Article

Jette Thygesen*

What are the rules for the reimbursement of electricity tax used to charge electric cars in Denmark, Sweden, and Germany?[1]

https://doi.org/10.2478/ntaxj-2023-0004
Received Mar 08, 2022; accepted Feb 01, 2023

Abstract: In Denmark, the rules on the reimbursement of electricity charges for charging electric cars have been introduced under the provisions of Act No. 1353 of December 21, 2012. Contrary to custom, the rules have not been introduced into the Electricity Tax Act itself, but are only laid down in the Special Act. However, the fact that the rules have given rise to problems of interpretation is due not only to the unusual way in which they were introduced, but also to the ambiguities caused by the legal text itself, and to the way in which the Danish tax authorities administer the rules.

In this article I will highlight some of the areas where the rules have caused—and continue to cause—problems of interpretation. I will therefore highlight requirements for changing stations; interpretation of the company's bill and risk; the supply of electricity to the charging point; and the correlation between the reimbursement rule and the electric heating rules, the renewable energy rules, the Danish Value Added Tax Act, and the European internal market rules.

In addition, I will explain the rules for the reimbursement of electricity tax for charging electric cars in Sweden and Germany.

Finally, I shall examine the possibility of support for the installation of charging points in the three countries.

1 Introduction

In Denmark, the reimbursement of tax on electricity for charging batteries for electric cars before 2010 was subject to the general rules for the reimbursement of electricity tax.[2] The general rules of Section 11(1)(1) of the Electricity Tax Act laid down that a company which used electricity for a taxable activity could apply for reimbursement of the tax. As a result, it was essential to determine when the electricity was to be considered consumed during the charging. The Tax Assessment Council was therefore asked to a provide binding ruling on where electricity consumption took place in connection with the charging of electric cars.[3] Was it in connection with the charging or in connection with the driving? If it happened when charging the electric car, the company responsible for the actual charging was considered to be the consumer of the electricity, and thus the company was entitled to reimbursement. If it happened in connection with driving, the individual motorist was considered to be the consumer, and thus the possibilities for reimbursement were minimal. The Tax Assessment Council found that the consumption of electricity happened in connection with the actual charging. The decision led to a brief indicative guideline, in which the Danish Tax Agency stated that:

> companies whose service activities involve charging batteries for electric cars are subject to the rules on reimbursement of electricity tax, provided that it is the company's electricity provider or another provider with whom the company cooperates that supplies the electricity for charging, regardless of where and under what conditions the charging of the batteries for electric cars takes place. [4]

Since this is by no means an unambiguous interpretation of the rules, the law was changed in December 2012,[5] when

***Corresponding Author: Jette Thygesen:** Department of Law, University of Southern Denmark; Email: jett@sam.sdu.dk

2 See Section 11, (1) and (16) of LBK No. 421 of 05/03/2006, Bekendtgørelse af lov om afgift af elektricitet (Den.).

3 The actual decision has not been made public. See also the indicative guideline SKM2011.259.SKAT (Den.), https://skat.dk/skat.aspx?oID=1943959&chk=217592

4 See the indicative guideline SKM2011.259.SKAT (Den.), https://skat.dk/skat.aspx?oID=1943959&chk=217592
(Note: Translated from Danish).

5 Act. No. 1353 of December 21, 2012, amending the Electricity Tax Act and various other Acts and repealing the Act amending the Act on the Taxation of Waste and Raw Materials. This is a special provi-

explanatory notes[6] stated that the bill contained "a clarification and dissemination of the rules for the reimbursement of electricity tax on electricity consumed for commercially charging batteries for registered electric cars."

The proposal sought to put into practice a political desire that all known models of commercial charging of batteries for electric cars should be subject to processing tax[7] only when charging at charging points operated at the company's expense and risk, or when charging at battery change stations. This meant—and still means—that companies whose activities involve charging batteries for registered electric cars at charging points, as well as companies that use electricity to charge batteries for registered electric cars at battery change stations, are reimbursed for electricity tax, as the electricity is considered to be consumed by these companies.

The rule was introduced in Section 21 of the Amending Act, which states the following (translated from Danish):

> Subsection 1. The tax is refunded on the taxable electricity consumed by the company for charging batteries for registered electric cars. The refund includes electricity used in charging points, including rapid chargers operated at the company's expense and risk, and electricity used to charge batteries at battery change stations. The refund is also granted in accordance with the other provisions of the Electricity Tax Act Art. 11, 11a, and 11c.
>
> Subsection 2. The refund shall be granted notwithstanding the condition laid down in Section 11(16) of the Electricity Tax Act on the right of deduction to the same extent as the business has a right to deduct value added tax on electricity and heating. To substantiate the amount of the refund, the business shall, upon request, provide statements of meterings of the electricity consumed at charging points, including rapid chargers, and at battery change stations. Refunds will be granted with effect from April 27, 2010, until December 31, 2015.[8]

This special provision is not specified in the Electricity Tax Act, but only in the above amending act. The procedure is presumably unusual when rules on the reimbursement of a tax are introduced, but the rules are not incorporated into the tax law in question.

To add to the general confusion, rules have subsequently been introduced into the Electricity Tax Act[9] stating that:

> As of January 1, 2020, a full tax will be levied on the charging of electric cars both commercially and privately, without the possibility of refunding part of the tax. However, the effective date[10] of these rules, which is laid down in the Electricity Tax Act, has been postponed several times, so that they do not enter into force until January 1, 2031, and thus do not run counter to the rules on reimbursement in the 2012 Amending Act.[11]

By Act No. 203 of February 13, 2021, amending the Registration Tax Act, the Fuel Consumption Tax Act, the Danish Tax Assessment Act and various other Acts, Section 6 further postponed the effective date for the termination of refunding in accordance with the Electricity Tax Act until December 31, 2030.

The fact that the rules have given rise to problems of interpretation is apparent from the fairly large number of binding rulings published in this area. This is due not only to the unusual way in which the rule is introduced, but also to the way in which the tax authorities administer the rules.

In this article I will highlight some of the areas where the Danish rules have caused—and continue to cause—problems of interpretation.

I will therefore highlight the following issues in relation to the Danish rules for the reimbursement of tax on electricity for charging electric cars:

- What are the requirements for charging points?
- How should "at the company's expense and risk" be interpreted?

sional scheme which is only provided for in Act No. 1353 and which is not mentioned in the Electricity Tax Act. By Act No. 1585 of December 27, 2019, amending the Electricity Tax Act and various other Acts, Section 7 states that this provisional reimbursement scheme has been extended until December 31, 2021. By Act No. 203 of February 13, 2021, amending the Registration Tax Act, the Fuel Consumption Tax Act, the Danish Tax Assessment Act and various other Acts, Section 6 states that this provisional reimbursement scheme has been further extended until December 31, 2030.

6 Comments on the individual parts of the proposal. See 2012/1 LSF 52, Bill amending the Electricity Tax Act and various other Acts and repealing Act No. 529 of June 17, 2008, amending the Act on the Taxation of Waste and Raw Materials.

7 Processing tax is the European Union's minimum tax.

8 The expiry date of the rules has since been extended several times. See Act No. 1585 of December 27, 2019, amending the Electricity Tax Act and various other Acts—specifically, Section 7, where the temporary reimbursement scheme was extended until December 31, 2021. By Act No. 203 of February 13, 2021, amending the Registration Tax Act, the Fuel Consumption Tax Act, the Danish Tax Assessment Act and various other Acts, Section 6 further extended the temporary reimbursement scheme until December 31, 2030.

9 By Act No. 687 of June 8, 2017, the Act amending the Registration Tax Act, the Fuel Consumption Tax Act, the Electricity Tax Act and various other acts.

10 The rules have entered into force and have thus been introduced into the Electricity Tax Act, but will not take effect until 2031.

11 By Act No. 1585 of December 27, 2019 amending the Electricity Tax Act and various other Acts, the effective date of the rules on the suspension of refunding under the Electricity Tax Act was postponed until January 1, 2022.

- Does it matter who is responsible for the supply of electricity to the charging point?
- What is the relation between with the rules on electric heating and the rules for renewable energy?
- What is the relation between the special provision and the Danish Value Added Tax Act?
- What is the relation to the European internal market rules?

In addition, I will examine whether Denmark's neighboring countries Germany and Sweden have rules similar to the Danish rules for the reimbursement of electricity tax for charging electric cars.

The reimbursement of electricity tax or lack thereof is far from the only parameter that consumers take into account when considering switching to an electric car. A crucial parameter is the ability to "refuel" power wherever one needs it. I shall therefore briefly highlight the "investments in charging infrastructure" in the three countries in the form of each country's rules on subsidies for the installation of charging points.

2 Requirements for charging points—Denmark

While the actual legislative text does not lay down any requirements for charging points, the explanatory statement accompanying the bill states that "it is a requirement that there be a metering of the electricity used to charge batteries for electric cars. The metering requirement applies regardless of whether the charging point is located in a public accessible location, in households or elsewhere. The meter must be integrated into the charging point." [Note: Translated from Danish.]

The tax authorities take the statement that the meter must be integrated into the charging point very literally and thus do not recognize meterings that are performed anywhere else. This can be seen, among other places, in the binding ruling in tax ruling SKM2021.283.SR.[12] The case concerns a company that wishes to make a service vehicle and charging point available to its employees. The charging point is installed on the outside of the wall of the employee electrician's private home and equipped with a fixed charging cable. From the box, a cable is fed to the home's electrical panel, in which a new circuit breaker/fuse group and a MID electricity meter are installed, metering only the consumption for the charging point. Thus, the actual charging point does not have an integrated meter.

According to the Danish Tax Agency, a separate secondary meter located outside the actual charging point fails to meet the metering requirement in the special scheme.[13] The Danish Tax Agency justifies this by referring to the explanatory statement accompanying the bill, which clearly states that "The meter must be integrated into charging point". The fact that this wording is non-arbitrary is substantiated by responses to consultations by the Minister for Taxation in connection with the consideration of the bill. Thus, the Minister for Taxation replies that:

> If the meter is located elsewhere than in the charging point, many charging point installations allow for consuming electricity for purposes other than commercial charging of batteries. Therefore, for control reasons, the meter must be integrated into the charging point.

In addition, the Danish Tax Agency considers that it is clear from the documentation requirement in Section 21(2)(2) of the Amending Act No. 1353 of December 21, 2012: "To substantiate the amount of the reimbursement, the business shall, upon request, provide statements of meterings of the electricity consumed at charging points, including rapid chargers, and at battery change stations…" [translated from Danish].

Thus, it is a clear wish on the part of the Minister for Taxation that reimbursement of electricity tax for charging cars can only be granted when the proof of consumption stems from a meter integrated directly into the charging point. Therefore, control purposes are the justification for this unambiguous statement of where the electricity meter should be installed.

However, the fact that this is justified in control purposes may be surprising when other tax legislation allows electricity for charging electric cars to be metered by a secondary meter located outside the charging point. Thus, it is clear from tax ruling SKM2015.376.SR that the inquirer wishes for clarification as to whether it is sufficient for electricity for charging electric (company) cars to be documented via a secondary meter or a separate main meter in order to be considered as usual operating costs. Provided that the charging point installed at the employee's private residence is used exclusively for charging the company-taxed electric car, SKAT (the Danish Central Tax Administration) has determined that a separate electricity meter

12 See SKM2021.282.SR. https://skat.dk/data.aspx?oid=2303739&lang=da

13 Section 21 of Amending Act No. 1353 of December 21, 2012 (Den.).

that meters only the electricity consumption from this specific charging point can serve as a basis for the employer's reimbursement of the electricity costs in question to cover the usual operating costs of the electric (company) car. In other words, the Danish tax authorities accept that a secondary meter is sufficient documentation and that the control option must be sufficient when one is governed by the Danish Tax Assessment Act,[14] but not when one is governed by the special provision regarding the reimbursement of electricity tax.[15]

It appears from the general metering requirements for electricity or fuels used for both reimbursable and non-reimbursable purposes that metering must be carried out. For instance, when the space heating rules were introduced in 1995[16], it became necessary to find a way of metering the electricity/fuel for which companies could no longer be reimbursed. According to the legislative preparatory work[17], the distribution must be made by metering. However, other calculation methods are allowed to determine the consumption of electricity. Thus, Section 11(5) states that:

> Businesses may choose from the following 3 principles when calculating the quantity of electricity covered by Subsection 3:
>
> 1) The actual amount of electricity consumed in those power plants, measured by meter; or
> 2) The quantity of heat produced, measured by meter and multiplied by 1.1; or
> 3) The installed power multiplied by 350 hours per month.

The special possibilities were justified by the fact that it would often be very costly to carry out separate meterings of consumption in electric radiators, etc. Although consumption in electric radiators, etc. cannot be directly compared with the electricity consumption of charging points, it can and should still be considered whether the costs of requiring separate meters in charging points are unnecessarily high compared to recognizing secondary meters located outside the individual charging points. Assuming that a company has many charging points on its premises, it would, at the end of the day, be both administratively easier and more cost-effective to allow the metering of electricity for all charging points using a single secondary meter—which could, for example, be located next to the main meter. If this secondary meter metered only the consumption of each charging point and at the same time met the requirements of BEK No. 544 of May 28, 2018, on the "Executive Order on the market availability of metering apparatuses" (Bekendtgørelse om tilgængeliggørelse på markedet af måleinstrumenter (Den.)), this should be sufficient to meet the metering requirement.

2.1 Companies' expense and risk—Denmark

The Amendment Act states that "The refund includes electricity used in charging points, including rapid chargers operated at the company's expense and risk, and electricity used to charge batteries at battery change stations [...]" (translated from Danish).[18]

This begs the question: When is the company considered to operate the charging points at its own expense and risk? In practice, the Tax Assessment Council has reached a decision on this particular issue in several binding rulings. For instance, SKM2020.12.SR[19] clearly states that the ownership of the charging point is not decisive for the possibility of reimbursement. What matters is whether the company actually operates the charging point at its own expense and risk. In this particular case, the company is responsible for the operation of the charging point, which includes remedying malfunctions, damages, and defects. The customer therefore pays only a fixed subscription to the inquirer and thus does not bear a financial risk regarding the operation of the charging point.

Nor does it matter whether there are two or three parties involved in a subscription agreement regarding charging points. Thus, it does not matter whether a leasing company has taken out a subscription with a company providing a charging point that is installed with the leasing customer. As long as the company providing the charging point effectively operates the charging point at its own expense and risk, it may seek reimbursement for the electricity tax.[20]

What matters, however, is whether the customer, in addition to the fixed subscription payment, defrays separate costs for a new charging point if, due to normal age

14 If the electricity can be individualized, the cost of the electricity should be considered as ordinary running costs of the company car, footed by the employer, conditional upon the employee being taxed on a company car at the rates laid down in Section 16(4) of the Danish Tax Assessment Act.

15 Section 21 of Amending Act No. 1353 of December 21, 2012 (Den.).

16 Act No. 418 of June 14, 1995.

17 LFF 1995-04-06 No. 210, Bill amending the Act on the Taxation of Mineral Oil Products, etc.; the Act on the Taxation of Coal, Lignite and Coke, etc.; and the Electricity Tax Act (Den.)

18 Section 21(1) of Amending Act No. 1353 of December 21, 2012 (Den.).

19 SKM2020.12.SR https://skat.dk/data.aspx?oid=2293082&lang=da

20 SKM2021.121.SR (Den.)

and wear and tear, the charging point no longer works. In such cases, the charging point shall not be considered to be operated solely at the company's expense.[21] Thus, the company cannot seek reimbursement for the electricity tax.

Nor is it sufficient for the subscription scheme to include two annual service checks. In SKM2021.379.SR, the company's two annual service checks are considered to be generally adequate and thus, in normal cases, no additional costs will be accrued to the customer. However, cases may arise where a charging point requires one or more repairs that are not part of the intended level of service in the subscription. If the customer chooses this subscription solution, it is a calculated risk that the customer may have to purchase service, repair, or even replacement of the charging point, as accidental loss/destruction is also part of the risk assumed by the customer. The Tax Assessment Council considers this possible risk of additional costs to the customer to be sufficient for the scheme to fall outside the definition of the charging point being operated solely at the expense and risk of the company. Therefore, the company cannot seek reimbursement for the electricity tax in such cases.

2.2 Supply of electricity to charging points—Denmark

According to the legislative preparatory work for Act No. 1353 of December 21, 2012,[22] reimbursement of the tax on electricity may be granted if the electricity is considered to be supplied by the business at the charging points operated by the business—regardless of whether the charging points are located in customers' private homes, where the electricity stems from the normal domestic electricity supply and where the electricity bill, including value added tax, is paid by the household. Thus, it does not matter whether the charging point is operated by the company or whether the customer covers the cost of the electricity paid to the power supplier.

Consequently, the electricity bill may be invoiced to private households, housing associations, etc., or to the companies that provide the charging services. The only thing that matters is the requirement to document that full tax has been paid on the electricity.

This is, for instance, evident from SKM2021.384.SR, in which the Danish Tax Agency states that it is not decisive for the possibility of reimbursement of electricity tax in connection with the charging of electric cars that the housing association (the customer) chooses to bear the cost of electricity. What matters, however, is that full tax has been paid on the electricity and that the tax is not re-invoiced to the housing association's customers.

The Danish Tax Agency states that:

> For the Inquirer to be entitled to a reimbursement of the electricity tax, it is a requirement that the housing association, according to the contractual basis for charging at the housing association, does not re-invoice electricity tax for charging electric cars; furthermore, this requirement must be inserted and clarified in the contract for charging between the Inquirer and the housing association, as no reimbursement of already reclaimed electricity tax can be obtained. Without this requirement, there is a risk of electricity tax being refunded twice when electricity consumption concerns any VAT-registered businesses which receive reimbursement of electricity tax through the VAT return in the tenancies of the housing association. (Translated from Danish.)[23]

2.3 Correlation with the rules for electric heating and the rules for renewable energy—Denmark

In addition to documentation in the form of the metering of electricity consumed by charging points, a prerequisite for reimbursement under the special scheme[24] is that the condition of Section 11(5), 3(3) of the Electricity Tax Act (formerly Section 11(15), 3rd paragraph) can be met. According to this provision, the business must be able to produce invoices or separate statements showing the amount of the tax as evidence of the amount of the refund. It therefore follows that the company is required to prove that full tax has been paid on the electricity consumed by the charging point.

All other things being equal, this is bound to cause problems in relation to the rules on reduced electricity tax for households using electricity for heating and in relation to the rules on the tax exemption for renewable energy which is used directly by the electricity producer.

In cases where a household uses electricity for domestic heating, the household must pay a reduced tax. Thus, the household pays the full tax of DKK 0.90 per kWh for the

21 SKM2021.354.SR (Den.)

22 Section 21(1) of Amending Act No. 1353 of December 21, 2012 (Den.).

23 Please refer to the Danish Tax Agency's reasoning on question 2 of SKM2021.384.SR (Den.).

24 Section 21 of Amending Act No. 1353 of December 21, 2012 (Den.).

first 4,000 kWh and DKK 0.08 per kWh for all electricity consumption above 4,000 kWh. This means that a household with electric heating is unable to benefit from the rule on reimbursement for electricity used for charging electric cars.[25] If such a household enters into a subscription agreement with a company for charging an electric car, the company cannot, as a rule, apply for reimbursement of the electricity tax. This is because the company must be able to prove that full tax has been paid on the electricity used by the charging point. Obtaining proof would not be possible, as the household does not pay full tax on consumption beyond 4,000 kWh. For such households to benefit from the reimbursement, the company providing the charging service must itself be responsible for the supply of electricity to the charging point, so that the electricity used in the charging station bypasses the household electricity meter and thus is not included in the electricity consumption of the household. In such cases, households will only have to pay DKK 0.90 per kWh for electricity consumption up to 4,000 kWh. Beyond that, they will have to pay DKK 0.08 per kWh of electricity, but they will immediately only have to pay DKK 0.04 per kWh for the electricity used for charging their electric car, since the company providing the charging point will be able to seek reimbursement already from the consumption of the first kWh.

Looking at the exemption rules for renewable energy, there are several schemes:

The net settlement method allows households to generate electricity at their renewable energy power plants and, on the one hand, to use it themselves before selling it into the national electricity grid and, on the other hand, to sell it into the national electricity grid and to recover it without having to pay electricity tax on it.[26] If your household is covered by the annual net settlement, it is calculated once a year how much electricity you have produced and distributed to the collective power grid. Next, the household's total power consumption from the grid is calculated, deducting one's own production. Only the difference is taxable. In other words, you do not pay tax on domestic production. The same applies to the hourly net settlement method, only on an hourly basis, not annual.

Here, it should be noted that net settlement on an annual basis on renewable energy power plants with an installed capacity of no more than 6 kW was abolished in 2012 and replaced by net settlement on an hourly basis.[27] However, power plants installed before the change in legislation may continue to use year-based net settlement until 2032.

The hourly net settlement method was abolished in 2017,[28] when instant billing was introduced instead for new renewable energy power plants and existing business power plants, including that of the letter, which used hourly-based net settlement. However, existing domestic renewable energy power plants may continue to use hourly-based net settlement until 2032.

Instant billing means that only the electricity produced and consumed before it is transferred to the collective network is exempt from tax, while all consumed electricity which is purchased on the collective electricity network is subject to ordinary tax. Instant billing thus means that the owners of renewable energy power plants are taxed on equal footing with electricity consumers without renewable energy power plants in relation to their purchase of electricity on the collective network.

This means that depending on the scheme that applies to the household, the association, the company, etc., a certain amount of their electricity is exempt from tax, and a certain amount is taxable. This has led to requests for binding rulings, and thus the Tax Assessment Council decided in SKM2018.220.SR that the documentation requirement cannot be met if a consumer is subject to the net settlement method.

The inquirer takes the view that when the net settlement method in the customer's annual statement substantiates that a number of kWh (at least equal to that for which compensation is sought) have been fully taxed, this must be sufficient to apply the rule of reimbursement of electricity tax for charging electric cars.

However, the Tax Assessment Council considers that the inquirer cannot request reimbursement of electricity tax for consumption for charging electric cars from customers whose net metering scheme includes PV power plant(s). The Tax Assessment Council justifies this by the fact that the inquirer will ask for reimbursement of a tax that has not been paid. Whether that is a correct assumption is debatable. It is true that it cannot be proven with certainty that the electricity used at a given time is taxed from the collective network. However, if the application model for reimbursement outlined by the business in the binding ruling is followed, compensation for a quantity of

25 This is because the subscription rate depends on the company providing the charging service being able to obtain reimbursement of the electricity tax.

26 According to the previous Section 2(1)(e) of the Electricity Tax Act, electricity produced on photovoltaic (PV) power plants with an installed capacity of no more than 6 kW is exempt from taxation. The rule can be applied until 2032.

27 By Act No. 1390 of December 23, 2012 (Den.).

28 By Act No. 1049 of September 12, 2017 (Den.).

electricity greater than the amount tax paid by the household will never be sought. In other words, compensation would be at least "neutral" in relation to the public purse.

Looking at the latest binding ruling (SKM2021.474.SR) regarding the correlation between the exemption rules for renewable energy and the reimbursement rules in the Amending Act, the Tax Assessment Council has provided answers regarding a project in which a company makes a comprehensive package available to customers.[29] The package includes a renewable energy installation (solar panels/wind turbines) and charging points for electric cars. Ownership will be transferred to the customer upon delivery, but the company will be responsible for the operation and maintenance of both the energy installation and the charging points. The customer who owns the installation and charging points takes out operational, maintenance, and vandalism insurance. If the renewable energy installation does not provide sufficient electricity for the charging point, they will be supplied with electricity from the collective network.

The request for binding rulings includes a specific project which the company has already launched. Thus, an agreement has already been entered into with a customer (A) for setting up a photovoltaic (PV) system in four parking spaces at a high school and installing two charging points for charging registered electric vehicles. The charging points are powered by the PV system. If the solar panels do not produce enough power, the charging points can receive power from the collective power grid via the high school's control board, which will have a secondary meter[30] installed that measures the power supplied from the collective power grid to the electric vehicle chargers. Solar panel production is monitored via inverter and made available on the solar.web portal.

The first seven questions concern the scope of the exemption for electricity which is produced on the PV power plant and used for charging electric cars. The essence of the Tax Assessment Council's answer is that in order to be exempt from electricity tax, it must be renewable energy used for the electricity producer's internal consumption. Thus, tax exemption can only be granted in cases where the charging point is used exclusively for charging the electricity producer's own electric cars. In other words, tax exemption cannot be granted in cases where high school users are allowed to use the charging points.

Thus, in the case of the use of taxed electricity in charging points, it is important to determine whether the company can seek reimbursement for that electricity tax. The Tax Assessment Council considers that the company does not meet the requirement to bear the full financial risk involved in the operation of the charging points. The reason is that the customer (A) has taken out an operational, maintenance, and vandalism insurance. Thus, the company cannot seek reimbursement for the electricity tax in the specific project.

However, the company may consider whether to modify future projects so that they alone are faced with the risk of operation and maintenance of the charging points and thus meet the requirements for reimbursement.

2.4 Correlation with VAT legislation—Denmark

Section 21(1) of the special rule states that:

> [...] the reimbursement is also granted in accordance with the other provisions of the Electricity Tax Act, Sections 11, 11a, and 11c.

Subsection 2 states that:

> The reimbursement shall be granted notwithstanding the condition laid down in Section 11(16)[31] of the Electricity Tax Act on the right to deduct to the same extent as the business has a right to deduct value added tax for electricity and heating [...].

Section 11(1) of the Electricity Tax Act states that VAT registered companies can apply for reimbursement. This means that as a rule, the companies must meet the requirements set out in the VAT Act. However, it is worth noting that it is the business which operates the charging point that can seek reimbursement, since it is considered to be the consumer of the electricity, and thus it does not matter whether the owner of the electric car is a private individual, an unregistered business, or a VAT-registered business. The business operating the charging points is most likely to fulfill the conditions for VAT registration. They thus have an economic activity, since they presumably seek to generate a certain lasting income from charging cars and, furthermore, they provide taxable transactions,

29 SKM2021.474.SR https://skat.dk/data.aspx?oid=2338690&lang=da

30 The binding ruling does not address the use of a secondary meter, but it must be assumed that the tax authorities will not approve their use, cf. the discussion in the section "Requirements for charging points."

31 Today, Section 11(5) of the Electricity Tax Act.

since they charge a fee for charging the cars.[32] Other companies which provide their own charging points for charging their own cars and possibly customers' cars will also be able to obtain reimbursement for the electricity used by the charging point, provided the transactions are registered for VAT.

Under the general rules of Section 11, companies registered for VAT will be able to obtain reimbursement of the electricity tax to the same extent as they are entitled to reimbursement of the VAT on the electricity consumed. This means that only electricity used for activities subject to VAT are reimbursable. If a company has both taxable and exempt transactions, they can only seek partial reimbursement for the electricity tax. In such a case, the business would have to use the turnover distribution rate calculated for the VAT deduction on overheads to determine the partial reimbursement of the electricity tax. In actual practice, the city court has in SKM2011.594.BR ruled that the partial reimbursement cannot be calculated on the basis of anything other than the VAT turnover, regardless of whether a more accurate picture of electricity consumption can be created through secondary meters. In the case, the city court assumes that the company has a main meter and two secondary meters, which meter the consumption in the kitchen and kiosk. Total settlement is made for the purchase of electricity for the use of activities subject to and exempt from VAT. Consequently, it must be regarded as a single purchase and the consumption of electricity is therefore considered to be a common expense covered by Section 38(1) of the VAT Act, since electricity cannot be attributed solely to activities subject to or exempt from VAT. This means that the VAT deduction must be calculated by distribution of turnover. Since the reimbursement of the electricity tax is reimbursed to the same extent that the business has the right to deduct input value added tax for electricity, this means that the business must apply the calculated turnover rate to its application for reimbursement of the electricity tax. As a result, it cannot be fully reimbursed for the electricity tax, even for the amount spent on purely taxable activities.

Since the electricity used for charging electric cars is measured by (secondary) meters integrated into the charging points, this means that according to the general rule in Section 11(5) of the Electricity Tax Act, a company performing activities that are either subject to or exempt from VAT may seek only partial reimbursement of the electricity tax, based on the result of the calculated turnover rate. This applies regardless of the fact that the electricity in the charging points is used exclusively for taxable transactions. However, the wording of the special scheme that the reimbursement is granted, notwithstanding the condition laid down in Section 11(5) of the Electricity Tax Act on the right to deduct to the same extent that the business has the right to deduct VAT for electricity and heating, means that companies can obtain full compensation for the tax on electricity specifically used in the charging points. However, it is still a prerequisite that the actual charging of the cars can be considered a taxable transaction. This means that if a company charges cars for which no VAT deduction can be granted (e.g., cars subject to full registration tax[33] and VAT), it is not possible to obtain reimbursement for that part of the electricity tax. Whether a company can obtain reimbursement for electricity tax in connection with charging customers' or employees' cars will depend on whether or not that charging is considered to be part of a taxable transaction.

In addition, the reference to Section 11 of the Electricity Tax Act must mean that liberal professions which are currently not entitled to reimbursement of electricity tax used for process, cannot apply the reimbursement rules of the Amending Act. The reason for this is that the rule that the liberal professions cannot be reimbursed for process energy was previously laid down in Section 11(2) of the Electricity Tax Act and that the effect on the repeal of that rule will not enter into force until January 1, 2023. Therefore, until January 1, 2023, liberal professions cannot be reimbursed for electricity used to charge electric cars.

In addition, companies that only have activities exempt from VAT cannot apply for reimbursement of the electricity tax for charging electric cars. This is because such companies do not have to be registered for VAT, and thus they are outside of the scope of the rules when referring to Section 11 of the Electricity Tax Act in Section 21(1) of the Amending Act.

However, it should be kept in mind that both the liberal professions and non-VAT-registered companies, such as households, can take out a subscription with a charging company that provides the charging to them. The charging company can apply for reimbursement of the electricity tax and set the reimbursement as a discount to the company.

32 This applies regardless of whether the payment for the charging is in the form of a subscription scheme or direct payment.

33 In Denmark, vehicle registration tax (VRT) on cars and motorcycles is calculated on the basis of the taxable value, i.e., the value including VAT, but excluding VRT. For an overview in English of the 2022 VRT rates, please see https://skat.dk/skat.aspx?oid=2244599

2.5 Correlation with the European internal market rules—Denmark

Since any system of tax relief could potentially constitute State aid, it should be examined whether the special scheme should be regarded as State aid.

The rules on State aid are laid down in Article 107 of the TFEU. Section 1 states that:

> Save as otherwise provided in the Treaties, any aid granted by a Member State 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 Member States, be incompatible with the internal market.[34]

When considering the rule of reimbursement of the tax for charging electric cars, it clearly fulfills the condition for State aid under Article 107(1) of the Treaty. Thus, it constitutes aid granted from State resources, since it is the State that reimburses the tax to the businesses. The rule favors certain businesses, since suppliers of other vehicle fuels are unable to obtain reimbursement of taxes on their supplies, which distorts competition between those industries. It must also be assumed that the reimbursement rules affect trade between Member States, since the rule, all other things being equal, will favor the use of electricity. After all, electricity is generally domestically produced compared to other motor fuels, which are often produced in other countries.

Once the compensation has been found to be State aid, it may nevertheless be compatible with EU State aid rules. The compensation scheme for the taxation of electricity for charging electric cars is covered by EU Regulation No. 651/2014 of June 17, 2014 (Block Exemption Regulation),[35] Article 44: Aid in the form of a reduction in environmental taxes and charges under Directive 2003/96/EC. Preamble 64 to the Block Exemption Regulation states that:

> Aid in the form of tax reductions pursuant to Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity favouring environmental protection covered by this Regulation can indirectly benefit the environment.

In doing so, the European Union considers it appropriate to entitle certain types of tax relief, whether or not they constitute State aid, if they can be justified on environmental grounds. All other things being equal, it must be assumed that the reimbursement rules will facilitate the transition from diesel and gasoline cars to electric cars, which are considered to be more environmentally friendly. In this way, the reimbursement rules comply with the block exemption rules as they benefit the environment. As a result, Denmark has been able to introduce the reimbursement rule without the approval of the European Commission.

2.6 What is being done in Denmark's neighboring countries to promote the use of electric cars?

As Sweden and Germany are also members of the EU, they are subject to the same harmonized rules on the tax on energy products, including the electricity tax, as Denmark. For this reason, I have decided to examine the Swedish and German rules on the electricity tax to determine if these countries have any rules concerning the reimbursement of the tax on electricity used for charging electric cars that are less complicated than the Danish rules.

3 Rules for the reimbursement of electricity tax for charging electric cars in Sweden

Lag (1994:1776) om skatt på energi (Swed.)[36] states that all electricity used in Sweden is subject to taxation.[37]

The rules for the reimbursement of the electricity tax are set out in Sections 12–15 of Lag (1994:1776) (Swed.). In particular, it states that compensation may be granted for electricity used for:

34 Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union - Consolidated version of the Treaty on the Functioning of the European Union - Protocols - Annexes - Declarations annexed to the Final Act of the Intergovernmental Conference which adopted the Treaty of Lisbon, signed on 13 December 2007 - Tables of equivalences Capter 1: Rules on competition - Section 2: Aids granted by States - Article 107 (ex Article 87 TEC)

35 Note: There has been an extension in accordance with Commission Regulation (EU) 2020/972 of 2 July 2020 amending Regulation (EU) No. 1407/2013 as regards its prolongation and amending Regulation (EU) No. 651/2014 as regards its prolongation and relevant adjustments.

36 Lag (1994:1776) on the tax on energy, (Ändring till och med: SFS 2021:411) (Swed.).

37 In accordance with Chapter 11, Section 1.

- commercial land or forestry activities;[38]
- commercial aquaculture activities;[39]
- shore power[40]
- electricity which, after battery storage, is returned to the power plant from which it originates[41]
- trains or other railroad-connected means of transport or for operation or heating in the immediate course of such consumption;[42]
- mainly for chemical reduction or mainly for electrolytic processes;[43]
- in the manufacture of the products referred to in Part 6(a)[44]
- in the case of metallurgical processes or in the manufacture of mineral products, provided that the incoming material has been chemically altered by heating in furnaces or that its internal physical structure has changed, in so far as the right to reimbursement does not result from (2).[45]
- the manufacturing process in industrial activities;[46]
- consumption in a mainframe room[47]

On the face of it, none of these reimbursement rules allows for reimbursement for the tax on electricity used to charge electric cars. Thus, it must be assumed that electricity used for charging electric cars cannot be considered to have been consumed for the industrial manufacturing process. The only form of electricity related to transport covered by the reimbursement rules is electricity for rail traffic. Thus, there is no direct reimbursement for tax on electricity for charging electric cars in Sweden. However, it cannot be ruled out that Sweden, like Denmark, has introduced a rule into an amending act. That being said, it has not been possible for the undersigned to find any such rule. As it is not possible to seek reimbursement for tax on electricity used for charging electric cars in Sweden, no decision has been taken as to who should be considered a consumer of electricity when charging. However, it must be assumed that Sweden, like Denmark, considers the sale of a charging service to be a taxable service and thus it must also be assumed that it is the provider of the service who must be regarded as the consumer of the electricity used to produce the service. In that case, the charging company will be considered to be the consumer.

On the other hand, where there is no possibility of reimbursement of the tax on electricity for charging electric cars, it is possible to use duty-free electricity. In Sweden, Section 2 of the Lag om skatt på energi (Swed.) lays down rules for the exemption of self-generated electricity.[48] The exemption applies both to electricity produced from a generator of a certain size[49] and to renewable energy installations,[50] provided that the electricity is not transferred to the power grid. In addition, it is possible to transfer electricity to a user other than the manufacturer without electricity tax being imposed. However, there are three conditions which must be met before electricity can be transferred to anyone other than the actual producer: The power must be less than 50 kilowatts; electricity must not be transferred to the commercial power grid; and, finally, the electricity must not be sold commercially. As a result, a private individual or a company can use electricity to charge electric cars without having to pay tax on the electricity, provided it is sourced directly from its own power plant or supplied directly from another person's/company's power plant free of charge.

38 Section 12 / Effective date: 01/01/2021 / Lag (2020: 1045) (Swed.).
39 Section 12 a / Effective date: 01/01/2021 / Lag (2020: 1045). Applies only to SMBs in accordance with Annex I to Commission Regulation (EU) No. 1388/2014 of December 16, 2014 (Swed.).
40 Section 12 b / Effective date: 01/01/2021 / Lag (2020: 1045) (Swed.).
41 Section 13 / Lag (2018: 1887) (Swed.).
42 Section 13 a / Lag (2017: 1208) (Swed.).
43 Section 13 a / Lag (2017: 1208) (Swed.).
44 Section 13 a / Lag (2017: 1208) (Swed.).
45 Section 13 a / Lag (2017: 1208) (Swed.).
46 Section 14 / Effective date: 01/01/2021 / Lag (2020: 1045) (Swed.).
47 § 15 / Lag (2020: 1045) (Swed.).

48 Lag (1994:1776) (Swed.).
49 The conditions of Section 2(1):

(a) in an enterprise with an installed generator power totaling less than 100 kilowatts;
(b) by a person with an installed generator power totaling less than 100 kilowatts;

50 The conditions laid down in the first subparagraph of Section 2(1)(a) and (b) if the electricity is produced by:

1) Wind or waves, the power is raised to 250 kilowatts
2) Solar energy, the is raised to 500 kilowatts (installed peak power)
3) Other energy source without generator: The power remains at 100 kilowatts

4 Rules for the reimbursement of electricity tax for charging electric cars in Germany

Section 1 of Stromsteuergesetz (StromStG) (Ger.)[51] states that electricity consumed in Germany is taxable.[52]

In order to understand the possibilities for reimbursement of electricity tax for charging electric cars in Germany, it is necessary to first define the concept of *electromobility*, since this concept is applied in the German reimbursement rules. Section 1c of the Stromsteuer-Durchführungsverordnung (StromStV) (Ger.)[53] states as follows:

> (1) Electromobility within the meaning of the Act is the use of
>
> 1. battery-powered electric cars and
> 2. externally chargeable hybrid electric cars (also known as plug-in hybrids).

According to #1, an electric car is (within the meaning of Section 1 of the German Road Traffic Act) defined as a motor vehicle that is powered by electricity and whose electrical energy storage (battery pack) can be charged externally. According to #2, an externally chargeable hybrid electric vehicle is a motor vehicle with multiple drive systems, at least one of which is electric and whose electric energy storage device (battery pack) can also be charged outside the vehicle.

> (2) The following use is not considered as electromobility for the purposes of the Law;
>
> 1. Electric vehicles not approved for road traffic, and which are used exclusively in the territory of the business;
> 2. Electric bicycles used exclusively in the territory of the business.

Thus, not all electrically powered vehicles fall under the rules of electromobility. For example, an electric truck which is used exclusively on a company's premises and cannot be approved for use on public roads will not be subject to the rules on electromobility, even if it an electric vehicle in the legal sense. The same may apply to electric or hybrid cars if they are unregistered and therefore have not been assigned a registration number. According to Section 1 of the German Road Traffic Act (Straßenverkehrsgesetz (StVG)),[54] the approval of a vehicle is carried out by assigning a registration number. All other things being equal, this must mean that an electric or hybrid car which is not registered, and which is used exclusively on a company's premises, is not covered by the rules on electromobility. In addition, there is a curious rule regarding electric bikes: For instance, if an electric bike is used on public roads, it could be considered to fall within the scope of the concept of electromobility—but not if it is used exclusively within a company's premises. In Denmark, an electric bike is not considered to be an electric vehicle on an equal footing with an electric or hybrid car.

In Germany, the rules for the reimbursement of the electricity tax for companies are laid down by the StromStG. As a general rule, the StromStG provides for exemption from tax for the electricity consumption of businesses, but Sections 9b(1) and 10(1) clearly state that no compensation can be granted for electricity used for electromobility. This allows the tax on electricity for charging electric vehicles which are *not* covered by the concept of electromobility to be reimbursed. This means that if a company has an electric or hybrid car which is not registered and which can therefore only be used on the company's premises, the company is entitled to reimbursement for electricity for charging the car. If, on the other hand, the company uses a registered electric or hybrid car outside the company's premises, the company cannot seek reimbursement. The underlying basis must therefore be that the tax on electricity used for charging electric cars cannot be reimbursed, and the exception is that companies can be compensated in certain circumstances.

Although it is generally not possible to recover the tax on electricity for charging electric cars, it is possible to obtain non-taxable electricity for charging electric cars. Thus, Section 9 of the StromStG provides for the exemption of internal consumption of renewable energy.[55] Section 9(1) states that the following are exempt from tax:

> 1..

51 Stromsteuergesetz vom 24. März 1999 (BGBl. I S. 378; 2000 I S. 147), das zuletzt durch Article 6 des Gesetzes, March 30, 2021 (BGBl. I S. 607), geändert worden ist. (Ger.).

52 For further research on energy consumption in Germany see i.a." Forschungsberichte zum Energisystem X.O. Nr. 1: Intelligente und effiziente Vernetzung von Energieerzeugern und -verbrauchern auf Quartiersebene".

53 Stromsteuer-Durchführungsverordnung vom 31. Mai 2000 (BGBl. I S. 794), die zuletzt durch Artikel 6 der Verordnung, August 11, 2021 (BGBl. I S. 3602), translated (Ger.).

54 Straßenverkehrsgesetz in der Fassung der Bekanntmachung vom 5. März 2003 (BGBl. I S. 310, 919), das zuletzt durch Artikel 1 des Gesetzes July 12, 2021 (BGBl. I S. 3108), geändert worden ist (Ger.).

55 Stromsteuergesetz vom 24. März 1999 (BGBl. I S. 378; 2000 I S. 147), das zuletzt durch Article 6 des Gesetzes, March 30, 2021 (BGBl. I S. 607), geändert worden ist. (Ger.).

2..
3. Electricity produced by power plants with a nominal electrical output of up to two MW from renewable energy sources or in highly efficient CHP stations with a nominal electrical output of up to two MW and

(a) used by the owner for internal consumption;
(b) supplied by the person operating the power plant or allowing it to be operated [by a third party] to end consumers into whose systems the electricity is fed directly.

In other words, the exemption depends, firstly, on electricity being drawn directly from the installation and sold into the commercial power grid. Secondly, the electricity must be used for internal consumption or delivered directly to an end consumer. This means that if a private individual has a renewable energy installation and uses the electricity from the installation to charge their electric car, this could be done without taxation, as it is considered to be private consumption. In the case of a company which has a renewable energy power plant and charges its own electric cars, this consumption will also be considered to be internal consumption and thus exempt from tax. The question is what happens when a charging company uses electricity to charge other people's electric cars. In this case, the charging company is considered to be the end user of the electricity,[56] and thus such consumption will be considered to be internal consumption. Finally, the rule laid down in Section 9(1)(3)(b) must mean that electricity from a renewable energy installation can be supplied without being taxed to other end-users, provided that the electricity is not distributed into the commercial power grid or sold commercially. A commercial sale shall entail, in accordance with Section 9(1)(a) of the StromStG, abolition of the tax exemption.

5 Subsidies for the construction of the infrastructure of charging points in the three countries

As can be seen from the above discussion, the three countries have not introduced identical rules for the reimbursement of electricity for charging electric cars.

However, it is not only the possibility/lack of reimbursement of the electricity tax that prevents consumers from converting to hybrid or electric cars. One of the problems is the practical experience of charging cars in public spaces. I would therefore like to briefly highlight Denmark, Sweden and Germany's attempts to support the construction of an adequate infrastructure of charging points to meet the growing need for access to them. This is done in all three countries through the introduction of subsidy schemes.

5.1 Rules for financing charging points for electric cars in Denmark

In 2021, the Danish Housing and Planning Authority had a pool of DKK 48 million allocated to supporting the installation of charging points at shared parking facilities belonging to public housing departments, cooperative housing associations and owner associations.[57] The associations could apply for 25% of the costs, and only one charging point can be applied for per 20 residences in the housing association.

In 2021, the Danish Road Directorate had a pool of DKK 65 million allocated to supporting publicly available charging points on private land.[58] Thus, charging station operators and partnerships can apply for support to co-finance the total cost of setting up rapid and fast charging points. Subsidies can amount to up to 25% of the total cost of the projects, and a maximum of DKK 75,000 excluding VAT per fast-charging point and DKK 220,000 excluding VAT per charging outlet on a rapid charging point. The allocation will take into account such aspects as geographical dispersion in relation to existing charging infrastructure and whether there is a real need for charging infrastructure that cannot be covered under market conditions, including, for example, charging facilities for taxis in provincial areas. Ensuring equal access for all electric cars will also be a condition for funding from the pool, so that ad hoc charging is as simple as subscription-based EV charging.

In addition, a political agreement has been reached that[59] municipalities and regions may, under certain conditions, co-finance the installation of charging points in their own areas. This has resulted in a bill being prepared. The bill has been in consultation and is expected to be in-

56 See Section 1a(2) of the Stromsteuer-Durchführungsverordnung vom 31. Mai 2000 (BGBl. I S. 794), die zuletzt durch Artikel 6 der Verordnung vom 11. August 2021 (BGBl. I S. 3602) geändert worden ist (Ger.).

57 Bekendtgørelse om tilskud til etablering af ladestandere i fælles parkeringsanlæg tilhørende boligforeninger mv. (Den.)

58 Executive Order on pool for publicly available charging points.

59 Aftale om Regulering af ladestandermarkedet af 28. oktober 2021 (Den.).

troduced in the near future. It will ensure, among other things, that there is a market for setting up charging points in outlying areas, for which reason municipalities and regions will be able to co-finance public tenders for charging infrastructure at their own locations. The possibility of co-financing is provided within a clear framework, which the agreement describes as:

> […] co-financing shall be carried out under market terms and may take place only:
>
> - Within the municipality or region's own funds for construction,
> - For a limited number of years, provisionally until 2024, as well as
> - On the basis of a model in which the city/town council or regional council decides to commit funds for charging infrastructure contracts only after the invitation to tender has become necessary, if co-financing proves necessary.

On the face of it, it does not appear that Denmark subsidizes the installation of charging points by private individuals for private use.

However, subsidizing the installation of charging points is not the only aspect that seeks to make it easier to "refuel" an EV. It is crucial that it is easy and simple for everyone to use the existing network of charging points, regardless of which operator you are a customer of. A solution to this issue is already in place, as an industry agreement has been concluded between 96% of the operator market which is currently setting up charging points in the public space in Denmark. The agreement means that operators allow other operators to integrate their charging network directly into their own app for the benefit of customers, so that the customer only needs one start/stop and payment platform (app or RFID tag/fob).

5.2 Rules for financing charging points for electric cars in Sweden

In Sweden, subsidy schemes have been put in place to support the installation of charging points. Thus, it is possible to apply for State aid for various types of charging infrastructure from the Swedish Environmental Protection Agency or the Swedish Tax Agency. For instance, charging points for private residences, corporate employees, charging points available to the public, or charging infrastructure for heavy vehicles.

Since January 1, 2021, private individuals who own a home and install a charging point have been able to take advantage of a tax rebate for green technology.[60] The tax rebate is 50% of the labor costs and materials associated with the installation of a charging point.[61]

The "Elbilsladdning för företag och organisationer" scheme allows housing associations, organizations and companies to apply for financial support for the installation of charging points. The subsidy is granted as a lump sum of a maximum of 50% of the eligible costs, up to a maximum of SEK 15,000 per charging point. To receive the subsidy, a payment application must be submitted to the Swedish Environmental Protection Agency.

"Elbilsladdning för allmänheten" provides the opportunity to apply for financial aid for publicly available charging points. The maximum amount of aid to publicly available charging points depends on the estimated operating profit expected to be made by the charging point. Thus, Article 56(6) of the Block Exemption Regulation (EU)[62] states that:

> The aid amount shall not exceed the difference between the eligible costs and the operating profit of the investment. Operating profits shall be deducted from the eligible costs[63] *ex ante*, on the basis of reasonable projections, or through a claw-back mechanism.

Therefore, in addition to documentation of costs incurred, a profitability calculation is required which reports the expected operating profit when the station is in operation and the reason for these calculations. The selling price of the electricity sold must correspond to the market price. Thus, the application of this scheme is more administratively cumbersome than the application for, say, private individuals, who have to document only the costs of installing a charging point.

The Swedish subsidy scheme "Laddning och laddinfrastruktur för andra fordon än personbilar" provides for the possibility of applying for state aid for charging stations for buses, trucks, and boats. It should be borne in mind here that the amount of the aid depends on the size

60 See Sections 36–45 of the Inkomstskattelag (1999:1229) (Swed.).

61 In order to alleviate the liquidity needs of citizens, they can receive the rebate directly on the invoice from the installation contractor.

62 Commission Regulation (EU) No. 651/2014 of June 17, 2014, declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty Text.

63 The eligible costs consist of the costs of investing in tangible and intangible assets within the meaning of Article 56(5) of Commission Regulation (EC) No. 651/2014 of June 17, 2014, on the compatibility of certain categories of aid with the internal market under Articles 107 and 108 of the Treaty.

of the business, in accordance with Article 36 of the Block Exemption Regulation.[64]

5.3 Rules for financing charging points for electric cars in Germany

Germany has also chosen to support the construction of the EV charging station infrastructure through subsidies. Therefore, in 2017, the German Federal Government introduced the subsidy scheme "Förderrichtlinie Ladeinfrastruktur für Elektrofahrzeuge in Deutschland", for which EUR 300 million has been allocated between 2017 and 2021. Both private and public investors have been subsidized for the installation of publicly available charging points. Over those four years, for example, subsidies were granted for the construction of 30,000 charging points, of which almost 10,000 were fast charging points.

On March 24, 2021, the "Ladeinfrastruktur vor Ort"[65] subsidy scheme was introduced. The scheme has been allocated EUR 300 million, and its primary purpose is to support small and medium-sized enterprises in order to give them an incentive to invest in the electromobility of the future.

In addition, a subsidy program, "Öffentlich zugängliche Ladeinfrastruktur für Elektrofahrzeuge in Deutschland" has been introduced,[66] which runs from summer 2021 to the end of 2025[67]. The subsidy program has been allocated EUR 500 million. This scheme supports the installation of ordinary charging points with a charging capacity of up to 22 kW and fast charging points with a capacity of more than 22 kW, where only DC charging is possible. With the budget available, before the end of 2025, at least 50,000 charging points (of which at least 20,000 are fast charging points) will be established under this program.

Finally, subsidy schemes for private charging points have been introduced.[68] Subsidies may be applied for for the setting up of charging points in non-publicly accessible areas, such as rental or owner-occupied homes. Thus, private individuals, homeowner associations, cooperative housing societies, rental housing associations, etc. can apply for subsidies.

6 Final remarks

As can be seen from the above, only Denmark has introduced rules on the reimbursement of electricity tax for the charging of electric cars. The way in which the Danish reimbursement rules are introduced is somewhat unconventional and therefore presents certain challenges for those who wish to make use of the rules.

In addition, certain requirements which are not immediately set out in the legal text must be met before the reimbursement rules can be applied.

For instance, a meter must be present in the actual charging station. This rule is set out exclusively in the legislative remarks and in a reply from the Minister for Taxation, where the requirement is justified by the fact that a secondary meter located elsewhere may give rise to the possibility of error or fraud, since electricity can be used for purposes other than charging cars. This attitude may be surprising, since in other contexts, secondary meters are approved for the inventory of electricity.

The business which may seek reimbursement of the electricity tax shall be the business who operates the charging points at its own expense and risk. This means that customers, i.e., those who purchase the charging of the cars, must not under any circumstances be at risk of receiving an additional bill for the maintenance or destruction of the charging point. If such a risk exists, however slight, it would mean that the Tax Administration does not consider the charging point to be operated at the company's expense and risk.

With the introduction of the special scheme, it does not matter who is responsible for the supply of electricity to the charging point. Thus, delivery can be made from the electricity supplier or from the customer, whether the latter is a business or a private household. It does not matter as long as it can be documented that full tax has been paid on the electricity.

64 Article 36(6). The aid intensity may not exceed 40% of the eligible costs and Section 7. The aid intensity may be increased by 10 percentage points in the case of aid to medium-sized enterprises and by 20 percentage points in the case of aid to small enterprises.

65 Bekanntmachung der Richtlinie über den Einsatz von Bundesmitteln im Rahmen des BMVI-Programms "Ladeinfrastruktur vor Ort" (Ger.).

66 Bekanntmachungder Förderrichtlinie "Öffentlich zugängliche Ladeinfrastruktur für Elektrofahrzeuge in Deutschland," July 13, 2021.

67 This is in line with recommendations from Nationale Akademie der Wissenschaften Leopoldina acatech – Deutsche Akademie der Technikwissenschaften Union der deutschen Akademien der Wissenschaften in "Wenn nicht jetzt, wann dann – wie die Energiewende gelingt", October 21, 2021.

68 MerkblattLadestationen für Elektroautos – Wohngebäude (Ger.).

This means that the company wishing to seek reimbursement must have an invoice stating that the full tax has been paid before the company can seek reimbursement. This is not an option if the customer to whom they provide the charging service and from whom the electricity is supplied, has a renewable energy power plant or uses, for example, the reduced rate of electric heating. In such cases, however, it is possible to apply for reimbursement if the company arranges for electricity to be supplied to the charging point by the electricity provider.

The special rule on the reimbursement of electricity tax in connection with the charging of electric cars refers to the general reimbursement rules of the Electricity Tax Act in Section 11 of the Electricity Tax Act. It is therefore a condition that businesses applying for reimbursement are considered to be consumers of electricity and are VAT registered. There is no doubt that they are considered to be consumers, as the authorities consider the electricity consumption to be carried out in connection with the charging of the electric car and not in connection with driving. The fact that they must be VAT registered means that they must meet the conditions of the VAT Act in order to be a taxable person and have transactions subject to VAT. Normally, mixed-transaction businesses are required to calculate the reimbursement of electricity tax according to an allocation of revenue for VAT purposes, regardless of whether the electricity is actually metered by to a secondary meter that gives a more accurate picture of consumption. However, if the company applies the special scheme for the reimbursement of electricity tax on the charging of electric cars, it will be able to obtain reimbursement of the full tax on the electricity used in the charging points, provided that the charging is carried out for taxable transactions.

Finally, it should be borne in mind that a tax refund must comply with the European internal market rules. The special rule on the reimbursement of the electricity tax for charging electric cars is State aid; however, it is covered by the Block Exemption Regulation as it is introduced on environmental grounds, which means that it does not infringe EU rules. That being said, the fact that the rule is State aid means that, under certain conditions, companies are subject to the reporting obligation for the receipt of State aid.[69]

Since neither Germany nor Sweden has introduced reimbursement rules for the taxation of electricity used for charging electric cars, it is not possible to make a direct comparison of the reimbursement rules of the three countries. However, there are a number of ways to receive reimbursement of the electricity tax used for the charging of electric vehicles in Germany.

For instance, companies may seek reimbursement for the tax on electricity used to charge certain electric or hybrid cars. It is, therefore, a requirement that the car is not approved under the Road Traffic Act and can therefore only be used on the company's premises. The reimbursement options in Germany are due to the fact that these vehicles are not considered to be covered by the concept of electromobility, which is why electricity used by a business to charge those particular vehicles falls within the general reimbursement rules for electricity used by businesses. This means that, despite the complex rules, both private individuals and companies are better off financially in Denmark, because so far, it is possible to recover most of the tax on electricity for charging electric cars. In the case of a private individual, he or she must purchase the charging from a charging company, as electricity is required to be used for a taxable activity before reimbursement can be granted. The charging company will be able to recover the tax and pass this allowance on in the form of reduced charging rates.

In addition, in all three countries it is possible to use tax-exempt electricity for, among other things, charging electric cars. However, the requirements for this option differ somewhat across the three countries: In Denmark, two types of electricity are exempt from electricity tax: 1) electricity produced by a power plant whose capacity is less than 150 kW; 2) electricity from renewable energy power plants used by the actual owner of the plant. In Germany, electricity from renewable energy installations used directly from the installation (regardless of whether the electricity is being used by the actual owner or another end-user) is exempt from tax as long as the electricity is not distributed into a commercial power grid or sold commercially. In Sweden, both electricity produced in minor generator installations and renewable energy installations is subject to exemption from tax. Here, too, there is a requirement that electricity is not distributed into the commercial power grid or sold commercially. However, there is not any requirement that the electricity must be used by actual owner. It is not insignificant that both Germany and Sweden allow others besides the owner of a renewable energy power plant to use electricity from the installation without it being taxed. This may mean that while the Danish rules do not allow electricity produced on a company's renewable energy power plant(s) to be used for charging its own and other people's cars tax-free, the difference between the rules will effectively mean that in Germany and Sweden, it is possible to charge both the company's own cars

69 See BEK No. 566 of 05/03/2019, Bekendtgørelse om efterlevelse af regler for tildeling af statsstøtte på skatteområdet (Den.).

and other people's cars without taxing the electricity being used.

All three countries have introduced subsidy schemes to support the construction of charging infrastructure for both publicly available charging points and charging points in housing associations, etc. That being said, it seems that unlike Denmark, Sweden and Germany also provide subsidies for the installation of charging points in private homes.