001	371	271	-99	0.00%
DE	0.001	753	632	-121	0.00%
EL	0.000	1	0	0	0.00%
HU	0.000	1	4	2	0.00%
IE	0.001	19	7	-11	0.00%
IT	0.000	39	19	-19	0.00%
LV	0.000	2	2	0	0.00%
LT	0.000	4	3	-1	0.00%
LU	0.001	28	15	-13	-0.01%
MT	0.000	0	0	0	0.00%
NL	0.001	164	71	-94	-0.01%
PL	0.000	7	7	1	0.00%
PT	0.000	6	6	0	0.00%
RO	0.000	7	8	1	0.00%
SK	0.000	6	7	1	0.00%
SI	0.000	1	1	0	0.00%
ES	0.000	6	9	3	0.00%
SE	0.001	69	23	-46	-0.01%
EU27	0.010	1,868	1,286	-582	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 91: Recurrent costs and cost savings for national public authorities in PO1C in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.001	228	0	-228	-0.04%
BE	0.001	246	36	-210	-0.03%
BG	0.000	8	4	-4	0.00%
HR	0.000	1	5	4	0.00%
CY	0.000	2	6	3	0.01%
CZ	0.000	23	25	2	0.00%
DK	0.001	88	18	-70	-0.02%
EE	0.000	1	0	-1	0.00%
FI	0.000	22	3	-19	-0.01%
FR	0.001	484	28	-456	-0.01%
DE	0.001	484	268	-216	0.00%
EL	0.000	3	3	0	0.00%
HU	0.000	8	19	11	0.00%
IE	0.001	45	13	-32	0.00%
IT	0.000	94	123	29	0.00%
LV	0.000	2	4	2	0.00%
LT	0.000	11	5	-6	-0.01%
LU	0.001	-1	1	2	0.00%
MT	0.000	1	-1	-1	0.00%
NL	0.001	419	68	-350	-0.03%
PL	0.000	48	24	-23	0.00%
PT	0.000	1	2	1	0.00%
RO	0.000	37	24	-13	0.00%
SK	0.000	2	10	8	0.01%
SI	0.000	6	7	1	0.00%
ES	0.000	31	61	29	0.00%
SE	0.001	116	40	-76	-0.01%
EU27	0.010	2,411	798	-1,613	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

7.10. PO2A: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 92: Recurrent costs and cost savings for businesses in PO2A in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	45	0.01	81	38	130	83	48	24	0.01%
BE	106	0.00	116	15	130	119	12	5	0.00%
BG	10	0.00	7	-1	-1	3	-13	-11	-0.01%
HR	11	0.01	19	1	1	1	-29	-41	-0.03%
CY	7	0.09	0	0	0	0	-7	-70	-0.02%
CZ	50	0.00	95	3	17	8	-124	-57	-0.04%
DK	32	0.01	36	11	41	22	-16	-15	0.00%
EE	6	0.00	3	0	0	1	-8	-34	-0.02%
FI	65	0.02	9	7	29	22	-29	-27	-0.01%
FR	366	0.03	129	79	282	195	-98	-8	0.00%
DE	595	0.00	728	227	279	295	-976	-64	-0.02%
EL	42	0.02	0	0	0	0	-41	-21	-0.02%
HU	18	0.00	4	2	-1	0	-25	-16	-0.01%
IE	23	0.00	10	0	7	8	-18	-27	0.00%
IT	330	0.00	1	1	4	5	-324	-33	-0.01%
LV	6	0.00	16	1	-2	2	-22	-67	-0.05%
LT	11	0.00	10	1	2	1	-17	-39	-0.02%
LU	4	0.00	8	7	20	21	22	144	0.02%
MT	3	0.02	0	0	0	0	-3	-37	-0.01%
NL	86	0.01	143	31	105	88	-68	-23	-0.01%
PL	175	0.01	10	1	5	0	-181	-21	-0.02%
PT	11	0.00	2	1	2	1	-12	-5	0.00%
RO	36	0.00	105	-7	-11	7	-138	-47	-0.04%
SK	20	0.00	22	1	8	5	-30	-28	-0.02%
SI	9	0.00	24	2	8	1	-26	-67	-0.03%
ES	234	0.00	-1	0	4	0	-229	-30	-0.01%
SE	70	0.01	23	4	20	18	-58	-34	-0.01%
EU27	2,369	0.25	1,600	424	1,078	908	-2,409	-29	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

Table 93: Recurrent costs and cost savings for businesses in PO2A in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	49	0.01	33	1	102	65	84	40	0.01%
BE	115	0.00	135	0	-27	102	-174	-70	-0.02%
BG	12	0.00	21	1	5	28	0	0	0.00%
HR	12	0.01	36	0	57	10	19	29	0.02%
CY	7	0.09	6	3	-3	5	-15	-149	-0.04%
CZ	57	0.00	112	0	95	51	-22	-9	-0.01%
DK	34	0.01	34	-1	19	17	-31	-29	-0.01%
EE	6	0.00	11	0	19	6	7	27	0.01%
FI	59	0.02	99	1	4	86	-69	-60	-0.02%
FR	390	0.03	337	18	288	115	-342	-23	-0.01%
DE	667	0.00	582	25	329	451	-494	-30	-0.01%
EL	41	0.02	60	0	4	37	-60	-27	-0.02%
HU	21	0.00	11	7	39	22	21	13	0.01%
IE	25	0.00	-3	0	6	12	-3	-4	0.00%
IT	392	0.00	282	35	140	45	-524	-48	-0.02%
LV	6	0.00	14	1	47	10	36	93	0.07%
LT	14	0.00	5	0	14	18	14	29	0.01%
LU	4	0.00	-2	1	13	5	16	87	0.01%
MT	3	0.02	11	0	1	8	-5	-53	-0.01%
NL	103	0.01	223	12	196	139	-2	-1	0.00%
PL	157	0.01	101	1	66	97	-95	-10	-0.01%
PT	10	0.00	2	2	-10	7	-16	-7	-0.01%
RO	39	0.00	118	5	28	145	11	4	0.00%
SK	22	0.00	24	2	19	10	-19	-16	-0.01%
SI	11	0.00	17	0	25	11	7	23	0.01%
ES	220	0.00	114	21	92	140	-122	-15	-0.01%
SE	77	0.01	15	0	-39	11	-119	-61	-0.02%
EU27	2,550	0.25	2,397	133	1,527	1,655	-1,898	-21	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

7.11. PO2A: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 94: Recurrent costs and cost savings for citizens in PO2A in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	30	23	1	0	-52	-13	-0.01%
BE	15	14	1	0	-28	-6	0.00%
BG	0	0	0	0	0	0	0.00%
HR	0	0	0	0	0	0	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	9	6	2	0	-13	-6	0.00%
EE	0	0	0	0	0	0	0.00%
FI	10	10	2	0	-18	-6	-0.01%
FR	84	72	11	0	-145	-4	0.00%
DE	205	153	13	0	-345	-9	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	0	0	1	0	0	0	0.00%
IT	0	0	0	0	0	0	0.00%
LV	2	0	0	0	-2	-4	0.00%
LT	0	0	0	0	0	0	0.00%
LU	3	4	1	0	-5	-13	-0.01%
MT	0	0	0	0	0	0	0.00%
NL	18	13	3	0	-28	-4	0.00%
PL	-1	0	4	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	-1	0	0	0	0	0	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	2	2	0	0	-4	-1	0.00%
EU27	390	305	39	0	-656	-3	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 95: Recurrent costs and cost savings for citizens in PO2A in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	15	0	104	70	159	32	0.03%
BE	19	0	102	77	160	27	0.02%
BG	1	0	-4	1	-5	-2	0.00%
HR	-3	0	13	-3	13	13	0.01%
CY	0	2	-3	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	9	0	10	7	9	4	0.00%
EE	-1	0	2	0	3	4	0.01%
FI	-4	0	-7	-14	-18	-6	-0.01%
FR	23	1	48	25	48	1	0.00%
DE	64	2	-163	-205	-434	-10	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	0	0	3	3	5	3	0.00%
IT	-2	1	8	5	14	0	0.00%
LV	-4	0	16	0	19	29	0.04%
LT	0	0	1	0	1	1	0.00%
LU	1	0	-1	-3	-6	-11	-0.01%
MT	-1	0	2	0	2	6	0.01%
NL	62	0	138	142	217	31	0.02%
PL	4	0	32	15	43	3	0.00%
PT	0	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-3	-5	-6	-3	0.00%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-8	-8	-22	-1	0.00%
SE	5	0	6	8	10	2	0.00%
EU27	189	8	295	101	198	1	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.12. PO2A: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 96: Recurrent costs and cost savings for national public authorities in PO2A in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	83	61	-22	0.00%
BE	0.24	119	29	-91	-0.01%
BG	0.03	3	-1	-5	0.00%
HR	0.03	1	1	0	0.00%
CY	0.10	0	0	0	0.00%
CZ	0.11	8	11	4	0.00%
DK	0.17	22	17	-5	0.00%
EE	0.01	1	1	-1	0.00%
FI	0.11	22	17	-6	0.00%
FR	0.82	195	151	-45	0.00%
DE	2.15	295	380	82	0.00%
EL	0.06	0	0	0	0.00%
HU	0.04	0	2	2	0.00%
IE	0.15	8	1	-7	0.00%
IT	0.52	5	1	-4	0.00%
LV	0.02	2	1	-2	0.00%
LT	0.03	1	0	-1	0.00%
LU	0.04	21	10	-10	-0.01%
MT	0.02	0	0	0	0.00%
NL	0.39	88	45	-43	0.00%
PL	0.17	0	1	0	0.00%
PT	0.07	1	1	0	0.00%
RO	0.06	7	-7	-15	0.00%
SK	0.04	5	2	-4	0.00%
SI	0.02	1	2	1	0.00%
ES	0.44	0	0	0	0.00%
SE	0.26	18	5	-13	0.00%
EU27	6.33	908	729	-185	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 97: Recurrent costs and cost savings for national public authorities in PO2A in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	134	1	-133	-0.02%
BE	0.24	179	0	-179	-0.02%
BG	0.03	29	1	-27	-0.02%
HR	0.03	7	0	-7	-0.01%
CY	0.10	5	5	0	0.00%
CZ	0.11	51	0	-52	-0.01%
DK	0.17	24	-1	-26	-0.01%
EE	0.01	6	0	-6	-0.01%
FI	0.11	71	1	-70	-0.02%
FR	0.82	139	19	-121	0.00%
DE	2.15	246	27	-222	0.00%
EL	0.06	37	0	-37	-0.01%
HU	0.04	13	7	-7	0.00%
IE	0.15	15	0	-16	0.00%
IT	0.52	50	36	-14	0.00%
LV	0.02	10	1	-8	-0.02%
LT	0.03	19	0	-19	-0.02%
LU	0.04	2	1	-1	0.00%
MT	0.02	7	0	-7	-0.02%
NL	0.39	282	12	-270	-0.02%
PL	0.17	113	1	-112	-0.01%
PT	0.07	7	2	-5	0.00%
RO	0.06	140	5	-135	-0.03%
SK	0.04	6	2	-4	0.00%
SI	0.02	11	0	-11	-0.01%
ES	0.44	132	22	-111	-0.01%
SE	0.26	20	0	-20	0.00%
EU27	6.33	1,756	141	-1,621	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

7.13. PO2B: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 98: Recurrent costs and cost savings for businesses in PO2B in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	45	0.01	90	45	178	115	114	56	0.02%
BE	106	0.00	159	16	145	143	7	3	0.00%
BG	10	0.00	8	-1	-1	3	-14	-11	-0.01%
HR	11	0.01	32	2	2	4	-39	-56	-0.04%
CY	7	0.09	0	0	0	0	-7	-70	-0.02%
CZ	50	0.00	146	2	19	19	-160	-73	-0.05%
DK	32	0.01	47	12	61	33	2	2	0.00%
EE	6	0.00	4	0	-1	3	-9	-39	-0.02%
FI	65	0.02	13	9	44	34	-9	-8	0.00%
FR	366	0.03	273	120	497	304	42	3	0.00%
DE	595	0.00	1,003	269	557	561	-749	-49	-0.02%
EL	42	0.02	0	0	0	0	-41	-21	-0.02%
HU	18	0.00	4	2	-1	0	-25	-16	-0.01%
IE	23	0.00	11	1	13	13	-10	-15	0.00%
IT	330	0.00	17	4	14	14	-324	-33	-0.01%
LV	6	0.00	19	1	-4	3	-26	-79	-0.06%
LT	11	0.00	16	0	4	3	-19	-43	-0.02%
LU	4	0.00	10	8	26	28	32	214	0.04%
MT	3	0.02	0	0	0	0	-3	-37	-0.01%
NL	86	0.01	162	38	144	124	-17	-6	0.00%
PL	175	0.01	30	7	11	7	-194	-23	-0.02%
PT	11	0.00	9	4	7	3	-13	-6	0.00%
RO	36	0.00	109	-10	-15	5	-144	-49	-0.04%
SK	20	0.00	37	3	12	10	-38	-36	-0.03%
SI	9	0.00	31	3	8	1	-33	-86	-0.04%
ES	234	0.00	-1	1	10	1	-223	-29	-0.01%
SE	70	0.01	28	6	40	33	-30	-18	0.00%
EU27	2,369	0.25	2,256	540	1,770	1,465	-1,931	-24	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

Table 99: Recurrent costs and cost savings for businesses in PO2B in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	49	0.01	32	1	123	82	122	58	0.02%
BE	115	0.00	151	-1	-4	130	-138	-56	-0.02%
BG	12	0.00	31	1	6	40	3	2	0.00%
HR	12	0.01	57	0	59	18	7	11	0.01%
CY	7	0.09	9	3	-4	6	-17	-176	-0.04%
CZ	57	0.00	159	0	99	73	-44	-18	-0.01%
DK	34	0.01	31	-2	31	29	-4	-4	0.00%
EE	6	0.00	13	0	18	9	8	30	0.02%
FI	59	0.02	107	1	12	94	-61	-52	-0.02%
FR	390	0.03	428	23	454	202	-185	-12	-0.01%
DE	667	0.00	819	20	482	612	-411	-25	-0.01%
EL	41	0.02	102	0	2	66	-74	-33	-0.03%
HU	21	0.00	24	7	41	33	22	13	0.01%
IE	25	0.00	-5	0	9	17	7	10	0.00%
IT	392	0.00	382	35	90	70	-648	-59	-0.03%
LV	6	0.00	16	1	46	12	35	90	0.07%
LT	14	0.00	11	0	15	25	15	32	0.02%
LU	4	0.00	-4	1	13	8	20	110	0.02%
MT	3	0.02	11	0	1	8	-5	-52	-0.01%
NL	103	0.01	240	10	229	178	54	18	0.00%
PL	157	0.01	147	1	79	97	-129	-14	-0.01%
PT	10	0.00	5	2	-9	11	-14	-6	0.00%
RO	39	0.00	127	5	29	151	9	3	0.00%
SK	22	0.00	39	2	21	17	-25	-21	-0.02%
SI	11	0.00	23	0	27	16	9	29	0.01%
ES	220	0.00	131	21	95	175	-102	-12	-0.01%
SE	77	0.01	22	0	-36	15	-119	-62	-0.02%
EU27	2,550	0.25	3,108	130	1,929	2,193	-1,666	-19	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

7.14. PO2B: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 100: Recurrent costs and cost savings for citizens in PO2B in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	36	27	1	0	-62	-15	-0.01%
BE	18	16	1	0	-33	-7	-0.01%
BG	0	0	0	0	0	0	0.00%
HR	0	0	0	0	-1	-1	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	11	8	2	0	-17	-8	0.00%
EE	0	0	0	0	0	-1	0.00%
FI	14	14	2	0	-25	-8	-0.01%
FR	115	96	13	0	-198	-5	-0.01%
DE	262	195	16	0	-441	-12	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	0	1	0	0	-1	-1	0.00%
IT	1	1	0	0	-2	0	0.00%
LV	3	0	-1	0	-4	-8	-0.01%
LT	0	0	0	0	0	0	0.00%
LU	3	4	1	0	-7	-17	-0.01%
MT	0	0	0	0	0	-1	0.00%
NL	20	15	3	0	-32	-5	0.00%
PL	-1	0	4	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	0	1	0	0	-1	-1	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	3	2	0	0	-6	-2	0.00%
EU27	501	389	44	0	-846	-4	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 101: Recurrent costs and cost savings for citizens in PO2B in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	21	0	149	103	231	46	0.04%
BE	29	0	150	115	235	40	0.03%
BG	1	0	-4	1	-5	-2	0.00%
HR	-2	0	13	-3	12	12	0.01%
CY	0	2	-3	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	14	0	27	20	33	15	0.01%
EE	0	0	2	0	2	4	0.00%
FI	-3	0	-8	-16	-21	-7	-0.01%
FR	59	1	154	100	194	5	0.01%
DE	111	2	-179	-216	-508	-12	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	1	0	8	8	15	8	0.00%
IT	1	1	13	11	21	1	0.00%
LV	-3	0	14	0	17	25	0.03%
LT	0	0	1	0	2	2	0.00%
LU	1	0	1	-2	-2	-4	0.00%
MT	0	0	1	0	0	1	0.00%
NL	81	0	176	186	281	40	0.02%
PL	4	0	32	15	43	3	0.00%
PT	0	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-4	-5	-7	-4	0.00%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-7	-8	-22	-1	0.00%
SE	9	0	28	27	45	11	0.01%
EU27	324	8	562	322	552	3	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.15. PO2B: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 102: Recurrent costs and cost savings for national public authorities in PO2B in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	115	71	-43	-0.01%
BE	0.24	143	32	-111	-0.02%
BG	0.03	3	-2	-5	0.00%
HR	0.03	4	2	-2	0.00%
CY	0.10	0	0	0	0.00%
CZ	0.11	19	10	-9	0.00%
DK	0.17	33	20	-13	0.00%
EE	0.01	3	0	-2	0.00%
FI	0.11	34	23	-11	0.00%
FR	0.82	304	216	-89	0.00%
DE	2.15	561	464	-99	0.00%
EL	0.06	0	0	0	0.00%
HU	0.04	0	2	2	0.00%
IE	0.15	13	2	-10	0.00%
IT	0.52	14	6	-9	0.00%
LV	0.02	3	1	-2	0.00%
LT	0.03	3	0	-3	0.00%
LU	0.04	28	13	-16	-0.02%
MT	0.02	0	0	0	0.00%
NL	0.39	124	53	-72	-0.01%
PL	0.17	7	7	-1	0.00%
PT	0.07	3	4	0	0.00%
RO	0.06	5	-11	-16	0.00%
SK	0.04	10	4	-6	0.00%
SI	0.02	1	2	1	0.00%
ES	0.44	1	1	0	0.00%
SE	0.26	33	8	-26	0.00%
EU27	6.33	1,465	928	-543	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 103: Recurrent costs and cost savings for national public authorities in PO2B in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	184	1	-184	-0.03%
BE	0.24	245	-1	-246	-0.03%
BG	0.03	41	1	-39	-0.03%
HR	0.03	15	0	-15	-0.01%
CY	0.10	7	5	-1	0.00%
CZ	0.11	73	0	-73	-0.02%
DK	0.17	49	-2	-51	-0.01%
EE	0.01	9	0	-9	-0.02%
FI	0.11	78	1	-77	-0.02%
FR	0.82	302	24	-279	-0.01%
DE	2.15	397	22	-377	-0.01%
EL	0.06	65	0	-65	-0.03%
HU	0.04	24	7	-17	-0.01%
IE	0.15	25	0	-26	0.00%
IT	0.52	81	36	-46	0.00%
LV	0.02	11	1	-10	-0.02%
LT	0.03	26	0	-26	-0.03%
LU	0.04	5	1	-5	0.00%
MT	0.02	8	0	-8	-0.02%
NL	0.39	364	11	-354	-0.03%
PL	0.17	112	1	-111	-0.01%
PT	0.07	11	2	-9	0.00%
RO	0.06	146	5	-141	-0.03%
SK	0.04	11	2	-10	-0.01%
SI	0.02	16	0	-16	-0.02%
ES	0.44	167	22	-146	-0.01%
SE	0.26	41	0	-42	-0.01%
EU27	6.33	2,515	139	-2,382	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

7.16. PO2C: Impacts on costs and costs savings for businesses in 2030 and 2040 relative to the baseline

Table 104: Recurrent costs and cost savings for businesses in PO2C in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	45	0.01	93	46	215	140	171	85	0.03%
BE	106	0.00	174	18	177	170	50	21	0.01%
BG	10	0.00	9	-2	-1	3	-14	-12	-0.01%
HR	11	0.01	66	2	1	14	-64	-92	-0.07%
CY	7	0.09	0	0	0	0	-7	-70	-0.02%
CZ	50	0.00	200	2	23	31	-197	-91	-0.06%
DK	32	0.01	60	12	75	42	12	12	0.00%
EE	6	0.00	5	0	-2	3	-9	-41	-0.02%
FI	65	0.02	19	11	52	43	1	1	0.00%
FR	366	0.03	452	153	682	403	113	9	0.00%
DE	595	0.00	1,360	328	843	777	-662	-43	-0.02%
EL	42	0.02	0	0	0	0	-41	-21	-0.02%
HU	18	0.00	4	2	-1	0	-25	-16	-0.01%
IE	23	0.00	15	2	19	19	-2	-3	0.00%
IT	330	0.00	124	3	21	26	-410	-41	-0.02%
LV	6	0.00	20	0	-6	3	-29	-87	-0.06%
LT	11	0.00	23	0	5	5	-24	-54	-0.03%
LU	4	0.00	13	10	33	33	40	262	0.04%
MT	3	0.02	0	0	0	0	-3	-36	-0.01%
NL	86	0.01	179	44	175	152	18	6	0.00%
PL	175	0.01	128	7	20	21	-268	-31	-0.03%
PT	11	0.00	26	7	13	9	-22	-9	-0.01%
RO	36	0.00	108	-16	-19	3	-144	-49	-0.04%
SK	20	0.00	58	3	14	17	-50	-48	-0.04%
SI	9	0.00	33	3	8	2	-35	-91	-0.05%
ES	234	0.00	-2	2	15	1	-218	-29	-0.01%
SE	70	0.01	43	10	78	56	12	7	0.00%
EU27	2,369	0.25	3,211	648	2,442	1,975	-1,811	-22	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

Table 105: Recurrent costs and cost savings for businesses in PO2C in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Enforcement costs (EUR million)	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by corporate vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	49	0.01	24	1	142	96	164	77	0.03%
BE	115	0.00	186	-2	28	172	-98	-40	-0.01%
BG	12	0.00	37	1	8	52	11	9	0.01%
HR	12	0.01	87	0	58	30	-10	-16	-0.01%
CY	7	0.09	14	3	-5	8	-21	-210	-0.05%
CZ	57	0.00	204	0	100	97	-63	-26	-0.02%
DK	34	0.01	26	-2	38	43	23	22	0.01%
EE	6	0.00	15	0	19	10	7	26	0.01%
FI	59	0.02	117	1	27	111	-40	-34	-0.01%
FR	390	0.03	488	21	591	316	8	1	0.00%
DE	667	0.00	1,079	15	708	786	-267	-16	-0.01%
EL	41	0.02	131	0	1	87	-84	-38	-0.03%
HU	21	0.00	28	7	39	51	34	20	0.01%
IE	25	0.00	-2	0	18	23	19	27	0.00%
IT	392	0.00	520	35	125	88	-733	-67	-0.03%
LV	6	0.00	21	1	46	16	35	89	0.07%
LT	14	0.00	19	0	16	32	16	35	0.02%
LU	4	0.00	-5	1	13	9	21	118	0.02%
MT	3	0.02	11	0	1	8	-4	-48	-0.01%
NL	103	0.01	256	8	271	229	133	44	0.01%
PL	157	0.01	237	1	99	109	-186	-20	-0.02%
PT	10	0.00	10	2	-8	22	-7	-3	0.00%
RO	39	0.00	142	5	34	169	16	6	0.00%
SK	22	0.00	55	2	21	29	-29	-24	-0.02%
SI	11	0.00	22	0	23	19	10	31	0.01%
ES	220	0.00	202	21	123	216	-104	-12	-0.01%
SE	77	0.01	16	-1	-25	32	-86	-44	-0.01%
EU27	2,549	0.25	3,939	118	2,510	2,860	-1,237	-14	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative and enforcement costs

7.17. PO2C: Impacts on costs and costs savings for citizens in 2030 and 2040 relative to the baseline

Table 106: Recurrent costs and cost savings for citizens in PO2C in 2030, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	38	28	0	0	-65	-16	-0.01%
BE	20	17	1	0	-37	-8	-0.01%
BG	0	0	0	0	0	0	0.00%
HR	0	1	0	0	-1	-1	0.00%
CY	0	0	0	0	0	0	0.00%
CZ	16	8	0	0	-24	-5	-0.01%
DK	12	9	2	0	-19	-9	0.00%
EE	0	0	0	0	-1	-1	0.00%
FI	17	17	3	0	-31	-10	-0.01%
FR	145	118	15	0	-248	-6	-0.01%
DE	325	236	17	0	-544	-15	-0.01%
EL	0	0	0	0	0	0	0.00%
HU	-1	0	0	0	1	0	0.00%
IE	1	2	0	0	-2	-1	0.00%
IT	1	3	0	0	-3	0	0.00%
LV	4	0	-1	0	-5	-9	-0.01%
LT	0	0	0	0	0	0	0.00%
LU	4	5	1	0	-9	-21	-0.01%
MT	0	0	0	0	-1	-2	0.00%
NL	22	17	3	0	-36	-6	0.00%
PL	-1	1	5	0	5	0	0.00%
PT	0	0	0	0	0	0	0.00%
RO	0	0	0	0	1	0	0.00%
SK	1	2	0	0	-3	-1	0.00%
SI	0	0	0	0	0	0	0.00%
ES	0	0	0	0	1	0	0.00%
SE	5	4	0	0	-9	-3	0.00%
EU27	610	465	47	0	-1,028	-5	-0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

Table 107: Recurrent costs and cost savings for citizens in PO2C in 2040, relative to the baseline, in million EUR (2023 prices)

	Adjustment costs (EUR million)	Increase in tax expenditures (EUR million)	Adjustment costs savings (EUR million)	Reduction in tax expenditures (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) divided by private vehicle stock (in EUR)	Net benefits (+) or net costs (-) as share of GDP
AT	29	0	197	139	306	61	0.05%
BE	43	0	194	154	304	52	0.04%
BG	1	0	-5	1	-5	-2	0.00%
HR	-2	0	12	-3	12	12	0.01%
CY	1	2	-2	0	-5	-7	-0.01%
CZ	2	0	4	0	2	1	0.00%
DK	27	0	48	34	56	25	0.01%
EE	0	0	2	0	2	3	0.00%
FI	2	0	1	-8	-9	-3	0.00%
FR	76	2	236	168	326	8	0.01%
DE	215	2	-61	-83	-360	-8	-0.01%
EL	1	0	-4	0	-5	-1	0.00%
HU	-1	0	-7	-8	-14	-4	0.00%
IE	3	0	15	14	26	15	0.00%
IT	4	1	19	16	29	1	0.00%
LV	-3	0	13	0	16	24	0.03%
LT	0	0	1	1	2	2	0.00%
LU	0	0	8	-2	6	11	0.01%
MT	1	0	-1	0	-1	-3	0.00%
NL	101	0	215	228	341	49	0.03%
PL	5	0	32	15	42	3	0.00%
PT	-1	0	2	0	2	1	0.00%
RO	-3	0	1	-5	-1	0	0.00%
SK	-2	0	-4	-6	-8	-5	-0.01%
SI	-1	0	4	0	5	7	0.01%
ES	5	1	-8	-8	-21	-1	0.00%
SE	19	0	75	70	125	31	0.02%
EU27	522	9	988	715	1,172	5	0.01%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling)

7.18. PO2C: Impacts on costs and costs savings for national public authorities in 2030 and 2040 relative to the baseline

Table 108: Recurrent costs and cost savings for national public authorities in PO2C in 2030, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	140	74	-66	-0.01%
BE	0.24	170	35	-136	-0.02%
BG	0.03	3	-2	-5	0.00%
HR	0.03	14	3	-11	-0.01%
CY	0.10	0	0	0	0.00%
CZ	0.11	31	10	-21	-0.01%
DK	0.17	42	21	-21	-0.01%
EE	0.01	3	0	-3	-0.01%
FI	0.11	43	28	-15	-0.01%
FR	0.82	403	270	-133	0.00%
DE	2.15	777	564	-216	0.00%
EL	0.06	0	0	0	0.00%
HU	0.04	0	2	2	0.00%
IE	0.15	19	3	-15	0.00%
IT	0.52	26	6	-21	0.00%
LV	0.02	3	1	-2	0.00%
LT	0.03	5	0	-5	-0.01%
LU	0.04	33	15	-18	-0.02%
MT	0.02	0	0	0	0.00%
NL	0.39	152	61	-92	-0.01%
PL	0.17	21	7	-14	0.00%
PT	0.07	9	8	-2	0.00%
RO	0.06	3	-16	-20	-0.01%
SK	0.04	17	5	-13	-0.01%
SI	0.02	2	3	1	0.00%
ES	0.44	1	2	1	0.00%
SE	0.26	56	13	-43	-0.01%
EU27	6.33	1,975	1,113	-869	0.00%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

Table 109: Recurrent costs and cost savings for national public authorities in PO2C in 2040, relative to the baseline, in million EUR (2023 prices)

	Administrative costs (EUR million)	Losses in tax revenues (EUR million)	Additional tax revenues (EUR million)	Net benefits (+) or net costs (-) in EUR million	Net benefits (+) or net costs (-) as share of GDP
AT	0.22	235	1	-234	-0.04%
BE	0.24	326	-2	-328	-0.04%
BG	0.03	53	1	-52	-0.04%
HR	0.03	28	0	-28	-0.03%
CY	0.10	8	5	-3	-0.01%
CZ	0.11	97	0	-98	-0.02%
DK	0.17	77	-2	-80	-0.02%
EE	0.01	10	0	-10	-0.02%
FI	0.11	103	1	-102	-0.03%
FR	0.82	484	22	-462	-0.01%
DE	2.15	703	17	-688	-0.01%
EL	0.06	87	0	-87	-0.03%
HU	0.04	42	7	-35	-0.01%
IE	0.15	38	0	-38	0.00%
IT	0.52	104	36	-69	0.00%
LV	0.02	16	1	-14	-0.03%
LT	0.03	33	0	-33	-0.03%
LU	0.04	6	1	-6	-0.01%
MT	0.02	8	0	-8	-0.02%
NL	0.39	457	9	-449	-0.04%
PL	0.17	124	1	-123	-0.01%
PT	0.07	22	2	-20	-0.01%
RO	0.06	163	5	-158	-0.03%
SK	0.04	24	2	-22	-0.01%
SI	0.02	19	0	-19	-0.02%
ES	0.44	208	22	-187	-0.01%
SE	0.26	101	-1	-102	-0.01%
EU27	6.33	3,576	127	-3,455	-0.02%

Source: Ricardo (2025), Support study; PRIMES-TREMOVE transport model (E3-Modelling) and standard cost model for administrative costs

8. ASSUMPTIONS USED FOR THE ASSESSMENT OF IMPACTS OF EU CONTENT REQUIREMENTS

According to analysis performed by JRC with FIDELIO model, introducing EU content requirements for steel and aluminium in the automotive sector for public procurement and support schemes would lead to a 0.53% reduction of the EU automotive sector's gross value added for 2025-2030, relative to a baseline scenario without EU content requirements[220].

For batteries, EU content requirements may raise the costs of battery electric vehicles, affecting affordability and competitiveness in cost-sensitive markets. However, a phased implementation plus the support schemes in place would help absorb the impact. Based on 2024 cost differentials, the price increase for an average electric car equipped with a 68 kWh battery pack, when using EU-made cells, cathode active materials (CAM), and anode active materials (AAM), would range between EUR 653 and EUR 1,632. This corresponds to approximately 1.4% to 3.5% of the average retail price of an electric vehicle in Europe. However, as battery cell costs decline over time, the total cost differential with China is also expected to decrease. The table below provides the low and high estimates for the cost difference for an electric car, van and lorry based on the cost difference per battery cell and the average battery capacity of an average vehicle in the baseline[221].

Table 110: Low and high estimates for the cost difference between electric vehicles equipped with batteries using EU-made battery cells with locally sourced CAM and AAM and Chinese imports (in EUR per vehicle)

	2029	2030	2035	2040	2050
Cost difference for an electric car (average 65-67 kWh)	393-982	346-865	264-659	262-545	263-328
Cost difference for an electric van (average 89 kWh)	534-1,335	470-1,175	350-874	350-729	350-437
Cost difference for an electric lorry (average 445 kWh in 2029 to 333 kWh in 2050)	2,674-6,686	2,355-5,887	1,494-3,734	1,374-2,863	1,311-1,639

The economic impacts of the measure on vehicle components were calculated by JRC using the SMILE EU model[222], including Eurostat's FIGARO tables[223] and other data sources[224]. The estimated impacts on prices per electric vehicle stemming from this measure are expected to be limited: (i) for cars, 0.9% increase in 2029 and 1.2% increase from 2030 relative to the baseline; (ii) for vans, 0.1% increase in 2029 and 0.4% increase from 2030 relative to the baseline; (iii) for lorries, 0.9% increase in 2029 and 1.2% increase from 2030 relative to the baseline.

---

[220] FIDELIO stands for Fully Interregional Dynamic Econometric Long-term Input-Output model. It is a dynamic general equilibrium model developed by the JRC. For simulating the impacts of local content requirements for aluminium and steel, FIDELIO was used in combination with the FIGARO-E3 database (Cazcarro et al., 2025); a disaggregation of the Eurostat's global FIGARO input-output tables (Remond-Tiedrez and Rueda-Cantuche, 2019) that includes such materials explicitly represented.

[221] Post-2035, the low estimate of the cost difference per battery cell has been kept constant over time, while accounting for the changes in the average battery capacity in the baseline. For the high estimate of the cost difference some further reduction has been assumed up to 2050 due to economies of scale. The cost difference per battery cell by 2050 is assumed to be half of the cost difference in 2035.

[222] SMILE EU (Single Market Integration through a MIcroeconomic LEns) is a set of analytical and quantitative tools on market efficiency and microeconomic behaviour to provide tailor-made answers related to industrial, innovation and employment policies. At its core, there is a macroeconomic model where economic outcomes are the result of microeconomic decisions made by heterogeneous firms and/or households. In SMILE EU, the micro drives the macro. The impact assessment builds on various tools developed within SMILE EU. It leverages the methodology developed to disaggregate input-output data, which provides science-to-policy evidence at a more granular level.

[223] https://joint-research-centre.ec.europa.eu/projects-and-activities/trade-and-industrial-policy-analysis/input-output-accounts/figaro-tables_en

[224] McKinsey & Company (2024), Europe's economic potential in the shift to electric vehicles; JRC (2022), Revision of the EU Green Public Procurement Criteria for Road transport; ACEA (2025), Tax benefits and incentives; Leard and Wu (2023), New Passenger Vehicle Demand Elasticities: Estimates and Policy Implications;
Draghi (2024), The future of European competitiveness

Table 111 provides the estimated costs of applying EU content criteria to new zero-emission vehicles in corporate fleets, associated to the policy options, assuming 100% pass through of the costs to vehicle owners. The table shows the number of vehicles subject to the requirements on batteries and to the requirements on other vehicle components as well as the costs associated to the requirements on batteries and on other vehicle components for specific years (2029, 2030, 2033 and 2035), relative to the baseline.

Table 111: Impacts of EU content requirements on costs for businesses for specific years relative to the baseline

	PO1A				PO1B				PO1C			
	2029	2030	2033	2035	2029	2030	2033	2035	2029	2030	2033	2035
Number of vehicles subject to requirements on vehicle components, excluding batteries (in thousand)	525	598	244	8	901	785	321	12	1,122	984	403	16
Number of vehicles subject to requirements on batteries (in thousand)	501	590	239	6	860	774	314	9	1,072	970	395	12
Costs related to vehicle components (million EUR)	119	191	92	24	202	253	125	38	251	319	160	52
Costs related to batteries - low estimates (million EUR)	208	226	83	9	361	299	111	13	458	377	141	18
Costs related to batteries - high estimates (million EUR)	519	564	207	22	902	747	278	33	1,145	941	353	46
Total costs for businesses - low estimates (million EUR)	327	416	175	33	563	552	236	51	709	696	301	70
Total costs for businesses - high estimates (million EUR)	638	754	299	46	1,104	1,000	403	71	1,396	1,261	513	97
	PO2A				**PO2B**				**PO2C**			
	2029	**2030**	**2033**	**2035**	**2029**	**2030**	**2033**	**2035**	**2029**	**2030**	**2033**	**2035**
Number of vehicles subject to requirements on vehicle components, excluding batteries (in thousand)	521	617	293	77	894	808	380	94	1,112	1,019	467	99
Number of vehicles subject to requirements on batteries (in thousand)	498	607	281	64	854	796	364	77	1,063	1,004	449	81
Costs related to vehicle components (million EUR)	110	255	253	241	185	337	317	291	224	337	317	291
Costs related to batteries - low estimates (million EUR)	199	266	159	95	345	351	202	115	434	351	202	115
Costs related to batteries - high estimates (million EUR)	499	665	397	238	863	878	504	288	1,085	878	504	288
Total costs for businesses - low estimates (million EUR)	310	521	412	336	530	688	519	406	658	688	519	406
Total costs for businesses - high estimates (million EUR)	609	920	650	479	1,048	1,215	822	579	1,309	1,215	822	579

ANNEX 5: COMPETITIVENESS CHECK

1. OVERVIEW OF IMPACTS ON COMPETITIVENESS

Dimensions of Competitiveness	Impact of the initiative (++ / + / 0 / - / -- / n.a.)	References to sub-sections of the main report or annexes
Cost and price competitiveness	++ for PO1A and PO1B / +++ for PO1C	6.1.1, 6.1.5, 6.1.6, 6.1.7 and Annex 4 (sections 3, 4, 5, 6 and 7)
Capacity to innovate	+ for PO1A / ++ for PO1B / +++ for PO1C	6.1.8
International competitiveness	+ for PO1A, PO1B and PO1C	6.1.5
SME competitiveness	-- for PO1A, PO1B and PO1C	6.1.6, Annex 4 (section 3 and 4) and Annex 6

2. SYNTHETIC ASSESSMENT

2.1 Cost and price competitiveness

PO1A, PO1B and PO1C are expected to have an **overall positive impact on the cost competitiveness of the directly affected businesses**, that include large road transport operators and other large businesses (vehicle owners). Lower fuel costs and other operation costs will strengthen the cost competitiveness of these companies despite the higher upfront cost for the ZEV purchase.

Total adjustment costs for large businesses, mostly capital costs for the ZEV purchase, are estimated at EUR 8.3 billion in PO1A, EUR 11.9 billion in PO1B and EUR 15.6 billion in PO1C expressed as present value over 2029-2050 relative to the baseline (see Table 22 in section 6.1.5). On the other hand, adjustment costs savings, mostly fuel and other operation costs savings, are projected at EUR 23.4 billion in PO1A, EUR 32.7 billion in PO1B and EUR 42.9 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline. In addition, the reduction in the fossil fuel use due to the purchase of new ZEV instead of conventional vehicles would also lead to a decrease in the fuel tax expenditures for large companies, estimated at EUR 16.9 billion in PO1A, EUR 24.1 billion in PO1B and EUR 32 billion in PO1C. As shown in section 6.1.5, PO1A, PO1B and PO1C are expected to result in **net benefits for the directly affected businesses**. The net benefits for large companies are estimated at EUR 32 billion in PO1A, EUR 45 billion in PO1B and EUR 59.2 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline. Thus, large businesses are expected to increase their cost competitiveness in PO1A, PO1B and PO1C.

SMEs are not directly affected by PO1A, PO1B and PO1C. However, assuming that vehicle manufacturers maintain the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards, the increased demand for new ZEVs by large companies will reduce the availability of new ZEVs for SMEs resulting in net costs for SMEs as discussed in section 6.1.6, and further discussed in section 2.4 of Annex 5 and in Annex 6.

At aggregate level, the preferred option is expected to result in net benefits for businesses owning vehicles

(large businesses and SMEs taken together) estimated at EUR 16.4 billion in PO1A, EUR 26.3 billion in PO1B and EUR 38.7 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline.

The competitiveness of automotive manufacturers is also expected to improve, as long-term predictable increases in the demand for ZEVs from corporate fleets provides greater certainty for the investment necessary to maintain a competitive position in the fast-growing ZEV market.

2.2 Capacity to innovate

PO1A, PO1B and PO1C are expected to have an **overall positive impact on the capacity of vehicle manufacturers to innovate**. By stimulating the **deployment of zero-emission technologies in new corporate vehicle registrations**, they create long-term demand certainty and establish a more stable environment for vehicle manufacturers to invest in ZEV innovation and technological development. While innovation in technologies for road transport vehicles is primarily driven by the CO_2 emission performance standards, this initiative will play a supporting role by stimulating demand in specific corporate fleets use cases and by incentivising the deployment of ZEV models suited to their operational requirements. The wider deployment of ZEVs in the second-hand vehicle markets is also expected to increase their visibility in markets with currently low market penetration rates and to enhance understanding of ZEV use across a broader range of operational contexts. This broader exposure is likely to provide additional impetus for technological development, particularly in the case of lorries. The positive impacts on innovation and technological development are expected to be highest in PO1C, due to the highest impacts on the ZEV corporate fleets and second-hand market, followed by PO1B and PO1A.

2.3 International competitiveness

The international competitiveness of larger companies is expected to increase, as lower fuel costs and other operation costs over the lifetime of the ZEV fleet will impact positively the cost structure of the companies and free resources. Importantly, the increased competitiveness of automotive manufacturers due to a more predictable planning of the transition to ZEVs will also benefit their ability to better position themselves in competitive global markets for ZEVs.

2.4 SME competitiveness

For **SMEs,** PO1A is estimated to result in net costs of EUR 15.6 billion expressed as present value over 2029-2050 relative to the baseline, PO1B to net costs of EUR 18.7 billion and PO1C to net costs of EUR 20.5 billion. Despite SMEs not being directly targeted by the preferred policy options, the increased demand for new ZEVs by large companies will reduce the availability of new ZEVs for SMEs in the short to medium term. This is based on the assumption that vehicle manufacturers maintain the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards. At the same time, the faster increase in the share of ZEVs in corporate fleets, particularly in fleets with high turnover such as rental car fleets, is expected to accelerate the uptake of second-hand ZEV by SMEs. This would lead to fuel costs and other operation costs savings for SMEs relative to the baseline. It should also be noted that although SMEs are expected to experience overall net costs, expressed as present value over 2029-2050 relative to the baseline, in the medium to longer term in PO1B and PO1C they are projected to experience net benefits, due to the higher ZEV uptake in the second-hand market. In addition, the net costs are estimated at up to EUR 21.1 per vehicle per year in PO1A, EUR 29.6 in PO1B and EUR 38.5 in PO1C. More detailed explanations on the impacts on SMEs are provided in section 6.1.6, Annex 4 (sections 3 and 4) and the SME check is provided in Annex 6.

3. COMPETITIVE POSITION OF THE MOST AFFECTED SECTORS

Corporate fleets present a clear potential in helping to sustain and accelerate the increase in the uptake of ZEVs in the EU. Renting and leasing of motor vehicles sector represents 10% of all value added generated by administrative and support service activities (0.6% of the total value added of the industry, construction and market services in the EU economy), while passenger and freight transport by road represents around 36% of all value added generated by the transport and storage sector (2.1% of the total value added of the industry, construction and market services)[225]. Around 73.5% of businesses and approximately half of persons employed in the transportation and storage sector operate in passenger and freight transport by road.

Table 112: Value added, persons employed and number of businesses in the road transport and rental and leasing sectors in EU27 in 2023

	Value added (million EUR, current prices)	Persons employed	Number of enterprises
Industry, construction and market services [B-S_X_O_S94]*	10,459,844	162,151,763	33,065,685
Transportation and storage [H]	597,797	10,312,819	1,461,505
Land transport and transport via pipelines [H49]	264,687	5,740,560	1,063,770
Other passenger land transport [H493]	64,410	1,720,000	474,806
Freight transport by road and removal services [H494]	150,609	3,400,000	600,000
Administrative and support service activities [N]	607,186	14,083,422	1,936,646
Rental and leasing activities [N77]	144,177	749,282	225,431
Renting and leasing of motor vehicles [N771]	60,430	209,329	52,000

*Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates [sbs_ovw_act]. *Except public administration and defence, compulsory social security, activities of membership organisations.*

The sector is also significantly represented by SMEs, which represent more than 99% of total businesses in *passenger and freight transport by land* as well as *rental and leasing of motor vehicles*, as shown in the table below. This is particularly important when considering the high purchase costs and operational constraints of ZEVs compared to conventional vehicles. The low availability of affordable ZEVs in the market is one of the factors driving the current low uptake of ZEVs in corporate fleets.

Table 113: Number of businesses in selected sectors in the EU27 in 2023, by size

	Micro (less than 9 employees)	Small (10-49 employees)	Medium (50-249 employees)	Large (250 or more employees)
Industry, construction and market services [B-S_X_O_S94]*	31,190,732	1,572,015	248,720	54,219
Transportation and storage [H]	1,347,436	94,169	16,539	3,360
Land transport and transport via pipelines [H49]	983,194	68,892	10,200	1,510
Other passenger land transport [H493]	433,105 **	13,931	2,549	516
Freight transport by road and removal services [H494]	524,505	54,838	7,000	880
Administrative and support service activities [N]	1,818,115	90,328	22,450	5,752

[225] The three NACE sub-sectors (H493, H494 and N77) capture corporate fleets primarily focused on public passenger transport, freight/logistics, and vehicle leasing. Missing corporate fleets activity include internally owned fleets, non-transport fleets, or industry-specific fleets.

	Micro (less than 9 employees)	Small (10-49 employees)	Medium (50-249 employees)	Large (250 or more employees)
Rental and leasing activities [N77]	216,185	7,767	1,226	254
Renting and leasing of motor vehicles [N771]	50,000	1,783	303	88 **

*Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity (from 2021 onwards) [sbs_sc_ovw]. *Except public administration and defence, compulsory social security, activities of membership organisations. ** 2022 data, as 2023 is confidential.*

Given that an increase in the uptake of ZEVs in corporate fleets across the EU would support the competitiveness of the automotive sector, it is relevant to also examine the automotive sector in the EU. From a socioeconomic perspective, the automotive sector is a key contributor to economic growth and employment across the EU. The overall transport, mobility and automotive ecosystem is responsible of EUR 1 trillion of GDP as stated in section 1.1[226]. The table below shows the value added produced by businesses directly involved into the manufacturing of motor vehicles, trailers and semi-trailers. It can be observed that this subsector represented around 9.5% of total value added generated by the manufacturing sector in the EU between 2021 and 2023. The sector kept a stable employment between 2021 and 2023, hovering at around 2.45 million workers, i.e., 8% of total EU jobs in manufacturing. These represent the persons directly employed in the automotive sector.

Table 114: Value added for the EU industry, construction and market services sectors, including the automotive manufacturing sector, between 2021 and 2023 (EUR million, in current prices)

	2021	2022	2023
Industry, construction and market services [B-S_X_O_S94]*	9,342,087	10,061,373	10,459,844
Manufacturing [C]	2,190,084	2,419,775	2,466,454
Manufacture of motor vehicles, trailers and semi-trailers [C29]	204,000	223,636	240,806

*Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates) [sbs_ovw_act]. *Except public administration and defence, compulsory social security, activities of membership organisations.*

Table 115: Persons employed in the EU industry, construction and market services sectors, including the automotive manufacturing sector, between 2021 and 2023

	2021	2022	2023
Industry, construction and market services [B-S_X_O_S94]*	156,098,847	160,424,218	162,151,763
Manufacturing [C]	29,736,500	30,026,436	30,286,221
Manufacture of motor vehicles, trailers and semi-trailers [C29]	2,453,776	2,426,930	2,450,000

*Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates) [sbs_ovw_act]. *Except public administration and defence, compulsory social security, activities of membership organisations.*

As the automotive industry is currently undergoing a massive transformation – due to the importance of reducing CO_2 emissions in road transport – the uptake of ZEVs is crucial. The table below shows the share of new ZEVs, by type of vehicle. The share of new ZEV registrations has overall witnessed an increase between 2016 and 2025 in the EU. Quite notably, zero-emission cars registrations increased from less than 1% in 2016 to around 14% of new vehicles registered in 2024 and around 16% in the first half of 2025. Over the same period, registrations of new zero-emission buses and coaches also increased considerably, from 1.4% to 18.7% in 2024, while the uptake of zero-emission vans and lorries was more limited.

[226] Transition pathway for the EU mobility industrial ecosystem

Table 116: New registrations of zero-emission vehicles by type of vehicle in the EU27, between 2016 and 2025

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 (first half)
Cars	0.5%	0.7%	1.0%	1.9%	5.4%	9.0%	12.1%	14.6%	13.6%	16.2%
Vans	0.7%	0.9%	1.2%	1.3%	1.9%	2.9%	4.8%	6.6%	5.4%	8.4%
Buses and coaches	1.4%	1.8%	1.9%	4.1%	5.6%	8.0%	12.6%	15.3%	18.7%	22%
Lorries	0.0%	0.0%	0.1%	0.2%	0.3%	0.4%	0.5%	1.8%	2.4%	3.7%

Source: European Alternative Fuel Observatory. Market share of total registrations; Note: The table displays the new ZEVs acquisition and does not allow to distinguish between corporate fleets and other uses.

The accelerated uptake of ZEVs observed in the table above is also reflected in the increasing relative importance of motor vehicles with electric motor for propulsion in international trade. As displayed in the table below, the share of EU imports of electric vehicles over total imported motor vehicles increased from 1.8% (EUR 1,231 million) in 2018 to 16.5% (EUR 15,926 million) in 2024. Exports also saw a significant rise, growing from 1% (EUR 1,820 million) to 12.3% (EUR 25,766 million) during the same period.

Table 117: Exports and imports of motor vehicles and electric vehicles between EU27 and the rest of the world between 2018 and 2024 (EUR million, in current prices)

	2018	2020	2022	2024
Exports				
Total EU	2,058,470	1,932,076	2,570,215	2,583,053
Motor vehicles	177,799	151,103	196,808	208,663
Motor vehicles, with only electric motor for propulsion	1,820	7,096	21,693	25,766
Road tractors for semi-trailers with only electric motor for propulsion	NA	NA	16	115
Motor vehicles for the transport of goods with only electric motor for propulsion	NA	NA	564	952
Imports				
Total EU	1,910,414	1,715,119	3,005,720	2,437,177
Motor vehicles	68,986	60,288	76,041	91,634
Motor vehicles, with only electric motor for propulsion	1,231	5,304	12,558	15,138
Road tractors for semi-trailers with only electric motor for propulsion	NA	NA	1	2
Motor vehicles for the transport of goods with only electric motor for propulsion	NA	NA	311	786

Source: Comext database. EU trade since 2002 by CPA 2.2 & International trade of goods.

ANNEX 6: SME CHECK

OVERVIEW OF IMPACTS ON SMES

Relevance for SMEs
The initiative is considered relevant for SMEs, although the SMEs are only indirectly affected in the preferred policy option.

(1) IDENTIFICATION OF AFFECTED BUSINESSES AND ASSESSMENT OF RELEVANCE
Are SMEs directly affected? In which sectors?
No, SMEs are not directly affected by the preferred policy option.
Estimated number of directly affected SMEs
-
Estimated number of employees in directly affected SMEs
-
Are SMEs indirectly affected? In which sectors? What is the estimated number of indirectly affected SMEs and employees?
Yes, SMEs are expected to be indirectly affected by the preferred policy option. **Scale of SME involvement**: SMEs are estimated to own a significant share of corporate fleets in the EU, although statistics are not available on the number of vehicles owned by SMEs. Based on stakeholders interviews, the share of corporate fleets belonging to SMEs is estimated at around 60% for cars, 70% for vans and 80% for lorries. **Sectors affected:** SMEs are expected to be indirectly affected across various sectors, notably in rentals, leasing, passenger transport services, logistics and road haulage. More broadly, all SMEs owning vehicles may be indirectly affected by the preferred policy option. **Estimated number of most affected SMEs and employees:** SMEs represent over 99% of total businesses in *passenger and freight transport by land* as well as *rental and leasing of motor vehicles* (see section 3 of Annex 5). A total of 1.1 million SMEs were operating in these sectors in 2023 (see Table 113 in Annex 5). Around 87% of companies operating in the road haulage sector and the vast majority of taxi companies are micro-enterprises[227].

[227] Source: Eurostat. Enterprises by detailed NACE Rev. 2 activity and special aggregates [sbs_ovw_act].

In terms of employment, in 2023 the SMEs in the *renting and leasing of motor vehicles* sector employed 130,560 persons, while the SMEs in the *passenger and freight transport by land* sector 3.9 million persons (2.8 million persons in the *haulage sector* and 1.1 million persons in *passenger land transport*). Of this, micro-enterprises in the *renting and leasing of motor vehicles* sector employed 64,247 persons, the *haulage sector* 1,057,289 persons and the *passenger land transport* sector 592,035 persons[228].

(2) CONSULTATION OF SME STAKEHOLDERS

How has the input from the SME community been taken into consideration?

SMEs were involved in the consultation activities, further described in Annex 2 ('Synopsis report'). Out of the 268 respondents to the OPC, 158 (59%) identified as SMEs. More specifically, 53 were micro-enterprises (i.e. 1 to 9 employees), 54 were small-enterprises (i.e. 10 to 49 employees), and 51 were medium-enterprises (i.e. 50 to 249 employees). In the CfE, 104 of the 179 respondents in the company and business category were SMEs. Of the 21 targeted interviews, 5 were with representatives of SMEs[229]. Most of the remaining interviews were conducted with large organisations, which heavily rely on subcontracting carried out by SMEs.

Are SMEs' views different from those of large businesses?

Out of the 179 respondents to the CfE identifying as companies or businesses, 104 stated they were SMEs. The views expressed by SMEs were somewhat similar to those of larger companies, depending on the topic. The responses of the CfE were not systematically disaggregated by company size[230]. However, an additional qualitative analysis was conducted for SMEs, allowing partial comparison of their positions with those of larger companies.

ZEV mandates and flexibility: Most SMEs were not in favour of ZEV mandates, echoing the views of financial institutions, leasing companies, rental companies and road haulage operators. SMEs and other small operators repeatedly called for gradual, incentive-based approaches rather than rigid obligations, stressing the need for flexibility and proportionality. 3.8% of respondents to the CfE (18 of 483) proposed SME-specific thresholds or simplified templates to ensure reporting remains feasible for smaller firms. The need for sectoral flexibility was also mentioned by companies making use of transport and logistics services (shippers, retailers, etc.), as well as road haulage operators.

Infrastructure and operational constraints: SMEs highlighted that access to charging infrastructure is a major barrier to ZEV uptake in corporate fleets, echoing the views of logistics operators, electric vehicles and alternative-fuels refuelling and charging infrastructure providers, logistics services companies, rental companies, road haulage operators, and passenger transport services. Stakeholder groups with higher SME representation (leasing, finance) placed relatively more emphasis on upfront and financing costs while operational actors (haulage, logistics, rental) put more emphasis on cost implications of the inability to charge (under current duty cycles) and operational constraints. Overall, 54.4% of respondents to the CfE (259 of 483) identified the lack of charging infrastructure (public and depot) as a key barrier in the uptake

[228] Source: Eurostat. Enterprise statistics by size class and NACE Rev. 2 activity [sbs_sc_ovw]. Sectors are categorised using the NACE classification. The calculation of employees is based on the average number of employees in micro, small and medium sized companies.
[229] CLECAT, IRU, Muoversi, T4SM and UETR.
[230] Company-size breakdowns are available in aggregate (number of SMEs vs. total businesses) but not cross-analysed by specific question or issue.

of ZEVs in corporate fleets.

Costs and financing: SMEs reported that they face disproportionate transition costs and lack the capital resources of larger companies. 8.7% of respondents to the CfE (26 of 483) mentioned that SMEs would be disproportionately affected by ZEV costs. They asked for simple, easily accessible grants or fiscal incentives and warned that new reporting or monitoring requirements could create excessive administrative burdens.

Second-hand market: Several respondents to the CfE also noted that SMEs are expected to gain more from higher supply and lower-cost ZEV on the second-hand market. According to 26.1% of respondents to the CfE (124 of 483), faster new zero-emission vehicle uptake could increase used-vehicle supply and stabilise residual values, improving affordability for SMEs. However, 24.6% of respondents to the CfE (117 of 483) expressed concern about uncertain resale values and the early-stage nature of second-hand markets for ZEVs, noting that extended lease terms delay the entry of used ZEVs into the market. SMEs cautioned that mandates could worsen this imbalance if resale confidence and price certainty are not addressed.

Incentives and fiscal treatment: Many SMEs saw clear environmental benefits from electrification but called for continued, well-designed fiscal support to ease investment costs and align phase-out timelines with infrastructure deployment and vehicle availability.

Overall, SMEs' responses reflected similar concerns to other business stakeholders, e.g. costs, infrastructure, and administrative complexity. SMEs placed greater emphasis on proportionality, flexibility, and access to finance, while larger companies highlighted the need for regulatory clarity and long-term investment certainty.

(3) ASSESSMENT OF IMPACTS ON SMES
What are the estimated direct impacts for SMEs of the preferred policy option?
Qualitative assessment
There are no direct impacts associated to the preferred policy option.
Quantitative assessment
There are no direct impacts associated to the preferred policy option.
What are the estimated direct benefits/cost savings for SMEs of the preferred policy option?
Qualitative assessment
There are no direct benefits/costs savings associated to the preferred policy option.
Quantitative assessment
There are no direct benefits/costs savings associated to the preferred policy option.
What are the indirect impacts of this initiative on SMEs?

Costs

Adjustment costs: In the short term, the increased demand for new ZEVs by large companies is expected to reduce the availability of new ZEVs for SMEs, assuming that vehicle manufacturers do not exceed the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards. As a result, a higher number of new conventional vehicles is expected to be purchased by SMEs relative to the baseline, leading to higher fuel and other operation costs compared to the baseline. Adjustment costs for SMEs are estimated at EUR 16.1 billion in PO1A, EUR 20.9 billion in PO1B and EUR 25.2 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline.

Increase in tax expenditure: In the short term, the increase in the number of new conventional vehicles and thus fuel costs for SMEs are also expected to result in higher fuel tax expenditures, estimated at EUR 9.7 billion in PO1A, EUR 12.2 billion in PO1B and EUR 14.3 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline.

Benefits

***Adjustment cost savings*:** In the short term, the purchase of new conventional vehicles by SMEs will result in lower capital costs relative to the baseline. In the medium to long term, as the availability of ZEVs in second-hand markets increases, the uptake of second-hand ZEVs by SMEs is expected to accelerate, leading to adjustment cost savings due to lower capital costs, fuel costs and other operation costs. As explained in section 6.1.1 (see Table 12), the total increase in zero-emission second-hand vehicles (cars, vans and lorries) is estimated at 721,000 on average per year over 2031-2050 relative to the baseline in PO1A, 1.1 million in PO1B and 1.4 million in PO1C. The increase in the zero-emission second-hand lorries will benefit entirely to SMEs, of vans mostly to SMEs and of cars to both SMEs and citizens. The adjustment costs savings for SMEs are estimated at EUR 9.5 billion in PO1A, EUR 12.9 billion in PO1B and EUR 16.3 billion in PO1C.

Reduction in tax expenditure: As SMEs start purchasing ZEVs from the second-hand market, they are expected to experience lower energy consumption due to the higher energy efficiency of ZEV and thus lower fuel tax expenditures. The reduction in tax expenditures is estimated at EUR 0.8 billion in PO1A, EUR 1.5 billion in PO1B and EUR 2.6 billion in PO1C, expressed as present value over 2029-2050 relative to the baseline.

Net impacts

Overall, the net costs for SMEs are estimated at **EUR 15.6 billion in PO1A, EUR 18.7 billion in PO1B and EUR 20.5 billion** in PO1C, expressed as present value over 2029-2050 relative to the baseline (see Table 24 in section 6.1.6).

It should however be noted that although SMEs are expected to experience overall net costs, expressed as present value over 2029-2050 relative to the baseline, in the medium to longer term in PO1B and PO1C they are projected to experience net benefits, due to the higher ZEV uptake in the second-hand market. In addition, the net costs are estimated at up to EUR 21.1 per vehicle per year in PO1A, EUR 29.6 in PO1B and EUR 38.5 in PO1C (see Table 26 in section 6.1.6).

(4) MINIMISING NEGATIVE IMPACTS ON SMES
Are SMEs disproportionately affected compared to large companies? If yes, are there any specific

subgroups of SMEs more exposed than others?
The preferred policy option is estimated to result in net costs for SMEs, estimated in total at EUR 15.6 billion in PO1A, 18.7 billion in PO1B and 20.5 billion in PO1C, expressed as present value over 2029-2050 relative to baseline. As explained in section 3 of Annex 6, in terms of net costs per vehicle per year these are limited to up to EUR 21.1 in PO1A, EUR 29.6 in PO1B and EUR 38.5 in PO1C, while in the medium to long term in PO1B and PO1C SMEs are expected to experience net benefits. It should be noted that the SMEs are not directly targeted by PO1A, PO1B and PO1C. The net costs estimated for SMEs are due to the assumption that vehicle manufacturers do not exceed the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards and thus they reduce the availability of new ZEVs for SMEs. This is a conservative assumption that shows the upper bound costs estimates for SMEs.
Have mitigating measures been included in the preferred option/proposal?
PO1A, PO1B and PO1C do not target the SMEs, which are excluded from the scope of the targets. As explained above, the estimated indirect impacts represent the upper bound costs estimates under the assumption that vehicle manufacturers do not exceed the minimum share of ZEVs in new registrations required to meet their emission reduction targets under the CO_2 emission performance standards and thus they reduce the availability of new ZEVs for SMEs. The SMEs are expected to benefit of the increase in the zero-emission vehicles in the second-hand market, even if this would not be able to full compensate for the additional costs.

CONTRIBUTION TO THE 35% BURDEN REDUCTION TARGET FOR SMES
Are there any administrative cost savings relevant for the 35% burden reduction target for SMEs?
For the purpose of the 'one in, one out' approach and the Calculator of Administrative Costs (AC) & Administrative Burdens (AB), the SMEs are not expected to experience additional administrative costs or costs savings in PO1A, PO1B and PO1C.

ANNEX 7: DISCARDED POLICY OPTIONS

This annex provides more detailed explanations on the discarded policy options and the reasons why they were discarded.

Discarded policy option	Reason for discarding
(i) Voluntary commitments by large shippers and large fleets operators	This option would entail facilitating a voluntary commitment by large operators to meet a minimum share of zero-emission vehicles by a given date. It would build on commitments already set by certain private actors on a voluntary basis. This option would allow the Commission to provide additional political visibility to those commitments and a supporting tool to monitor their implementation through purchase of data on commercial vehicles sales. This option was discarded because such an approach would fail to sufficiently address the identified problems and problem drivers. Stakeholders (especially shippers and logistics users) criticised voluntary or non-binding approaches, noting that such option would transfer the risk to buyers without solving operational bottlenecks and would not create predictable demand for ZEVs. This option would neither reduce the existing fragmentation of national support frameworks, nor create better conditions in terms of purchase price, TCO or operational conditions for corporate ZEVs. Furthermore, this option would also fail to provide additional certainty to vehicle manufacturers that the demand would materialise. Several respondents to the consultation activities stressed that market forces alone (without mandatory measures) already determine the level and speed of clean-vehicle uptake and result in fragmented national policies. This option was therefore discarded on the basis of lack of effectiveness.
(ii) Commission Recommendations on the fiscal treatment of corporate vehicles	This option would mandate the Commission to adopt Recommendations for Member States on the taxation of corporate vehicles, with the aim of encouraging a more favourable fiscal treatment of zero-emission corporate vehicles than of conventional ones. This option was discarded because, although it could partially address the relevant problems and problem drivers by reducing fragmentation of national support and improving the economic performance of corporate ZEVs, it would not sufficiently ensure that concrete action is taken, and impacts achieved. Out of the respondents to the CfE, 36.6% (174 of 483), including a few public authorities, underlined the need for stronger EU-level coordination on taxation and incentives, noting that existing tax rules and incentives are either insufficient, inconsistent across Member States, or volatile. The added value of these Recommendations would be limited compared to the promotion of the use of fiscal levers already presented in the Communication "Decarbonise corporate fleets"[231] in March 2025, lacking additional weight or direct legal effect. Around one-third of the CfE respondents highlighted fiscal measures as a key barrier, with many SMEs and fleet operators stressing that short-term or fragmented incentives undermine investment predictability. Since a Commission Recommendation would have no binding effect and could not ensure coherent or stable fiscal treatment across Member States, this option was considered not effective enough, and therefore it was discarded.
(iii) Harmonising the	This option would harmonise the fiscal treatment of corporate vehicles, requiring Member

[231] COM(2025) 96 final

Discarded policy option	Reason for discarding
fiscal treatment of corporate vehicles to prevent Member States from providing financial incentives to corporate vehicles other than ZEVs	States to set up financial incentives in a way that excludes corporate vehicles other than ZEVs. From the year following adoption, Member States would be required to adapt their relevant financial and fiscal instruments and norms to comply with these requirements. This would effectively result in the financial treatment of any conventional vehicle being the same irrespective of whether that vehicle is registered by a legal entity or by a physical person, while reserving any more favourable financial treatment to ZEVs. This option was discarded because it was not considered to meet the requirement for proportionality and subsidiarity. It would heavily impact on Member States' prerogatives in the area of fiscal policies.
(iv) Targets for Member States based on the total number of corporate vehicles registered on their territory	This option would set targets for Member States on corporate ZEVs, on the basis of the number of corporate vehicles registered on their territory. This option, while sharing some similarities with PO1A, PO1B and PO1C, would be based on the overall stock of corporate vehicles, instead of the newly registered vehicles during a given year as in the retained policy options. This option was discarded because it would introduce significant uncertainty, due to the fact that the impact of national measures on the operation of fleets is less direct than on new vehicle acquisition. Furthermore, Member States would be exposed to the risk of missing their targets due to circumstances outside their control in a situation such as, e.g., a large operator closing operations in their territory, or deciding to phase out a part of its zero-emission fleet faster than initially planned[232]. In addition, for some Member States a significant part of freight transport is performed by vehicles registered in another Member State. This option was therefore considered not sufficiently effective. Moreover, 16.2% of respondents to the CfE (77) identified administrative burden as a key barrier, and several stakeholders, including public authorities and leasing companies, cautioned against complex or disproportionate reporting frameworks. Stakeholders, particularly SMEs and fleet operators, underlined that any new reporting or monitoring obligations should remain proportionate. This option would entail higher compliance and administrative costs due to the need to ensure additional monitoring of the total fleet on a Member State's territory and was therefore discarded on the basis of proportionality and not sufficient effectiveness.
(v) Targets for Member States on share of ZEVs in new corporate registrations, with the same level of ambition for light-duty vehicles across all Member States	This option would be similar to PO1 but without differentiating between Member States in terms of the level of ambition for light-duty vehicles. Several respondents to the CfE underlined the diversity of national starting points and market maturity, noting that infrastructure and ZEV availability are more advanced in some Member States than others. This approach would fail to adequately take into account each Member State's starting point, national circumstances, and specific transport and economic characteristics. This option was therefore discarded on the basis of subsidiarity and proportionality.
(vi) Targets for Member States on share of ZEVs in new corporate	This option would be similar to PO1, but with a differentiation between Member States in terms of the level of ambition for heavy-duty vehicles. For heavy-duty vehicles, the differences in levels of ambition could create challenges for fair competition between transport operators in different Member States. Cross-border competitiveness concerns and

[232] This happened for example in the case of Hertz, which announced significant changes in its fleet strategy and re-sold a large share of its electric vehicles between 2023 and 2024, well before initially planned: https://www.electrive.com/2024/04/26/hertz-plans-to-phase-out-10000-more-electric-cars-in-2024/

Discarded policy option	Reason for discarding
registrations, with differentiated levels of ambition for heavy-duty vehicles across Member States	the need for level playing field across the internal market were highlighted by logistics and haulage stakeholders in the CfE. This option was therefore discarded on the basis of lack of coherence with the internal market principles and lack of effectiveness.
(vii) Targets for Member States on the share of zero-emission vehicles (cars, vans and lorries) in yearly new corporate vehicles registrations, including by SMEs	This option would be similar to PO1, but with a broader scope, including also corporate vehicles registered by SMEs and not only by large companies. SMEs would be disproportionately affected due to the difficulty in ensuring the access to finance required for the higher purchase costs of ZEVs, as they are generally considered less bankable and face higher revenue risks. This option was therefore discarded on the basis of proportionality.
(viii) Binding minimum targets on the share of zero-emission vehicles for specific types of corporate fleets	This option would set binding minimum targets on the share of zero-emission vehicles for specific types of corporate fleets (e.g. taxi fleets, rental companies, company cars) across the EU. The owners/operators of the fleets within the scope (e.g. all fleets of more than a specified number of lorries, all van rental fleets, all taxi fleets of more than 20 cars, etc.) would be required to ensure that, by a predetermined year, a given % of the vehicles in their fleet are zero-emission, or that a given % of the new vehicles procured in a specific year for that fleet are zero-emission. In the CfE, several SME and operator respondents cautioned against rigid ZEV mandates and called instead for gradual, incentive-based approaches. Their feedback indicates that binding targets for specific fleet types could be seen as disproportionate and administratively burdensome. The option would also need to introduce a definition of each type of fleet to be included, ensuring that it is broad enough to cover all the fleets of that kind, while minimising the risk that fleets of other kinds fall within the scope. In this case as well, the option would need to set rules on what qualifies a "fleet" in the cases of e.g. subsidiaries of the same company, or different legal entities within the same group, or under the same ownership, controlling different vehicles. In order to ensure a sufficient coverage and minimise the risk of avoidance, this option would need to include all fleets of the identified categories, without excluding SMEs (as a company can still be a SME but operate a bigger fleet). While this option would allow a targeted intervention focused on specific types of fleets (provided the scope could be defined with appropriate details and clarity), this would also entail lower benefits, due to the more limited scope. This option was discarded because the level of complexity required for the definition of the scope and the allocation of the obligations to different legal entities would be high, and there would be a very high risk of loopholes allowing avoidance of the obligations or of unintended consequences. For example, setting mandatory targets e.g. for leasing companies might result in a shift from leasing to purchase of vehicles, or from operational to financial leasing; a target for taxi companies and/or ride hailing companies that own the vehicles of their fleet might damage their competitiveness compared to ride hailing companies using a higher share of their drivers' private vehicles. Furthermore, given the complexity and expected high administrative burden, and the limited scope, the overall effectiveness and efficiency of this option were expected to be low.
(ix) Binding minimum targets on the share of zero-emission vehicles for corporate fleets above a certain size	This option would set binding minimum targets on the share of zero-emission vehicles for all corporate fleets of more than a predetermined amount of vehicles across the EU. The owners/operators of those fleets would be required to ensure that, by a given year, a given % of the vehicles in their fleet are zero-emission, or that a given % of the new vehicles procured in a certain year for that fleet are zero-emission. Some respondents to the CfE

Discarded policy option	Reason for discarding
	(4.2%; 20) warned against onerous reporting and changing rules and reporting burdens that add risk or cost. All companies registered in the EU, across all economic sectors, would need to report yearly about the average number of vehicles they owned/operated during that year (by vehicle category: cars, vans, trucks), either to demonstrate that they are outside the scope, or, if they are in the scope, to confirm that the share of zero-emission vehicles in the total number meets the legal requirement. Member States would be required to compile reports from all companies on their territory and submit them to the Commission. By imposing complex reporting requirements on every company established in the EU, this option would be expected to generate disproportionate administrative burden. Furthermore, by defining the scope based on the number of vehicles, this option would entail a significant risk of imposing stringent ZEV targets on companies and operators for whose use case suitable zero-emission options are not yet sufficiently available (for instance, some companies performing specialised transport such as some long-haul refrigerated transport or transport of chemicals, or focused on specialised vehicles such as cement mixers) with a disproportionate negative impact on those operators. This option was therefore discarded because it would generate an extremely high level of administrative burden, not being proportionate, and due to its lack of efficiency.
(x) Binding minimum targets on the share of zero-emission vehicles for corporate fleets of large companies, based on vehicle stock	This option would apply to all large companies established in the EU. They would be required to report yearly on the average number of vehicles they owned during that year (by vehicle category: cars, vans, lorries), and ensure that at least a certain share of those are zero-emission vehicles. Member States would be required to compile reports from all large companies on their territory and submit them to the Commission. This option would entail a very high risk of avoidance of the obligations and of unintended consequences. For example, companies within the scope could avoid the obligation to meet the targets by making more extensive use of solutions such as leasing or sub-contracting. This could in turn result in a higher share of vehicles registered by smaller operators, which face higher barriers to the switch to ZEVs, thus undermining the objective of decarbonising road transport. This option would also impose complex reporting requirements on every large company established in the EU, generating a disproportionate level of administrative burden. There would also be a significant risk of imposing stringent ZEV targets on companies and operators for whose use case suitable zero-emission options are not yet sufficiently available, resulting in a disproportionate negative impact on those operators. This option was therefore discarded because of not sufficient proportionality, effectiveness, and efficiency.
(xi) Prohibiting the registration of new conventional corporate vehicles after a certain date	This option would prohibit the registration of new conventional corporate vehicles after a certain date. An end date for the registration of new corporate vehicles would be set in the legislation, using the identified technology (e.g. conventional vehicles, or non zero-emission vehicles). From that date onwards, it would not be possible for any legal entity to register a new vehicle of that type, while physical persons would still be allowed to do so. The criteria could be made progressively more stringent (e.g. conventional vehicles banned from 2029, hybrid vehicles from 2030, etc.). This policy option would not require setting stringent targets or monitoring and reporting obligations for companies, and it would therefore entail very limited administrative burden. By focusing on technologies to be prohibited instead of mandating zero-emission options, it would allow companies to plan the progressive decarbonisation of their fleets over a longer timeframe. This option was discarded because a complete ban on identified technologies for new corporate vehicle registrations would provide no flexibility and entail significant risk of unintended consequences for specific fleets and use cases where suitable zero-emission

Discarded policy option	Reason for discarding
	alternatives are not yet sufficiently available, such as some companies performing specialised transport such as some long-haul refrigerated transport or transport of chemicals, or focused on specialised vehicles such as cement mixers, or remote outdoor activities. Several stakeholders in the CfE cautioned against rigid or mandatory measures, stressing that any new requirements should reflect current market realities, infrastructure availability, and technology readiness. SMEs and logistics operators requested phased and realistic implementation timelines, warning that premature bans could create significant operational and investment challenges. This option would also significantly limit vehicle manufacturers' flexibility in meeting CO_2 emission performance standards, especially for heavy-duty vehicles where corporate vehicles represent the totality of the market. For example, a ban on diesel lorries from 2030 would effectively force lorries manufacturers to either fully switch to zero-emission options already from 2030, or to convert their entire non-ZEV supply chain to alternatives such as plug-in hybrid electric vehicle or natural gas vehicles. Consequently, this option would fail to ensure sufficient external coherence, especially regarding the CO_2 emission performance standards for heavy-duty vehicles set out in Regulation 2019/1242. Moreover, the scale of investment required for such a rapid industrial conversion is unlikely to be mobilised within the expected timeframe, creating a serious risk of severe market disruption in the EU automotive sector. This option was therefore discarded because of lack of efficiency and proportionality.
(xii) **Targets for other vehicles than zero-emission**	This option considered setting targets for low- and zero-emission vehicles under the options presented above. This option was discarded because such an approach would be inconsistent with existing legislation: the Clean Vehicles Directive already sets targets for zero-emission vehicles only in the light-duty segment, and sub-targets for zero-emission vehicles for urban buses. It would also fail to contribute to the objectives of making ZEVs more attractive and would not give sufficient certainty to vehicle manufacturers. Additionally, Member States have been decreasing public support for company-car plug-in hybrids citing higher real-world fuel, as these vehicles are charged and driven electrically far less than assumed with an insufficient electric only range[233]. This option is therefore discarded because of the lack of external coherence as well as lack of effectiveness.
(xiii) Inclusion of buses and coaches	This option considered including buses and coaches (vehicles of category M2 and M3) in the scope of the initiative. This would result in a broader scope. The use cases and market dynamics for buses and coaches are significantly different than those of cars, vans, and lorries. Buses and coaches are used for collective transport, and in particular public transport. Public procurement plays a leading role on the market for vehicles and services in this segment (in particular for buses the impact assessment accompanying the 2019 revision of the Clean Vehicles Directive estimated that it covered more than 70% of new registrations) and national targets for the public procurement of zero-emission urban buses are already set by the Clean Vehicles Directive. Because that Directive covers also the procurement of services, any measure targeting urban buses would carry serious risks of duplication, with the same vehicle being subject to two parallel demand-side measures: one for the transport operator under this initiative and one for the contracting entity or contracting authority procuring the services, under the Clean Vehicles Directive. This would in turn impact the interactions between different services procured and provided using buses

[233] https://publications.tno.nl/publication/34622243/22jtHB/TNO-2016-R10938.pdf

Discarded policy option	Reason for discarding
	and coaches, for example in the case of urban, peri-urban, and regional public transport. The support for measures addressing coaches was low in both the 2024 OPC and in the 2025 CfE. In the CfE, the arguments provided by respondents highlighting the benefits and need for EU intervention generally focused on cars, vans, and lorries, while several respondents highlighted the challenges of operating zero-emission coaches. Buses and coaches are also treated differently under the CO_2 emission performance standards for heavy-duty vehicles: manufacturers have progressively higher mandates for a minimum share of zero-emission urban buses in new registrations (90% in 2030 and 100% in 2035), while coaches are subject to emission reduction targets similar to lorries. For these reasons, the inclusion of buses and coaches within the scope of the initiative would risk creating inconsistencies and overlaps, both within the initiative itself and in its interactions with the existing legal framework; this option has therefore been discarded on the basis of considerations of internal and external coherence.
(xiii) **Inclusion of criteria on vehicle-to-grid capability**	This option would require (some of) the electric vehicles counted for the targets under the options above to be capable of bi-directional charging[234]. The benefits of such a requirement would vary significantly from one fleet to another, depending on the type of vehicle and its use case. As noted by some CfE respondents, solutions should take into account diversity of fleet types. For example, large shippers indicate that the lorries they use for long-distance transport between major hubs do not usually spend more time parked than is strictly necessary to recharge, so there would be no opportunity to take advantage of this capability. This requirement would also result in additional purchase costs – further exacerbating the main identified barrier to the switch to ZEVs, i.e. their high CAPEX – and significantly higher administrative burden to prove compliance with targets. This option was therefore discarded because of lack of efficiency and proportionality.

[234] Bi-directional charging allows electric vehicles to both draw electricity from the grid to charge their batteries, and feed electricity back from their batteries into the grid when needed.

ANNEX 8: MODULATION OF THE TARGETS FOR CARS AND VANS

This annex presents the targets for Member States, calculated by multiplying the EU-level targets in section 5.2.3 under the different policy options by each Member State's modulation factor presented in section 5.2.3.

PO1A / PO2A

Table 118: Minimum target level for zero-emission new corporate cars registrations by large companies (share of new registrations by large companies) in PO1A/PO2A

Country	2029	2030	From 2035 onwards
Austria	46%	85%	100%, resulting from the CO_2 emission performance standards
Belgium	46%	85%	
Bulgaria	25%	46%	
Croatia	25%	46%	
Cyprus	28%	52%	
Czechia	25%	46%	
Denmark	46%	85%	
Estonia	25%	46%	
Finland	46%	85%	
France	42%	78%	
Germany	42%	78%	
Greece	25%	46%	
Hungary	25%	46%	
Ireland	46%	85%	
Italy	25%	46%	
Latvia	25%	46%	
Lithuania	25%	46%	
Luxembourg	46%	85%	
Malta	46%	85%	
Netherlands	46%	85%	
Poland	25%	46%	
Portugal	35%	65%	
Romania	25%	46%	
Slovakia	25%	46%	
Slovenia	25%	46%	
Spain	25%	46%	
Sweden	46%	85%	

Table 119: Minimum target level for zero-emission new corporate light commercial vehicles registrations by large companies (share of new registrations by large companies) in PO1A/PO2A

Country	2029	2030	From 2035 onwards
Austria	33%	72%	100%, resulting from the CO_2 emission performance standards
Belgium	33%	72%	
Bulgaria	18%	39%	
Croatia	18%	39%	
Cyprus	20%	44%	

Country	2029	2030	From 2035 onwards
Czechia	18%	39%	
Denmark	33%	72%	
Estonia	18%	39%	
Finland	33%	72%	
France	30%	66%	
Germany	30%	66%	
Greece	18%	39%	
Hungary	18%	39%	
Ireland	33%	72%	
Italy	18%	39%	
Latvia	18%	39%	
Lithuania	18%	39%	
Luxembourg	33%	72%	
Malta	33%	72%	
Netherlands	33%	72%	
Poland	18%	39%	
Portugal	25%	55%	
Romania	18%	39%	
Slovakia	18%	39%	
Slovenia	18%	39%	
Spain	18%	39%	
Sweden	33%	72%	

PO1B / PO2B

Table 120: Minimum target level for zero-emission new corporate cars registrations by large companies (share of new registrations by large companies) in PO1B/PO2B

Country	2029	2030	From 2035 onwards
Austria	59%	91%	100%, resulting from the CO_2 emission performance standards
Belgium	59%	91%	
Bulgaria	32%	49%	
Croatia	32%	49%	
Cyprus	36%	56%	
Czechia	32%	49%	
Denmark	59%	91%	
Estonia	32%	49%	
Finland	59%	91%	
France	54%	84%	
Germany	54%	84%	
Greece	32%	49%	
Hungary	32%	49%	
Ireland	59%	91%	

Country	2029	2030	From 2035 onwards
Italy	32%	49%	
Latvia	32%	49%	
Lithuania	32%	49%	
Luxembourg	59%	91%	
Malta	59%	91%	
Netherlands	59%	91%	
Poland	32%	49%	
Portugal	45%	70%	
Romania	32%	49%	
Slovakia	32%	49%	
Slovenia	32%	49%	
Spain	32%	49%	
Sweden	59%	91%	

Table 121: Minimum target level for zero-emission new corporate light commercial vehicles registrations by large companies (share of new registrations by large companies) in PO1B/PO2B

Country	2029	2030	From 2035 onwards
Austria	46%	78%	100%, resulting from the CO_2 emission performance standards
Belgium	46%	78%	
Bulgaria	25%	42%	
Croatia	25%	42%	
Cyprus	28%	48%	
Czechia	25%	42%	
Denmark	46%	78%	
Estonia	25%	42%	
Finland	46%	78%	
France	42%	72%	
Germany	42%	72%	
Greece	25%	42%	
Hungary	25%	42%	
Ireland	46%	78%	
Italy	25%	42%	
Latvia	25%	42%	
Lithuania	25%	42%	
Luxembourg	46%	78%	
Malta	46%	78%	
Netherlands	46%	78%	
Poland	25%	42%	
Portugal	35%	60%	
Romania	25%	42%	
Slovakia	25%	42%	
Slovenia	25%	42%	
Spain	25%	42%	

Country	2029	2030	From 2035 onwards
Sweden	46%	78%	

PO1C / PO2C

Table 122: Minimum target level for zero-emission new corporate cars registrations by large companies (share of new registrations by large companies) in PO1C/PO2C

Country	2029	2030	From 2035 onwards
Austria	65%	98%	100%, resulting from the CO_2 emission performance standards
Belgium	65%	98%	
Bulgaria	35%	53%	
Croatia	35%	53%	
Cyprus	40%	60%	
Czechia	35%	53%	
Denmark	65%	98%	
Estonia	35%	53%	
Finland	65%	98%	
France	60%	90%	
Germany	60%	90%	
Greece	35%	53%	
Hungary	35%	53%	
Ireland	65%	98%	
Italy	35%	53%	
Latvia	35%	53%	
Lithuania	35%	53%	
Luxembourg	65%	98%	
Malta	65%	98%	
Netherlands	65%	98%	
Poland	35%	53%	
Portugal	45%	70%	
Romania	35%	53%	
Slovakia	35%	53%	
Slovenia	35%	53%	
Spain	35%	53%	
Sweden	65%	98%	

Table 123: Minimum target level for zero-emission new corporate light commercial vehicles registrations by large companies (share of new registrations by large companies) in PO1C/PO2C

Country	2029	2030	From 2035 onwards
Austria	59%	85%	100%, resulting from the CO_2 emission performance standards
Belgium	59%	85%	
Bulgaria	32%	46%	
Croatia	32%	46%	
Cyprus	36%	52%	

Country	2029	2030	From 2035 onwards
Czechia	32%	46%	
Denmark	59%	85%	
Estonia	32%	46%	
Finland	59%	85%	
France	54%	78%	
Germany	54%	78%	
Greece	32%	46%	
Hungary	32%	46%	
Ireland	59%	85%	
Italy	32%	46%	
Latvia	32%	46%	
Lithuania	32%	46%	
Luxembourg	59%	85%	
Malta	59%	85%	
Netherlands	59%	85%	
Poland	32%	46%	
Portugal	45%	65%	
Romania	32%	46%	
Slovakia	32%	46%	
Slovenia	32%	46%	
Spain	32%	46%	
Sweden	59%	85%	

ANNEX 9: MONITORING AND EVALUATION

The Commission services will monitor the implementation and effectiveness of this initiative through a number of actions and a set of core indicators that will measure progress towards achieving the objectives. Five years after the implementation date of the legislation, the Commission services should carry out an evaluation to verify to what extent the objectives of the initiative have been reached.

The primary references for assessing the uptake of ZEVs in the corporate segment and for monitoring progress toward the initiative's objectives will be **vehicle registration data** to be submitted by Member States, data from the **European Alternative Fuels Observatory (EAFO),** and from **Eurostat,** as well as **existing reporting by Member States under the Alternative Fuels Infrastructure Regulation (AFIR)**. This will allow the Commission to monitor overall fleet greening trends and identify gaps or shortcomings.

As regards Specific Objective 1 (Stimulate the demand for ZEVs in the corporate segment), the main milestone to achieve is the increase of the share of ZEVs in new corporate vehicle registrations. This will be mainly achieved through **Member States' annual reports** on corporate fleets composition. These reports, which will contain the number of corporate vehicles registered by large companies and the share of ZEVs thereof, extracted from the national vehicle registries, will be submitted in the framework of the central register for CO_2 standards for vehicles maintained by European Environment Agency (EEA).

Concerning Specific Objective 2 (Reduce fossil fuels expenditures in the road transport sector), the monitoring of the advancement towards the objective will be based on the annual data made available by Member States on energy statistics. Namely, the identified indicator is:

- Final energy consumption in the road transport sector (by fuel type) in the EU and by Member State.

Finally, the monitoring of the achievement of Specific Objective 3 (Accelerate the ZEV availability on the second-hand market) will entail a combination of sources to derive the needed indicators:

- Share of ZEVs in registrations of second-hand vehicles in Member States
- Average age of corporate ZEVs entering the second-hand market

In this context, the following information needs to be collected:

- Data on the **share of ZEVs in registrations of second-hand vehicles**, and the **average age of corporate ZEVs entering the second-hand market** will be used to assess the effects of the initiative on the second-hand market and help monitor the spread of cleaner vehicles to private users and SMEs. This information should be compiled through **dedicated studies** conducted for the European Commission and made publicly available through the EAFO.

The links between specific objectives, operational objectives, indicators and data sources is presented in the table below.

Table 124: Link between specific objectives, operational objectives, indicators for monitoring and related data sources

Specific objective	Operational objectives	Indicators	Data sources
Stimulate the demand for ZEVs in the corporate	• Increase the share of ZEVs in new corporate	• Number of zero-emission corporate	• Registration figures by each Member State on an

Specific objective	Operational objectives	Indicators	Data sources
segment	vehicle registrations.	vehicles registered	annual basis
Reduce fossil fuels expenditures in the road transport sector	• Support the shift from conventional vehicles to ZEVs within corporate fleets	• Final energy consumption in the road transport sector (by fuel type) in the EU and by Member State	• Annual data submitted to Eurostat in line with Regulation (EC) 1099/2008 on energy statistics
Accelerate the ZEV availability on the second-hand market	• Promote circularity and affordability of ZEVs through a more active second-hand ZEV market	• Share of zero-emission vehicles in registrations of second-hand vehicles in Member States • Average age of corporate ZEVs entering the second-hand market	• Study to analyse progress in uptake of ZEVs in the second-hand vehicle markets in each Member State for the European Commission, to be made available through the Commission's European Alternative Fuels Observatory (EAFO) • Eurostat / Member State registration data

ANNEX 10: INCENTIVES FOR ZERO-EMISSION CORPORATE VEHICLES AT NATIONAL LEVEL

The following table presents an overview of the main incentives for corporate ZEV across Member States.

Table 125: Overview of corporate ZEV incentives across Member States[235]

MS	Corporate purchase grant (cars)	Registration / Acquisition tax relief for BEVs	Ownership/ Annual tax relief for BEVs	Company car benefit-in-kind (BIK) advantage for EVs	Corporate VAT deductibility
AT	Not federal (but Länder business grants)	Yes (BEVs exempt from registration tax)	No	Yes (preferential BIK versus ICE)	Full depreciation; standard VAT reclaim
BE	No national BEV grant; regional charging support	Yes (registration tax exemptions in Flanders/Brussels)	Yes (lower or zero annual tax)	Yes (BIK advantage)	100% deductibility until 12/2026; reduce to max 67.5% by 2031
BG	No	Partial (registration/product tax relief)	Partial (local fee reductions)	Neutral/limited	Standard VAT/corporate tax
HR	Yes (new 2025 grant aimed solely at corporate vehicles)	Yes (CO_2-based; BEVs exempt)	Yes (lower annual tax)	Partial/neutral	Standard VAT
CY	Yes (including specialized for taxis)	Yes (favourable registration tax)	Yes (road tax linked to CO_2)	Partial/neutral	Standard VAT
CZ	No	Yes (registration/road tax relief)	Yes (reduced ownership charges)	Partial/neutral	Standard VAT; accelerated depreciation for charging
DK	No	Yes (reduced registration tax for BEVs)	Yes (lower ownership/green tax)	Neutral	Standard VAT
EE	No	Yes (favourable registration tax)	Yes (ownership tax reductions)	Neutral/partial	Standard VAT
FI	No	Yes (zero registration tax)	Yes (lower annual tax)	Yes (favourable BIK)	Standard VAT; employer charging advantages
FR	Yes (bonus for SMEs and increased for EU produced)	Yes (malus/bonus; BEVs exempt)	Yes (local ownership relief)	Yes (70% BIK reduction, cap EUR 4,582 for 2025-2027)	Standard VAT; accelerated depreciation
DE	No	Yes (zero registration tax)	Yes (exemption until 12/2025)	Yes (0.25–0.5% BIK)	New 2025: super-depreciation for electric vehicles
EL	Yes (grants)	Yes (registration relief)	Yes (circulation tax relief)	Yes (favourable BIK tiers)	Reduced VAT rate

[235] In the table VAT stands for value added tax, BIK stands for benefit in kind, ICE for internal combustion engine vehicle, BEV for battery electric vehicle.

MS	Corporate purchase grant (cars)	Registration / Acquisition tax relief for BEVs	Ownership/ Annual tax relief for BEVs	Company car benefit-in-kind (BIK) advantage for EVs	Corporate VAT deductibility
HU	Yes (periodic grants, specific for companies in 2025)	Yes (registration/excise duties relief)	Yes (ownership tax reductions)	Partial/neutral	Standard VAT; higher depreciation caps
IE	Yes (commercial vehicles higher grants)	Yes (registration tax)	Yes (lower motor tax)	Yes (temporary BIK relief bands)	VAT reclaim limited; leasing advantages
IT	Yes (grants in 2025 increased for SMEs)	Yes (regional registration tax relief)	Yes (5-years exemption then reduction)	Yes (favourable BIK)	Standard VAT; higher depreciation caps
LV	No	Yes (registration tax relief)	Yes (annual tax reductions)	Partial/neutral	Standard VAT
LT	Yes	Yes (registration relief)	Yes (ownership reductions)	Yes	Standard VAT, Companies can claim up VAT
LU	Yes (purchase bonus, linked to energy efficiency)	Yes (favourable registration tax)	Yes (lower annual tax)	Yes (BIK 0.5–0.6% vs 2%)	Standard VAT
MT	Yes (including scrappage)	Yes (registration exemptions)	Yes (lower annual tax)	Partial/neutral	Standard VAT
NL	No	Yes (tax on vehicles EUR 0)	Yes (exemption)	Yes (lower tax surcharge for private use of a company car, with cap)	Standard VAT
PL	Yes (grants for microenterprises only)	Yes (excise/registration relief)	Yes (lower ownership taxes)	Partial/neutral	VAT 50–100%; higher depreciation caps
PT	No	Yes (vehicle tax exemption)	Yes (vehicle circulation tax exemption)	Yes (favourable BIK valuation)	Fully deduced VAT ≤ EUR 62,500; no extra corporate car tax
RO	Yes	Yes (registration relief)	Yes (ownership taxes reduced)	Partial/neutral	Standard VAT
SK	No	Yes (registration relief)	Yes (ownership taxes lower)	Partial/neutral	Standard VAT
SI	Yes (part specific for companies)	Yes (registration relief)	Yes (annual tax reductions)	Partial/neutral	Standard VAT
ES	Yes (until 12/2025)	Yes (registration exemption)	Yes (ownership tax reduced locally)	BIK lower for vehicles under EUR 40,000	Corporate income tax deduction (15%) until end-2025
SE	No purchase grant	Same for all vehicles	Yes (lower annual tax)	Yes (from 2025: SEK 350,000 BIK deduction, max 50%)	Standard VAT