Bundesministerium
Verkehr, Innovation
und Technologie

Report on the implementation of the National Policy Framework 'Clean Power for Transport'

Under the obligation imposed on Austria by

Directive 2014/94/EU
of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure

Article 10 – Reporting and review

Federal Ministry for Transport, Innovation and Technology [Bundesministerium für Verkehr, Innovation und Technologie, BMVIT]
in cooperation with

Federal Ministry for Sustainability and Tourism [Bundesministerium für Nachhaltigkeit und Tourismus, BMNT]

Burgenland
Carinthia
Lower Austria
Upper Austria
Salzburg
Styria
Tyrol
Vorarlberg
Vienna

Austrian Association of Cities and Towns
Austrian Association of Municipalities

Vienna, November 2019

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1 Introduction

This document complies with the requirement to submit a report on the implementation of the National Policy Framework pursuant to Article 10 of Directive 2014/94/EU on the deployment of alternative fuels infrastructure in Austria. The aim of the Directive is to reduce the environmental impact of transport and reduce dependence on oil. A National Policy Framework for the development of the alternative fuels market in the transport sector and the deployment of relevant infrastructure has been developed with a view to achieving this goal. This document is the report on the implementation of the National Policy Framework 'Clean Power for Transport', and will be forwarded to the European Commission by 18 November 2019.

1.1 Updated legislative framework

The regulatory framework has undergone further developments at both Austrian and European level since the publication of the National Policy Framework 'Clean Power for Transport' in 2016. For example, Austria's Climate and Energy Strategy #mission2030[1] was published in June 2018. In this strategy, Austria underlines its commitment to international climate targets and a proactive climate protection and energy policy. The main target in the transport sector is to achieve a 36% reduction in greenhouse gas emissions by 2030 compared to 2005, bringing the figure down to 15.7 million tCO_2. The first measures aimed at accomplishing the necessary transition to a decarbonised society have been defined in the form of flagship projects.

A National Energy and Climate Plan that builds on the Austrian Climate and Energy Strategy #mission2030 is currently being developed pursuant to the EU Regulation on the Governance of the Energy Union. It defines national requirements and targets for the period between 2021 and 2030, as well as the measures necessary to achieve under the decarbonisation, energy efficiency, safety of the energy supply, internal energy market and research, innovation and competitiveness dimensions.

With a view to implementing Directive 2014/94/EU on the deployment of alternative fuels infrastructure, the Federal Act laying down uniform standards for the deployment of alternative fuels infrastructure was adopted on 12 July 2018 (Federal Law Gazette I

[1] https://mission2030.info/

No 38/2018). This Act outlines the rights and obligations incumbent upon the operators of recharging points and grants powers to issue regulations to guarantee implementation of the technical specifications that apply in respect of electricity, hydrogen and natural gas refuelling points. The Regulation issued by the Federal Minister of Digital and Economic Affairs on technical specifications for recharging points and for refuelling points for alternative fuels (Recharging and Refuelling Point Regulation [Ladepunkte- und Tankstellen-Verordnung, LT-V]), Federal Law Gazette II No 280/2019 of 23 September 2019, lays down uniform standards for normal-power and high-power recharging points for electric vehicles that are accessible to the public, hydrogen refuelling points for vehicles that are accessible to the public and CNG refuelling points for vehicles that are accessible to the public.

CO_2 fleet targets for the transport sector have been set at EU level, and apply to the manufacturers of passenger cars, light commercial vehicles and heavy goods vehicles.

- Based on the fleet goal of 95 gCO_2/km for passenger cars and 147 gCO_2/km for light commercial vehicles, manufacturers must reduce fleet emissions by 15% across both vehicle categories by 2025, and by 37.5% for passenger cars and 31% for light commercial vehicles by 2030.
- The fleet target for heavy goods vehicles (which is the first of its kind) stipulates a reduction in fleet emissions of 15% by 2025 and of 30% by 2030. The fleet emissions of heavy goods vehicles sold between July 2019 and June 2020 were used as a reference.

The Clean Vehicles Directive also specifies minimum percentages of clean light commercial vehicles and heavy goods vehicle and buses to be achieved through public procurement by 2025 and 2030 respectively.

1.2 Examples of best practices by the provinces and the Federal Government

The measures that must be taken in the interests of moving towards a decarbonised society are designed and implemented by both the Federal Government and the provinces. Since a detailed description of all the measures would exceed the scope of this report, examples of projects from the individual regions are presented below. A full list of all measures can be found in the annex to this report.

Burgenland – cross-border e-mobility strategy

The goal of the Interreg AT-HU Project 'Low Carb Mobility' (cross-border e-mobility strategy, term: 1 April 2019 to 31 December 2021) is to improve multimodal networking between means of transport in the project area (Burgenland and West Hungary). One of the measures that will be implemented with a view to achieving this goal is the development of a cross-border e-mobility strategy. This strategy will focus on topics such as intermodality, the deployment of multimodal transport nodes and cross-border commuter and tourism traffic, taking into account the existing potential for the generation of renewable energies. It will set concrete targets for the period 2025-2030, and back these targets up with packages of measures that help ensure their achievement.

Carinthia – electric buses on the roads

An increasing number of electric buses have been and are being used on the road in Carinthia. An electric bus is being tested in urban traffic on a half-hourly route in Klagenfurt (Line 43) in order to determine whether the electric range is adequate for use on bus routes, and whether bus drivers and passengers are in favour of the new technology. There are also plans to test 15-seater electric buses on two urban bus routes in the urban municipality of Wolfsberg (one bus per route). Although the routes mentioned above are predominantly urban, an electric bus will also be used in rural areas in future. Plans exist to operate an electric bus between a company in Globasnitz and the railway station at St Michael ob Bleiburg, with a view to supplementing the company's mobility programme as well as the local public transport network.

Lower Austria – e-mobility field tests and network stability

The Province of Lower Austria has worked together with the regional energy supplier and the grid operator, the municipalities of Echsenbach, Obersiebenbrunn and Seitenstetten and manufacturers of recharging stations to organise e-mobility field tests. The aim of this measure is to test the electric mobility products that will be available between 2030 and 2050 using the infrastructure available today. Targeted support will be available for the development of recharging stations, and any weak points in the electric car / recharging unit / power grid system will be highlighted. As well as allowing people to experience electric mobility at first hand, support will be provided for the development of recharging stations, and any weak points in the system will be identified and eliminated. The Province of Lower Austria has established a network of electricity suppliers, grid operators, providers of recharging stations and households for the purpose of holding tests; the findings from these tests will ensure the best possible outcomes when the E-Mobility Strategy is implemented.

Upper Austria – zero-emission taxis

The Upper Austrian initiative for energy-efficient and low-emission taxis is intended to provide funding for up to 20 zero-emission taxis (BEVs and FCEVs) and 50 low-emission taxis (PHEVs). For example, funding of €3,500 is available for zero-emission taxis (battery electric and fuel cell vehicles), and the funding is doubled for vehicles registered in an NO_2 (nitrogen dioxide) clean air zone.
An extra three high-power DC recharging stations (rated power of 50 kW each) will also be installed for exclusive use by taxis to ensure the problem-free operation of these vehicles.

Salzburg – extensive network of recharging stations

One of the goals set by the Province of Salzburg is the funding of electric recharging infrastructure in Salzburg. The Province of Salzburg has therefore joined together with the energy suppliers operating within its borders to offer municipalities the chance to install a high-power recharging station (one per municipality). The ultimate aim is to ensure that recharging stations are installed in all 119 municipalities. The measure is implemented on the basis of the Partnership Agreement for the Climate and Energy Strategy SALZBURG 2050. Funding is granted for public electric recharging stations that are located centrally or on a high-traffic section of the road, with parking spaces that can be accessed freely on a 24/7 basis. A rated power of 22 kW is planned for each connection.

Styria – multimodel transport node 'tim'[2]

The first station funded by the 'tim' project ('täglich. intelligent. mobil.' ['daily. intelligent. mobile.']) was opened in Graz in 2016. The tim project involves the construction of multimodal transport nodes offering a range of sustainable mobility solutions in the immediate vicinity of tram stops. There are currently seven stations in Graz offering (electric) car-sharing vehicles, hire cars, electric taxis, recharging stations for private electric vehicles and bicycle parking spaces. The stations are spread over the entire city, and can be found at the following locations:

- Hasnerplatz
- Jakominigürtel / corner of Conrad-von-Hötzendorf-Straße
- Eggenberger Allee / corner of Janzgasse
- Schillerplatz / corner of Schützenhofgasse
- Lendplatz
- Brauquartier Puntigam and

[2] https://www.tim-oesterreich.at/graz/

- Styrian Chamber of Commerce (Körblergasse).

The popularity of the tim project in Graz has led to the idea being copied by other provinces (e.g. the city of Linz in Upper Austria).

Tyrol – neutral contact point for e-mobility

The goal of the project 'How Tyrol Will Drive in 2050' is to serve as a major driver for the use of electric vehicles and alternative mobility solutions in Tyrol. It is designed as a neutral contact point for all questions relating to the topic of e-mobility in Tyrol.

As well as providing advice in the fields of e-mobility and recharging infrastructure, organising events and training sessions and establishing and maintaining an e-mobility network in Tyrol (which has already launched its first initiatives), in-depth investigations of individual topics have also been initiated, as well as demonstration projects (Electric Car-Sharing in Tyrol, E-Mobility Strategy for East Tyrol). A major milestone in the first phase of the project was the definition of targets under the E-Mobility Action Programme 2017-2020 and the implementation of measures to illustrate the feasibility of these targets.

Based on the foundations laid during the first phase of the project, the focus of future action will be on practical implementation, with particular emphasis on the establishment of networks between the heating, electricity and mobility sectors.

Vorarlberg – recharging infrastructure for multi-family dwellings

A particular priority for the Province of Vorarlberg is the construction of housing that is both environmentally friendly and affordable. Funding is therefore provided not only for accessible housing (i.e. buildings that can be used by different generations), but also for environmentally friendly housing. Future-proofed buildings must also meet new e-mobility requirements and incorporate the necessary recharging infrastructure. The option of recharging electric vehicles at home (albeit slowly) will make electric passenger cars more popular among the general population. Funding is therefore provided for the deployment of recharging infrastructure in multi-family dwellings.

Vorarlberg grants residential building subsidies (in the form of loans) as a means of achieving this goal. The amount loaned is calculated as the sum of basic funding plus various supplements (bonuses).

Energy and environment bonuses are available in the form of supplements for reductions in heating and primary energy demand, reductions in CO_2 emissions, the OI3 Eco-Index, PVC-free windows, doors and roller shutters, the use of wooden façades, the use of renewable insulation and measures in the field of mobility. More specifically, the following are available in the field of mobility:

- bonus for optimised bicycle parking spaces in residential estates,
- bonus for car-sharing parking spaces,
- bonus for preparatory e-mobility measures.

The bonus for preparatory e-mobility measures is granted if all parking spaces in residential estates (covered parking or carports) meet the structural requirements (empty conduits, cable runs, wall openings etc.), i.e. have a suitable connection for the retrofitting of a recharging point for an electric vehicle at each parking space.

Vienna – recharging stations for public transport

As part of the project 'One thousand electric recharging points for Vienna', the City of Vienna tendered out a service concession contract to a service provider able to install and operate public recharging infrastructure in Vienna. By the end of 2020, 500 electric recharging stations will be operational in public areas, each supplying 2 x 11 kW; this will provide a major boost to electric mobility. As well as the 11-kW recharging stations, four high-power recharging stations (350 kW) have also been installed. Additional high-power recharging stations will be installed at selected locations.

Federal Government – vehicle funding

As part of the E-Mobility Package 2017+2018 and the subsequent E-Mobility Programme 2019+2020, funding is available for purchases of electric vehicles in the various vehicle categories and for recharging infrastructure purchased by private individuals, businesses, local and regional authorities and associations. The financial resources are allocated by the Federal Ministry for Sustainability and Tourism, the Federal Ministry for Transport, Innovation and Technology and the economic partners (vehicle and bicycle importers and sports retailers). The steady rise in the number of electric vehicles registered and the popularity of the funding programmes are a clear indication that the need for a technological transition in the transport sector is accepted not just by the departments in question, but by the broader Austrian public. This is also apparent from an international comparison, since Austria is among the top EU Member States in terms of the share of newly registered electric cars.

European comparison

The impacts of the measures are also reflected in the number of purely battery electric passenger cars registered as new vehicles. In 2018, the number of purely battery electric cars registered in Austria as a share of all newly registered vehicles was the third highest in the EU. The Netherlands took first place at 5.42%, with Sweden in second place at 2.01% and Austria in third place at 1.98%.

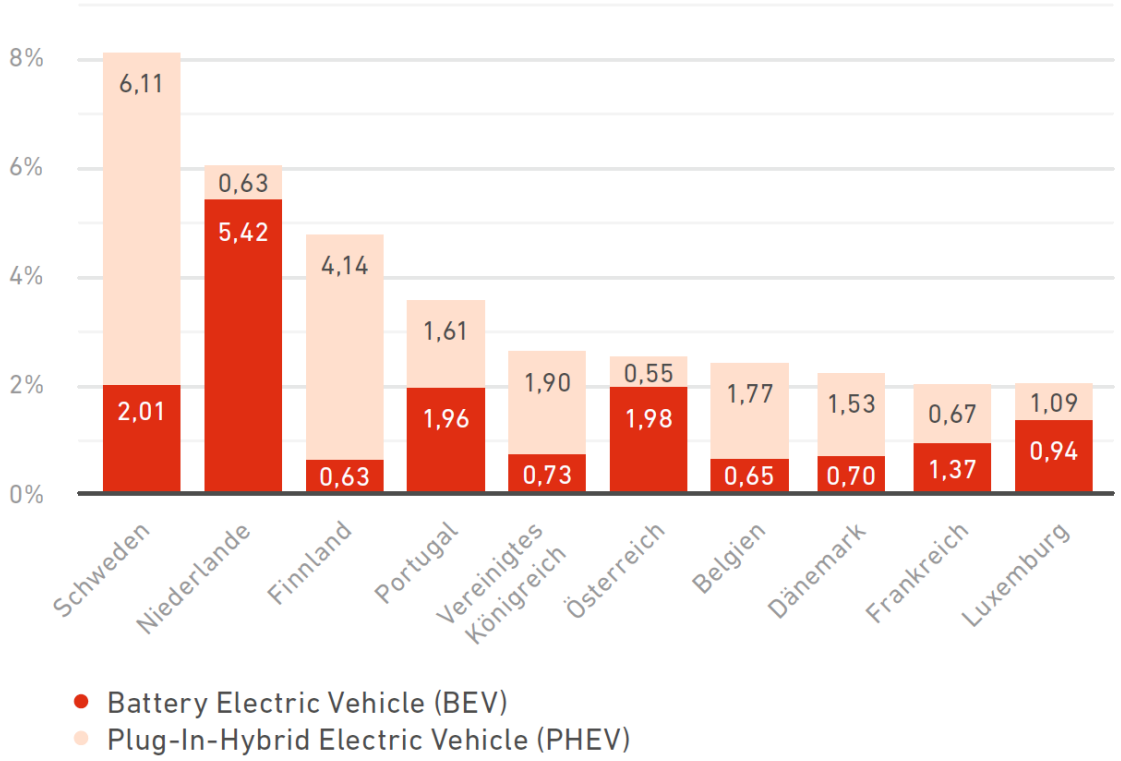

Figure 1: Number of electric passenger cars as a share of all newly registered vehicles in the EU in 2018[3]

Schweden	Sweden
Niederlande	Netherlands
Finnland	Finland
Portugal	Portugal
Vereinigtes Königreich	United Kingdom
Österreich	Austria

[3] Source of image: https://www.austriatech.at/assets/Uploads/Publikationen/PDF-Dateien/24020edb86/Highlight_Report_2019.pdf; source of data: EAFO

Belgien	Belgium
Dänemark	Denmark
Frankreich	France
Luxemburg	Luxembourg

2 Status quo

The Federal Government, the provinces and the municipalities have been supporting research and development relating to alternative fuels in the transport sector and development of the relevant market for many years. They also provide funding for various training and awareness-raising measures. Although the number of alternatively powered vehicles continues to be low, Austria has an extensive network of (basic) recharging or refuelling infrastructure for both electric mobility and natural gas mobility (CNG). The high proportion of renewable energy in its electricity mix means that Austria is particularly well placed to complete the transition to an electrically powered transport sector.

The current level of development of the electricity, natural gas and hydrogen market (both vehicles and infrastructure) is outlined below. More detailed information can be found in the annex to this document. The descriptions of both the current level of development and future developments (in Section 4) are based on the reporting format set out in the Annex to the National Policy Framework, and reflect developments between Q2 2016 and Q2 2019.

2.1 Current level of development of the alternative fuels market in the transport sector

Table 1: Number of alternatively powered vehicles in Austria (Statistics Austria)

Alternatively powered vehicles	Number of vehicles		Change in per cent
	30 June 2016	30 June 2019	
Electric vehicles, Class M1 (BEV & PHEV)	9,225	32,048	+247%
Electric vehicles, Class N (BEV)	1,178	2,470	+110%
Electric buses, Class M2, M3 (BEV)	148	163	+10%
Electrically powered vehicles, Class L (BEV)	5,895	9,941	+69%
Hydrogen vehicles, Class M1	12	35	+192%
CNG vehicles, Class M1 (including petrol / natural gas (bivalent))	4,933	5,604	+14%
CNG vehicles, Class N (including petrol / natural gas	1,931	1,809	-6%

Alternatively powered vehicles	Number of vehicles		Change in per cent
	30 June 2016	30 June 2019	
(bivalent))			
CNG buses, Class M2, M3	186	168	-10%
LNG lorries, Class N	n/a	n/a	n/a
LNG buses, Class M2, M3	n/a	n/a	n/a

2.1.1 Electricity

At present, around 70% of the rail network in Austria is electrified[4]. Since electrification efforts have focused on high-traffic passenger and freight routes (all double-track routes have been electrified), the percentage of electrified train-kilometres travelled is even higher. A great deal of progress has been made as regards electrification of the rail network, and the number of electric vehicles on Austria's roads is also increasing steadily. At the end of 2018, 0.53% of the entire vehicle fleet of almost 5 million passenger cars (Class M1) was electrically powered, with 20,831 purely battery electric vehicles (BEV) and 5,710 plug-in hybrids (PHEV). The number of purely electric vehicles in the remaining vehicle classes (L, M2, M3 and N) amounted to 10,920 vehicles at the end of 2018.

A basic level of recharging infrastructure for electric vehicles is available throughout Austria. The TEN-T (Trans-European Transport Network) core network covers the entire country, including in urban and suburban conurbations and other densely populated areas (see Section 2.2). By the end of Q2 2019, 503 high-power recharging points and 3,675 normal-power recharging points were in operation pursuant to Annex 2 to Directive 2014/94/EU.

With a view to making it easier to use recharging stations operated by different companies, all Austrian operators are currently working hard on user-friendly and streamlined authentication and payment systems, both within Austria and as part of the relevant EU-wide projects.

Austria's ports provide a basic level of shore-side electric supply for inland waterway vessels.

All of Austria's passenger airports operate both stationary and mobile ground power units (GPUs) with a view to minimising the use of aircraft-side kerosene-operated auxiliary power units (APUs) during ground handling of aircraft. The conventionally operated (diesel) mobile

[4] 2018 annual report by Schienen-Control, p. 74

GPUs that have been used to date are gradually being switched over to battery-operated GPUs. In general terms, the deployment of e-mobility at all of Austria's airports is a high priority. This also involves the installation of airport-based photovoltaic systems. (Vienna Airport: increase from the four photovoltaic systems already present (8,000 m^2) to a total of seven photovoltaic systems by 2020, covering 16,000 m^2 and with an output of 2,700 kWp)

2.1.2 Natural gas (CNG)

Compressed natural gas (CNG) is the most environmentally friendly of all the fossil fuels. Although refuelling infrastructure is available throughout the country and certain tax concessions are available, only 5,542 passenger cars in Class M1 were registered in Austria on 31 December 2018. This was almost exactly the same number of vehicles as the previous year. Many different series-production CNG vehicles are available (including passenger cars, light commercial vehicles, heavy goods vehicles and buses), and refuelling points are present throughout Austria.

On 30 September 2019, the number of public CNG refuelling points in Austria stood at 156, three[5] of which were purely biomethane refuelling points. A slight decrease in the number of CNG refuelling points can therefore be observed at present, since the number was 171 at the end of 2016. The TEN-T core network is nevertheless still covered throughout the country, including in urban or suburban conurbations and other densely populated areas. Although a comprehensive network of infrastructure exists, as well as a technical and regulatory legal framework and a wide range of vehicle models, the development of the CNG market in Austria remains at a very low level.

2.1.3 Natural gas (LNG)

Liquefied natural gas (LNG) is an alternative fuel for ships and heavy goods vehicles. It can be used to achieve the targets set in terms of a reduction in the sulphur content of marine fuels and to ensure compliance with the emissions limits under the Euro VI standards in the case of heavy goods vehicles. LNG does not currently play a significant role either in inland waterway navigation or in heavy goods transport in Austria; the deployment of LNG infrastructure has not therefore been a priority to date. On cost grounds, Austria currently assumes that LNG is unlikely to replace natural gas in locations where natural gas pipes have already been installed. Nevertheless, potential exists for increased use of LNG in future, and Austrian institutions are currently working hard on feasibility studies and pilot projects such as the 'LNG Master Plan Rhine-Main-Danube' project. Since September 2017, RAG has operated the

[5] https://www.kompost-biogas.info/biogas/biomethan/gruener-kraftstoff-biomethan/

first Austrian LNG refuelling point in Ennshafen. A second LNG refuelling point was opened in 2019 at the Feldkirchen exit from the A2 motorway, near Graz/Airport.

2.1.4 Hydrogen

The number of hydrogen fuel cell electric vehicles (FCEVs) in Austria has been very low to date. This can be explained primarily by the extremely limited selection of vehicles currently available. The deployment of publicly accessible infrastructure should be paired with vehicle-related developments. On 31 December 2018, 24 fuel cell vehicles were registered in Austria. This figure had increased by around 50% by mid-2019. FCEVs are eligible for the same tax concessions as BEVs (e.g. car registration tax, company car taxation etc.). Given the current number of vehicles, Austria meets the requirements of Directive 2014/94/EU; there are five fully operational refuelling points in Linz-Asten, Graz, Innsbruck, Vienna and Wiener Neudorf, and two private refuelling points in Graz (TU Graz) and Thalheim bei Wels (Fronius).

2.2 Current level of deployment of alternative fuels infrastructure

Table 2: Alternative fuels infrastructure accessible to the public in Austria

Fuel / energy source	Type of recharging / refuelling point	Number	
		Q2/2016	Q2/2019
Electricity	Road: normal-power recharging point with a power of 22 kW or less	1,327	3,675
	Road: high-power recharging point with a power of over 22 kW	316	503
	Shore–side electricity supply for inland waterway vessels	Basic equipment available at TEN-T ports	
	Ground power supply for aircraft	An adequate number of stationary and mobile ground power units (GPUs) are available at all commercial airports in Austria. For example, 42 stationary GPUs were available at Vienna Airport in October 2019, and around 50 mobile GPUs.	
Natural gas (CNG)	For road transport	171	156 (as at: September 2019)

Fuel / energy source	Type of recharging / refuelling point	Number	
		Q2/2016	Q2/2019
Natural gas (LNG)	For heavy goods vehicles	0	2
	For inland waterway vessels	0	n/a
Hydrogen (700 bar)	For road transport	3	5

3 Implementation of measures

Electric mobility plays a key role in the conversion of transport systems in Austria. E-mobility is therefore also a core component of the Climate and Energy Strategy #mission2030, which includes the E-Mobility Package which ran from 2017 to 2018, and the E-Mobility Programme 2019+2020 which followed it and is still running. The E-Mobility Package has proved extremely successful, allowing Austria to becoming one of the leading EU Member States for new registrations. The number of applications submitted under the E-Mobility Package 2017+2018 was 14,300 for electric passenger cars and electric bicycles, with private individuals and businesses accounting for around half. Around 88% of the electric cars were purely electric, and around 12% were plug-in hybrids or range extenders. The follow-on package ('E-Mobility Programme for 2019 and 2020') has a total funding volume of €93 million, to be provided jointly by the Federal Ministry for Sustainability and Tourism, the Federal Ministry for Transport, Innovation and Technology and economic partners (vehicle and bicycle importers and sports retailers). The programme is being implemented on the basis of three bundles of measures:

1. E-mobility for road vehicles and infrastructure
    - electric passenger cars for businesses,
    - electric lightweight vehicles, electric minivans and electric light commercial vehicles,
    - electric recharging infrastructure,
    - electric bicycles and cargo bikes,
    - e-mobility for private individuals.
2. E-mobility in the rail network
3. E-mobility management, e-fleets and e-logistics
    - e-mobility management, e-fleets and e-logistics,
    - multimodal transport system – 'klima**aktiv**mobil' action programme as part of the Rural Development Programme 2014-2020.

Additional components of the E-Mobility Programme include the research projects 'Zero Emission Mobility' and 'E-Mobility in Practice', the research priority 'Decarbonisation of the Rail Network' and an increase in the level of electrification of the ÖBB rail network. The 'E-Mobility in Practice' programme involves targeted measures aimed at raising awareness and making it easier for companies to enter the market, with the aim of boosting the market penetration of e-mobility.

Although the funding is not linked to a particular technology, most of the applications relate to battery electric vehicles (BEVs). Funding is only granted if all of the electricity or hydrogen

used originates from renewable sources of energy. The number of new e-mobility applications submitted by 24 June 2019 stood at 3,219. Private individuals had submitted 47% of these applications, and businesses had submitted 53%. Electric passenger cars accounted for 2,266 applications; 93% were BEVs, and 7% were plug-in hybrids and range extenders (PHEVs). A detailed breakdown of the applications submitted to date can be found below:

- 2,112 applications for electric passenger cars (BEVs) and small electric vans, and 154 applications for PHEVs and REXs (private individuals + businesses),
- 60 applications for electric lightweight vehicles (businesses),
- 88 applications for electric recharging infrastructure (businesses),
- 558 applications for electric bikes (private individuals + businesses),
- 247 applications for electric (cargo) bikes (private individuals and businesses).

Alongside the Federal Government's E-Mobility Programme, certain provinces are also offering top-up funding or separate funding instruments for purchases of electric vehicles and the associated recharging infrastructure. These provinces include Lower Austria and Salzburg. Lower Austria tops up Federal Government funding in the case of electric passenger cars for private individuals and also in the case of electric cargo bikes for businesses and municipalities. As described in the examples of best practice, Salzburg provides funding for the installation of an electric recharging station in each municipality. Separate funding schemes are also operated in the provinces of Upper Austria, Tyrol, Vorarlberg and Burgenland.

Upper Austria also provides funding for electric scooters for retired persons and persons with impaired mobility, new electric mopeds and motorbikes and new or converted fully electric passenger cars. Funding for gas-operated vehicles is also offered by Upper Austria. Further examples of best practices include the initiative 'How Tyrol Will Drive in 2050' in Tyrol, and the guidelines on residential building subsidies published by Vorarlberg. Vorarlberg also provides funding for recharging infrastructure in the municipalities, electric passenger cars for public-interest transport (e.g. for home-based nursing) and electric taxis. Burgenland provides funding for the purchase of smart and controllable recharging stations for private individuals.

Table 3: Current rates of funding available for alternative vehicles and infrastructure from the Federal Government and the provinces[6]

Local or regional authority	Nature	Type	Means of propulsion	Funding rate (maximum)	Maximum funding amount
Federal Government – private individuals		M1, N1	BEV, FCEV	-	€3,000
		M1, N1	PHEV, REX, REEV	-	€1,500
		Wall box or smart recharging cable	Electric	-	€200
		OCPP wall box for multi-family dwellings	Electric	-	€600
		L1e	Electric	-	€700
		L3e	Electric	-	€1,000
		Electric cargo bike or cargo bike	Electric	30%	€400
Federal Government – enterprises		M1, N1 (N1≤2.0 to MAW (maximum authorised weight))	BEV, FCEV	30%	€3,000
		M1, N1	PHEV, REX, REEV	30%	€1,500
		N1 >2.0 and ≤2.5 to MAW	Electric	30%	€5,000
		N1 >2.5 to MAW	Electric	30%	€10,000
		M2	Electric	30%	€20,000
		L2e, L5e, L6e, L7e	Electric	30%	€1,000
		AC > 3.7 kW	Electric	30%	€200
		AC > 22 kW	Electric	30%	€200
		AC 3.7 <> 22 kW	Electric	30%	€1,000
		AC/DC 22 <>43 kW	Electric	30%	€2,000
		AC >43 kW, DC ≥50 kW	Electric	30%	€10,000
		L1e	Electric	30%	€700

[6] *This list contains all funding schemes active on 30 October 2019*

Local or regional authority	Nature	Type	Means of propulsion	Funding rate (maximum)	Maximum funding amount
		L3e	Electric	30%	€1,000
		Electric bike	Electric	30%	€200
		Electric cargo bike or cargo bike	Electric	30%	€400
		N2	Electric	30%	€20,000
		N3	Electric	30%	€50,000
		M3 ≤ 39 passengers including driver	Electric	30%	€40,000
		M3 39 <>120 passengers	Electric	30%	€60,000
		M3 ≥ 120	Electric	30%	€100,000
		DC ≥ 150 kW	Electric	30%	€20,000
Lower Austria – private individuals		M1, N1	BEV		€1,000
Lower Austria – businesses		M1, N2	BEV		€1,000
Lower Austria – municipalities		M1, N2	BEV		€1,000
Burgenland – private individuals		Electric scooters, e.g. for retired persons	BEV	30%	€250
		Electric mopeds	BEV	30%	€350
		M1	BEV	30%	€750
		M1	CNG	30%	€750
Salzburg – businesses, municipalities		M2	BEV		€20,000
		N1 >2.5 to MAW	BEV		€8,500
		N1 >2.0 and ≤2.5 to MAW	BEV		€3,500
		AC <3.7 kW	Electric		€200
		AC 3.7 <> 22 kW	Electric		€1,000

Local or regional authority	Nature	Type	Means of propulsion	Funding rate (maximum)	Maximum funding amount
		AC/DC 22 <>43 kW	Electric		€2,000
		AC >43 kW, DC ≥50 kW	Electric		€10,000
Salzburg – municipalities		AC 22 kW	Electric		n/a
Vorarlberg – private individuals (residential estates)		Domestic connection booster for electric passenger cars	Electric	50%	€3,500
		Building work relating to private recharging stations	Electric	50%	€10,000
		Empty conduits for electric car-sharing	Electric	50%	€1,500
		Empty conduits for electric bikes / pedelecs	Electric	50%	€1,000
Vorarlberg – municipalities		Type 2 >11 kW (without existing infrastructure)	Electric	50%	€7,000
		Type 2 >11 kW (with existing infrastructure since 1 January 2018)	Electric	30%	€5,000
Vorarlberg – businesses		M1, N1 (public use)	Electric	30%	€1,500
		M1 (taxis)	Electric	30%	€5,000
Upper Austria – private individuals		Private electric recharging stations	Electric	40%	€600
		Private OCPP electric recharging stations (multi-family dwellings)	Electric	40%	€200

Key: Class M1, N1; only Class N1; Class N2, N3; Class M2, M3; Class L; electric bikes / cargo bikes; Infrastructure

3.1 Legal measures

The measures relating to construction law described in the 2016 National Policy Framework have already resulted in the adoption of certain amendments by the provinces. For example,

the provinces have incorporated requirements concerning the installation of recharging infrastructure or empty conduits in newly constructed car parks into their Building Regulations. In future, the provinces will also use the requirements laid down in the Energy Performance of Buildings Directive (EPBD, Directive (EU) 2018/844) as a basis. This Directive entered into force on 9 July 2018 and includes not only requirements relating to energy efficiency during the renovation of existing buildings and the construction of new buildings, but also requirements relating to the installation of empty conduits for recharging infrastructure or the installation of recharging points when the number of parking spaces exceeds a certain level. It will be transposed into national legislation by March 2020 at the latest.

More detailed requirements concerning fire safety and user safety have also been provided in the guidelines published by the Austrian Institute of Construction Engineering with a view to harmonising the provisions of the provincial building regulations in the field of alternative drives. For example, Guideline 2.2 (Safety in the event of fires in garages, roofed parking spaces and multi-storey car parks) ensures that hydrogen-operated and LNG-operated vehicles receive the same treatment. Guideline 4 also states that recharging stations do not affect the minimum dimensions of vehicle parking spaces provided that their usability and user safety is guaranteed.

The provinces have also taken steps to amend the approval procedure with a view to facilitating the installation of electric recharging infrastructure.

In particular, new measures have been implemented for users of electrically powered and hydrogen-powered vehicles. For example, vehicles with a green registration plate are exempt from speed limits on motorways and dual carriage ways in the 100-km/h zones established under the Ambient Air Quality Act [Immissionsschutzgesetz-Luft]. Purely BEV and FCEV vehicles are allowed to drive at the normal statutory speed limit in these zones, i.e. 130 km/h. This exemption does not apply to plug-in hybrids. These speed limit rules are currently in force along seven stretches of road in Austria (in Carinthia, Upper Austria, Salzburg, Styria, Tyrol and Vorarlberg) and in one stretch in Salzburg where an 80-km/h speed limit applies. One additional new measure is an exemption from the driving bans that apply to freight traffic on a section of the A12 Inntal motorway for electrically powered lorries or lorries with hydrogen fuel cell technology. This means that the sectoral driving bans, night-time driving bans and Euro class driving bans do not apply to zero-emission lorries. Emission-free vehicles in vehicle classes N2, N3, M2 and M3 are now also eligible to use green registration plates.

Amendments to the Federal Road Toll Act in 2019 (Federal Law Gazette I No 45/2019) introduced further incentives for purely electric or hydrogen vehicles: from 1 January 2020

onwards, purely electric or hydrogen fuel cell vehicles with a maximum authorised weight of over 3.5 tonnes will form a separate tariff group that is eligible for the lowest tariff. The lowest tariff must be 50% below the highest tariff. In addition, a basic tariff per kilometre aimed at reducing traffic-related air pollution will not be applied to purely electric or hydrogen fuel cell vehicles.

In order to ensure that the geographic location of recharging points that are accessible to the public is made available in an open and non-discriminatory manner, the E-Control Act now states that operators of these recharging points must notify them to E-Control, and that E-Control must maintain a directory of all public accessible recharging points in Austria.

Amendments have also been adopted in respect of consumer information on fuel consumption and CO_2 emissions of vehicles, fuel labels at refuelling points and information sheets for newly registered cars. For example, pursuant to the requirements of the Passenger Car Consumer Information Regulation, the sections of the website www.autoverbrauch.at concerning alternative drives have been updated in cooperation with the Federal Ministry for Sustainability and Tourism, the Federal Committee for the Automotive Trade, the Austrian Chamber of Commerce, the Working Group of Automotive Importers and the Federation of Austrian Industry, and expanded to include consumption and emission information in line with the WLTP. The information sheet for new vehicles was expanded to include the category 'Fuel compatibility'.

3.2 Policy measures

The policy measures implemented over the past few years include not only ambitious public procurement targets, but also the provision of local incentives and large-scale awareness-raising measures in the form of many different public campaigns.

Provinces such as Lower Austria, Tyrol, Salzburg and Vorarlberg have set themselves the goal of gradually electrifying the vehicle fleets they operate. Both Tyrol and Vorarlberg provide funding for electric car-sharing, and Styria (until 2017) and Upper Austria offer funding that allows taxi fleets to be switched to zero-emission vehicles.

As well as the financial incentives provided by the provinces, incentives are also offered at municipal level, such as an exemption from parking charges for zero-emission vehicles in towns or cities. The following table indicates the towns or cities in Austria where exemptions from parking charges currently apply. Individual requirements may need to be observed in

the individual town or city, such as a parking disc that needs to be displayed, special certificates for an exemption from parking charges or a green registration plate.

Table 4: Towns or cities with exemptions from parking charges for electric vehicles[7]

Province	Town or city
Lower Austria	Klosterneuburg
	Krems
	Melk
	Mödling
	Neunkirchen
	Perchtoldsdorf
Upper Austria	Wels
Burgenland	Eisenstadt
Styria	Graz (in force since 2015)
	Gleisdorf
	Weiz (in force since 2016)
	Hartberg
	Kapfenberg
	Knittelfeld
	Voitsberg (in force since 2017)
Carinthia	Klagenfurt
	Villach
	St Veit
	Wolfsberg
Tyrol	Wörgl
	Hall in Tirol
	Imst (only applies to the two parking spaces that can be used for electric recharging)

[7] *Last updated 30 October 2019*

	Schwaz (valid until 31 December 2022)
	Lienz
	Wattens
	Kitzbühel (only free while recharging)
	Reutte
	Landeck
	Kufstein (an application must be submitted for a special parking card)
Salzburg	City of Salzburg (only valid for electric vehicles during the recharging process)
	Zell am See
Vorarlberg	Vorarlberg (Exemption from parking charges for electric vehicles during the recharging process, not in short-stay parking areas)
Vienna	City of Vienna (only free while recharging)

The 2017 amendments to the Road Traffic Regulations [Straßenverkehrsordnung, StVO] (Federal Law Gazette I No 6/2017, §54(5m)) included provisions regarding an additional sign *(see Figure 2)* intended to be used for labelling a parking space in front of a recharging station. If this additional sign is displayed together with a 'No stopping or parking' sign, owners of vehicles with an electric powertrain that can be recharged externally are allowed to stop and park while recharging their vehicle.

Figure 2: Additional sign indicating that parking is permitted for electric vehicles

ausgenommen	except

Almost all of the provinces provide funding for both private individuals and businesses for purchases of electric vehicles and private recharging infrastructure, in the form of subsidies for wall box installations. Vorarlberg has published guidelines on residential building subsidies for this purpose in order to promote the deployment of electric recharging infrastructure in

existing multi-family dwellings and residential estates. A bonus of €10.00 per square metre of usable floor space is granted if all the parking spaces in the residential estate (covered parking or carports) meet the structural requirements for the retrofitting of a recharging point.

Table 5: Level of deployment of all publicly accessible recharging stations and wall boxes installed in multi-storey residential buildings under the Vorarlberg guidelines on residential building subsidies

Year	Locations	Charging stations	Recharging points
2015	121	128	227
2016	160	174	324
2017	213	233	444
2018	259	288	551
2019	282	313	596

Vienna has launched a funding initiative for electric recharging stations in public areas. Under this project ('One thousand electric recharging points for Vienna'), a total of 1,000 new high-power recharging points, each supplying 11 kW of power, will be installed across all districts in Vienna by the end of 2020. The project is being implemented in collaboration with Wien Energie.

The Province of Lower Austria is supporting PR-related measures with a view to allowing interested members of the public to experience e-mobility at first hand. Events such as E-Mobility Days have allowed up to 8,000 individuals a year to test electric vehicles such as electric cars, electric bikes and electric scooters since 2015. The scope of these events was increased through the organisation of 50 events that were smaller in scale but essentially very similar. The '6 days – 60 euros' campaign, which involved car dealers loaning out electric vehicles for a one-off period of six days, allowed interested parties to experience electric vehicles as part of their everyday lives.

The individual provinces are all implementing one or more strategies in the field of alternative fuels with a view to helping achieve the climate targets. The following Table 6 lists the

strategies currently being implemented to promote sustainable mobility and renewable energy.

Table 6: Provincial strategies

Province	Name	Link to factsheet
Federal Government	Climate and Energy Strategy #mission2030	Link
Burgenland	Burgenland E-Mobility Strategy (planned)	-
Carinthia	Mobility Master Plan for Carinthia (MoMaK)	Link
Lower Austria	Lower Austrian E-Mobility Strategy ('e-mobil' Lower Austria) 2014-2020	Link
Upper Austria	Draft strategy: 'Alternative drive technologies in Upper Austria until 2025, with a focus on e-mobility' (planned)	-
East Tyrol	E-Mobility Strategy East Tyrol 2030	Link
Styria	2030 Styrian electromobility strategy	Link
Vorarlberg	E-Mobility Strategy 2015–2020 for Vorarlberg	Link
Vorarlberg	Vorarlberg Mobility Concept 2019	Link
Vorarlberg	Vorarlberg Air Quality Plan (new)	Link
Vienna	Smart City Strategy for Vienna	Link
Vienna	Technical Mobility Concept for Vienna	Link
Vienna	Urban Energy Efficiency Programme 2030 (SEP 2030) for Vienna	Link

3.3 Infrastructure and production facilities

Following the publication of the 2016 National Policy Framework and the funding arrangements described therein, additional funding instruments were developed in particular by the provinces. As described in the examples of best practices, Salzburg provides funding for the deployment of recharging infrastructure. More specifically, a recharging station delivering 22 kW of power is to be installed in each municipality. Increased use will also be

made of trolleybuses in the centre of Salzburg, by extending certain routes and using batteries to operate the vehicles along certain bridging sections of the routes. Carinthia has taken proactive steps to provide targeted funding for sustainability and alternative mobility in the form of the plan 'Carinthia - Sustainability has a Future'.

In addition to the provinces, ASFiNAG (Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft [Motorways and Highways Financing Stock Corporation]) has also launched a funding initiative for e-mobility and energy efficiency. Since 2016, all of the energy used by ASFiNAG has been generated from renewable sources, and it is also installing facilities to generate its own energy. Pilot photovoltaic systems were put into regular service in 2018 so that the company could source the energy it needs to operate tunnels directly on site and in an environmentally friendly way. Additional systems have also been installed at a service station, a motorway maintenance depot and a traffic guidance and control system. The deployment of recharging infrastructure for electric vehicles along motorways and dual carriageways is an ongoing project. For example, high-power recharging stations were available at 26 service stations at the end of 2018. On 8 November 2019, a total of 164 recharging points were available at a total of 27 locations. ASFiNAG's own fleet of vehicles is also being converted to e-mobility: by 2020, 20% of company cars and pool cars (around 500 in total) will be electrically powered. A total of 37 of the planned 100 vehicles were already electric by the end of 2018. As indicated in the policy measures, ASFiNAG was involved in the process of implementing the amendments to the Federal Road Toll Act, with a view to creating incentives for investments in modern, new and clean mobility.

Three park & ride sites (at Leoben, St Pölten and Amstetten) were equipped with two recharging points each by ÖBB in 2017 as part of the pilot e-mobility project 'Electric Recharging Infrastructure at Park & Ride Sites'. Based on the findings made in the process, a framework contract for operation of the sites was concluded for all subsequent locations with an external service provider. By mid-2019, around 40 park & ride sites across Austria had been retrofitted with between two and a maximum of four electric recharging points as part of the e-mobility project; a modular system was used so that expansions will be possible in the future if necessary. When new park & ride sites are constructed, empty conduits are incorporated so that electric recharging infrastructure can be fitted at a later date, depending on demand.

3.4 Research, technological development and demonstration (RTD&D)

The 'Electric Mobility Flagship Projects' funding programme described in the National Policy Framework was completed in 2017. It was immediately followed by the 'Zero Emission Mobility' programme, which was relaunched in 2018 with a consistent and exclusive new funding focus on zero-emission vehicles. The programme therefore prioritises the development of 100% zero-emission technologies. Under the priority topic 'Zero-Emission Vehicles', untethered vehicles are developed (or further developed) to the point that they are 100% electrified. Under the priority topic 'Zero-Emission Infrastructure', electric mobility infrastructure components and their integration into infrastructure or holistic transport concepts are developed and implemented in pilot projects. Under the priority topic 'Zero-Emission Logistics & Mobility Solutions', zero-emission freight logistics concepts and the integration of e-mobility into the public transport system are developed and demonstrated. In 2018 and 2019, calls for tenders focused on integrating electrified, automated and publicly accessible mobility services into urban and rural transport systems. In addition, the ongoing second call for tenders for two R&D service providers focuses in more detail firstly on battery technologies (recycling, raw materials and value creation) and secondly on technological options and economic framework conditions for CO_2-neutral freight transport by 2050.

The 'Mobility of the Future' programme supports research and development projects that are aimed at delivering major solutions to mobility-related societal challenges and that stimulate existing markets or generate new markets through innovation. The current programme covers the topics 'Innovative design for personal mobility', 'Reorganisation of freight mobility', 'Alternative development of vehicle technologies' and 'Joint development of transport infrastructure'. The 14th call for tenders, which will end on 12 February 2020, focuses on the topics 'Battery initiative' and 'Automated mobility'.

The funding focus of the programme 'E-Mobility For All: Urban Electric Mobility' was the implementation of demonstration projects in greater urban areas aimed at making available to the urban population a market-focused e-mobility system involving electric taxis and/or electric car-sharing. The concept of multimodal transport nodes has proved particularly useful in this respect, and so additional projects were funded in 2018.

The 'Electric Mobility Model Region' programme under the National Policy Framework has also given rise to a follow-on programme entitled 'E-Mobility in Practice'. It involves targeted measures aimed at raising awareness and making it easier for companies to enter the market, with the aim of boosting the market penetration of e-mobility. Additional measures relating

to the topics of transport and mobility systems are funded within the framework of the 'Energy Research' programme under the Climate and Energy Fund.

The provinces are also implementing key measures aimed at promoting e-mobility. For example, Lower Austria has carried out field tests, as described in the examples of best practice. Vienna is working together with Lyon and Munich on the 'Smarter Together' urban renewal initiative, aimed at developing smart city solutions in cooperation with the public and many different companies.

4 Outlook

In 2018, Austria took third place among the EU Member States (after Sweden and the Netherlands) as regards of the share of newly registered battery electric passenger cars. In 2018 the share of BEVs accounted for around 2.0% of new registrations, and this figure is still rising on a monthly basis. After the first six months of 2019 (on 30 June 2019), it was around 2.9%.

In order to counter consumers' concerns regarding electric vehicle range, a comprehensive, provider-neutral and country-wide compendium of recharging points has been set up by E-Control in the form of an online directory of all publicly accessible recharging points in Austria. A beta version was developed in close cooperation with industry and presented on 13 November 2019.

Based on many different announcements by vehicle manufacturers and the ambitious CO_2 fleet targets, a dynamic increase in the number of vehicles registered can be expected from 2020 onwards. As things currently stand, this increase will be particularly apparent in Class M1 (battery electric vehicles, BEVs).

4.1 Current level of development of the alternative fuels market in the transport sector

This chapter outlines future developments for vehicles and recharging or refuelling infrastructure in the categories of electricity, natural gas (CNG), natural gas (LNG) and hydrogen. Future market developments were assessed on the basis of close cooperation with the industry players concerned and local and regional authorities.

4.1.1 Electricity

The outlook for the development of e-mobility in Austria is based on the latest energy scenario with existing measures (WEM) published in 2019 by the Environment Agency Austria. The WEM scenario includes the measures that have already been implemented on a particular date or whose implementation has already been decided on. The WEM scenario therefore illustrates conservative fleet development at the lower end of a possible bandwidth. The scenario with additional measures (WAM) shows a more ambitious level of

measures, and is presently being developed as part of the drafting of the National Energy and Climate Plan (NECP); it has not therefore been included in this report.

According to the WEM scenario, an increase from around 29,000 vehicles at the end of 2018 to 660,000 vehicles in 2030 is anticipated in the case of battery electric passenger cars in particular. The number of plug-in hybrid electric vehicles will increase from around 6,000 to around 250,000 vehicles in 2030 if the measures outlined in the WEM scenario are implemented. A significant increase from the current figure of somewhat more than 2,000 partly and fully electrified light commercial vehicles to around 53,000 is also expected. A slight increase of around 70% is also anticipated over the same period for fully electric city buses.

4.1.2 Natural gas (CNG)

It is not currently possible to give a reliable estimate of future developments in the number of CNG vehicles. A look at the figures to date reveals that the increase in the number of natural gas vehicles registered has remained in the lower single digits over the past few years. Five manufacturers are currently on the market, offering a total of over 28 models ranging from superminis through to limousines and from tax-exempt micro vans through to flatbed or panel vans, i.e. covering a broad variety. Five providers also offer buses, ranging from intercity buses through to urban buses and urban articulated buses. Unless the existing potential of natural gas as a fuel is leveraged to a greater extent, there is a risk that the infrastructure currently available will fall out of use over the medium and long term. In September 2019, the number of natural gas refuelling points had dropped to 156 (compared to 171 in June 2016). The purchase of CNG vehicles will continue to be subsidised in the Provinces of Burgenland, Lower Austria, Upper Austria, Salzburg and Styria with a view to countering this trend.

4.1.3 Natural gas (LNG)

The use of LNG instead of diesel makes it possible to reduce sulphur oxide emissions and particulate matter by almost 100%, nitrogen oxide emissions by around 80-90% and CO_2 emissions by almost 20%. Given the challenges faced in the transport sector, particular potential for LNG has been identified in connection with maritime shipping, especially in coastal areas that are not supplied with natural gas. The use of LNG is unprofitable in Central Europe at present. Under current circumstances, transporting LNG into the interior of the continent would have a negative impact in terms of CO_2 emissions. It is also difficult to imagine a scenario under which LNG could be used for heavy goods traffic under the current

market conditions. A debate should however be held on the extent to which it is useful and environmentally sensible to replace one fossil fuel with another in the medium and long term.

If necessary, individual provincial capitals and motorways along the TEN-T corridors (in particular the West-South Corridor) might need to be supplied for the purpose of a potential HGV refuelling market resulting from Austria's central location and its role in transit transport. If demand increases, other LNG refuelling points could be opened in addition to those currently in operation in Ennshafen and Feldkirchen.

In the shipping sector, the installation of LNG refuelling points for pleasure craft on lakes within Austria can be ruled out owing to the small quantities of fuel involved. Realistically speaking, only a stationary LNG terminal with potential additional facilities for the refuelling of heavy goods vehicles would be possible in the TEN-T area along the Danube. Developments similar to those in North-West Europe can be expected for shipping on the Danube, where the installation of LNG refuelling infrastructure has already commenced. The TEN-T port of Linz is particularly suitable because of its proximity to Voestalpine AG, which is responsible for the majority of shipping traffic there. The TEN-T port of Enns-Ennsdorf would also be suitable. Both ports could also be used for the storage and distribution of LNG for use as a source of energy and a fuel for HGV freight transport. Austria therefore continues to assume that at least one dual-use LNG refuelling point will be installed by 2030 at the latest.

4.1.4 Hydrogen

The number of hydrogen-powered passenger cars is even lower. The number of hydrogen-powered cars in Class M1 stood at 35 on 30 June 2019. Given that there are currently five public hydrogen refuelling points in Austria, there is therefore one refuelling point for every seven passenger cars.

Austria's Hydrogen Strategy is currently being drafted. The Sub-Working Group 'Fuel Cells and Hydrogen Use by End Consumers – Mobility' has published interim outcomes in the form of forecasts for the market penetration of hydrogen vehicles through to 2030 based on information from stakeholders (businesses, associations, ministries and provinces), and listed potential measures for achieving these targets. The number of FCEVs is forecast to rise over the next few years, with the increase being focused in particular in the areas of heavy goods vehicles and buses. The Sub-Working Group however also found that hydrogen refuelling points tended to be installed on business premises for in-house fleets.

A systematic project-based approach, particularly in the period through to 2030, is important in this respect. This would involve the joint examination and development of vehicle procurement, the installation of infrastructure and the manufacture of renewable hydrogen.

To date, the rail transport sector has only seen minor developments in respect of hydrogen. For example, the Zillertal Railway in Tyrol, which currently runs on diesel, is scheduled to switch to hydrogen.

Given that Austria's Hydrogen Strategy is still being drafted, concrete forecasts and targets for 2020, 2025 and 2030 will not be included in this report.

4.2 Alternative fuels infrastructure targets

The targets outlined below *(goals Table)* for the installation of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen were defined in the National Policy Framework 'Clean Power for Transport', and have not been amended for the purposes of this report.
It is still true that Austria has a good basic supply of not only CNG and electricity, but also hydrogen; this supply meets the requirements of Directive 2014/94/EU. As regards the installation of recharging infrastructure that is not accessible to the public, the current assumption is that a private recharging point will be available for each passenger car. In the case of public recharging infrastructure, a well-established recharging network currently exists. The level of utilisation of this network is still low, and so the number of recharging points may need to be scaled as the number of newly registered electric cars increases, depending on how quickly this number rises.

Table 7: Alternative fuels infrastructure goals[8]

Fuel/energy source	Type of recharging/refuelling point	2020	2025	2030
Electricity	Street: Normal-power recharging point with a power of 22 kW or less	3,000-4,000	Depending on the market situation	

[8] *Table taken from the 2016 National Policy Framework*

	Street: Normal-power recharging point with a power of over 22 kW	500-700	Depending on the market situation	
	Shore–side electricity supply for inland waterway vessels	Maintenance of existing basic infrastructure and investigation of additional demand within the framework of the 'Action Programme Danube 2022' by the Ministry for Transport, Innovation and Technology (Measure 07: Needs analysis regarding shore-side infrastructure for moorings).		
	Ground-based electricity supply to aircraft	Maintenance of the existing (and adequate) electricity supply for stationary aircraft at Austrian airports.		
Natural gas (CNG)	For road transport	Maintenance of existing infrastructure:		
Natural gas (LNG)	For heavy goods vehicles	n/a	Depending on the market situation, one LNG terminal at the Linz or Enns-Ennsdorf TEN-T port with a connected HGV refuelling point, and potentially a second LNG port in Vienna (including an HGV refuelling point)	Depending on the market situation along TEN-T
	For inland waterway vessels	n/a		Depending on the market situation along TEN-T
Hydrogen (700 bar)	For road transport	5	Depending on the market situation	

The number of recharging points has increased steadily since 2016. In 2016 there were 2,010 normal-power and 346 high-power recharging points. Since 2017 the number has risen significantly, and now stands at 3,144 normal-power and 452 high-power recharging points. On 30 June 2019, 3,675 normal-power and 503 high-power recharging points were in operation. The infrastructure goals have therefore already been met.

Not all of the CNG filling infrastructure available in 2016 could be kept in operation through to September 2019. There was a small reduction (of less than 9%) to 156 refuelling points.

This number still means that CNG is available throughout the entire country. Nevertheless, if the number of approvals continues to be low, there is a risk – in spite of the many different funding initiatives in effect – that the level of reinvestment into existing infrastructure will only be limited.

The fifth public hydrogen refuelling point has already been opened, meaning that the 2020 target has already been met.

Efficiency of high-power recharging points along motorways and dual carriageways (ASFiNAG network)

In order to assess the current efficiency of Austria's high-power recharging infrastructure, investigations were carried out into the level of utilisation of electric recharging stations within the ASFiNAG network. High-power recharging stations for electric vehicles are currently available at 26 service stations along Austrian motorways and dual carriageways. On average, electric recharging stations are therefore available every 100 km along motorways and dual carriageways. They support the connector types CHAdeMO, CCS and Type 2, with powers of 50 kW, 150 kW and (in some cases) 350 kW. In the first six months of 2019, the 86 high-power recharging points within the ASFiNAG network that were investigated were used 0.4 times a day on average. The average recharging duration was 11 minutes a day, and the average amount of energy delivered was 7.5 kW.
This is evidence that the current utilisation rate is still low, but that a foundation has already been laid for the anticipated ramp-up of the electric vehicle market.

5 Annex

The annex to the report on the implementation of the National Policy Framework 'Clean Power for Transport' provides detailed information on the legal and policy framework outlined in the main document and updates on the current development of the market for alternative fuels in the transport sector, the corresponding infrastructure and existing publicly funded measures in Austria.

It is enclosed as an additional document with this report.

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Abbreviations

AC	Alternating Current
APU	Auxiliary Power Unit
ASFiNAG	Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft [Motorways and Highways Financing Stock Corporation]
BEV	Battery Electric Vehicle
BMNT	Bundesministerium für Nachhaltigkeit und Tourismus [Federal Ministry for Sustainability and Tourism]
BMVIT	Bundesministerium für Verkehr, Innovation und Technologie [Federal Ministry for Transport, Innovation and Technology]
CCS	Combined Charging System
CNG	Compressed Natural Gas
DC	Direct Current
E-Fahrzeug	Elektrofahrzeug [electric vehicle]
R&D	Research and development [DE: Forschung und Entwicklung, F&E]
FCEV	Fuel Cell Electric Vehicle
GPU	Ground Power Unit
MAW	Maximum authorised weight [DE: Höchst zulässiges Gesamtgewicht, hzG]
kW	Kilowatts
LFZ	Luftfahrzeug [aircraft]
Lkw	Lastkraftwagen [lorry]
LNF	Leichtes Nutzfahrzeug [light commercial vehicle]
LNG	Liquefied Natural Gas
ÖBB	Österreichische Bundesbahnen [Austrian Federal Railways]
OCCP	Open Charge Point Protocol
P&R	Park & Ride
PHEV	Plug-In Electric Vehicle
Pkw	Personenkraftwagen [passenger car]
REX	Range Extender
SNF	Schweres Nutzfahrzeug [heavy goods vehicle]
WLTP	Worldwide Harmonized Light Vehicles Test Procedure

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Annex

Under the obligation imposed on Austria by

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Article 10 – Reporting and review

Federal Ministry for Transport, Innovation and Technology [Bundesministerium für Verkehr, Innovation und Technologie, BMVIT]
in cooperation with

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Burgenland
Carinthia
Lower Austria
Upper Austria
Salzburg
Styria
Tyrol
Vorarlberg
Vienna

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Introduction

This document complies with the requirement to submit a report on the implementation of the National Policy Framework pursuant to Article 10 of Directive 2014/94/EU on the deployment of alternative fuels infrastructure in Austria. The aim of the Directive is to reduce the environmental impact of transport and reduce dependence on oil. A National Policy Framework for the development of the alternative fuels market in the transport sector and the deployment of the relevant infrastructure has been developed with a view to achieving this goal. This document is the annex to the report on the implementation of the National Policy Framework 'Clean Power for Transport', and will be forwarded to the European Commission by 18 November 2019.

The annex to the report on the implementation of the National Policy Framework 'Clean Power for Transport' provides detailed information on the legal and policy framework outlined in the main document and the current development of the alternative fuels market in the transport sector, the corresponding infrastructure and existing publicly funded measures in Austria.

1 Legal measures

CATEGORY	No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TYPE	TRANSPORT MODE	APPLICATION LEVEL	Start Year	Stop Year	Observations
Legislative & Regulatory [Provinces]	1 NPF 2016	Construction law – approval procedure for the deployment of recharging infrastructure for electric vehicles	Development of guidelines on the approval process for the deployment of recharging infrastructure. Part I (on the current situation under construction law) has already been published.	AFI	Electricity	National targets	Road	National	2016	-	The approval procedure was simplified in April 2016 in Lower Austria. Recharging stations are now only subject to a reporting requirement rather than a notification requirement (Provincial Law Gazette No 37/2016). It was clarified by Vienna in February 2016 that garages in which electric recharging stations are installed do not require special exhaust air systems. On 15 September 2015, Styria issued a general circular stating that commercial electric recharging stations were subject to commercial law, but that this did not automatically make them installations that required approval. This position is now also shared by the other provinces.
Legislative & Regulatory [Provinces]	1 Update 2019	Circular by the Department of Plant, Environmental and Water Law of Upper Austria	As a basic principle, commercial recharging stations for electric vehicles do not require approval under plant permit law.	AFI	Electricity	AFV Classification on environmental performance	Road	Regional	2017	-	
Legislative & Regulatory [Provinces]	1 Update 2019	Assessment of electric recharging stations in Styria	An information notice was produced on the commercial approval procedure to be followed by mechanical engineers and plant technicians in connection with electrical engineering assessments of electric recharging stations	AFI	Electricity	Norms & Requirements	Road	Regional	2015	-	
Legislative & Regulatory [Provinces]	1 Update 2019	2019 amendments to the Burgenland Construction Act	Amendments to the Burgenland Construction Act, adopted in April 2019: Small structures are no longer subject to mandatory approval. This applies not only to photovoltaic systems with a power rating of up to 10 kW (previously 5 kW), but also to electric recharging stations	AFI	Electricity	Norms & Requirements	Road	Regional	2019	-	
Legislative & Regulatory [Provinces]	1 Update 2019	Approval procedure for recharging stations in Vienna	A fast-track approval procedure has been developed for the installation of public recharging infrastructure.	AFI	Electricity	Norms & Requirements	Road	Regional	2016		https://www.wien.gv.at/wohnen/baupolizei/pdf/stellplaetze-elektro.pdf
Legislative & Regulatory [Provinces]	2 NPF 2016	Construction law – empty conduits for recharging infrastructure in buildings and parking areas	Similar provisions have currently been adopted by five of the nine provinces.	AFI	Electricity	National targets	Road	National	2016	-	Specific provisions were included in the Lower Austrian Building Regulations in 2011 for the first time, with extensive amendments in 2014 (Lower Austrian Building Regulations [Niederösterreich Bauordnung, NÖ BO] 2014). §64(3)-(8) of these Building Regulations contain the most stringent requirements in Austria. The requirements adopted by Styria and Upper Austria are roughly similar to those set out in the Lower Austrian Building Regulations prior to the 2014 amendments, and are therefore less detailed (they do not apply to residential properties, for example). Vienna has focused on garages and the Building Regulations, and Carinthia has delegated the matter to the relevant

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											building authorities. This option is only utilised in the Klagenfurt Guidelines on Parking Spaces, which contain concrete requirements.
Legislative & Regulatory [Provinces]	2 Update 2019	Approval procedure for empty conduits under Lower Austrian construction law	§64 – mandatory empty conduits for parking areas in buildings and mandatory installation of recharging points for all other parking areas	AFI	Electricity	National targets	Road	Regional	2012	-	Implementation of EPBD, amended version (Directive (EU) 2018/844), currently at the preparatory stage
Legislative & Regulatory [Provinces]	2 Update 2019	2017 amendments to the Upper Austrian Structural Engineering Regulation	The amendments to the Upper Austrian Structural Engineering Regulation contain requirements relating to the installation of empty conduits and recharging stations	AFI	Electricity	Norms & Requirements	Road	Regional	2017	-	When parking spaces are installed that can be accessed by the public, preparatory measures (e.g. empty conduits) must be taken for 1 out of every 50 parking spaces if the total number of parking spaces is 50 or more. Recharging stations for electric vehicles must be installed for these parking spaces by 31 December 2018 (whereby no requirements apply in terms of the rated power, number of recharging points, plug types etc.).
Legislative & Regulatory [Provinces]	2 Update 2019	Amendments to Upper Austrian construction law	Further requirements concerning recharging infrastructure for parking spaces are planned in execution of the relevant provisions of the EU's amended Performance of Buildings Directive (Directive (EU) 2018/844, cf. in particular Article 8).	AFI	Electricity	Norms & Requirements	Road	Regional	At the planning stage		
Legislative & Regulatory [Provinces]	2 Update 2019	Styrian construction law Parking Space Regulation	Installation of recharging infrastructure for parking spaces, or preparatory measures for the later installation of this infrastructure (empty conduits) A further draft is planned for the fourth quarter of 2019.	AFI	Electricity	Norms & Requirements	Road	Regional	2017	-	https://www.ris.bka.gv.at/NormDokument.wxe?Abfrage=LrStmk&Gesetzesnummer=20000070&Artikel=&Paragraf=92a&Anlage=&Uebergangsrecht=
Legislative & Regulatory [Provinces]	2 Update 2019	Tyrol construction law Parking Space Regulation	Implementation of Article 8 of Directive (EU) 2018/844 on the energy performance of buildings: Amendments to the Tyrol Building Regulations, Provincial Law Gazette No 109/2019 – expansion of the power to issue regulations	AFI	Electricity	Norms & Requirements	Road	Regional	Planned for 2020	-	
Legislative & Regulatory [Provinces]	2 Update 2019	Vorarlberg Structural Engineering Regulation	Inclusion in the Structural Engineering Regulation: empty conduits for electric recharging infrastructure in buildings, pursuant to	AFI	Electricity	Norms & Requirements	Road	Regional	2018	-	The new and revised Directive on the energy performance of buildings (Directive (EU) 2018/844) was published in the EU's Official Journal on 19 June 2018 (OJ L 156) and entered into force on 9 July 2018. The EU Member States are obliged to transpose the new provisions of the Directive into national

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		[Bautechnikverordnung, BTV] – amendments planned for 2020	the EU's new Performance of Buildings Directive (EPBD, Directive (EU) 2108/844)								legislation within a period of 20 months. Further amendments are planned for 2020
Legislative & Regulatory [Provinces]	2 Update 2019	Burgenland construction law – empty conduits for recharging infrastructure in buildings and parking areas	When car parking areas containing more than 50 parking spaces are installed, and provided that the relevant electrical facilities are not installed at the same time, preparatory measures must be taken (e.g. empty conduits) to ensure that recharging stations for electric vehicles can be retrofitted (for at least 1 out of every 50 parking spaces).	AFI	Electricity	Norms & Requirements	Road	Regional	2017	-	Legal basis: Burgenland Building Regulations 2008, §40a https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrBgld&Gesetzesnummer=20000684
Legislative & Regulatory [Federal Ministry for Transport, Innovation and Technology]	3 NPF 2016	28th amendments to the Road Traffic Regulations [Straßenverkehrsordnung, StVO], 2016	A definition of an electric vehicle (with a corresponding symbol) was incorporated into the Road Traffic Regulations for the purpose of reserving parking spaces in front of recharging stations for use when recharging.	AFI	Electricity	Norms & Requirements	Road	National level	2017	-	§54 contains provisions regarding a new additional sign (to be used in combination with a 'No stopping or parking' sign, for example). Definition: can be recharged externally, i.e. includes all vehicles with a plug and any wireless recharging options that become available in future (e.g. inductive recharging).
Legislative & Regulatory [Federal Ministry for Transport, Innovation and Technology]	4 NPF 2016	Vehicle identification	Aimed at the uniform labelling of particularly clean and low-emission vehicles (high zero-emission capacity) for vehicles in Classes L, M1, N1.	AFV	Electricity	Norms & Requirements	Road	National	2017	-	Drivers of purely electric vehicles and fuel cell vehicles registered from 1 April 2017 onwards have the option of choosing a special 'electric' registration plate. These registration plates feature green (rather than black) letters and digits on a white background. As well as cars and light commercial vehicles (with a maximum authorised total weight of up to 3.5 tonnes), all vehicles in Class L, such as motorcycles and mopeds, are also eligible for an electric registration plate. Legal basis: Motor Vehicles Act §49(4)(5) (Federal Law Gazette I No 9/2017 re 34th amendment to the Motor Vehicles Act).
Legislative & Regulatory [Federal Ministry for Transport, Innovation and Technology]	4 Update 2019	Expansion of the scope of vehicle labelling	Vehicles in Classes N2, N3, M2 and M3 now also qualify, as well as vehicles in Classes L, M1 and N1.	AFV	Electricity	Norms & Requirements	Road	National	2017	-	Legal basis: Motor Vehicles Act §49(4)(5) (Federal Law Gazette I No 102/2017 re 35th amendment to the Motor Vehicles Act).
Legislative & Regulatory [Federal Ministry for Transport, Innovation and	5 NPF 2016	2016 amendments to the Registration Office Regulation	Expansion of the vehicle registration document to include the field 'Electric range'.	AFV	Electricity	Norms & Requirements	Road	National	2017	-	Inclusion of the field 'Electric range' in the vehicle licensing database instead of on the registration document.

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Technology]											
Legislative & Regulatory [Federal Ministry for Transport, Innovation and Technology]	6 NPF 2016	Motor Vehicle Act	Transposition into the Motor Vehicle Act of the provisions of Directive (EU) 2015/719 amending Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic.	AFV	Combination	Norms & Requirements	Road	National	2017	-	Among other things, this Directive provides for an increase in the maximum authorised weight for two-axle and three-axle alternatively fuelled vehicles by the additional weight required for the alternative drive technology with a maximum of 1 tonne. Legal basis: Motor Vehicle Act §4(7)(1b), §4(7)(3a) and §4(7)(5a) (Federal Law Gazette I No 9/2017 re 34th amendment to the Motor Vehicles Act).
Legislative & Regulatory [Federal Ministry for Transport, Innovation and Technology]	7 NPF 2016	Driving Licence Act	Amendments to the Driving Licence Act aimed at increasing to 4.25 tonnes the total mass of purely electric vans authorised for a Class B driving licence (expansion of the scope of the Class B driving permit to include purely electric vans with a maximum authorised total mass of up to 4.25 tonnes).	AFV	Electricity	Norms & Requirements	Road	National	2017	2021	Legal basis: §2(1a) of the Driving Licence Act (Federal Law Gazette I No 15/2017 re 18th amendment to the Driving Licence Act).
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	8 NPF 2016	2016 amendments to the Passenger Car Consumer Information Act [Personenkraftwagen-Verbraucherinformationsgesetz, PKW VIG]	Amendments to the Passenger Car Consumer Information Act, aimed at providing consumers with information on fuel consumption and CO_2 emissions of new cars. Implementation of Article 7 ('User information') of Directive 2014/94/EU.	AFV	Combination	Norms & Requirements	Road	National	-	-	
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	8 Update 2019	2017 amendments to the Passenger Car Consumer Information Act	Amendments to the Passenger Car Consumer Information Act, aimed at providing consumers with information on fuel consumption and CO_2 emissions of new cars. Implementation of Article 7 ('User information') of Directive 2014/94/EU.	AFV	Combination	Norms & Requirements	Road	National	2017	-	Legal basis: Federal Act amending the Passenger Car Consumer Information Act, Federal Law Gazette I No 119/2017 www.autoverbrauch.at
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	8 Update 2019	2018 amendments to the Passenger Car Consumer Information Regulation [Personenkraftwagen-	Amendments to the Passenger Car Consumer Information Regulation, aimed at providing consumers with information in the form of fuel labels at refuelling stations and information sheets for new passenger cars.	AFV	Combination	Norms & Requirements	Road	National	2018	-	Legal basis: Passenger Car Consumer Information Regulation 2018, Federal Law Gazette II No 279/2018 www.autoverbrauch.at

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		Verbraucherinformationverordnung, PKW VIV]									
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	9 NPF 2016	Fuels Regulation	Implementation of technical specifications for hydrogen offered at hydrogen refuelling points.	AFI	Hydrogen	Norms & Requirements	Road	National	-	-	-
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	9 Update 2019	Fuels Regulation	Implementation of technical specifications for the hydrogen offered at hydrogen refuelling stations, §3(1)(9)	AFI	Hydrogen	Norms & Requirements	Road	National	2017		Legal basis: Fuels Regulation 2012 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20008075
Legislative & Regulatory [Federal Ministry for Digital and Economic Affairs (Bundesministerium für Digitalisierung und Wirtschaftsstandort, BMDW), provinces]	10 NPF 2016	Harmonisation of the approval procedures under commercial law for commercial recharging infrastructure and hydrogen refuelling points	Harmonisation of the approval procedures for recharging infrastructure and hydrogen refuelling points.	AFI	Combination	Permits	Road	National	-	-	Recharging infrastructure: Checks to ascertain whether any notification and approval procedures relating to recharging infrastructure for electric vehicles can be simplified and whether the associated red tape can be reduced. Clarification of the fact that recharging stations do not require approval in the form of a plant permit under commercial law as a general principle, unless specific unusual or hazardous local circumstances or specific unusual designs mean that application for approval is mandatory in concrete special cases. Hydrogen refuelling points: The Federal Ministry for Education, Science and Research [Bundesministerium für Bildung, Wissenschaft und Forschung, BMBWF] and the provinces are working together to develop assessment guidelines aimed at standardising trading authority approval procedures for different types of operating facilities; the Ministry publishes these procedures on its homepage. Development of guidelines for the assessment of hydrogen refuelling points. Responsibility: Federal Ministry for Education, Science and Research and the provinces
Legislative & Regulatory [Federal Ministry for Digital and Economic Affairs, provinces]	10 Update 2019	Harmonisation of the approval procedures under commercial law for commercial recharging infrastructure	Assessment of criteria relating to the requirement for approval under plant permit law pursuant to §74(2)(1)-(5) of the Industrial Code [Gewerbeordnug, GewO] 1994	AFI	Combination	Permits	Road	National	2016	-	Legal basis: Minutes of the 2016 Conference of Federal Trade Supervisory Department Representatives (Agenda Item 17) Recharging stations should only be regarded as installations that require approval in exceptional cases.
Legislative & Regulatory [Federal Ministry for	11 NPF 2019	Technical standards	Implementation of technical specifications for recharging points, hydrogen refuelling points and natural gas refuelling points pursuant to	AFI	Combination	Norms & Requirements	Road	National	-	-	The technical specifications are only intended to apply to recharging points that are publicly accessible within the meaning of the Directive.

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Sustainability and Tourism, Federal Ministry for Digital and Economic Affairs]			Annex II to Directive 2014/94/EU.								
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	11 Update 2019	Technical standards	Implementation of technical specifications for recharging points, hydrogen refuelling points and natural gas refuelling points pursuant to Annex II to Directive 2014/94/EU into the Federal Act laying down uniform standards for the deployment of alternative fuels infrastructure	AFI	Combination	Norms & Requirements	Road	National	2018	-	The Federal Act laying down uniform standards for the deployment of alternative fuels infrastructure was adopted on 12 July 2018 in execution of Directive 2014/94/EU. The main purpose of the Act is the implementation of the minimum requirements set out in the EU Directive regarding recharging infrastructure for electric vehicles that is accessible to the public. The Act specifies which locations should always be publicly accessible. If a recharging point is publicly accessible, users must be able to recharge their vehicles there on an ad-hoc basis; in other words, customers must be able to recharge their vehicles without entering into a long-term contractual obligation. The Act also sets out basic principles relating to the implementation of technical specifications for electricity, hydrogen and natural gas refuelling points.
Legislative & Regulatory [Federal Ministry for Digital and Economic Affairs]	11 Update 2019	Technical standards	Implementation of technical specifications for recharging points, hydrogen refuelling points and natural gas refuelling points pursuant to Annex II to Directive 2014/94/EU into the Regulation on technical specifications for recharging points and for refuelling points for alternative fuels (Recharging and Refuelling Point Regulation (Ladepunkte- und Tankstellen-Verordnung, LT-V))	AFI	Combination	Norms & Requirements	Road	National	2019	-	Legal basis: Recharging and Refuelling Point Regulation Further clarification of the Federal Act laying down uniform standards for the deployment of alternative fuels infrastructure in the Regulation on technical specifications for recharging points and for refuelling points for alternative fuels (Recharging and Refuelling Point Regulation)
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	12 NPF 2016	Establishment of a register of publicly accessible recharging stations	Implementation of Article 7(7) of Directive 2014/94/EU, according to which the data indicating the geographic location of refuelling and recharging points accessible to the public must be accessible on an open and non-discriminatory basis to all users, where available.	AFI	Electricity	National targets	Road	National	-	-	Information regarding CNG refuelling points has been integrated into the E-Control fuel price calculator.
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	12 Update 2019	Establishment of a register of publicly accessible recharging stations	Implementation of Article 7(7) of Directive 2014/94/EU, according to which the data indicating the geographic location of refuelling and recharging points accessible to the public must be accessible on an open and non-discriminatory basis to all users, where available.	AFI	Electricity	National targets	Road	National	2019	-	The requirements of Directive 2014/94/EU on the deployment of alternative fuels infrastructure concerning a national directory for geographic information on recharging points that are accessible to the public were incorporated into the E-Control Act as part of the Green Electricity Amendment Package (1519 of the Supplements) 2017. According to this latter, operators must notify the geographic location of recharging points that are accessible to the public ('recharging points') to E-Control, and E-Control must in turn maintain a register ('directory of recharging points'), which must be made accessible to all users in an open and non-discriminatory manner. The statutory obligation to register all publicly accessible recharging points in Austria will ensure that a consolidated directory

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											of all publicly accessible recharging points is created as a reference source for third-party apps. The directory has been created in close cooperation with industry, and a beta version is already in operation.
Legislative & Regulatory [Provinces]	13 NPF 2016	Ongoing analysis and examination of amendments to the building codes of the provinces	Creation of sustainable e-mobility infrastructure, in particular in the form of empty conduits in residential buildings and publicly accessible parking areas (increase of up to 100%), electrical engineering equipment, approval procedures and harmonisation (e.g. in the guidelines published by the Austrian Institute of Construction Engineering).	AFI	Electricity	National targets	Road	National	2016	-	
Legislative & Regulatory [Provinces]	14 NPF 2016	Amendments to the Austrian Institute of Construction Engineering Guideline 2.2	Harmonisation and clarification of the structural engineering requirements that apply in relation to ventilation and fire safety for modern electric vehicles at entrances into garages under the Austrian Institute of Construction Engineering Guideline 2.2 (Safety in case of fire in garages, roofed parking spaces and multi-storey car parks); no additional requirements apply to electric vehicles or electric vehicles during recharging in garages and multi-storey car parks. Corresponding clarifications have already been issued for CNG vehicles.	AFI	Electricity	Permits	Road	National	-	-	Implementation regulated by the provinces, for example in Vienna and Lower Austria (no exhaust systems if the relevant signage is displayed)
Legislative & Regulatory [Provinces]	14 Update 2019	Amendments to the existing Upper Austrian Structural Engineering Regulation	The forthcoming amendments to the Upper Austrian Structural Engineering Regulation 2013 are intended to clarify the requirements that apply in relation to hydrogen-powered vehicles in garages.	AFI	Hydrogen	Norms & Requirements	Road	Regional	Planned for 2020	-	According to the new Austrian Institute of Construction Engineering Guideline 2.2 (Safety in case of fire in garages, roofed parking spaces and multi-storey car parks) adopted in April 2019, the requirements that apply to LNG-powered vehicles in garages and multi-storey car parks now also apply to hydrogen-powered vehicles, without any additional specifications (cf. Section 8.1). These provisions will shortly also be adopted as mandatory requirements under Upper Austrian construction law.
Legislative & Regulatory [Provinces]	14 Update 2019	Amendments to the Austrian Institute of Construction Engineering Guideline 4	Minimum dimensions of vehicle parking spaces: Clarification that structures such as recharging stations for electric vehicles are permitted if their usability and safety of use is guaranteed.	AFI	Electricity	Permits	Road	National	2019	-	See Austrian Institute of Construction Engineering Guideline 4, Section 2.10.4 https://www.oib.or.at/sites/default/files/richtlinie_4_12.04.19_0.pdf

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Legislative & Regulatory [Provinces]	15 NPF 2016	2011 amendments to the Tyrol Building Regulations (2016 amendments to the Tyrol Building Regulations)	Following amendments to the Tyrol Building Regulations adopted in June 2016 (Provincial Law Gazette No 94/2016), §21(2) of these Building Regulations now states that the installation and alteration of free-standing recharging stations for electric vehicles is subject to notification (with the exception of buildings).	AFI	Electricity	Permits	Road	Regional	2016	-	Plans also exist to adopt further amendments to the Building Regulations that introduce a statutory requirement to install empty conduits, on the basis of an extension of the power to issue regulations and pursuant to the Administrative Reform Act (and based on similar provisions of the building regulations in other provinces). Responsibility: Province of Tyrol
Legislative & Regulatory [Federal Ministry for Sustainability and Tourism]	16 New 2019	Exemption from the 100-km/h speed limit under the Ambient Air Quality Act	Exemption for BEV and FCEV vehicles from the clean air speed limit of 100 km/h (Ambient Air Quality Act [Immissionsschutzgesetz□Luft, IG-L]).	AFV	Combination	Norms & Requirements	Road	National	2018	-	An amendment to the Ambient Air Quality Act has introduced a statutory exemption from speed limits on motorways and dual carriageways for purely electric or hydrogen fuel cell vehicles.
Legislative & Regulatory [Provinces]	17 New 2019	HGV driving bans on the A12 Inntal motorway	Exemptions for ZEV (zero-emissions vehicles, i.e. electric or hydrogen fuel cell lorries) from the sectoral driving ban, night-time driving ban and Euro class driving ban Legislative basis: Ambient Air Quality Act, Provincial Law Gazette No 80/2019	AFV	Combination	Norms & Requirements	Road	Local	2019	-	Legal basis: Amendments to the Euro Class Driving Ban Regulation https://www.ris.bka.gv.at/eli/lgbl/TI/2019/80/20190705
Legislative & Regulatory [Provinces]	18 New 2019	Amendments to the Federal Road Toll Act 2019	Purely electric or hydrogen fuel cell vehicles will be assigned to the tariff group eligible for the lowest tariff.	AFV	Combination	Norms & Requirements	Road	National	2019	-	From 1 January 2020 onwards, purely electric or hydrogen fuel cell vehicles will form a separate tariff group eligible for the lowest tariff. Pursuant to Article 7g(4) of Directive 1999/62/EC, tariffs must be calculated in such a way that the lowest tariff is no more than 50% below the highest tariff. A basic tariff per kilometre aimed at reducing traffic-related air pollution will not be applied to purely electric or hydrogen fuel cell vehicles.
Administrative	1	Draft strategy for Upper Austria	Draft strategy: 'Alternative drive technologies in Upper Austria until 2025, with a focus on e-mobility'	AF	Combination	Other	Road	Regional	Planned for 2019	2025	As the basis for a strategy for the Province of Upper Austria, the draft strategy lists four goals (increasing the share and number of newly registered electric passenger cars, deploying recharging infrastructure, combining e-mobility with public transport and raising awareness of alternative drive technologies, in particular e-mobility) as well as seven areas of action; the draft strategy also contains a list of 45 proposed measures.
Administrative	2	Provincial Strategy for E-Mobility Styria 2030	E-mobility as an opportunity for sustainable mobility and as part of an integrated overall mobility system.	AFI	Electricity	Other	Road	Regional	2016	2030	http://www.technik.steiermark.at/cms/beitrag/12641753/142705718/

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Administrative	3	Implementation of the E-Mobility Strategy, based on 32 measures (Vorarlberg)	E-mobility strategy: The 2015–2020 E-Mobility Strategy of the Province of Vorarlberg contains 32 concrete measures and one ambitious goal: by 2020, up to 10,000 electric cars, 20 electric buses and 500 electric commercial vehicles are to be registered in Vorarlberg. The share of journeys travelled by electric bike is also to be doubled.	AFV	Electricity	Other	Road	Regional	2015	2020	https://vorarlberg.at/web/land-vorarlberg/contentdetailseite/-/asset_publisher/qA6AJ38txu0k/content/elektromobilitaetsstrategie?article_id=122347
Administrative	4	Mission ZeroV: Small-scale reduction measures Vorarlberg	When new company cars are procured to add to an existing fleet or to replace decommissioned vehicles, priority will continue to be given to electric vehicles unless there are grounds justifying their unsuitability (requirement for an all-wheel drive vehicle etc.)	AFV	Electricity	Other	Road	Regional	2019	-	In December 2018, the political groups represented in the Vorarlberg Provincial Parliament (Landtag) unanimously adopted a motion stating that the Vorarlberg Provincial Administration should be run on a climate-neutral basis from 2019 onwards; Vorarlberg is the first province in Austria to take this step. Within the framework of 'MissionZeroV', CO_2 emissions will be eliminated or reduced to the lowest possible level between now and 2040. Annual CO_2 emissions and the residual emissions that are almost impossible to eliminate (according to the current state of scientific knowledge) are to be neutralised by means of investments in climate protection projects.
Administrative	5	Vorarlberg Mobility Concept 2019	Several goals are being pursued on the basis of the E-Mobility Strategy: - environmentally friendly buses running along scheduled routes - e-mobility at multimodal nodes - e-mobility at tourist destinations - deployment of recharging infrastructure - updating of the E-Mobility Strategy	AFI	Electricity	Other	Road	Regional	2019	2029	The E-Mobility Strategy was adopted on 9 July 2019 and will serve as a guideline or roadmap for transport policy over the next 10 to 15 years. It contains targets for proactively overcoming current and future challenges.
Administrative	6	Vorarlberg Air Quality Plan (new)	One of the measures in this plan involves investigating the possibility of converting all public bus routes to alternative drive technologies, including the corresponding infrastructure	AFI	Combination	AFV Classification on environmental performance	Road	Regional	2018	-	The Vorarlberg Provincial Government has updated the existing air pollution control measures, and adopted a new Air Quality Plan on 12 June 2018. The action plan that was drafted contains over 150 individual measures that will be worked out in more detail over the coming months and years, and that will be implemented depending on the contribution they make to the achievement of goals and their impact.
Administrative	7	International E-Charter for Lake Constance, Vorarlberg	Joint implementation land-based and water-based e-mobility activities in the following areas of action: - energy suppliers - employers - mobility providers - tourism industry - public authority	AFI	Electricity	Other	Road	Regional	2019	-	The E-Charter is aimed at promoting networking and cooperation between e-mobility stakeholders and learning from best practices in the different countries surrounding Lake Constance. It was initiated by the International Lake Constance Conference (ICC), which is made up of the Heads of Government of the countries surrounding Lake Constance. It was signed by the first countries in October 2019.
Administrative	8	Burgenland E-Mobility Strategy	Cross-border E-Mobility Strategy developed by Burgenland and West	AF	Combination	Other	Road	Regional	Planned for	-	

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			Hungary.						2019		
Administrative	9	Mobility Master Plan for Carinthia (MoMaK)	The Mobility Master Plan replaced the previous integrated transport concept for the Province of Carinthia in 2015. Alternative mobility (in particular e-mobility) is a key component of several areas of action under the Mobility Master Plan, such as specific infrastructure-building measures in the area of mobility nodes, training on the servicing of electric vehicles and emergencies involving electric vehicles etc.	AFV	Combination	Other	Combination	Regional	2015	2035	Discussions are also ongoing regarding an expansion of the plan to cover the field of hydrogen/electric drives. https://www.ktn.gv.at/328812_DE-Dokumente-Momak_Abschlussbericht_neu.pdf
Administrative	10	E-Mobility Strategy of the City of Vienna	The E-Mobility Strategy of the City of Vienna contains measures aimed at promoting e-mobility.	AFI	Combination	Other	Road	Regional	2018	-	https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008435.pdf
Administrative	11	Green electricity for public recharging stations in Vienna	All of the electricity supplied via electric recharging stations in Vienna must be green electricity	AFI	Electricity	EU & international standards implementation	Road	Regional	-	-	https://www.wien.gv.at/verkehr-stadtentwicklung/e-ladestellen-ausbau.html
Administrative	12	Technical Mobility Concept for Vienna	The E-Mobility Strategy focuses primarily on measures aimed at the electrification of vehicle fleets and deployment of the necessary recharging infrastructure.	AFI	Select:	Other	Road	Regional	2016	2025	https://www.wien.gv.at/stadtentwicklung/strategien/step/step2025/fachkonzepte/mobilitaet/
Administrative	13	Urban Energy Efficiency Programme 2030 (SEP 2030) for Vienna	The Urban Energy Efficiency Programme 2030 (SEP 2030) includes a group of mobility-related measures based on the Technical Mobility Concept.	AFI	Electricity	Other	Road	Regional	2019	2030	https://www.wien.gv.at/stadtentwicklung/energie/sep2030.html

2 Policy measures supporting the implementation of the national policy framework

No	DENOMINATION	DESCRIPTION	AF FIELD	TYPE	INDICATOR	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
M1 - Measures to ensure national targets and objectives																			
M1.1 NPF 2016	Engine-specific insurance tax up to 3.5 tonnes	Does not apply to purely electric vehicles. Vehicles that combine combustion engines and electric motors ('electric hybrid vehicles') are taxable. These vehicles are however assessed solely on the basis of their combustion engine output.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2013	-	
M1.2 NPF 2016	Motor vehicle tax From 3.5 tonnes	Tax exemption designed by way of analogy to the engine-specific insurance tax.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2013	-	
M1.3 NPF 2016	Car registration tax	The car registration tax does not apply to vehicles with emissions below 90g CO_2/km.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2016	-	
M1.4 NPF 2016	2016 tax reform	Following the tax reform that entered into force on 1 January 2016, vehicles which are used as company cars, which fall into Classes M1 and N1 and which have CO_2 emissions of 0 g per km are entitled to deduct input tax. The individual benefit in kind does not apply.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2016	-	
M1.4 Update 2019	2019 tax reform	The tax reform announced on 29 October 2019 involved amendments to the following acts, with the aim of completing the transition to the WLTP cycle: Insurance Tax Act 1953 Motor Vehicle Tax Act 1992 Car Registration Tax Acts	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2019	-	https://www.ris.bka.gv.at/eli/bgbl/I/2019/103
M1.4 Update 2019	2019 tax reform	The amendments announced on 31 October 2019 were aimed at revising the Regulation on the assessment of certain benefits in kind for the purpose of completing the transition to the WLTP cycle.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	2019	-	https://www.ris.bka.gv.at/eli/bgbl/II/2019/314

No	DENOMINATION	DESCRIPTION	AF FIELD	TYPE	INDICATOR	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
M1.5 NPF 2016	Tax concession for CNG vehicles	The lower natural gas levy applies instead of the mineral oil tax.	AFV	Financial incentives	Taxes reduction / exemption	CNG (including biomethane)	Road	National	-	-	-	-	-	-	-	-	1996	-	
M1.6 NPF 2016	Purchase incentives	Purchase incentive schemes have been set up in almost all provinces for private individuals, businesses and public authorities. Most of these schemes provide funding for electric vehicles and CNG vehicles, but funding is also available for buses, taxis and car-sharing vehicles.	AFV	Financial incentives	Subsidies	Electricity	Road	National	-	-	-	-	-	-	-	-	2009	-	
M1.7 NEW 2019	Purchase incentives	E-mobility package 2017-2018	Combination	Financial incentives	Subsidies	Combination	Road	National	-	-	-	-	-	-	-	-	2017	2018	
		<u>E-mobility for private individuals</u> Incentives for first-time purchases of passenger cars (including infrastructure) and bicycles.	Combination	Financial incentives	Subsidies	Combination	Road	National	-	€5,000	€5,000	-	-	-	-	€10,000	2017	2018	
		<u>E-mobility for businesses, municipalities, associations</u> Funding for electric vehicles in all vehicle categories, including electric recharging infrastructure (budget made available)	Combination	Financial incentives	Subsidies	Combination	Road	National	-	€11,500	€11,500	-	-	-	-	€23,000	2017	2018	
M1.8 NEW 2019	Purchase incentives	E-Mobility Programme 2019-2020	Combination	Financial incentives	Subsidies	Combination	Road	National	-	-	-	-	-	-	-	€0.00	2019	2020	
		<u>E-mobility for private individuals</u> Continuation of incentives for purchases of passenger cars (including infrastructure) and bicycles. Additional bonus for wall boxes in multi-family dwellings. Funding for first-time purchases of (electric) cargo bikes by private individuals.	Combination	Financial incentives	Subsidies	Combination	Road	National	-	-	-	€7,750	€7,750	-	-	€15,500	2019	2020	
		<u>E-mobility for businesses, municipalities, associations</u> Continuation of funding for electric vehicles in all vehicle categories, including electric recharging infrastructure (budget made available).	Combination	Financial incentives	Subsidies	Combination	Road	National	-	-	-	€12,000	€12,000	-	-	€24,000	2019	2020	
Burgenland Lower Austria	Purchase incentives in Lower Austria	Funding of recharging stations as part of the funding available for electric car purchases by private individuals and businesses.	AFI	Financial incentives	Subsidies	Electricity	Road	Regional	€100	€100	€100	-	-	-	-	€300	2016	2018	

No	DENOMINA-TION	DESCRIPTION	AF FIELD	TYPE	INDICA-TOR	ALTERNA-TIVE FUEL	TRANS-PORT MODE	APPLICA-TION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
Burgenland Lower Austria	Funding of electric passenger cars in Lower Austria	Funding of electric car purchases by private individuals and businesses.	AFV	Financial incentives	Subsidies	Electricity	Road	Regional	€500	€500	€500	€500	€500	-	-	€2,500	2016	2020	
Burgenland Upper Austria	Upper Austrian funding programme for recharging stations	Funding of smart/controllable recharging stations for private individuals	AFI	Financial incentives	Subsidies	Electricity	Road	Regional	-	€13.5	€26.8	€9.6	-	-	-	€49.9	2017	2019	Around 100 recharging stations have been funded to date (16 September 2019).
Burgenland Salzburg	Funding for recharging infrastructure (e-mobility) in Salzburg	Measure aimed at funding the deployment of private e-mobility infrastructure	AFI	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	€183.8	€126.6	-	-	-	€310.4	2018	-	
M3.2 Tyrol	How Tyrol Will Drive in 2050	Advice and contact point in Tyrol for the field of e-mobility and alternative mobility solutions.	Combination	Financial incentives	Other support schemes	Electricity	Road	Regional	-	-	-	€117	€117	€117	-	€351	2019	2021	
Burgenland Vorarlberg	Guidelines on residential building subsidies in Vorarlberg	Provincial funding for electric recharging infrastructure in existing multi-family dwellings and residential estates: Bonus for preparatory e-mobility measures in residential estates: The bonus (€10.00 per square metre of usable floor space) is granted if all parking spaces in residential estates (covered parking or carports) meet the structural requirements, i.e. have a suitable connection for the retrofitting of a recharging point for an electric vehicle at each parking space.	AFI	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	€130	€230	€250	€280	-	€890	2018	2021	
Province of Burgenland	Funding for alternative mobility (residential building subsidies) in Burgenland	Funding for vehicles with alternative drive technologies (cars, bicycles, scooters).	AF	Financial incentives	Subsidies	Electricity	Road	Regional	€3,000	€3,000	€3,000	€3,000	€3,000	-	-	€15,000	2014	-	Total annual budget of €3 million for e-mobility, installation of photovoltaic systems and alternative energy systems
Province of Styria	Purchase incentives in Styria	Ongoing funding for BEVs and FCEVs for private individuals	Combination	Financial incentives	Subsidies	Combination	Road	Regional	-	-	€200	-	-	-	-	€200	2017	2018	

No	DENOMINATION	DESCRIPTION	AF FIELD	TYPE	INDICATOR	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
Province of Styria	Purchase incentive for private recharging stations in Styria	Incentive for purchasing a private wall box at the same time as a BEV or PHEV	AFI	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	€200	-	-	-	-	€200	2017	2018	Budget: only a portion of €200,000
Province of Upper Austria	Funding programme for taxis in Upper Austria	Provincial initiative aimed at providing an incentive to switch to energy-efficiency zero-emission taxis.	AFV	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	-	€450	-	-	-	€450	2019	2019	
Province of Styria	Funding programme for taxis in Styria	Provincial initiative aimed at providing an incentive to switch to energy-efficient zero-emission taxis.	AFV	Financial incentives	Subsidies	Electricity	Road	Regional	€100	€100	-	-	-	-	-	€200	2016	2017	
Province of Vorarlberg	Funding programme for taxis in Vorarlberg	The aim of the funding programme is to reduce the use of fossil fuels and emissions of greenhouse gases in the field of mobility. Incentive for the rapid establishment of a fleet of electric taxis in Vorarlberg.	AFV	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	-	€50	€50	-	-	€100	2019	2020	
M1.9 NPF 2016	Changes to parking rules	Some of the main non-financial incentives for switching to clean power in the transport sector are municipal measures such as parking rules. Electric vehicles are exempt from parking charges in towns and cities such as Graz, Klagenfurt, Villach, Krems, Innsbruck, Wörgl and Wels.	AFV	Non-financial incentives	Other support schemes	Electricity	Road	Local	-	-	-	-	-	-	-	-	-	-	
M1.9 Update 2019	Changes to parking rules	The number of towns and cities in Austria with exemptions from parking charges for electric or hydrogen vehicles has increased to 33. A detailed list of these towns and cities can be found in the main section of the report.	AFV	Non-financial incentives	Other support schemes	Electricity	Road	Local	-	-	-	-	-	-	-	-	-	-	
M1.10 NPF 2016	CO_2-Free Urban Logistics by 2030	The Council for Sustainable Logistics, together with representatives of the Federal Government and Austria's towns and cities, organises meetings on topics relating to logistics with the aim of achieving 'CO_2-Free Urban Logistics by 2030' in line with their responsibility for humans and the environment. The goal is to put in place suitable conditions (on the basis of the National	Combination	Other	Other support schemes	Electricity	Road	Local	-	-	-	-	-	-	-	-	-	-	

No	DENOMINA-TION	DESCRIPTION	AF FIELD	TYPE	INDICA-TOR	ALTERNA-TIVE FUEL	TRANS-PORT MODE	APPLICA-TION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
		Policy Framework) to allow funding to be granted for the use of electric commercial vehicles and investments in the relevant urban infrastructure.																	
M1.11 NPF 2016	Retention of tax concessions	Retention of tax concessions for electric cars (BEVs and FCEVs) and examination of the possibility of putting an end to the recharging of private electric vehicles at commercial recharging stations as a benefit in kind.	AFV	Financial incentives	Taxes reduction / exemption	Electricity	Road	National	-	-	-	-	-	-	-	-	-	-	
M1.12 NPF 2016	Purchase incentive for electric and CNG vehicles	Continuation of the 'klimaaktiv mobil' funding programme operated by the Federal Ministry for Agriculture, Forestry, the Environment and Water Management [Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, BMLFUW] for purchases of electric and CNG vehicles in all vehicle classes by businesses, associations and municipalities, provided that the electricity used is generated from renewable sources or that the share of biofuels is at least 50%, and continuation of funding schemes for the deployment of electric recharging infrastructure, for both normal- and high-power recharging stations.	AFV	Financial incentives	Subsidies	Combinati on	Road	National	-	-	-	-	-	-	-	-	-	-	
M1.12 Updat e		Integration of CNG vehicles into the 2017/2018 e-mobility package: no funding was granted owing to a lack of demand.	AFV	Financial incentives	Subsidies	Combinati on	Road	National	-	-	-	-	-	-	-	-	2017	2018	
M1.13 NPF 2016	Fleet management for alternative drives	Call for tenders by Bundesbeschaffung GmbH (the public tendering body) relating to fleet management for alternative drives (Class M1, N1, buses, L) – consultancy and fleet analysis, tenders for operating leases (electricity, CNG, hydrogen) in autumn 2016.	AFV	Education / Informatio n	Public procureme nt incentives	Combinati on	Road	National	-	-	-	-	-	-	-	-	-	-	
M1.14 NPF 2016	Switch to low-emission vehicles for federal ministries	Adoption of a strategic procurement target relating to a switch to zero-emission vehicles by the federal ministries and any federal institutions, based on fleet analyses; consideration must be given to any specific vehicle-related requirements, in particular those pertaining to national military defence.	AFV	Education / Informatio n	Public procureme nt incentives	Combinati on	Road	Local	-	-	-	-	-	-	-	-	-	-	
M1.15	More	Significant improvements to the sustainability of	AFV	Education	Public	Combinati	Road	National	-	-	-	-	-	-	-	-	-	-	

No	DENOMINA-TION	DESCRIPTION	AF FIELD	TYPE	INDICA-TOR	ALTERNA-TIVE FUEL	TRANS-PORT MODE	APPLICA-TION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
NPF 2016	sustainable public procurement	public procurement and examination of the possibility of amending the vehicle procurement guidelines, e.g. to include a country-wide mandatory requirement to consider the total cost of ownership (TCO) when procuring vehicles for public fleets in order to compensate for the disadvantages suffered by alternatively powered vehicles if purchase costs alone are considered. Examination of the possibility of amending the procurement guidelines to state that public consumers no longer need to provide reasons for procuring an alternatively powered vehicle in the event of a routine replacement, but must instead provide reasons for not doing so in exceptional circumstances (once again, consideration must be given to requirements pertaining to national military defence).		/ Information	procurement incentives	on													
M1.15 Update	Austrian Action Plan for Sustainable Public Procurement (naBe)	In October 2018, the Council of Ministers ordered that the existing naBe Action Plan (2010) should be updated on the basis of political guidelines and technical developments. A duly updated naBe Action Plan has been drafted. The next stage in the process is for the Council of Ministers to approve the Action Plan officially.	AFV	Education / Information	Public procurement incentives	Combination	Road	National	-	-	-	-	-	-	-	-	2019 planned	-	
M1.16 NPF 2016	'Clean Power for Transport' Coordination Body	On the basis of the National Policy Framework, the Federal Ministry for Transport, Innovation and Technology has set up a 'Clean Power for Transport' Coordination Body which meets at least once a year or on an ad-hoc basis, and which includes the federal ministries and institutions involved (including the Federal Ministry for National Defence and Sport in relation to matters pertaining to national military defence), the provinces and the Associations of Austrian Cities and Towns and Austrian Municipalities. This Coordination Body is responsible for monitoring the implementation of all planned measures and for discussing additional incentives with the relevant industry stakeholders and associations.	AF	Education / Information	Other support schemes	Combination	Road	National	-	-	-	-	-	-	-	-	-	-	The Federal Ministry for Transport, Innovation and Technology also continues to represent Austria within the European Commission's Sustainable Transport Forum and within the Government Support Group Alternative Fuels (with the aim of improving dialogue with other Member States).

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									2016	2017	2018	2019	2020	2021-2025	2026-2030				
M1.17	Streamlining of the approval procedure for hydrogen infrastructure	A uniform basis for assessing the necessary approval procedures is to be developed in order to facilitate the deployment of hydrogen infrastructure in Austria and provide legal certainty for industry players planning to make large-scale investments.	AFI	Non-financial incentives	Public procurement incentives	Hydrogen	Road	National	-	-	-	-	-	-	-	-	-	-	
M1.18	Sub-Working Group on 'E-mobility and impacts on the electricity system'	Establishment of a Sub-Working Group on 'E-mobility and impacts on the electricity system', made up of representatives of the Federal Government, the provinces and industry on the basis of existing projects and preliminary work, with the aim of carrying out structured investigations into interactions at the various network levels and examining related questions on an ongoing basis (increased flexibility, local network upgrades, load management, V2G, storage integration, decentralised private consumption optimisation etc.) from a technical and legal perspective. The Sub-Working Group is chaired by the Federal Ministry for Education, Science and Research.	AFI	Education / Information	Public procurement incentives	Electricity	Road	National	-	-	-	-	-	-	-	-	-	-	
M1.19	Sub-Working Group on 'E-mobility and impacts on building standards and technical building services'	Establishment of a Sub-Working Group on 'E-mobility and impacts on building standards and technical building services', made up of representatives of the Federal Government, the provinces and industry, with the aim of carrying out structured investigations into the way that the market launch of e-mobility will impact both new and (in particular) existing buildings. Development and adaptation of planning criteria for new buildings, (administrative) regulations relating to the electrical engineering systems to be deployed in existing buildings (increase in grid connection capacity, payment of costs in the case of commonholders' associations etc.). The Sub-Working Group is chaired by the Province of Lower Austria.	AFI	Education / Information	Public procurement incentives	Electricity	Road	National	-	-	-	-	-	-	-	-	-	-	

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									2016	2017	2018	2019	2020	2021-2025	2026-2030				
Burgenland Lower Austria	Procurement for municipalities in Lower Austria	Joint procurement of electric vehicles for municipalities and provincial authorities: Lower Austria implemented a joint procurement programme at both provincial and municipal level over the course of 2018. By October 2019, this procurement programme had resulted in call-offs of 190 vehicles (60 by the provincial authorities and the remainder by the municipalities). No information is available regarding contractual prices, since the call for tenders only involved negotiating discounts on list prices.	AFI	Non-financial incentives	Select:	Electricity	Select:	Regional	-	-	-	-	-	-	-	-	2018	-	
Burgenland Lower Austria	Procurement for provincial authorities	Conversion of the provincial fleet and deployment of recharging infrastructure for provincial authorities: In addition to vehicles (see 'Procurement for municipalities in Lower Austria'), electric recharging points were installed at 53 locations. These were predominantly Type 2 recharging stations.	Combination	Non-financial incentives	Select:	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	
Burgenland Lower Austria	PR measures relating to e-mobility	PR measures by the Austrian Energy Agency, E-Mobility Days in Melk and various other events, e-mobility conferences, 'Six days of e-mobility for €60' programme for 3,000 users.	Combination	Education / Information	Other support schemes	Electricity	Road	Local	€220	€445	€445	€ 220	-	-	-	€1,330	2015	-	
Burgenland Upper Austria	Sub-measure 'Integrated Traffic Concept for the Greater Linz region'	Vehicle procurement – expansion of the public transport network	Combination	Financial incentives	Public procurement incentives	Electricity	Rail	Local	-	-	-	€ 50	-	-	-	€50	2019	2028	
Burgenland Upper Austria	Implementation of the Integrated Transport Concept for the Greater Linz region	Planning activities to promote and strengthen regional public transport (SRT Kremsdorf, StB Gallneukirchen/Pregarten)	AFI	Financial incentives	Public procurement incentives	Electricity	Rail	Local	-	-	-	€1,300	-	-	-	€1,300	2019	2030f	
Province of Tyrol	Procurement of vehicles by the Province of Tyrol	Replacement of combustion engine vehicles owned by the Province of Tyrol with electrically powered vehicles, increased use of hybrid vehicles.	AFV	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	
Province of Tyrol	Funding of electric car-sharing in municipalities	Funding of electric car-sharing in municipalities in Tyrol, €3,000 per vehicle; uniform system/compatibility.	AFV	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	€15	€30	€30	-	-	€75	2018	2020	

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									2016	2017	2018	2019	2020	2021-2025	2026-2030				
	– Tyrol																		
Burgenland Salzburg	Fleet of electric vehicles – Province of Salzburg	The Province of Salzburg has significantly increased the proportion of electric vehicles in its fleet since 2018. New purchases: 50% hybrid and electric cars.	AFV	Non-financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2018	-	
Province of Vorarlberg	Procurement of vehicles by the Province of Vorarlberg	In December 2018, the Vorarlberg Provincial Parliament adopted a unanimous motion stating that the Vorarlberg Provincial Administration should be operated on a climate-neutral basis (MissionZeroV). One of the measures that will be undertaken with a view to achieving this goal is the gradual electrification of the Province's entire fleet (where technically possible). At present, 46 of the 190 vehicles belonging to the Vorarlberg Provincial Administration are fully electric.	AFV	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2018	-	https://www.energieautonomie-vorarlberg.at/de/mzv/
Burgenland Salzburg	Funding of recharging stations in Salzburg municipalities	The Province of Salzburg and Salzburg AG provide funding for one recharging station per municipality.	AFI	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	
Burgenland Vienna	Funding by the Province of Vienna	Funding is provided for the purchase of electric cargo bikes.	AFV	Financial incentives	Subsidies	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2017	-	https://www.fahrradwien.at/transportfahrrad/foerderung/
Burgenland Vienna	'One thousand electric recharging points for Vienna' project	By the end of 2020, a total of 1,000 new high-power electric recharging points with a rated power of 11 kW each are to be installed in all of the districts across Vienna. This will be carried out in cooperation with Wien Energie GmbH.	AFI	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	2020	
M2 - Measures that can promote AFI in public transport services																			

No	DENOMINA-TION	DESCRIPTION	AF FIELD	TYPE	INDICA-TOR	ALTERNA-TIVE FUEL	TRANS-PORT MODE	APPLICA-TION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
M2.1 Vorarlberg	Funding for electric vehicles within the Vorarlberg public transport system	Funding for electric vehicles for public-interest passenger transport (Class M1) and for freight transport (Class N1, with a maximum authorised total weight of less than 2.0 tonnes). This includes vehicles for mobile services (home-based nursing care etc.) and vehicles for building yards. The aim of Vorarlberg's funding programme is to reduce the use of fossil fuels and emissions of greenhouse gases in the field of mobility through the use of purely electric vehicles.	AFV	Financial incentives	Public procurement incentives	Electricity	Road	Regional	-	-	-	€30	-	-	-	€30	-	-	
M2.2 Vorarlberg	Funding programme for electric car-sharing in Vorarlberg	Assistance with the choice of a suitable location for recharging infrastructure, uniform access and reservation system throughout Vorarlberg	AFV	Education / Information	Public procurement incentives	Electricity	Road	Regional	-	€15	-	-	-	-	-	€15	2016	2017	
M3 - Measures that can promote the deployment of private electro-mobility infrastructure																			
M3.1 Styria	Marketing of e-mobility in Styria	Public information and awareness-raising activities. Examples include the campaigns '6 days – 60 euros' and 'I go green at the weekend!' (2 days – 20 euros)	AFV	Education / Information	Other support schemes	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2016	2031	http://www.technik.steiermark.at/cms/dokumente/12641753_142705718/a6b1e988/EMOST%20Monitoring.pdf
M3.2 Vorarlberg	ÖKOPROFIT campaign for electric commercial vehicles	An information event aimed at providing access to additional advice will be supported by Vorarlberg as part of the ÖKOPROFIT campaign.	AFV	Education / Information	Other support schemes	Electricity	Road	Regional	-	-	€4	-	-	-	-	€4	-	-	
M3.4 Vienna	Logistic 2030+ Vienna	The 'Sustainable Logistics 2030+ Lower Austria/Vienna' project (or 'Logistics 2030+') aims to overcome these challenges by developing a sustainable and proactive plan that tackles the current challenges and (more importantly) the future challenges that are and will be faced by the Vienna/Lower Austria region in the area of freight mobility, and backs up this plan with appropriate measures.	AFI	Select:	Select:	Select:	Select:	Select:	-	-	-	-	-	-	-	-	-	-	http://www.logistik2030.at/

No	DENOMINA-TION	DESCRIPTION	AF FIELD	TYPE	INDICA-TOR	ALTERNA-TIVE FUEL	TRANS-PORT MODE	APPLICA-TION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
									2016	2017	2018	2019	2020	2021-2025	2026-2030				
M3.5 Vienna	Establishment of a Vienna Mobility Fund	The Mobility Fund is intended to provide members of the public with an incentive to opt for sustainable mobility options. Priority will be given to investment-related projects. This includes purchases of new vehicles, for example. Steps will be taken to pave the way for the organising and marketing of new mobility services. Infrastructure measures that must be funded by private individuals or the State pursuant to statutory requirements are excluded from funding.	Combi nation	Financial incentives	Subsidies	Combinati on	Combina tion	Regional	-	-	-	-	-	-	-	-	-	-	https://www.wien.gv.at/verkehr/mobilitaetsfonds/

3 Deployment and manufacturing support

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
							2016	2017	2018	2019	2020	2021-2025	2026-2030				
AFI deployment																	
1 NPF 2016	Funding: Burgenland	Funding of municipality-based recharging stations as part of the regeneration of villages, with a total budget of €50,000	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	
1 Update 2019	Funding: Burgenland	Funding of recharging stations for electric vehicles (village regeneration)	AFI	Electricity	Road	Regional	€7.3	€7.3	€7.3	€7.3	€7.3	-	-	€36.5	2016	2020	Funding for the development of municipality-based recharging stations Annual funding breakdown: €7,300 in provincial funding + €6,300 in EU funding
1 Update 2019	Funding: Burgenland	Expansion of electric recharging infrastructure (Energie Burgenland)	AFI	Electricity	Road	Regional	-	-	-	€100	€100	-	-	€200	2018	2020	Expansion of electric recharging infrastructure owned by Energie Burgenland, from the current figure of 113 recharging points to 150 recharging points.
1 Update 2019	Funding: Burgenland	Funding of wall boxes (Energie Burgenland)	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2018	2020	Funding is provided for wall boxes in the form of a €200 voucher for additional services that can be redeemed with the service partner that installed the box.
2 NPF 2016	Funding: Styria	Direct funding for electric vehicles and electric recharging points for private use since October 2016.	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2016	-	http://www.wohnbau.steiermark.at/cms/dokumente/12117789_113383975/af0b3b8b/ABT15EW-3.0%20RL%20Elektromobilit%C3%A4t%202016.pdf

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
							2016	2017	2018	2019	2020	2021-2025	2026-2030				
3 NPF 2016	Funding: Tyrol	Funding is available for purchases of single-lane and multi-lane electric vehicle recharging stations for use in publicly accessible and high-traffic locations where people are likely to remain for significant lengths of time. The amount of funding available (one-off subsidy) is equivalent to 50% of the total invoiced, with a cap of €10,000 per customer. Additional funding for recharging stations, amounting to 50% of the total invoiced (up to a maximum of €10,000), is available for points of consumption in the TINETZ distribution grid. Overall, this means that 100% of the total invoiced can be funded (up to €20,000 per customer).	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	€200	-	-	http://energieeffizienz.tiwag.at/ http://energieeffizienz.tiwag.at/fileadmin/energieeffizienz_tiwag_at/Paket_2015/Antragsformular_Ladestationen_TIWAG 2015.pdf
4 NPF 2016	Funding: Tyrol	Public investment funding for the installation of natural gas refuelling points	AFI	CNG (including biomethane)	Road	Regional	-	-	-	-	-	-	-	-	-	-	
5 NPF 2016	Upper Austria	Installation of recharging stations for electric vehicles in Upper Austrian municipalities: funding is provided to Upper Austrian municipalities for the installation of electric recharging stations (up to a maximum of €5,000 per electric recharging station). Recharging stations must meet certain conditions in order to qualify for funding. The funding programme entered into force on 18 August 2015 and will end when the funding pot runs out, or at the latest on 30 September 2016.	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	€750	2015	2016	
5 Update 2019	Upper Austria	Installation of public recharging stations for electric vehicles in Upper Austrian municipalities: 80 municipal recharging stations were funded under this programme.	AFI	Electricity	Road	Regional	€51	-	-	-	-	-	-	€51	2015	2016	
5 Update 2019	Upper Austria	Implementation or planning of an 'alternative' infrastructure project – extension of the tram line to Traun	AFI	Electricity	Rail	Local	€2,875	€2,875	€3,075	€3,075	€3,125	€3,125	€3,175	€21,325	2013	2032	
5 Update 2019	Upper Austria	Construction of park & ride sites with alternative fuel facilities (electric recharging stations)	AFI	Electricity	Road	Regional	€80	-	€50	-	€80	-	-	€210	2016	2020	
5 Update 2019	Upper Austria	Construction of bike & ride sites with alternative fuel facilities (electric bike recharging stations)	AFI	Electricity	Road	Regional	€120	-	-	€30	-	-	-	€150	2015	2019	
5 Update 2019	Upper Austria	Construction of a connecting line between Gmunden Seebahnhof and Gmunden Franz-Josefs-platz	AFI	Electricity	Road	Regional	€1,993	€1,993	€1,993	€1,993	€1,993	€1,993	€1,993	€13,951	2014	2029	
6	Salzburg	Within the framework of the Climate and Energy	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
							2016	2017	2018	2019	2020	2021-2025	2026-2030				
New 2019		Strategy Salzburg 2050, Salzburg AG and the Province of Salzburg are providing all of the 119 municipalities in Salzburg with the option of installing a high-power recharging station.															
7 New 2019	Salzburg	Trolleybuses continue to play an important and increasingly prominent role in the centre of Salzburg. In more specific terms, for demonstration purposes: 2.5-km extension of Trolleybus Line 5 from the city of Salzburg to the neighbouring municipality of Grödig (starts in 2020). Vehicles will be battery-operated on this new segment of the route.	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	-	-	
8 New 2019	Carinthia	The 'Carinthia – Sustainability has a Future' initiative (previously 'Carinthia: the Place to Live') focuses on sustainability and alternative mobility and contains goals such as building infrastructure for e-mobility, developing new mobility concepts and promoting market development in the fields of e-mobility and renewable energies.	AFI	Electricity	Road	Regional	-	-	-	-	-	-	-	-	2008	-	
11 NPF 2016	'klimaaktiv mobil' funding (part of the e-mobility programme)	Continuation of 'klimaaktiv mobil' funding by the Federal Ministry for Agriculture, Forestry, the Environment and Water Management for purchases of recharging infrastructure by businesses, municipalities and associations.	AFI	Electricity	Road	Local	-	-	-	-	-	-	-	-	2016	-	
11 NSR Update		Integration into the 2017/2018 e-mobility package	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12 NPF 2016	Funding: Provinces	All of the provinces are planning to deploy recharging infrastructure for electric vehicles on a demand-led basis. In certain cases, existing provincial funding schemes for recharging infrastructure are being continued (e.g. in in Vorarlberg). In Burgenland, municipality-specific recharging stations are funded under a programme worth €50,000 in 2016.	AFI	Electricity	Road	National	€50	-	-	-	-	-	-	-	2016	-	
13 NPF 2016	Electric Mobility Flagship Projects	Focus on 'Low Emission/Low Cost Industrial Production for E-Mobility' in 2016 as part of the 'Electric Mobility Flagship Projects' programme by the Federal Ministry for Transport, Innovation and Technology, with a funding budget of €5 million.	AFI	Electricity	Road	National	€5,000	-	-	-	-	-	-	€5,000	2016	2016	
14 NPF 2016	FTI initiatives	Continuation of the FTI initiatives 'Production of the Future' and 'ICT of the Future'.	AFI	Electricity	Road	National	-	-	-	-	-	-	-	-	-	-	

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	APPLICATION LEVEL	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
							2016	2017	2018	2019	2020	2021-2025	2026-2030				
15 NPF 2016	Rail electrification programme	With a view to electrifying the remaining diesel sections, the Federal Ministry for Transport, Innovation and Technology is planning a rail electrification programme that will involve not only the electrification of diesel sections still in use but also an investigation of the possibility of using rail vehicles powered by alternative fuels or electric drives on the remaining diesel sections. Guidelines are being developed for the electrification of rail sections, as a basis for the corresponding investment decisions by ÖBB.	AFI	Electricity	Rail	National	-	-	-	-	-	-	-	-	-	-	
16 NPF 2016	Installation of recharging infrastructure at park & ride sites	The 'Charge & Ride' initiative by the Federal Ministry for Transport, Innovation and Technology involves the development of new guidelines for the construction of park & ride sites, including the installation of recharging infrastructure for electric vehicles and the relevant agreements for operators. In addition, recharging infrastructure is to be installed at a significant number of Austrian railway stations with a view to allowing the combined use of public means of transport and environmentally friendly vehicles in line with the integrated transport plan.	AFI	Electricity	Combination	National	-	-	-	-	-	-	-	-	-	-	
16 Update 2019	Installation of recharging infrastructure at park & ride sites owned by ÖBB	The ÖBB park & ride sites in Leoben, St.-Pölten and Amstetten were each fitted with two recharging points in 2017. Empty conduits will be installed at all new park & ride sites constructed by ÖBB. Between two and four recharging points will be installed at 40 park & ride sites owned by ÖBB	AFI	Electricity	Rail	National	-	-	-	-	-	-	-	-	2017	-	
17 New 2019	Installation of recharging infrastructure at service stations along the ASFiNAG network	The ASFiNAG recharging network currently consists of 164 recharging points at 27 locations in Austria. (Reference date: 8 November 2019)	AFI	Electricity	Road	National	-	-	-	-	-	-	-	-	2017	-	

4 Research, technological development and demonstration (RTD&D)

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
						2016	2017	2018	2019	2020	2021-2025	2026-2030				
1 NPF 2016	Electric Mobility Flagship Projects	'Electric Mobility Flagship Projects' was a research and demonstration programme organised under the Climate and Energy Fund in cooperation with the Federal Ministry for Transport, Innovation and Technology in the field of e-mobility. Funding is provided not only for integrated system solutions for electric mobility, but also for large-scale and highly visible projects that relate to vehicles, users and infrastructure and that make a significant contribution to improving Austria's reputation as a place to do business and increasing the visibility of electric mobility. The seventh call for tenders for the 'Electric Mobility Flagship Projects' programme took place in 2015, and focused on 'Low-Emission Electric Fleets'. The aim was to investigate solutions that could bring about a significant reduction in the greenhouse gas emissions caused by Austrian vehicle fleets. The eighth call for tenders took place in autumn 2016, and concentrated in particular on production-related aspects and special vehicles. The ninth call for tenders took place in 2017, and focused on 100% electrification; since the programme is technology-neutral, the scope covered both fuel cell solutions and high-performance condensers.	AFV	Combination	Road	€5,000	€6,000	-	-	-	-	-	€11,000	2009	2017	Climate and Energy Fund Processing body: Austrian Research Promotion Agency [Österreichische Forschungsförderungsgesellschaft, FFG] https://www.klimafonds.gv.at/unsere-themen/mobilitaetswende/leuchttuerme-der-elektromobilitaet/ https://www.ffg.at/leuchttuerme-der-elektromobilitaet-0
2 New 2019	Zero-Emission Mobility	Zero-Emission Mobility (formerly 'Electric Mobility Flagship Projects') is a research and demonstration programme under the Climate and Energy Fund in the field of sustainable mobility and energy supply. The focus is on 100% technology-neutral zero-emission technologies. The programme's aim is to serve as a launchpad for high-visibility projects that implement ambitious approaches and innovative developments. Electric mobility is also to be made more attractive to the wider public through the funding and development of infrastructure. The programme's research priorities include vehicles and infrastructure, but also users.	AFV	Combination	Road	-	-	€7,000	€7,000	€7,000 [1]	-	-	€24,000	2018	-	Climate and Energy Fund Processing body: Austrian Research Promotion Agency https://www.ffg.at/zero-emission-mobility

[1] The budget negotiations for 2020 have not yet been completed

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNA-TIVE FUEL	TRANS-PORT MODE	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMA-TED BUDGET [k€]	Start Year	Stop Year	Observations
						2016	2017	2018	2019	2020	2021-2025	2026-2030				
3 NPF 2016	Mobility of the Future	The 'Mobility of the Future' programme supports research projects that are aimed at delivering solutions to major mobility-related societal challenges in the medium and long term, and that stimulate existing markets or generate new markets through innovation. The sixth call for tenders ended on 10 February 2016, and related to the following topics: 'Innovative design of personal mobility', 'Development of alternative vehicle technologies' and 'Joint development of transport infrastructure'.	AF	Combination	Road	€4,700	-	€9,500	€4,700	-	-	-	€18,900	2012	-	Processing body: Austrian Research Promotion Agency https://www.ffg.at/mobilitaetderzukunft https://www.ffg.at/mobilitaetderzukunft_call2015as6 Tendering budget only available in connection with calls for tenders with an AFI focus (batteries, hydrogen and fuel cells and alternative fuels).
4 NPF 2016	E-Mobility For All – Urban Electric Mobility	Projects that focus on the operation of electric car-sharing and electric taxi fleets in urban areas are funded under the programme organised by the Federal Ministry for Transport, Innovation and Technology. The second phase, which involves implementing two demonstration projects, was launched in 2015.	AFV	Electricity	Road	-	-	-	-	-	-	-	-	2013	2014	Processing body: Schieneninfrastruktur-Dienstleistungsgesellschaft mbh (SCHIG) https://www.bmvit.gv.at/verkehr/elektromobilitaet/foerderungen/urban2.html https://www.schig.com/foerderungen-ausschreibungen/
4 Update 2019	E-Mobility For All – Urban Electric Mobility	The aim of the 'E-Mobility For All: Urban Electric Mobility' programme is the implementation of demonstration projects in greater urban areas aimed at making available to the public a market-focused e-mobility system involving electric taxis and/or electric car-sharing. Additional projects relating to multimodal transport nodes were funded in 2018.	AFV	Electricity	Road	-	-	€2,300	-	-	-	-	€2,300	2018	2018	Processing body: Schieneninfrastruktur-Dienstleistungsgesellschaft mbh (SCHIG) https://www.schig.com/wp-content/uploads/2018/03/UEM_2018_LEITFADEN.pdf
5 NPF 2016	start:e – e-mobility start-up challenge	The Climate and Energy Fund, in cooperation with the Federal Ministry for Transport, Innovation and Technology, funds start-ups in the field of e-mobility through the 'START-E' initiative. Potential start-up owners and young entrepreneurs are given the help they need to get involved in the field of e-mobility, to contribute their know-how as a basis for pushing technological innovations forward, and to muster the courage to launch their ideas and solutions onto the market. As part of the tendering procedure, start-ups can network with each other and with potential partners and investors, and present their project effectively to the public. In 2015 a total of 27 applications were submitted, and 10 innovative ideas went forward to the final round.	AF	Combination	Road	-	-	-	-	-	-	-	-	2015	2016	Climate and Energy Fund http://www.start-emobility.at https://www.bmvit.gv.at/verkehr/elektromobilitaet/foerderungen/starte.html
6 NPF 2016	Electric Mobility Model Regions	The Federal Ministry for Agriculture and Forestry, the Environment and Water Management and the Climate and Energy Fund have supported the establishment of 'electric mobility regions' since 2008 under the Electric Mobility Model Regions programme. Support has been provided to seven model regions to date. In summer 2015, these regions were able to take part in another call for tenders relating to the following topics: 'Raising awareness: Practical tests for user groups', 'Interoperability of recharging stations' and 'Funding of electric vehicles for commuters'; successful tenderers will be able to push forward developments in the relevant areas.	AF	Electricity	Road	-	-	-	-	-	-	-	-	2008	2015	Climate and Energy Fund Processing body: Austrian Research Promotion Agency https://www.klimafonds.gv.at/foerderungen/aktuelle-foerderungen/2015/modellregionen-elektromobilitaet/

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNATIVE FUEL	TRANSPORT MODE	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMATED BUDGET [k€]			TOTAL ESTIMATED BUDGET [k€]	Start Year	Stop Year	Observations
						2016	2017	2018	2019	2020	2021-2025	2026-2030				
7 New 2019	Electric Mobility in Practice	The call for tenders 'Electric Mobility in Practice' forms part of the 'Electric Mobility Model Region' programme, and is aimed at bring technologies and electric mobility products that are already on the market to a wider audience and making them accessible. Aims include raising awareness and reducing the time to market.	Combination	Electricity	Combination	-	€500	€500	€500	€500	-	-	€2,000	2017	2020	Climate and Energy Fund Processing body: Kommunalkredit Public Consulting (KPC) https://www.klimafonds.gv.at/call/e-mobilitaet-in-der-praxis/
8 NPF 2016	Smart Cities Demo	The aim of the 'Smart Cities Demo' programme is to initiate visible implementation measures in urban areas by integrating existing (individual) technologies and methods, (individual) systems and (sub-)processes, most of which have reached a relatively high level of maturity, into innovative and interacting complete systems. The seventh call for tenders will focus on areas including buildings, energy and urban mobility.	AFI	Electricity	Road	-	-	-	-	-	-	-	-	-	-	Climate and Energy Fund Processing body: Austrian Research Promotion Agency https://www.ffg.at/smart-cities-das-programm https://www.ffg.at/smart-cities-das-programm-cities-demo-7-ausschreibung/downloadcenter
9 NPF 2016	Flagship Region for Energy	The project 'Flagship Region for Energy' involves using innovative energy technologies from Austria to develop and demonstrate intelligent, safe and affordable energy and transport systems for the future. The focus is on efficient interactions between factors such as generation, consumption, system management and storage within a complete system that is optimised for all market participants, and which can be powered by renewable energies at a rate of up to 100% (on a temporary basis). The drafting of concepts for the Flagship Region for Energy was funded through the first call for tenders (for the period from 21 December 2015 to 31 March 2016). Since then, three flagship regions have been established across Austria and are implementing large-scale demonstration projects in Austria for the first time.	AFI	Combination	Road	-	€10,000	€12,000	€25,000	€35,000	-	-	€82,000	2017	-	Hydrogen-related topics in the field of mobility are covered by the Hydrogen Initiative Flagship Region for Energy Austria Power & Gas [Wasserstoffinitiative Vorzeigeregion Energie Austria Power&Gas, Wiva PG], see: https://www.wiva.at/v2/projekte/ Climate and Energy Fund Processing body: Austrian Research Promotion Agency https://www.vorzeigeregion-energie.at/ https://www.ffg.at/vorzeigeregion-energie/ausschreibungen
9 Update 2019	Green Energy Lab Burgenland	Research initiative for sustainable energy solutions and part of the Austrian innovation programme 'Flagship Region for Energy' under the Climate and Energy Fund (Energy Burgenland) The Green Energy Lab has been in existence since September 2018.	AFI	Electricity	Road	-	-	-	-	-	-	-	-	2018	-	Funding is granted at Federal Government level rather than at provincial level. Research projects are coordinated (including projects in the field of alternative mobility), but specific funding is not granted directly (Climate Fund). https://www.vorzeigeregion-energie.at/category/green-energy-lab/
9 Update 2019	NEFI - New Energy for Industry Austria	Decarbonisation of the industrial energy system is brought about by means of key technologies that are 'Made in Austria', thus helping to secure Austria's role as an industrial location within a new energy system.	AFI	Electricity	Combination	-	-	-	-	-	-	-	-	-	-	https://www.nefi.at/ https://www.vorzeigeregion-energie.at/vorzeigeregion/nefi/

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						2016	2017	2018	2019	2020	2021-2025	2026-2030				
9 Update 2019	Hydrogen Initiative Flagship Region for Energy Austria Power & Gas (WIVA P&G) Upper Austria and Styria	The aim of the Hydrogen Initiative Flagship Region for Energy Austria Power & Gas (WIVA P&G) is to demonstrate the way in which the Austrian economy can transition to a predominantly hydrogen-based energy system.	AFI	Hydrogen	Combination	-	-	-	-	-	-	-	-	2016	2017	https://www.vorzeigeregion-energie.at/vorzeigprojekte/energie-vorzeigeregion-wiva-pg/
10 NPF 2016	Lower Austria	Funding call 'Sustainability 2016: Responsible Management' (budget: €300,000)	AFV	Combination	Road	€300	-	-	-	-	-	-	€300	2016	2016	http://www.noe.gv.at/noe/Wirtschaft-Tourismus-Technologie/Wirtschaft-Tourismus-Technologie.html
11 NPF 2016	Styria	Funding by Upper Austria and Styria for 'Smart Mobility' (fuel-neutral) One-off amount of €2 million per province (for 2016)	AF	Combination	Road	€2,000	-	-	-	-	-	-	€2,000	-	-	http://www.kommunikation.steiermark.at/cms/beitrag/12341573/29767960/
12 NPF 2016	Styria (Graz)	In autumn 2016, a pilot project was launched in Graz involving the operation of two electric buses fitted with 'super condensers' on an electrified bus route.	AFV	Electricity	Road	-	-	-	-	-	-	-	-	-	-	
13 NPF 2016	Tyrol	Pilot project: Reduction of CO_2 emissions in cold chain logistics (budget: €100,000) – Real-life trials of alternatively powered company vehicles (budget: €105,000) Innovation funding in Tyrol is focused on the priority areas identified in the Tyrol Innovation Strategy (https://www.tirol.gv.at/arbeit-wirtschaft/wirtschaft-und-arbeit/tiroler-forschungs-und-innovationsstrategie/), and is not therefore limited to particular topics. Funding is accordingly available for research and development projects in the field of alternative fuels (in the priority area 'Renewable energies'); no specific budgetary resources have been reserved for this purpose, however.	AFI	Electricity	Road	-	-	-	-	-	-	-	-	2016	-	https://energieeffizienz.tiwag.at/
14 NPF 2016	Tyrol	The trial operation of a pilot facility in Tyrol for reducing CO_2 emissions in cold chain logistics is planned for the purpose of testing facility management systems and acquiring more knowledge about electrically powered mobility applications. The Vomp facility is one of three pilot facilities developed by ASFiNAG with the aim of installing electrical recharging points for refrigerated lorries at service stations.	AF	Electricity	Combination	-	-	-	-	-	-	-	-	-	-	By the end of 2016, electric recharging points operated on the basis of uniform technical standards and an interoperable billing system were installed at three pilot locations (A1 Kesselhof service station, A12 Vomp lorry park and S1 Schwechat service station). A decision on future roll-out phases will be taken once installation measures at these three locations are complete and evaluations have been carried out.
15 NPF 2016	Upper Austria	Funding by Upper Austria and Styria for 'Smart Mobility' (fuel-neutral) One-off amount of €2 million per province (for 2016)	AF	Combination	Road	€2,000	-	-	-	-	-	-	€2,000	2016	2016	http://www.land-oberoesterreich.gv.at/164800.htm

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNA-TIVE FUEL	TRANS-PORT MODE	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMA-TED BUDGET [k€]	Start Year	Stop Year	Observations
						2016	2017	2018	2019	2020	2021-2025	2026-2030				
16 NPF 2016	Upper Austria	A pilot project 'LNG for HGV traffic in Upper Austria' is at the preparatory stage in Upper Austria.	AFI	LNG (including biomethane)	Road	-	-	-	-	-	-	-	-	-	-	
17 NPF 2016 Update	Electric Mobility Europe (EMEurope)	Involvement by Austria in a joint call under the aegis of ERA-NET Co-fund Electric Mobility Europe (EMEurope).	AF	Electricity	Combination	€1,500	-	-	-	-	-	-	€1,500	2016	2021	https://www.electricmobilityeurope.eu/
18 NPF 2016	Christian Doppler Laboratory	Continuation of funding for the Christian Doppler Laboratory for Sustainable Syngas Chemistry (around €1.3 million for the period 2012-2019), for lithium batteries (around €1.5 million for the period 2012-2019) and for interfaces in metal-supported electrochemical energy transformers (around €1.2 million for the period 2014-2021). Following an amendment to the Federal Ministries Act in 2018, the Federal Ministry for Digital and Economic Affairs now holds responsibility in this area.	AFV	Electricity	Road	€500	€500	€500	€500	€150	€150	-	€2,300	-	-	
19 NPF 2016	Research, technology and innovation funding guidelines and tools	Project evaluation and monitoring of potential energy and environmental impacts across all research, technology and innovation funding guidelines and tools, and market transfer of technologies and best practices (including appropriate support and incentives for project consortia).	AF	Select:	Select:	-	-	-	-	-	-	-	-	-	-	
20 NPF 2016	ASFiNAG	ASFiNAG will carry out a study to investigate potential development scenarios, in order to ensure that it is in the best possible position to handle future high-priority challenges relating to the network of motorways and dual carriageways. The study will also include a plan for the nationwide deployment of recharging infrastructure along the ASFiNAG network.	AFI	Electricity	Road	-	-	-	-	-	-	-	-	-	-	
20 Update 2019	Reference to Deployment Update	Reference to Deployment Update The ASFiNAG recharging network currently consists of 149 recharging points at 26 locations in Austria. (Reference date: 31 March 2019)	AFI	Electricity	Road	-	-	-	-	-	-	-	-	-	-	
21 New 2019	E-mobility field tests in Lower Austria	Field tests involving over 60 participants were carried out in three locations, and the impacts on the electricity grids were investigated. A total of 250,000 km were covered using electric vehicles; the everyday usability of the vehicles was tested, and many effective and straightforward methods for protecting distribution grids were also identified.	AFI	Electricity	Road	-	-	-	-	-	-	-	-	-	-	
22 New 2019	Smarter Together project in Vienna	Smarter Together is an EU-funded urban renewal initiative being implemented in the three cities of Vienna, Lyon and Munich. The Simmering district of the City of Vienna is working together with the public and many companies to develop smart city solutions. Priorities	Combination	Electricity	Road	-	-	-	-	-	-	-	-	-	-	https://www.smartertogether.at/

No	DENOMINATION	DESCRIPTION	AF FIELD	ALTERNA-TIVE FUEL	TRANS-PORT MODE	CURRENT AND PAST ANNUAL BUDGET [k€]				FUTURE ESTIMA-TED BUDGET [k€]			TOTAL ESTIMA-TED BUDGET [k€]	Start Year	Stop Year	Observations
						2016	2017	2018	2019	2020	2021-2025	2026-2030				
		for the project include building renovation, energy, mobility and logistics, as well as information and communication technologies.														
23 New 2019	Conversion of the bus fleet – Wiener Linien	Strategy for conversion of the Wiener Linien bus fleet: A centre of excellence for electric buses is being established in the south of Vienna. A separate electric bus garage will be built in Siebenhirten, and routes that can be served by electric buses will be introduced. A total of 60 electric buses will be in operation there from 2023 onwards. A hydrogen refuelling point will be installed in the north of Vienna at the Leopoldau Garage. Hydrogen will be tested there as a means of propulsion for the first time. The first test bus will be put into operation in May 2020.	AFV	Combination	Road	-	-	-	-	-	-	-	-	-	-	https://www.wienerlinien.at/eportal3/ep/bvContentView.do?contentTypeId=1001&contentId=1800504&programId=74577&channelId=-47186
24 New 2019	MA 48 Vienna	Electrically powered refuse collection vehicles have been procured, and the municipal authorities also own a large number of electric vehicles (MA 01, MA 34, MA 48, MA 49 and others).	AFV	Electricity	Road	-	-	-	-	-	-	-	-	-	-	https://www.wien.gv.at/umwelt/ma48/fuhrpark/elektro-muellsammelfahrzeug.html
26 New 2019	Electric recharging for residential buildings in Vienna	The aim of this study was to undertake an in-depth investigation into how recharging stations can be installed in existing large-scale residential buildings under the current framework of construction law and, if necessary, to propose ways in which the legislation could be clarified. Technical and energy industry considerations are also to be examined in connection with the Electricity Industry and Organisation Act [Elektrizitätswirtschafts- und –organisationsgesetz, ElWOG], Tariff 2.0 and the Energy Efficiency Act [Energieeffizienzgesetz, EEffG].	AFI	Electricity	Road	-	-	-	-	-	-	-	-	-	-	https://www.bmvit.gv.at/themen/alternative_verkehrskonzepte/elektromobilitaet/publikationen/nachruesten.html
27 New 2019	Trial operation of a hydrogen bus by Österreichische Post AG in Vienna	Operation of a hydrogen-powered bus by Österreichische Post AG in Vienna. Three-week trial operation of the bus in October 2019	AFV	Hydrogen	Road	-	-	-	-	-	-	-	-	2019	-	https://www.postbus.at/das-unternehmen/innovationen/wasserstoffbusse.html
NEW	'Energy Research' programme	The Energy Research Programme also made it possible to fund projects in the area of transport and mobility systems (interactive optimisation of transport and mobility systems using alternative fuels).	AF	Combination	Combination	-	-	-	-	-	-	-	-	2014	2018	Funding under the Climate and Energy Fund Call for tenders: Austrian Research Promotion Agency https://www.ffg.at/programm/migriert-energieforschung-das-programm

5 Alternative Fuels Vehicles (AFV) estimates

TRANSPORT MODE	ALTERNATIVE FUELS VEHICLES (AFV)	CURRENT AND PAST NUMBER OF AFV			NUMBER OF AFV EXPECTED TO BE REGISTERED		
		2016	2017	2018	2020	2025	2030
	ELECTRICITY						
Road	**Electric Vehicles, EV (total road)**	**18,884**	**27,478**	**37,461**	**101,222**	**445,394**	**1,045,556**
	Powered Two Wheelers (PTW)	5,907	7,057	8,614	11,448	39,992	85,161
	Electric Vehicles, EV (excl. PTW)	**12,977**	**20,421**	**28,847**	**89,774**	**405,402**	**960,395**
	Electric Passenger Cars (BEV+PHEV)	11,360	18,566	26,541	83,905	383,507	907,192
	• BEV	9,073	14,618	20,831	62,663	279,700	660,820
	• PHEV	2,287	3,948	5,710	21,242	103,807	246,372
	Electric Light Commercial Vehicles	1,467	1,711	2,141	5,709	21,709	52,936
	• BEV	1,467	1,711	2,141	4,064	12,469	30,487
	• PHEV	n/a	n/a	n/a	1,645	9,240	22,449
	Electric Heavy Commercial Vehicles	1	1	11	n/a	n/a	n/a
	• BEV	1	1	11	n/a	n/a	n/a
	• PHEV	n/a	n/a	n/a	n/a	n/a	n/a
	Electric Buses and Coaches	149	143	154	160	186	267
	• BEV	149	143	154	160	186	267
	• PHEV	n/a	n/a	n/a	n/a	n/a	n/a
Water	Inland Waterway Vessels	n/a	n/a	n/a	n/a	n/a	n/a
	Seagoing Ships	n/a	n/a	n/a	n/a	n/a	n/a
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives	844	851	824	n/a	n/a	n/a
	CNG (including Biomethane)						
Road	**CNG Vehicles (total road)**	**6,884**	**7,175**	**7,614**	**n/a**	**n/a**	**n/a**
	Powered Two Wheelers	n/a	n/a	n/a	n/a	n/a	n/a
	CNG Vehicles	**6,884**	**7,175**	**7,614**	**n/a**	**n/a**	**n/a**
	CNG Passenger Cars (monovalent)	2,457	2,433	2,365	n/a	n/a	n/a
	CNG Passenger Cars (bivalent)	2,574	2,773	3,177	n/a	n/a	n/a
	CNG Light Commercial Vehicles (monovalent)	957	944	1,019	n/a	n/a	n/a
	CNG Light Commercial Vehicles (bivalent)	845	804	827	n/a	n/a	n/a
	CNG Heavy Commercial Vehicles (monovalent)	48	47	52	n/a	n/a	n/a
	CNG Heavy Commercial Vehicles (bivalent)	3	3	3	n/a	n/a	n/a
	CNG Buses and Coaches	n/a	171	171	n/a	n/a	n/a
Water	Inland Waterway Vessels	n/a	n/a	n/a	n/a	n/a	n/a
	Seagoing Ships	n/a	n/a	n/a	n/a	n/a	n/a
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives	0	0	0	n/a	n/a	n/a

	LNG (including Biomethane)						
Road	**LNG Vehicles (total road)**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Powered Two Wheelers	n/a	n/a	n/a	n/a	n/a	n/a
	LNG Passenger Cars	n/a	n/a	n/a	n/a	n/a	n/a
	LNG Light Commercial Vehicles	n/a	n/a	n/a	n/a	n/a	n/a
	LNG Heavy Commercial Vehicles	n/a	n/a	n/a	n/a	n/a	n/a
	LNG Buses and Coaches	n/a	n/a	n/a	n/a	n/a	n/a
Water	LNG Inland Waterway Vessels	n/a	n/a	n/a	n/a	n/a	n/a
	LNG Seagoing Ships	n/a	n/a	n/a	n/a	n/a	n/a
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives	0	0	0	n/a	n/a	n/a
	HYDROGEN						
Road	**Fuel Cell Vehicles, FCEV (total road)**	**13**	**19**	**24**	**n/a**	**n/a**	**n/a**
	Powered Two Wheelers	n/a	n/a	n/a	n/a	n/a	n/a
	Hydrogen Passenger Cars	13	19	24	n/a	n/a	n/a
	Hydrogen Light Commercial Vehicles	n/a	n/a	n/a	n/a	n/a	n/a
	Hydrogen Heavy Commercial Vehicles	n/a	n/a	0	n/a	n/a	n/a
	Hydrogen Buses and Coaches	n/a	n/a	n/a	n/a	n/a	n/a
Water	Inland Waterway Vessels	n/a	n/a	n/a	n/a	n/a	n/a
	Seagoing Ships	n/a	n/a	n/a	n/a	n/a	n/a
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives	0	0	0	n/a	n/a	n/a
	LPG						
Road	**LPG Vehicles (total road)**	**498**	**504**	**694**	**n/a**	**n/a**	**n/a**
	Powered Two Wheelers	n/a	n/a	n/a	n/a	n/a	n/a
	LPG Passenger Cars (monovalent)	1	2	2	n/a	n/a	n/a
	LPG Passenger Cars (bivalent)	341	335	327	n/a	n/a	n/a
	LPG Light Commercial Vehicles (monovalent)	2	2	2	n/a	n/a	n/a
	LPG Light Commercial Vehicles (bivalent)	153	164	171	n/a	n/a	n/a
	LPG Heavy Commercial Vehicles (monovalent)	0	0	0	n/a	n/a	n/a
	LPG Heavy Commercial Vehicles (bivalent)	1	1	1	n/a	n/a	n/a
	LPG Buses and Coaches (monovalent)	n/a	n/a	191	n/a	n/a	n/a
Water	Inland Waterway Vessels	n/a	n/a	n/a	n/a	n/a	n/a
	Seagoing Ships	n/a	n/a	n/a	n/a	n/a	n/a
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives	0	0	0	n/a	n/a	n/a
	OTHER AF						
Air	Aircraft	0	0	0	n/a	n/a	n/a
Rail	Locomotives (Hybrid)	1	5	8	n/a	n/a	n/a

6 Alternative Fuels Infrastructure (AFI) targets

TRANSPORT MODE	ALTERNATIVE FUELS INFRASTRUCTURE (AFI)	CURRENT AND PAST NUMBER OF RECHARGING/REFUELLING POINTS			TARGET NUMBER OF RECHARGING/REFUELLING POINTS		
		2016	2017	2018	2020	2025	2030
	ELECTRICITY						
Road	Total recharging points (public* + private)	2,356	3,596	4,178[2]	3,500	n/a	n/a
	Recharging points (publicly accessible)	**2,356**	**3,596**	**4,178[2]**	**3,500**	**n/a**	**n/a**
	Normal-power recharging points, P ≤ 22 kW (public)	2,010	3,144	3,675[2]	3,000	n/a	n/a
	High-power recharging points, P > 22 kW (public)	346	452	503[2]	500	n/a	n/a
	• AC fast charging, 22 kW < P ≤ 43 kW (public)	92	119	131[2]	n/a	n/a	n/a
	• DC fast charging, P < 100 kW (public)	254	333	372[2]	n/a	n/a	n/a
	• DC ultrafast charging, P ≥ 100 kW (public)	n/a	n/a	n/a	n/a	n/a	n/a
	Recharging points (private)	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Normal-power recharging points, P ≤ 22 kW (private)	n/a	n/a	n/a	n/a	n/a	n/a
	High-power recharging points, P > 22 kW (private)	n/a	n/a	n/a	n/a	n/a	n/a
	• AC fast charging, 22 kW < P ≤ 43 kW (private)	n/a	n/a	n/a	n/a	n/a	n/a
	• DC fast charging, P < 100 kW (private)	n/a	n/a	n/a	n/a	n/a	n/a
	• DC ultrafast charging, P ≥ 100 kW (private)	n/a	n/a	n/a	n/a	n/a	n/a
Water	Shore-side electricity supply for seagoing ships in maritime ports	n/a	n/a	n/a	n/a	n/a	n/a
	Shore-side electricity supply for inland waterway vessels in inland ports	n/a	n/a	n/a	n/a	n/a	n/a
Air	Electricity supply for stationary airplanes	42	42	42	n/a	n/a	n/a
	NATURAL GAS (including Biomethane)						
Road	CNG refuelling points (total)	171	166	161	n/a	n/a	n/a
	CNG refuelling points (public)	171	166	161	n/a	n/a	n/a
	CNG refuelling points (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a
	LNG refuelling points (total)	0	1	1	n/a	1	n/a
	LNG refuelling points (public)	0	1	1	n/a	1	n/a
	LNG refuelling points (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a
Water	Maritime Ports - LNG refuelling points	n/a	n/a	n/a	n/a	n/a	n/a
	Inland Ports - LNG refuelling points	0	0	0	n/a	1	n/a
	HYDROGEN						
Road	H2 refuelling points (total)	3	4	5	5	n/a	n/a
	H2 refuelling points – 350 bar (total)	n/a	n/a	n/a	n/a	n/a	n/a
	H2 refuelling points – 350 bar (public)	n/a	n/a	n/a	n/a	n/a	n/a
	H2 refuelling points – 350 bar (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a
	H2 refuelling points – 700 bar (total)	3	4	5	5	n/a	n/a
	H2 refuelling points – 700 bar (public)	3	4	5	5	n/a	n/a
	H2 refuelling points – 700 bar (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a
	LPG						
Road	LPG refuelling points (total)	50	45	45	n/a	n/a	n/a
	LPG refuelling points (public)	50	45	45	n/a	n/a	n/a
	LPG refuelling points (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a
	OTHER AF						
All	AF refuelling points (total)	n/a	n/a	n/a	n/a	n/a	n/a
	AF refuelling points (public)	n/a	n/a	n/a	n/a	n/a	n/a

[2] Last updated Q2 2019

	AF refuelling points (private fleet operators)	n/a	n/a	n/a	n/a	n/a	n/a

Abbreviations

AC	Alternating Current
ACEA	European Automobile Manufacturers Association
AF	Alternative Fuels
AFV	Alternative Fuels Vehicle
AFI	Alternative Fuels Infrastructure
AFID	Alternative Fuels Infrastructure Directive
AI	Acquisition incentives
BEV	Battery Electric Vehicle
CCS	Combined Charging System, Type 2 and Combo 2
CNG	Compressed Natural Gas
CNGV	Compressed Natural Gas Vehicle
CO_2	Carbon Dioxide
CSI	Company-specific incentives
DC	Direct Current
E85	Ethanol 85
EC	European Commission
EEA	European Environment Agency
EAFO	European Alternative Fuels Observatory
EU	European Union
EUR	Euro
EV	Electric Vehicle: PHEV and/or BEV
FCEV	Fuel Cell Electric Vehicle
FFV	Flexible Fuel Vehicle
GHG	Greenhouse Gas
H2	Hydrogen
HCV	Heavy Commercial Vehicles
HEV	Hybrid Electric Vehicle
ICE(V)	Internal Combustion Engine (Vehicle)

k€	thousand euros
km	Kilometre
kW	Kilowatts
kWh.	Kilowatt-hour
LCV	Light Commercial Vehicles
LNG	Liquefied Natural Gas
LNGV	Liquefied Natural Gas Vehicle
pedelec	Pedal electric cycle
PC	Passenger car
PTW	Powered Two Wheeler
PHEV	Plug-in Hybrid Electric Vehicle
RFI	Recurring financial incentives
RNFI	Recurring non-financial incentives
RTD&D	Research, technological development and demonstration
TEN-T	Trans-European Transport Network
TRAN	European Parliament Committee on Transport and Tourism
UK	United Kingdom
V	Volts
VAT	Value-Added Tax
W	Watts
ZEV	Zero Emission Vehicle: BEV and/or FCEV

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