

Guide for Proposers Zero Emission Mobility plus

2024 Programme

A Programme of the Climate and Energy Fund in support of implementing the Mobility Master Plan 2030 for Austria of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK)



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Foreword

Austria is striving to meet the challenging goal of climate neutrality by 2040. Converting the transport sector to renewable energy systems plays a key role in achieving this aim. Only with a comprehensive mobility transition will it be possible to achieve the climate goals and create a mobility system fit for the future.

This requires a holistic approach which considers the overall complexity of the challenges involved, and this is the role of our new "Zero Emission Mobility plus" call. This holistic perspective should also be reflected in the funding landscape. This is why, this year for the first time, we have merged the previously separate "Sustainable Mobility in Practice" and "Zero Emission Mobility" calls into a single, broader call.

The overarching goal of the funding programme is to accelerate the mobility transition and reduce emissions. The focus lies in rolling out zero emission drive systems, including in special vehicles, promoting active forms of mobility, and the consistent expansion of sharing and ride-sharing services. To this end, we rely on close cooperation with Austrian companies and research organisations, in turn strengthening Austria as a business location and increasing domestic value added.

We invite you to submit your innovative project and help shape the future of mobility in Austria.

Bernd Vogl

Managing Director of the Climate and Energy Fund

1.0 Key Facts at a Glance

General information about the call

Reducing transport emissions while meeting universal mobility needs is a complex challenge which demands holistic and integrated solutions. In response, the two former, separate Zero Emission Mobility and Sustainable Mobility in Practice calls are being merged into a single call for the first time. This further strengthens the systemic perspective which has already been an essential aspect of both programmes.

Call topics

Call topic 1 focuses on zero emission technologies as an opportunity to reduce the greenhouse gas emissions associated with transport, and to contribute to creating an interoperable mobility system which is fit for the future. The Climate and Energy Fund supports technology and implementation-oriented electric mobility projects designed to integrate components, systems and services into a comprehensive mobility system. In accordance with the climate-neutral and sustainable mobility pyramid (Figure 1, page 5), the focus therefore lies on the principle of "Improve", together with efficiency increases.

Projects that fall exclusively into the research category "Industrial Research" are not eligible for funding under the Funding Guidelines for Environmental Assistance in Austria (UFI).

Call topic 2 takes a closer look at aspects that help to "Shift" and "Avoid" transport. The focus lies on active mobility; transport poverty and ensuring the provision of inclusive mobility offerings; as well as measures to systematically strengthen the potential for sharing.

Budget and instruments

This call provides a total of **EUR 9 million in funding** for the two call topics.

These funds are intended to support flagship projects and cooperative R&D projects. The projects will promote 100% electrification of vehicles and enable the development and testing of intelligent electric mobility and hydrogen infrastructure and seamless integration into publicly accessible mobility systems. The use of hydrogen in combustion engines is only eligible for funding in thematic areas 1.1 and 1.5 of this programme, as specified there.

The call additionally includes R&D services focusing on specific topics.

The full project proposals must be submitted to the Austrian Research Promotion Agency (FFG) via <u>eCall</u> by the submission deadline of **2 October 2024, 12:00**.

Zero Emission Mobility plus is a funding initiative of the Climate and Energy Fund in support of implementing the Mobility Master Plan 2030 for Austria and achieving climate neutrality by 2040.

PLEASE NOTE:

If the application does not meet the formal requirements for project submissions in accordance with the conditions and criteria of the relevant funding instrument and the call, and if the deficiencies are not rectifiable, the application will be excluded from the further procedure and will be formally rejected without exception in accordance with the principle of equal treatment of applications. The FFG's eCall system provides support in this respect, but the ultimate responsibility for compliance with the formal requirements still rests with the applicants. A check list specifying the conditions and criteria of the relevant funding instrument and the call can be found in Annex 1

Funding may only be granted if it has an incentive effect. The FFG Challenge Guideline thus requires all consortium members to declare via eCall whether the funding leads to a change in their behaviour.

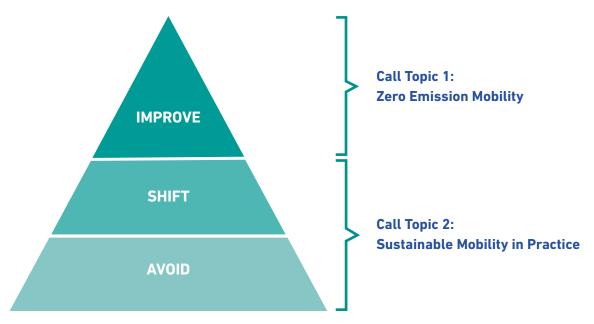


Figure 1: Pyramid of climate-neutral, sustainable mobility (see Mobility Master Plan 2030)

Table 1: Call overview – thematic areas and funding instruments

Thematic areas and financing instrument	Flagship Project Large-scale research and demonstration project	Cooperative R&D Project Cooperative research and development project	R&D Service Specified R&D content
Thematic area 1.1: Zero Emission Vehicles	Applicable	Applicable	Not applicable
Thematic area 1.2: Zero Emission Infrastructure	Applicable	Applicable	Not applicable
Thematic area 1.3: Integrated System Solutions for Vehicles and Infrastructure	Applicable	Applicable only in research category "Experimental Development"	Not applicable
Thematic area 1.4: Accompanying Research Projects for EBIN and ENIN	Applicable	Applicable	Not applicable
Thematic area 1.5: Demonstration of Zero Emission Special Vehicles in Real Operation	Applicable	Applicable	Not applicable
Thematic area 1.6: Retrofitting of Electric Vehicles	Not applicable	Not applicable	Applicable
Thematic area 2: Sustainable Mobility in Practice	Not applicable	Not applicable	Applicable

Table 2: Information about funding instruments

Information	Flagship Project Large-scale research and demonstration project	Cooperative R&D Project Cooperative research and development project	R&D Service Specified R&D content
Research category	Industrial Research and/or Experimental Development Both research categories can be included in one project; Industrial Research must not exceed 30% of overall project costs. If both research categories are included, the individual Work Packages (WP) must be assigned to the corresponding research categories.	Industrial Research or Experimental Development	Not relevant
Min. funding requested for R&D part of the project	EUR 2 million.	None	None
Max. funding/financing for R&D part of the project	None	EUR 1 million	See relevant call topic
Funding rate	Max. 85%, depending on research category and type of organisation. For details, see Guidelines for the relevant funding instrument.	Max. 85%, depending on research category and type of organisation. For details, see Guidelines for the relevant funding instrument	No funding rate. 100 % financing
Project duration	2 to 4 years	1 to 3 years	See relevant call topic
Cooperation required	Yes	Yes	No

Table 3: Budget, deadlines, contacts and further information

Further information	Details
Available call budget	EUR 9 million
Obligatory preliminary meeting	A preliminary meeting until 6 September 2024 is obligatory for flagship projects and voluntary for cooperative R&D projects (see Chapter 4.2).
Submission deadline	2 October 2024, 12:00
Language	Cooperative projects and flagship projects: English R&D services: German
Contact	Dr. Andreas Fertin Telephone: +43 5 7755-5031 E-Mail: andreas.fertin@ffg.at Dr. Johannes Fritzer Telephone: +43 5 7755-5032 E-Mail: johannes.fritzer@ffg.at
Online information	FFG Website for Zero Emission Mobility

2.0 The Funding Programme

2.1 Reorientation of the programme

The global climate crisis requires rapid responses and timely reductions in greenhouse gas emissions (GHG). In Austria, GHG have risen since 1990, generated particularly in the transport sector. With the Mobility Master Plan 2030 for Austria, the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) has presented a new climate protection framework for the transport sector, outlining how the mobility turnaround can succeed by adopting the principle of "Avoid, Shift, Improve".1

Consequently, a bundle of different measures is needed, each using different levers.

To structurally embed this approach in the funding landscape and create a holistic perspective, the previously separate funding programmes have been merged into a joint call in 2024.

Taking a **systemic perspective** is highly relevant for call topic 1 – projects should not primarily focus on individual aspects but address the **system integration** of the technologies developed or entire value chains. They should also demonstrate Austrian technology expertise and innovative system design strengths in the field of electric mobility by drawing on the expertise of complementary partners.

The aim of projects in call topic 2 is to make a relevant contribution to overcoming the hurdles and barriers on the pathway to broad implementation of sustainable forms of mobility as effectively, efficiently and quickly as possible.

2.2 Strategic goals of the programme

The aim is to contribute to achieving the goals formulated in the Government Programme 2020–2024, including climate neutrality by 2040 and the associated decarbonisation of road transport. The long-term vision for the future of transport is "clean mobility", especially e-mobility in combination with public transport and other alternative modes of transport (cycling and walking). Intelligent, integrated mobility concepts and the efficient provision of energy from renewable energy sources are essential to reach this goal. The mobility transition will not only make a significant contribution to achieving climate protection targets, but will also create and secure jobs in the long term, and support the international, pioneering role of Austrian technology.

The Zero Emission Mobility plus programme is a driver and trailblazer for the expansion of electric mobility and other sustainable forms of transport in Austria. It will consider the different forms of mobility not in isolation, but as part of a system, to create the most effective incentives possible for moving away from fossil-fuelled mobility.

The overarching objectives of the programme are to develop traffic avoidance concepts; to switch journeys in fossil-fuelled vehicles to journeys taken by electric vehicles and/or other sustainable modes of transport (public transport, walking and cycling); as well as to help reduce overall vehicle ownership, for example through sharing projects. All forms of mobility must be powered by renewables.

In Austria, zero emission technologies are embedded in an **intermodal mobility system** made up of trains, electric utility vehicles, buses and cars as well as electric scooters and (e-)bikes on the basis of smart grids and the necessary fuelling and charging infrastructures. The Zero Emission Mobility programme aims to support the development of solutions for the creation of an affordable, environmentally-friendly and efficient mobility system. Relevant project results include both innovative technology developments and integrated mobility solutions offering perspectives of short-term implementation and value creation for Austria.

¹ www.bmk.gv.at/themen/mobilitaet/mobilitaetsmasterplan/mmp2030.html

In order to achieve sustainable development, framework conditions must be established for a mobility transition which creates a decarbonised, service-oriented transport system. In line with ensuring the Climate and Energy Fund's policy of achieving greatest possible relevance in terms of climate protection, the programme follows the decarbonisation pathway by setting a technology neutral focus on locally emission-free vehicles (BEV, FCEV, HICEV only for thematic areas 1.1. & 1.5., as specified there).

This call pays particular attention to gender and diversity. The project selection process will examine closely whether the submitted projects analyse and consider the mobility needs and behaviour patterns of women², people with a migration background, and people with disabilities³. The Climate and Energy Fund attaches great importance to equity and equal opportunities, ensuring that the solutions developed are universally applicable to guarantee a just and successful mobility transformation.

2.3 Interaction with other funding programmes

Distinction from thematically relevant programmes

Funding for research and development projects involving components and parts of conventional vehicles is granted under the General Programmes of the Austrian Research Promotion Agency (FFG).

The BMK's "Mobilitätswende 2024/1 - Mobilitätstech-nologie" call addresses the development of components for alternative drive systems, lightweight components and vehicles as well as automotive electronics. The focus, however, is not on electric mobility infrastructure or demonstration projects.

Links to other calls:

- The Federal Ministry for Climate Action (BMK) and the Climate and Energy Fund have established the Climate Neutral City mission, which enables Austrian cities to implement their climate and energy goals more quickly. Comprehensive research and accompanying measures help to sketch out, develop and then demonstrate the path to climate neutrality.
- The Electric Mobility Initiative launched by the BMK in cooperation with the automobile and two-wheeler importers seeks to accelerate the market introduction of electric mobility in Austria. Infrastructure and vehicles which are not part of research and development should primarily receive funding under the Electric Mobility Initiative. Applications are to be submitted directly to Kommunalkredit Public Consulting (KPC). An exception are demonstration facilities (according to Environmental Assistance in Austria UFI, as amended). These demonstration facilities can be submitted to the present call provided that they are directly related to research and development activities (for more information, see Chapter 5.4).
- The EBIN (zero-emission buses and infrastructure) and ENIN (zero-emission commercial vehicles and infrastructure) programmes focus on converting bus and commercial vehicle fleets to zero-emission.
- The LADIN programme provides funding for the establishment of publicly accessible charging infrastructure in the form of fast charging stations and upstream infrastructure for passenger cars and utility vehicles in currently underserved areas along

² Gender is defined here as "the system of socially defined roles, privileges, characteristics, and relationships between men and women that are learned and not biologically determined". Gender is a social construct, and therefore gender descriptions are a dynamic concept that depend on time, space, and context. Here, therefore, women* are recognised as all persons socialized as female.

³ For inspiration, see e.g.."Daten & Diversität in der Mobilität 2024", P&I (2024), "Gender & Mobilität, Herausforderungen und Grenzen beim Messen des Unterwegs-Seins von Menschen aus einer Gender-Perspektive", Bente Knoll (2016), "Positionspapier zum Stand der Mobilitätsforschung in Österreich aus der Genderperspektive" WIMEN (2013).

- the low-level road network.
- The BMK's Logistics Funding Programme 2024–2028 focuses on the (pilot) implementation of innovative logistics concepts for all modes of transport. The funding programme is designed to increase the competitiveness of the Austrian freight transport and logistics sector, to enhance Austria's attractiveness as a business location and to safeguard social and ecological sustainability. Funding is provided for implementation studies, demonstrators and pilot projects which are carried out in close cooperation of (logistics) companies, public authorities and other stakeholders (more information on logistics funding can be found on the SCHIG Website).

Potential applicants are encouraged to examine the programmes and initiatives listed above and to organise a meeting with the relevant project managers in good time.

3.0 Call Topic 1: Zero Emission Mobility

3.1 Call objectives for research projects

The clear focus in this call topic is on zero emission mobility (with the exception of air and sea transport) with a special emphasis on near-market research **consortium** projects with integrated demonstration and a clear implementation perspective. The calls are mission-oriented and technology neutral and focus on two pillars, vehicle and infrastructure. User aspects may be addressed as an additional pillar, but only when priority is given to the vehicle and/or infrastructure level.

Zero emission technologies are also of high economic relevance for Austria. Electric mobility alone has the potential to increase value added by around 19% and the number of jobs by around 21% until 2030. Realising this potential requires a fast and targeted transformation of the (automotive supply) industry. The most effective way to do this is to coordinate with international suppliers and clients. Another focus of the programme is therefore on the international relevance and exploitation potential of the technologies developed. With Austria's economic structure in mind, the programme places strong emphasis on the involvement of small and medium-sized enterprises and actively promotes the integration of start-ups and the establishment of new businesses.

The current call focuses on the goal of 100% vehicle electrification (batteries, fuel cells, high-performance capacitors, no internal combustion engine; with the exception of thematic areas 1.1 and 1.5, as specified there) as well as the development and testing of intelligent charging infrastructure. The focus lies on projects with a systemic perspective, i.e., not on individual aspects, but rather the system integration of existing technologies.

The call focuses on systemic technological solutions for vehicles and infrastructure. User aspects may be addressed, but only when priority is given to the vehicle and/or infrastructure level. Material aspects of the planned call are sector integration (power grid) and the intelligent integration of solutions into a connected transport system.

Relevant project results include both innovative systemic technology developments and integrated mobility solutions providing value creation perspectives for Austria. Accompanying research projects for the EBIN and ENIN programmes are also of interest. Special emphasis is placed on the scalability of solutions and the integration of existing components into novel zero emission developments.

Call topic 1 thus focuses on five thematic areas to obtain these results:

- 1. Zero Emission Vehicles
- 2. Zero Emission Infrastructure
- 3. Integrated System Solutions for Vehicles and Infrastructure
- 4. Accompanying Research Projects for EBIN and ENIN
- Demonstration of Zero Emission Special Vehicles in Real Operation

In order to achieve high practical relevance and fast implementation of research results on the market, partners from industry should be encouraged to **participate in the consortia**. A further objective of the call is to involve small and medium-sized enterprises (SMEs) or start-ups as well as including international partners and/or networking with major existing initiatives and projects, where feasible (see also Chapter 2.3).

3.2 Thematic areas for research projects

Project proposals must address at least one of the following thematic areas and may include a combination of several areas. It is recommended that cooperative R&D projects should focus on only one thematic area.

The applications must fulfil the requirements described below.

3.2.1 Thematic area 1.1: Zero Emission Vehicles

While zero emission technologies are penetrating the passenger car market at increasing speed, many other vehicle classes and areas of application still offer potential for development. In principle, this includes all vehicles specified in Sec. 3 of the Motor Vehicles Act (§ 3 KFG), such as vehicles used in

- · the logistics sector,
- road-based passenger transport including new needs-based mobility services,
- the agriculture and the tourism sector,
- the municipal sector,
- airports and railway stations,
- the industrial sector,

and selected vehicles not covered by §3 KFG, including special-purpose vehicles and vehicles for special applications in the construction, mining or tourism industries or similar.

The development of new vehicle concepts and e-bikes, for example offering particularly attractive pricing or for a specific use, is also eligible for funding.

This thematic area, therefore, calls for the submission of projects which (further) develop locally emission-free vehicles that are fully electrically powered by batteries, fuel cells or high-performance capacitors. Projects must consider the vehicle as a whole and, where necessary, take account of special fuelling or charging infrastructure (in combination with thematic area 2 – Zero Emission Infrastructure). Flagship projects and cooperative R&D projects of the research category "Experimental Development" must include a demonstration phase in order to prepare a successful market launch and to demonstrate operational capability within the overall system of vehicles and infrastructure.

(Further) development should focus in particular on the potential to reduce costs and increase the efficiency of the system as a whole. Project proposals may also

address production aspects in preparation for serial production of batteries and other components in order to enable the efficient and cost-effective scaling up of production.

Operational demonstration must be based exclusively on electricity and/or hydrogen from renewable resources. The use of hydrogen in internal combustion engines is eligible for funding only where this is designed to replace conventional diesel engines with hydrogen engines, and only for autonomous mobile machinery and equipment not intended for road traffic and for special vehicles (HICEV which are not eligible for funding include vehicle categories M1, M2, M3, as well as N1, N2 and N3).

3.2.2 Thematic area 1.2: Zero Emission Infrastructure

The availability of suitable fuelling and charging infrastructure is a key prerequisite for the spread of zero emission technologies. In addition to the availability of appropriate charging capacity, the focus is primarily on cost-efficient installation, intelligent integration into the energy system and operation of the infrastructure.

Consequently, this thematic area calls for project proposals which either develop novel infrastructure systems or enhance existing solutions to integrate them in comprehensive infrastructure systems. The focus should be on the development of hardware solutions which may also include associated software aspects and can be tested and demonstrated for feasibility and scalability (for flagship projects and cooperative R&D projects of the research category "Experimental Development").

Particular attention is paid to **sector integration**, i.e. intelligently combining mobility-related aspects with other sectors such as energy production, storage and distribution. This integration is essential for developing the most economically efficient solutions for the future. In addition to the development and testing of technical solutions the call encourages the **integration of organisational issues and new business models**.

Planning and implementation must take into account the availability of the required energy (including hydrogen, stationary storage, second-life and vehicle-to-grid applications) as well as considering potential scalability at a later stage. Integration into an overall system in-

cluding operational demonstration (e.g. with photovoltaics, storage system, charging solutions and/or hydrogen and vehicle-to-grid applications) is welcomed. The economic sustainability of the development, and potential transition to regular operations must be demonstrated at the end of the project period.⁴

The involvement of grid operators is desired, e.g. in order to be able to simulate or test charging management systems and grid-friendly charging under real-world conditions. Only electricity and/or hydrogen from renewable resources may be used in the demonstrations. The use of hydrogen in combustion engines is not eligible for funding in this thematic area.

3.2.3 Thematic area 1.3: Integrated System Solutions for Vehicles and Infrastructure

System solution approaches ranging from energy production and infrastructure to the consumption of energy in the vehicle are essential for creating intelligent and coordinated mobility models.

The goal is to combine promising technical innovations to create credible systems and prepare them for market launch. The focus should be on application and user-oriented technological system solutions, both in and from Austria, i.e., projects relevant to transport and mobility which stand out due to their technical and organisational system perspective, degree of innovation, extent to which they incorporate innovations, or their competitive edge.

Seen in this context, the projects should not focus primarily on individual features, but instead consider the integration of developed technologies or entire value chains into systems. In addition, projects should draw on the know-how offered by complementary partners to visibly demonstrate Austrian technological expertise and innovative system design in the field of electric mobility.

Therefore, this thematic area calls for project proposals that combine novel vehicle technologies and/or infrastructure systems (see thematic areas 1 and 2) with application and user-oriented technological system solutions, or enhance existing solutions. The focus should be on developing complete system solutions which are already close to market. For that reason,

funding will only be given to flagship projects and cooperative R&D projects in the "Experimental Development" research category.

Only electricity and/or hydrogen from renewable resources may be used in the demonstrations. **The use of hydrogen in combustion engines is not eligible for funding.**

3.2.4 Thematic area 1.4: Accompanying Research Projects for EBIN and ENIN

Electrifying public transport services and freight transport will make an important contribution to achieving climate neutrality by 2040. Therefore, the two following funding programmes will continue in 2024:

- EBIN Zero emission buses and infrastructure
- ENIN Zero emission commercial vehicles and infrastructure

These programmes are designed to initiate and accelerate the market ramp-up of zero emission buses and commercial vehicles. Due to the novelty of such vehicles, research questions have yet to be answered in many areas, paired with a lack of practical experience in planning and daily operation. Consequently, in addition to the investment funding noted above, this thematic area is open to research projects dealing with aspects such as the following:

- optimal design and use of (shared) infrastructure
- optimal incorporation of new vehicles into existing logistics concepts/workflows/operations
- necessary adaptations and enhancements to vehicle components
- scaling strategies for converting entire vehicle fleets to zero emission

Projects must contain an innovative technical component but may also develop and test social and/or organisational innovations (e.g., business and operator models).

Delimitation of the funding programmes and costs:

The research activities are eligible for funding under the Zero Emission Mobility (ZEM) programme and must be described in detail in the application. The investment costs for vehicles and infrastructure must be submitted to the EBIN or ENIN programme. This must be explicitly noted in the content description of the ZEM project. ZEM

⁴ Publicly accessible charging infrastructure must meet the requirements of the Federal Act establishing uniform standards for the deployment of alternative fuels infrastructure

projects and EBIN/ENIN may be combined, however, the applications will be assessed independently.

Where vehicles and infrastructure are essential to conducting the research project, a funding commitment from the EBIN or ENIN programme must be presented prior to the start of the project. Any additional KPC funding will be applied for and assessed together with the ZEM project.

Costs or partial costs which have already been funded will not be recognised. If you have applied to the FFG or other funding bodies for this project or parts of this project, the relevant information must be provided in eCall. Only electricity and/or hydrogen from renewable resources may be used in the demonstrations. The use of hydrogen in combustion engines is not eligible for funding in this thematic area.

3.2.5 Thematic area 1.5: **Demonstration of Zero Emission Special** Vehicles in Real Operation

Building on previous findings, existing technologies and solutions, as well as pilot projects, the aim is to test zero emission vehicles, special vehicles, and autonomous construction and other machines under real operating conditions, and to develop them further until ready for market launch. To this end, the call supports research projects with a demonstration or implementation character. It is intended that once successfully completed, Zero Emission Mobility plus projects should be continued and demonstrated on a large scale. The aim should be to transition to regular operation after conclusion of the funded project. The focus lies in demonstrating, testing and validating new or improved products, processes and services in an environment representative of real operating conditions. The adaptation and further development of existing solutions to meet different regional conditions (e.g., in a city or along a transport link) is also eligible for funding. The project must significantly enhance the current state of knowledge/technology, and represent an innovative leap from previous projects and demonstrations.

It is essential to demonstrate potential for timely market launch and significant growth after the funding period has ended, as well as a viable business model. This must be presented accordingly in the application. This call does not include the (large-scale) rollout of charging or refuelling infrastructure which cannot be realised in the near future. Only electricity and/or hydrogen from renewable resources may be used in the demonstrations. The use of hydrogen in internal combustion engines is eligible for funding only where this is designed to replace conventional diesel engines with hydrogen engines, and only for autonomous mobile machinery and equipment not intended for road traffic and for special vehicles (HICEV which are not eligible for funding include vehicle categories M1, M2, M3, as well as N1, N2 and N3).

3.3 General requirements for research projects

The proposal must specify the measurable and quantifiable targets to be met by the end of the project.

In addition, **ecodesign principles** must be applied when further developing vehicle and/or infrastructure components. The environmental impacts must be taken into account across the entire product life cycle (from design and use through to recycling, reuse, disposal etc.) and minimised as far as possible. This approach must be applied to the main components of the cooperative R&D projects and flagship projects submitted.

If the project focuses on the further development of battery concepts, the aims of <u>Regulation (EU) 2023/1542 (EU Battery Regulation)</u> should be taken into account, in particular:

- declaration of the carbon footprint of the battery
- at least partial use of recycled materials (e.g. lithium and cobalt)
- compliance with the OECD Due Diligence Guidance for raw material extraction and risk assessment of potential negative environmental effects (Art. 39)
- the concept should include measures that enable a high recycling rate or second life use.

The cooperative R&D projects of the research category "Experimental Development" and flagship projects submitted for thematic areas 1.1 to 1.3 are required to complement the research and development work with a **demonstration component**.

The project developments (prototypes, systems, etc.) must be tested under real-world operating conditions during a demonstration phase running over a period of at least **six months**. Only electricity and/or hydrogen from renewable resources may be used in the demonstrations.

A monitoring system must be established to determine whether the prototypes achieve the target values and to identify areas offering potential for further improvement. The potential transition to regular operations should also be presented.

The fuelling and charging infrastructure installed should, as far as possible, be made accessible to other transport infrastructure users during the demonstration phase.

SMEs should be included in the project consortium in order to involve them as potential technology providers. Therefore, project proposals should demonstrate the inclusion of innovative SMEs or start-ups, to an extent over and above the formal requirements of the funding instruments (indicators: number of SMEs, SME share in project costs, knowledge transfer to SMEs).

3.4 R&D Service

3.4.1 Retrofitting of electric vehicles

Current situation:

More greenhouse gas emissions (GHG) are generated in the process of manufacturing electric vehicles than in the production of conventional vehicles with combustion engines. Consequently, it is vital that the resources needed to manufacture electric vehicles are used efficiently for as long as possible. A forward-looking strategy consists of repairing or upgrading existing vehicles to the current state-of-the-art in order to extend their lifespan and minimise their environmental footprint.

Expected outcome:

The study should involve relevant stakeholders and address the following questions:

Market and profitability analysis

- What is the current and predicted availability of spare parts for electric vehicles (batteries, power electronics, electric motors, etc.)?
- What specific expertise (education, training, certifications, etc.) do specialist workshops require to exchange these components? Are the corresponding training and further education programmes available in Austria?
- What is the current and predicted availability of components for repairing electric vehicle parts (batteries, power electronics, electric motors, etc.)?
- What specific expertise (education, training, certifications, etc.) do specialist workshops require to repair these components? Are the corresponding training and further education programmes available in Austria?
- Austria's fleet of electric vehicles should be analysed according to the following categories:
 - Vehicle manufacturers & models
 - Battery technologies and ranges
 - Charging technology and charging capacities
 - Guarantees and warranties
 - Used car prices
- Existing studies should be used to analyse the durability of traction batteries. At the same time, the findings should be verified through extrapolation, based on SOH measurements of batteries from used vehicles.
- The results of the analysis should be used to estimate the overall potential for exchanging or repairing traction batteries.

- The results of the analysis should be used to estimate the overall potential for exchanging or upgrading the charging technology.
- The results of the analysis should be used to estimate the overall potential for replacing or upgrading vehicle components to increase energy efficiency (e.g., by upgrading the heating system to a heat pump).
- An analysis of the economic efficiency of replacing these vehicle components (traction battery, charging technology, components to increase energy efficiency) outside the guarantee and warranty periods should be conducted.
- What are the main requirements of Regulation (EU) 2023/1542 with respect to batteries and waste batteries when retrofitting electric vehicles?
- The current role played by automated battery exchange systems should also be examined. How can the systems be classified within the context of the study?
- What are the challenges involved in type approval for retrofitted vehicles and how can they be solved?
 Which warranty obligations or guarantees are relevant here?
- What are the requirements for training or retraining employees in the specialist workshops? Are new training courses needed/how should existing training courses be supplemented? What are the requirements for equipping specialist workshops in terms of workplace safety and fire protection?
- What is the potential for vehicle retrofitting to create added value and employment in Austria?

Analysis of best practice examples (international)

- What are the international best practice examples (retrofitting electric vehicles) and what findings are most relevant for Austria?
- What are the problem areas or fields of action related to retrofitting electric vehicles and how are these dealt with in the best practice examples?

Role of the public sector

- Is international funding for retrofitting electric vehicles already available?
- What criteria should be considered for future funding?
- What main measures should be taken by the relevant competent bodies (Europe, federal ministries and local authorities and other national stakeholders) to accelerate the practice of retrofitting electric vehicles in light of the findings? What is the relationship between retrofitting and recycling?

Focus of the work:

The focus of the study is to determine the status quo and future potential of retrofitting electric vehicles (especially classes M1 and N1). There should be close coordination with the relevant stakeholders (including specialist workshops), interest groups and OLÉ (Austria's control centre for electromobility). The results of the ConVErT study should also be considered to avoid overlaps.

The study is not intended to be purely a survey of the economic and climate-relevant potentials.

The study should involve at least three advisory board meetings, coordinated with the BMK and OLÉ..

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 8 months

Report language:

German, summary in German and English

Project costs:

Max. EUR 60,000 plus VAT (if applicable)

4.0 Call Topic 2: Sustainable Mobility in Practice

The call is for projects that break down existing barriers to establishing sustainable forms of mobility. Projects must address the goal of "avoiding" and "shifting" traffic.

Call topic 2 focuses, above all, on the following points which are explained in more detail below: designing a nationwide bike sharing service; multi-use roads outside urban areas with a single two-way centre lane ("2-1 road"); mobility certificates for residential locations; developing an Austrian definition of transport and accessibility poverty (at the interface with the EU Commission's Social Climate Fund); and a transparency tool for sharing services in municipalities.

4.1 R&D Services

4.1.1 Design of a nationwide bike-sharing service in Austria

Current situation & challenge:

Shifting journeys made in passenger cars to eco-friendly alternatives is a measure in the 2030 Mobility Master Plan designed to help achieve climate neutrality in the transport sector.

This involves managing the last mile, especially in areas with reduced public transport. Combining public transport and bike sharing is a particularly suitable solution in this scenario.

Currently, bike sharing services are only available in a few Austrian provinces and cities where they are provided by a range of different operators. To ensure the full impact of measures on intermodal routes, it makes sense to offer bike sharing at public transport stops throughout Austria and allow them to be booked via one (or more) platforms (cf. Sharing Strategy 2023, Action 6).

Challenges include fragmented responsibility for financing and operating bike sharing systems, including different rates, terms of use, and booking platforms. With the large number of individual initiatives, there is no holistic vision for a potential nationwide bike sharing

network or shared criteria that must be met to achieve the targets set for the shift to eco-friendly mobility.

Goal:

The overarching goal is to design a nationwide bike sharing service, accessible at public transport stops throughout Austria, to make public transport more appealing in general and provide attractive transport services for the first and last mile. The services currently provided by existing operators should be incorporated.

Expected outcome:

The project outcome should be a nationwide bike sharing network for Austria in different expansion stages, an assessment of its potential level of use, and a detailed implementation strategy.

Legal and strategic framework:

Mobility Master Plan for Austria 2030 Sharing Strategy 2023

Focus of the work:

- Provide an overview of existing and planned bike sharing systems (incl. rates/software/hardware, etc.)
- Develop criteria for the deployment of bike sharing systems (where does it make sense?)
- Develop the principles and a set of criteria for an Austria-wide bike sharing network: types of stops, catchment radii, existing offerings, source-destination relationships, etc.
- Estimate the additional bike sharing offerings required throughout Austria.
- Quantify sharing stations and their equipment in expansion stages: sharing station typology, including minimum standards, estimated fleet composition (drives, vehicle types) by location.
- Spatial mapping of the Austria-wide bike sharing network in expansion stages, taking into account the availability of bicycles at the public transport stops and the supplementary network.
- Impact assessment, potential use, and possible rebound effects.
- Estimate total costs throughout Austria, as well as the cost recovery rate (or, conversely, the need for public sector subsidies).

 Suggest how to manage and integrate existing and future bike sharing offers, proposal for uniform terms of use, recommendations for possible rate/pricing models.

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 18 months

Project costs:

Max. EUR 100,000 plus VAT (if applicable)

Multi-use roads outside urban areas with a single two-way centre lane ("2-1 road")

Current situation & challenge:

Austria has around 107,000 km of roads outside residential areas on which cycling is generally permitted. Of the approximately 7,500 km of main roads outside urban areas (functional road class 1-3, most of which are classed as B and L roads in Austria), only around 1,900 km are equipped with safe cycling infrastructure, either on the road or running parallel to it. The Austrian guidelines and regulations for roads (RVS) 03.02.13 (cycle traffic) provide for the use of multi-use roads with a single two-way centre lane of less than 4.5 metres ("2-1 road") only up to a maximum permissible speed of 30 km/h. This means that, according to the current Austrian guidelines, the use of 2-1 roads outside urban areas is not permissible. The experience gained in a pilot project in Germany (protected cycle lanes outside urban areas), the first use cases (see Baden-Württemberg) and other international projects should be used to determine the practicality and possible limits inherent in the 2-1 road for at least three temporary test sections in Austria (West, East, South), including corresponding recommendations (e.g., ground markings, speed limit, etc.). The selection of test sections (length, vehicle frequencies) should deliver representative and valid results to ensure transferability. An acceptance and conflict analysis of the different road users, including car drivers, cyclists, drivers of (agricultural) commercial vehicles, should accompany the test sections and be representative for all of Austria. The possible effects (construction cost savings, avoidance of surface sealing, change in accident numbers, change in travel times, health benefits, etc.) should be calculated based on application limits in the case of Austria-wide implementation. It is believed that 2-1 roads will have

implementation advantages (costs, time) over structurally separate cycle paths, which is an important factor in light of the need to expand cycling networks outside urban areas to meet the European climate and energy targets in transport.

Goal:

Piloting 2-1 roads on at least three road sections in Austria is designed to evaluate international experiences and implementation in Austria with corresponding application limits. Furthermore, the acceptance and impact analysis should indicate the potential for implementation, as well as advantages and disadvantages for Austria.

Expected outcome:

Pilot application of multi-use roads with a single twoway centre lane of less than 4.5 metres on three test sections in Austria (West, East, South). International experience and the pilot results will be used to provide recommendations for application/non-application for the Austrian road guidelines and regulations. Possible effects are to be calculated based on application limits in the case of Austria-wide implementation.

Legal and strategic framework:

Cycling Master Plan Road Traffic Regulations, Road Marking Ordinance RVS 03.02.13, RVS 03.04.12

Focus of the work:

- Temporary pilot application on three sections of road in Austria.
- Determine the application limits and possible application areas in Austria in the form of recommendations for the guidelines.
- Conduct an acceptance and conflict analysis among road users.
- Calculate the impact in the case of Austria-wide application.

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 18 months

Project costs:

Max. EUR 100,000 plus VAT (if applicable)

4.1.3 Mobility certificate for residential locations

Current situation & challenge:

Around three quarters of all journeys begin or end at home. Consequently, choice of residential location has a very significant and long-lasting impact on personal mobility costs and the consumption of transport resources. The effects of spatial development on the choice of transport modality have been sufficiently researched, and tools are already available for planners (see Mobility Certificate for Settlements). The effects of residential choice on expected heating costs are also clearly visible in the form of the mandatory energy certificate (EU Building Directive). However, expected energy expenditure/resource costs for households due to car dependency is not yet available in a standardised form for those searching for residential property. One challenge lies in applying meaningful key figures (costs vs. energy consumption) when using existing data. Another challenge for the project is to consider different means of transport and household types as an aid in decision-making, as well as weighing the advantages and disadvantages of a dynamic versus a static mobility certificate.

Goal:

Developing and applying a methodology for mobility certificates for residential locations modelled on the energy efficiency rating scheme of energy performance certificates (class A++ to class G), with the option of extending the mobility certificate to commercial premises. Working with an Austria-wide real estate platform to apply the methodology in a pilot project for residential locations.

Expected outcome:

Publishable description of the method (OGD) for determining the key parameters in the mobility certificate for residential locations, including underlying assumptions (e.g., different profiles of transport mode choice) as well as nationwide pilot application on an Austrian real estate platform. Recommendations for extending the method to include commercial premises.

Legal and strategic framework:

Mobility Master Plan for Austria 2030 ÖREK Partnership Platform "Spatial Development & Transport"

Focus of the work:

- Analysis of potential parameters for the mobility certificate and their advantages and disadvantages, taking into account the existing literature or existing tools (public transport class, Bike&Ride accessibility, Austrian accessibility model, etc.).
- Pilot application on an Austria-wide real estate platform with optional testing between dynamic and static mobility certificates.

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 12 months

Project costs:

Max. EUR 100,000 plus VAT (if applicable)

4.1.4 Development of an Austrian definition of accessibility and transport poverty at the interface with the EU Commission's Social Climate Fund

Current situation & challenge:

According to the erREICHbar⁵ (Accessible) project, around 6% of Austria's population is affected by transport poverty (no figures are available for companies, especially micro-enterprises and one-person companies). In order to take appropriate countermeasures, a generalised definition of transport poverty is required. This must include not only the financial situation of those affected, but also the ease of access to basic daily needs (housing, work, education, access to supplies, recreation, social contacts).

The concept of transport poverty has not yet been precisely defined. It remains vague and needs to be developed. In its Regulation (EU) 2023/955 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060, the EU Commission defines transport poverty as "individuals' and households' inability or difficulty to meet the costs of private or public transport, or their lack of or limited access to transport needed for their access to essential socioeconomic services and activities, taking into account the national and spatial context".

Subsequently, a differentiation according to target groups must be made:

- "Vulnerable transport users" means individuals and households in transport poverty that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from road transport within the scope of Directive 2003/87/EC and lack the means to purchase zero- and low-emission vehicles or to switch to alternative sustainable modes of transport, including public transport;
- "Vulnerable micro-enterprises" means micro-enterprises that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from buildings or road transport within the scope of Directive 2003/87/EC and that, for the purpose of their activity, lack the means either to renovate the building they occupy, or to purchase zero- and low-emission vehicles or to switch to alternative

sustainable modes of transport, including public transport, as relevant.

Most of the planned measures can only be implemented where financial resources are allocated by the provinces or municipalities. To this end, municipalities in rural areas need recommendations on the most sensible and also affordable measures for improving access to essential services, and the improvements that can be achieved through planning specifications

Expected outcome:

Development of a national definition of "transport poverty" or "accessibility poverty" which considers existing legal framework conditions based on relevant projects that have already been implemented (especially projects "erREICHBAR" (Accessible), "Von allem genug, von nichts zu viel" (Enough of everything, for everyone) etc.). It should be based on the multidimensional definition of energy poverty (see: kea.gv.at/infothek/infos-zu-energiearmut/)

- Proposed acceptable limits for expenditure of available income (individuals, private households, micro-enterprises) to cover access to basic daily needs (e.g., max. share of income for mobility in euros)
- Proposed acceptable limits for effort to access basic daily needs (e.g., max. acceptable distance or travel time to access basic daily needs)

Goals:

The results will be used to create a factual basis for use in subsequent funding programmes on transport and accessibility poverty.

The methodology cannot and should not be developed as pure desk research, but in coordination and discourse with relevant stakeholders from the fields of administration (BMK, BMGSPK, BMF, Statistics Austria), civil society (Ökobüro, Armutskonferenz, Caritas, Volkshilfe), business (Austrian Economic Chamber - WKÖ) and research & development (university institutions, various relevant national and international RTI projects).

Framework conditions:

The contracting authority and the responsible BMK department must be involved in the work on a regular basis, including coordination rounds. Furthermore, it is

⁵ Link: nachhaltige-mobilitaet.at/projekte/erreichbar-soziale-und-raeumliche-abschaetzung-oesterreichs-betroffener-von-mobilitaetsarmut/

⁶ nachhaltige-mobilitaet.at/projekte/erreichbar-soziale-und-raeumliche-abschaetzungoesterreichs-betroffener-von-mobilitaetsarmut/

⁷ oekobuero.at/files/1132/hintergrundpapier_empfehlungen_von-allem-genug_armutskonferenz_oekobuero_2024.pdf

expected that the development of the methodology will be successively synchronised with activities at the European level. In addition, the study should also consider developments in other European countries.

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 12 months

Project costs:

Max. EUR 80,000 plus VAT (if applicable)

4.1.5 Transparency tool for sharing services in municipalities

Current situation:

In many expert circles and among local policy-makers there is limited understanding of how to optimally exploit the potential of shared transport and how sharing systems and ride-sharing platforms can be implemented. In addition, municipalities and businesses often lack the necessary human resources.

This also applies to the need for sharing services to be transparent; a lack of transparency sometimes makes them extremely difficult to compare. Without being transparent and comparable, it is difficult, especially for municipalities, to choose the option that best suits their needs

Goals:

The aim of this project is to develop a comparison tool based on clearly defined key performance indicators (KPIs) which will function as a decision-making aid.

In addition to KPIs from the literature and existing research and development projects, this comparison tool must be based on the results of real-life examples that have already been implemented, and at the same time present these best practice examples as references to ensure the broadest possible impact. Lack of clarity and differences at the regional level must be included and noted as far as possible.

The comparison tool should enable municipalities to conduct an initial assessment quickly and simply, to determine which individual solution best meets their needs and capabilities.

Expected outcome:

- Development of a web-based comparison tool prototype for sharing services based on objective and comparable KPIs.
- A link must be established with national best practice examples and data from real-life operations.

The contracting authority specifically requires substantive exchanges with the "Leitfaden Carsharing" (Guide to Car Sharing) project, which was launched in 2024.

Legal basis:

Exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018)

Project duration:

Max. 12 months

Project costs:

Max. EUR 80,000 plus VAT (if applicable)

5.0 Administrative Information

5.1 Call documents

Projects may only be submitted electronically via the FFG's <u>eCall</u> system.

The proposal consists of the following online elements, which must be entered in $\underline{\text{eCall}}$ under the following menu items:

- Description of content presents the content of the project.
- Work plan includes the work packages and elements of project management, such as time management plan (GANTT diagram), tasks, milestones, results.
- Consortium describes the expertise of the individual consortium members.
- Cost and financing describes all cost categories per consortium member. The totals for each work package will be automatically displayed in the online work plan.

Attachments to the online proposal, if applicable.

When applying for environmental funding from KPC, the following additional attachments must be uploaded (details see Chapter 5.4):

- Project description UFI
- Cost plan UFI

Please use the templates and call documents provided for download on the <u>FFG Zero Emission Mobility</u> website.

The funding conditions, application procedure and funding criteria are described in the **Guidelines of the relevant funding instruments** (see links in the table below).

Call documents

Flagship Project	Guidelines for Flagship Projects (PDF) Declaration of SME status (if required) (PDF)*
Cooperative R&D Project	Guidelines for Cooperative R&D Projects (PDF) Declaration of SME status (if required) (PDF)*
General Cost Regulations	Cost Guidelines 3.1 (Guidelines for the Accounting of Project Costs) (PDF)
R&D Service	Guidelines for R&D Services (German) (PDF) Affidavit (eCall) Declaration of Commitment (eCall) Model Contract (German) (PDF)

Please note: A Declaration of SME Status is required for associations, sole proprietorships and foreign companies. In the template provided, applicants must (as far as possible) categorise their business for the last three years according to the SME definition...

5.2 Obligatory preliminary meeting for all flagship projects

In order to clarify stipulations and requirements, the submission of a flagship project requires an obligatory preliminary meeting with the Climate and Energy Fund, the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) and the Austrian Research Promotion Agency (FFG) by 6 September 2024 at the latest. Applicants are requested to contact the FFG in due time to arrange a date for the meeting. The preliminary meeting is necessary to provide optimal support to the applicants in preparing their project proposals. Preliminary meetings are therefore also recommended for cooperative projects. Applications for flagship projects submitted without having conducted a preliminary meeting will be rejected for formal reasons. If the proposal also includes an application for funding according to Chapter 5.4, the meeting will also be attended by Kommunalkredit Public Consulting (KPC), or a separate meeting must be arranged with KPC (see Chapter 5.4).

5.3 R&D Service

Please note that the procurement of research and development services (R&D Services instrument) falls under the exemption provision of Sec. 9(12) of the Public Procurement Act (BvergG 2018) and is thus subject to a tendering process. The Climate and Energy Fund is the contracting entity for the R&D Services instrument. The FFG funding agency acts in the name and for the account of the Climate and Energy Fund.

By submitting a tender, the tenderer accepts the content of the present Guide and all other relevant call documents in their entirety.

If a (sub-)contractor is mentioned in several tenders (multiple participation), the respective tenders will be excluded from the tendering process if it can be assumed that this multiple participation leads to a restriction or distortion of competition.

The Climate and Energy Fund holds the non-exclusive exploitation rights to the project results obtained in the course of the R&D services. The copyright shall remain unaffected. The Climate and Energy Fund is entitled to publish all project results to maximise the multiplier effect of the projects

Supplementary information

Requests for supplementary information about the R&D service tendered shall be sent **exclusively** by email to the FFG (mobilitaet@ffg.at) no later than 21 days prior to the submission deadline, specifying the sender address (email). The questions will be collected and answered in an anonymised form no later than 11 days prior to the submission deadline. To ensure equal treatment, inquirers are asked to formulate their questions in such a manner that no conclusions can be drawn as to their identity. The questions and answers will be made available in the Download Center of the call. Requests for information cannot be sent after this date. The Climate and Energy Fund and the FFG will not comment on the evaluation of the tenders submitted during the tendering process.

5.4 Environmental funding managed by Kommunalkredit Public Consulting (KPC)

Projects that receive funding from the Climate and Energy Fund and include at least one Work Package qualifying as Experimental Development can also be managed by FFG in cooperation with Kommunalkredit Public Consulting (KPC). In this case, research activities receive funding from the FFG, while investments in demonstration facilities are supported by KPC based on the Funding Guidelines for Environmental Assistance in Austria (UFI), as amended. Both funding components are covered by the present programme. Demonstration facilities submitted for additional environmental funding from KPC under the Zero Emission Mobility programme must be of key importance to the relevant research project. The research and development activities must in turn constitute the prerequisite for the investment for which environmental funding is sought.

Demonstration facilities as specified in the Funding Guidelines for Environmental Assistance in Austria go beyond standard technologies. They serve to test and introduce new or substantially improved technologies and must be based on the research activities.

The expected environmental effect (reduction in air emissions, noise, hazardous waste or energy consumption, innovative supply of renewable energy) must be assessable and quantifiable as a prerequisite for funding. Funding can only be granted for the share of the investment which is directly necessary for, and contributes to, achieving the environmental effect. Costs that are not or only indirectly related to the environmental effect are not eligible for funding.

Funding is based on the environmentally relevant additional investment costs (eligible costs less any reference costs if the demonstration facility can be compared with a standard facility) according to the Funding Guidelines for Environmental Assistance in Austria. Later submission to other funding programmes and other funding agencies (Austrian federal development and financing bank AWS for business development funding; KPC for environmental funding) is possible subject to the relevant funding conditions if the project submitted to the present programme does not involve application for or granting of funding for demonstration facilities.

Obligatory preliminary meeting with KPC

If a project proposal also involves funding of a demonstration facility in accordance with the Funding Guidelines for Environmental Assistance in Austria, a mandatory advisory meeting with experts from FFG and KPC must be held **by 6 September 2024 at the latest**, unless KPC has already participated in the preliminary meeting mentioned in Chapter 5.2. Applicants are requested to contact the FFG to arrange a date for the meeting. The advisory meeting helps KPC experts to assess whether the planned investment is eligible for funding as a demonstration facility in the respective call. Environmental funding will not be granted if such an advisory meeting has not been held.

Application

Application shall be in the form of ONE project application which must be submitted to the FFG. The following documents must be uploaded as attachments in eCall:

- A detailed project description of the planned demonstration facilities to be funded by KPC. The additional specifications are designed to enable KPC to assess the demonstration parts and the expected environmental effects.
- A cost plan for the demonstration part.

The templates can be found in the Download Center of the call.

The following supplementary information is required:

- Cost of facility broken down into trades/items, assembly costs, planning costs.
- Quotations must be provided for third-party services (must be available by the date of the final accounts at the latest).

- Comprehensible description and quantitative prediction of the environmental effect; the environmental effect is shown by comparing the demonstration facility to the status quo or a reference plant producing the same output using conventional technologies (example: comparison of energy consumption [MWh/a] by energy source before and after the implementation of the demonstration facility).
- Presentation of the feasibility and market potential of the demonstration plant.
- Profitability analysis with operating costs and profits
 of the demonstration facility in comparison to the
 status quo or a reference plant.

If no information on the exact environmental effect and the costs of the demonstration facility is available on submission of the proposal, the applicant must provide reasonably substantiated estimates.

Procedure after project submission

Please consult the Guidelines of the relevant funding instruments (see Chapter 5.1) for more information about the project selection procedure following submission of the application. Projects involving applications for both R&D funding and environmental funding will additionally be sent to Kommunalkredit Public Consulting GmbH (KPC) for further processing. Experts from KPC will check compliance with the funding requirements and prepare a funding proposal for the investment cost portion.

If necessary, the relevant funding agency may contact applicants directly to request additional information. If the project receives additional funding from KPC, two funding contracts will be drawn up:

- FFG funding contract for R&D-related costs
- KPC funding contract for investment costs in accordance with the Guidelines for Environmental Assistance in Austria

Further information regarding environmental funding can be found on the <u>KPC website detailing the funding of other environmental measures</u>.

Eligible costs

Industrial Research FFG Experimental Development FFG **Demonstration Facility KPC** "Industrial Research" denotes planned "Experimental Development" denotes "Demonstration Facilities" as specified research or critical investigation to the acquisition, combination, formation in the Funding Guidelines for Environacquire new knowledge and abilities. and use of existing scientific, technical, mental Assistance in Austria (UFI) are The aim is to develop new products, economic and other relevant knowledge of a highly innovative character. They go procedures or services or to effect and abilities in the development of plans beyond standard technologies and serve significant improvements to existing or concepts for new, modified or improto demonstrate and introduce new or substantially improved technologies. products, procedures or services. ved products, procedures or services. This includes the creation of parts of It also includes, for example, other Demonstration facilities can only be complex systems necessary for indusactivities for the definition, planning funded by KPC under the Zero Emission trial research and in particular for the and documentation of new products, Mobility programme if they are directly validation of technological fundamenprocedures and services as well as the based on the research activities carried preparation of drafts, sketches, plans out as part of the project submitted. The tals. expected environmental effect can be and other documentation, provided these are not intended for commercial assessed and quantified. purposes. Investments immediately required for achieving the environmental effect are eligible for funding.

If the funded measure qualifies as an energy-saving measure in terms of end consumption according to the Federal Energy Efficiency Act (EEffG), it will be credited to the Climate and Energy Fund as a strategic measure according to Sec. 5(1)17 of the EEffG in proportion to the funding granted. Obligated third parties may claim the eligible measures (in whole or in part) only for the part of the project costs exceeding the funding granted by the Climate and Energy Fund. This applies in particular if the measures are transferred by the funding recipient to the third party for the purpose of allowing them for individual obligations according to Sec. 10 EEffG.

6.0 Legal Aspects

6.1 Data protection and confidentiality

The FFG is under a legal obligation to maintain secrecy concerning company and project information pursuant to Sec. 9(4) of the Austrian Research Promotion Agency Act (FFG-G, Federal Law Gazette BGBl. I No. 73/2004). External experts who are involved in the assessment of projects as well as Kommunalkredit Public Consulting GmbH (KPC) are also subject to confidentiality obligations with respect to company and project information.

Personal data will be processed pursuant to Art. 6 et seq. of the General Data Protection Regulation (EU) 2016/679:

- for compliance with legal obligations to which the FFG, KPC and the Climate Fund are subject (Art. 6(1) (c) GDPR,
- if no legal obligation exists, for the purposes of the legitimate interests pursued by the FFG, KPC and the Climate Fund (Art. 6(1)(f) GDPR), namely conclusion and processing of the funding contract and for control purposes.

This use may mean that the data must be transferred or disclosed in particular to bodies and authorised representatives of the Court of Audit, the Federal Ministry of Finance and the EU. There is also the possibility to obtain information from the transparency portal according to Sec. 32(5) of the Transparency Database Act (TDBG 2012).

All project applications submitted will only be forwarded to the persons responsible for the management of this RTI Initiative as well as to the programme owner. All persons involved are bound by strict confidentiality rules.

6.2 Legal basis

The following guidelines provide the legal basis for this

- Guideline of the Austrian Research Promotion Agency for the Promotion of Research, Technology Development and Innovation to Meet Social Challenges (FFG-Challenge-Richtlinie 2024-2026)
- <u>Funding Guidelines for Environmental Assistance in</u> Austria (UFI) as amended

The company size shall be established in accordance with the corresponding SME definition specified in EU competition law. More detailed information about the SME definition can be found on the <u>FFG Website</u>. All EU provisions shall be applicable as amended.

Research and development services shall be subject to the exemption provision of Sec 9(12) of the Public Procurement Act (BVergG 2018).

6.3 Funding/Financing decision

The Board of the Climate and Energy Fund makes the funding decision based on the recommendations of the evaluation panel.

6.4 Publication of funding decision

In the event of a positive funding decision, the Climate and Energy Fund reserves the right to publish the name of the funding applicants, the funding decision, the rate and amount of funding granted as well as the title and a brief description of the project in order to pursue the Climate and Energy Fund's legitimate interests to ensure funding transparency (Art. 6(1)(f) GDPR).

6.5 Open access – notes on publication

The projects funded under this Call and their results will be made available to the public in line with the general objectives and tasks of the Climate and Energy Fund as defined in Sec. 1 and Sec. 3 of the Climate and Energy Fund Act (KLI.EN-FondsG) and the special characteristics of the funding programme, which is specifically aimed at publishing project and contact data for the dissemination of project results, as well as the Recommendation of the European Commission (2012/417/ EU) on Open Access. The open access provisions do not apply to confidential information (e.g. related to patent applications). The funding recipient is obliged to ensure that the reports submitted to the Climate and Energy Fund for publication do not contain any sensitive data (Art. 9 GDPR) or personal data about criminal convictions and offences (Art. 10 GDPR). The funding recipient is also obliged to obtain all other approvals and consents from third parties (including but not limited to image rights) that are required for lawful publication by the Climate and Energy Fund and to indemnify and hold harmless the Climate and Energy Fund in this respect.

Since the dissemination of the project results is an essential purpose of this funding programme, the Climate and Energy Fund will publish these project results and project information in order to pursue its legitimate interest to ensure funding transparency and to fulfil the objectives of the Climate and Energy Fund (Sec. 1 and Sec. 3 of the Climate and Energy Fund Act, KLI.EN-FondsG) (Art. 6(1)(f) GDPR).

Visibility and easy availability of innovative results are essential to increase the impact of the programme. Where possible, all project results achieved under this RTI Initiative will thus be published and made available by the Climate and Energy Fund in accordance with the principle of open access. To be able to present the project results in a clear and comprehensible manner, instructions for public relations on projects funded under the call are made available in a Guide for Project Reporting and Public Relations, which also forms an integral part of the agreement.

7.0 Contact

Programme lead

Climate and Energy Fund

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Further funding opportunities

EBIN – Zero-emission buses and infrastructure

ENIN – ENIN – Zero-emission commercial vehicles and infrastructure

<u>LADIN – Charging infrastruktur</u>

Climate-neutral city mission

RTI Mobility Call, spring 2024

More women in science and technology with <u>FEMtech</u> Internships for female students:

Funding is provided for high-quality internships in companies and non-university research institutions with a focus on the mobility transition. You, too, can offer young female researchers an exciting introduction to applied research.

Funding agency for investment costs

Kommunalkredit Public Consulting GmbH

Türkenstraße 9, 1090 Wien DI Wolfgang Löffler, MSc Telephone: +43 1 31 6 31-220

Email: w.loeffler@kommunalkredit.at

www.public-consulting.at

Annex 1: Checklist for submission

The formal check serves to examine the funding and financing applications for accuracy and completeness. Please note: If the formal requirements are not met and the deficiencies cannot be corrected, the funding

or financing application will be excluded from the further procedure and will be formally rejected without exception in accordance with the principle of equal treatment of all applications.

Formal check - checklist for funding and financing applications

Criteria	Items checked	Can deficiency be corrected?	Consequence
Project description is complete and the correct language has been used.	The online Project Description form must be completed in full. Language: - English for cooperative R&D projects and flagship projects - German for R&D services	no	Rejection for formal reasons
Obligatory annexes have been attached.	If KPC funding is requested: UFI Project Description and Cost Plan have been submitted.	yes	Rectification via eCall after submission
The funding applicant is eligible to submit an application.	See Guidelines of the relevant funding instrument	no	Rejection for formal reasons
For consortia: The project part- ners are eligible to participate.	See Guidelines of the relevant funding instrument	no	Rejection for formal reasons
Minimum requirements for the consortium	See Guidelines of the relevant funding instrument	no	Rejection for formal reasons
Obligatory preliminary meeting for flagship projects	The obligatory preliminary meeting for flagship projects took place until 6 September 2024 at the latest.	no	Rejection for formal reasons

Annex 2: Criteria for hydrogen from renewables

The vehicles used for all projects and zero emission technologies must be powered exclusively by renewable energy. For hydrogen projects, it should be noted that the RED II Directive (EU) 2018/2001 stipulates strict criteria for qualifying hydrogen as renewable hydrogen. RED II already defines the basic requirements and conditions under which renewable fuels of non-biogenic origin, such as hydrogen, must be manufactured in order to count towards the RED II targets. Specific details, in particular those stipulating the conditions under which the electricity used for hydrogen electrolysis qualifies as renewable in terms of RED II, are specified by the EU Commission in two delegated acts, which have not yet come into force at the launch of this Call. Accordingly, the criteria for hydrogen are not applied in this Call.

However, we expressly recommend the following:

- Examine the RED II Directive guidelines because only RED-compatible hydrogen will be sustainable over the long term. From today's standpoint, the RED II criteria for producing renewable hydrogen are extremely challenging.
- Plan your project so that it can be converted to RED compatibility over the medium term. However, there is no intention to introduce an obligation to convert as a criterion for funding.
- Furthermore, future legal requirements based on RED regulations may result in hydrogen which fails to qualify as renewable hydrogen according to RED criteria being subsequently classified as fossil hydrogen, so that the distributor of the hydrogen could be obliged to compensate with other forms of renewable energy.



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