

Brussels, 16 December 2020
Case No: 85854
Document No: 1158139
Decision No 148/20/COL

Ministry of Trade, Industry and Fisheries
PO Box 8090 Dep
0032 Oslo
Norway

Subject: Prolongation of the zero VAT rating for zero-emission vehicles 2021–2022

1 Summary

- (1) The EFTA Surveillance Authority (“ESA”) wishes to inform the Norwegian authorities that, having assessed the notified prolongation of the existing zero VAT rating measures in favour of zero-emission vehicles (“the measures” or “the zero VAT rating measures”), it considers that the measures constitute state aid within the meaning of Article 61(1) of the EEA Agreement. ESA decides not to raise objections¹ to the prolongation of the measures, as they are compatible with the functioning of the EEA Agreement, pursuant to its Article 61(3)(c).
- (2) The measures concern the prolongation of: (i) the zero VAT rating for the supply and import of zero-emission vehicles; (ii) the zero VAT rating for the leasing of zero-emission vehicles; and (iii) the zero VAT rating for the supply and import of batteries for zero-emission vehicles.
- (3) The term “zero-emission vehicles” comprises both battery electric vehicles (“BEV”) and fuel-cell electric vehicles (“FCV”). BEVs are propelled by one or more electric motors powered by rechargeable battery packs. BEVs use no other fuel source, and there is no internal combustion engine. Non-rechargeable hybrid electric vehicles and plug-in hybrid electric vehicles are thus excluded. FCVs are 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 term zero-emission vehicle (“ZEV”) is used for both BEV and FCV, unless otherwise specified.
- (4) ESA has based its decision on the following considerations.

2 Procedure

- (5) The Norwegian authorities notified the measures on 10 November 2020.² On 20, 27 and 30 November and 4 December, they provided additional information.³

¹ Reference is made to Article 4(3) of the Part II of Protocol 3 to the Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice.

² Documents No 1162371 and 1162373.

³ Documents No 1164383, 1165894, 1166250 and 1167299.

3 Description of the measures

3.1 Policy background

- (6) The Paris Agreement,⁴ adopted under the United Nations Framework Convention on Climate Change (“UNFCCC”), sets out the long-term objective of limiting global warming to well below 2°C compared to pre-industrial times, and pursuing efforts to limit the temperature increase further to 1.5°C, in order to reduce the risks and impacts of dangerous climate change.⁵ These goals are linked to the commitment under the agreement of all parties pursuing efforts of bringing greenhouse gas⁶ (“GHG”) emissions to net-zero by the second half of the 21st century.⁷
- (7) The European Union (“the EU”), its Member States and the EEA EFTA States are among the parties to the Paris Agreement.⁸ Under the Paris Agreement, each country must determine, communicate, and regularly report on the contributions that it intends to achieve to mitigate climate change.⁹ In its 2020 submission of the nationally determined contribution, Norway committed to reducing its GHG emissions by at least 50% and towards 55% by 2030 compared to the 1990-level.¹⁰
- (8) With the Effort Sharing Regulation,¹¹ the EU Member States have committed to binding GHG reduction targets for 2021–2030 for those sectors of the economy that fall outside the scope of the EU emission trading system (“the EU ETS”). These sectors include transport, buildings, agriculture, non-ETS industry, and waste, which combined account for almost 60% of total EU emissions.
- (9) Under the Effort Sharing Regulation, the European Commission sets national emission reduction targets for 2030 for each of the EU Member States, ranging from 0% to 40% from the 2005-levels. The individual EU Member States also receive an annual emissions allocation in tonnes of CO₂ equivalents (“tCO₂e”) each year.¹²
- (10) Iceland and Norway have agreed to implement the Effort Sharing Regulation and to commit to binding GHG reduction targets.¹³ Norway is thus legally bound to reducing its non-ETS emissions by 40% by 2030 compared to the 2005-level. Norway is also committed to meet its annual emission allocation in each year of the period 2021–2030. The Norwegian political ambition is, however, to reduce its

⁴ The [Paris Agreement](#) was adopted at on 12 December 2015 at the twenty-first session of the Conference of the Parties to the UNFCCC (COP21) held in Paris from 30 November to 13 December 2015, and entered into force on 4 November 2016.

⁵ Article 2(1)(a) of the Paris Agreement.

⁶ Greenhouse gases trap the sun’s heat in the atmosphere thereby causing a greenhouse effect.

⁷ Article 4(1) of the Paris Agreement.

⁸ The EU formally ratified the Paris Agreement on 5 October 2016. See more information [here](#).

⁹ Article 4(2) of the Paris Agreement.

¹⁰ See the Nationally Determined Contribution registry information on [Norway](#).

¹¹ Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013. The Regulation was incorporated into the EEA Agreement in Article 3, Paragraph 8(a) of Protocol 31 by EEA Joint Committee Decision No 269/2019.

¹² CO₂ equivalent is a simplified way to put emissions of various GHGs on a common footing by expressing them in terms of the amount of CO₂ that would have the same global warming effect.

¹³ See EEA Joint Committee Decision No 269/2019.

total non-ETS emissions by 45% by 2030, which represents a fulfilment beyond the legal requirement under the Effort Sharing Regulation.¹⁴

- (11) In December 2019, the European Commission published the European Green Deal Communication, outlining measures needed to achieve climate-neutrality in Europe by 2050.¹⁵ One policy area identified in the initiative is the acceleration of the shift to sustainable and smart mobility. According to the European Commission, transport accounts for a quarter of the EU's GHG emissions and within this sector, road transport is the largest emitter. According to the European Green Deal, a 90% reduction in transport emissions is needed to achieve climate neutrality by 2050.
- (12) In January 2020, the Norwegian Government published the *Klimakur 2030* report, outlining the potential for GHG emission reductions during 2021–2030 in the sectors of the economy not covered by the EU ETS.¹⁶ The aim of the inquiry was to evaluate options for reducing emission in these sectors by 50% by 2030 compared to 2005.
- (13) More than half of Norway's GHG emissions are from the non-ETS covered sectors, where transport is the primary source of emissions.¹⁷ Within the transport sector, the passenger car segment is the largest emitter with emissions of 4.7 million tCO₂e in 2018.¹⁸ This is almost a third of the total GHG emissions in the transport sector. In its White Paper on the National Transport Plan for 2018–2029,¹⁹ adopted in June 2017, the Norwegian authorities established the following targets for transport:
- By 2025, all new passenger cars and light vans should be ZEVs.
 - By 2025, all new city buses should be ZEVs or use biogas.
 - By 2030, all new heavy vans should be ZEVs.
 - By 2030, 75% of new long-distance buses should be ZEVs.
 - By 2030, 50% of new trucks should be ZEVs.
- (14) The *Klimakur 2030* report estimates that the corresponding emission reductions could be almost 6 million tCO₂e in the period 2021–2030.²⁰ This represents more than a quarter of the calculated emission gap for Norway in the non-ETS sector. Large-scale uptake of ZEVs is thus a cornerstone of Norway's climate strategy.

3.2 General overview of the Norwegian VAT system

- (15) Value Added Tax ("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

¹⁴ [Klimakur 2030](#), published on 31 January 2020.

¹⁵ Communication from the Commission of 11 December 2019, ([COM\(2019\) 640 final](#)).

¹⁶ [Klimakur 2030](#), published on 31 January 2020.

¹⁷ *Klimakur 2030*, published on 31 January 2020, page 28.

¹⁸ <https://miljostatus.miljodirektoratet.no/tema/klima/norske-utslipp-av-klimagasser/klimagassutslipp-fra-veitrafikk/>.

¹⁹ [National Transport Plan for 2018–2029](#). Meld. St. 33 (2016–2017).

²⁰ [Klimakur 2030 summary report](#), published on 31 January 2020, page 13.

considered a fiscal tax to secure the State's income. The VAT provisions are laid down in the VAT Act²¹ and the VAT Regulation.²²

- (16) Norwegian VAT is collected on the supply of goods and services falling within the scope of the VAT Act. Importation and self-supply of goods and services are also considered taxable events. The general VAT rate is 25% of the net price. The VAT rate for foodstuff is 15%, while certain services are levied a rate of 12% (passenger transport, admission fees to cinemas/museums and hotel accommodation).
- (17) Persons engaged in trade or business, whose taxable supplies exceed NOK 50 000 over 12 months, must be registered in the VAT register, and are liable to pay VAT. A registered person may, however, deduct input VAT on goods and services used in the business. The deduction right implies that VAT is not finally levied until the goods or services are sold to a customer. When reporting VAT to the authorities, the input VAT is offset against the output VAT for the same period. If the input VAT exceeds the output VAT, a repayment can be claimed from the tax authorities.
- (18) Due to the right to deduct input VAT, VAT is, in principle, not an expense. However, apart from undertakings involved in car-hire services (including leasing) or passenger transport, the right to deduct input VAT does not comprise VAT on passenger vehicles (including motorcycles). Consequently, VAT is a cost for undertakings acquiring cars.²³
- (19) Certain supplies, including health care and social services, are exempted from VAT. Exemption means that, on the supply of the exempted goods or services, no output VAT is charged, and suppliers are not entitled to deduct input VAT. Some goods and services, however, are levied output VAT, but at a zero rate, so-called zero VAT rating. Suppliers of such goods and services are still entitled to credit for input VAT.
- (20) The VAT rates are adopted annually by the Norwegian Parliament.²⁴ Exemptions and zero rates are laid down in the VAT Act and are not adopted annually by the Parliament. However, since exemptions and zero rates have economic effects, their adoption and repeal form part of the annual state budget process.
- (21) The zero VAT rating for the sale and import of ZEVs was introduced on 1 July 2001 and extended to include leasing of ZEVs and supply/import of batteries for ZEVs on 1 July 2015. The zero-rating covers the sale and import of ZEVs for both public and private sector use, provided the cars are registered in the Central Motor Vehicle Register. All manufacturers, importers and distributors are entitled to the zero-rating.

²¹ [The Act on Value Added Tax](#) of 19 June 2009 No 58. In Norwegian: *lov om merverdiavgift*.

²² [The Regulation concerning Value Added Tax](#) of 15 December 2009 No 1540.

²³ However, businesses may deduct input VAT on electrical vans and light trucks. Hence, a zero VAT rate would not have an impact on such purchases compared with the present system.

²⁴ For the 2020 budget: [Stortingsvedtak om merverdiavgift for budsjettåret 2020 \(kap. 5521 post 70\)](#).

3.3 Measures previously approved by ESA

3.3.1 Measures approved by and dealt with in ESA's Decision No 150/15/COL²⁵

- (22) ESA approved the following measures in its Decision No 150/15/COL as compatible state aid within the meaning of Article 61(3)(c) of the EEA Agreement:
- zero VAT rating for the supply and import of ZEVs;
 - zero VAT rating for the leasing of ZEVs;
 - zero VAT rating for the supply and import of batteries for ZEVs;
 - reduced annual vehicle tax for ZEVs;
 - exemption from road tolls for ZEVs;
 - free boarding on classified national road ferries; and
 - favourable income tax calculation for private use of company ZEVs.
- (23) ESA found that these measures constituted indirect aid in favour of the manufacturers and dealers of ZEVs and batteries (jointly “the manufacturing sector”).²⁶ The first three measures were approved until 31 December 2017. The approval of the remaining measures was not limited in time.
- (24) In the same decision, ESA further found that the following measures constituted existing aid measures, as they have been in place from before the EEA Agreement entered into force in Norway on 1 January 1994:
- exemption from registration tax;
 - free charging at public charging stations; and
 - free parking in public parking.
- (25) Regarding the measures listed in the previous paragraph, ESA did not initiate the existing aid procedure set out in Section V of Part II of Protocol 3 to the Agreement between the EFTA States on the Establishment of a Surveillance Authority and a Court of Justice (“Protocol 3”).

3.3.2 Measures approved by ESA's Decision No 228/17/COL²⁷

- (26) In its Decision No 228/17/COL, ESA approved the following measures as compatible state aid within the meaning of Article 61(3)(c) of the EEA Agreement:
- a prolongation of the zero VAT rating for the supply and import of ZEVs;
 - a prolongation of the zero VAT rating for the leasing of ZEVs;
 - a prolongation of the zero VAT rating for the supply and import of batteries;
 - a new exemption for ZEVs from annual tax/insurance tax;
 - a new exemption for ZEVs from re-registration tax; and
 - a new more favourable depreciation rate for electric cargo vans.

²⁵ ESA Decision No [150/15/COL](#) of 21 April 2015 on state aid measures in favour of electric vehicles.

²⁶ ESA Decision No 150/15/COL, paragraphs 83 and 118.

²⁷ ESA Decision No [228/17/COL](#) of 19 December 2017 on tax reductions on zero emission vehicles.

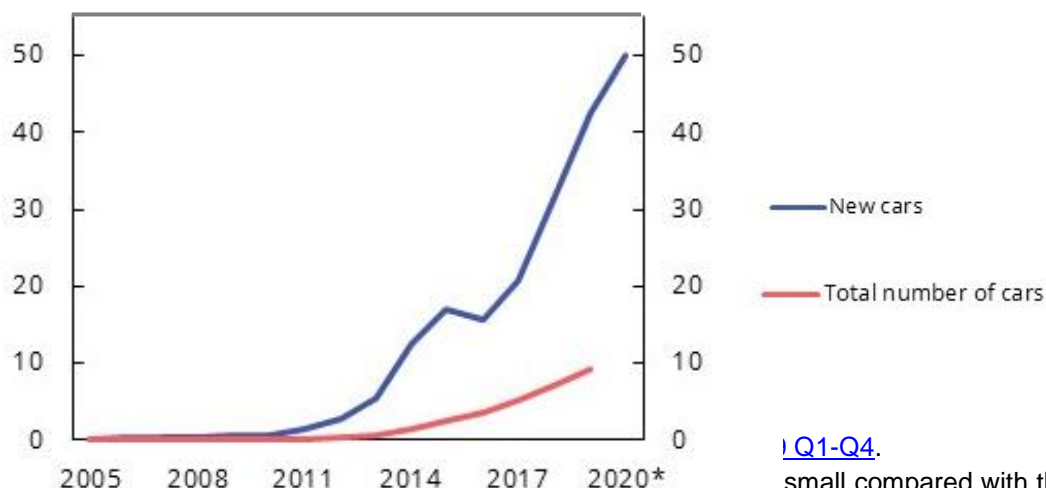
- (27) As in its Decision No 150/15/COL, ESA concluded that these measures constituted indirect aid to the manufacturing sector.²⁸ ESA found that the zero VAT rating measures were compatible with the functioning of the EEA Agreement for three years from 1 January 2018 till 31 December 2020, while the remaining measures were found compatible for six years from 1 January 2018 till 31 December 2023.

3.4 The market for ZEVs in Norway

3.4.1 Development in ZEV market shares in Norway

- (28) The development in ZEVs' share of all new registration of passenger cars in Norway is depicted in the blue line in figure 1 below. The figure shows that the share of new ZEVs, as a percentage of all new registered passenger cars, has been increasing. In 2016, ZEVs constituted 21% of all new car sales, rising to 31% in 2018 and 42% in 2019. In January–April 2020, 50% of new passenger cars were ZEVs.
- (29) According to the industry publication *InsideEV*, Norway had by far the largest share of BEVs in total sales in 2019, compared to the other European countries. With 42% in 2019, Norway was followed by the Netherlands with 14% and Iceland with 8%.²⁹
- (30) However, the total number of ZEVs is still small compared to the total number of conventional vehicles in Norway. The red line in figure 1 depicts the share of ZEVs in the stock of passenger cars, which reached only 9.3% at the beginning of 2020. At that point, there were around 261 000 BEVs registered in Norway, while there were over 2.3 million registered petrol and diesel cars and around 200 000 hybrids.³⁰
- (31) The market share of BEVs in the Norwegian stock of passenger cars corresponded well with the share of kilometres driven by BEV passenger cars, which reached 9.6% in 2019. This was a substantial increase from 6.7% in 2018 and 4.7% in 2017.

Figure 1: BEVs share of new passenger cars and BEVs share of the total number of passenger cars in Norway from 2005 until March 2020.



small compared with those of electrical passenger cars. In 2019, 693 electric motorcycles and 2040 electric vans were registered in Norway. The various reports and studies on the topic, thus focuses on passenger cars.

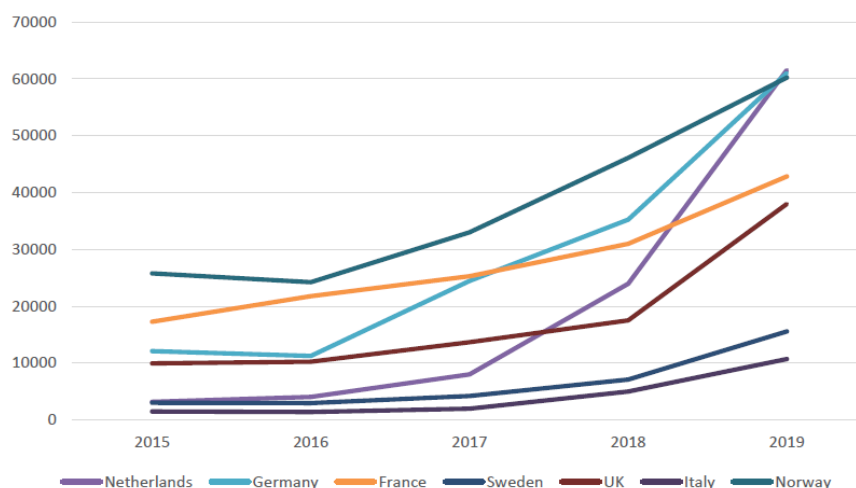
Source: Statistics Norway and The Norwegian Information Council for Road Traffic (OFV).

- (32) As regards FCVs, only 146 FCVs were registered at the beginning of 2020. Only 29 *new* FCVs were registered in 2019,³¹ a reduction from 51 registrations in 2018.³² After an explosion at a hydrogen fuelling station outside Oslo in the summer of 2019, there has only been a single registration of a new FCV in Norway.

3.4.2 The European market for ZEVs

- (33) The Norwegian passenger car market represents roughly 1% of the total European passenger car market. Nevertheless, more than 16% of all new BEVs sold in Europe last year were sold in Norway.
- (34) Figure 2 below shows the number of registered BEV sales in selected European countries from 2015 to 2019. Norway was the largest market for BEVs in Europe for years. It was only in 2019 that Norway was no longer the largest BEV market in terms of number of BEVs sold – as Germany and the Netherlands reached roughly the same sales numbers.

Figure 2: Registered new BEVs in various European countries from 2015 to 2019



Source: European Alternative Fuels Observatory (EAFO)

3.4.3 Price differences in today's market

- (35) In ESA's Decision No 228/17/COL, the Norwegian authorities committed to conducting a mid-term review of the then notified zero VAT rating measures.³³ The review was submitted to ESA on 29 June 2020.³⁴

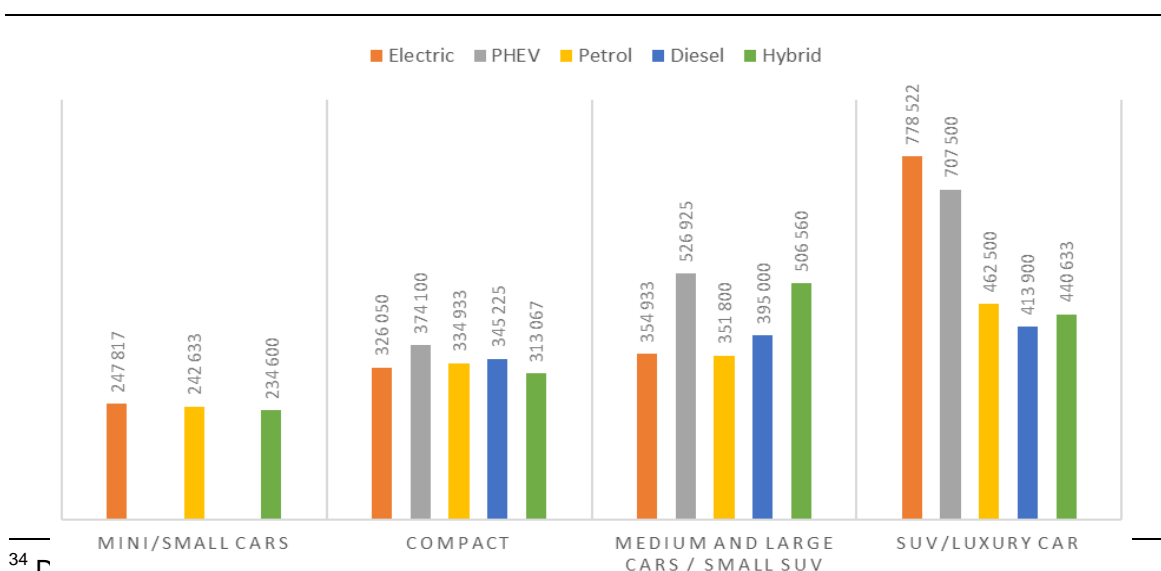
³¹ <https://ofv.no/bilsalget/bilsalget-i-2019>.

³² <https://ofv.no/bilsalget/bilsalget-i-2018>.

³³ ESA Decision No 228/17/COL, paragraph 140.

- (36) In the review, the Norwegian authorities collected data on new passenger car sale in Norway from January to May 2020.³⁵ In total, almost 48 000 cars were sold in those months, and the models included in the analysis comprised about 75% of the sales. The models were classified as belonging to one of four broad segments: (i) mini/small, (ii) compact, (iii) medium and large/small SUVs, and (iv) SUV/Luxury cars. The most affordable version of the most popular models within each segment were chosen for the comparisons. The technologies included in the study were BEVs, hybrids, plug-in hybrid electric vehicles (“PHEV”), petrol and diesel.
- (37) The prices used in the comparison were the “guiding prices” of the cars, which is an estimate of the price paid by the final consumer and includes taxes where applicable. The relevant taxes for non-BEVs are the registration tax and the 25% VAT rate, while a scrap deposit was included for both BEVs and non-BEVs. Furthermore, a one-off cost for a home charging infrastructure priced at NOK 20 000 was assumed for BEVs. The result from the comparison when taxes are included are shown in figure 3 below.
- (38) The comparison shows that, with the current tax regime, purchase prices today are relatively similar between all engine technologies in the segments mini/small and compact. Similarly, the price differences between BEVs and the diesel/petrol cars in the segment comprising medium and large cars/small SUVs are also relatively small. PHEVs, however, are more expensive, which could be explained by their average weight being high, resulting in high registration tax and production cost.
- (39) The results of the price comparison in the SUV/luxury car segment show that BEVs have substantially higher prices than conventional fuel cars, and higher prices than PHEVs. However, as explained by the Norwegian authorities, among the most popular models in this segment, the luxury cars are all BEVs. These cars thus push the average price for BEVs upwards. However, when luxury BEV models are left out, the average of the remaining BEVs is still higher than the non-BEV models.

Figure 3: Purchase price comparisons (including taxes) between BEVs, hybrids, PHEVs, petrol and diesel cars for different segments (January–May 2020)



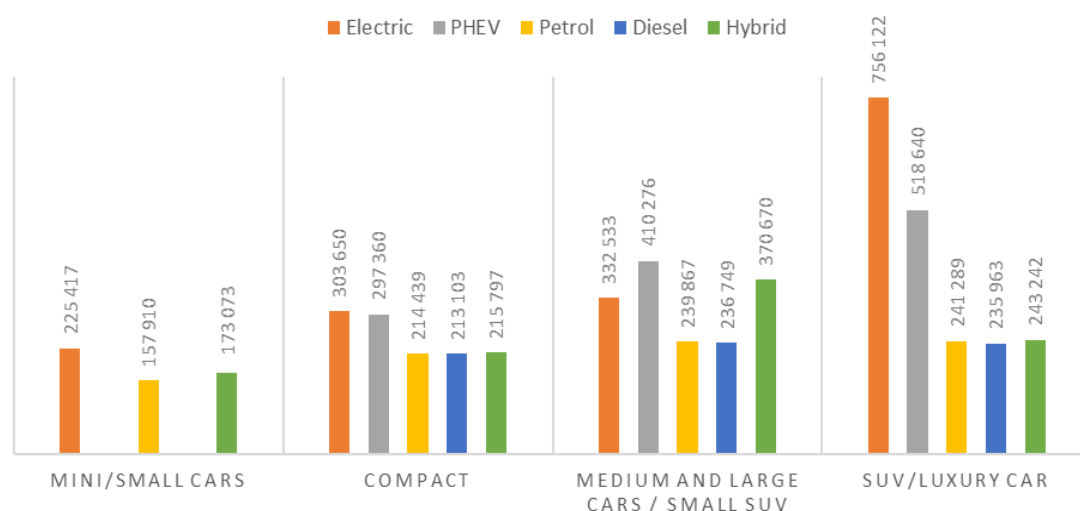
³⁴ Documents No. 111999, 111999 and 111999.

³⁵ The data was retrieved from the databases of the Information Council for Road Traffic (OFV).

Source: The Norwegian Information Council for Road Traffic (OFV)

- (40) The results from the price comparisons when taxes are excluded, are displayed in figure 4 below. BEVs, in all segments, are still today substantially more expensive than the comparable petrol and diesel models before taxes are added to the purchase prices.
- (41) According to the numbers presented in figure 4, the estimated before-tax price difference between BEVs and the fossil-fuelled cars in the mini/small segment is around NOK 67 000. In the compact segment, the estimated price difference is around NOK 90 000. In the segment for medium and large cars/ small SUVs, the price difference is around NOK 93 000. Finally, in the SUV/luxury car segment, the price differences are more than NOK 500 000.

Figure 4: Purchase price comparisons (excluding taxes) between BEVs, hybrids, PHEVs, petrol and diesel cars for different segments (January–May 2020)



Source: The Norwegian Information Council for Road Traffic (OFV)

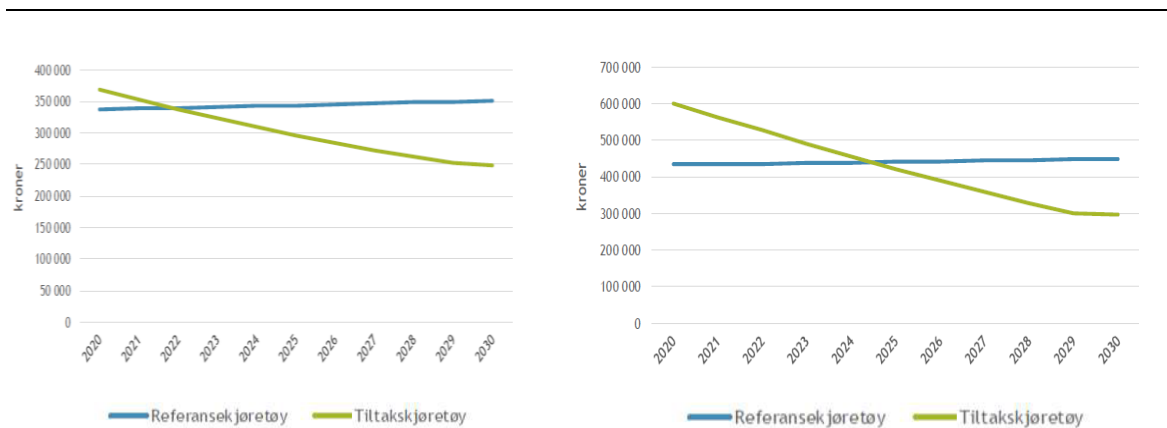
3.4.4 Expected purchase cost developments

- (42) In *Klimakur 2030*, the authors simulate the purchase cost of BEVs compared to conventional internal combustion engine vehicles (“ICEV”). The simulation is based on two selected ICEV reference cars, the Volkswagen Golf (representing small cars) and the Volkswagen Tiguan (representing large cars), which have then been compared to cost-simulated BEV versions of those same ICEVs (a hypothetical small and large BEV). Figures 5 and 6 below show the result of the simulations, where the green lines represent the BEVs, while the blue lines represent the ICEVs.
- (43) The authors of the report find that, before taxes (VAT and registration tax), the small BEV today costs around NOK 130 000 more than the small ICEV reference

car. In the large-size segment, the BEV is estimated to be more than twice as expensive.

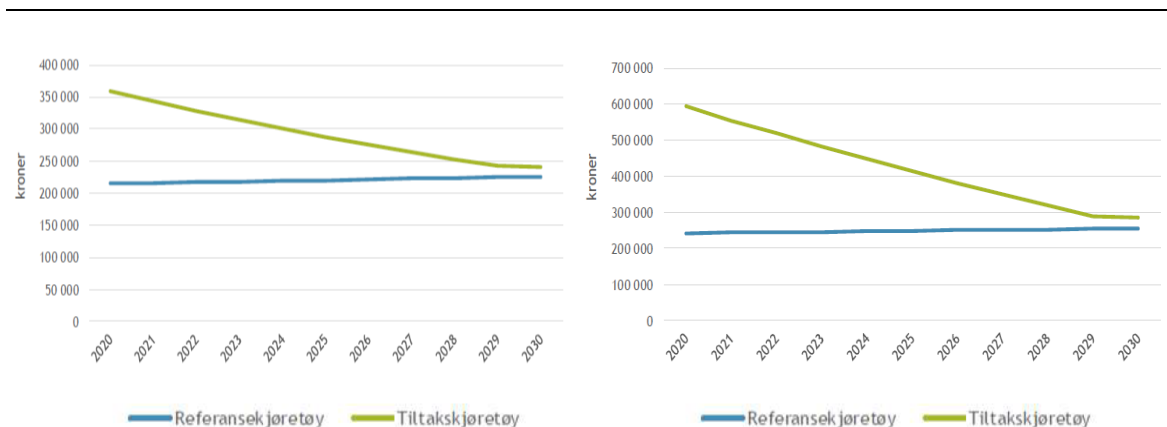
- (44) *Klimakur 2030* expects, however, that the cost of passenger BEVs, on average, will decrease by 4–5% annually from 2021 to 2030.³⁶ This projection relies on a continued substantial cost reduction for batteries, dedicated production lines for BEVs and a transition to large-scale BEV production.
- (45) The cost-simulations further show that, when including taxes in the purchase cost and assuming a continuation of the current tax regime, the small BEV becomes economical compared to the reference ICEV around 2022. The same scenario for the large BEV is expected to materialise around 2025.

Figure 5: Projected cost development, including taxes, for small (left) and large (right) cars. The green lines represent the BEVs, while the blue lines represent the ICEVs.



Source: *Klimakur 2030*

Figure 6: Projected cost development, excluding taxes, for small (left) and large (right) cars. The green lines represent the BEVs, while the blue lines represent the ICEVs.



Source: *Klimakur 2030*

- (46) As regards the market for FCVs, the *Klimakur 2030* report projects that BEVs will be more competitive than FCVs at least until 2030. The authors of the report thus consider BEVs to be the only realistic zero-emission technology in the passenger

³⁶ *Klimakur 2030*, page 42

car segment, as the production cost of the FCVs, the fuel cells and the hydrogen fuel itself rely on large-scale production.

- (47) Furthermore, a 2020 report³⁷ conducted by the Norwegian Institute of Transport Economics (“TØI”) on behalf of the Norwegian Ministry for Climate and Environment, provides a review of the potential for meeting the market share targets for ZEVs, as set out in the National Transport plan for 2018–2029.
- (48) In the report, the authors simulate purchase cost for BEVs and other vehicles in 2019 and 2025 for different car segments. The results of the simulation, when taxes are *included* in the purchase cost, are presented in figure 7 below. The results when taxes are *excluded* from the cost calculation are displayed in figure 8 below.
- (49) The authors estimate that in 2019, small, compact and medium-size BEVs had approximately the same purchase cost as gasoline and diesel cars, due to the favourable tax regime on BEVs, while in the larger size and luxury segments, the purchase costs of BEVs were a little lower compared to fossil fuel cars. Purchase cost for FCVs, however, were significantly higher than all the other technologies.
- (50) The TØI 2020 report further projects that in 2025, when including taxes and assuming a continuation of the current tax regime, the cost for BEVs in all segments will be lower than fossil fuel cars. However, the report also finds that when taxes are excluded from the cost estimates, BEVs were a substantially more costly alternative in 2019 and would continue to be more expensive in 2025.

Figure 7: Estimated purchase cost including taxes for passenger cars in 2019

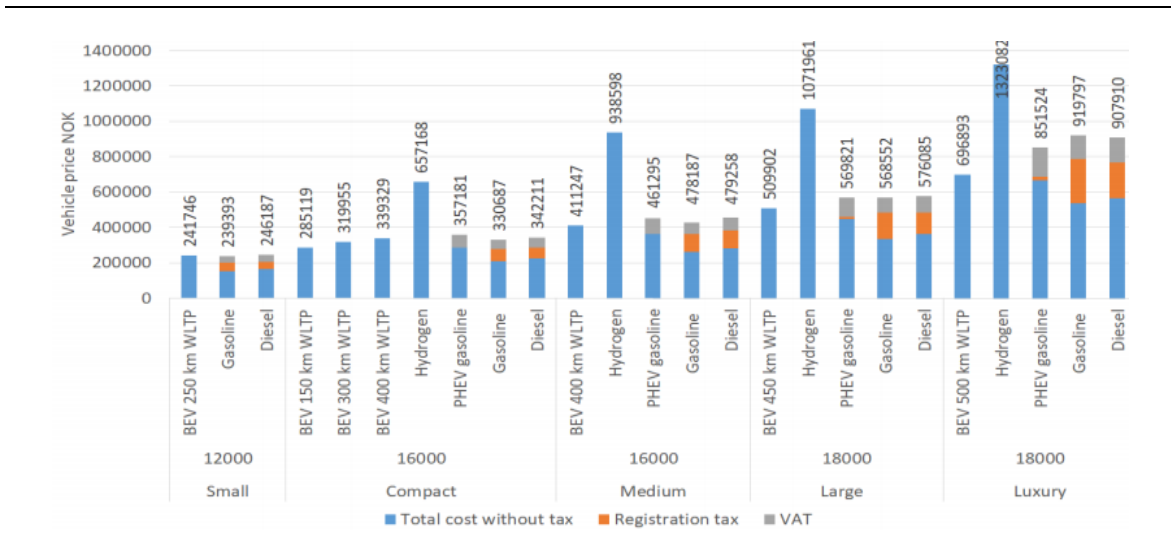
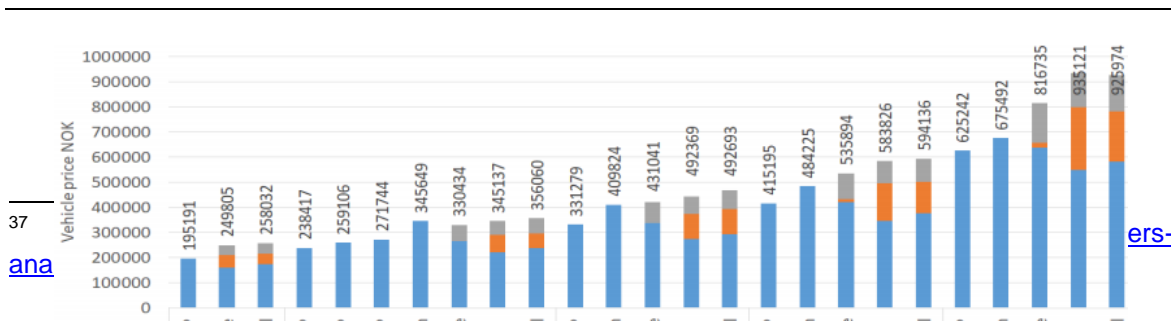


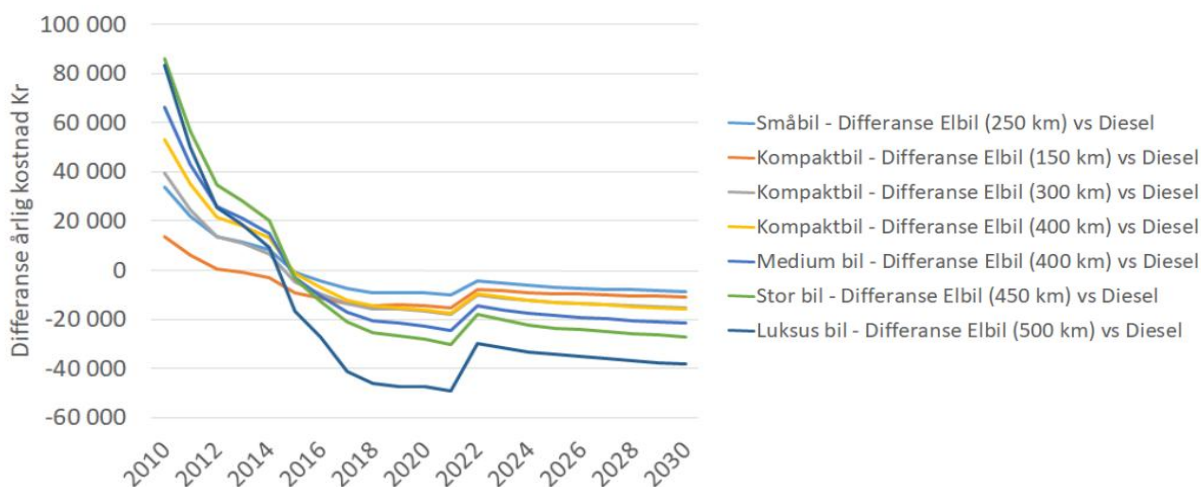
Figure 8: Estimated purchase cost including taxes for passenger cars in 2025



Source: *The Norwegian Institute of Transport Economics (TØI)*

- (51) The figures above show the difference in purchase cost for different types of vehicles, but they do not take into account any differences in cost over the lifetime of the car. A BEV owner will, for example, have lower running expenditures related to fuel costs and maintenance. In addition to the comparisons of purchase cost, the TØI 2020 report thus presents calculations of the annualised total ownership cost (“TOC”) of the vehicle, which includes fuel and maintenance costs. The comparison is shown in figure 9 below, which assumes a scenario where the current zero VAT rate on BEVs is removed in 2022 and replaced by the general VAT rate of 25%.
- (52) TØI’s calculations show that the annual total cost of ownership is lower for BEVs compared to conventional diesel vehicles already today. Removing the zero VAT rate in 2022 would significantly increase the total annual cost of BEVs and reduce the advantage compared to diesel vehicles. However, even with the introduction of the full general 25% VAT rate in 2022, BEVs would still have a total ownership cost advantage.

Figure 9: Differences in the annual total ownership cost between small, compact, medium large and luxury diesel cars and BEVs with various driving ranges (km), assuming an introduction of the general 25% VAT rate on BEVs from 2022 onwards.



Source: *The Norwegian Institute of Transport Economics (TØI)*

3.4.5 Non-price factors affecting ZEV sales

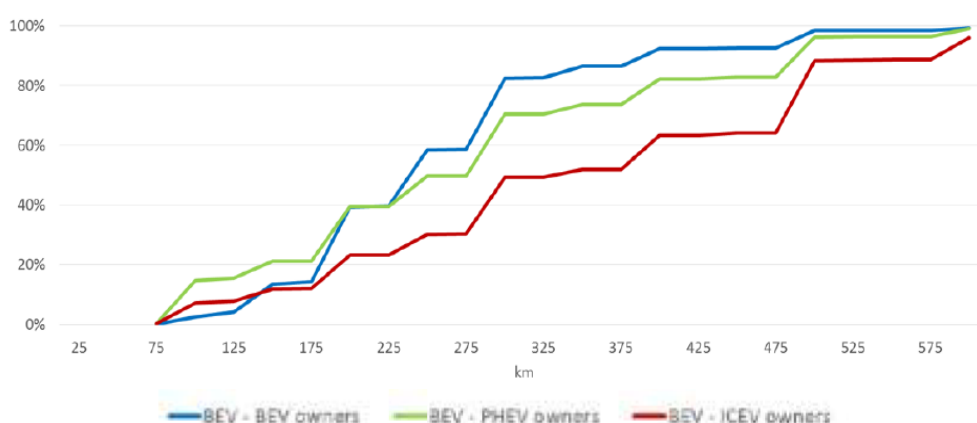
3.4.5.1 Introduction

- (53) The Norwegian authorities consider that there are important disadvantages related to buying a BEV – perceived and real. Such disadvantages are, to some degree, non-monetisable, such as driving range limitations and charging time. Other disadvantages are uncertainties regarding the expected lifetime of batteries and the BEVs' value in the second-hand market. Continued technological development is expected to reduce these disadvantages, but, according to the Norwegian authorities, they remain important factors in the short term, so in 2021 and 2022, which is the time span of the notified measures.

3.4.5.2 Limited driving range

- (54) Norway is a sparsely populated country with long distances; the battery range (km) of BEVs is thus a big concern for many buyers. For example, in a 2019 survey conducted by TØI, ICEV owners listed driving range as the most important disadvantages of BEVs.³⁸
- (55) A report by the Norwegian Environment Agency³⁹ evaluates the range requirements of car owners in Norway.⁴⁰ The findings of the report are shown in figure 10 below. The red line in the figure shows that at least 300 km driving range in winter conditions is necessary for 50% of the ICEV owners to change to a BEV. For 80% of the ICEV owners to switch, a range of almost 500 km is needed. Yet, an overview of BEV models currently on and coming to the Norwegian market provided by TØI show that most models have a driving range below 300 km during wintertime.

Figure 10: The relationship between range and the share of consumer wishing to buy a BEV.



Source: The Norwegian Environment Agency

³⁸ TØI [Battery electric vehicle user experiences in Norway's maturing market](#). Report No 1719/2019.

³⁹ The [Norwegian Environment Agency](#) is a government agency under the Ministry of Climate and Environment tasked with reducing GHG emissions, manage nature and prevent pollution.

⁴⁰ Miljødirektoratet. [Tiltakskostnader for elbil](#). Rapport M-620, 2016, page 56.

3.4.5.3 Charging difficulties

- (56) Charging the BEVs might be challenging due to the more limited availability of charging stations. Recharging the battery also takes a longer as compared to refuelling a tank with petrol or diesel. With a fast-charging station, it takes a minimum of 20 minutes to recharge a BEV fully. More common chargers take 5 to 8 hours, leaving the vehicle out of service for a number of hours a week. Furthermore, if fast-charging stations are occupied or out of service, the BEV owners risk a long wait or running out of power for the car.

3.4.5.4 Limited range of models

- (57) The number of BEV models available on the market has increased over time and is expected to increase further. However, there is still variation in availability and price ranges within the segments. The Norwegian authorities thus consider that the more limited selection of BEVs could induce the purchase of a BEV that does not meet the customers' needs to the same extent as a fossil-fuelled alternative.

3.4.5.5 Market uncertainties

- (58) According to the Norwegian authorities, there is also a high degree of uncertainty regarding future market developments for ZEVs, in particular the functioning of the second-hand market and battery durability. Both real and perceived uncertainty regarding the expected costs and benefits make it more difficult for consumers to fully understand the implications of buying and owning a ZEV. In particular, according to the Norwegian authorities, there have been, and still remain, uncertainties regarding the expected lifetime of the battery of a BEV relative to the lifetime of the car itself. As batteries constitute a major share of the total cost of a BEV, the risk of having to undertake a costly change of battery during the life span of a vehicle, is expected to remain a deterrent for many consumers when facing the choice between a BEV and a conventional car.

3.4.5.6 Myopic behaviour

- (59) There is also a risk that consumers focus more on cost and benefits today than on costs and benefits in the future, so-called myopic behaviour. Some consumers may disproportionately favour effects in the near-term relative to mid-and long-term effects. For example, the fact that BEVs have an annual total ownership cost advantage already today may not be fully considered.

3.5 The notified prolongation of the measures

- (60) The notification concerns a prolongation of the zero VAT rating measures (see paragraph (2)).

3.6 National legal basis, the aid granting authority and beneficiaries

- (61) The VAT exemptions and zero rates are laid down in the VAT Act.
- (62) As explained by the Norwegian authorities, the obligation to pay VAT, and the subsequent rates are adopted through the annual (plenary) decision of the Norwegian Parliament. Whereas the VAT Act derives its legal authority from the plenary decision, the act itself is not subject to annual adaptation.
- (63) The aid granting authority is the Ministry of Finance.
- (64) The Norwegian authorities consider that the direct beneficiaries of the zero VAT rating measures are the end-users since VAT is a tax on final consumption. The

term end-users comprise both private individuals (not qualifying as undertakings) and undertakings. Regarding the latter category, the Norwegian authorities have explained that without the zero VAT rating, VAT would be a cost to the undertaking, as the right to deduct input VAT does not include VAT on passenger cars (see paragraph (18)).

- (65) The Norwegian authorities also consider that manufacturers and dealers of ZEVs and batteries may obtain an indirect advantage.

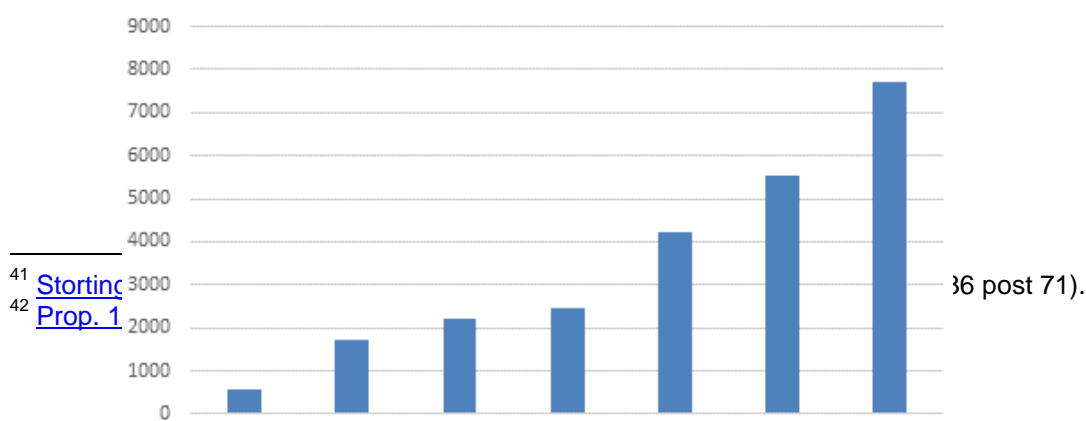
3.7 Form of aid, eligible costs and intensity

- (66) The aid is granted in the form of a zero VAT rating. The general VAT rate in Norway is 25% of the net price of a good or service.
- (67) The Norwegian authorities have confirmed that all models or types of ZEVs are eligible for the measures. The Norwegian authorities have further confirmed that all end-users, private individuals and undertakings alike, can acquire, import or lease ZEVs or batteries, and so benefit from the measures.
- (68) More specifically, the Norwegian authorities have explained that, under Section 6-7 subsection (1) of the VAT Act, the measures apply to vehicles that fall under Parliament's decision on motor vehicle registration tax⁴¹ section 5 subsection (1) letter (i), and which must be registered pursuant to the Act relating to Road Traffic.
- (69) The scope of the registration tax is laid down in Section 2 of the decision on registration tax. The registration tax covers most types of motor vehicles that need to be registered for use on public roads. As explained by the Norwegian authorities, the following types of vehicles have until now been available as ZEVs: passenger cars, motorcycles, vans and light trucks.
- (70) The measures cover part of the expenditure incurred for the purchase, lease or import of ZEVs or batteries. In particular, the measures aim to compensate for the extra cost and other disadvantages of ZEVs compared to fossil-fuelled vehicles.

3.8 Duration and budget

- (71) The measure is notified for a period of two years from 1 January 2021 until 31 December 2022. The zero VAT rating measures result in a loss of tax revenue to the State, the size of which depends on actual vehicle sales in a given year. In the Government's proposal for the 2021 budget to Parliament, the zero VAT rating measures expenditure is estimated to have amounted to NOK 7.1 billion in 2019 and NOK 6.7 billion in 2020.⁴² Figure 11 below shows the estimated yearly tax expenditure from 2013 to 2019.

Figure 11: Estimated yearly tax expenditure from 2013 to 2019. Million NOK in 2019-prices



Source: *The Ministry of Finance.*

4 Presence of state aid

- (72) Article 61(1) of the EEA Agreement reads as follows: “Save 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.”
- (73) The qualification of a measure as aid within the meaning of this provision therefore requires the following cumulative conditions to be met: (i) the measure must be granted by the State or through State resources; (ii) it must confer an advantage on an undertaking; (iii) favour certain undertakings (selectivity); and (iv) threaten to distort competition and affect trade.
- (74) In its Decision No 228/17/COL, ESA considered that the currently prolonged zero VAT rating measures constituted state aid to the indirect beneficiaries, as summarised below.
- (75) ESA found that the measures constituted state resources as they represented foregone tax revenues, which was granted by the State via legislative acts.
- (76) Regarding economic advantage to undertakings, ESA considered that the measures indeed conferred an economic advantage on buyers, importers or lessors of ZEVs, and buyers or importers of batteries for company use.⁴³ ESA considered that the buyers, importers or lessors of ZEVs and the buyers or importers of batteries were the recipients of a direct advantage. Private persons, not engaged in economic activities, were not considered subject to the state aid rules.
- (77) Furthermore, ESA identified an indirect advantage in favour of the manufacturers and dealers of ZEVs or batteries (those indirect beneficiaries were in that decision, and are in the present decision, referred to as “the manufacturing sector”). ESA considered this indirect advantage to be the stimulation of demand for ZEVs and batteries compared to a reference situation in which no such aid would be granted.
- (78) As regards selectivity, ESA considered that the advantages applied to all economic operators and were not selective for the direct beneficiaries qualifying as undertakings.⁴⁴ In contrast, ESA considered already in its Decision No

⁴³ ESA Decision No 228/17/COL, section 4.2.

⁴⁴ ESA Decision No 228/17/COL, paragraph 69.

150/15/COL, and confirmed in Decision No 228/17/COL, that the measures were selective for the indirect beneficiaries (the manufacturing sector).⁴⁵

- (79) ESA further considered that the manufacturing sector was or could be active in markets open to competition within the EEA.⁴⁶ The selective economic advantage was thus liable to distort or threaten to distort competition on these markets.
- (80) ESA also found that manufacturers of conventional cars could find themselves able to trade fewer vehicles in Norway. Opportunities for undertakings established in other EEA States to offer their services could also be reduced. Consequently, the measures were liable to affect trade within the EEA.
- (81) There is nothing in the present case to alter the conclusions drawn by ESA in its Decision No 228/17/COL. ESA thus considers that the notified zero VAT rating measures constitute state aid within the meaning of Article 61(1) of the EEA Agreement. ESA considers that these measures grant aid to the indirect beneficiaries (the manufacturing sector). This view is moreover accepted by the Norwegian authorities in the notification.

5 Procedural requirements

- (82) Pursuant to Article 1(3) of Part I of Protocol 3: "The EFTA Surveillance Authority shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. ... The State concerned shall not put its proposed measures into effect until the procedure has resulted in a final decision."
- (83) The Norwegian authorities have submitted a notification of the measures and have not let the prolongation enter into force. They have therefore complied with the obligations under Article 1(3) of Part I of Protocol 3.

6 Compatibility of the prolongation of the measures

6.1 Compatibility assessment in Decision No 228/17/COL

- (84) As stated in ESA's Decision No 228/17/COL, ESA can declare state aid compatible with the functioning of the EEA Agreement under its Article 61(3)(c), provided that certain compatibility conditions are fulfilled.⁴⁷
- (85) ESA also considered that there were no state aid guidelines applicable. ESA's guidelines on State aid for environmental protection and energy 2014–2020 ("the EEAG")⁴⁸ 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 [...]".

⁴⁵ ESA Decision No 228/17/COL, paragraph 70. See also [ESA Decision No 329/09/COL](#) of 15 July 2009 on the Norwegian scheme on support for alternative, renewable heating and electricity savings in private households, chapter II.1.2.2.

⁴⁶ ESA Decision No 228/17/COL, section 4.4.

⁴⁷ ESA Decision No 228/17/COL, paragraph 83.

⁴⁸ Section 1.1 (paragraph 10) of the EEAG. OJ L 131, 28.5.2015, p. 1 and EEA supplement to the OJ No 30, 28.5.2015, p. 1.

(86) Therefore, ESA assessed the measures directly under Article 61(3)(c) of the EEA Agreement, and based its assessment on the following common assessment principles:⁴⁹

- 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.

6.2 Compatibility assessment in the present decision

(87) Since the adoption of ESA's Decision No 228/17/COL, no changes have been introduced to the state aid guidelines that would change the above conclusion regarding the direct application of the EEA Agreement. Accordingly, ESA considers that the prolongation of the measures should be assessed directly under Article 61(3)(c) of the EEA Agreement, on the basis of the above assessment principles.

6.3 Objective of common interest

(88) State aid must be aimed at a well-defined objective of common interest that has been recognised by the Contracting Parties to the EEA Agreement.

(89) Under the Paris Agreement, Norway has committed to reducing GHG emissions by at least 50% and towards 55% by 2030 compared to 1990-levels. Through participation in the Effort Sharing Regulation, Norway is further committed to reducing its non-ETS covered emissions by 40% by 2030 compared to 2005-levels. The Norwegian political ambition is, however, to reduce its non-ETS emissions by 45% by 2030 and thus go beyond its legal requirement (see paragraph (10)).

(90) More than half of Norway's GHG emissions is from the non-ETS covered sectors, where transport is the primary source of emissions.⁵⁰ Within the transport sector, the passenger car segment is the largest emitter with 4.7 million tCO₂e in 2018.⁵¹ This is almost a third of the total GHG emissions in the transport sector.

(91) In the White Paper on the National Transport Plan for 2018–2029, the Norwegian authorities established a target that all new passenger cars and light vans should be ZEVs by 2025. The *Klimakur 2030* report estimated that reaching the targets for ZEVs uptake would contribute to a substantial reduction in CO₂ emissions.⁵²

(92) Reducing CO₂ emissions is one of the objectives of the EEA environmental policy. As stated in the European Green Deal, a 90% reduction in transport emissions is needed to achieve climate neutrality by 2050 (see paragraph (11)).

⁴⁹ ESA Decision No 228/17/COL, paragraph 85.

⁵⁰ *Klimakur 2030*, published on 31 January 2020, page 28.

⁵¹ <https://miljostatus.miljodirektoratet.no/tema/klima/norske-utslipp-av-klimagasser/klimagassutslipp-fra-veitrafikk/>.

⁵² *Klimakur 2030 summary report*, published on 31 January 2020, page 13.

- (93) The zero VAT rating measures are meant to incentivise the purchase or lease of ZEVs at the expense of fossil fuel cars, and thereby facilitate increasing the market share for ZEVs in Norway. ESA considers that increased uptake of ZEVs continues to contribute to reduced GHG emissions, in line with Norway's and the EEA's policy objectives. ESA thus concludes that the aid aims at an objective of common interest, i.e. the promotion of environmental protection, in accordance with Article 61(3)(c) of the EEA Agreement.

6.4 Need for state intervention

- (94) In order to assess whether state aid is effective in achieving 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 about a material improvement that the market alone cannot deliver, for example by remedying a market failure or addressing an equity or cohesion concern.
- (95) The Norwegian authorities have provided updated information on purchase price differences between BEVs and conventional cars in today's market (see paragraphs (35) to (41)). The price comparison shows that the prices of BEVs, in all segments, are still substantially higher than comparable fossil-fuel cars before taxes are added. The same conclusion is drawn in the cost simulations in the *Klimakur 2030* report and in TØI 2020 (see paragraphs (42) to (50)).
- (96) In its Decision No 228/17/COL, ESA considered that environmentally harmful CO₂ (and other) emissions represent a negative externality that economic agents may disregard when deciding to buy a new vehicle. Economic theory suggests that these agents may not be willing to pay the extra costs linked to environmental protection if those costs are not compulsory or subsidised; in other words, consumers have little incentive to acquire (more costly) goods that limit environmental harm, since consumers typically consider only their private costs and benefits, without taking into account the environmental effect of their choices. Environmental externalities, therefore, represent a market failure, which justify state intervention.⁵³
- (97) Taking into account the above, ESA considers that negative externalities continue to be present today, and that there is therefore still a need for state intervention.

6.5 Appropriateness of state aid

- (98) State aid must be an appropriate instrument to address the identified objective of common interest. An aid measure is not compatible with the functioning of the EEA Agreement if the same positive contribution to the common objective is achievable through other less distortive policy instruments or other less distortive types of aid.
- (99) The objective of the notified prolongation of the zero VAT rating measures is to facilitate achieving Norway's environmental policy aims (see section 3.1) by enhancing the market share of ZEVs in Norway.
- (100) According to the information submitted by the Norwegian authorities, the purchase cost difference between ZEVs and conventional vehicles remains in favour of the

⁵³ ESA's Decision No 228/17/COL, paragraph 94.

latter (see paragraphs (35) to (41)). Moreover, BEVs continue to have several non-price drawbacks for consumers (see section 3.4.5).

- (101) The Norwegian authorities have further explained that the zero VAT rate is both a substantial economic incentive in favour of ZEVs and a tool that is intuitive to understand and to calculate the impacts of at the time of making the purchasing decision. Incentives at the time of buying a vehicle can be more effective in stimulating demand than incentives over the lifetime of owning a car. This is supported by economic theory, which suggests that consumers may disproportionately favour effects in the near-term relative to mid-and long-term effects, so-called myopic behaviour (see paragraph (59)).
- (102) Concerning the zero VAT rating of batteries, the Norwegian authorities have explained that batteries continue to be a large cost component of a BEV, and there are still uncertainties as to whether a BEV owner may need to change the battery of the car during the lifetime of the car. The Norwegian authorities consider that this uncertainty may deter uptake of ZEVs, and that it is thus necessary to have a zero VAT rating on the import and sale of batteries in order to limit this potential barrier.
- (103) In light of the above, ESA considers that state aid in the form of a zero VAT rating is an appropriate instrument to stimulate uptake of ZEVs, and thereby contribute to achieving the objective of reducing CO₂ emissions from transport.

6.6 Incentive effect

- (104) 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.
- (105) The objective of the zero VAT rating measures is to enhance the market share of BEVs. The general proposition is that the price of vehicles influences demand: lower prices are expected to increase demand, while increased prices are expected to lower demand. The zero VAT rate on ZEVs is thus meant to stimulate demand for ZEVs at the expense of conventional cars.
- (106) The information submitted by the Norwegian authorities shows that Norway has a much higher market share of BEVs than other European countries (see sections 3.4.1. and 3.4.2). This situation is, to a large degree, considered to be the result of the support measures in place in Norway. TØI 2020 studies uptake of BEVs in countries that have financial incentives in place to stimulate the sale of BEVs. The authors conclude that countries with the most incentives have the highest BEV market shares. Furthermore, in an *Elbilisten* survey,⁵⁴ 69% of the respondents considered the zero VAT as the most important BEV advantage out of three. When asked if they would buy a BEV today without the zero VAT rate, 47% answered 'no'.
- (107) The Norwegian authorities have further provided updated information on price differences between BEVs and conventional cars in today's market (see paragraphs (35) to (41)). The price comparison shows that the prices of BEVs, in all segments, are still substantially higher than comparable fossil-fuel cars before

⁵⁴ Document No 1162932. *Elbil og momsfristak*. Norsk Elbilforening, 2019, page 8.

taxes are included. The same conclusion is drawn in the cost simulations in *Klimakur 2030* and TØI 2020. In this regard, a 2018 TØI study⁵⁵ further estimates that removing the zero VAT rate and introducing 25% VAT would result in a 70% reduction in BEV-sales.

- (108) The Norwegian authorities have also conducted an empirical study that supports the claim that the zero VAT rate actually results in lower price for the consumer.⁵⁶ By comparing the tax-adjusted price differences between conventional cars and BEVs in Norway and Sweden, the empirical model uses a similar setup to the difference-in-difference methodology. The study finds that the average difference-in-price-difference given by the model is negative, suggesting that Norwegian BEV prices for end-users reflects the absence of the VAT rate.
- (109) Based on the above, ESA considers that the zero VAT rating measures lead to an increase in the number ZEVs purchased by consumers that, in turn, have an effect on the behaviour of the manufacturing sector. ESA concludes that the measures continue to have an incentive effect.

6.7 Proportionality

- (110) State aid is proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the identified objective of common interest.
- (111) As explained by the Norwegian authorities, the prolongation of the zero VAT rating measures has an overall objective of increasing market shares for ZEVs by reducing prices of ZEVs and compensate for other disadvantages of using ZEVs, such as limited range, longer charging time, a limited range of models and uncertainties regarding the second-hand market (see section 3.4.5).
- (112) Regarding the difference in the purchasing price between electric and conventional vehicles, the Norwegian authorities have provided updated information on price differences between BEVs and conventional cars in today's market. The price comparison is based on sales data from January to May 2020.
- (113) According to the 2020 data, when taxes were added to the prices of the non-BEVs, the sales prices of BEVs in the segment for mini/small cars, as well as compact cars, are similar to the prices of comparable petrol and diesel cars. Similarly, in the segment for medium and large/small SUVs, the difference in sales prices is small. Finally, in the segment for SUV/Luxury cars, prices of BEVs remain higher (see paragraphs (35) to (41)).
- (114) The findings of the Norwegian authorities are supported by the *Klimakur 2030* report, which estimated that when including taxes, and assuming a continuation of the current tax regime, both small and large BEVs still cost more today, but would become economical compared to ICEVs around 2022 and 2025, respectively. The findings of the Norwegian authorities are also supported by TØI 2020, which found that, when taxes were included in the cost, small, compact and medium-size BEVs had approximately the same purchase cost as fossil fuel cars in 2019, while in the large and luxury segments, the cost of BEVs was comparatively a little lower (see paragraphs (42) to (50)).

⁵⁵ Transportøkonomisk institutt. [Etterspørselen etter nye personbiler analysert ved hjelp av modellen BIG](#). Rapport No 1665/2018.

⁵⁶ Documents No 1141858 and 1141864

- (115) The price comparison conducted by the Norwegian authorities and the cost simulations presented in the *Klimakur 2030* and the TØI 2020 reports show that, with the current favourable tax regime for BEVs, the prices/cost of BEVs are brought to a level similar to that of comparable conventional fuel cars (see paragraph (35) to (41)). *Klimakur 2030* and TØI 2020 also find, however, that the cost differences are expected to disappear or become significantly narrower in the coming years.
- (116) In its Decision No 228/17/COL, ESA excluded overcompensation for several reasons. First, the measures assessed only entailed state aid for the indirect beneficiaries of such measures (the manufacturing sector). Aid intensity received by those beneficiaries is 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). ESA concluded that the notified measures were proportionate to the aim to be achieved without resulting in overcompensation.
- (117) Information submitted by the Norwegian authorities shows that BEVs will have several non-price drawbacks for consumers for some time still (see section 3.4.5). In order to enhance the market share of BEVs further, measures beyond levelling out prices may thus be needed.
- (118) ESA considers that, taking into account the information submitted by the Norwegian authorities on the market developments and projections (see section 3.4), Norway's climate goals and the relatively short duration of the prolongation, the measures continue to be proportionate to the aim to be achieved. The prolongation allows for the stimulation of the demand for ZEVs without resulting in overcompensation.
- (119) ESA further notes that, like at the time of the adoption of its Decision No 228/17/COL, there is no discrimination between manufacturers or between dealers. The lack of discrimination contributes to ensuring the proportionality of the prolongation of the measures.
- (120) As regards the FCVs, the information submitted by the Norwegian authorities shows that the purchase cost is still high and is expected to remain higher than the costs of both conventional vehicles and BEVs in the foreseeable future.
- (121) Based on the above, ESA concludes that the prolongation of the zero VAT rating measures is proportionate.

6.8 Avoidance of undue negative effects on competition and trade

- (122) 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.
- (123) The currently notified prolongation of the measures, as the measures assessed in ESA's Decision No 228/17/COL, only grant aid to the indirect beneficiaries, not to their direct beneficiaries. As ESA noted in its Decision No 228/17/COL, that feature of the measure implies limited potential distortion of competition and trade. There is also no discrimination between operators in the manufacturing sector.

(124) Furthermore, the benefits obtained by the indirect beneficiaries, i.e. the increase of demand for ZEVs, continues to be necessary for achieving the objective pursued by the scheme. Therefore, the measures do not entail undue distortions of competition and trade, and the overall balancing exercise has a positive outcome.

6.9 Transparency

(125) According to the general transparency requirement, only aid granted in a transparent manner can be approved on the basis of Article 61(3)(c) of the EEA Agreement. The Norwegian authorities have committed to publishing information about the aid granted in accordance with the general transparency requirement. The Norwegian authorities will publish the full text of the aid scheme and make the necessary disclosures on a central website.⁵⁷

7 Conclusion

(126) On the basis of the foregoing assessment, ESA considers that the prolongation of the zero VAT rating measures constitutes state aid with the meaning of Article 61(1) of the EEA Agreement. Since no doubts are raised that this aid is compatible with the functioning of the EEA Agreement pursuant to its Article 61(3)(c), ESA has no objections to the notified prolongation of the measures.

For the EFTA Surveillance Authority,

Yours faithfully,

Bente Angell-Hansen
President
Responsible College Member

Frank J. Büchel
College Member

Högni Kristjánsson
College Member

Carsten Zatschler
Countersigning as Director,
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*This document has been electronically authenticated by Bente Angell-Hansen,
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⁵⁷ The information will be available on the following website: <https://data.brreg.no/rofs/>