Measures to Support the Use of Alternative Fuels in the German Federal States

A State Atlas



Supported by:



Federal Ministry of Transport and Digital Infrastructure Coordinated by:



The Federal States – Driving the Energy Transition in the Transport Sector

Besides the multitude of activities with which the Federal Ministry of Transport and Digital Infrastructure is stimulating the switch to low-emission fuels and accompanying technologies at the federal level, a large number of measures are also currently being pursued by the federal states in Germany to drive the energy transition forward. This overview presents a total of 101 of these measures.

The State Atlas:

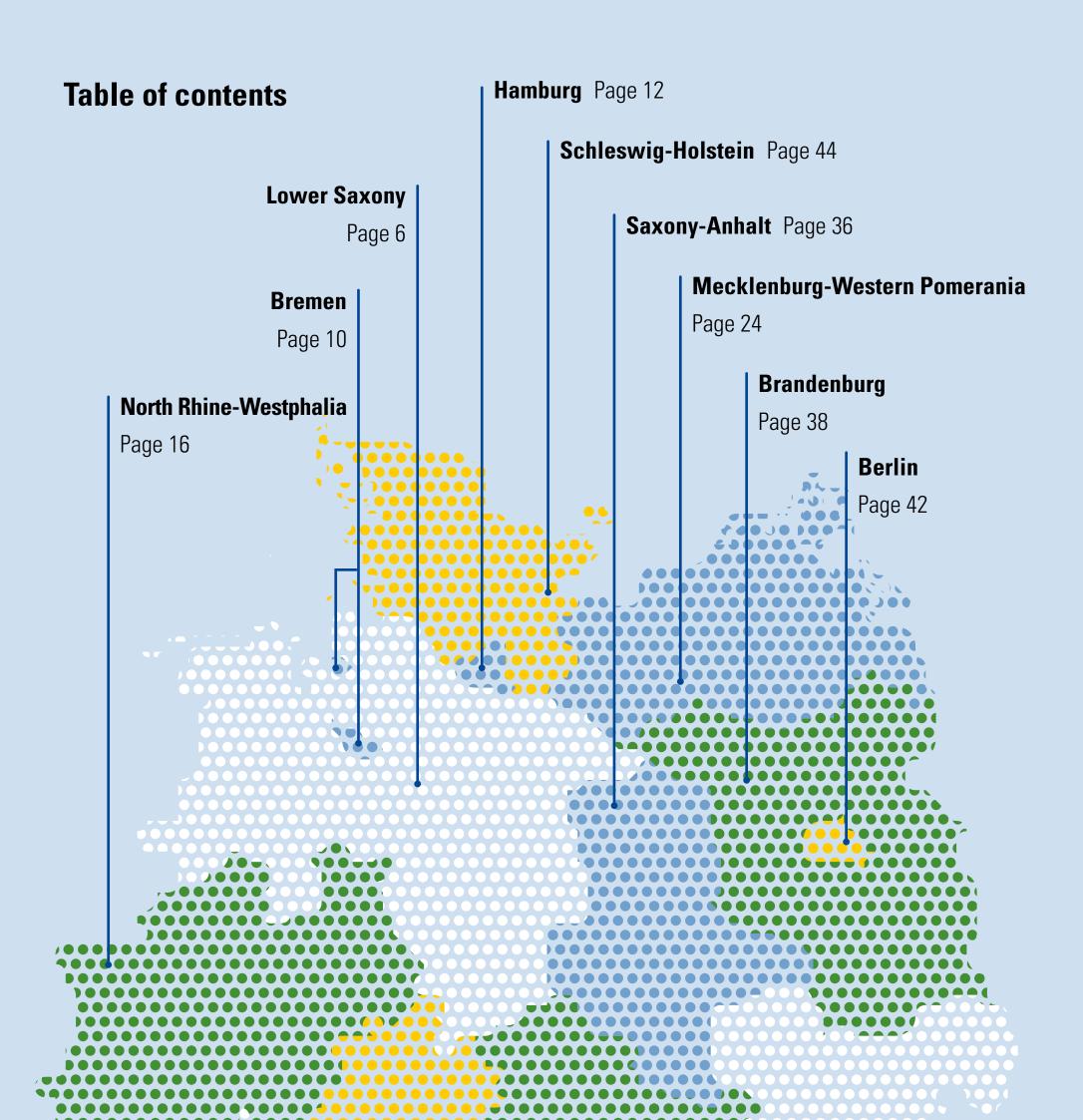
- Is designed to illustrate the wide variety of measures for reducing air pollutants and climate gases
- Provides those responsible in governments, energy agencies and other organizations with ideas and stimuli for their own measures
- Gives an overview of funding opportunities for projects in a municipal or commercial context

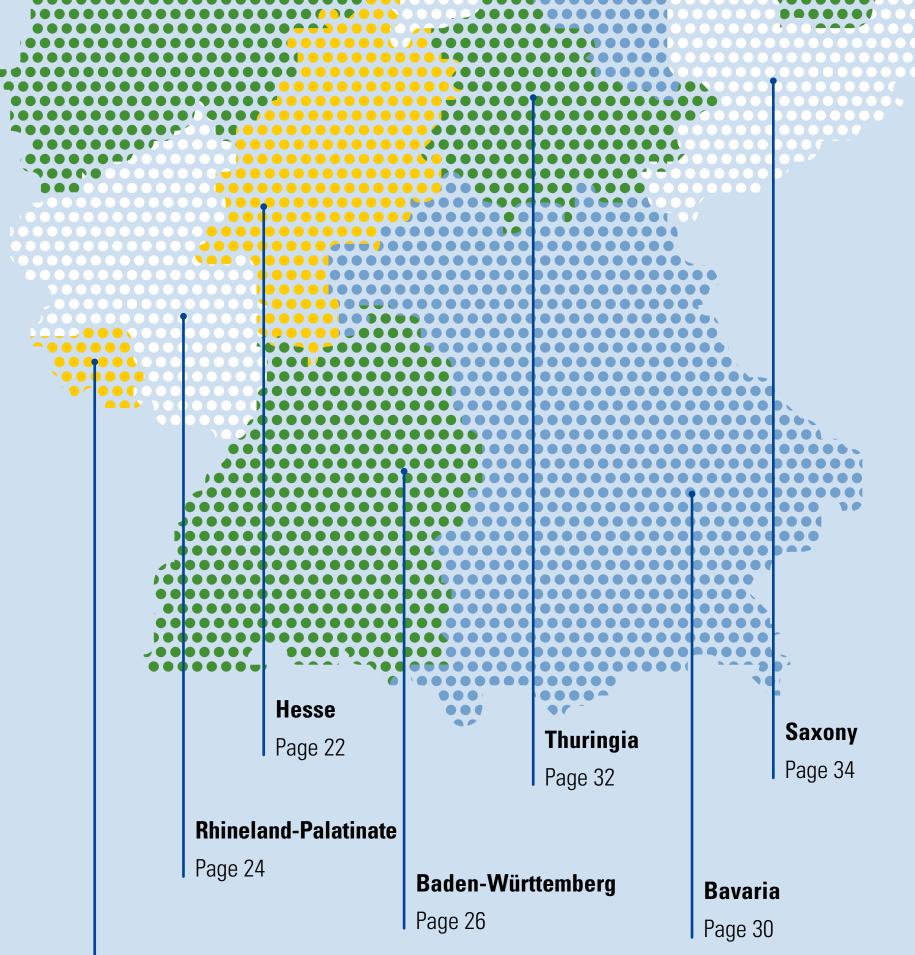
The atlas is based on the report published at the end of 2019 on the implementation of the National Strategy Framework in Germany for compliance with Directive

2014/94/EU (AFID report). On behalf of the Federal Ministry of Transport and Digital Infrastructure, NOW GmbH conducted a survey of measures in the federal states of Germany. The atlas thus provides a very broad overview.

The measures include procurement guidelines within state financing law for municipalities, funding programmes for the procurement of vehicles and infrastructure, and research funding. Apart from widespread programmes like bus procurement, more specific measures such as equipping vocational schools for teaching in the area of electric mobility can be found. The measures relate to road and rail transport as well as shipping. Aside from electric mobility, measures to support hydrogen, natural gas as well as biogenic and synthetic fuels are also included.

Only by working together will the energy transition in the transport sector succeed. The measures in this atlas bear witness to extensive know-how, creativity, know-ledge and commitment on the part of a wide range of stakeholders. This atlas aims to make this wealth of experience available to all — learning from each other is therefore expressly encouraged!





Saarland

Page 25

Lower Saxony

Deployment of fuel cell vehicles in local rail passenger transport

Funding is made available for the procurement of the vehicles and the provision of the filling station



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Hydrogen

Funding to support innovation by universities and research institutions

Funding is provided for the establishment and expansion of research infrastructure at universities of applied sciences along with infrastructure for cutting-edge research and application-oriented cooperation as well as joint projects between universities and industry, networking and knowledge transfer projects. This funding programme can also support projects on alternative fuels.







2016 - 2022

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Alternative fuels:

Infrastructure

Vehicle: General

Vehicle: Car

Vehicle: Ship

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Vehicle: Bus

Subject of the measure



The procurement of new electric locomotives is being supported in this funding programme.



Since 1997

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Funding programme for the procurement of public transport buses in accordance with the Lower Saxony Municipal **Transport Financing Act (NGVFG)**

Funding was provided for the procurement of new and used public transport buses, including higher funding levels for vehicles with alternative drive systems (electric, hybrid, gas, fuel cell).



2015 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen, CNG

Research and appointments pool, innovative university projects

Support of research projects and events from the "Pro*Niedersachsen" (Pro*Lower Saxony) programme, including the formation of research priorities, appointment and retention negotiations, structural improvements in the research sector, innovative university projects. Projects on alternative fuels are also supported.





Ongoing programme

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Support programme for procurement of citizens' bus vehicles for public transport

Funding support is provided for the procurement of citizens' bus vehicles for use in public transport, including higher funding rates for vehicles with zero-emission drive systems.



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Guideline for the allocation of funding for infrastructure measures and dredging in seaports

Support is available for investments in the construction, replacement or upgrading of infrastructure and facilities in ports that provide transport-related port services, such as infrastructure for alternative fuels.



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding programme to improve the supply of alternative fuels and energy in seaports

Funding support for the development, planning, construction and expansion of facilities to improve the supply of sea-going and inland waterway vessels in Lower Saxony seaports with alternative fuels and energy, such as liquefied natural gas (LNG) and shore-side electricity. Funding will be provided for projects involving, in particular, storage facilities, tank farms, distribution networks and cable installations and the necessary safety equipment associated with these.

2018 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Subject of the measure





Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)







The procurement of new electric railcars was supported.



2013 - 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Funding programme for charging points at P+R and B+R facilities

Funding is being provided for charging points at Park+Ride and Bike+Ride facilities at local passenger railway stations, where customers can charge the batteries of parked electric vehicles.



Since 2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Improvement of the supply of alternative fuels

Funding is available for the establishment and expansion of infrastructure for alternative fuels and for the use of electric mobility applications as well as the use of alternative fuels in public and municipal transport:



- Construction and expansion of tank infrastructure for the supply of inland waterway transport, and of road freight transport with alternative fuels like Liquefied Natural Gas (LNG) and inland waterway transport with shore-side electricity.
- Model projects in rail transport.
- . Measures in the field of urban mobility.

2017-2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Othe



Electricity, hydrogen, LNG

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Bremen

Horizon 2020 (H2020): Electrification of Public Project Transport in Cities (ELIPTIC) project

Coordination of the European ELIPTIC research project on the electrification of public transport (E-bus concepts, multiple use, charging infrastructure, efficiency improvements).





2015 - 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Vehicle: Bus





A→B Vehicle: General



Vehicle: Car





Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

















Horizon 2020 (H2020): GreenCharge project

H2020 research project on charging infrastructure with participation of the State of Bremen: Integration of e-car sharing in new construction projects and existing structures within the framework of municipal concepts.





2018 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

State decree on charging columns

Establishment of a state-level framework for electric charging infrastructure, including regulations on special use, minimum technical requirements, liability issues, special usage fees and responsibilities. The state decree was adapted accordingly following the federal charging station ordinance came into force.

Since 2011

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Hamburg

Amendment to the Hamburg's tendering guidelines

To test this regulation, the "HafenCity Baakenhafen" pilot project has included a mandatory quota for charging infrastructure of 33 %, while simultaneously reducing the number of parking spaces when planning and tendering for public parking facilities.

Since 2016

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Quotas concerning the e-share of the vehicle fleet in the **Hamburg Climate Plan**

Fleets in Hamburg's administration must achieve a share of 50 % e-vehicles (xEVs) in passenger cars by 2020 and fleets of public companies a share of 35 %.



2016 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Subject of the measure













Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)



Vehicle: Bus





Amendment of the procurement guidelines for public vehicle fleets

The reversal of the burden of proof was included in the procurement guidelines for the administrative vehicle fleet (state ministries, district administration, state companies) in favor of BEVs (Battery Electric Vehicles), PHEVs (Plug-in Hybrid Electric Vehicles) and FCEVs (Fuel Cell Electric Vehicles): If e-vehicle models are available and other requirements are met, they are to be procured preferentially. The procurement of vehicles with combustion engines must be justified.

Since 2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Construction of a stationary shore-side power facility for cruise ships at Cruise Center Altona (CC2)

The objective is to reduce emissions from cruise ships during their time in port by means of supplying shore-side electricity.



Since 2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Amendment of the planning processes of new development sites in favour of e-carsharing hubs

For testing purposes, binding specifications for the design of e-carsharing hubs for the charging infrastructure in new development sites were included in public-sector contracts with private companies as part of the "Mitte-Altona" pilot project.

Since 2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

ADM

LEG Legislative measures

R&D Research and development

Administrative measures

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Major project "ELectrify Buildings for EVs (Electric Vehicles)" (ELBE)

Research and development project to investigate load management, in the context of which private charging points for electric cars in buildings are supported; co-financed by, among others, the BMWi and the Hamburg Investment and Development Bank.

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Construction of the required infrastructure for the supply of energy using **LNG-powered barges at the Cruise**

Center HafenCity (CC1)

Provision of berth and terminal-side cable channel for LNG barges by the City of Hamburg. The aim is to reduce the volume of emissions from cruise ships during their time in port.



Since 2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Infrastructure



A→B Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Vehicle: Bus





Expansion of publicly accessible charging infrastructure

Expansion and operation of 1000 public charging points in Hamburg.

2015 – 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

Electricity

Hamburg in-house project group for an overall concept for shore-side power supply

Development of a concept for the expansion of the shore-side power supply in the port of Hamburg, including shore-side power supply for container ships and cruise liners.



2017 - 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Funding support for "Use of fuel cell vehicles in companies and as taxis"

The purpose of the measure is the use of climate-friendly fleet vehicles in commercial enterprises and in ridesharing within Hamburg. The demonstration of 28 vehicles was supported.

2015 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Hydrogen

Type of measure

Legislative measures LEG

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

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"Hydrogen Mobility Model Region" competition

Funding support is being provided for the development of three detailed concepts for model regions in the field of hydrogen mobility. The region with the best detailed concept will be awarded the title "Hydrogen Mobility Model Region NRW".





2019 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



NRW.BANK.Elektromobilität

Low-interest loans from the North Rhine Westphalia Development Bank to companies and freelancers for:



• Purchase of vehicles without combustion engine



• Investments in connection with electric mobility (e.g. investments in charging infrastructure or battery technology)



· Research and development projects in the field of electric mobility

Since 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Subject of the measure



Infrastructure





Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Vehicle: Bus









Support of joint and individual projects in the commercial and scientific sectors for the development of technologies in the context of the energy industry and the energy system transition. This includes the funding of projects on alternative drives.





Until 2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



ΔΙΙ

Type of measure

LEG Legislative measures
ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

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As part of the MobilitätLogistik.NRW (MobilityLogistics.NRW) competition, research and development projects were supported in the following areas, including:



- · Low-emission mobility: efficient drive systems/technologies, innovations in exhaust aftertreatment
- Projects that research, test or apply the possibilities of low-emission, inner-city transport.

2017 - 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding competition EnergieUmweltwirtschaft.NRW

The EnergieUmweltwirtschaft.NRW (EnergyEnvironmentalEconomy.NRW) competition provides funding for joint and individual projects in the commercial and scientific sectors on energy issues, including fuel cell technology, hydrogen, battery technology and e-mobility.







2014 - 2022

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



NRW.BANK.Effizienzungskredit (Efficiency Credit)

Low-interest loans from the North Rhine-Westphalia development bank to companies when introducing energy and resource-saving measures. This also includes the introduction of alternative drives on the road or on water (except electric mobility).





Since 2012

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



CNG, LNG, hydrogen, bio fuels, synthetic paraffin-based fuels

Subject of the measure



Infrastructure



Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)





Investment measures for the procurement of battery-electric and hydrogen-powered public transport buses, for the establishment of the necessary charging infrastructure and for the procurement of specific workshop



Since 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

HydrogenHyWay.NRW climate protection competition

Funding of joint and individual projects of the commercial and scientific sectors for the development of hydrogen and fuel cell technologies for grid stabilisation and for mobile applications.



2017 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Hydrogen

EnergieSystemwandel.NRW climate protection competition (EnergySystemChange.NRW)

Funding of joint and individual projects of the commercial and scientific sectors for the development of technologies that lead to an increased use of renewable energies, including biofuels, hydrogen and fuel cell technologies and charging infrastructure.





2018 - 2022

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

Electricity, hydrogen, synthetic fuels, bio fuels

Type of measure

LEG Legislative measures ADM

R&D Research and development

Administrative measures

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

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Support is being provided: Implementation consulting and concepts for electric mobility, development of charging infrastructure, procurement of battery electric and fuel cell vehicles as well as electric cargo bicycles, preparation of concepts, studies and analyses.



2018 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Initial consulting by EnergieAgentur.NRW on climate-friendly mobility

Within the scope of an existing individual contract with EnergieAgentur.NRW, initial consulting and project initiation can be funded. Events (expert meetings, user workshops and conferences) are being conducted on the subject of climate-friendly mobility.







2015 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Modernisation of housing (Modernisation Guideline "RL Mod")

Included are measures to improve or create alternative, barrier-free local mobility offers for residential communities (rental apartments) on site and in the residential area, for example car sharing, charging stations for electric mobility, parking facilities for (cargo) bicycles, walkers and prams.

Since 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Infrastructure

Vehicle: Bus





Vehicle: General



Vehicle: Car



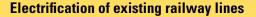
Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)



Funding from state budgets for the electrification of existing railway lines for local public passenger transport in accordance with § 13 (1) no. 4 of local public transport law (ÖPNVG).

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

Electricity

Promotion of residential housing -Support for owner-occupied dwellings

Granting of additional loans for particularly qualitative designed facilities on the building site, which offer alternative, barrier-free access to local mobility services (e.g. car sharing, parking facilities for (cargo) bicycles, charging stations for electric mobility), provided that the parking space factor stipulated in the building permit is reduced to a value below 1.0.

Since 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Centre of Excellence ElektroMobilität NRW

As part of an existing individual contract, public relations work, initial consulting and market observation on the subject of electric mobility are being supported, including the staging of specialist lectures, events and conferences.

2015 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Hesse

Support provided under the **Hessian Energy Act**

The scheme includes funding for equipping vocational schools with pilot and demonstration facilities, for example in the field of electric mobility as part of the dual training programme.





2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Innovation stimulus – focus on electric mobility

The state of Hesse supports individual projects as well as joint projects that aim to substantiate the practicability and suitability for everyday use of electric mobility.





Since 2016

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Vehicle: Bus





A→B Vehicle: General



Vehicle: Car







Alternative fuels:

Synthetic methane Hydrogen Biofuels

Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)



Synth. paraffin-based Synthetic fuels Paraffin fuels

"Electric Mobility" funding programme

Support of measures aimed at proving the practical and everyday suitability of electric mobility. Areas of funding support:

- · Research and development.
- Pilot and demonstration projects.
- · Also included in this is the development of charging infrastructure

Since 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



"Electric bus" funding programme

Procurement of electric buses and development of the associated charging infrastructure.

Since 2017

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding support for charging infrastructure at comapny premises as part of the "Electric Mobility" funding programme

Contribution towards the investment costs for the installation of charging points at company premises.



2018 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

"Model R&D projects" funding programme (ERDF = European Regional **Development Fund)**

Funding is provided for individual research and development projects of SMEs or joint projects of SMEs in cooperation with universities, research institutions, companies as well as transfer and business development institutions. These include projects in the field of innovative mobility and logistics concepts and electric mobility.







2014 - 2020

LEG | ADM | FûE) | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen, synthetic methane

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

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Rhineland-Palatinate, Saarland, **Mecklenburg-Western Pomerania**

Climate protection funding guidelines for municipalities and

companies (Mecklenburg-Western Pomerania)

Funding is available for measures that directly or indirectly reduce greenhouse gas emissions. Also eligible for funding are investment measures for the use of alternative non-fossil fuels and drives, including fuel cell drives and electric mobility, as well as hydrogen infrastructure measures.

2014 - 2022

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

Electricity, hydrogen

Electric mobility in rural areas development of a pilot region in the Westerwald (Rhineland-Palatinate)

The aim was the planning and implementation of the Westerwald region as a pilot region for electric mobility in rural areas. Local stakeholders, in particular municipalities, were supported for this purpose, while citizens were provided with information, advice and other support.

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other





Alternative fuels:

Subject of the measure

Vehicle: General





Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Infrastructure

Vehicle: Bus















Alternative drives "Lotsenstelle"

(Rhineland-Palatinate)

The "Lotsenstelle (Pilot Office) for Alternative Drives" advised local authorities, their residents and the companies based there on their integrated, strategic approaches to reducing climate-relevant emissions with targeted information and offers on the subject of alternative drives. The focus was on electric mobility.



2017 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Procurement of new public buses

(Mecklenburg-Western Pomerania)

Procurement of bus for scheduled services. Vehicles with alternative drive systems benefiting from a higher subsidy rate.

2015 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

Electricity, hydrogen, CNG

Retrofitting of trains to battery electric railcars (Saarland)

In a lighthouse project, electric railcars are to be converted to battery electric railcars for use on a regional railway routes that are only 50% equipped with overhead power lines in order to replace the operation of diesel railcars.

In planning

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

Legislative measures LEG

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

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Baden-Württemberg

Innovation voucher for small and medium-sized enterprises

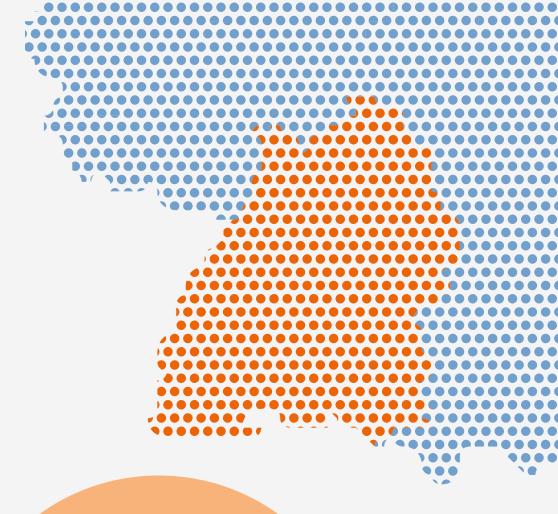
Support for the use of research and development services in the context of product, service and process innovations. The focus here is on high-tech mobility, including support for the development of functionally integrated and/or modular components for electric mobility and charging technology.



2017 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other





Innovation Alliance BW (innBW)

The Innovation Alliance Baden-Württemberg is a consortium of nine application-oriented, business-focused research institutions, in which research projects on sustainable mobility are funded as one of four key areas. Current projects include green hydrogen, fuel cells, electric buses and autonomous driving.







Since 2010

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Subject of the measure



Infrastructure





Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)









Strategy dialogue automotive industry

A platform for institutionalised cooperation, which is divided into six thematic areas: Research and Development, Distribution, Energy, Digitisation, Transport Solutions, Research and Innovation Environment. In each of these fields, governmental and in-company measures are developed.





2017 - 2024

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Guideline for bus funding support pursuant to the State Municipal **Transport Financing Act (LGVFG)**

Funding support for the procurement of buses powered by renewable energy sources in accordance with the State Municipal Transport Financing Act (LGVFG - Landesgemeindeverkehrsfinanzierungsgesetz).

Ongoing programme

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen, CNG

Electric Mobility III state initiative

Support through various measures:



• Electrification of the state vehicle fleet including charging infrastructure



• Special programme for fleet modernisation



• Consulting and procurement (e-buses)



• Procurement of electric trucks (BEV -Battery Electric Vehicles; FCEV - Fuel Cell Electric Vehicles; and Hybrid)



• Funding support for selected vehicle fleets, innovative projects and charging infrastructure, including taxis

- Funding support for small and medium-sized enterprises: SME mobility offensive - "Automotive and electric mobility" funding voucher and "Innovative mobility technologies" technology transfer programme
- Investment in research infrastructure including pilot production plants
- Financing of pilot projects for electric mobility logistics

2017 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development PROC Vehicle Procurement

INFRA Development and expansion

of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Procurement guidelines for the state vehicle fleet

The guidelines:

- CO, limit of 95 g CO,/km in the fleet mix from 2020
- Electrification quota of 10 % for the individual state vehicle fleets
- · Preferential allocation of electric and hybrid vehicles in procurement.

Since 2011/2014

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Support for construction, extension and conversion measures on transport routes and the associated infrastructure in the public transport sector in accordance with the Support for construction, extension and conversion measures on transport routes and the associated infrastructure in the public transport sector in accordance with the State Community Transport Financing Act (LGVFG)

Funding support for (overnight) charging stations in depots. Also eligible are route-related charging facilities in connection with the construction of railway infrastructure.



Kontinuierliches Programm

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



HYBRID II doctoral college

Funding of doctoral projects in the joint college of the University of Stuttgart and the **Esslingen University of Applied Sciences** on the subject of hybridised drive trains. The collegium is supported by the state of Baden-Württemberg, Daimler AG and Robert Bosch GmbH.



2018 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Rethinking fuels – reFuels joint project

In the joint "reFuels" project, processes are being examined with which petrol and diesel fuels can be produced on a larger scale on the basis of renewable energies and from sustainably accessible raw materials. The project is investigating how the regeneratively produced fuels affect the pollutant emissions of existing fleets and the function of the vehicles and individual components. Partners come from science, the automotive industry, the supply industry and the petroleum industry.



2019 - 2021

LEG | ADM | FûE) | PROC | INFRA | PUBT | PROD | Other

Synth. paraffin-based fuels

Subject of the measure



Infrastructure





Vehicle: General



Vehicle: Car



Vehicle: Ship

Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)







Resource efficiency financing of the L-Bank

Low-interest loans in the field of material efficiency and environmental technology are used to promote operational investments in environmental protection measures, including commercial vehicles with environmentally friendly drive systems and the associated charging and tanking infrastructure.







2017 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen, CNG, LNG

Power-to-Gas Baden-Württemberg lighthouse project

The aim was to further develop power-togas technology towards greater efficiency and lower costs, with a focus on hydrogen production (power-to-hydrogen) for the mobility sector. This work was based on the operation and measurement of a constructed electrolyser plant in the 1 MWel power class of Energiedienst AG in Wyhlen on the Upper Rhine.



a i

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Hydrogen

Nationwide safety charging network for electric vehicles (SAFE) in Baden-Württemberg

Development of a basic charging network in Baden-Württemberg with at least 22 kW charging capacity (10 km grid). Additionally, construction of a fast charging network with at least 50 kW (20 km grid), which is integrated into the basic charging network. Part of the Electric Mobility III initiative of the state of Baden-Württemberg.



2017 – 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding programme for specialist courses – focus on electric mobility (within the scope of the European Social Fund 2014–2020)

Support of inter-company training courses for further vocational retraining with a focus on electric mobility by means of subsidies for participation fees.





2015 – 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Bavaria

"Electric Mobility and Innovative Drive **Technologies for Mobile Applications**" (BayEMA)

Funding was provided for joint industrial research and experimental development projects in the field of electric mobility and innovative drive technologies, especially in the following areas: electric drives, refuelling and storage technologies (most notably battery technologies), safety engineering, engine technology, transmission technology, fuel consumption and exhaust gas modification, hybrid technologies, energy management and technology studies.

2014 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure

Vehicle: Bus

Infrastructure



A→B Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas)

CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Support for networking activities between universities and businesses

Funding is available for continuing education and training measures for companies and their employees within networks and partnerships between universities and companies. The focus is on Clean Tech: resource-saving energy, transport and environmental technologies, renewable raw materials (including biofuels), electric mobility.



2014 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



ΔΙΙ

Guidelines for the provision of subsidies by the Free State of Bavaria for local public transport (RZÖPNV)

Support is provided for the construction and expansion of infrastructure, the procurement of vehicles and allocations for the purposes of general public transport, including buses, coaches and rail vehicles.





2018 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, CNG

"Charging infrastructure for electric vehicles" programme

Support for the construction of charging stations as well as for the grid connection and installation.



2017 – 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Thuringia Funding support for research, technology and innovation (RTI guideline) Support is provided for research and development projects being pursued by companies and research institutions, in areas such as sustainable and intelligent mobility and logistics. 2015 - 2021 LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other All "E-Mobil Invest" funding programme for electric mobility in municipal companies Funding is provided for the installation of charging points including grid connection and the purchase and conversion of purely electric vehicles (including trucks). 2018 - 2020 LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other Electricity Alternative fuels: Subject of the measure



Vehicle: Bus



Vehicle: Truck 🖳 Vehicle: Train



A→B Vehicle: General





Vehicle: Ship

Vehicle: Car

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas)

CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Guideline for supporting investments in local public transport in Thuringia (ÖPNV investment guideline)

Funding support was provided for investments in maintaining and qualifying an attractive range of public rail and road passenger transport services, including the construction, modernisation and maintenance of infrastructure as well as the procurement of vehicles with alternative drive technologies (particularly electric, hybrid or gas drives).



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding programme for municipal climate protection and climate impact adaptation measures "Klima Invest"

Support is provided to municipalities, districts and special-purpose associations that intend to electrify their vehicle fleets and procure electrically powered vehicles and the necessary charging infrastructure.





2017 - 2021

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Guideline for the support of lowcarbon mobility in Thuringia - Electric bus systems model project

Support is provided to public transport operators conducting pilot projects for switching to electrically powered public road transport. This includes investments in low-carbon vehicles and the establishment of the necessary charging infrastructure for electric mobility.





2017 - 2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

GREEN invest – support of greentec innovations (demonstration projects and studies)

Funding will be provided for model projects for the reduction of energy-related carbon emissions using new energy and energysaving technologies with a multiplier effect (demonstration projects) as well as studies, insofar as they are a prerequisite for the implementation or proof of the success of the demonstration project. Projects on alternative fuels may also be funded.







2015 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Type of measure

LEG Legislative measures ADM

R&D Research and development

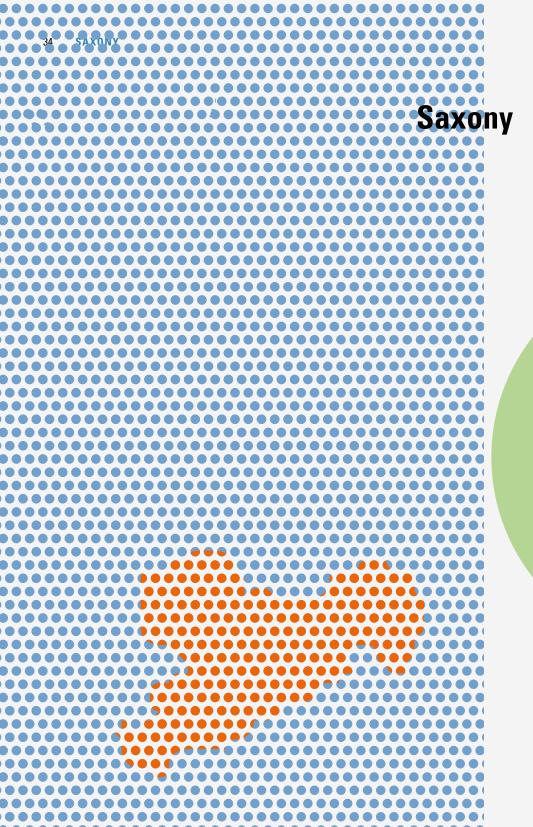
Administrative measures

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities



Support of business-related infrastructure within the scope of the "Improvement of the regional business structure" joint project (GRW-Infra)

Support in ports will, for instance, include the establishment of infrastructure and facilities to provide transport-related port services, such as the infrastructure for alternative fuels.



Since 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Subject of the measure



Vehicle: Bus



Vehicle: General



Vehicle: Car

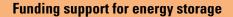


Vehicle: Ship

Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)



Support is being provided for the establishment of decentralised electricity storage facilities (including neighbourhood storage facilities and retrofit kits) that are operated with electricity from photovoltaic systems. Also supported in connection with this is the charging infrastructure for electric vehicles.

2019 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



"Sustainable energy supply" funding programme

Funding support for increasing energy efficiency, for the use of renewable energies, for energy storage, for the construction of intelligent energy networks and for research into innovative energy technologies, in which electric mobility is also eligible for funding.

5

2015 – 2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Funding support for transport infrastructure

Support is provided for the procurement and conversion of vehicles with low-emission drive systems (e.g. rail vehicles, light rail vehicles, hybrid, electric and low-emission buses) as well as measures (e.g. facilities, transhipment concepts) for the cost-effective, transport-related and environmentally friendly upgrading of Saxony's inland ports, taking into account multimodal transport networks.

2016 - 2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Type of measure

LEG Legislative measures

ADM Administrative measures

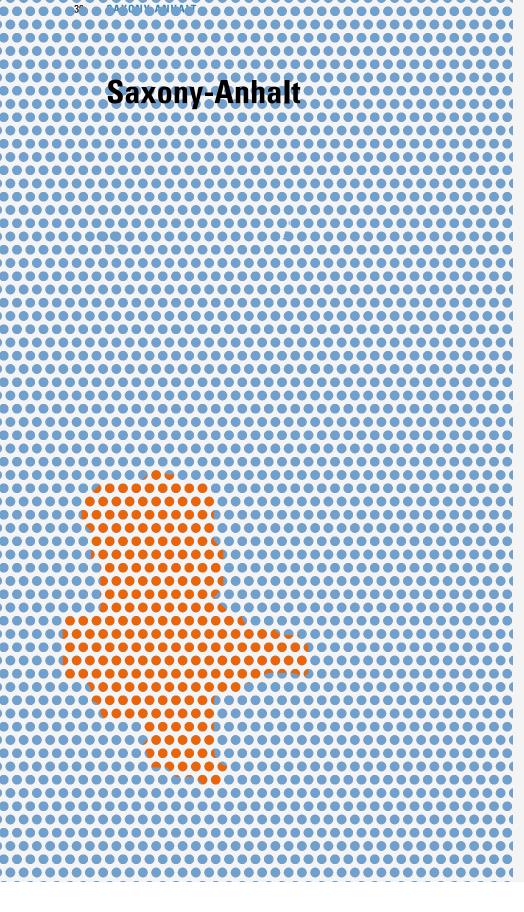
R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities



Funding support for vehicles with alternative drive systems for local public transport

Funding is available for the procurement, rental or leasing of vehicles and charging infrastructure for use in public transport: BEV (Battery Electric Vehicles), PHEV (Plug-in Hybrid Electric Vehicles), REEV (Range Extended Electric Vehicles), CNG, biomethane.

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, CNG (incl. biomethane)

State Shipping and Port Ordinance – **LSchiffHVO**

Inclusion of the obligation to use shore-side electric facilities in the State Shipping and Port Ordinance (§ 39 Para. 3 LSchiffHVO -Landesschifffahrts- und Hafenverordnung).



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Infrastructure



Vehicle: General



Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

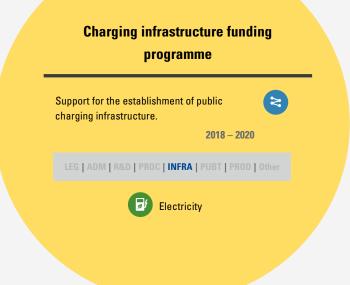
Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)











Support for measures to increase energy efficiency and the use of renewable energies in business enterprises

Eligible for funding are the procurement of electric vehicles and charging infrastructure.



2016 - 2021



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures
ADM Administrative measures

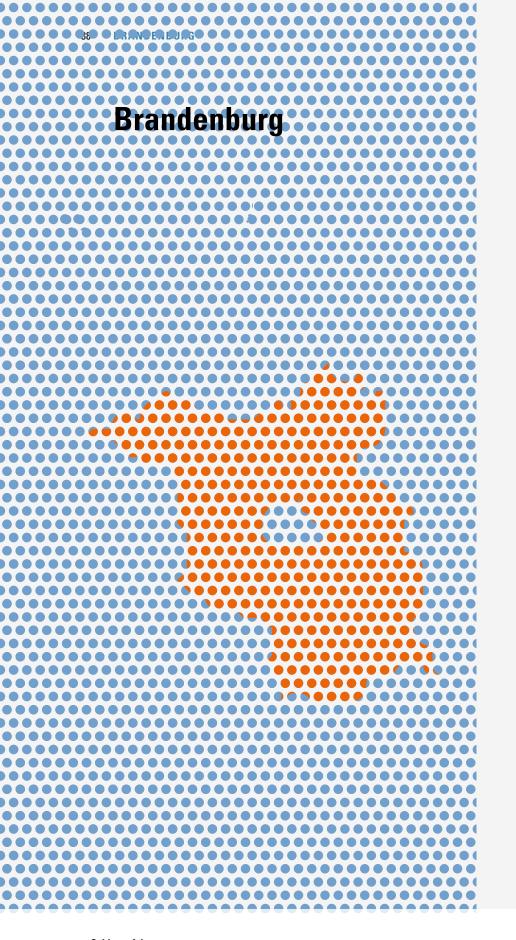
R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities



"ProFIT Brandenburg" guideline

Funding is available for R&D projects by companies in industrial research and experimental development, feasibility studies and projects in the field of market preparation/





This support programme, which is open to all sectors and topics, can also provide funding for projects involving alternative fuels.

2014 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Subject of the measure









Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen **Biofuels**

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)







Among the activities supported are research, development and innovation projects of small and medium-sized enterprises.



Projects on alternative fuels can also be funded within the scope of this funding programme, which is open to all sectors and topics.

2015 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Allocations via the Brandenburg Public Transport Act

Support for measures or investments in tram and trolleybus infrastructure.



2014 - 2022

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Funding support within the scope of the public transport investment guideline (Richtline ÖPNV-Invest)

Support for construction, extension and reconstruction investments in public transport access and interconnection points and in all facilities required for operation, including bus charging lanes, charging stations and electrical equipment for rail power.



2015 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Type of measure

LEG Legislative measures ADM

R&D Research and development

Administrative measures

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

Support is provided for business-related municipal infrastructure projects. The funding programme may also support projects on alternative fuels.



2015 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Support within the scope of the "RENplus Energy Efficiency Guideline".

Support for the establishment of public charging infrastructure.



2018 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Guideline for the support of industry within the scope of the "Improvement of the regional business structure" joint project (GRW)

Support is granted for investments by the industrial sector in businesses in the state of Brandenburg, including the establishment of a new business enterprise, diversification of the activities of a business enterprise, acquisition of the assets of another business enterprise that has ceased operations or is threatened with closure. Separate funding for small enterprises.

Projects relating to alternative fuels may also be supported within the scope of this funding scheme.

2015 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Subject of the measure



Infrastructure

Vehicle: Bus



Vehicle: Truck 🖳 Vehicle: Train



Vehicle: General



Vehicle: Car



Vehicle: Ship

Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

AK EMO: E-mobile Brandenburg contact and coordination office at the **Brandenburg Economic Development** Corporation

The aim is to support municipalities and companies in the state in initiating and implementing future-oriented electric mobility projects. Furthermore, AK EMO (Anlauf- und Koordinierungsstelle E-mobiles Brandenburg) is the central contact for funding opportunities for e-mobility and charging infrastructure.

2018 - 2020

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Funding support as part of the "Mobility Guideline"

Support of energy-efficient and climate-friendly drives for use in public transport:



- · Additional costs of the drives
- Technically-related measures such as charging infrastructure and repair shops

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen, CNG

Type of measure

ADM

LEG Legislative measures

R&D Research and development

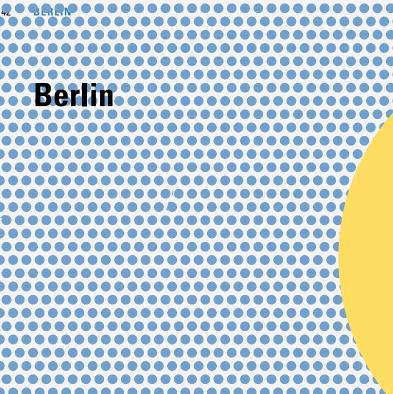
Administrative measures

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities



Expansion of public charging infrastructure (be e-mobil)

The federal state of Berlin has developed the so-called Berlin Model, which allows charging point operators and mobility providers (charging-electricity providers) to operate charging points in public spaces to the same standards. The end customer enters into a contract with a mobility provider for the supply of electricity and can recharge at any charging station regardless of the charging station operator. According to this model, a total of 1140 charging points will be created in public spaces by 2020.

It is part of the master plan for sustainable and low-emission mobility.

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Othe



Electricity

Establishment of the Charging Infrastructure Office (LIB) in the Berlin Senate **Department for Environment, Transport** and Climate Protection

The Charging Infrastructure Office (LIB -Ladeinfrastrukturbüro) coordinates the further expansion and long-term planning of the public charging infrastructure in Berlin and is the point of contact for companies interested in setting up their own charging points according to the specifications of the Berlin Model.



LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Infrastructure

Vehicle: Bus





Vehicle: General



Vehicle: Car



Vehicle: Ship

Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)

Taxi programme

Funding support for the purchase (incl. leasing) of petrol-hybrids; duration March to June 2018, thereafter transferred to the WELMO programme ("Business-oriented electric mobility).

It is part of the master plan for sustainable and low-emission mobility.

2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other

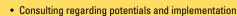


Electricity

"Business-oriented Electric Mobility" (WELMO – Wirtschaftsnahe Elektromobilität)

The aim was to encourage small and mediumsized commercial enterprises as well as non-profit and self-employed persons to switch to electrically powered vehicles. Being supported was:







- Procurement vehicles (BEV Battery Electric Vehicles, PHEV – Plug-in Hybrid Electric Vehicles, FCEV – Fuel Cell Electric Vehicles)
- Expansion of charging infrastructure

It is a part of the master plan for sustainable and low-emission mobility.

2018 - 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity, hydrogen

Changeover of the state vehicle fleets to e-mobility

Changeover of the state vehicle fleets to electric vehicles:



- Fleet of the Berlin's public transport authority (BVG Berliner Verkehrsbetriebe):
 Electrification of light commercial vehicles (up to 3.5 t)
- Commencement of the procurement process for 30 electric buses for public transport in 2018
- Increase of the electric share of the car fleet of Berliner Wasserbestriebe (water utilities) to 60% by the end of 2018
- Review/start of the conversion of the vehicle fleet in other self-owned companies

It is part of the master plan for sustainable and low-emission mobility.

Since 2018

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Procurement guidelines in the administrative regulation on procurement and the environment (VwVBU – Verwaltungsvorschrift Beschaffung und Umwelt)

In the future, vehicles with all-electric drive systems will be given precedence in the procurement of new light commercial vehicles.



Since 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures

ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

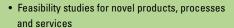
PROD Promotion of production facilities

Schleswig-Holstein

State economic programme -**Support for energy system transformation** and environmental innovations (EUI Directive)

Individual and collaborative research projects are supported in the following areas, including electric mobility:







- Creation of technical and scientific prerequisites for the development of new future-oriented products, processes or services
- Industrial research and experimental development for new future-oriented products, processes or services
- Pilot and demonstration projects

2015 - 2023

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Funding grant programme "Charging points for electric cars in municipalities"

Fifty charging points with at least two charging points and 22 kW charging capacity each were eligible for funding. The charging points needed to be publicly accessible and able to be used freely.



2016

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Subject of the measure



Infrastructure







Vehicle: Car



Vehicle: Ship



Alternative fuels:

Synth. paraffin-based Synthetic methane Hydrogen Biofuels

Synthetic fuels Paraffin fuels Electricity LNG (Liquefied Natural Gas) CNG (Compressed Natural Gas) All (usually excl. LPG (Liquid Petroleum Gas)







Vehicle: Truck 🖳 Vehicle: Train

Funding guideline for the expansion of the charging infrastructure for electric vehicles

Funding support for the demand-oriented and user-friendly expansion of charging infrastructure in the state of Schleswig-Holstein. In addition to the establishment of new charging points, the upgrading of existing publicly accessible charging points and the expansion of charging infrastructure for the operation of electric buses are to be supported.



In Planung

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

XMU tender

As a replacement for diesel railcars, 55 battery railcars (BEMU - Battery Electrical Multiple Units) of the Stadler FLIRT rechargeable battery type with innovative drives are being procured for local rail passenger transport in Schleswig-Holstein. They are to be used successively from December 2022. The invitation to tender was open to new technologies. It also included the development of charging and refueling. infrastructure.

Since 2019

LEG | ADM | R&D | PROC | INFRA | PUBT | PROD | Other



Electricity

Type of measure

LEG Legislative measures
ADM Administrative measures

R&D Research and development

PROC Vehicle Procurement

INFRA Development and expansion of infrastructure

PUBT Local public transport

PROD Promotion of production facilities

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