

EFTA Surveillance Authority
Avenue des Arts 19H
1000 Brussels , Belgium

Your ref

Our ref
22/2062

Date
07.12.2022

Notification of amendments to VAT benefits for zero-emission vehicles

1. INTRODUCTION

Pursuant to Part I Article 1 (3) and Part II Article 2 of Protocol 3 to the Surveillance and Court Agreement, the Ministry of Finance (hereafter referred to as the Ministry) on behalf of the Norwegian Government hereby would like to notify to the EFTA Surveillance Authority (hereafter referred to as the Authority) a prolongation and amendments in the existing measures regarding zero rated value added tax (VAT) for battery electric vehicles (BEVs). The notification comprises:

- Prolongation of the existing zero VAT rate on supply and import of BEVs, with the introduction of a threshold of NOK 500 000, and a standard VAT rate (25 per cent) on the amount exceeding the threshold.
- Prolongation of the existing zero VAT rate for leasing of BEVs, with additional rules to reflect the threshold of NOK 500 000.

The current zero VAT rate for supply, import and leasing of BEVs and for the supply and import of batteries for BEVs is approved by the Authority until 31 December 2022, cf. the Authority's Decision No. 148/20/COL.

The amendments presented in this notification do not affect the approval set out in Decision No. 228/17/COL as regards fuel cell electric vehicles (FCVs). Hence, the zero rated VAT may be upheld for FCVs until 31 December 2023.

The prolongation of the adjusted VAT measures will be confined to battery electric passenger vehicles (BEPVs). Passenger vehicles comprises passenger cars, motorcycles, mopeds, motor caravans, 5 seat combi vans (class 1 vans) and minibuses. Hence, commercial electric vehicles, such as 2/3 seat vans (class 2 vans), trucks, buses and other vehicles not defined as passenger vehicles will be subject to standard VAT rate from 1 January 2023.

In the Revised Budget for 2022, the Government announced that they would replace the current zero VAT rating measure for ZEVs with an aid scheme from 1 January 2023. The intention was that the aid scheme should reflect a measure of zero VAT rating but with a threshold of NOK 500 000. In the budget agreement for the Revised Budget for 2022 between the governmental parties and the Socialist Left Party (SV), the following was adopted:

"The Parliament asks the Government in the State Budget for 2023 to introduce value added tax on the purchase amount for electric vehicles over NOK 500 000. The VAT exemption must be kept unchanged until 2025. In connection with the introduction of purchase taxes for electric vehicles, it must be ensured that the competitive advantage of electric vehicles in all passenger car segments is maintained."

To follow up the budget agreement, the Government in the State Budget for 2023, presented on 6 October, proposed the necessary amendments in the VAT Act, see [Prop. 1 LS \(2022-2023\) section 7.2](#). The Government also proposed to abolish the zero VAT rate for the supply and import of batteries for BEVs from 1 January 2023.

Based on the budget agreement of 29 November 2022 between the governmental parties and SV, the Governments proposal to introduce VAT for purchase amounts over NOK 500 000 per BEPV and to abolish the zero VAT rate for the supply and import of batteries for BEVs from 1 January 2023 will be implemented. The amendments to the VAT Act will be debated and adopted by the Norwegian Parliament on 13 and 16 December 2022 and take effect from 1 January 2023.

It is the Government's position that the notified measures constitute State aid according to Article 61 (1) of the EEA Agreement. However, in our view the aid is compatible with the functioning of the EEA Agreement according to Article 61 (3).

The term "electric vehicles" comprises battery electric vehicles ("BEV"), and fuel cell electric vehicles ("FCV"). BEVs are propelled by one or more electric motors powered by rechargeable battery packs. No other fuel source is used, and there is no internal combustion engine on BEVs, thus different types of hybrid electric vehicles are excluded from the definition. FCVs are electric vehicles that use a fuel cell instead of a battery, or in combination with a battery, to power its on-board electric motor. In the following, the terms "electric vehicles" ("EV") and "zero emission vehicles" ("ZEV"), will be used for both BEV and FCV unless it is specified otherwise. As mentioned above, the prolongation of the zero VAT rate for BEVs, but with the introduction of a threshold, is confined to battery electric passenger vehicles. In the following the term "BEPV" will be used for battery electric passenger vehicles.

To support the Authority's factual and legal assessment, we will give an overview of the measures in Chapters 2 and 3, before considering the question of state aid in Chapter 4. Finally

in Chapter 5, the compatibility provisions of the aid measure in Article 61 (3) will be considered in detail.

2. BACKGROUND

2.1. Norwegian Climate Policy and implications for the transport sector

As a part of the Paris Agreement, Norway is committed to take action to keep global warming in line with the global long-term temperature goal. Under the Paris Agreement Norway has committed to reduce emissions by at least 55 per cent by 2030 compared to 1990-levels.

In EEA Joint Committee Decision No 269/2019 the EU, Iceland and Norway formally agreed to cooperate on fulfilling our respective emission reduction targets. By that decision, Iceland and Norway take part in all three pillars of the EU climate framework. This includes participation in the Effort Sharing Regulation (ESR), which regulates emissions not covered by the EU Emissions Trading System (EU ETS).

Through the participation in the ESR, Norway's commitment is to reduce the non-ETS emissions by 40 per cent by 2030 compared to 2005 levels. In the Norwegian strategy to fulfil the commitments under the ESR, uptake of EVs is a cornerstone. To substantially reduce transport emissions, we need a large scale introduction of EVs in the passenger vehicle segment, as this is a segment where one has seen a growing popularity of the BEPV models already available.

2.2. General overview of the Norwegian VAT system

VAT was introduced in Norway with effect from 1 January 1970. The tax is levied on the final consumption of goods and services and is considered as a fiscal tax to secure state revenue.

The VAT provisions are laid down in the [Act on Value Added Tax of 19 June 2009 No. 58](#)¹ (hereafter referred to as the VAT Act) and the [Regulation concerning Value Added Tax of 15. December 2009 No. 1540](#)² (hereafter referred to as the VAT Regulation).

The obligation to pay VAT and the VAT rates are adopted annually by the Norwegian Parliament³ (hereafter referred to as the Parliament). Exemptions and zero rates are laid down in the VAT Act and are not adopted annually. However, since exemptions and zero rates have economic effects, their adoption and repeal form part of the annual budget process.

Norwegian VAT is levied on the supply of goods and services falling within the scope of the VAT Act. The importation and self-supply of goods and services are also considered taxable events.

Persons engaged in trade or business, whose taxable supplies exceed a financial limit of NOK 50 000 over a period of 12 months, must be registered in the VAT register and are liable to pay the tax.

¹ <http://lovdata.no/dokument/NL/lov/2009-06-19-58>

² <http://lovdata.no/dokument/SF/forskrift/2009-12-15-1540?q=merverdiavgiftsforskriften>

³ Available at <https://lovdata.no/forskrift/2019-12-13-1826>

A registered person may deduct input VAT on goods and services for use in the business cf. Section 8-1 of the VAT Act. The deduction right for businesses implies that VAT is not finally levied until the goods or services are sold to a customer without a right to deduction. Thus, VAT is a tax on the final consumption.

When reporting VAT to the tax authorities, the input VAT will be set off against the output VAT for the same period. If the input VAT exceeds the output VAT, the excess amount of input VAT shall be refunded claimed from the tax authorities.

The general VAT rate is 25 per cent of the net price (taxable base). The VAT rate on foodstuff is 15 per cent. Certain services are levied a reduced rate of 12 per cent, e.g., passenger transport, admission fees to cinemas and museums, and hotel accommodation.

Certain supplies, including health care and social services, are exempted from VAT. An exemption means that no output VAT is levied on the supply of the exempted goods and services, and suppliers are not entitled to deduct input VAT.

Some goods and services, however, are levied output VAT, but at a zero rate. Suppliers of such goods and services are still entitled to deduct input VAT. Most of the zero rated groups of goods and services have existed since the introduction of the VAT in Norway, e.g. the zero rating on newspapers, books, periodicals, and electricity for domestic use in northern parts of Norway. Due to the right to deduct input VAT, the zero rate only effects the sales of goods or services to private persons and other businesses without a right to deduct input VAT.

Sales of used motor vehicles, i.e., previously registered in the Norwegian Central Motor Registry, are also subject to zero VAT rate. Instead, previously registered vehicles are subject to the re-registration tax when the vehicle is registered on a new owner. This system has been in place since the introduction of the VAT system in 1970.

The zero VAT rating for the sale and import of EVs was introduced 1 July 2001 and extended to include leasing of EVs and supply/import of batteries for such vehicles 1 July 2015.

2.3. Other measures in favour of electric vehicles

Current measures in force

There are several measures adopted by the Norwegian authorities in favour of EVs. The following measures, all of them designed to stimulate the demand for EVs, are in force:

- Exemption from registration tax. All vehicles, except large lorries and buses are levied a one-off registration tax when they are being registered in the Norwegian Central Motor Vehicle Register for the first time. The registration tax is determined by three factors: weight, emissions of CO₂, and emissions of NO_x. EVs have been exempted from registration tax since 1991. The tax objects, tax rates and tax exemptions for the registration tax follows from the Parliament's decision concerning excise duties. Further regulations can be found in Regulation of 19 March 2001 No 268 on the registration tax.
- Re-registration tax with a reduced rate at ¼ of the rate for other cars. The re-registration tax is a fiscal tax originally meant to substitute VAT on used motor vehicles. The tax objects, tax rates and tax exemptions for the re-registration tax follows from the Parliament's decision

concerning excise duties. Further regulations can be found in Regulation of 4 July 1986 No 1430 on the re-registration tax.

- Favourable income tax calculation. Employees benefitting from private use of company cars are subject to employment income tax calculated on the value of the benefit. The taxable benefit from the private use of the employee's EV is 80 per cent (as from the income year 2022) of that of a conventional car with the same listing price as new. This measure has been in force since 2009. The favourable income tax calculation for EVs are set out in the Norwegian Tax Act of 27 March 1999 No 14 Section 5-13 (3) and Section 5-13-5 of the complementary administrative regulation.⁴
- Favourable depreciation rules. All vans are depreciated with an annual depreciation of 24 per cent. Under the Norwegian system for depreciation for tax purposes, the depreciation rates reflect the expected economic lifetime of the operating assets. Electric vans are subject to more favourable depreciation rules with a depreciation rate of 30 per cent. This measure has been in force since 2017. The depreciation rules for electric vans are set out in the Norwegian Tax Act of 27 March 1999 No 14 Section 14-43(4).
- Reduced rates on toll-roads. Previously, EVs were granted free use of toll-roads. Currently, according to the guidelines concerning toll-roads⁵, the rates for EVs must not exceed 50 per cent of those of conventional vehicles. Local governments may opt for lower rates for EVs on toll-roads and toll-rings, and the rates therefore vary.
- Reduced rates on road ferries. According to the guidelines concerning duty on ferries, point 1.3⁶ rates for EVs must not exceed 50 per cent of those of conventional vehicles. EVs have for many years been subject to reduced or zero rates on road ferries. At first, they were usually granted a full exemption.
- Free or reduced rate parking at public parking places. Free parking for EVs was previously (from 1993) widely used throughout Norway. Currently, most municipalities in Norway, including all the major cities, have introduced parking fees for EVs. According to the Norwegian EV association⁷, eight municipalities have zero parking fees for EVs, 13 municipalities have 50 percent reduced fees, and at least 41 municipalities have no reduced fees for parking.
- Access to bus lanes. EVs enjoy an authorisation to drive in bus lanes, according to the regulation relating to pedestrian and vehicle traffic (traffic rules)⁸ - Section 5(2). This measure has been in force since 2006. In its Decision No. 150/15/COL the Authority concluded that the authorisation granted to EVs to drive in bus lanes does not involve any commitment of State resources, and hence is not state aid. Many municipalities in Norway have watered down this measure. For instance, there are restrictions on EVs' access to bus lanes in the Oslo area during rush hours.
- Many Norwegians have access to private parking spaces, so they primarily charge at home. However, sufficient fast charging infrastructure is a precondition for the market development of EVs. In most areas, fast charging infrastructure has been developed, and there are currently

⁴ <https://lovdata.no/forskrift/1999-11-19-1158>.

⁵ Available at: https://www.autopass.no/_attachment/2746707/binary/1353516

⁶ Available at:

https://www.vegvesen.no/_attachment/2886999/binary/1356924?fast_title=Riksregulativ+for+ferjetakster+2020.pdf

⁷ <https://elbil.no/elbil-fordeler/parkering/>

⁸ Available at: <https://lovdata.no/forskrift/1986-03-21-747/§5>

approximately 4600 fast chargers in Norway. These chargers have been predominately built on commercial terms. Enova has only supported approximately 10 per cent of these chargers, primarily in the years 2015-2018, when publicly accessible fast charging stations were lacking. Approximately 70 municipalities, however, currently do not have fast chargers. Enova recently launched a new program for support charging infrastructure in these specific areas – primarily areas that do not yet have a commercial market for charging infrastructure.

Back scaling of measures – overview

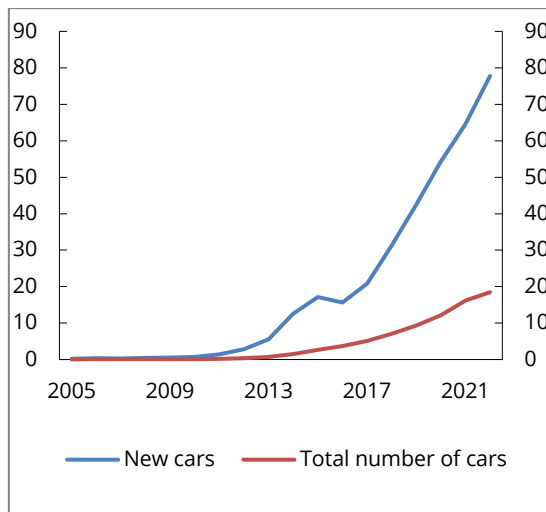
- EVs were previously exempted from insurance tax. Insurance tax was introduced for EVs with a reduced rate in 2021, and with the same rates as conventional vehicles in 2022.
- EVs have been exempted from re-registration tax since 2018. As from 1 May 2022 EVs are subject to re-registration tax with a reduced rate at $\frac{1}{4}$ of the rate for other cars. As from 1 January 2023, the same rate as apply to conventional fuel vehicles will apply to EVs.
- As from the income year 2022, the taxable benefit from the private use of the employee's EV is increased from 60 per cent to 80 per cent of that of a conventional car with the same listing price. As from the income year 2023 the favourable income tax calculation for employees benefitting from private use of electric company vehicles will be abolished.
- The Government has decided not to implement a national policy on reduced parking fees for EVs, which was previously requested by the Parliament. However, some municipalities have reduced parking fees for EVs, as aforementioned.
- The Government has decided to increase the maximum rate for toll-roads and toll-rings for EVs. The current maximum rate is 50 per cent, which will be increased to 70 per cent of rates for conventional vehicles.
- Previously, charging at publicly accessible charging stations was free of charge at many locations. This practice has all but disappeared in recent years, and payment is required for charging at almost all public charging stations.

2.4. Current market status and availability

Status of the battery electrical vehicle market in Norway

BEPVs are available in the Norwegian passenger car market. The sale has increased considerably over the last decade and BEPVs have been sold in substantial amounts the last few years. The share of new BEPVs registered in Norway, as a percentage of all new passenger cars, has increased from 18 per cent in 2015 to 64.5 per cent in 2021. So far in 2022 (January–August), 78 per cent of new passenger cars sold are BEPVs. The development of BEPVs, as share of registration of passenger cars, is shown in the blue line in Figure 1.

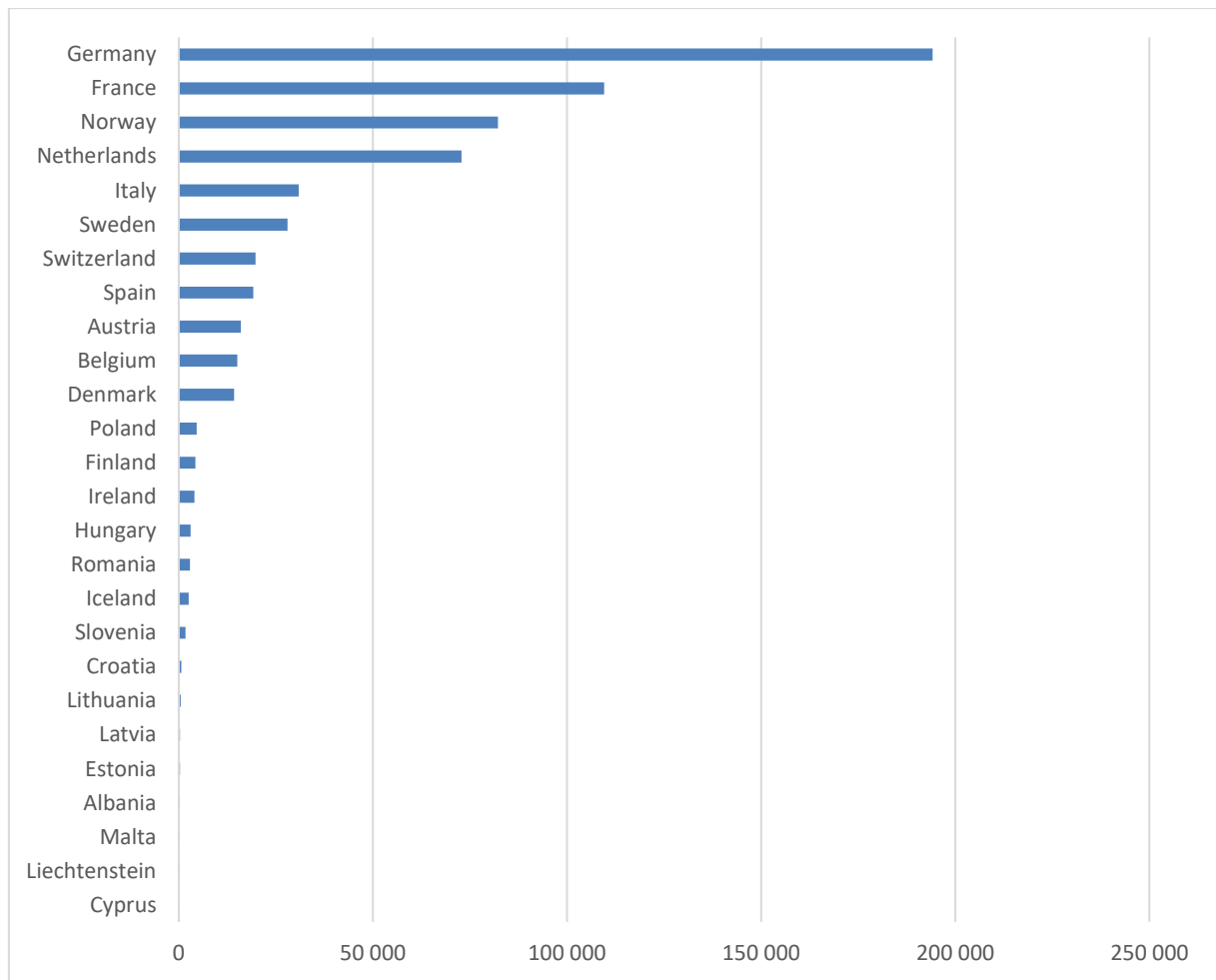
Figure 1 - Shares of electric vehicles per year of new passenger cars and of the stock of passenger cars in Norway 2005–August 2022



Source: OFV

In Figure 2, the number of BEPVs in total sales in European countries in 2020 is shown. The figure shows that the number of sold BEPVs in Norway is high in absolute terms compared to other, bigger European countries. Only Germany and France have larger sales number than Norway.

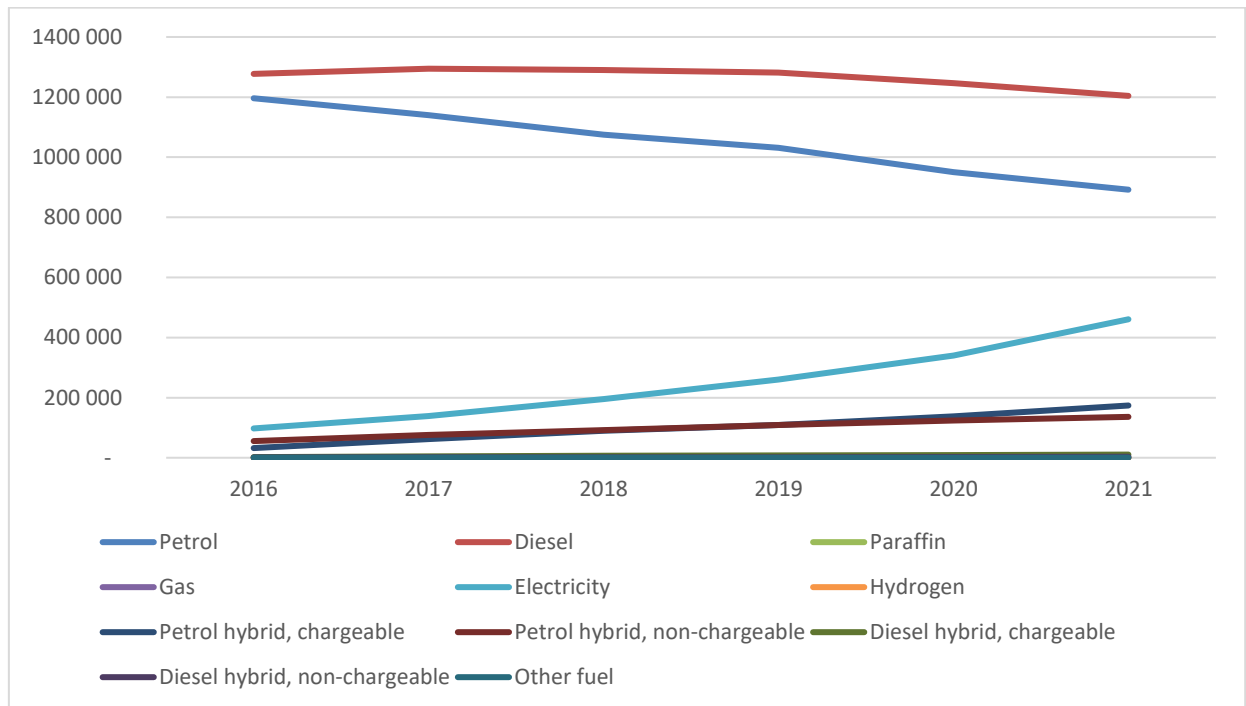
Figure 2 - Number of battery electric vehicles of new passenger cars in European countries (2020)



Source: Eurostat

However, the total number of BEPVs is still small compared to the number of conventional fossil fuel vehicles in Norway. The development of registered vehicles by fuel type in the stock of passenger cars is shown in Figure 3. The light blue line depicts the share of BEPVs, that reached 16 per cent at the start of 2022. At the beginning of 2022, 461 000 BEPVs were registered in Norway. The numbers of BEPVs and hybrid cars have been increasing, but the total numbers are still significantly lower than petrol and diesel cars.

Figure 3 - Stock of registered vehicles by type of fuel, Norway



Registered vehicles, by type of fuel and year. Source: Statistics Norway

Status of the fuel cell electric vehicle market

The market for fuel cell vehicles will still be limited in 2025. In the analysis in Klimakur 2030, the Norwegian Environmental Agency viewed battery electric passenger cars as the only realistic zero emission technology in the passenger car segment. Both the production cost of fuel cell vehicles, fuel cells and the hydrogen itself relies on a much larger scale production than it is today. In 2021, only 36 new passenger cars using hydrogen were registered.

3. THE NOTIFIED MEASURES

3.1. Previously approved measures and prolongations

In Decision No. 150/15/COL the Authority considered the following measures as compatible state aid within the meaning of Article 61(3)(c) of the EEA Agreement in favour of the indirect beneficiaries of those measures, i.e. manufacturers and dealers of EVs and batteries:

- the zero VAT rating for the supply and import of EVs
- the zero VAT rating for the leasing of EVs
- the zero VAT rating for the supply and import of batteries for EVs
- the reduced annual vehicle tax for EVs
- the exemption from road tolls for EVs
- the free boarding on classified national road ferries for EVs
- the favourable income tax calculation for employees benefitting from private use of electric company cars.

The Authority found that the outlined measures did not entail State aid within the meaning of Article 61(1) of the EEA Agreement in favour of their direct beneficiaries, i.e. the buyers, importers or lessors of electric vehicles or buyers or importers of batteries for electric vehicles.

In the same decision, the Authority found that the following measures in favour EVs constituted existing aid measures, as they had been in place before the EEA Agreement entered into force in Norway on 1 January 1994.

- exemption from registration tax
- free charging at public charging stations
- free parking in public parking.

By letter dated 6 November 2017, the Ministry notified a package of several tax measures in favour of EVs, including:

- prolongation of the zero VAT rating for the supply and import of EVs
- prolongation of the zero VAT rating for the leasing of EVs
- prolongation of the zero VAT rating for the supply and import of batteries for EVs
- new full exemption for EVs from annual tax/insurance tax
- new exemption for EVs from re-registration tax
- new more favourable depreciation rate for electric cargo vans.

The measures were notified for a period of six years from 1 January 2018 until 31 December 2023, except for the zero VAT rate measures in favour of BEVs, which were notified for a period of three years from 1 January 2018 until 31 December 2020.

In its decision No. 228/17/COL, the Authority concluded that the notified measures constituted state aid within the meaning of Article 61(1) of the EEA Agreement. Since no doubts was raised as to their compatibility with the functioning of the EEA Agreement pursuant to its Article 61(3)(c), the Authority had no objections to their implementation.

By letter dated 10 November 2020, the Ministry notified a package of several tax measures in favour of BEVs, including:

- prolongation of the zero VAT rating for the supply and import of BEVs
- prolongation of the zero VAT rating for the leasing of BEVs
- prolongation of the zero VAT rating for the supply and import of batteries for BEVs

The measures were notified for a period of two years from 1 January 2021 until 31 December 2022.

In its decision No. 148/20/COL, the Authority concluded that the notified measures constituted state aid within the meaning of Article 61(1) of the EEA Agreement. Since no doubts was raised as to their compatibility with the functioning of the EEA Agreement pursuant to its Article 61(3)(c), the Authority decided not to raise objections to the prolongation.

The notification presented in this letter refers to the current zero VAT rating for supply, import and leasing of battery electric vehicles (BEVs) and for supply and import of batteries for such vehicles. The zero VAT rating for BEVs is approved in the Authorities Decision No. 148/20/COL, until 31 December 2022. A prolongation of the zero VAT rating for BEPVs but with the introduction of a threshold of NOK 500 000 is being notified for a period of two years, from 1 January 2023 until 31 December 2024.

By letter dated 9 March 2022, the Ministry notified two tax measures in favour of ZEVs, including:

- Replacement of the exemption from re-registration tax with a reduced rate for ZEVs.
- Reduction in the favourable income tax calculation for employees benefitting from private use of electric company vehicles, setting the taxable benefit to 80 per cent of that of a conventional vehicle.

In the notification the Ministry explained that the notified measures would reduce the current aid intensity under the approved measures.

In its decision No. 068/22/COL, the Authority concluded that the notified measures constituted state aid within the meaning of Article 61(1) of the EEA Agreement. Since no doubts was raised as to their compatibility with the functioning of the EEA Agreement pursuant to its Article 61(3) (c), the Authority had no objections to their implementation.

3.2. Description of the notified measure

Outlines

The current measure of zero VAT rate for EVs is laid down in the VAT Act Section 6-7. The VAT Act section 6-7 subsection (1) includes both supply and leasing of EVs and subsection (2) covers the supply of batteries for such vehicles.⁹ Section 7-1 in the VAT act lays down that goods, as mentioned in Section 6-7 subsection (1) and (2), shall be exempted from VAT on import of goods.¹⁰

A prolongation of zero VAT rating for BEPVs but with the introduction of a threshold implies zero VAT rating up to an amount of NOK 500 000 for the supply of BEPVs, and the use of the standard VAT rate (25 per cent) on amounts exceeding the threshold of NOK 500 000. Such an alteration requires amendments in the current VAT Act. The draft legislation of the amendments is provided in section 3.4.

Technical implementation and delimitation

The notified measure of zero VAT rating with a threshold of NOK 500 000 will apply to the supply, import and leasing of BEPVs (i.e. not include FCVs).

The current zero VAT rating covers all types of EVs, including passenger vehicles and different types of commercial vehicles, such as vans, trucks and buses. The vast majority of commercial vehicles are acquired by businesses entitled to deduct input VAT, and hence do not benefit from the zero VAT rate. The introduction of a threshold in the zero VAT rate measure will complicate the tax calculation for all businesses that acquire or lease commercial vehicles without affecting these businesses, or their customers financially. On this background, the zero rate will be abolished for so-called commercial vehicles as from 1 January 2023. The measure of zero VAT rate with the introduction of a threshold will thus only apply to *battery electric passenger vehicles* (BEPVs). Passenger vehicles comprises passenger cars, motorcycles, mopeds, motor caravans, 5 seat combi vans (class 1 vans) and minibuses. The delimitation corresponds to the list in the VAT Regulation Section 1-3-1 Passenger vehicles subsection (1)

⁹ [Lov om merverdiavgift \(merverdiavgiftsloven\) - I Innenlands omsetning - Lovdata](#)

¹⁰ [Lov om merverdiavgift \(merverdiavgiftsloven\) - Kapittel 7. Varer som det ikke skal beregnes merverdiavgift av ved innførsel - Lovdata](#)

(excluding letter f and h, which are non-engine vehicles). As mentioned above, the zero VAT rate will be abolished for battery electric commercial vehicles, such as 2/3 seat vans (class 2 vans), trucks, buses and other vehicles not defined as passenger vehicles as from 1 January 2023, see Prop. 1 LS (2022–2023) section [7.2.3](#) under the heading “Gjennomføring av forslaget” and section [7.2.7](#).

The introduction of a threshold in the zero VAT rate measure for battery electric passenger vehicles requires amendments in the current VAT rules. The alteration will imply zero VAT rating up to an amount of NOK 500 000 for the supply, import and self-supply of BEPVs, and the use of the standard VAT rate (25 per cent) on amounts exceeding the threshold of NOK 500 000. In the invoice taxable persons must split the purchase amount in a taxable and a non-taxable section.

The introduction of a threshold in the zero VAT rate measure will normally not affect the taxable person’s right to deduct input VAT. Businesses involved in car-hire services (including leasing) and passenger transport have right to deduct input VAT when acquiring passenger vehicles. Such businesses will thus be entitled to deduct input VAT for the part of the purchase price that exceeds the threshold of NOK 500 000 when acquiring battery electric passenger vehicles, cf. Section 8-4 in the VAT Act.

Today, both sales and leasing of electric vehicles are exempted from VAT, the rules are thus neutral in the choice between purchase and leasing. The introduction of a threshold for the purchase of BEPVs calls for an adjustment in the rules for leasing of BEPVs to ensure equal treatment of purchase and leasing of expensive BEPVs. If the purchase price exceeds NOK 500 000, VAT shall be calculated of the rent multiplied with the purchase price that exceeds NOK 500 000 divided with the purchase price.

The VAT on the leasing will be calculated according to this formula:

$$M_L = \frac{P - G}{P} * l * m$$

M_L = VAT on leasing

P = Purchase price ex. VAT

G = Threshold (NOK 500 000)

l = rent

m = VAT rate (25 per cent)

For businesses with the right to deduct input VAT, the VAT on the rent will be deductible.

Revenue effects

Introducing VAT on purchase amounts over NOK 500 000 is estimated to generate additional revenue of approximately NOK 1.2 billion in 2023 compared to a continuation of today’s exemption.

3.3. Objective

As a part of the Paris Agreement, Norway is committed to take action to keep global warming in line with the global long-term temperature goal. Under the Paris Agreement, Norway is committed to reduce emissions by at least 55 per cent by 2030 compared to 1990-levels. In EEA Joint Committee Decision No 269/2019 the EU, Iceland and Norway formally agreed to cooperate on fulfilling their respective emission reduction targets. By that decision, Iceland and Norway are taking part in all three pillars of the EU climate framework. This includes participation in the ESR, which regulates emissions not covered by the EU ETS.

Through the participation in the ESR Norway has a legal commitment to reduce the so-called non-ETS emissions by 40 per cent by 2030 compared to 2005 levels. Moreover, as Norway under the ESR, has received an annual emission allocation for each year in the period from 2021 to 2030, it has large value to accelerate the transition to zero emission technology as early in the period as possible. Preliminary assessments of emissions in 2021 indicate that Norwegian emissions exceeded the emission allocation for 2021 by approximately 500 000 tonnes of CO₂-equivalents.

In addition, emission reduction goals are being strengthened, emphasizing the importance of continuing with strong climate measures. Following the European Green Deal, the EU institutions are working on strengthening emission reduction targets for member states through the ESR, which would likely entail reduction requirements of up to 50 per cent reduction for member states by 2030 compared to 2005 levels. Furthermore, the Norwegian Government has recently set an ambitious transitional goal for the Norwegian economy in 2030, described in its political platform as a target to reduce Norwegian emissions by 55 per cent compared to 1990. This entails that the Government has a national transitional goal for both EU-ETS and non-ETS emissions.

More than half of Norwegian greenhouse gas (GHG) emissions are in the non-ETS sector, where the transport sector is the primary source of emissions. Within the transport sector, the passenger car segment is the largest emitter with emissions of 4.1 million tonnes CO₂ eq. in 2020. This is equivalent to the GHG emissions from vans, trucks and busses combined and over one quarter of the total GHG emissions in the transport sector.¹¹

In the Norwegian strategy to fulfil the commitments under the ESR, uptake of ZEVs is a cornerstone. To substantially reduce transport emissions, we need a large scale introduction of ZEVs in the passenger car segment, as this segment both has the largest emissions, while also being the one where zero emission technology is most readily available for deployment.

To achieve its emission reduction goals, in the White paper on the National Transport Plan for 2018–2029¹², the Government at that time established several new targets:

- in 2025, 100 per cent of new private cars and light vans will be zero-emission vehicles. All new city buses will be zero-emission vehicles or use biogas

¹¹ The source of the data is from Statistics Norway, table 08940: *Greenhouse gases, by source (activity), energy product, contents, year and pollutant*, (year 2020, detailed level of emission sources)

¹² <https://www.regjeringen.no/en/aktuelt/a-national-transport-plan-for-better-and-safer-daily-travel/id2548623/>, <https://www.regjeringen.no/en/dokumenter/meld.-st.-33-20162017/id2546287/>

- by 2030, all new heavy vans, 75 per cent of new long-distance buses, and 50 per cent of new lorries will be zero-emission vehicles
- by 2030, the distribution of goods in major city areas will be more or less emission free.

The White Paper on National Transport Plan 2018–2029 was adopted by the Parliament in June 2017. Among these targets, it is the target for zero emission passenger cars that by far has the largest potential when it comes to GHG emissions reduction. In order for the targets to be achieved, the Government relies on technological development. At the same time it is critical with an effective incentive regime, as we can see from the ZEV market share in Norway compared to other countries.

The report Klimakur 2030¹³, which was finalized in 2020, performed a comprehensive analysis of the measures possible to reduce emissions from the non-ETS sector. In total 60 measures were assessed, which if swiftly implemented, could together reduce emissions by 50 percent over the period 2021-2030. If the Norwegian Government meets the targets for ZEVs in the National Transport Plan 2018-2029, it was calculated in the report that corresponding reductions could be almost 6 million tons CO₂-eq. in the period 2021-2030. This is more than a quarter of the calculated emission gap for Norway in the non-ETS, given a target of 45 per cent reduction.

It also follows from the Hurdal platform that *"The government will (...) make it attractive to choose low- and zero-emission vehicles with the goal that 100 percent of new passenger cars are fossil-free by the end of 2025."*

In addition, it is important to emphasize that while the targets for ZEVs are political goals in their own right, they play a critical role in achieving the overall reduction targets. The zero rating of ZEV in the VAT system has been, and still will be with the introduction of a threshold, merely one of several measures to achieve these targets.

3.4. National legal basis and aid granting authority

The Government has in the budget proposal for 2023 proposed the following amendments in the VAT Act:¹⁴

Section 6-7 shall read as follows:

Section 6-7. Vehicles covered by the Storting's decision on motor vehicle registration tax

(1) The supply of vehicles covered by the Storting's decision on motor vehicle registration tax, shall be exempt from VAT if the vehicle has been registered here in Norway. The exemption also applies to vehicles covered by the Storting's decision section 1 letter c if the vehicles have permissible total weight of 7 500 kg or more.

(2) The Ministry may issue regulations prescribing that the exemption in subsection (1) shall include goods other than the vehicle itself and work that is performed on the vehicle.

¹³ Klimakur 2030 is a report written by Norwegian public agencies, led by the Norwegian Environmental Agency. In the report, the authors have calculated the GHG reduction potential in Norway in the non-ETS in the years 2021-2030. The report also points to what measures can be implemented in order for Norway to reach the GHG reduction potential. The report was published on the 31st of January 2020.
<https://www.miljodirektoratet.no/globalassets/publikasjoner/m1625/m1625.pdf>

¹⁴ See the draft proposal in Norwegian in [Prop. 1 LS \(2022-2023\)](#).

Section 6-8 shall read as follows:

Section 6-8. Vehicles powered by electricity

(1) The supply and leasing of vehicles powered by electricity and where the electricity is produced by fuel cells shall be exempt from VAT.

(2) The supply of passenger vehicles powered by electricity and where the electricity is delivered from a rechargeable battery pack which can be charged from an external power source, shall be exempt from VAT up to an amount of NOK 500 000.

(3) Leasing of passenger vehicles powered by electricity and where the electricity is delivered from a rechargeable battery pack which can be charged from an external power source, shall be exempt from VAT if the leasing business' purchase price for the leased passenger vehicle is NOK 500 000 or less. If the cost price is higher, VAT shall be calculated of the rent multiplied with the purchase price that exceeds NOK 500 000 divided with the purchase price. With leasing means the hiring of passenger vehicles where the rental period according to a written contract is at least 30 days.

(4) The Ministry may issue regulations prescribing the types of vehicles that are covered by subsection (1) to (3).

With regard to Section 6-7 above, we refer to the description in section 2.2 in this notification. Sales of *used* motor vehicles, i.e., previously registered in the Norwegian Central Motor Registry, are subject to zero rate VAT. Instead, previously registered vehicles are subject to the re-registration tax when the vehicle is registered on a new owner. This system has been in place since the introduction of the VAT system in 1970.

The VAT rates are adopted annually by the Parliament. Exemptions and zero rates are laid down in the VAT Act and are not adopted annually. However, since exemptions and zero rates have economic effects, their adoption and repeal form part of the annual budget process.

The aid granting authority is the Norwegian Ministry of Finance.

3.5. Beneficiaries

The direct beneficiaries of the notified zero VAT rating on BEPVs are the consumers, i.e. the final users. This includes both private individuals and businesses.

Due to the right to deduct input VAT for undertakings, VAT is in principle not an expense for undertakings registered in the Norwegian VAT system. With the exception of undertakings involved in car-hire services (including leasing) and passenger transport, the right to deduct VAT does not comprise VAT on passenger vehicles. As a consequence, without the zero VAT rate, VAT would be a cost for undertakings acquiring BEPVs, in the same way that VAT is a cost for undertakings acquiring conventional passenger vehicles. Consequently, undertakings established in Norway will benefit directly from the notified measure of zero VAT rating under the threshold of NOK 500 000 per BEPV.

Manufacturers and dealers of BEPVs, as well as undertakings buying, importing or leasing BEPVs to use as company cars may obtain an indirect advantage. There are no geographical, sectorial or other kinds of limitations to obtaining the benefits herewith notified.

3.6. Form of aid, eligible costs and intensity

The notified aid measure is implemented by means of tax exemptions but with the introduction of a threshold of NOK 500 000.

All BEPVs are eligible to zero VAT rate up to purchase amounts of NOK 500 000 (per BEPV), while amounts exceeding the threshold of NOK 500 000 will be subject to ordinary VAT rate (25 per cent). The measure does not discriminate between car manufacturers since all models or types of battery electric passenger vehicles are eligible to zero rate up to an amount of NOK 500 000 (per BEPV). The vast majority of commercial vehicles are acquired by businesses entitled to deduct input VAT, and hence do not benefit from the zero VAT rate. The introduction of a threshold in the zero VAT rate measure will complicate the tax calculation for all businesses that acquire or lease commercial vehicles without affecting these businesses, or their customers financially. On this background, the zero rate will be abolished for commercial vehicles, see section 3.2.

No electric cars are manufactured in Norway. All end users – private and undertakings – are able to purchase, lease or import BEPVs for their own use. Consequently, all end users are eligible for zero VAT rating up to an amount of NOK 500 000 per BEPV.

The notified aid measure will cover part of the expenditure incurred for the purchase, lease or import of a BEPV. In particular, the zero rate for BEPVs, with an introduction of a threshold, will still aim to increase the share of ZEVs and thereby reduce GHG-emissions by compensating for the extra cost and disadvantages of EVs in comparison to conventional vehicles. The Norwegian Government wishes to lower the costs of BEPVs for consumers by bringing BEPVs to a price level lower than that of conventional cars.

3.7. Duration and budgetary implications

The Ministry notifies a prolongation of the zero VAT measure but with the introduction of a threshold of NOK 500 000 for the supply, import and leasing of BEPVs for a period of 2 years from 1 January 2023 to 31 December 2024.

The actual duration will depend on the annual adoption of taxes by the Parliament.¹⁵

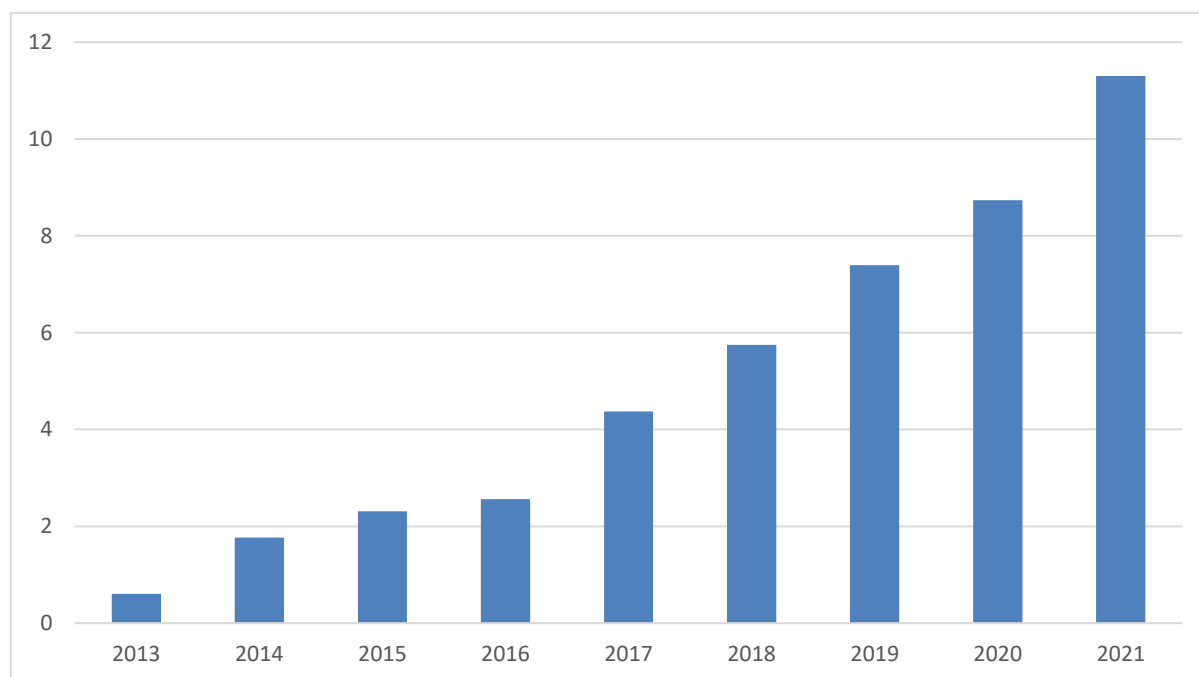
The zero VAT rate with the introduction of a threshold of NOK 500 000 for BEPVs results in a loss of revenue compared to a situation where BEPVs are charged the standard rate (25 pct.) in the VAT system, the size of which depends on the changes in the vehicle sales. The estimated tax expenditure is used as a measure of the value of the zero rating for the BEPVs. The value depends on the number of BEPVs sold as well as their sales price. In 2022, the value of the zero rating for BEPVs is estimated to amount to approximately NOK 13,4 billion. Introducing a

¹⁵ This sentence refers to the formalities regarding the adoption of taxes by the Parliament in Norway. The Parliament is competent to impose taxes, duties, customs and other public charges *on a yearly basis*, cf. Section 75 a in the Norwegian Constitution. Thereby, the Parliament imposes a number of decisions on taxes, duties, customs and other charges, on a yearly basis by the adaption of the State budget.

threshold (NOK 500 000) will reduce tax expenditure for 2023 by approximately NOK 1,2 billion.

The estimated tax expenditure caused by the zero rating for the supply, leasing and import of EVs¹⁶ since 2013 is shown in Figure 4.

Figure 4 - Estimated yearly tax expenditure from zero VAT rating sales of EVs. 2013 to 2021. Billion NOK in 2021-prices



Source: The Ministry of Finance.

The estimated tax expenditure/revenue loss of the other advantages for EVs is presented below¹⁷. The numbers given are annual estimates for 2022 for each measure, unless stated otherwise:

- exemption from the registration tax: around NOK 10,0 billion per year
- exemption of electric cars from re-registration tax: Around NOK 225 million
 - As from 1 May 2022 EVs are subject to re-registration tax with a reduced rate at $\frac{1}{4}$ of the rate for other cars. This is taken into account in the calculations above. As from 1 January 2023 the same rate as apply to conventional fuel vehicles will apply to EVs, thus in 2023 the tax expenditure will be equal to 0.
- exemption from the insurance tax: around NOK 265 million per year
 - As from 1 March 2022 the exemption from insurance tax/annual vehicle tax for electric vehicles is abolished. This is taken into account in the calculations above.
- favourable income tax calculation for employees using corporate EVs: around NOK 200 million per year

¹⁶ Cars using hydrogen and electric battery commercial vehicles are today also subject to zero VAT rate. As companies has the right to deduct input VAT and the number of hydrogen cars sold in Norway is very limited, the tax expenditure estimate reflects the cost for the state from the zero rating for the BEPVs.

¹⁷ Tax expenditures are estimated revenue losses due to special rules, advantages and exemptions compared to general rules. The estimates are calculated based on actual EV sales and other EV activity and do not take into account that changes can affect behaviour.

- As from the income year 2023 the favourable income tax calculation for employees benefitting from private use of electric company vehicles will be abolished.
- increased depreciation rate for electric vans from 24 to 30 pct.: NOK 2 million
- value of advantages from ZEVs in road tolls: around NOK 600 million in 2020
- value of transport for ZEVs on road ferries: around NOK 45 million in 2019.

4. ASSESSMENTS OF AID

4.1. State aid within the meaning of Article 61(1) EEA

Article 61(1) of the EEA Agreement Article reads as follows:

(1) Save as otherwise provided in this Agreement, any aid granted by EC Member States, EFTA States or through state resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Contracting Parties, be incompatible with the functioning of this Agreement.

In order to constitute state aid within the meaning of Article 61(1), a measure must meet the following cumulative criteria:

1. the measure is granted by the State or through state resources
2. the measure confers an economic advantage on an undertaking
3. the measure is favouring certain undertakings or the production of certain goods (selectivity)
4. the measure distorts or threatens to distort competition and has an effect on trade between the EEA States

The Ministry acknowledges that the proposed measures may constitute state aid within the meaning of article 61(1) of the EEA Agreement. Consequently, the criteria will only be discussed briefly below.

4.2. The measure is granted by a Member State or through state resources

The form in which the aid is provided is not relevant to its assessment under Article 61 (1) of the EEA Agreement. Tax reliefs or more favourable tax rules may constitute aid granted through State resources.

VAT is mainly levied in order to raise revenue. The zero VAT rate under the threshold of NOK 500 000 for BEPVs entails a loss of State revenues, as the measures constitute foregone tax revenues for the state. The measures are also granted by the State since they are adopted by legislative acts.

On this basis, the Ministry finds that the first criterion is met.

4.3. The measure confers an advantage on an undertaking

In order for a measure to constitute state aid, it must confer an economic advantage on an undertaking. According to established case law an economic advantage is an economic benefit which an undertaking could not have obtained under normal market conditions, i.e., without

State intervention. Hence, the definition of aid is more general than that of a subsidy, because it includes not only positive benefits, such as subsidies themselves, but also State measures which, in various forms, mitigate charges that are normally included in the budget of an undertaking and which thus, without being subsidies in the strict sense of the word, are similar in character and have the same effect.

A tax exemption can constitute an economic advantage, as well as a loss of State resource, even though it does not involve a transfer of State resources. A measure must be assessed in relation to its effects not to its form, aim or causes. As a consequence, neither the fiscal nature of a measure, nor its environmental aim is sufficient to place it outside the scope of the State aid rules. It follows that a measure, by which the public authorities grant to certain undertakings a tax or a fee exemption that places the entity to whom the exemption applies in a more favourable financial situation than other entities, constitutes an advantage within the meaning of Article 61(1) of the EEA Agreement.

The VAT system is designed as a general tax on the final consumption of goods and services, and hence carried by the consumer. The zero-rating is a favourable position in the VAT system due to the undertakings' right to deduct input VAT without any output tax. This type of VAT benefits are shared between buyers and sellers of the product which benefits from reduced VAT. The allocation of the tax benefit depends on the market conditions amongst other factors. As follows in section 5.5, the Ministry concludes that the benefit of zero rate VAT on EVs in general is passed on to the car purchasers.

Private individuals purchasing, importing or leasing BEPVs are not subject to state aid rules. State aid rules are only applicable to undertakings, i.e., an entity engaged in economic activities.

However, undertakings purchasing BEPVs may obtain a direct economic advantage through the proposed measures. Furthermore, by stimulating demand, the measures may indirectly favour other undertakings such as manufacturers and dealers, even if the direct beneficiary is not an undertaking.

The zero rating for EVs has been stimulating the demand for EVs and a prolongation of zero rate VAT under the threshold of NOK 500 000 per BEPV will keep stimulate the demand for BEPVs. This increased demand for BEPVs translates into an indirect advantage for dealers, importers and manufacturers of BEPVs as compared to dealers, importers and manufacturers of conventional vehicles. Such indirect advantages, although limited in scope, and even more limited with the introduction of a threshold, may constitute an advantage, in order for a measure to constitute state aid.

On this basis, the Ministry finds that the proposed measures directly and indirectly will give undertakings an economic advantage.

4.4. Selectivity

In order to constitute state aid, a measure must be selective by favouring certain undertakings or the production of certain goods. When assessing the selectivity criterion, it may be distinguished between state aid measures and general measures of tax or economic policy. Advantages resulting from a general measure applicable without distinction to all economic

operators do not constitute state aid within the meaning of Article 61(1) of the EEA Agreement¹⁸.

According to established case law¹⁹ the assessment of the condition of selectivity, which is a constituent factor in the concept of State aid, it is clear that Article 87(1) EC [equivalent to Article 61(1) EEA] requires assessment of whether, under a particular statutory scheme, a State measure is such as to 'favour certain undertakings or the production of certain goods in comparison with other undertakings which are in a legal and factual situation that is comparable in the light of the objective pursued by the system in question.

In the Authority's Decision No 150/15/COL, Decision No 228/17/COL and Decision No 148/20/COL the Authority concluded that the zero VAT rate was not selective for the direct beneficiaries. The Ministry considers that a measure of zero VAT rate under a threshold of NOK 500 000 per BEPV is not selective for the direct beneficiaries, i.e. the undertakings purchasing, importing or leasing BEPVs. The zero VAT rate under the threshold of NOK 500 000 per BEPV is open to all sectors of the economy and all kinds of companies. Hence, the advantages applies to all economic operators.

For the indirect beneficiaries of the zero VAT rate with a threshold of NOK 500 000, i.e., the manufacturers and dealers of BEPVs will be selective as only certain companies will benefit, resulting in an exemption from the system of reference, which refers to the car industry in general.

On this background, the Ministry takes the view that the BEPV measure fulfil the selectivity criterion in Article 61(1) of the EEA Agreement.

4.5. Distortion of competition and effect on trade

According to case law and administrative practise, the threshold for considering this criterion to be fulfilled is low.

Given that beneficiaries, such as manufacturers and dealers, compete in a market encompassing conventional and electric vehicles, the Ministry finds that the support for BEPVs has a potential to distort competition.

Such distortion can be presumed to have an effect on trade if it strengthens the position of an undertaking compared to other companies competing in the EEA-trade.²⁰ The Ministry finds that there is significant trade in both conventional and electrical vehicles in the EEA, and that manufacturers and dealers of conventional vehicles may have reduced opportunities to offer their services and trade in Norway due to the measures.

Therefore, the measures will likely distort competition and have an effect on trade between the Contracting Parties.

¹⁸ Judgment in *Air Liquide Industries and others*, C-393/04 and C-41/05, EU:C:2006:403, para. 32.

¹⁹ Judgments in *GIL Insurance*, C-308/01, EU:C:2004:252, paragraph 68; *Heiser*, C-172/03, EU:C:2005:130, paragraph 40; *Portugal v Commission*, C-88/03, EU:C:2006:511, paragraph 54.

²⁰ Decision 150/15/COL paragraph 111

4.6. Conclusion

The Ministry concludes that the proposed measures constitute State aid in favour of manufacturers and dealers²¹ of BEPVs, cf. Article 61(1) of the EEA Agreement.

5. COMPATIBILITY OF THE AID MEASURE

5.1. Compatibility with article 61(3)

According to the EEA Agreement Article 61 (3) (c) state aid may still be compatible with the functioning of the agreement, if the purpose is to “facilitate the development of certain economic activities or of certain economic areas” and the aid does not adversely affect trading conditions to an extent contrary to the common interest.

Regarding state aid for environmental purposes in relation to Article 61 (3), the European Commission adopted on 27 January 2022 Guidelines on State aid for climate, environmental protection and energy 2022 (“CEEAG”), which replace the former Guidelines on State aid for environmental protection (“EEAG”). On 9 February 2022 the Authority adopted [CEEAG](#), cf. [Decision No 029/22/COL](#). According to CEEAG Section 2.1 (12), they are applicable to state aid “granted to facilitate the development of economic activities in a manner that improves environmental protection, as well as activities in the energy sector that are governed by the Treaty ...”, under the condition that the measures fall under the list of accepted measures in Section 2.2.

In Decision 228/17/COL, the Authority noted that the EEAG 36 in Section 1.1 (10) states that the EEAG do not apply to “the design and manufacture of environmentally friendly products, machines or means of transport with a view to operating with fewer natural resources [...]”. The Authority therefore assessed the measures directly under Article 61(3) (c) of the EEA Agreement. In its Decision No 148/20/COL, the Authority also considered that the prolongation of the zero VAT rate should be assessed directly under Article 61(3) (c) of the EEA Agreement, as the Authority noted that no changes had been introduced to the EEAG since the adoption of ESAs Decision No 228/17/COL that would change the Authority’s conclusion in Decision No 228/17/COL.

In the Ministry’s view CEEAG Section 2.1 (13) corresponds to EEAG Section 1.1 paragraph (10). CEEAG Section 2.1 (13) states that the CEEAG do not apply to “the design and manufacture of environmentally-friendly products, machinery, equipment or means of transport with a view to operating with fewer natural resources [...]”. The Ministry therefore concludes that the notified measures of zero VAT rate under NOK 500 000 per BEPV must be assessed directly under Article 61(3) (c) of the EEA Agreement.

In the following, the Ministry will thus assess the prolongation of zero VAT rate but with the introduction of a threshold of NOK 500 000 for BEPVs directly pursuant to Article 61(3) (c) of

²¹ Manufactures and dealers will be in code 45.1 Sales of motor vehicles (45.111 Commission and wholesale trade of cars and light motor vehicles, except motorcycles and/or 45.112 Retail sale of cars and light motor vehicles, except motorcycles) and/or 45.4 Sale, maintenance and repair of motorcycles and related parts and accessories (45.401 Commission and wholesale trade of motorcycles, parts and accessories and/or 45.402 Retail sale of motorcycles, parts and accessories) of the Standard Industrial Classification: [Classification of Standard Industrial Classification - Statistics Norway \(ssb.no\)](#) .

the EEA Agreement. In assessing whether the aid measure can be deemed compatible with the EEA Agreement, the positive impact of the aid measure in reaching an objective of common interest must be balanced against its potentially negative side effects by distortion of trade and competition.

The assessment will be based on the following common principles:

- contribution to a well-defined objective of common interest;
- need for state intervention;
- appropriateness of state aid as a policy instrument;
- existence of an incentive effect;
- proportionality of the aid amount (aid limited to minimum necessary);
- avoidance of undue negative effects on competition and trade; and
- transparency.

The assessment presupposes a balancing of the positive impact of the measure in reaching the objective against the potential negative effects on trade and competition.

5.2. Objective of common interest

State aid must aim at a well-defined objective of common interest that has been recognised by the Contracting Parties.

The objective of the notified measures is to enhance the share of BEPVs in the vehicle stock in Norway in order to reduce CO₂ emissions from the transport sector. In its Decision 148/20/COL as well in its Decision 228/17/COL and Decision 150/15/COL, the Authority acknowledged that increased uptake of ZEVs will contribute to reduced emissions from new passenger cars and concluded that the aid aims at an objective of common interest. Reducing CO₂-emissions from vehicles is one of the objectives of the EEA environmental policy. This will also be in line with the European Green Deal where one of the key objectives for sustainable transport is to boost considerably the uptake of clean vehicles and alternative fuels in order to reduce greenhouse gas emissions.

The incentive to purchase or lease BEPVs, by application of zero rate VAT under NOK 500 000 per BEPV, will aim at increasing the market share of EVs and thus protecting the environment. Updated analysis of targets and measures needed to reduce emissions in 2030 by 40 per cent shows that reaching the targets for ZEVs will contribute to substantial reductions in emissions. It also shows that it will be extremely difficult to reach our climate goals without a substantial contribution from ZEVs.

The Ministry concludes that increased uptake of ZEVs that contribute to reduced emissions from new passenger vehicles still is an objective of common interest. For further explanation of Norwegian climate commitments see section 2.1 and 3.3.

5.3. Need for state intervention

State aid measures can under certain conditions, correct market failures and thereby contribute towards achieving the common objective to the extent that the market on its own fails to deliver an efficient outcome. As pointed out in the Authority's Decision 148/20/COL and 228/17/COL,

in order to assess whether state aid is effective to achieve the identified objective of common interest, it is necessary first to identify the problem that needs to be addressed.

State aid should be targeted towards situations where aid can bring a material improvement that the market alone cannot deliver, for example by remedying a market failure or addressing an equity or cohesion concern.

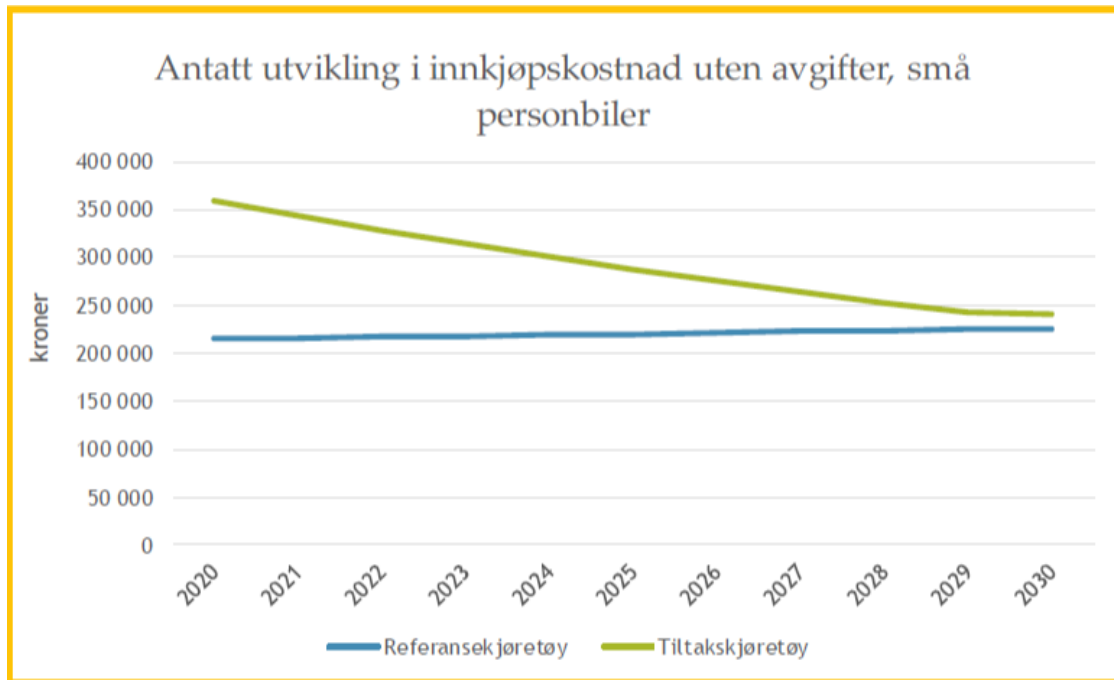
Environmentally harmful emissions from vehicles represent a negative externality that economic agents may disregard when making the decision to buy or lease a new vehicle. Economic theory suggest that these agents may not be willing to pay for the extra costs linked to environmental protection, if those costs are not compulsory or subsidised. In other words, consumers will have little incentive to acquire (more costly) goods (in this case BEPVs) that limit environmental pollution, since consumers will typically consider only their own private costs and benefits, without taking into account the environmental effect of their choices. Negative environmental externalities therefore represent a market failure, which justifies state intervention in the market.

The cost of producing a BEPV is still higher than the cost of producing a conventional vehicle, and this is reflected in the purchasing price before incentives. In the analysis performed by the Norwegian Environmental Agency in Klimakur 2030, they estimated the additional cost for battery electric passenger cars compared to a conventional car, in two car segments. Without taxes, both segments were significantly more expensive²². The analysis in Klimakur 2030 expected the purchase price of battery electric passenger cars to decrease by 4-5 per cent annually in the period 2021-2030.

The two figures below are based on the Norwegian Environmental Agency's analysis in Klimakur 2030 and show expected development in investment for small and large passenger cars, without taxes.

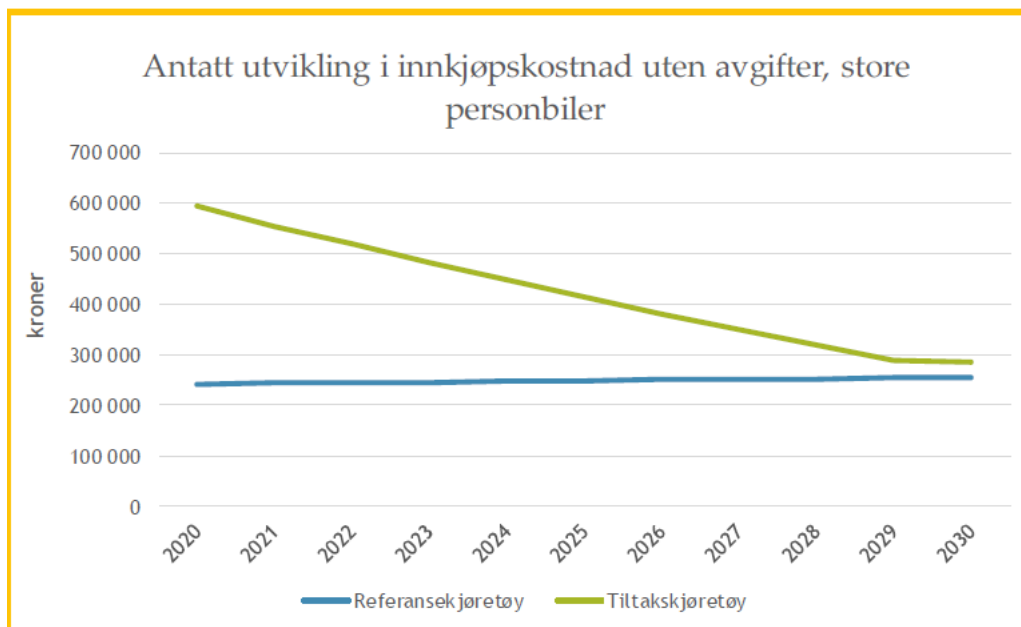
²² In Klimakur 2030, the reference vehicle for small ICE passenger cars is a gasoline powered Volkswagen Golf. The reference vehicle for large ICE passenger cars is a gasoline powered Volkswagen Tiguan. The so called "tiltakskjøretøy" or "model vehicle" is a hypothetical battery electric version with more or less the same qualities. There exists one "tiltakskjøretøy" mirroring the small ICE passenger car and one mirroring the large ICE passenger car.

Figure 5 - Expected development in purchaser price without taxes, small passenger cars.



Figur 14. Utvikling i innkjøpskostnad uten avgifter for små personbiler (2019-kroner).

Figure 6 - Expected development in purchaser price without taxes, large passenger cars.



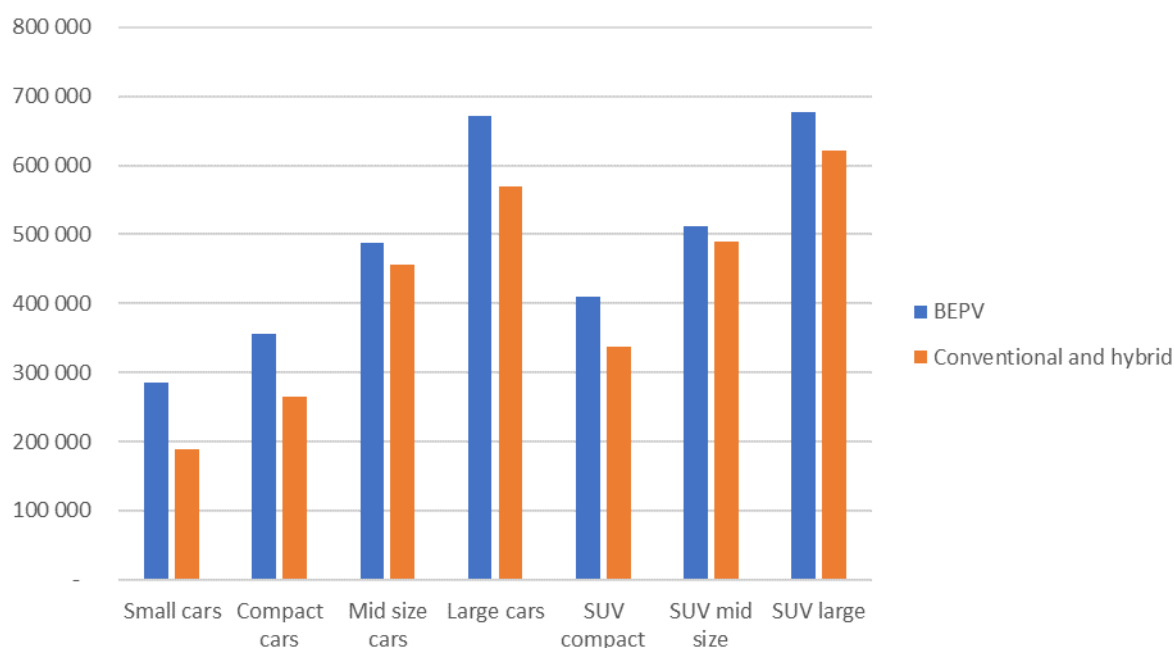
Figur 15. Utvikling i innkjøpskostnad uten avgifter for store personbiler (2019-kroner).

A continued significant cost reduction for batteries, dedicated production lines for BEPVs and production for a broader large-scale consumer market is expected. A combination of reduced costs and increased energy efficiency in batteries will initially increase the range of these cars,

and subsequently reduce the cost for a given range. All this means that BEPVs should become increasingly competitive in the coming years. A number of reports point to BEPVs becoming competitive in price, without taxes, before the end of this decade (see for instance *Klimakur 2030*, Miljødirektoratet 2020; BNEF 2019²³; and TØI 2020).

An analysis (Figure 7, below) of the prices of the most common models²⁴ of new cars sold in Norway the last 12 months confirms that before taxes, BEPVs are still more expensive than conventional and hybrid cars. This is valid for all passenger car classes.

Figure 7 - Price of BEPVs and conventional/hybrid cars, before taxes. Grouped by passenger car class.



Source: Ministry of Climate and Environment

In addition to higher costs, BEPVs have real and perceived disadvantages compared to conventional cars. In the study 'Battery electric vehicle user experiences in Norway's maturing market' (TØI-report 1719/2019), TØI has collected user experiences and opinions from both owners of ZEVs and owners of conventional fuel vehicles. Owners of conventional fuel vehicles lists the following as the most important disadvantages with ZEVs: Driving range, car size, practical characteristics like size of the storage/luggage space and missing possibilities for tow bar ('tilhengerfeste'), all of which are important for long travels and flexible car use.

When surveying existing owners of electric vehicles, costs have consistently been the main motivation for choosing BEPVs over conventional vehicles. In the Norwegian EV association's

²³ <https://about.bnef.com/blog/battery-pack-prices-fall-as-market-ramps-up-with-market-average-at-156-kwh-in-2019/> See also: <https://about.bnef.com/blog/electric-cars-reach-price-parity-2025/> for the same argument in 2017.

²⁴ Based on information of available passenger car vehicle models from <https://www.vegvesen.no/kjoretøy/kjøp-og-salg/nybilvelger/>, and car sales in the last 12 months from the Norwegian Vehicle Registry. Of 160 102 new cars sold in the last 12 months, variants where over 50 cars were sold within the classes were selected. In total 135 525 cars were in the selection, representing 85 per cent of the total cars sold in the last 12 months.

survey for 2021, 59 per cent of BEPV owners stated that low costs were their main motivation for buying an BEPV, while only 19 per cent stated that environmental concerns were their main motivation.

BEPVs may have lower operating expenditures related to fuel costs and maintenance. Electricity as a fuel, per kilometre has historically been much cheaper than petrol and diesel. Partly, this is due to lower energy prices and higher efficiency of BEPVs, partly this is due to fuel taxes. Recent months' developments in energy prices, however, have disproportionately increased the average electricity prices relative to fossil fuel prices, reducing the benefit of reduced operation expenditures for BEPVs compared to conventional vehicles.

The numbers of BEPV models in the market have increased and are expected to increase further, but still there are variations between segments and price ranges, that to some extent can force BEPV owners to buy a car that not fully compensate for the characteristics they are searching for. This can also be considered as an extra cost of owning a BEPV. Battery degradation is a significant concern for car owners, and there is uncertainty whether the battery will have full capacity for the lifetime of the chassis. These disadvantages are difficult to quantify, and they will also differ to a large degree between consumers.

The share of BEPVs is still low in most countries, due to the price difference and the disadvantages related to buying an BEPV, (see Figure 9, page 31). The comprehensive set of measures in place has led to Norway having the highest rate of BEPVs in the world. The market shares of new BEPVs have increased over the last years, in line with the necessary trajectory to achieve the Government's targets. Continuation of the measures, however partially scaled down, is necessary to continue on the trajectory.

Taking this into account the Ministry concludes that there still is a need for state intervention until the end of 2024. State intervention is still necessary to stimulate further increases in BEPVs sales to reach the very ambitious climate goals of the Norwegian government.

5.4. Appropriateness of state aid

State aid must be an appropriate instrument to address the identified market failure and help reach the identified objective of common interest. An aid measure is not compatible with the functioning of the EEA Agreement if the same positive contribution is achievable through other less distortive policy instruments, or other less distortive types of aid instruments. As stated, the main objectives of the notified measure is to enhance the market of BEPVs in the Norwegian vehicle stock in order to reduce CO₂ emissions from the transport sector.

There is no production of EVs in Norway, and the support instruments must therefore primarily be aimed at the consumers. Norway has had in place numerous measures to promote the uptake of ZEVs for many years. Since the 1990s, EVs have been exempted from registration tax, benefitted from free parking and have been exempted from tolls etc. The zero VAT rate for the supply and import of EVs was adopted in 2001.

The impact of the different support instruments for BEPVs have been subject to several surveys. Survey results²⁵ of consumer choices indicate that economic aspects (the exemption from registration tax and the zero VAT rate) have been the most important factor for the majority of people in the choosing of a BEPV over a conventional car. According to the survey

Elbilisten²⁵ the zero VAT rate is the most important BEPV advantage. When asked to choose the three most important EV advantages for themselves the zero VAT rate is chosen by the highest share, 69 per cent. Following second and third are the exemption from the registration tax and free or reduced toll roads fares.

In large part because of the combination of measures, Norway has the world's highest share of BEPVs as percentage of the passenger car fleet. However, even as the share has increased in the vehicle stock, BEPVs still have certain real and perceived disadvantages as compared to petrol and diesel cars. None of the above mentioned measures would alone enable BEPVs to compete with conventional cars, and a package consisting of several measures is therefore considered necessary.

However, with the increase in the BEPV share in the vehicle stock, a number of the early measures have been scaled back. BEPVs have previously been granted free use of toll-roads, free use of road ferries, free parking and access to bus lanes. As follows from section 2.3, these benefits have been scaled back in later years. Payment for toll-roads, currently at reduced rates applies for BEPVs on most toll-roads and toll rings in Norway. The same goes for payment on road ferries. Most municipalities in Norway, including all the major cities have introduced parking fees²⁶ for BEPVs, and the access to many bus lanes for BEPVs have been subject to limitations. Charges on toll-roads and road ferries are primarily payment for the use of infrastructure, while separate bus lanes and parking fees are established to facilitate public transport, and regulate congestion. As a consequence of the increasing share of the BEPVs in Norway, the Government has decided to scale back several of the usage incentives even further, to uphold the original purpose and sustainability of these systems. That is also the case for several of the tax benefits for BEPVs. The exemption from insurance tax for electric vehicles was abolished in 2022. In 2022 the favourable income tax calculation for employees benefitting from private use of electric company vehicles was amended and as from 1 May 2022 EVs are subject to re-registration tax with a reduced rate at ¼ of the rate for other cars. As from 1 January 2023 both the favourable re-registration tax for ZEVs and the favourable income tax calculation for employees benefitting from private use of electric company vehicles will be abolished.

The scale back will reduce the incentives to purchase BEPVs, and consequently reduce the impact of these measures. This in turn will enhance the importance of a measure of zero VAT rate, but with the introduction of a threshold of NOK 500 000, for BEPVs in the future.

The zero VAT rate has been both a substantial economic incentive to favour of ZEVs and also a tool that is intuitive to understand and calculate the impacts of. In order to correct for consumers' inclination to disproportionately favour short term costs and benefits related to BEPVs, incentives at the time of buying a vehicle can be more effective than incentives over the lifetime of owning a vehicle. The notified measure of zero VAT rate under NOK 500 000 per

²⁵ Elbilisten is an annual survey (spørreundersøkelse) by the Norwegian EV Association since 2013. In 2021 the survey was sent to Norwegian EV owners (both member and non-members of the association) and received 15 464 answers. The purpose of the survey is to examine Norwegian BEPV owners' car use, attitudes and experiences with BEPVs and charging. Articles on the findings can be found (in Norwegian) on <https://elbil.no/elbilisten-2021-de-fleste-av-oss-velger-elbil-av-okonomiske-arsaker/> and <https://elbil.no/elbilisten-2021-momsfritak-aller-viktigst-for-at-vi-velger-elbil/>

²⁶ Certain municipalities have reduced rates for EVs, cf section 3.3.

BEPV is an economic measure to give incentives at the time of buying a vehicle in favour of BEPVs.

The Ministry concludes that the zero VAT rate together with other measures, has been important for the steadily growing increase in the share of BEPVs and that the notified measure of zero VAT rate under NOK 500 000 per BEPV will continue to be so ahead. Several of the other important measures which promoted BEPVs are being scaled back as the BEPV vehicle stock has increased, to uphold the sustainability in these systems, e.g. toll roads, bus lanes and parking. In particular, the zero VAT rate is well suited to reduce the price difference between BEPVs and conventional fuel vehicles. The Ministry concludes that the zero VAT rate, but with the introduction of a threshold, for BEPVs is an appropriate measure.

5.5. Incentive effect

State aid is only compatible with the functioning of the EEA Agreement if it has an incentive effect. An incentive effect occurs when the aid induces the beneficiary to change its behaviour to further the identified objective of common interest, a change in behaviour which it would not undertake without the aid.

The objective of zero VAT rating under the threshold of NOK 500 000 per BEPV is to enhance the market share of BEPVs in Norway in order to reduce CO₂ emissions from the transport sector. The general proposition is that the price on vehicles influences the consumption level: lower prices are expected to lead to higher consumption, while increased prices are expected to lower consumption. The zero VAT rate on EVs has been meant to result in a higher demand for EVs at the expense of conventional cars. A prolongation of zero VAT rate with the introduction of a threshold will continue to stimulate to a higher demand for BEPVs at the expense of conventional vehicles.

There are several studies that concern the effect reduced VAT rates have on the pricing and the demand of certain goods and services. In a paper published by the European Commission, Copenhagen Economics²⁷ states the following: *“It is important from the outset to stress that there is little doubt that permanently lowering the VAT rate on a particular good (or service) sooner or later will lead to a reduction in the price of the good more or less corresponding to the monetary equivalent of the lower VAT rate”*.²⁸ Consequently, the zero VAT rate under NOK 500 000 per BEPVs will lead to lower prices for the consumers, compared to a situation with a VAT charged at 25 per cent.

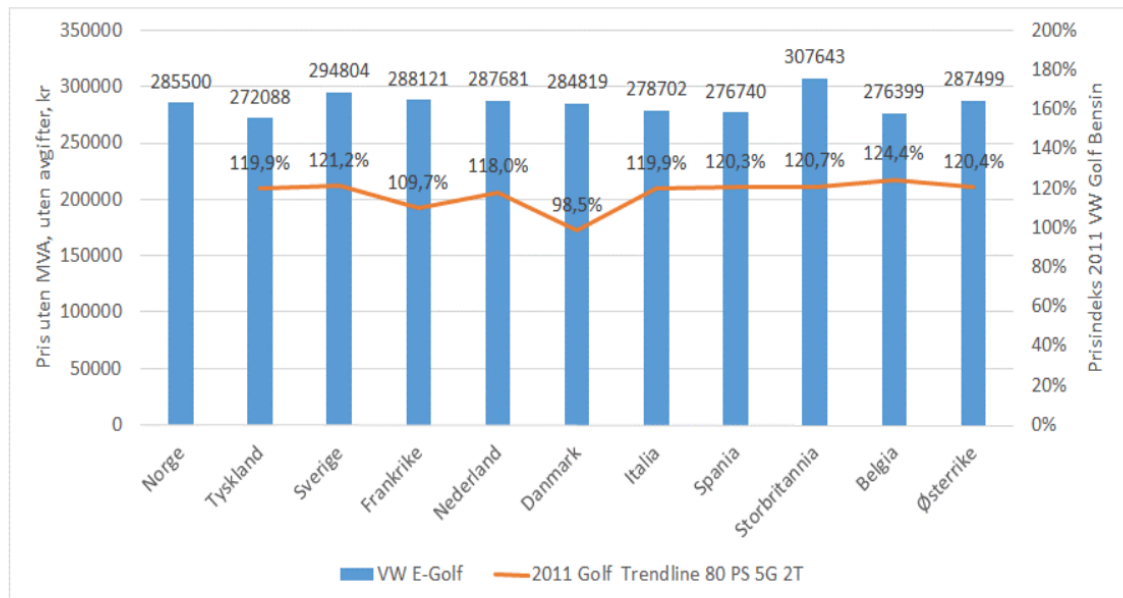
TØI (2020) also has a short discussion of who benefits from the zero VAT rate. They point to several factors that may influence the distribution, among them the elasticity of the supply, how fierce competition there are, risk of parallel import, transport costs as well as differences in car models and level of extra equipment. They also include a comparison of price without taxes on one model, VW E-Golf, in several European countries (blue bars in Figure 8, below). They find small price differences between the countries, commenting that small differences in price is not

²⁷ Copenhagen Economics (2007) Taxation Papers, Study on reduced VAT applied to goods and services in the Member State of the European Union, Working Paper NO 13 2007, European Commission, available at: http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_13_en.pdf.

²⁸ Copenhagen Economics study, page 10

necessarily evidence against a higher margin some places than other, but that it is an indication that if an effect like that exists, it is small.

Figure 8 - Price of Volkswagen E-Golf without taxes in different countries



Figur 13.31: Pris Volkswagen E-Golf uten avgifter i ulike land, det vil si det bilen ville kostet ut til forbruker uten MVA og uten andre avgifter. Kilder: E-Golf: Listepriser i henhold til fabrikantens nettside i hvert enkelt land, hentet inn 19.11.2019, fratrullet MVA og eventuelle avgifter. Bensin-Golf: Data hentet fra konkurranserapport laget av EU (EU 2011), prisindeks uten avgifter. Kilde: Egne beregninger.

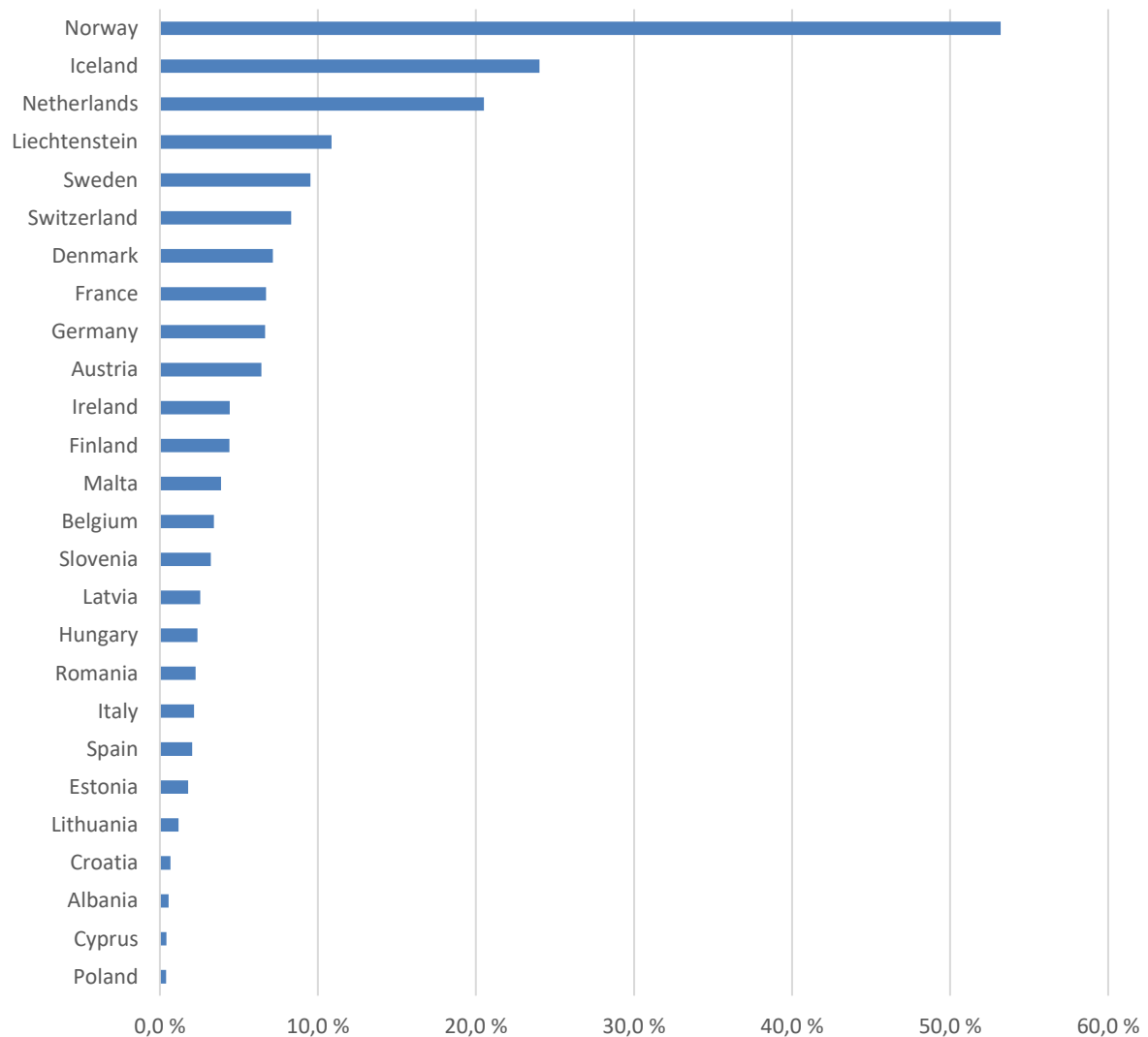
As part of the midterm review submitted to the Authority on 29 June 2020, the Ministry has provided empirical evidence that supports our claim that the zero VAT rate results in lower price for the consumer. Our empirical model uses a similar setup to the difference-in-difference strategy known from causal empirics. By comparing the price difference between conventional and battery electric cars in Norway and Sweden we account for any factors affecting either both types of vehicles in one of the countries. Such factors may be different market conditions and sales costs, or one type of vehicle in both countries, such as production costs, transportation costs etc. The Ministry argues that our model effectively isolates the effect of the zero VAT rate on prices, and that it can be interpreted as a causal effect.

The Ministry also gives a brief summary of existing theoretical and empirical literature on tax incidence. Both the theoretical predictions and empirical findings are heterogeneous, supporting the notion that both the level and the direction of pass-through depends heavily on specific market conditions. Using empirical studies on other markets or products to determine pass-through in the Norwegian market for EVs should only be done with caution. Furthermore, the zero VAT rate was introduced before any substantial market for EVs existed, which further invalidates any use of empirical findings from existing markets as predictive tools on the Norwegian market.

As described in section 2.3, Norway still has in place numerous measures to promote the uptake of ZEVs. The incentive effect of the combined measures is reflected by increased market shares of BEVs the last decade, leaving Norway with a higher share than other

countries, as shown in Figure 9. The increase is to a large degree considered to be a result of the support measures in place. TØI (2020) investigates goals, incentives and results with regard to EVs in Finland, Sweden, Denmark, Germany, France and China. All these countries have incentives in place, which can have a value of up to EUR 60 000, but typically less. Many of the incentives take form of favourable taxation rules for the private use of electric company cars. None of the countries comes close to Norway when it comes to market shares for EVs, as shown in Figure 9. A conclusion of the report is that countries with the most incentives have the highest EV shares. Further, a finding which is reported is the importance of the long-term nature of the Norwegian EV incentives, and the relative predictability. This has been very important for there to be a functioning second hand market, which is imperative when taking a decision of buying a car.

Figure 9 - Share of battery electric vehicles of new passenger cars in European countries (2020)



Source: Eurostat

In an EEA-study from "The European Topic Centre on Air Pollution and Climate Change Mitigation"²⁹ in 2019 one of the conclusions is the following: Countries such as Norway and the Netherlands, which have promoted EVs more than any of the other countries in the study, managed to achieve significant reductions in emissions, both in terms of CO₂ and air pollutants. Many EVs were introduced into these countries' fleets, because policies specifically target these technologies. The leading country in terms of emission savings is Norway. One likely reason for this relatively high performance is strong incentives for promoting purchase and ownership of EVs.

It is difficult to separate the effect of the zero VAT rate, but in a study from 2018 TØI uses the model BIG to predict changes in composition of car sales with different tax changes. One of the tax changes they estimate is removing of the zero VAT rate, finding that this would result in a

²⁹ <https://www.eea.europa.eu/publications/fiscal-instruments-favouring-electric-over>

70 per cent reduction of the BEPV-sales. Furthermore, in studies by for example Vista Analyse³⁰ and Yan S. and G. S. Eskeland (2018)³¹ the introduction of environmental differentiation of the registration tax is analysed. The findings that the CO₂-component in the registration tax have had significant influence on the CO₂-emissions from new cars, also strengthens the hypothesis that tax advantages at the time of purchase, like the zero VAT rate impact the composition of car sales.

In section 5.3, results from different surveys are presented. These results leave little doubt that the VAT advantage is an important measure to increase the purchase of BEPVs. The answers from surveys of existing BEPV-owners in Norway, indicate that a significant share of the BEPVs would not have been purchased without the zero VAT rate.

The Ministry concludes that the zero VAT rate under the threshold of NOK 500 000 therefore has an incentive effect for consumers by bolstering their demand for BEPVs.

5.6. Proportionality

State aid is proportionate if the aid amount is limited to the minimum needed to achieve the identified objective of common interest.

In its Decision No 228/17/COL, the Authority excluded overcompensation for several reasons. First, the measures assessed only entailed state aid for the indirect beneficiaries of such measures (the manufacturing sector), and the aid intensity received by those beneficiaries was significantly reduced. Second, there were still significant differences between conventional vehicles and ZEVs (limited range, a limited number of models, longer charging time and uncertain regarding the second-hand market). On this background the Authority concluded that the notified measures were proportionate to the aim to be achieved without resulting in overcompensation. In its Decision No 148/20/COL the Authority noted that based on information provided by the Norwegian government, BEVs would still have several non-price drawbacks for consumers for some time. The Authority further noted that to enhance the market share of BEVs further, measures beyond levelling out prices may thus be needed. The Authority considered that, when taking into account the information submitted by the Norwegian authorities on the market developments and projections, Norway's climate goals and the relatively short duration of the prolongation, the measures would continue to be proportionate to the aim to be achieved. The Authority thus excluded overcompensation. The Authority also noted that there was no discrimination between manufacturers or between dealer, and that the lack of discrimination contributed to ensuring the proportionality of the prolongation of the measures.

The objective of the notified measures is to increase the market share of BEPVs in order to reduce CO₂-emissions from the transport sector. The measure reduces the price of BEPVs and compensates for the disadvantages of using a BEPV for the consumers (such as limited range, longer charging time, limited number of models and uncertain second hand market). In practice, this will make BEPVs more attractive to consumers, and make BEPVs able to compete with conventional vehicles.

³⁰ Report by Vista Analyse: <https://vista-analyse.no/no/publikasjoner/evaluering-av-endringer-i-kjopsavgiften-for-nye-biler-fra-2006-2011/>

³¹ <https://www.sciencedirect.com/science/article/pii/S0095069617301249>

The measure thus has a clear environmental purpose. Norway has ambitious climate goals. Reduced emissions from the transport sector are a critical contribution to achieve Norway's climate targets in the period towards 2030. Providing incentives to accelerate uptake of ZEVs in the transport sector is considered one of Norway's most important and so far most successful climate policies.

Although the sale of BEPVs has increased considerably since the year of the last notification, from approximately 52 per cent in 2020 to about 76 per cent from January to August 2022, we are still far from achieving the contributions needed from higher BEPV shares in order to reach our climate goals. The average lifespan of a conventional car in Norway is 16–18 years³², and a transition towards zero emission technology in the vehicle stock therefore happens slowly, even with a high share of BEPVs of the sales of new vehicles. Therefore, the total number of BEPVs is still small compared to the number of conventional vehicles (16 per cent at the start of 2022).

33

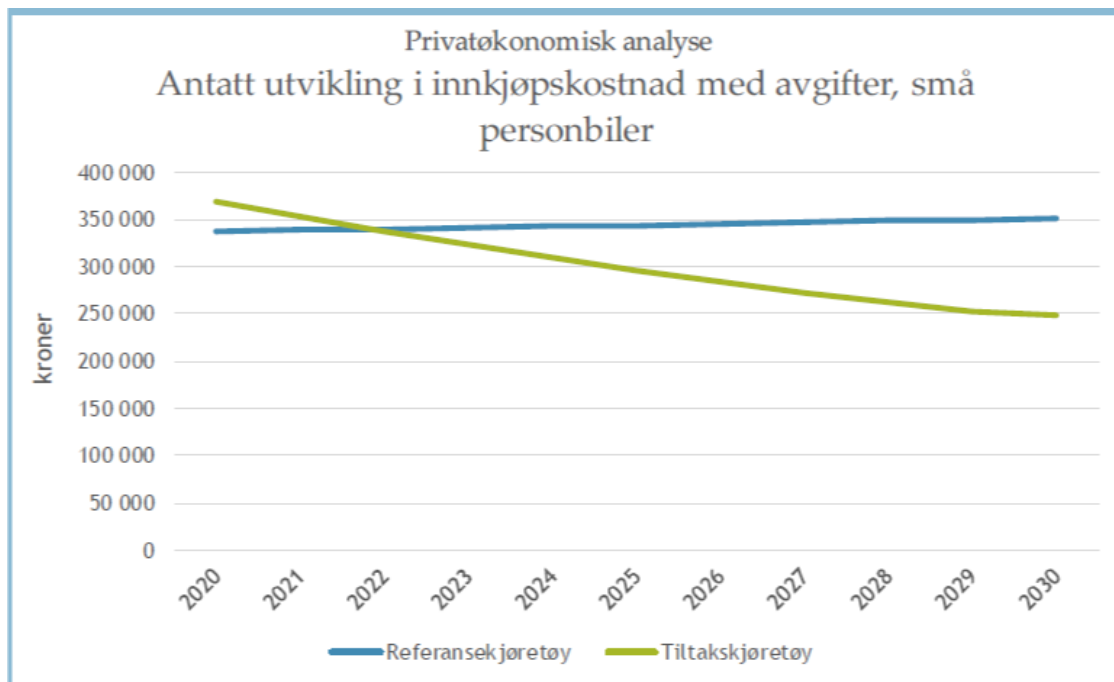
The share of BEPVs mentioned above imply that Norway is ahead of other countries, but the transition towards zero emission technology in accordance with political goals is still challenging. Even though we have witnessed substantial increases in the share of BEPVs the last years, currently around one quarter of new passenger cars are not ZEVs. To reach the 2025-target, continued strong growth in the share of ZEVs in the years ahead will be necessary. Due to the long lifespan of vehicles, every new fossil fuelled car in the Norwegian vehicle stock will contribute to emissions until well after 2030.

As discussed in section 5.3, electric vehicles still are more expensive to produce. The Norwegian tax advantages are needed and appropriate measures to incentivise purchase of BEPVs at the expense of conventional vehicles. In the “Klimakur 2030” report from 2020, the Norwegian Environmental Agency analysed the cost differential of vehicles with similar attributes, BEPV and conventional respectively, in two different classes. Klimakur 2030 finds that with current tax regime, comparison of reference models for small BEPVs and large BEPVs indicated that small BEPVs would have comparable purchase prices compared to a conventional vehicle within a few years, while large BEPVs would have comparable purchase prices to conventional vehicles around the middle of the decade (see Figure 10 and Figure 11).

³² TØI (2022) Kjøretøyenes demografi <https://www.toi.no/getfile.php?mmfileid=72976>

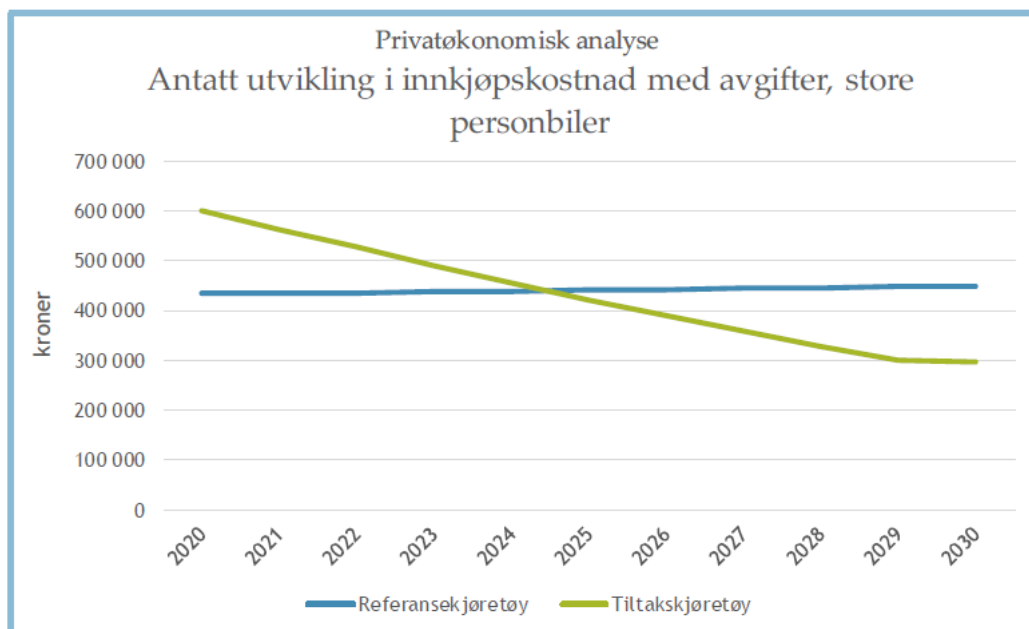
³³ <https://www.ssb.no/transport-og-reiseliv/statistikker/bilreg/aar>

Figure 10 - Expected development in purchaser price with taxes, small passenger cars.



Figur 12. Utvikling i innkjøpspris inkludert avgifter for små personbiler (2019-kroner).

Figure 11 - Expected development in purchaser price with taxes, large passenger cars



Figur 13. Utvikling i innkjøpspris inkludert avgifter for store personbiler (2019-kroner).

The Norwegian Environmental Agency has recently revisited the calculations of prices and costs of BEPV reference vehicles. The costs of small and large BEPVs towards 2022 has developed in line with the prognosis from Klimakur, and the average price of the top ten models

for large and small BEPVs are NOK 317 600 and 510 758, respectively.³⁴ The Norwegian Environmental Agency points out, however, that the future price development of conventional cars is more uncertain. This is due to a combination of factors, including car producers' plans on phasing out production of conventional vehicles, the EU Commission's proposal³⁵ on strengthening CO₂ emission standards from 2030 to 2035, and other EU countries'³⁶ plans to phase out petrol- and diesel vehicles from new car sales by 2030.

It is not straightforward, for instance, to conclude what model of a car that is equivalent to a certain BEPV. The choice of the concrete model will affect the comparison, especially related to battery capacity. However, an attempt is made to analyse the currently available passenger car models³⁷ in the Norwegian market for 2022 and their purchase prices (including taxes and the VAT exemption for BEPVs), the competitiveness of different engine technologies varies between the different classes of vehicles. Figure 12 below shows the average market price³⁸ (in NOK) for each vehicle variant³⁹, grouped by engine technology and passenger car class. In the smaller classes, BEPVs are on average slightly more expensive than conventional and hybrid cars. In the larger classes, BEPVs are on average significantly less expensive than conventional cars.

³⁴ Not including the costs for installation of a home charger.

³⁵ The Commission has proposed EU fleet-wide CO₂ emission reduction targets of 100% for new passenger cars and vans by 2035, with a intermediate target for 2030. https://ec.europa.eu/clima/eu-action/european-green-deal/delivering-european-green-deal/co2-emission-performance-standards-cars-and-vans_en

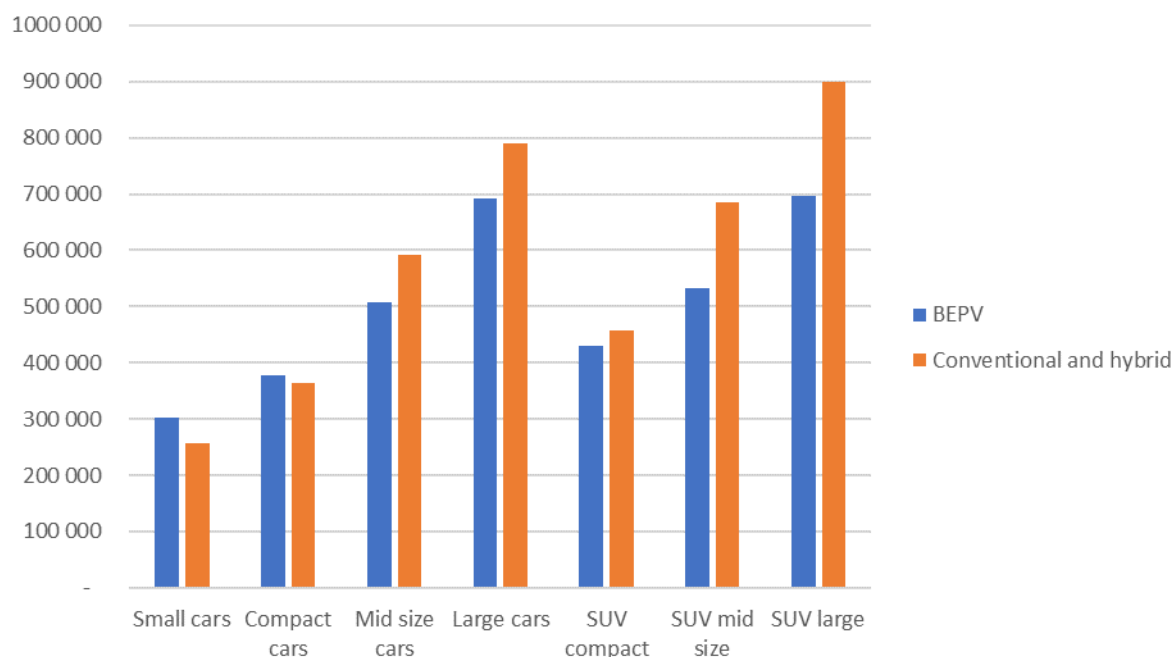
³⁶ <https://theicct.org/publication/update-on-government-targets-for-phasing-out-new-sales-of-internal-combustion-engine-passenger-cars/>

³⁷ Based on information of available passenger car vehicle models from <https://www.vegvesen.no/kjoretoy/kjop-og-salg/nybilvelger/>, and car sales in the last 12 months from the Norwegian Central Vehicle Registry. Of 160 102 new cars sold in the last 12 months, model variants where over 50 cars were sold within the classes were selected. In total 135 525 cars were in the selection, representing 85 per cent of the total cars sold in the last 12 months.

³⁸ Including the costs of installation of a home charger for BEPVs.

³⁹ It is important to note that even in the same class, the average prices are not necessarily comparable. Each vehicle model has different specifications, related to performance, range, and other attributes, and there are systematic differences within and between the different classes. In addition, certain producers list models with a multitude of variants, while other producers list very few variants per model. When analysing the prices of the models, producers with many variants become over-weighted in the average.

Figure 12 - Comparison of purchase costs (in NOK) in 2022 between BEPVs and conventional/hybrid cars, including taxes (By class of car)



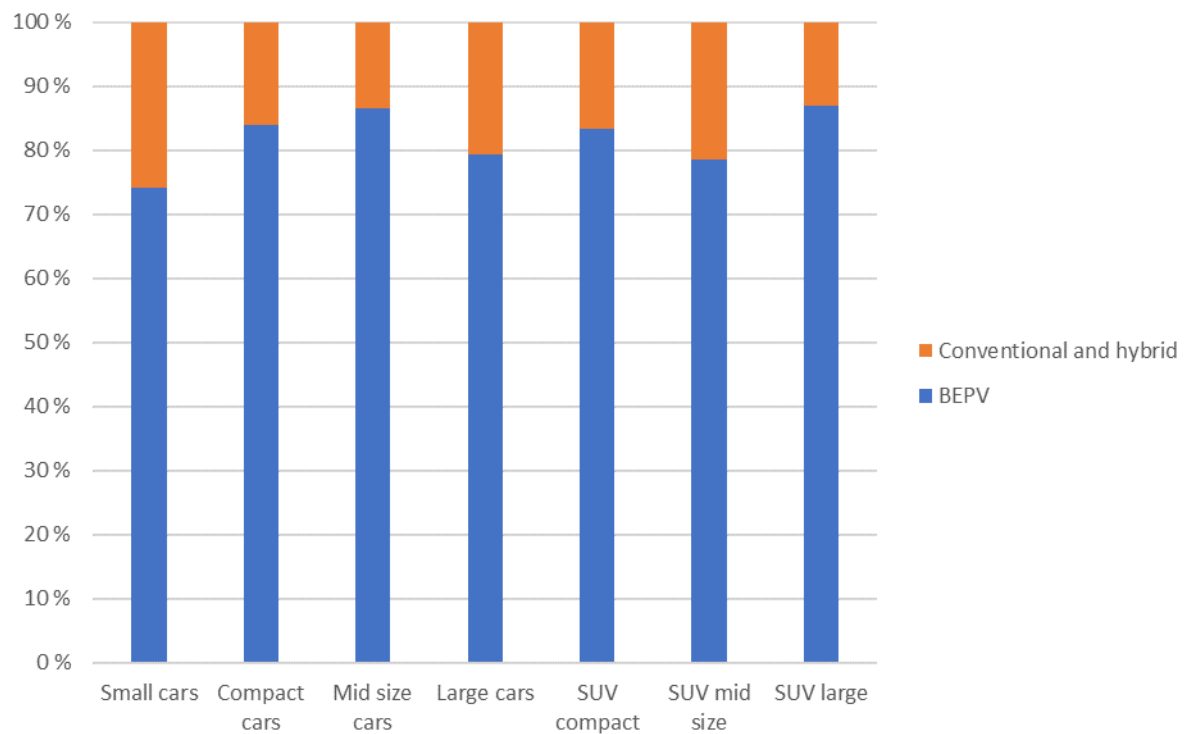
Source: Ministry of Climate and the Environment

While the figure above does not necessarily compare equivalent models to each other, it does indicate that, when including taxes, that the price competitiveness of BEPVs in the higher price ranges is higher, and that an introduction of an upper threshold to the exemption from VAT for BEPVs may be possible without significantly reducing the BEPV share in these segments.

Smaller conventional and hybrid cars are, before taxes, less expensive than BEPVs. On average, they are slightly less expensive than BEPVs, even after taxes are applied. Based on the models sold, conventional and hybrid larger cars are less expensive than BEPVs before taxes, but on average significantly more expensive than BEPVs after taxes are applied.

Even so, when comparing the BEPV share grouped by the different vehicle classes (Figure 13, below), we see that conventional and hybrid cars represent a significant share of new vehicles in all classes. The BEPV share is lowest in the small car class, and highest for large SUVs. This is an indication that a significant share of consumers consider BEPVs, even if they have lower purchase prices, to be inferior to conventional and hybrid cars.

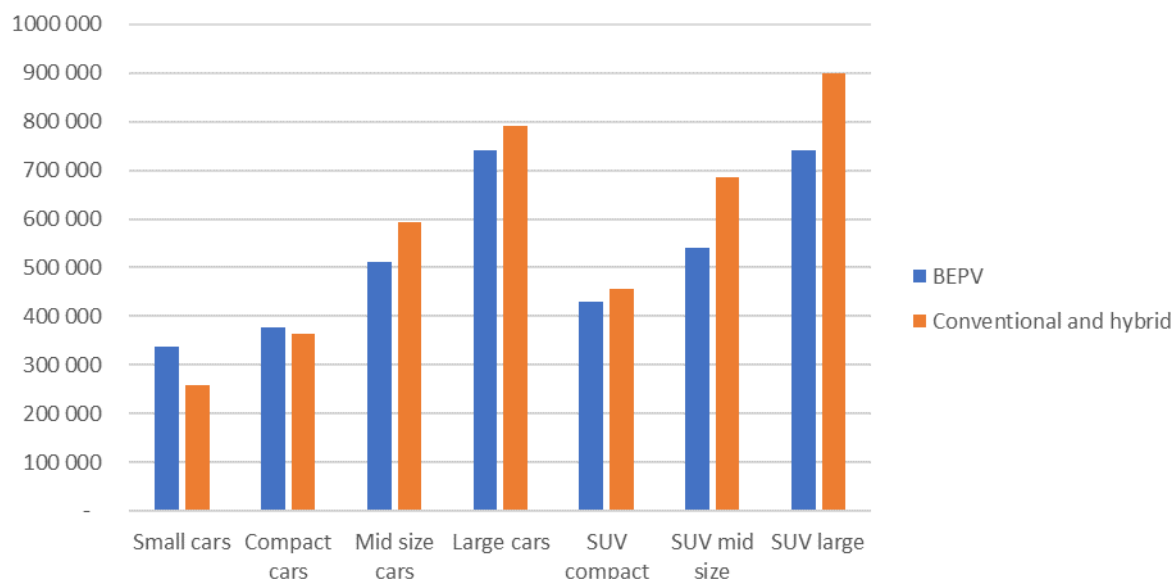
Figure 13 - Share of BEPVs and conventional/hybrid cars in new sales, last 12 months.



Source: Ministry of Climate and the Environment

Without the VAT exemption, BEPVs would be significantly more expensive across all categories. Comparative to conventional vehicles, especially small/mid-sized and more moderately priced cars, BEPVs would become much less competitive. A continued VAT exemption, but with the introduction of a threshold of NOK 500 000, would lead to price increases only for BEPVs above that threshold. On average, these are the groups which appear to currently have a more significant price advantage compared to conventional vehicles, and slightly higher BEPV shares. The introduction of a threshold will be a targeted measure to ensure more proportionality of the VAT exemption.

Figure 14 - Comparison of purchase costs (in NOK) in 2022 between BEPVs and conventional/hybrid cars, including taxes and introducing VAT for BEPVs above NOK 500 000.



Source: Ministry of Climate and the Environment

The zero VAT rate, even when introducing a threshold, may still lead to lower purchase prices on BEPVs, than conventional vehicles. However, the BEPVs still have drawbacks for consumers which are not reflected in the purchasing price. In order to enhance the BEPVs market share further, so that the necessary emission reductions are achieved, measures beyond levelling out the price gap between conventional and electric may be needed.

As explained above in section 5.3, there are still significant disadvantages related to EVs, perceived and real, including limitations in range, size of the storage space and charging capacity. Some of the models may, for example, have less comfort and possibilities for extra equipment. The disadvantages can represent a significant non-monetary cost for an BEPV buyer and needs to be included in the calculation of costs and benefits of buying an BEPV relative to a fossil fuelled car. Other disadvantages related to buying an EV are uncertainties regarding the expected lifetime of batteries and the BEPVs value in second hand market. Even with BEPVs being competitive in the smaller passenger car classes, and less expensive in the larger classes, currently almost one quarter of passenger cars are not BEPVs, distributed along all classes, (see Figure 13 on page 37). This indicates that at least some consumer groups experience significant disadvantages associated with BEPVs. The continued technological development is expected to reduce these disadvantages, but they will remain an important factor in the time span of this notification. Due to such disadvantages, BEPVs may still be considered by many car buyers as an inferior alternative to fossil fuel vehicles. To offset such disadvantages in this period, BEPVs may have to be cheaper than a conventional car, in order to maintain a sufficiently high market share to achieve necessary emission reductions in the coming few years.

These graphs and analyses above show the purchase price of different types of vehicles and do not take into account any difference in cost between BEPVs and conventional cars over the lifetime of the car. An BEPV owner will on average have lower expenditures related to fuel costs

and maintenance (regular motor services for example) over the lifetime of the car. However, fuel costs are highly dependent on whether charging is performed at private homes or at publicly available charging stations. The fuel costs of charging at public charging stations have increased in later years. For fast chargers the price varies between 6,39 kr/kWh and 8,39 kr/kWh.⁴⁰ Per kilometre, these prices are comparable⁴¹ to the current fuel prices for conventional vehicles. Furthermore, as explained in section 2.3, user benefits (toll road tax exemption, lowered rates on ferries, access to bus lanes, free public slow charging, free public parking) that so far have been important advantages, are being scaled back, for reasons discussed in 5.4, which increase the lifetime costs of using a BEPV.

Consumers are still worried about their driving autonomy. The *Norwegian Automobile Federation* (NAF), the Norwegian association for car owners, routinely presents reports about Norwegian car owner's preferences and concerns. One of the issues is prospective car ownership. According to the latest figures, from August 2022, 54 percent of the respondents in the NAF survey answered that they would want their next car to be a BEPV. This share has increased in the last two years, but there are significant regional differences. In urban areas, 64 per cent of respondents would like their next car to be a BEPV, while in more rural areas, only 33 per cent wanted a BEPV to be their next car.⁴²

Norway is a sparsely populated country with long distances, and the battery range of BEPVs is a major concern. Charging EVs might be challenging due to limited availability of charging stations, despite the current developments in charging infrastructure. Recharging the battery of BEPVs takes much longer time than refuelling a tank with petrol or diesel. With fast charging stations, it takes minimum 40 minutes to fully recharge a BEPV, but for most cars this is significantly more. More common chargers take between 5 and 8 hours, leaving the vehicle out of service for several hours a week. Furthermore, if fast charging stations are occupied or out of service, the BEPV user might risk a long wait or running out of energy for the car. Indeed, in a 2022 survey, 50 per cent of BEPV owners reported experiencing that chargers at fast charging stations are out of service, and the same number also reported of experiencing charging queues.⁴³ This is despite a significant improvement in the charging infrastructure over the last years. The Government continues to make targeted efforts towards facilitating a robust and market-driven development of charging infrastructure. These policies are considered successful, but rapid increases in the number of BEPVs in combination with relatively long lead-times for deployment of charging infrastructure may lead to some transitional challenges for BEPV owners.

The current measure of zero VAT rating has been an important instrument to increase the purchase of new ZEVs. The measure of zero VAT rating for ZEVs must be seen in context with other favourable tax measures such as the exemption from registration tax, re-registration tax with a reduced rate, the former exemption from insurance tax and favourable income tax calculation for employees benefitting from private use of electric company vehicles. Other measures such as reduced rates on toll-roads, reduced rates on road ferries and public parking, access to public lanes and significant public financing of charging infrastructure have also been

⁴⁰ <https://elbil.no/dette-koster-hurtiglading/>

⁴¹ Based on fuel consumption for small cars of 0,55 liters/10 km, at 25 kr/liter, and 1,65 kWh/10 km, the break-even price is 8,3 kr/kWh. For a fuel price of 20 kr/liter, the break even cost of charging is 6,66 kr/kWh.

⁴² <https://nye.naf.no/elbil/elbil-nytt/elbil-neste-bil>

⁴³ <https://elbil.no/flere-elbilister-opplever-at-hurtigladeren-ikke-virker/>

important measures for the purchase of ZEVs. The Government has however started to scale back many of the EV-incentives, see section 2.3. The development is being monitored. Annual overviews over the development of ZEVs in all transport segments that are covered by the Government targets are published every year as part of the budget proposals. Depending on the market development, the Government will consider necessary changes in policy measures.

Part of the explanation of why more consumers do not choose BEPVs is that consumers seem to favour immediate costs and benefits more than future costs and benefits (positive discount rate). With a high degree of uncertainty regarding the future development, consumers are expected to place a lower weight on future costs and benefits. Also, some consumers may disproportionately favour effects in the near term relative to mid and long term effects. This is called myopic behaviour. BEPVs represents a new and rapid changing technology and the lack of necessary information and uncertainty about future costs and benefits as well as disadvantages may be substantial.

Both real and perceived uncertainty regarding the expected costs and benefits may make consumers unable to take fully into considerations the future costs and benefits of buying and owning a BEPV. There may also be uncertainty for many purchasers whether the tax advantages and other policy measures towards BEPVs will exist over the lifetime of the car at the time of purchase.

In TØI (2020), the prospects of reaching the 2025-target are summarized as follows: *“The passenger car target for 2025 is demanding due to the wide variation in user preferences. Strong measures will be required.”* The current and future system of car taxation is the topic in TØI (2019)⁴⁴ and the zero VAT rate is considered decisive for the competitiveness and marked share of the ZEVs. The discussion of incentive effect in section 5.5 supports the important role of economic incentives. Model results show that tax advantages at the time of purchase affects behaviour and that removing the zero VAT rate entirely would lead to a significant drop in the ZEVs' share.

The zero VAT rate implies a substantial and increasing revenue loss for the Norwegian government. A prolongation of the zero VAT rate with the introduction of a threshold will reduce the support to the most expensive BEPVs. The introduction of a threshold of NOK 500 000 will consequently contribute to reduce the tax expenditure.

As discussed in section 5.5, existing knowledge of mechanisms of pricing in the car market, makes it reasonably safe to conclude that the majority of the zero VAT rate is passed on to the car purchasers. Hence, the measure at hand only entails state aid for the indirect beneficiaries, i.e. the manufacturing sector including dealers. As a consequence, the state aid intensity received by those beneficiaries is limited to the indirect aid caused by a higher demand for their products. It must also be recalled that the lack of discrimination between manufacturers or dealers contributes to ensuring the proportionality of the measure.

The Ministry considers the zero VAT rate an integral and necessary part of the policy to give incentives to reach the target for the transition to ZEVs and achieve the goal to reduce CO₂-emissions. With the introduction of a threshold of NOK 500 000, the zero VAT rate will be more

⁴⁴ <https://www.toi.no/publikasjoner/dagens-og-morgendagens-bilavgifter-article35804-8.html>

targeted towards the vehicles that require more support, while scaling back the amount of support for the more expensive vehicles. Furthermore, evidence supports the conclusion that the negative effects are relatively limited. The policy is now regarded necessary to reach the ambitious climate goals. The Ministry concludes that the notified measure is proportionate.

5.7. Avoidance of undue negative effects on competition and trade

For state aid to be compatible with the functioning of the EEA Agreement, the negative effects of the aid measure in terms of distortions of competition and impact on trade between Contracting Parties must be limited and outweighed by the positive effects in terms of contribution to the objective of common interest.

As noted by the Authority in Decision 228/17/COL and Decision 148/20/COL, the Norwegian state only grants State aid to the indirect beneficiaries of the measures, not to their direct beneficiaries. This implies in itself that the potential distortion of competition and trade is limited. Further, there is no discrimination between operators in the manufacturing sector.

The Authority also underlined in its decisions mentioned above that the benefits obtained by those indirect beneficiaries, i.e. the increase of demand for ZEVs, is necessary for achieving the objective pursued by the scheme. On these grounds the Authority concluded that the measures do not entail undue distortions of competition and trade and the overall balancing exercise has a positive outcome.

5.8. Transparency

According to the CEEAG Section 3.2.1.4 information concerning the measure and the beneficiaries shall be published on a comprehensive State aid website. The Ministry will make sure that this obligation will be fulfilled.⁴⁵ Furthermore, the relevant rules and regulations will be published on www.lovdato.no, as they are approved and enter into force.

6. CONCLUSION

It is the Ministry's position that the zero VAT rate with the introduction of a threshold of NOK 500 000 for BEPVs is compatible with the functioning of the EEA Agreement according to Article 61(3)(c).

The Ministry hopes that the provided information will enable the Authority to start an assessment of the notified measures.

Yours sincerely,

Frédéric Wilt
Deputy Director General

Caroline Knem Christie
Legal adviser

This document has been signed electronically and it is therefore not signed by hand.

⁴⁵ The information will be available on the following website: <https://data.brreg.no/rofs>