

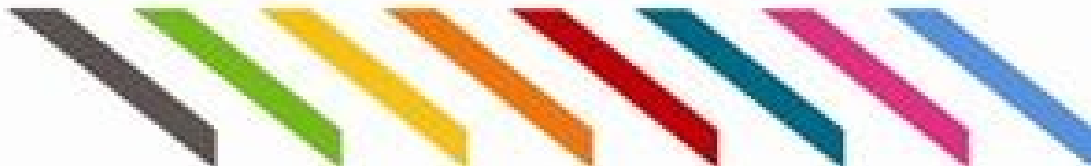
# Promotion policies for electric vehicles



TECHNISCHE  
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# 1 Abstract

Since the industrial revolution the amount of carbon dioxide (CO<sub>2</sub>) is rising, even faster in the last couple of decades, which is taken as one of the main gases which causes the climate change. The climate change effects not just our health (respiration problems, ...) but also the harvest, as based on the huge temperature swings. Therefore, being the support of electromobility one of the ways how to reduce the amount of CO<sub>2</sub> in the air, as the electric vehicles (EV, EVs) are not producing CO<sub>2</sub> gases during their usage.

Due to the global environmental crisis the CO<sub>2</sub> emissions need to be decreased. As a part of that, EVs substituting established combustion engined ones is one of many possibilities to do so. Electromobility is not a new idea, as the thoughts of an EV are here since the time when electricity has been „found“. However, states supporting the increase in sales and usage by integrating promotion policies are inevitable to add a contribution to the goal. The goal of all that is to get the individual transport away from internal combustion engines and, as a result, push the development of alternatives.

We look at the main measurable variable – CO<sub>2</sub> – closely, compare EVs with different alternatives and explain the reasons and goals of a push for EVs. Furthermore, we look at radical and mild policies and how the society reacts at the current situation.

Statistics have shown that policies can be a very powerful tool to push an economy and society into a certain direction. It is to say that people will always get the cheaper and more comfortable product. The bigger the gap between the two products, the more obvious the dominating share. States, however, have a big impact on what is the better option with policies.

## 2 Introduction

Climate change arising from anthropogenic activity has been identified as one of the greatest challenges facing the world and will continue to affect business and citizens over future decades.

Climate change has implications for both human and natural systems and could lead to significant impacts on resource availability, economic activity and human wellbeing. In response, international, regional, national and local initiatives are being developed and implemented by public and private sectors to mitigate greenhouse gas (GHG) concentrations in the Earth's atmosphere as well as to facilitate adaptation to climate change.

There is a need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge.

The ISO 14060 family provides clarity and consistency for quantifying, monitoring, reporting and validating or verifying GHG emissions and removals to support sustainable development through a low-carbon economy. It also benefits organizations, project proponents and stakeholders worldwide by providing clarity and consistency on quantifying, monitoring, reporting, and validating or verifying GHG emissions and removals. Specifically, the use of the ISO 14060 family:

- enhances the environmental integrity of GHG quantification;
- enhances the credibility, consistency, and transparency of GHG quantification, monitoring, reporting, validation and verification;
- facilitates the development and implementation of GHG management strategies and plans;
- facilitates the development and implementation of mitigation actions through emission reductions or removal enhancements;
- facilitates the ability to track performance and progress in the reduction of GHG emissions and/or increase in GHG removals.

Applications of the ISO 14060 family include:

- corporate decisions, such as identifying GHG emission reduction opportunities and increasing profitability by reducing energy consumption;
- carbon risk management, such as the identification and management of risks and opportunities;

— voluntary initiatives, such as participation in voluntary GHG registries or sustainability reporting initiatives;

— GHG markets, such as the buying and selling of GHG allowances or credits;

— regulatory/government GHG programmes, such as credit for early action, agreements or national and local reporting initiatives. [<https://www.iso.org/obp/ui/#iso:std:iso:14067:ed-1:v1:en>]

Nevertheless, have you ever heard about „greenwashing“? The concept of the CO<sub>2</sub>e calculator, came as an idea from the British company name, British Petroleum (BP) in 2004. It has been promoted/advertised/made by the marketing company name Ogilvy & Mather, which was originally paid by BP. The main point of it was to consider the average life – like goods and clothes, energy consumption or even the ride to work – that can influence the climate change and warming of the planet. At first it was not that successful, but in 2006 it helped an advertisement, which was, according to someone, one of the most successful ones, but also one of the most deceptive of all times. Why?, because it helped to promote the saying „*users carbon footprint*“ into the basic conversation, as an argument into the fight against the climate change.

Even though is the „*carbon footprint calculator*“ a good tool to bring the average people to think, as how problematic is unnecessary consumption, the main reason its creation is to manipulate the whole view on one of the biggest environmental threat of our time. So basically BP wanted, that the responsibility for the climate change would be taken by the society, just like it was tried, in the 70-ties, by the producers of the plastic products (like: Coca-Cola, Pepsi-Co and Anheuser Busch Companies).

[[https://www.greenpeace.org/czech/clanek/11776/kalkulacka-uhlikove-stopy-dobry-sluha-ale-spatny-pan/?gclid=CjwKCAjw46CVBhB1EiwAgy6M4pz1gX3AiIFkCvaAKCRzo2\\_ltlB1HbixRG\\_y5X15t42BiZ\\_eZMQr3RoCL1QQA\\_vD\\_BwE](https://www.greenpeace.org/czech/clanek/11776/kalkulacka-uhlikove-stopy-dobry-sluha-ale-spatny-pan/?gclid=CjwKCAjw46CVBhB1EiwAgy6M4pz1gX3AiIFkCvaAKCRzo2_ltlB1HbixRG_y5X15t42BiZ_eZMQr3RoCL1QQA_vD_BwE)]

The company's carbon footprint is a measure of the impact of its activities on the environment. The carbon footprint is thus also an indirect indicator of energy consumption and the production of products or services. It is measured by collecting greenhouse gas emissions, and is expressed in CO<sub>2</sub> equivalents (CO<sub>2</sub>e). According to the GHG protocol, company emissions are divided into 3 areas, or Scopes:

1. Direct emissions to air from activities falling within the enterprise (eg. emissions from the boilers in the company, cars owned by the company or emissions from industrial processes and waste disposed of within the company)
2. Indirect emissions from purchased energy that do not arise directly in the company, but are the result of the company's activities (eg. purchase of electricity, heat or steam)
3. Other indirect emissions – emissions that are the result of the company's activities but are not classified as Scope 2 (eg purchased raw materials, services, business trips, waste, etc.)<sup>1</sup>

Video: [https://cs.wikipedia.org/wiki/Soubor:Carbon\\_Footprint\\_simple-explanation\\_EN.webm](https://cs.wikipedia.org/wiki/Soubor:Carbon_Footprint_simple-explanation_EN.webm)

### 3 Why there is a push on electromobility - the purpose

With Climate Change continuing to happen, the consciousness about lowering the CO<sub>2</sub>-emissions of European countries grows. The European Union has set targets to become carbon neutral by 2050 and achieve a 55% reduction on 1990 emissions by 2030. Passenger cars, which represent about 12% of EU CO<sub>2</sub><sup>2</sup> is one of the sectors with potential improvement as in 2021 only 8.9% of new car registrations in across Europe are zero-emission-vehicles.<sup>3</sup>

One main advantage and therefore main reason for promoting (EVs) is the much more efficient technology of electrical engines. The typical raw synchronous engines – which are amongst asynchronous engines common for EVs – have an average energy efficiency of about 95%. Asynchronous types transform 80 to 90% of the supplied energy into motion. Additional losses during the charging and because of battery efficiency, an EV reaches a total efficiency of around 65 to 70%. With combustion engines having only about 45% (diesel fuel) and 20% (gasoline) (tuev-nord.de), the comparison shows an obvious advantage for the electric technology.

This increased efficiency could also lead in decreasing GHG, although this is highly dependent on the source of electricity. If the overwhelming majority comes from renewable energy such as wind, PV and hydro power plants, the reduction will be higher than EV run by coal, gas, etc. Norway, for instance, have the highest percentage of EVs in Europe whilst supplying their whole country with almost only renewables (98%)<sup>4</sup>. We will look at it closer later in this paper.

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<sup>1</sup> [[https://www.green0meter.com/about-us/?gclid=CjwKCAjwkYGVBhArEiwA4sZLuOYzG\\_e5QrSVKvh6qq6VthLX-q\\_IU5ev\\_yZW3MhvXdP03vA1wM6WPBoCHZAQAvD\\_BwE](https://www.green0meter.com/about-us/?gclid=CjwKCAjwkYGVBhArEiwA4sZLuOYzG_e5QrSVKvh6qq6VthLX-q_IU5ev_yZW3MhvXdP03vA1wM6WPBoCHZAQAvD_BwE)]

<sup>2</sup> (European Commission, 2021)

<sup>3</sup> (Eardley, Charles; Peplow, Laurence, 2022)

<sup>4</sup> (Ministry of Petroleum and Energy, 2016)

### 3.1 Electric vehicles compared to e-fuel vehicles

Internal Combustion Engine (ICE) vehicles running on e-fuels are not a compelling alternative to Battery Electric Vehicles (BEVs) in the eyes of consumers as they would preferentially choose an EV over an ICE alternative if they were the same price. And that's no surprise given the fact that the running costs of ICE vehicles is nevertheless more expensive than those of (BEVs) – about 23% in 2030.<sup>5</sup>

According to Eardley and Peplow (2022), as a result of these high costs, consumers overwhelmingly choose to purchase BEVs. The introduction of e-fuels increases vehicle running costs to all consumers, providing new car buyers a greater incentive to switch to BEVs and hitting the poorest in society the hardest. E-fuels do not benefit consumers, and governments should instead focus investment towards achieving the near-term purchase price parity of mass-market BEVs.<sup>6</sup>

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<sup>5</sup> (Peplow & Eardley, 2021, p. 2)

<sup>6</sup> (Eardley, Charles; Peplow, Laurence, 2022, p. 4)

## 4 What is wanted to be achieved and what are the limits for CO<sub>2</sub>

### **Supporting the electromobility**

The support system, which is made to reduce the carbone footprint and GHG, needs to be gradually implemented, and it has to be made on several stages/levels

- Legislation
- National recovery plan – from which it is possible to request a part of the finances to „reduce“ the end price of an EV
- Price reduction in general

One of the ways can be to reduce the prices of the Li-Ion batteries (LIB, LIBs), thanks to which are the EV powered. This could be made, by the recycling of the LIBs in Gigafactories.

However, the idea of recycling of the LIBs is also supported by the EU. According to the rumors, the EU is pushing on the developers of the LIBs, to use at least 20 – 25% of recycled material in the production of new LIBs. If it would be also in real implemented, is still questionable, but it's a good step.

Nevertheless, according to the data from Bloomberg NEF, has the average price for EV batteries decreased by 13% year-on-year to 137 USD/kWh this year, and compared to 2010, batteries are 89% cheaper. By 2024, the limit of 100 USD/kWh should be broken/lowered. At this price, EVs will already be competitive over conventional vehicles.

Battery prices are falling with the technological progress and by the growth of the production. For batteries, the current learning curve is 18%. This means that with each doubling of production, the average cost of production will fall by 18%. The following figure shows the development of the average price of the entire battery pack – the price for cell, the price of the construction and recharging electronics. In 2020, the average price was 137 USD, of which the price of the article is 103 USD and the price of the structure with rechargeable electronics is 35 USD per kWh. In 2015, the average price was 384 USD, of which 257 USD was the price of the cell and 127 USD per kWh were the costs of construction and rechargeable electronics.

By 2024, the average price of the whole package could fall to 100 USD and by 2030, with further technological progress, should lead to a further reduction to 58 USD per kWh. At that time, LIBs will be used massively not just only in electromobility, but also in a number of industrial solutions, including energy storage.<sup>7</sup>

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<sup>7</sup>[2020 - <https://finlord.cz/2020/12/cena-baterii-elektroaut-poklesla-89/> ]

## PRICE OF A LI-ION BATTERY PACK, VOLUME-WEIGHTED AVERAGE

Real 2020 dollars per kilowatt hour

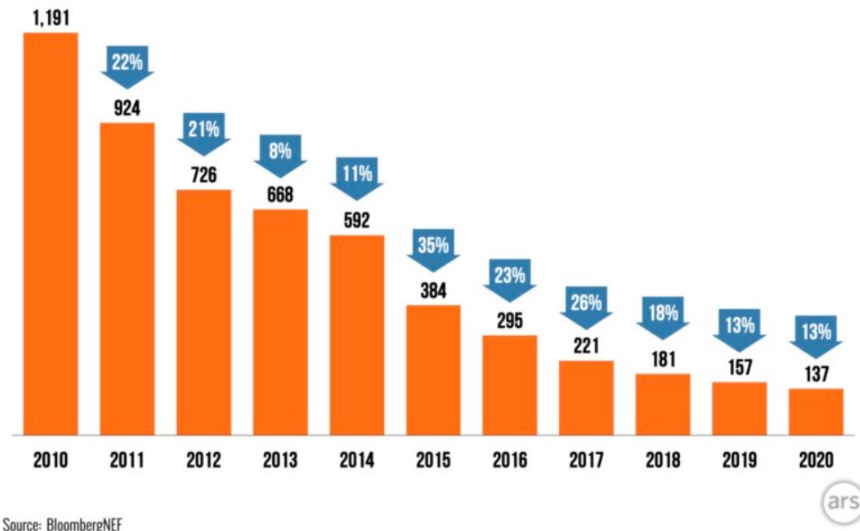


Figure 1 Development of the price of the Li-Ion Battery pack

## 5 Advantages and disadvantages of electric vehicles

### Advantages:

- Their operation is more environmental friendly
- With ev you pay less per km
- Cheaper service
- Ev are quiet and energetic
- Easy to operate

### Disadvantages:

- They are expensive
- Have limited range
- Charging length
- Availability of the charging stations
- The offer of ev is limited or transition to electromobility is not easy<sup>8</sup>

<sup>8</sup> [<https://zpravy.aktualne.cz/ekonomika/aut/prehledne-a-srozumitelne-5-nejvetsich-vyhod-a-nevyhod-elekt/r~ab1f4fe42d9511eb8b230cc47ab5f122/>]



## 6 What is wanted/needed for the support of electromobility

### 6.1 Tools and possibilities

There are many ways to either make the use of EVs more attractive or – respectively – do the opposite with ICE vehicles. In essence it all comes down to taxes and subsidies dependent on measurable variables related to individual transportation, such as CO<sub>2</sub>, etc. Some countries grant subsidies and bonuses to buyers of battery, fuel cell or hybrid electric cars. Other countries apply CO<sub>2</sub>-graduated purchase or ownership taxes.<sup>9</sup>

Given different social situations in different countries, chances are to hit the poorest in the society the hardest if the costs for transportation overall increase so that people cannot afford it. To combine the interest of environmental aspects and maintaining equal chances for everyone to not lowering the standards of living can be a real challenge.

### 6.2 Examples

In Europe there's a clear leader in terms of pushing e-mobility. As shown in the following figure from 2019, the overwhelming majority of passenger cars in Norway are EVs. BEVs make an incredible 42.4% of the overall number, plug-in hybrid electric vehicles add 13.6 % making it 56%.

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<sup>9</sup> (Fridstrøm, 2021)

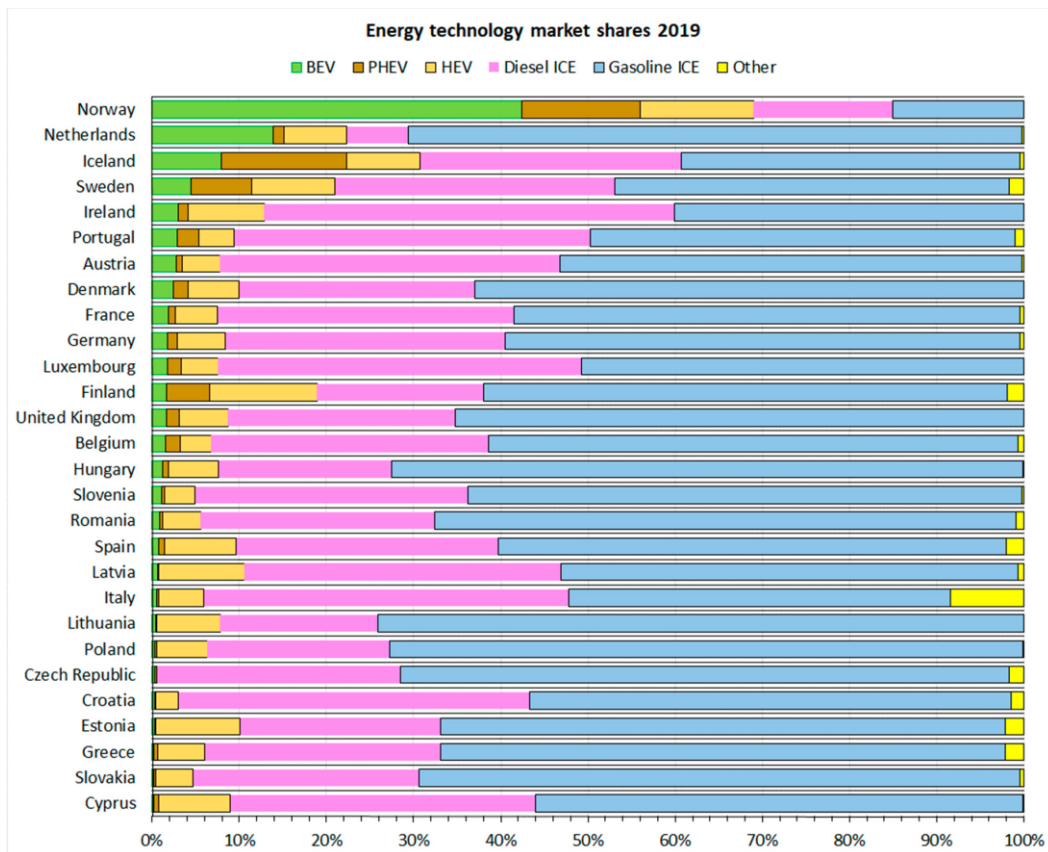


Figure 2 (Fridstrøm, 2021)

Fridstrøm calls this *a result of an enduring, non-nonsense government policy*. As he further states, the strategy Norway has followed to achieve this consists more of pushing out the conventional ICE vehicles rather than supporting EVs. Not only that, they did it by massively taxing ICE vehicles so that owning one becomes a luxury not everyone can afford. They introduced fourteen incentives bearing on vehicles, fuel or road use.

1. Graduated, one-off registration tax on passenger cars and LCVs, with ZEVs fully exempt
2. Reregistration tax on second hand sales of passenger cars and LCVs, with ZEVs fully exempt
3. Annual circulation (ownership) tax on passenger cars and LCVs, with ZEVs fully exempt
4. Fuel tax, not applicable to ZEVs
5. Road toll, with ZEVs fully or partially exempt
6. Ferry fares, with strongly reduced rates for ZEVs
7. Public parking fees, often with full exemption for ZEVs
8. Income tax on private use of company cars, with lower rates for ZEVs
9. Value added tax (VAT), with ZEVs fully exempt

10. Weight and Euro-class-graduated annual ownership tax on heavy-duty freight vehicles
11. Government support for fast charging and hydrogen refuelling facilities
12. Free recharging of BEVs at public parking lots
13. Subsidy on new battery or fuel cell electric light commercial vehicles
14. Subsidies on zero emission heavy-duty vehicles and machinery.<sup>10</sup>

Looking at this list, the first nine of these incentives clearly handicap owners of ICE vehicles as EVs are fully exempt or have reduced rates for additional taxes, tolls, and additional fees.

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<sup>10</sup> (Fridstrøm, 2021)

## 7 Current promotion policies

### 7.1 In Austria

#### 7.1.1 Private persons

In 2022, Austria have introduced financial support for the purchase of new EVs as a private person with a total subsidy budget of 167.2 Mio €. Specifically included are passenger cars and vehicles for cargo transportation up to 3500 kg that are one of the following:

- Battery Electric vehicles (BEV)
- Fuel cell electric vehicles (FCEV)
- Plug-in hybrid electric vehicles (PHEV)
- EVs with range extender (REX) or Range Extended Electric vehicles (REEV)

As well as

- Electric mopeds
- Electric motorcycles
- Electric light vehicles
- Electric transport bikes (but not ordinary electric bikes)

The financial support here is a flat rate with a maximum of 50% of the purchase price. However, the amount for BEVs and FCEVs is 5000€, for PHEVs 2500€ as well as for REXs and REEVs. Furthermore 800€ for e-mopeds, 1200€ for light e-motorcycles, 1900€ for motorcycles, and 1300€ for electric light vehicles. Purchasers of a new electric transport bike receive 900€ + a large bike-repair-service or a 3-year-guarantee.

To mention is also that e-vehicles must not exceed a list price of 60,000€ with basic equipment and must have an electric range of at least 50 km (WLTP)<sup>11</sup>. Additionally, the electricity used to run the vehicle must be obtained from renewable sources.

#### 7.1.2 Business sector

For companies and entrepreneurial organizations there is a subsidy budget as well for passenger cars and vehicles for cargo transportation up to 2000 kg maximum allowable total weight (different to the one for private persons, where the vehicle can be up to 3500 kg).

Similarly to the condition for private persons, the range must be at least 50 km and the list price mustn't exceed 60.000€.

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<sup>11</sup> (ÖAMTC, 2022)

The subsidy is

- 1000€ for BEVs and FCEVs
- 500€ for PHEVs and range extenders (REX, REEV)

PHEVs REXs and REEVs with Diesel engines are not subsidized.<sup>12</sup>

#### 7.1.3 Tax reductions

- BEVs are exempt from the so-called NoVa (Normverbrauchssteuer) - which is a one-time tax that must be paid at the purchase of a new passenger car – as well as the engine related insurance tax. PHEVs have to pay the engine related insurance tax for the ICE part of the passenger car.
- The private use of a company car is taxed dependent of the purchase price and the CO<sub>2</sub> emissions of the respective vehicle with either 1.5%, but a maximum of 720€ a month for vehicles with a maximum emission of 135 gCO<sub>2</sub>/km. If the value is above the 135 gCO<sub>2</sub>/km the amount rises up to 2%, with a maximum of 960€ monthly costs. Owners of EV are fully exempt from these costs.<sup>13</sup>
- If the vehicle is registered as company vehicle, the value added tax for EVs can be fully deducted<sup>14</sup>

#### 7.1.4 Green License plate

In 2017, the Austrian government introduced a green license plate for electric vehicles which offers owners of BEVs, PHEVs and FCEVs advantages.



With this EVs can be recognized immediately. Owners of them can have parking fees in several cities reduced or fully removed. Additionally, the air emission law, which contains a speed limit of 100 km/h on highways and expressways is not relevant for EVs. This means that EVs can go with 130 km/h on these streets, which are about 440 km in total in Austria.

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<sup>12</sup> (umweltfoerderung.at, 2022)

<sup>13</sup> (Kleine Zeitung, 2022)

<sup>14</sup> (Bundesverband Elektromobilität Österreich, 2022)

<sup>15</sup> (BMK Infothek, 2017)

## 7.2 In Czech/Slovakia

### 7.2.1.1 Electromobility in SVK

2021 is considered to be a turning point for EU as a whole in terms of investment in the development of electromobility. This market is mainly represented by purely electric vehicles (EV), but hybrids are also popular. **According to ACE, in 2021, 18% of EV were accounted for all sales. Only 3% of them were registered in the form of battery and hybrid vehicles. Therefore we can deduce that there is an increase in the sales share of electric cars, but the demand is still insufficient.**

Forecasts for the development of the electromobility in Slovakia, but also within the EU as a whole, are also different. However, it is important to note that Slovakia is beginning to make the topic of electromobility known to citizens and is taking steps for the comfortable use of EV on the road. **For example, according to SEVA, at the beginning of 2022 we exceeded the limit of 1020 charging points at 430 locations.** Charging is one of the most important parts of the use of EV and so this fact can significantly affect the interest in EV.

In this context, we should also draw the public's attention to the inclusion of charging infrastructure development in the National Recovery Plan. **In this way, almost 46 mil € are set aside to build a stable charging infrastructure for both long and short routes.** This money can create up to 228 DC ultra-fast charging stations on highways, 500 fast DC charging stations for cities and companies and 2600 AC charging stations.

#### **Donations for EV**

In connection with the promotion of electromobility, it is also important to mention that the government provides a subsidy for regular users to purchase EV. This subsidy allows you to pay a part of the price for the EV, thanks to which the initial investment is not that high. **Subsidies are intended to boost the interest in EV and also to mediate the competitiveness of these vehicles on the market, until their purchase price can be reduced.**

Electromobility represents the future of greener transport for people around the world.

**In 2016 – the budget was out in 3 min 41 sec:**

EV = 5000€

Plug-In Hybrid = 3000€

**In 2019:**

EV = 8000€

Plug-In Hybrid = 5000€

According to the statement of the Ministry of Economy R. Sulík, the donation system should change in 2022. The donation itself should be lower **app 5000€ per 1 car**. It is expected, that even though the donation would be lower, it could reach more applicants.

According to the website on the Ministry of Economy (as far as I have found), the height of the donation for 2022 stayed the same as in 2019 – BEV = 8000€ and PHEV = 5000€. <sup>16</sup>

## Green SLP

**State licence plate (SLP) or driver registration number (DRN) represent a unique number assigned to each vehicle in Slovakia, that has been registered.** Without it, the car can practically NOT drive and is described as immovable on the roads. **So what about the SLP for EV? how to get a green licence plate and what are its benefits in SVK and abroad?**

Green licence plates are currently considered as the domain of EV and Hybrids, because they can only be issued for these types of vehicles. **Their importance lies primarily in the distinctive function and also serves as a promotion only for EVs in SVK. However, such a registration plate in the form of a green licence plate is not automatic and must be requested.**



**Only electric cars and plug-in hybrids can get a green licence plate. Normally you pay 33€ for the classical registration, while you pay another 33€ for the allocation of a green DRN. So together, a green licence plate will cost you 66€.** However, you can also request the creation of your own licence plate, in green version, but for higher fee, namely **165,50€**. <sup>17</sup>

## Advantages

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<sup>16</sup> [<https://www.mhsr.sk/uploads/files/YRx8reQt.pdf> ]

<sup>17</sup> [<https://www.mhsr.sk/press/navrh-na-zelene-spz-ky-pre-elektromobily-putuje-do-nr-sr>]

**As for green licence plates, there are no benefits for users so far in Slovakia. Although Slovakia has had the opportunity to implement and create low emission zones since 2017, this has not yet happened.** However, you can get benefits with such a licence plate abroad – in Austria or in CZ. The reason is, that in the zones, the speed limit is low, because of the emissions, which are not produced by the EVs.

Also in CZ, owners of electric cars can use the highways for free, but the owners of these types of cars must register in advance on the website: [www.Edalnice.cz](http://www.Edalnice.cz).<sup>18</sup>

#### ***7.2.1.2 Support system in Czech***

According to the information, the grant call will be issued in January or maximum in February 2022. The amount of donation will be between 40 – 60%, depending on the size of the company.

The Ministry of Industry and Trade is preparing a record grant call in the support area for clean mobility, which should be financed from the National Recovery Plan. The call will relate to financial support for the acquisition of an EV, hydrogen vehicle (HV) or cargo wheel for entrepreneurs based in Czech Republic.

According to the information from the web page of National Recovery Plan, there should be around 940 millions CZK allocated for this purpose. This financial support should be available till 2025.

#### **Subsidy conditions for EV:**

- Entrepreneurs with a 2-year history doing business throughout CZ will be able to apply
- It will be possible to submit support application in the MS2014+ system
- The amount of support will be provided depending on the size of the company
- The call will **NOT** support primary agricultural production and forestry
- For regular motorists, ie. Individuals, that are **NOT** doing business in CZ, there is **NO** support for the purchase of an EV

#### **Amount of support for the purchase of an EV:**

- 40% for mid caps VP
- 50% for SP

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<sup>18</sup> [<https://www.chcemelektromobil.sk/>]



- 60% for small businesses from the price difference between an EV and a vehicle with an internal combustion engine<sup>19</sup>

## 8 Conclusion

According to the information, that we have gathered together, there are several different supporting system all over the European Union (EU).

The ISO 14060 family (especially ISO 14067:2018), which have been given by the EU are more or less informative, as all of the countries have to find their own way of how to reduce the CO<sub>2</sub> footprint. One of the ways of reduction is to support the shopping/purchase of the EVs. On the other hand, we still have to have in mind, that there could be only greenwashing applied, as the responsibility for the CO<sub>2</sub> footprint is being given on the shoulders of the consumers. Nevertheless, each of the countries has its own supporting system and rules, when implementing of the EU regulation and these need to be followed, when asking for a subsidy for buying of an EV.

When it comes to SVK and CZ, their supporting system comes mostly from the National Recovery Plans. In both countries are the subsidies taken differently, as SVK is supporting not just even business but also private persons. Unfortunately, CZ is supporting only the business, which can be taken a bit discriminating, as also the citizens are contributing to the taxes.

When it comes to other countries, e.g. Norway, it is a bit questionable whether they have chosen a good way, how to support the reduction of CO<sub>2</sub> footprint or the purchase of EVs. Nevertheless, they have reached their national goal of reducing of the CO<sub>2</sub> footprint.

We still have to have in mind, that there is **NO** common/joint support system, so it is up to the countries, which way of implementation of the EU regulation they apply. Nevertheless, the support system or better say the restrictions should **NOT** be discriminate the citizens, as they still have the right to decide for themselves and therefore, the **9** from **14** restrictions, applied by

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<sup>19</sup> [2022 - <https://fdrive.cz/clanky/dotace-na-elektromobily-letos-v-cesku-budou-vime-kdy-startuji-8319> ]

Norway, on the ICE can be considered as difficult, e.g. for those, who are not that privileged to buy themselves an EV.

As the rules and regulation have their own advantages, they also do have disadvantages, and therefore, we should find a middle way how the help the Nature to recover from the years of destruction, that we have caused.

## 9 Literature

[https://www.greenpeace.org/czech/clanek/11776/kalkulacka-uhlikove-stopy-dobry-sluha-ale-spatny-pan/?gclid=CjwKCAjw46CVBhB1EiwAgy6M4pz1gX3AiFkCvaAKCRzo2\\_ltlB1HbixRG\\_y5X15t42BiZ\\_eZMQr3RoCL1QQAuD\\_BwE](https://www.greenpeace.org/czech/clanek/11776/kalkulacka-uhlikove-stopy-dobry-sluha-ale-spatny-pan/?gclid=CjwKCAjw46CVBhB1EiwAgy6M4pz1gX3AiFkCvaAKCRzo2_ltlB1HbixRG_y5X15t42BiZ_eZMQr3RoCL1QQAuD_BwE)

[https://www.green0meter.com/about-us/?gclid=CjwKCAjwkYGVbHArEiwA4sZLuOYzG\\_e5QrSVKvh6qq6VthLX-q\\_IU5ev\\_yZW3MhvXdP03vA1wM6WPBoCHZAQAuD\\_BwE](https://www.green0meter.com/about-us/?gclid=CjwKCAjwkYGVbHArEiwA4sZLuOYzG_e5QrSVKvh6qq6VthLX-q_IU5ev_yZW3MhvXdP03vA1wM6WPBoCHZAQAuD_BwE)

<https://zpravy.aktualne.cz/ekonomika/auto/prehledne-a-srozumitelne-5-nejvetsich-vyhod-a-nevyhod-elekt/r~ab1f4e42d9511eb8b230cc47ab5f122/>

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