



ERA-NET Cofund

Electric Mobility Europe

(EMEurope)

**State of the art survey No. 1 –
National, Regional and
EU measures to establish and
support electric mobility**

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1. Introduction

Electric Mobility Europe (EMEurope) has the ambition to scale up and advance the implementation and deployment of e-mobility in Europe's urban areas. For this purpose, EMEurope contains a policy cooperation component with the following main tasks:

- Strengthening the knowledge base;
- Establishing closer contacts between policy-makers;
- Improving and tuning frame conditions for electric mobility;
- Facilitating the dialogue between policy-makers and stakeholders.

There are many networks working to achieve this goal, but their approach is rather fragmented and therefore unlikely to trigger radical changes. Therefore, one of the goals of EMEurope is to promote the exchange on policy decisions and actions in the involved countries and regions. Furthermore, wherever it is deemed to be beneficial also stakeholders from different networks inside and outside of Europe should be involved.

2. Survey

As part of the outputs planned within the policy cooperation activities, a state of the art survey of regional, national and EU measures was carried out in August and September 2018. The aim of the survey is to serve as base for information and exchange of experiences on the implementation of electric mobility supporting measures in the thirteen countries and two regions involved in the initiative. All partners involved in the EMEurope Policy Cooperation activities contributed to the survey (figure 1).

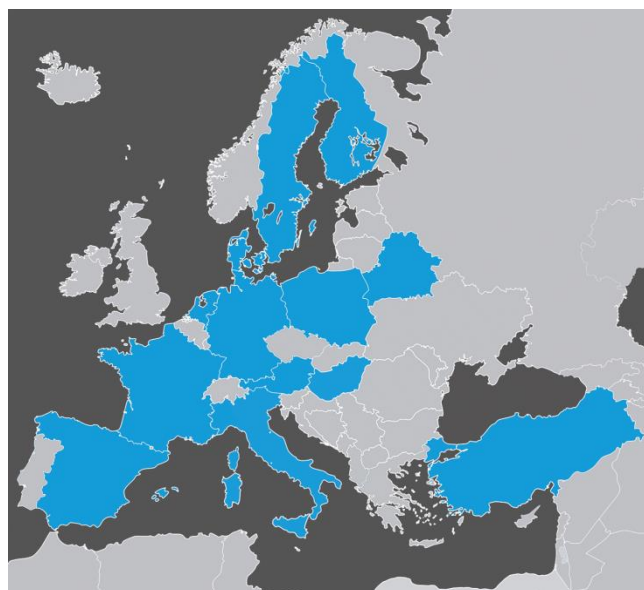


Figure 1: Countries and regions involved in the Policy Cooperation activities of EMEurope.

The survey was prepared considering the following six main types of measures:

- purchase subsidies,
- tax benefits (registration, ownership, company),
- VAT benefits,
- other financial benefits,
- incentives (local, infrastructure, other types) and,
- research and funding programmes/schemes.

The participating countries and regions were requested to answer to the following questions related to the measures mentioned above:

1. Does your country/region make or made use of measure “X” to support and establish electric mobility?
If no, please write “no”. Are there any known reasons for not making use of it?
If yes, please describe the main aspects of the measure(s):
2. When did your country/region first implement measure “X”?
3. Planned duration of the measure(s) “X”
4. What was the experience related to the measure(s) “X”?
Please consider the following aspects:
 - Implementation of the measure
 - Use of the measure
 - Contribution to the goal(s)
 - Information on measurable impacts available
5. Are changes/adaptations/improvements planned for this measure?
6. Measure(s) responsible offices and contact persons
7. Webpages and links to documents, if available (preferably in English, otherwise original language).

No changes have been made to the contributions content apart from changes in the format and typos. In the following table showing the overview of the survey outcomes measures related to infrastructure advancement were separated from other incentives because of the current importance of these measures.

Table: Overview of the outcomes of State of the art survey No. 1 – National, Regional and EU measures to establish and support electric mobility

country/region	purchase subsidies	tax benefits	VAT benefits	other financial benefits	incentives (local, other types)	incentive (infrastructure)	research and funding programs
Austria	✓	✓	✓	✓	✓	✓	✓
Belarus	planned	planned	✓	✓	✓	✗	✓
Denmark	planned	✓	✗	✗	planned	not yet reported	✓
Finland	✓	✓	✗	✓	not yet reported	✓	✓
France	✓	✓	✓	✓	✓	not yet reported	✓
Germany	✓	✓	✗	✓	✓	✓	✓
Hungary	✓	✓	✗	✗	✓	✓	✓
Italy	✓	at regional level	not yet reported	✗	not yet reported	planned	✓
Italy - Piedmont	✓	✓	✗	✗	not yet reported	planned	✓
The Netherlands	✗	✓	✗	✗	✓	✓	✓
Spain	✓	not yet reported	not yet reported	not yet reported	✓	not yet reported	✓
Spain - Catalonia	✓	✓	✗	✗	✓	✓	✓
Sweden	✓	✓	✗	✗	✓	✓	✓
Turkey	✓	✓	✗	not yet reported	✗	✗	✓
	79%	79%	21%	43%	57%	50%	100%

✓ = available

✗ = not available

Austria

Purchase subsidies	
Description	<p>Currently embedded in the E-Mobility Package 2017-2018</p> <p>www.bmvit.gv.at/verkehr/elektromobilitaet/foerderungen/aktionspaket.html</p> <p>www.bmvit.gv.at/presse/aktuell/downloads/leichtfried/emobilpaket.pdf</p> <p>Private purchase</p> <p>BEV & FCEV: 4,000 EUR, thereof 2,500 EUR from the Federal Ministry of Transport, Innovation and Technology and 1,500 EUR from the Austrian automobile importers. Additional subsidies from the federal state of Lower Austria (only BEV) and Styria with 1,000 EUR and furthermore for purchasing a wall box.</p> <p>PHEV, REEV, REx: 1,500 EUR, thereof 750 EUR from the Federal Ministry of Transport, Innovation and Technology and 750 EUR from the Austrian automobile importers.</p> <p>Purchase from businesses, other organisations and municipalities</p> <p>BEV & FCEV: 3,000 EUR, thereof 1,500 EUR from the Federal Ministry of Sustainability and Tourism and 1,500 EUR from the Austrian automobile importers.</p> <p>PHEV, REEV, REx: 1,500 EUR, thereof 750 EUR from the Federal Ministry of Sustainability and Tourism and 750 EUR from the Austrian automobile importers.</p> <p>Other financial benefits for busses, trucks etc. available</p> <p>There are further subsidies for electric motorbikes, bikes, busses and commercial vehicles as well as for charging infrastructure, fleet management and R&D (see Research and funding programmes/schemes).</p>
Since	<p>2008 within the model region for e-mobility (VLOTTE), since then purchase subsidies for businesses were implemented.</p> <p>Purchase subsidies on a federal level for private citizens were introduced in 2017.</p>
Duration	Should evolve (decrease) following a specific schedule
Experience	<p>A purchase subsidy is clear and easy to understand and helps to overcome the barrier of the higher price. It is a good motivation for the early adopters to buy an electric car. An additional subsidy for cars that are used in E-car sharing motivated many people (especially in rural areas) to start their e-car sharing-project, with big impact (many people got in touch with e-mobility).</p> <p>Having said that purchase subsidies cannot replace other even more important measures like adaptations in the taxation system. The 2016 changes in the Austrian company car taxation systems (zero tax for company cars; higher tax for polluting ICEs) is deemed to be the most successful single measure in place to boost electromobility in Austria.</p>
Planned changes	The subsidy should focus more on charging infrastructure especially in residential buildings. In addition the purchase premium for cars should decrease in the upcoming years as electric cars will become more price-competitive.
Responsible office	<p>Programme Management</p> <p>Ministry of Transport, Innovation and Technology, Office of the General Secretary, Mobility Transformation & Transport Decarbonisation</p> <p>Ministry of Sustainability and Tourism, Funding Administration Kommunalkredit Public Consulting GmbH – Team for e-mobility, Türkenstraße 9, 1092 Wien</p> <p>E-mail: e-mobilitaet@kommunalkredit.at</p>
Further information	<p>www.umweltfoerderung.at</p> <p>www.klimafonds.gv.at</p>

Tax benefits (registration, ownership, company)

Description	For electric vehicles (BEV & FCEV) No insurance tax (since 05/1993) No car registration tax (NoVA) (since 01/1995) Pre-tax reduction (usually pre-tax reduction for cars in Austria) (since 01/2016) No income tax for company cars when privately used (since 01/2016) Besides the value added tax (VAT) electric cars are basically completely tax-exempt since 2016.
Since	See description
Duration	Not yet decided
Experience	The tax reform in 2016 (input tax reduction and no income tax for company cars) brought a great advantage for EVs owned by companies but the effect was smaller than expected. Many companies didn't want to change/discuss their company car regulation (also because this tax reduction is only a temporary measure), many employees were not aware of the big advantage. Positive: company cars (and car holder) have a good image, companies were motivated to install charging infrastructure, second hand cars will be available soon.
Planned changes	Not yet decided
Responsible office	Ministry for Transport, Innovation and Technology
Further information	www.bmvit.gv.at/verkehr/elektromobilitaet/downloads/factsheet.pdf

VAT benefits

Description	Input tax reduction for EVs (usually no input tax reduction for cars in Austria), but only for companies. No VAT benefits for private persons (too expensive on the long run, hard to withdraw).
Since	01/2016
Duration	Not yet decided
Experience	See Tax benefits
Planned changes	See Tax benefits
Responsible office	See Tax benefits
Further information	See Tax benefits

Other financial benefits	
Description	No income tax for electricity if charging for free at the company
Since	12/2016
Duration	Not yet decided
Experience	Employers should have the incentive to build up charging infrastructure and also offer electric company cars. Employees should have the possibility to charge not only the company car but also the private car at work.
Planned changes	Not yet decided
Responsible office	N/A
Further information	BMF-AV Nr. 211/2016 (Lohnsteuerrichtlinie 2002 – Wartungserlass 2016, findok.bmf.gv.at/findok?execution=e100000s1&segmentId=2e3e01fd-3a1f-4ce4-8963-6b4ce5c431e3)
Incentives (local, infrastructure, other types)	
Description	<p>Currently embedded in the E-Mobility Package 2017-2018</p> <p>https://www.bmvit.gv.at/verkehr/elektromobilitaet/foerderungen/aktionspaket.html</p> <p>https://www.bmvit.gv.at/presse/aktuell/downloads/leichtfried/emobilpaket.pdf</p> <ul style="list-style-type: none"> • Green licence plates for electric vehicles (zero emission) for the classes L, M, N. (04/2017 for passenger cars and light duty vehicles and 08/2017 for heavy duty vehicles and busses) • Auxiliary sign „Parking, stopping and standing prohibited – except electric vehicles“ (01/2017) • Permissible total weight extension from 3.5 tons to 4.25 ton (01/2017) • Fleet Management of alternative fuel vehicles from the Federal Procurement Agency (10/2017) <p>Infrastructure funding: Up to 10,000 EUR funding for fast charging infrastructure</p>
Since	See Description
Duration	Not yet decided
Experience	<p><u>Green licence plates</u>: One main reason, why green licence plates were introduced, are that (local) incentives could be executed, for example free or cheap parking, expansion of delivery times and zones for electric vehicles, etc. <u>Auxiliary sign „Parking, stopping and standing prohibited – except electric vehicles“</u>: The auxiliary sign was introduced, so that electric vehicles have a legally right to stop and load at a charging station. A further reason is, that parking space is not blocked from non-EVs that are not able to charge.</p> <p><u>Permissible total weight extension</u>: The additional weight of electric commercial vehicles because of their batteries was addressed by extent the permissible total weight up to 4.25 tons. With that extension, electric vehicles up to 4.25 tons could be driven with driving licence B.</p> <p><u>Fleet Management</u>: Vehicle Leasing and fleet concepts for public authorities.</p>
Planned changes	Not yet decided

Responsible office	Ministry for Transport, Innovation and Technology, Federal Procurement Agency, Hotline: +43 1 245 70-0, E-Mail: office@bbg.gv.at
Further information	www.bmvit.gv.at/verkehr/elektromobilitaet/downloads/factsheet.pdf www.bbg.gv.at/publikationen/presse/presse/erstmal-ueber-die-bbg-verfuegbar-fuhrparkmanagement-alternativbetriebener-kraftfahrzeuge/
Research and funding programmes/schemes	
Description	<p>Seven Model regions for E-Mobility have been established since 2012 by the Climate and Energy Fund. New models and test EVs in daily use have been developed, all powered by renewable energies. The goal was to establish organisational and economical know-how. (since 2008)</p> <p>The program lighthouse projects aims to establish visible projects in which ambitious approaches and innovative developments are implemented and to make e-mobility more attractive for everyday use by promoting and developing the infrastructure. The lighthouse projects focus on issues in the field of vehicles, infrastructure but also users. Both research and development in the vehicle sector are addressed as well as the networking and bundling of existing initiatives. Cooperation with the "Model Regions for E-Mobility" of the Climate and Energy Fund result in an intensive exchange between research and practice. (2009-2017)</p> <p>The successor program of lighthouse projects is Zero Emission Mobility. Zero emission technologies offer the opportunity to substantially reduce greenhouse gas emissions from transport, and to create a sustainable, interoperable mobility system. The e-mobility initiative thus represents one of the flagship projects of the integrated #mission2030 Climate and Energy Strategy of Austria. The Climate and Energy Fund supports technology and implementation-oriented electric mobility projects designed to integrate components, systems and services into a comprehensive mobility system. (since 2018)</p> <p>Further programs are Mobility of the Future and Urban E-Mobility.</p>
Since	See Description
Duration	Not yet decided
Experience	N/A
Planned changes	Not yet decided
Responsible office	Zero Emission Mobility, Urban E-Mobility , Ministry for Transport, Innovation and Technology Mobility of the Future , Ministry for Transport, Innovation and Technology; Model regions , Ministry for Sustainability and Tourism
Further information	<p>Model Regions www.klimafonds.gv.at/call/modellregionen-elektromobilitaet/</p> <p>Zero Emission Mobility www.klimafonds.gv.at/wp-content/uploads/sites/6/Leitfaden_Zero_Mobility_Emission_2018_engl_fnal.pdf</p> <p>Lighthouse projects www.klimafonds.gv.at/wp-content/uploads/sites/6/Klien_Emobilitaet18_deutsch.pdf</p> <p>Urban E-Mobility www.ffg.at/programme/urbane-elektromobilitaet</p>

Further comments

The new climate-and-energy strategy of the Austrian government #mission2030 mission2030.info/ puts a strong emphasis on e-mobility, inter alia in the lighthouse project #3:

mission2030.info/wp-content/uploads/2018/06/Klima-Energiestrategie.pdf - PAGE 67ff (LEUCHTTURM 3: E-MOBILITÄTSOFFENSIVE)

A specific item is to simplify the legal procedures to install a wallbox within an apartment building. Currently unanimous consent is needed. This is currently under scrutiny and housing legislation is subject to amendment (similar to GERMANY).

Belarus

Purchase subsidies

Description	<p>On July 10 2018, the president of the Republic of Belarus Alexander Lukashenko had signed Decree No. 273 "On Stimulating the Use of Electric Vehicles". The document specifies that the issuance of a permit for electric vehicles to participate in road traffic will be made without paying a fee. RUE "PO" Belorusneft ", acting as the State Operator for the creation and development of a charging network for electric vehicles, was instructed to ensure the development and implementation of an appropriate programme.</p> <p>In 2017 Research and Design Enterprise "BelTe", commissioned by Belenergo, developed a programme for development of electric transport and charging infrastructure in the Republic of Belarus (programme). Its optimistic scenario suggests that by 2025 there will be more than 30,000 electric vehicles in Belarus, a pessimistic one - 10,000.</p> <p>Both scenarios can be realized only under the condition of stimulating economic policy and changes in legislation aimed at facilitating the use of electric vehicles. The program considers such stimulating demand for electric vehicles as soft loans, subsidies for the acquisition of cars, the abolition of customs duties and utilization charges, a reduction in the transport fee, a reduced tariff for electricity.</p> <p>Experts believe that subsidies of 7,000 USD together with relatively cheap electricity tariffs could make the electric car profitable for consumers.</p> <p>During the development of the Programme there was a change in legislation. Now any State Programme should be initiated by the Council of Ministers of the Republic of Belarus. Thus, this Programme can no longer have the status of State, but the movement is taking place. Now the same initiative has been taken by the Ministry of Economy of Republic of Belarus. It is preparing the own Programme for the development of electric transport, without affecting the charging stations.</p> <p>The Government of the Republic of Belarus agreed with the decision of the Northern Financial Corporation (NEFCO) to allocate 1 million EUR for the purchase by Belarusians electric vehicles and charging stations. The corresponding decision is fixed by the Council Decision of the Council of Ministers of Republic of Belarus of February 27, 2017 No. 162.</p> <p>The Belarusian People's Bank will receive a credit line for up to 1 million EUR. These funds will be used to allocate targeted loans to individuals for the purchase of electric vehicles, "hybrids", charging stations and other equipment. The website of the Belarusian People's Bank provides conditions for granting a loan.</p>
Since	02/2017
Duration	It is planned, that purchase subsidies should be permanent (7,000 USD)
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is involved in the process of discussion and negotiation of the Programmes.
Planned changes	Changes planned in the final version of the Programmes
Responsible office	The Programmes (together with all measures) are under development and consideration.
Further information	<p>president.gov.by/ru/official_documents_ru/view/ukaz-273-ot-10-ijulja-2018-g-19124/</p> <p>www.government.by/ru/solutions/2823</p> <p>naviny.by/article/20171013/1507898940-rynok-elektromobiley-gosudarstvo-ne-uspevaet-za-progressom</p> <p>www.bnb.by/chtoby-znali/novosti/avtomobili-budushchego-dostupny-segodnya-snizheny-stavki-po-kreditu-i-lizingu-na-elektrokary-i-zarya/?sphrase_id=3346</p>

Tax benefits (registration, ownership, company)	
Description	<p>The most difficult issue considered by the programme is related to the cancellation of customs payments for electric vehicles, which can reach 54% of the cost of the vehicle. Belarus, as a member of the EEA, must coordinate all customs payments. Therefore, this issue should be resolved collectively.</p> <p>Another difficult issue is the abolition of the recycling charge, the amount of which for new electric vehicles is about 400 USD, for electric cars over three years - more than 2,500 USD. In Belarus the utilization fee for cars with internal combustion engines is ten times lower, and hybrid cars are generally exempted from this fee, so the programme proposes to release electric vehicles from the utilization charge.</p> <p>In addition, experts propose to reduce the transport fee by 50%, as well as insurance of civil liability of owners of electric vehicles. Manufacturers of electric vehicles and charging stations are recommended to exempt from land tax, income tax for three years and reduce the income tax to 9%.</p>
Since	07/2018
Duration	It is planned, that the tax benefits should be permanent
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is involved in the process of discussion and negotiation of the Programmes.
Planned changes	Changes planned in the final version of the Programmes
Responsible office	The Programmes (together with all measures) are under development and consideration.
Further information	<p>president.gov.by/ru/official_documents_ru/view/ukaz-273-ot-10-ijulja-2018-g-19124/</p> <p>www.government.by/ru/solutions/2823</p> <p>auto.tut.by/news/road/600257.html</p> <p>naviny.by/article/20171013/1507898940-rynok-elektromobiley-gosudarstvo-ne-uspevaet-za-progressom</p> <p>auto.tut.by/news/road/533609.html?utm_source=auto.tut.by&utm_medium=news-bottom-block&utm_campaign=relevant_news</p> <p>www.bnb.by/chtoby-znali/novosti/avtomobili-budushchego-dostupny-segodnya-snizheny-stavki-po-kreditu-i-lizingu-na-elektrokary-i-zarya/?sphrase_id=3346</p> <p>naviny.by/article/20171013/1507898940-rynok-elektromobiley-gosudarstvo-ne-uspevaet-za-progressom</p>

VAT benefits

Description	<p>On July 10 2018, President of the Republic of Belarus Alexander Lukashenko had signed Decree No. 273 "On Stimulating the Use of Electric Vehicles".</p> <p>According to the Decree to December 31st, 2020:</p> <p>Devices for charging batteries ** (hereinafter referred to as charging stations) imported by legal entities or individual entrepreneurs into the territory of the Republic of Belarus are exempted from value added tax collected by customs authorities (tax authorities - when importing from the territory of the state members of the Eurasian Economic Union).</p> <p>Charging stations for which, upon importation, benefits for the payment of value added tax are used throughout their entire service life exclusively in the territory of the Republic of Belarus.</p>
Since	07/2018
Duration	The VAT benefits will expire in 31/12/2020
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is involved in the process of discussion and negotiation of the Decree.
Planned changes	Changes planned in the final version of the Programmes
Responsible office	The Programmes (together with all measures) are under development and consideration.
Further information	president.gov.by/ru/official_documents_ru/view/ukaz-273-ot-10-ijulja-2018-g-19124/

Other financial benefits

Description	<p>The market of electric vehicles is currently quite promising and fast-growing in Belarus. With a view to its further development the tariff for energy, that is used by electric charging stationary stations intended for charging electric vehicles, is set for the enterprises of the State Industry Association "Belenergo".</p> <p>The tariff was introduced from May 1, 2018 and amounted to 0.15693 rubles (excluding VAT) per 1 kWh, which is below the general tariff for organizations operating in the service sector, by 48%.</p> <p>The decision to introduce the tariff is aimed at stimulating electricity consumption by electric vehicles and, as a consequence, substitution of consumption of petroleum products produced from imported oil, electricity generated at Belarusian power plants, including Belarusian Nuclear Power Station. Thus, owners of electric vehicles can independently charge their car or receive this service at charging stations of legal entities or individual entrepreneurs providing such services on equal terms.</p>
Since	05/2018
Duration	The described benefits should evolve (decrease) following the Programmes (final version)
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is involved in the process of discussion and negotiation of the Decree.
Planned changes	Changes planned in the final version of the Programmes
Responsible office	N/A
Further information	auto.tut.by/news/offtop/590580.html

Incentives (local, infrastructure, other types)

Description	<p>Production of electric transport is organizing in Belarus:</p> <ul style="list-style-type: none"> - Electric buses. - Electric cars. - Personal electric transport (electric scooters, electric bicycles, etc.). <p>In the parking lot of the shopping center "Galleria Minsk" a station for charging electric vehicles was opened. Owners of such cars can use it for free and around the clock - they just need to park near to the terminal.</p> <p>Now the same charging stations (for free) are organizing in other shopping centres.</p> <p>There are a lot of promotional events for electromobility in Belarus (incl. international). For example, an auto rally on electric vehicles called Arctic rally was organized by the Norwegian ecological association BELLONA and the Association of Automobile, Unmanned and Connected Transport and Infrastructure of St. Petersburg. The purpose of the action was to draw the authorities' attention to the lack of a charging infrastructure.</p> <p>Two Belarusians drove on their Tesla from Minsk to Murmansk and returned back. This auto rally on electric vehicles called Arctic rally was organized by the Norwegian ecological association BELLONA and the Association of Automobile, Unmanned and Connected Transport and Infrastructure of St. Petersburg. The purpose of the action was to draw the authorities' attention to the lack of a charging infrastructure.</p>
Since	N/A
Duration	Should be permanent
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is involved in the process of discussion and negotiation of all measures on electromobility.
Planned changes	Changes planned in the final version of the Programmes
Responsible office	N/A
Further information	<p>Information about 1st Belarusian electric bus was published at: auto.tut.by/news/exclusive/543951.html</p> <p>Information about Belarusian electric car was published at: www.sb.by/articles/zaryad-vnimanie-v-put.html ex-press.by/article.php?id=138140</p> <p>Information about Belarusian light personal electric transport was published at: auto.tut.by/news/exclusive/552640.html</p>

Research and funding programmes/schemes

Description	<p>There is no a single research programme in Belarus, devoted to electromobility. But a lot of scientific works in the field of electromobility are carried out in a number of State Research Programmes, such as “Energetic systems, processes and technologies”, “Informatics, space and safety”, “Photonics, opto- and microelectronics”, “Mechanics, metallurgy, diagnostics in mechanical engineering”, “Physical material science, new materials and technologies”, etc.</p> <p>Some of works are carried out in the frames of President’s Instruction:</p> <ul style="list-style-type: none"> - Instruction on creation of the first Belarusian car. - Instruction on creation of domestic electric bike. <p>These works are funded as separate projects (funding of NASB) with partial funding from Innovation Fund.</p>
Since	N/A
Duration	Should be permanent
Experience	The National Academy of Sciences of Belarus as the highest scientific organization of the Republic of Belarus is responsible for carrying out of President’s instructions and a lot of scientific works in the field of electromobility.
Planned changes	According to the President’s and Governmental instructions.
Responsible office	State Research Programmes
Further information	<p>Information about Belarusian electric car was published at:</p> <p>news.mail.ru/economics/28255217/?frommail=1</p> <p>www.sb.by/articles/zaryad-vnimanie-v-put.html</p> <p>Information about Belarusian light personal electric transport was published at:</p> <p>televid.by/archives/27724</p> <p>electrotransport.ru/ussr/index.php?topic=22481.0</p>
Further comments	
N/A	

Denmark

Purchase subsidies

Description	The Danish Government does not offer purchase subsidies. An initiative to introduce purchase subsidies of 50,000 DKK for electrical cars has been proposed, but has not been adopted at this point.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Tax benefits (registration, ownership, company)

Description	The Danish government launched a new Climate Plan in autumn 2018. One of the initiatives of the plan is to exempt electrical cars with a value below 400,000 DKK from taxes in 2019 and 2020. Furthermore, the government will maintain a lower registration tax for electrical cars than for cars running on petroleum fuels.
Since	01/2016
Duration	Should evolve (decrease) following a specific schedule
Experience	N/A
Planned changes	N/A
Responsible office	Danish National Tax Authority, Phone: +45 72 22 27 96
Further information	www.regeringen.dk/nyheder/miljoe-og-klimaudspil/

VAT benefits

No VAT benefits

Other financial benefits

No other financial benefits

Incentives (local, infrastructure, other types)

Description	The new Climate Plan sets out an ambitious goal: no sale of petroleum fuelled cars after 2030. A commission is established to make concrete recommendations on how to achieve the goal. A set of incentives for buying electric cars/vehicles is also introduced as part of the Climate Plan: better parking and charging infrastructure for low emission cars, low emission cars may drive in the designated bus lanes, better conditions for low emission taxis – making it easier for passengers to choose a green taxi and stricter regulation for diesel fuelled heavy vehicles in areas marked as ‘environmental zones’.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Research and funding programmes/schemes

Description	Within existing research programmes.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Further comments

For more information about electrical mobility in Denmark, contact:

Danish electrical vehicle alliance: danskbilalliance.dk/

Danish Transport, Construction and Housing Authority: www.trafikstyrelsen.dk/EN.aspx

Finland

Purchase subsidies	
Description	N/A
Since	2011 (in connection with Tekes' EVE programme)
Duration	2018-2021 The purchase subsidies should evolve (decrease) following a specific schedule
Experience	Increase the interest of purchasing of EVs, but numbers are still low. Easy to apply. Contribution to the goal quite small.
Planned changes	N/A
Responsible office	Trafi, www.trafi.fi/oleedellakavija/tayssahkoauto/sahkoauton_hankintatuki
Further information	Trafi, www.trafi.fi/oleedellakavija/tayssahkoauto/sahkoauton_hankintatuki
Tax benefits (registration, ownership, company)	
Description	Purchase tax and annual tax is dependent on CO ₂ emissions of a vehicle.
Since	N/A
Duration	Should evolve (decrease) following a specific schedule
Experience	Easy to implement. Applied in all vehicle purchases. Not very strong impact.
Planned changes	N/A
Responsible office	Trafi, www.trafi.fi/oleedellakavija/tayssahkoauto/sahkoauton_hankintatuki
Further information	Trafi, www.trafi.fi/oleedellakavija/tayssahkoauto/sahkoauton_hankintatuki
VAT benefits	
No VAT benefits	

Other financial benefits	
Description	Investment support for charging stations for real estate.
Since	2018
Duration	End of 2018
Experience	Strong interest, large number of applications.
Planned changes	N/A
Responsible office	Trafi, www.trafi.fi/
Further information	www.virta.global/news-fi/tuet-sahkoauton-latauspisteiden-toteuttamiseen
Incentives (local, infrastructure, other types)	
Description	N/A
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A
Research and funding programmes/schemes	
Description	Tekes' EVE programme 2011-2015
Since	2011
Duration	Ended in 12/2015
Experience	Promoted Finnish companies to develop and create new EV business. Tekes funding 35 million EUR. Many new companies were born on EV sector. Worth of millions of euros of new international business created.

Planned changes	Programme has ended but Business Finland continues to support industry in this sector
Responsible office	Chief adviser Martti Korkiakoski /Business Finland
Further information	New Business Finland programme Smart Mobility 2018-2022 includes activities and funding for Electric Traffic Campaign Batteries from Finland 2018-2020 supports EV business www.businessfinland.fi
Further comments	
N/A	

France

Purchase subsidies	
Description	Bonus/malus for supporting purchase of low carbon vehicles that include also Purchase Subsidies, Tax Benefits, VAT Benefits, Other Financial Benefits and Incentives) (https://www.ecologique-solidaire.gouv.fr/bonus-malus-ecologique-definitions-et-baremes-2018) with a maximal help of 8,500 EUR for buying an electrical vehicle It is directly linked to our national energy policy (https://www.ecologique-solidaire.gouv.fr/programmations-pluriannuelles-lenergie-ppe)
Since	1990
Duration	The purchase subsidies should decrease following a specific schedule
Experience	N/A
Planned changes	Purchase subsidies will decrease progressively
Responsible office	The DGEC (General directorate for Energy and Climate is responsible for this policy). www.ecologique-solidaire.gouv.fr/direction-generale-lenergie-et-du-climat-dgdc
Further information	www.ademe.fr/sites/default/files/assets/documents/72285_ademe_histoire_du_ve_pageapage.pdf www.avere-france.org/ www.avere-france.org/Site/Category/?arborescence_id=70
Tax benefits (registration, ownership, company)	
N/A	
VAT benefits	
N/A	
Other financial benefits	
N/A	
Incentives (local, infrastructure, other types)	
N/A	

Research and funding programmes/schemes

Description	<p>It was managed during 20 years by the PREDIT (Research Programm on Innovation and transportation). Now it is shared between the national research agency (ANR - www.agence-nationale-recherche.fr/suivi-bilan/portail/theme/?tx_lwmsuivibilan_pi4[CODE]=DEFIS&tx_lwmsuivibilan_pi4[NumChamp]=97)</p> <p>And www.allianceenergie.fr/?s=v%C3%A9hicules+%C3%A9lectriques</p> <p>Now the VEDECOM institute is a key actor for research on those topics : http://www.vedecom.fr/?lang=en</p> <p>On research coordinated by the Ministry of the Environment, Energy and the Sea it is possible to upload the information about the programmes: www.side.developpement-durable.gouv.fr/EXPLOITATION/ACDRISR/search.aspx?SC=TOUS_SAUF_PERI_GENERAL&QUERY=vehicules+electriques+%/Search/(Page:0,PageRange:3,QueryString:%27vehicules%20electriques%27,ResultSize:10,ScenarioCode:TOUS_SAUF_PERI_GENERAL,SearchContext:0,SearchLabel:%27%27))</p> <p>On research coordinated by Ademe information can be achieved through a dedicated organisation called “investissements d’avenir” that is more centered on innovation (www.ademe.fr/recherche?query=investissements%20d%27avenir) and www.ademe.fr/expertises/mobilite-transports</p>
Since	End of 1980's
Duration	Should be permanent
Experience	N/A
Planned changes	N/A
Responsible office	www.ademe.fr/expertises/mobilite-transports
Further information	N/A
Further comments	
N/A	

Germany

Purchase subsidies

Description	Financial incentive/environmental bonus The German Federal Government has set itself the objective to promote the sale of electric vehicles by granting an environmental bonus. It amounts to 4,000 EUR for all-electric vehicles (powered by battery or fuel cell) and 3,000 EUR for externally chargeable hybrid vehicles. The total funding amount has been set at 1.2 billion EUR. The Federal Government and the automotive industry assume 50% of the costs each. The financial assistance will be granted until the amount has been paid out, in any event until 2019 at the most.
Since	07/2016
Duration	Will expire in 12/2019
Experience	Car buyers may file their application with the Federal Office for Economic Affairs and Export Control (BAFA).
Planned changes	Since March 2018, the drawdown of several similar financial assistance programmes has been permissible.
Responsible office	Federal Office for economic affairs and export control (BAFA), www.bafa.de/DE/Home/home_node.html
Further information	N/A

Tax benefits (registration, ownership, company)

Description	<p>1) Electric vehicles with CO₂ emissions below 50 grams per kilometre which were or will be registered for the first time in the period from 18 May 2011 to 31 December 2020 will be exempt from motor vehicle tax for ten years.</p> <p>2) Workplace charging of an electric vehicle is tax-free Cf. the Act on the Provision of Fiscal Incentives to Electric Mobility which entered into force on 17 November 2016 and is to apply until 31 December 2020: www.bundesfinanzministerium.de/Content/DE/Downloads/Gesetze/2016-11-16-G-stl-Foerderung-Elektromobilitaet.pdf;jsessionid=A572D80354216E2AE6F60E0CDCDE9063?__blob=publicationFile&v=4</p> <p>3) Compensation for disadvantages In 2013 already, it was made possible to make use of a discount of 500 EUR per kWh of the vehicle battery up to a maximum reduction of 10,000 EUR as regards the higher list price of new electric and hybrid vehicles compared with the price of conventional vehicles. The amount to be deducted is reduced by 50 EUR per kWh every year. The maximum amount to be deducted is at the same time reduced by 500 EUR per year until it will cease completely in 2023. www.gesetze-im-internet.de/estg/_6.html</p>
Since	<p>1) 11/2016</p> <p>2) 01/2017</p> <p>3) 2013</p>

Duration	Will expire in 1) 12/2020 2) 12/2020 3) 12/2022
Experience	N/A
Planned changes	Taxation of company cars As from 2019, company cars with electric motor are to be granted tax concessions. Currently, an employee who uses his company car for private purposes has to pay a tax of one percent of the list price per month as a benefit-in-kind. In this case, the individual income tax rate is applicable. Now, the benefit-in-kind is to be halved to 0.5 percent. This regulation is to also apply to hybrid vehicles using a combustion engine and an electric motor in combination.
Responsible office	Bundesministerium für Finanzen (Federal Ministry of Finance) www.bmf.bund.de
Further information	N/A
VAT benefits	
No VAT benefits	
Other financial benefits	
Description	<p>1) National Hydrogen and Fuel Cell Technology Innovation Programme (NIP)</p> <p>The Federal Ministry of Transport and Digital Infrastructure provides financial assistance for alternative drivetrain technologies on the basis of a technology neutral approach. In this respect, hydrogen and fuel cells are key technologies. They are an indispensable supplement to battery powered vehicles, especially for long distances, for commercial vehicles, buses, trains but also for air and shipping traffic.</p> <p>The Federal Government has therefore been supporting this technology in a targeted manner since 2007 with the National Hydrogen and Fuel Cell Technology Innovation Programme (NIP). Until 2016, the Federal Government and industry provided a total of 1.4 Bi. EUR for technology promotion and for demonstration projects. In the period from 2016 to 2026, the Federal Ministry of Transport and Digital Infrastructure will implement a total level of funding of almost 250 Mi. EUR. A priority of the financial support will, among other things, be the deployment of a refuelling infrastructure.</p> <p>2) Electric Mobility Funding Guidelines (FörderRL EM)</p> <p>To achieve the climate change targets of the Federal Government, the Federal Ministry of Transport and Digital Infrastructure promotes, inter alia, battery-electric mobility through the FörderRL EM of 15 June 2015. These guidelines focus on the market ramp-up: The priorities here are the promotion of the procurement of electric vehicles as well as of the related charging infrastructure for local authority vehicle fleets and fleets with a high transport performance in local communities. In addition, financial assistance is provided for the development of electric mobility strategies at local authority level as well as for the implementation of research and development projects. Every year, around 30 million EUR are available for these purposes.</p> <p>The procedure for application and approval was facilitated in order to speed up the implementation of the measures. The updated guidelines of 05/12/2017 will be valid until 31/12/2020.</p>
Since	1) 01/2007

	2) 06/2015
Duration	1) at least until 2/2026 2) at least until 12/2022
Experience	N/A
Planned changes	N/A
Responsible office	www.now-gmbh.de/de
Further information	N/A
Incentives (local, infrastructure, other types)	
Description	<p>Funding Guidelines for Electric Vehicle Charging Infrastructure in Germany</p> <p>The Funding Guidelines for Electric Vehicle Charging Infrastructure in Germany are part of the market incentive package for electric mobility that the Cabinet adopted on 18 May 2016. On the basis of these Funding Guidelines of the Federal Ministry of Transport and Digital Infrastructure (BMVI), a public charging infrastructure network is to be deployed throughout Germany.</p> <p>www.bmvi.de/SharedDocs/DE/Anlage/G/foerderrichtlinie-ladeinfrastruktur-fuer-fahrzeuge-in-deutschland.pdf?__blob=publicationFile</p>
Since	05/2016
Duration	It will expire in 12/2020
Experience	N/A
Planned changes	<p>The Federal Ministry of Transport and Digital Infrastructure (BMVI) is planning to issue new calls for applications for funding in the future.</p> <p>A location tool to be developed in the course of 2018 will identify further locations for charging infrastructure.</p>
Responsible office	www.bmvi.bund.de
Further information	N/A
Research and funding programmes/schemes	
Description	Research and funding projects are part of the FörderRL EM and of the NIP.
Since	See Other financial benefits
Duration	See Other financial benefits
Experience	N/A

Planned changes	N/A
Responsible office	N/A
Further information	N/A
Further comments	
N/A	

Hungary

Purchase subsidies

Description	<p>A call for applications was published in 2016 in order to encourage the acquisition of pure electric vehicles in Hungary. The Hungarian state provided HUF 2.3 Billion support for the purchase of purely electric passenger cars and vans.</p> <p>According to the call for applications, beneficiaries (private persons, individual entrepreneurs, companies, local authorities, public bodies, law firms, civil society organisations etc., residing or established in Hungary) may claim a maximum of HUF 1.5 million non-refundable grant per electric vehicle (the grant may amount to a maximum of 21 percent of the gross price for sales).</p>
Since	<p>The call for applications was published in September 2016.</p> <p>The implementation of the call is ongoing.</p>
Duration	Should be permanent
Experience	<p>Car buyers may submit their application to a separate non-profit company, called e-Mobi Nonprofit Ltd. established by the Hungarian Government.</p> <p>According to the feedback given by importers, most of the electric vehicles are sold in Hungary in the region of Central Eastern Europe.</p>
Planned changes	The Ministry of Innovation and Technology is planning to issue a new call for applications in autumn 2018 in order to encourage the purchase of BEVs. The new call will be based on simplified conditions (the application may be submitted electronically, the beneficiaries will receive the amount of the grant as an advance funding).
Responsible office	e-Mobi Nonprofit Ltd.
Further information	e-mobi.hu/hu/elektromos-gepjarmu-vasarlas-tamogatas (available only in Hungarian language)

Tax benefits (registration, ownership, company)

Description	<p>For BEV, PHEV, REx and zero emission vehicles</p> <ol style="list-style-type: none"> 1) exemption from car registration tax (since January 2016), 2) exemption from motor vehicle tax (since January 2016), 3) exemption from duty on onerous transfer of property (since January 2016) 4) exemption from company car tax (since January 2016)
Since	See Description
Duration	Should be permanent
Experience	Not at the moment
Planned changes	N/A
Responsible office	Ministry of Finance , www.kormany.hu/en/ministry-for-national-economy

Further information	en.nav.gov.hu/tax_laws njt.hu/ (legal provisions available only in Hungarian language)
VAT benefits	
No VAT benefits	
Other financial benefits	
Description	<p>1) Program of deploying public charging stations for electric vehicles – A call for applications was published in August 2016 for the local governments with more than 15.000 inhabitants in order to encourage the deployment of publicly accessible charging infrastructure in Hungary. The total allocation of this program amounts to HUF 1.25 billion. The amount of the non-refundable grant depends on the type of the electric charging station. One of the conditions of the grant is that the local governments have to provide free parking spaces for electric vehicles for the duration of charging.</p> <p>2) A publicly accessible electric vehicle charging infrastructure network is to be deployed throughout Hungary. The implementation of the projects is carried out by the e-Mobi Nonprofit Ltd. During the implementation of these projects, granted by the State (the grants are non-refundable) charging stations will be set up in the area of the most frequented tourist destinations, in the capital city, in the territory of provincial cities, along the TEN-T road network and for governmental bodies and central administrative bodies.</p>
Since	<p>1) 08/2016</p> <p>2) 01/2017</p>
Duration	<p>1) Should be permanent</p> <p>2) Will expire on 31/12/2018</p>
Experience	N/A
Planned changes	Not at the moment
Responsible office	e-Mobi Nonprofit Ltd.
Further information	e-mobi.hu/sites/default/files/file/2018/08/21/jedlik_palyazati_felhivas_onkormanyzatok_reszere_toltotelepites.pdf (available only in Hungarian)
Incentives (local, infrastructure, other types)	
Description	<p>Green number-plates have been issued for environmentally friendly vehicles (BEVs, PHEVs, REXs and zero emission vehicles). Several tax benefits are related to these vehicles (see Tax benefits description).</p> <p>The rules of parking are laid down by local authorities in local regulations. Some cities provide free parking for environmentally friendly vehicles with green number-plates.</p>
Since	01/2016
Duration	Should be permanent
Experience	Not at the moment

Planned changes	N/A
Responsible office	Ministry for Innovation and Technology, www.kormany.hu/en/ministry-for-innovation-and-technology
Further information	villanyautosok.hu/zold-rendszam/mely-varosokban-lehet-zold-rendszammal-ingyen-parkolni/ (available only in Hungarian)
Research and funding programmes/schemes	
No research and funding programmes	
Further comments	
N/A	

Italy

Purchase subsidies	
Description	<p>Public transportation</p> <p>The Italian Ministry for Environment has supported the Public Transportation Companies in the purchase of a fleet of consistent number of full electric buses (co-funding up 70% of the bus cost). It's also worth mentioning the Government Plan adopted in 2012 named PNIRE whose main goal is to develop a nationwide infrastructure for the recharge of electrical vehicles whose planned budget is of 72 million. Finally, the National energetic strategy adopted in 2017 covers relevant actions related to e-mobility.</p> <p>Private transportation</p> <p>Many Italian Regions provide tax subsidies addressed to final consumers in order to support and establish electric mobility.</p>
Since	<p>At national level, since 2014 the commitment of financial resources made available by the Italian Ministry for Environment (target: Public transport companies).</p> <p>At Regional level since 2015 (target: final consumers).</p>
Duration	Not defined
Experience	<p>At national level, since 2014 the main experiences are related to subsidies granted to public transportation with relevant results in terms of increasing number of electric bus and a consequent reduction on CO₂ and saving primary energy in many regions such as Lombardia, Piemonte, Veneto and Sardegna. The main indicators were a decrease of the CO₂ emission by 769 tons per year and a saving of primary energy by 1.62 GWh/year.</p> <p>At Region level, since 2015, in many Regions, Electric vehicles are exempt from the annual circulation tax (ownership tax) for a period of five years from the date of their first registration. After this five year period, they benefit from a 75% reduction of the tax rate applied to equivalent petrol vehicles). In February 2018 Sardegna Region adopted a strategic energy Plan with a Budget of 15 Mi. EUR aiming at developing 650 platforms for the recharge of electrical vehicles.</p> <p>Such regional actions contributed also to develop the market of electric auto vehicles. Looking at the latest updated market data, in 2018, BEV and PHEV auto vehicles represent 0.45% of the market share in Italy, representing an increasing trend in comparison to the past 5 years. During the first 8 months of year 2018 there have been almost 6,000 new registration purchases of electric auto vehicles while in the whole 2017 the new electric vehicles were only 4,500.</p>
Planned changes	N/A
Responsible office	<p>At national level:</p> <p>Ministry for Environment www.minambiente.it/</p> <p>Ministry of Transport www.mit.gov.it/</p>
Further information	<p>www.regione.piemonte.it/trasporti/mobilitaElettrica.htm</p> <p>www.regione.emilia-romagna.it/notizie/2018</p> <p>www.regione.sardegna.it/j/v/2568?s=358761&v=2&c=5387&t=1</p>

Tax benefits (registration, ownership, company)

Description	Only at Regional level
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	www.regione.piemonte.it/trasporti/mobilitaElettrica.htm www.regione.emilia-romagna.it/notizie/2018 www.regione.sardegna.it/j/v/2568?s=358761&v=2&c=5387&t=1

VAT benefits

No VAT benefits

Other financial benefits

Other types of benefits not available

Incentives (local, infrastructure, other types)

Description	It is planned a call for supporting the implementation of infrastructures (private, public, private with public access, in petrol stations) will be published thanks to the budget made available by the Italian Ministry of Infrastructures and Transport according to the National Plan named PNIRE with a Budget of 72 Mi. EUR.
Since	N/A
Duration	5 Years
Experience	N/A
Planned changes	N/A
Responsible office	www.mit.gov.it/
Further information	www.mit.gov.it/

Research and funding programmes/schemes

Description	<p>ERA-NET EMEurope as partner in the policy cooperation task.</p> <p>Funding programmes such as PNIRE are managed by the Italian Ministry of Infrastructures and Transport and the Ministry for Environment.</p> <p>There are also funding opportunities available in the framework of the Regional Programmes even focused on supporting innovation in SMEs.</p>
Since	2012
Duration	2020
Experience	PNIRE is still running with a Budget of 72 Mi. EUR over the next 5 years.
Planned changes	No
Responsible office	www.mit.gov.it/
Further information	www.mit.gov.it/
Further comments	
N/A	

Italy – Piedmont Region

Purchase subsidies	
Description	<p>Public transportation</p> <p>Using the budget made available by the Italian Ministry for Environment, Land and Sea Protection the Piedmont Region has supported the Public Transportation Companies in the purchase of a fleet of full electric buses. In the cities of Torino and Novara the new buses are already in service.</p> <p>Private transportation</p> <p>At the moment Piedmont Region has not a purchase subsidies system for the private citizens.</p> <p>Nevertheless the Region is evaluating the possibility to provide a purchase subsidies system according to the “Accordo di Programma per la Qualità dell’Aria del Bacino Padano 2017”, which is an agreement signed by the Italian Ministry for Environment, Land and Sea Protection and the Governments of the regions placed in the geographical area “Bacino Padano”.</p> <p>For example with this agreement Piedmont Region commits for the next years:</p> <ul style="list-style-type: none"> - To limit the circulation of diesel vehicles in specific period of the year (Oct - Mar). - To support with subsidies the purchase of alternative fuel vehicles. - To promote the infrastructures of alternative fuel and to discipline the urban area in order to facilitate the circulation of the above mention vehicles. <p>In this context, a call for purchase subsidies would supposedly be publish in October 2018.</p>
Since	In 2014 with the commitment of the resources made available by the Italian Ministry for Environment, Land and Sea Protection.
Duration	N/A
Experience	<p>To date the experience is related only to the subsidies for public transportation. The aid was set in 2014 and addressed to only one contracting authority that managed the tender on behalf of all the regional public transportation companies.</p> <p>Timeline</p> <ul style="list-style-type: none"> 2014: collection of the application of the Public Transportation companies by the Regional Government. 2015: market survey at international level to define the possible suppliers; opening of the application procedure for suppliers; supplier selection. 2016: adjudication <p>Budget</p> <p>The total budget was about 15 Mi. EUR:</p> <ul style="list-style-type: none"> -13.5 Mi. EUR from the Regional Government (provided by the Italian Ministry). -1.5 Mi. EUR from the Municipality of Torino. <p>To date 8.5 Mi. EUR were used to buy 23 electric buses. The remaining resources will be used to buy smaller buses (6.5 meter and 9 meter).</p> <p>The 23 vehicles are already in service since the end of the year 2017. According to the contracting authority it is forecast to:</p> <ul style="list-style-type: none"> -Decrease the emission on CO₂ by 769 ton per year -Save primary energy by 1.62 GWh/year

Planned changes	A second call for smaller buses will be implemented in the next years.
Responsible office	Public Works, Soil Defense, Mountain, Forests, Civil Protection, Transportation and Logistics Dept. Environment, Land Government and Protection Dept.
Further information	www.regione.piemonte.it/trasporti/mobilitaElettrica.htm www.gtt.to.it/cms/notizie-eventi-e-informazioni/4223-presentata-la-nuova-flotta-di-bus-elettrici-da-12-metri www.sppregions.eu/fileadmin/user_upload/Tenders/APE/spp-regions-tender-model-GTT-eng_Final.pdf
Tax benefits (registration, ownership, company)	
Description	Piedmont Region established a tax exemption addressed to the owners of full electric vehicles, hybrid vehicles with a maximum power of 100 KW and converted vehicles with a maximum power of 100 KW.
Since	04/2016 for full electric vehicles and converted vehicles; 11/2017 for hybrid vehicles.
Duration	The tax benefits: -should be permanent for full electric vehicles -should evolve (decrease) following a specific schedule. The tax exemption for hybrid or converted vehicles with a maximum power of 100 KW is valid for 5 year starting from the vehicle registration date. After this term the owner will pay the ownership tax with a preferential tariff.
Experience	The measure was firstly set in 2003 for alternative vehicles with LPG propulsion system. In 2015, it was decided to include in the exemptions also full electric vehicles, natural gas-driven vehicles and some hybrid vehicles providing a permanent or temporary exemption. In 2017, the list of exemption was extended by including in the temporary exemption also the electric hybrid vehicles.
Planned changes	Not at the moment
Responsible office	Financial Resources Department
Further information	www.regione.piemonte.it/tributi/esenzioni.htm
VAT benefits	
No VAT benefits	
Other financial benefits	
Other financial benefits not available	

Incentives (local, infrastructure, other types)

Description	Shortly a call for supporting the implementation of infrastructures (private, public, private with public access, in petrol station) will be published thanks to the budget made available by the Italian Ministry of Infrastructures and Transport according to the National Plan for the implementation of the charging infrastructure.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Research and funding programmes/schemes

Description	<p>Piedmont Region participated to the ERA-NET plus Electromobility+ and is now partner of the ERA-NET EMEurope both as partner in the policy cooperation task and as funding Agency in the Call Cofund 2016. Moreover in general R&D on this subject is one of the priorities of S3, to which are targeted all the policies for R&D of the Region.</p> <p>In addition, there are some funding programs supporting innovation in SMEs that include as eligible costs the purchase of alternative fuel vehicles for industrial purposes or investments for product/process innovation of manufacturing SMEs included companies actively involved in the manufacturing field of electric vehicles.</p> <p>Finally, there are grant funding programmes that support the participation on SMEs in events, fair etc. related to the regional S3 priorities in which is included the topic of electric vehicles and electric mobility in general.</p>
Since	Mainly in 2014, but similar general target were in place yet from 2007
Duration	It will expire in 2020 (European Structural funds, ERDF), possible continuation under period 2021-2028.
Experience	<p>Above all, the R&D projects connected to electric mobility represent a very large share (50 Mi. EUR of investment that roughly represent 20% of investment and subsidies of all the R&D projects submitted to the different ERDF funded R&D schemes up to now (2014-2018).</p> <p>A lot of suppliers of very different critical vehicle components (not only car components), submitted projects for their product innovation in view of the vehicle electrification.</p>
Planned changes	No
Responsible office	University, Research and Innovation Dept. (Vincenzo Zezza, Head)
Further information	www.regione.piemonte.it/attivitaProduttive/web/sistema-della-ricerca-e-dell-innovazione-in-piemonte www.finpiemonte.it/bandi/dettaglio-bando/por-fesr-14-20-electric-mobility-europe

Further comments

N/A



The Netherlands

Purchase subsidies	
Description	At the moment there are no national purchase subsidies. Though there are some regions that offer purchase subsidies.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	An overview of regional incentives (in Dutch) can be found here: nederlandelektrisch.nl/subsidies-financiering/subsidies-en-regelingen .
Tax benefits (registration, ownership, company)	
Description	Tax benefits for zero emission vehicles.
Since	2009
Duration	Should evolve (decrease) following a specific schedule Were gradually shifted towards more favouring zero emission vehicles (less favourable to PHEVs). Is evaluated in 2018 (also due to possible climate agreement measures), new measures will most probably hold till 2021, with a new evaluation before that.
Experience	Is evaluated from time to time, last public reports are rather old though (2009-2013).
Planned changes	The benefits are evaluated from time to time and changed. Now from next year a cap will be set on the vehicle price above 50,000 EUR - for tax benefits.
Responsible office	Ministry of Finance

Further information Concerning TAX benefits	Policy measure	Details
	Registration tax	Zero emission cars are exempt from paying registration tax. For conventional cars the system is progressive, with a starting tariff and 5 levels of CO ₂ emissions and amounts of registration tax. Plug-in hybrid cars get a discount compared to conventional cars, they do not have a starting tariff and have 3 levels of CO ₂ emissions and amounts of registration tax.
	Road tax	Zero emission cars are exempt from paying road tax. Plug-in hybrid cars < 51 gr CO ₂ /km pay half tariff (up to 2020). This is compared to 400 to 1.200 EUR otherwise (depending on fuel, weight and address).
	Surcharge on income tax for the private use of company cars	In the Netherlands, income tax has to be paid on the private use of a company car. This is implemented by imposing a surcharge of 4 or 22% of the catalogue value on the taxable income. For zero emission cars this percentage is 4%. For all other cars, including plug-in hybrid cars, it is 22%.
	Tax deductible investments	The Netherlands has a system of facilitating investments in clean technology, by making these investments partially deductible from corporate and income taxes. Zero emission and plug-in hybrid cars < 31 gr CO ₂ /km (and not with a diesel engine) are on the list of deductible investments, as are the accompanying charging points.
VAT benefits		
No VAT benefits		
Other financial benefits		
Description	Green deal on publicly accessible charging infrastructure described under incentives.	
Since	Mid 2015 – mid 2018	
Duration	Should expire in mid 2018	
Experience	As part of the Green Deal on Publicly Accessible Charging Infrastructure, the national government has committed a total of 7.2 million EUR to contribute to the installing of public charging points by municipalities. In the period mid-2015 to mid-2018 a gradually decreasing contribution per pole could be granted, provided that a municipality contributes the same amount and a market party also contributes. Up to the end of 2017, 216 municipalities have installed 7,800 charging poles through this arrangement.	
Planned changes	The available budget has been used. The green deal has ended now, but there is thought now on how to further stimulate charging infrastructure.	
Responsible office	Ministry Infrastructure and Water Management , www.rvo.nl/	
Further information	Information (in Dutch): www.rvo.nl/subsidies-regelingen/rijksbijdrage-laadinfrastructuur-voor-elektrische-autos .	

Incentives (local, infrastructure, other types)

Description	Local incentives already mentioned in purchase subsidies. Other green deals to stimulate and support e-mobility activities, such as the Green Deal on Electric Driving, the Green Deal on Zero Emission City Distribution, the Green Deal on Carsharing, the Policy Agreement on Zero Emission Public Transport, the Green Deal on Dedicated Personal Transport.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Research and funding programmes/schemes

Description	Various R&D and innovation programmes and schemes related to the Dutch top sector policy, in which electric mobility can also be a subject. Subsidy scheme on Climate Technologies and Innovations in Transport (in Dutch abbreviation is DKTI), in which subsidy can be granted to transport solutions with lower or zero CO ₂ emissions. Electric mobility is one of the specific technologies supported.
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	Starting page for information on financial schemes in top sectors (in Dutch): www.rvo.nl/onderwerpen/innovatief-ondernemen/topsectoren . Information (in Dutch) on DKTI: www.rvo.nl/subsidies-regelingen/DKTI-Transport .

Further comments

N/A

Spain

Purchase subsidies	
Description	<p>At national scale, the following incentives programs were launched:</p> <ul style="list-style-type: none"> - Agreements IDAE-Regional Governments (E4) and IDAE Strategic Line of incentives (2006-2011) - MOVELE Pilot demonstration Project (2009-2011) - Royal Decrees 648/2011 and 1700/2011 (Incentives program 2011-2012) - Royal Decree 417/2012 (Incentives program 2012-2013) - MOVELE Incentive Plans for EVs acquisition (2014 and 2015) - MOVEA Plans (2016 and 2017) – not only for EVs, but also for other alternative energies, NG, LPG, H₂. - MOVALT Vehículos Plan (2018, currently active) – not only for EVs, but also for other alternative energies, NG, LPG, H₂. <p>Note: Other programs at regional and local levels were launched, in parallel to national scale programs.</p>
Since	See Description
Duration	See Description
Experience	<p>At this initial stage of the implementation of EVs, purchase subsidies for EV's acquisitions are playing a key role for reducing the acquisition extra-costs of this kind of vehicles and so, for the implementation of EVs. At national scale, automotive sector claims for a continuity in time between these programs.</p> <p>Alternatively or complementarily to this measure, it could be also considered other fiscal initiatives or incentives at the different levels, to support EV's implementation.</p> <p>Please find detailed info about "Impact available of these programs" in the Spanish chapter of the Annual reports of the TCP-HEV (http://www.ieahev.org/news/annual-reports/)</p>
Planned changes	Currently under consideration
Responsible office	<p>Ministry for Ecology Transition, Institute for Energy Diversification and Saving (IDAE), Transport Department: dptotransporte@idaes.es</p> <p>Ministry for Industry, Tourism and Commerce, Secretary General of Industry: sganalisissectores@mineco.es</p> <p>AEDIVE (National cluster for electromobility) Director general AEDIVE, www.aedive.es</p>
Further information	<p>www.ieahev.org (Technology Collaboration Program on Hybrid and Electric vehicles, IEA)</p> <p>www.vea.gob.es (alternative energies vehicles, National Government information website)</p> <p>www.iea.org/topics/transport/evi (Electric vehicle Initiative -CEM- website)</p>
Tax benefits (registration, ownership, company)	
No Tax benefits	

VAT benefits

No VAT benefits

Other financial benefits

No other financial benefits

Incentives (local, infrastructure, other types)

Description	Madrid Region has recently announced a forthcoming sustainable urban mobility plan "Emite Cero" that will allocate direct aids for the purchase, by citizens of the Region, of cars, motorcycles and electric bicycles. Also they have announced the aid for an amount of 1.5 million euros for the installation of charging points for electric vehicles in public and private buildings, as well as in neighbourhood communities, to encourage and facilitate the use of electric vehicles to the citizen.
Since	These incentives were announced in September 2018
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	N/A
Further information	www.comunidad.madrid/noticias/2018/09/24/destinamos-2-millones-ayudas-madrilenos-comprar-vehiculos-cero-eco

Research and funding programmes/schemes

Description	<p>As of August 2018, CDTI has different types of instruments targeted to Spanish companies for R&D activities that cover automotive projects (including green vehicles):</p> <p>1) R&D Projects: aiming at the creation or significant improvement of productive processes, products or services.</p> <ul style="list-style-type: none"> - Funding: Loans (up to 85% total cost) + Non repayable (up to 33%). - Open call. - Type of projects: <ul style="list-style-type: none"> Individual R&D projects, National Cooperation R&D projects, International Technological Cooperation R&D Projects, European Technological Cooperation R&D Projects, International Technological Training R&D projects <p>2) Strategic R&D projects: large applied projects for the creation or significant improvement of productive processes, products or services or the generation of a new one. They should be of strategic character following the objectives of the project and its duration.</p>
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	<ul style="list-style-type: none"> - Funding: Loans (up to 85% total cost) + Non repayable (up to 7.5%). - Open call up to 31 December 2020. - Type of projects: Only available for some Spanish Regions (Andalucía, Castilla- La Mancha, Extremadura, Murcia, Canarias, Castilla y León and Comunidad Valenciana). Minimum budget: 1Mi. EUR for SMEs and 3Mi. EUR for large companies. Duration: 36 to 96 months. <p>3) Technological development projects: aiming to the technological demonstration under conditions similar to the real environment.</p> <ul style="list-style-type: none"> - Funding: Loans (up to 85% total cost) + Non repayable (up to 15%). - Open from 01-09-2018 to 28-12-2018. - Type of projects: targeted only to SMEs. TRL 7 to 8 <p>4) Strategic CIEN projects:</p> <ul style="list-style-type: none"> - Funding: Loans (up to 85% total cost) + Non repayable (up to 33%). - Open call. - Type of projects: Large projects carried out by entrepreneurial groupings and aiming at the development of a planned research in strategic areas. <p>5) Direct Innovation Line: funding for applied projects, very close to the market, with low-medium technological risk and short periods of recovery of investment, aiming at improving the company's competitiveness through the incorporation of emerging technologies in the sector.</p> <ul style="list-style-type: none"> - Funding: Loans (up to 85% total cost) + Non repayable (up to 5%). - Open call. - Type of projects: Minimum budget 175,000 EUR and up to 18 months duration. <p>6) Global Innovation Line: funding for innovation projects that allow the internationalization and growth of SMEs and midcaps.</p> <ul style="list-style-type: none"> - Funding: Loans (up to 75% total cost) - Open call. - Type of projects: Budget from 667,000 EUR to 10 Mi. EUR and maximum duration of 24 months <p>7) NEOTEC: funding for new firms that require the use of technologies or knowledge developed from research activity and with a business model based on the development of technology.</p> <ul style="list-style-type: none"> - Funding: Grants up to 250,000 EUR and 70% of total cost. - Open until 02 October 2018. <p>Type of projects: Budget from 175,000 EUR and duration of 1 to 2 years.</p>
Since	N/A
Duration	N/A
Experience	N/A
Planned changes	N/A
Responsible office	CDTI, Department for Energy, Transport, Manufacturing and Digital Society, detfsd@cdti.es



Further information	www.cdti.es
Further comments	
N/A	

Spain – Catalonia Region

Purchase subsidies	
Description	<p>1) Subsidy for the purchase of low emission vehicles (taxi and other services). Government of Catalonia (DG Environmental Quality)</p> <p>These are subsidies for the purchase of low emission vehicles for taxi and commercial use service vehicles operating in special atmospheric protection areas with the aim of improving the air quality of municipalities with high density of traffic.</p> <p>2) Subsidy for the purchase of electric motorbikes. Government of Catalonia. (ICAEN – Catalonia Energy Agency)</p> <p>3) Subsidy for the purchase of electric vehicles for municipal fleets. Barcelona's Metropolitan Area (AMB).</p> <p>4) Subsidy for the purchase of electric bicycle.</p> <p>Annual AMB call for the purchase of electric bicycle for physical persons residing in any of the 36 municipalities of the AMB. Barcelona's Metropolitan Area (AMB).</p>
Since	<p>1) January 2015</p> <p>2) Second half 2015</p> <p>3) 2016</p> <p>4) 2016</p>
Duration	<p>1) Several calls have been opened since 2015. Annual call. The prevision is to continue for the moment so it can be considered permanent.</p> <p>2) Only once (2015). Should decrease.</p> <p>3) Several calls have been opened. Annual call. Should be permanent.</p> <p>4) Several calls have been opened. Annual call. Should decrease.</p>
Experience	<p>To be evaluated by the entities responsible.</p> <p>1a) Successful in the sense that the call reaches the budget few days after being opened.</p> <p>1b) It is for the acquisition of M1 and N1 vehicles, intended for taxi service, for commercial use and for other services that operate in the Special Protection Zone, and that are of pure electrical, extended electric power, plug-in hybrids with a minimum electrical autonomy of 40 km, gasoline hybrids with emissions lower than or equal to 60 mg NO_x/km (Euro 5 or higher), LPG and natural gas, or bi-fuel, with a gasoline engine.</p> <p>1c) The objective is to contribute to the renewal of the park for electric and low emissions vehicles for the taxi service, commercial use and other services that operate in the Special Protection Zone.</p>
Planned changes	At the moment it is planned to modify the bases of the call to adapt them to the technological changes of the administration.
Responsible office	<p>1) DG Environmental Quality (Government of Catalonia).</p> <p>2) ICAEN – Catalonia Energy Agency (Government of Catalonia).</p> <p>3) Direction for Transport & Mobility Technical Services (Barcelona's Metropolitan Area – AMB).</p> <p>4) Direction for Transport & Mobility Technical Services (Barcelona's Metropolitan Area – AMB).</p>

Further information	<p>1) web.gencat.cat/ca/tramits/tramits-temes/Subvencio-per-al-foment-de-ladquisicio-de-vehicles-electrics-i-de-baixes-emissions-taxis-us-comercial-altres-serveis?category=75c7c314-a82c-11e3-a972-000c29052e2c</p> <p>2) icaen.gencat.cat/ca/energia/ajuts/mobilitat/</p> <p>3) www.ambmobilitat.cat/Principales/Inicio.aspx?idioma=3</p> <p>4) icaen.gencat.cat/ca/energia/ajuts/mobilitat/-amb-comptra-de-bicicletes-electriques/</p>
Tax benefits (registration, ownership, company)	
Description	Discount on road tax (IVTM in Spanish). Depending on the municipality, discounts of up to 75% can be achieved on the yearly road tax. Barcelona & other municipalities.
Since	2015
Duration	Should be permanent
Experience	To be evaluated by the entities responsible.
Planned changes	N/A
Responsible office	N/A
Further information	www.ajuntament.barcelona.cat/hisenda/es/ivtm-impuesto-sobre-veh%C3%ADculos-de-tracci%C3%B3n-mec%C3%A1nica
VAT benefits	
VAT benefits are under the state competencies	
Other financial benefits	
No, there are very limited competencies at the regional level.	
Incentives (local, infrastructure, other types)	
Description	<p>1) "Subsidy for the installation of EV charging points". Government of Catalonia. (ICAEN – Catalonia Energy Agency) Financial support aimed to charging stations for public administration and families.</p> <ul style="list-style-type: none"> - Fast recharging public access stations for electric vehicles requested by public administrations. - Semi-fast recharging public access stations for electric vehicles requested by public administrations. - Installation of private recharging points. <p>2) Free access to toll roads. Government of Catalonia. Free access to toll roads from Monday to Friday for electric vehicles with the ecoviaT label.</p> <p>3) Reduced rates on toll roads Government of Catalonia. An up to 30% discount on stretches of motorway and tunnels for low-emission private cars with the ecoviaT label.</p>

	<p>4) HOV lanes. Low-emission private cars with the ecovia T label can drive along the HOV bus lane of the C-58 road.</p> <p>5) Environmental Quality Guarantee for Fleets of Vehicles. Government of Catalonia. The Environmental Quality Guarantee is an eco-label that acknowledges products and services that surpass the legally required environmental quality criteria.</p> <p>6) Reduced parking costs in regulated areas. Barcelona and other municipalities.</p> <p>7) Discount on the use of charging points in underground parking spaces. Barcelona and other municipalities. Charging points have been fitted in some parking spaces by different public car park management bodies and they offer a discount on their use.</p> <p>8) Discount on the use of public roadside charging points. Barcelona and other municipalities. Free charging points at municipal roadside stations.</p>
Since	<p>1) PIRVEC plan (2016-2019) approved 06/2016</p> <p>2-4) 01/2012</p>
Duration	<p>The incentives:</p> <p>1) It will be evaluated in 2020</p> <p>2-4) It is foreseen to continue in the mid future</p>
Experience	<p>1) Impact on the infrastructure can be followed at www.icaen.gencat.cat/ca/detalls/article/Nou-article-00825</p>
Planned changes	<p>1) Adaptations in every annual call</p>
Responsible office	<p>1) ICAEN – Catalonia Energy Agency (Government of Catalonia)</p> <p>2-4) DG Environmental Quality (Government of Catalonia)</p>
Further information	<p>1) icaen.gencat.cat/ca/energia/ajuts/icaen-installacio-dinfraestructures-de-recarrega-per-al-vehicle-electric/#bloc1</p> <p>2-4) www.ecoviat.com/ca-es/inici.aspx</p>
Research and funding programmes/schemes	
No specific programme. There are R&D schemes for Innovation in general and some projects are dedicated to EV technologies.	
Further comments	
N/A	

Sweden

Purchase subsidies	
Description	<p>Plug-in electric cars and vans</p> <p>On the 1 July 2018, Sweden introduced a cost-neutral and technology-neutral bonus/malus system, replacing a plug-in electric vehicle purchase rebate scheme. The maximum subsidy/bonus is 6,000 EUR, which is granted battery electric vehicles and fuel cell vehicles. For plug-in hybrid electric vehicles, the bonus corresponds to the specified CO₂ emissions.</p> <p>E-buses</p> <p>In 2016 a purchase subsidy for electric buses was introduced. The yearly budget is 10 million EUR and the rebate constitutes 20% of the purchase price, however, up to 100 percent of the price difference between the bus and the nearest comparable diesel bus. Initially, only regional public transport authorities were eligible but today private public transport companies are also included.</p> <p>E-bikes, e-motorcycles, e-mopeds, e-boats</p> <p>In January 2018, a purchase subsidies for e-bikes, e-motorcycles, e-mopeds. These show great potential for intermodal shifts from passenger cars. Support is granted up to 25% of the purchase price, maximum 1,000 EUR.</p> <p>In June 2018, electric outboard motors for boats were also included in the support.</p>
Since	<p>Between 2006 and 2009 Sweden had a general green car purchase subsidy. The first PEV specific purchase subsidy was introduced in 01/2012.</p> <p>In 07/2018 a cost- and technology neutral bonus/malus scheme was introduced.</p>
Duration	<p>The PEV purchase schemes were somewhat responsive to the demand. Between 2012 and 2014 the Swedish government allocated in total 20 million EUR to the scheme. In 2015 the initial governmental budget comprised 21.5 million EUR but the big interest raised the budget with 13.2 million EUR. Onwards, the budget continued to increase and in 2016 and 2017, the budget was 49 and 70 million EUR. The need for a more permanent, self-sufficient system was evident and prior to the introduction of the Bonus/malus system in July, 29 million EUR were budgeted for 2018.</p> <p>The purchase subsidies to the bonus/malus scheme should be permanent (or as permanent as it gets)</p> <p>The Swedish government has decided on a yearly budget of 10 Mi. EUR to purchase subsidies for e-buses until 2023.</p> <p>The Swedish government has decided on a yearly budget of 35 Mi. EUR to purchase subsidies for e-bikes, e-mopeds and e-motorcycles until 2020. In 2018, electric outboard boat motors were also included in the scheme and additional 4.5 Mi. EUR in this year's budget.</p>
Experience	<p>Purchase price is, for obvious reasons, an imperative factor for Swedish vehicle buyers. The purchase rebate, and now the bonus/malus scheme, are successful and should be perceived as important messages to the Swedish new-sales market. However, they have probably been a less influential incentive to actually push the Swedish PEV market compared to the reduced benefit value for company cars (see "description" and "experience" in Tax benefits)</p>
Planned changes	<p>Bonus/malus has just been introduced and will be monitored. A purchase subsidy for trucks is discussed</p>
Responsible office	The Ministry of Energy and Environment
Further information	<p>www.government.se/4a61ac/globalassets/regeringen/dokument/miljo--och-energidepartementet/pdf/memorandum---largest-ever-investment-in-building-a-green-society.pdf</p> <p>transportstyrelsen.se/sv/vagtrafik/Fordon/bonus-malus/</p>

transportstyrelsen.se/sv/vagtrafik/Miljo/Klimat/Miljobilar1/supermiljobilspremie1/

Tax benefits (registration, ownership, company)

Description	BEVs and most PHEVs are exempted the annual vehicle tax the first three years [07/2018]. Prior to the bonus/malus system, the tax exemption was 5 years for green cars in general. Company cars may reduce the value of fringe benefits.
Since	01/2006
Duration	Should be permanent
Experience	Approximately half of the new-vehicle sales in Sweden are company cars. The setup for company cars in Sweden ranges from financing models where the employer pays for all costs of the car and the employee is just taxed for the benefit, to operational leasing models where the employee pays for all costs for the car with a gross salary deduction. Given the PEV deployment among company cars (it constitutes for over 70% of the PEV ownerships), this has probably been the most important incentive to promote the use of PEVs in Sweden.
Planned changes	The generous subsidies to company cars is disputed since they counteract policies that promote public transport and a more transport-efficient society.
Responsible office	Ministry of Finance
Further information	N/A

VAT benefits

No VAT benefits

Other financial benefits

Other financial benefits not available

Incentives (local, infrastructure, other types)

Description	<p>The Swedish market for charging infrastructure is completely deregulated, which enables for almost anyone to become a charging point operator (CPO). This has created an ecosystem of charging infrastructure benefits from interactions between private and public efforts.</p> <p>Sweden has two different support systems that grant support to charging infrastructure. The first one is Klimatklivet (the Climate Leap) which is a general investment support scheme, not specifically to EVSE, but has so far granted over 14,000 charging points support. The majority is non-public charging points, but also fast-charging corridors have been deployed. Private households can't be granted investment support through Klimatklivet, but tenant-owned cooperatives can apply. Klimatklivet was introduced in 2015.</p> <p>In addition to Klimatklivet, a private home-charger support scheme was introduced in 2018. Private households are the main target group but one charging point could also be granted to a cooperative. For many PEV owners in multi-family dwellings, it was difficult to reach the consensus need to apply through Klimatklivet. The availability of home-charging is perceived as crucial to substitute a conventional vehicle.</p> <p>Along with Klimatklivet, the Swedish government also assigned the Swedish Energy Agency as national coordinator for charging infrastructure deployment. Since 2015, the Swedish Energy Agency has coordinated charging infrastructure activities.</p> <p>Prior to the new requirements in EPBD 2010/31/EU, many Swedish municipalities required charging infrastructure in all new multi-family dwellings on public ground.</p>
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	In 2018, the Swedish government decided on giving the municipalities the mandate to introduce environmental zones. Governmental fleets are governed by certain procurement policies in Sweden, which force them to particularly consider climate factors when acquiring cars and vans or other mobility services. The public procurement policies in Sweden do also promote an increased use of renewable fuels, such as sustainable biofuels and electricity.
Since	Multiple
Duration	Demand-side policies are necessary. Without stimulating the new-car sales, the PEV market implodes – as seen in Denmark. However, a broad policy framework of tax incentives, charging infrastructure support and public procurement as believed to create a whole that is greater than the sum of its parts. Sweden has the largest global market share in the EU (EAFO, 2018) and third globally (IEA, 2017). However, a prominent obstacle in Sweden is still the lack of knowledge but as this increase the impact of the policy set-up will also become more evident.
Experience	The government has initiated a study to analyse the regulatory system could be altered to promote the use of car-pools.
Planned changes	N/A
Responsible office	N/A
Further information	N/A

Research and funding programmes/schemes

Description	Electromobility R&D and Swedish industrial policy interact to put fossil-free vehicles and vessels to the market. Regarding the market for heavy-duty vehicles, Swedish companies represent 20% of the global market. Between 2013 and Q1 2017, over 1450 million SEK of public means were invested in in electric mobility projects as R&D support.
Since	2009
Duration	Not yet decided
Experience	The automotive industry has, on top of that, matched that investment. Sweden is an automotive country with a broad portfolio of passenger cars, heavy-duty vehicles, construction machinery, vessels and marine engines, and the scope of the electromobility in Sweden include all segments. The Swedish government has granted 1 billion SEK to facilitate a new electromobility lab in Gothenburg, a test bed for electrified power train but also charging systems. A so called gigafactory for producing lithium ion batteries is to be built in the city of Skellefteå, accompanied by an R&D production line in Västerås with the support from the Swedish government. The production capacity of the plant will be 32 GWh/year and the plant is planned to operate in 2023. The size of the factory and the Swedish electricity mix constitute good conditions to produce lithium ion batteries to a low cost with a low environmental impact.
Planned changes	N/A
Responsible office	The Swedish Transport Administration; Sweden's Innovation Agency; Swedish Energy Agency
Further information	N/A

Further comments

The current industry developments, with bigger batteries and the chase for higher charging power, could be perceived as an attempt to copy the current fossil system. This could increase the cost for the society to make a transition to more e-mobility. (Not to mention the environmental impact). EMEurope could, for example, work to broaden the acceptance of plug-in hybrid vehicles, where the ICE or fuel cell could be perceived as range extender. The battery size could be optimised to comprise most journeys, and for the seldom longer journeys the range extender could be used.

Turkey

Purchase subsidies

Description	Public Procurement Law #4734 provides a 15% price advantage for domestically produced high and medium-high technology goods, of which list is declared by the Ministry of Science and Technology. Electric powered cars and buses are eligible for this category. Ministry of Energy and Natural Resources provides financial support to municipalities (as part of IPA-2 Program) for procurement of renewable energy and energy efficiency equipment. Municipalities can procure e-buses and invest in charging infrastructure in this scheme.
Since	06/2017
Duration	Should evolve (decrease) following a specific schedule
Experience	Following municipalities started to form their e-bus fleets in collaboration with Turkish manufacturers: İstanbul 200 e-bus Ankara 30 e-bus İzmir 20 e-bus Kayseri 18 e-bus Manisa 22 e-bus Şanlıurfa 10 e-bus Eskişehir 4 e-bus
Planned changes	No scheduled revision plan is announced.
Responsible office	Ministry of Energy and Natural Resources Public Procurement Authority
Further information	www.enerji.gov.tr/en-US/Mainpage www.sanayi.gov.tr/index.html?lang=en

Tax benefits (registration, ownership, company)

Description	Annual motor vehicle tax for electric vehicles is 25% of ICE vehicle duty with comparable engine power. Initial purchase of vehicles is subjected to special consumption tax in Turkey. Tax rates are shown below: Commercial vehicles with passenger carriage capacity ICE 15% EV 10% Passenger cars ICE 45%-160% (increases with motor cylinder volume) EV 3%-15% (increases with motor power)
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Since	03/2018
Duration	Should be permanent
Experience	Lower special consumption tax rates levied on electric vehicles are expected to create an incentive for new car purchases.
Planned changes	No scheduled revision plan is announced.
Responsible office	Ministry of Finance and Treasury
Further information	www.treasury.gov.tr

VAT benefits

No VAT benefits

Other financial benefits

No other financial benefits

Incentives (local, infrastructure, other types)

No incentives

Research and funding programmes/schemes

Description	<p>Since 2012 TÜBİTAK (The Scientific and Technological Research Council of Turkey) has moved to mission-oriented approach in R&D funding and we have more strategic approach by call based support programs for priority sectors and critical technologies.</p> <p>The sector-oriented standpoint in the national strategy document is promoted by three result-driven and targeted call based funding programs of TÜBİTAK. First one is mainly dedicated to industry oriented RDI with an obligatory academy-industry cooperation condition for the projects with a budget more than 1 million TL. Second one is mainly oriented to university and public research institutes based RDI. Besides, third one aims to satisfy the needs of governmental bodies by means of R&D projects.</p> <p>The automotive sector has been identified as one of the sectors in which Turkey has strong R&D and innovation capacity through the National Science, Technology and Innovation Strategy (UBTYS). Regarding the priorities of the automotive sector, electric vehicle have been ranked as the most significant areas to support. Therefore, TÜBİTAK has launched mission oriented calls dedicated to foster electric vehicle systems and technologies and funded national academy and industry stakeholders through research and innovation projects.</p>
Since	07/2012
Duration	Should be permanent
Experience	<p>There are two main programs used for supporting mission oriented projects.</p> <ol style="list-style-type: none"> 1) TUBITAK Priority Areas Research Technology Development and Innovation Funding Program (TÜBİTAK-1003) for academic R&D projects 2) TUBITAK Priority Areas Research Technology Development and Innovation Funding Program (TÜBİTAK-1511)

	<p>Up to now, the following topics related to EVs have been funded</p> <ul style="list-style-type: none"> -energy management systems for electric and hybrid vehicles, -electric motor control units & battery technologies, -infrastructure technologies for electric vehicles, -vehicle dynamic and control systems for electric and hybrid vehicles, -battery structure and systems for long driving range electric vehicles -battery and energy management systems for electric and hybrid vehicles -technologies for charging ecosystem (including on-board/off-board and wireless charging)
Planned changes	N/A
Responsible office	The Scientific and Technological Research Council of Turkey
Further information	N/A
Further comments	
www.tubitak.gov.tr/en/funds/industry/international-support-programmes/content-1509-tubitak-international-industrial-rd-projects-grant-programme www.tubitak.gov.tr/en/funds/industry/national-support-programmes#funds_industry_ana_sayfa_akordiyon-block_1-0	

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