Project description for proposals to Zero Emission Mobility

3rd Call 2020

Version 2.4; 07.01.2019

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| --- | --- | --- |
| **RTI Initiative:** | *Zero Emission Mobility – 3rd Call* | |
| **Full title of the project:** | *(max.* *120 digits)* | |
| **Short title of the project:** | *(max. 20 digits)* | |
| **Applicant:** | *Name of the leading organisation* | |
| **Project partner(s):** | *Name of partner organisation(s)* | |
| **Call topic covered:** | Zero-Emission Vehicles  Zero-Emission Infrastructure  Zero-Emission Logistics & Mobility Solutions | |
| **Research category:** | Industrial Research (IR)  Experimental Development (ED) | |
| **Project duration:** | From [MM.YY] | Duration in months (max. 36) |
| **Costs:** | Total costs [€]: | Total funding [€] (max. 1 Mio) |
| PROJECT GOALS:  *Please present the goals and innovative contents of the project with a maximum of 5 sentences.* | | |

# In General

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## Checklist for Submission

The information provided in Chapter 0 is designed to help you in your submission and can be deleted in the final Project Description to be uploaded as an attachment via eCall.

### Checklist for formal check

The formal check serves to check the application for formal correctness and completeness. Please note: **If the formal requirements are not met and the deficiencies cannot be corrected, the proposal will be excluded from the further procedure and will be formally rejected without exception in accordance with the principle of equal treatment of applications.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criterion** | **Requirements checked** | **Correctable?** | **Con-sequence** |
| Completeness of the application | Project Description: descriptive part of proposal (upload as .pdf file)  ***The Project Description form must be completed in full; alteration and addition of chapters or headings are not permitted!*** | *No* | Rejection as result of formal check |
| Use of correct form (Instrument in eCall is consistent with project description) | Project Description  (see. www.ffg.at/zero-emission-mobility/3.AS\_downloadcenter) | *No* | Rejection as result of formal check |
| Language | *English* | *No* | Rejection as result of formal check |
| Duration | max. 36 months | *No* | Rejection as result of formal check |
| The applicant is eligible for submission of a proposal. | See guidelines for Cooperative R&D-Projects, chapter 1.4 | *No* | Rejection as result of formal check |
| The project partners are eligible for participation. | See guidelines for Cooperative R&D-Projects, chapter 1.2 | *No* | Rejection as result of formal check |
| Minimum requirements of consortium | See guidelines for Cooperative R&D-Projects, chapter 1.2 | *No* | Rejection as result of formal check |
| Funding amount | Total funding amount requested must not exceed **EUR 1 million** | *No* | Rejection as result of formal check |
| Call-specific supplementary information to be included in the form |  | *yes* | Rectification via eCall is possible |
| Attachments to eCall project data  (upload as .pdf file) | Attachments to eCall project data  (upload as .pdf file) | *yes* | Rectification via eCall is possible |
| Uploads to eCall master data  (upload as .pdf file) | Annual accounts (balance sheet, profit and loss account) of the last 2 financial years have been submitted | *yes* | Rectification via eCall is possible |

### General points

* Adhere to the questions. Questions, comments and notes marked in blue in the form may be overwritten or deleted
* Please make sure, that the information provided in this form corresponds to the information in the eCall-systems. In case of differences, the information provided in the eCall-system is binding.
* A complete project proposal consists of the project description (presentation of the content) and a cost plan (presentation of costs)
* Describe your project in sufficient detail for reviewers to form an accurate impression of your planned project. Try to keep your text precise and to the point.
* The maximum number of pages is NOT a request to reach this limit. Applications should enable the reviewers to understand the topic and the benefits resulting from the proposed project. Quality is more important than quantity.
* In the event of any questions please refer to your contact person at the FFG (contact information is available in the call announcement).

## Submission

Project proposals may only be submitted electronically via [eCall](https://ecall.ffg.at) within the submission deadline. Please see the detailed [eCall tutorial](https://ecall.ffg.at/Cockpit/Tutorial-Hilfe).

The main proposal may only be submitted if all partners have previously completed and submitted their partner proposals via eCall.

A project proposal is considered to have been submitted if the eCall application has been finalised by clicking the “Submit“ (“Einreichung abschicken”) button. On successful submission, a confirmation will be sent by e-mail. It is not possible to resubmit the proposal or parts of it or to revise the proposal after the submission deadline.

In the event of any questions about eCall please refer to your contact person at the FFG (contact information is available in the call announcement). It is NOT required to send a duly signed copy of the proposal submitted online.

All proposals submitted will only be made available to the persons involved in the administration of the call. All these persons are subject to strict confidentiality. In particular, the national and international experts who take part in the evaluation procedure must sign a declaration of confidentiality before they start their work.

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| **Submission deadline:**  **Proposals for funding must be received via eCall by 12:00:00 noon on 13.11.2020!** |

Contents

[0 In General 2](#_Toc4409706)

[0.1 Checklist for Submission 2](#_Toc4409707)

[0.1.1 Checklist for formal check 2](#_Toc4409708)

[0.1.2 General points 4](#_Toc4409709)

[0.2 Submission 4](#_Toc4409710)

[Kurzfassung 7](#_Toc4409711)

[Abstract 8](#_Toc4409712)

[1 quality of the project 9](#_Toc4409713)

[1.1 State of the art – current level of technology/knowledge 9](#_Toc4409714)

[1.1.1 Results from other projects 9](#_Toc4409715)

[1.2 Degree of Innovation 11](#_Toc4409716)

[1.2.1 Problem and research need 11](#_Toc4409717)

[1.2.2 Goals 11](#_Toc4409718)

[1.2.3 Degree of innovation and associated risk 11](#_Toc4409719)

[1.3 Quality of planning 12](#_Toc4409720)

[1.3.1 Overview and description of work packages 12](#_Toc4409721)

[1.3.2 Detailed description of work packages 13](#_Toc4409722)

[1.3.3 Work and time schedule (Gantt chart) 14](#_Toc4409723)

[1.3.4 Description of cost plan 14](#_Toc4409724)

[1.3.5 Third-party costs (if exceeding 20% of total costs per partner) 14](#_Toc4409725)

[1.4 Integration of gender-specific aspects 14](#_Toc4409726)

[2 Suitability of Applicant / Project Partners 14](#_Toc4409727)

[2.1 Description of the Expertise of project partners 14](#_Toc4409728)

[2.1.1 Applicant (A) 14](#_Toc4409729)

[2.1.2 Project partners (Pn) 15](#_Toc4409730)

[2.2 Capacity of the consortium to achieve the project goals 15](#_Toc4409731)

[2.2.1 Completeness and coordination of required expertise 15](#_Toc4409732)

[2.2.2 Third-party expertise required 16](#_Toc4409733)

[2.3 Composition of project team with regard to gender balance (gender mainstreaming) 16](#_Toc4409734)

[3 Benefit and exploitation 17](#_Toc4409735)

[3.1 User benefit and exploitation potential 17](#_Toc4409736)

[3.2 Impact and significance of the project results for the organisations involved in the project 17](#_Toc4409737)

[3.3 Exploitation strategy 18](#_Toc4409738)

[4 Relevance of the Project 18](#_Toc4409739)

[4.1 Relevance to the Call 18](#_Toc4409740)

[4.2 Incentive effect of funding (additionality) 19](#_Toc4409741)

[Call-specific supplementary information 20](#_Toc4409742)

[Annex 1: Description of the Pilot Plant / Ecological Effect (to be filled in only in the case of application for additional environmental funding from KPC) 21](#_Toc4409743)

# Kurzfassung

Kurzfassung auf **Deutsch** (max. 1 Seite), entspricht der Kurzfassung aus den Projektdaten im eCall

Die aussagekräftige Kurzfassung muss folgende Punkte beinhalten:

* Ausgangssituation, Problematik und Motivation zur Durchführung des F&E-Projekts
* Ziele und Innovationsgehalt gegenüber dem Stand der Technik / Stand des Wissens
* Angestrebte Ergebnisse und Erkenntnisse

# Abstract

Summary in English (translation of "Kurzfassung") (max. 1 page), corresponds to English summary from eCall project data

# quality of the project

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## State of the art – current level of technology/knowledge

(max. 7 pages)

Describe the current state of the art, i.e. current level of technology/knowledge, relevant to the project based on the following criteria:

* State of the art – current level of technology/knowledge
  + in the company or research institution itself
  + in the national innovation system
  + in Europe (including EU projects) and internationally
  + results of patent searches
* Relevant products, procedures or services that are already on the market
  + by the company/company group
  + by competitors
* Relevant alternative technologies, methods and approaches that are in competition with the proposed approach
* Especially the research on international state of the art should be part of the proposal

### Results from other projects

Please explain the differences to other projects carried out by the consortium partners in the past three years. Include in particular all ongoing and completed projects of thematic relevance. Special focus should be placed on the results you intend to use for your project and potential synergies. Use the description to underline that you have the expertise and experience to carry out the proposed project (supplementary to Chapter 2, Suitability of Applicant / Project Partners).

If these projects were funded by the FFG, please indicate the FFG project number and the project title.

Use the following table to provide the relevant information:

**Existing results and deliverables obtained from publicly funded projects that provide the basis of or feed into the proposed project**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding provider** | **Project-number** | **Title** | **Description of results already obtained and relevant deliverables (verifiable results / products of R&D work) in terms of the basis for / differentiation from the proposed project** | **Location and type of documentation**  **(e.g. link to homepage, publication, conference proceedings, interim report, final report, …)** |
|  |  |  |  |  |
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|  |  |  |  |  |
|  |  |  |  |  |
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|  |  |  |  |  |

## Degree of Innovation

(max. 8 pages)

### Problem and research need

Clearly point out the problem and/or unsolved scientific/technical questions giving rise to the need for a funded research and development project.

### Goals

Describe briefly and concisely the key qualitative and quantitative goals and expected results of the project. These goals should be clear, measurable, realistic and achievable within the project duration. They should also be consistent with the benefit and exploitation of the results.

### Degree of innovation and associated risk

Describe the degree of innovation with reference to the state of the art (current level of technology / knowledge) as well as relevant products, procedures and services presented in 1.1.

* How do the goals of the project go beyond the state of the art (current level of technology / knowledge):
  + in the company or research institution itself
  + at national level
  + at international level
* How does the project improve existing solutions, cause a technological leap or create the basis for the registration of IPRs?
* Please quantify the improvements to be achieved (e.g. higher efficiency, lower cost, faster throughput, enhanced functions, etc.), or explain why the degree of innovation can only be described qualitatively.
* Describe the technical and economic risk involved at project and/or partner level. Describe the provisions made to ensure that the funding has a high impact despite the high risk involved (risk management, risk and contingency plan). However, you should not limit yourself to describing the risk in terms of project management.
* Justify your classification for one of the research categories “Industrial Research” or “Experimental Development”. If necessary use the Technology Readiness Levels (TRL).

## Quality of planning

### Overview and description of work packages

The Work Package (WP1) Project Management is mandatory. A maximum of 10 work packages are permitted. Please ensure consistency with the eCall data.

Please insert additional rows if necessary: place cursor in last row and select “Table -> insert -> row below” from the menu bar.

**Overview of work packages**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WP**  **No.** | **Work package title** | **Duration (month)** | **Start MM/YY** | **End MM/YY** | **Planned result** |
| 1 | Project Management |  |  |  |  |
| 2 |  |  |  |  |  |
| n |  |  |  |  |  |

**Overview of milestones**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone No.** | **Milestone title** | **Work packages involved** | **Expected date** | **Milestone is achieved when:** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| n |  |  |  |  |

### Detailed description of work packages

Describe the contents of the individual work packages, the results expected within the duration of the project and the milestones. The individual **methods** and steps must be clearly and consistently defined and/or described (about 1 page per work package).

The table should be copied and completed separately for each work package (WP)

**Description of work package**

|  |  |  |  |
| --- | --- | --- | --- |
| **WP No.** |  | **Title of WP:** |  |
| **Participating organisation (A/Pn) and person-months per organisation:** | | | |
|  | | | |

|  |
| --- |
| **Goals:** |
|  |

|  |
| --- |
| **Description of contents:** |
|  |

|  |
| --- |
| **Method:** |
|  |

|  |
| --- |
| **Milestones (to measure project progress), planned results and deliverables (verifiable results / products of R&D work)** |
|  |

### Work and time schedule (Gantt chart)

Insert a detailed work and time schedule.

Please pay attention to readability.

### Description of cost plan

(max. 1 page)

Please explain the relevance of the items listed in the cost plan for the project: personnel costs, costs of infrastructure use, costs of materials, third-party costs and travel costs (especially purpose of travel).

**Please observe the regulations in the** [**Cost Guidelines 2.1**](https://www.ffg.at/recht-finanzen/kostenleitfaden/version-21)

### Third-party costs (if exceeding 20% of total costs per partner)

(max. 1/4 page)

Third-party costs should not exceed 20% of the total project costs per partner. Please justify any excess.

## Integration of gender-specific aspects

(max. 1 page)

If the project relates to people, please explain how and in which work packages gender-specific aspects have been taken into account in the methodological approach.

# Suitability of Applicant / Project Partners

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## Description of the Expertise of project partners

(max. 1 page per partner)

### Applicant (A)

1. Company name / name of institution
2. Relevant expertise of organisation and staff involved in the project.   
   Provide evidence of relevant expertise by uploading appropriate and current CVs of senior scientific and technical project staff in the “Ressource Pool/MitarbeiterInnen-Pool” section of the eCall-system and provide a list of the major (max. 5) publications relevant to the project.
3. Description of know-how relevant to the project, e.g. market success, patents
4. Description of existing infrastructure relevant to the project and other aspects indicating the applicant’s ability to perform the project

### Project partners (Pn)

This page is to be completed individually and separately for each project partner.

1. Company name / name of institution
2. Relevant expertise of organisation and staff involved in the project.   
   Provide evidence of relevant expertise by uploading appropriate and current CVs of senior scientific and technical project staff in the “Ressource Pool/MitarbeiterInnen-Pool” section of the eCall-system.
3. Description of know-how relevant to the project, e.g. market success, patents
4. Description of existing infrastructure relevant to the project and other aspects indicating the applicant’s ability to perform the project

## Capacity of the consortium to achieve the project goals

(max. 2 pages)

### Completeness and coordination of required expertise

Please use the following table and additional descriptions to illustrate that the chosen consortium structure is suitable for achieving the qualitative and quantitative goals and expected results within the planned project period. Show that the consortium has the scientific, technical and economic expertise required for the project.

**Main tasks of all project partners**

|  |  |  |
| --- | --- | --- |
| **Work package** | **Key expertise required for the work package** | **Name of partner contributing key expertise** |
| 1 |  |  |
|  |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| X |  |  |

If the consortium includes partners from outside Austria: explain why these partners are essential for the project and what advantage the participation of the non-Austrian partner/s brings as compared to an Austrian organisation. Describe the benefits for Austria as a business and research location. Describe the IPR regulations to be agreed with the partner/s from outside Austria.

### Third-party expertise required

Please describe the fields of expertise that are not covered by the consortium and must therefore be contributed by a third party (e.g. via subcontracts). Name the subcontractors and describe in what form they will contribute the relevant expertise.

The content of **every subcontract exceeding EUR 20,000** must be described individually and in detail. If the subcontractor is not known yet, describe the aim of the work to be subcontracted and the qualifications to be met by the subcontractor.

**General information about subcontractor**

|  |  |  |  |
| --- | --- | --- | --- |
| **Relevant WP(s)** |  | **Subcontractor of A/Pn** |  |
| **Name of subcontractor** |  | | |
| **Content of subcontract** |  | | |

## Composition of project team with regard to gender balance (gender mainstreaming)

(max. 1/2 page)

Please describe why the gender balance in the project team is an improvement over current conditions in the sector. Alternatively, justify why it is not possible to achieve a better gender balance.

# Benefit and exploitation

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(max. 4 pages)

## User benefit and exploitation potential

Describe the benefits of the project results and/or new technologies and planned innovations for users from the perspective of the partners involved in the project in both qualitative and quantitative terms (external benefit).

* What is the benefit for those applying the project results and the exploitation potential?
* What new knowledge can be gained from the project in the relevant scientific/technical target group?
* For whom are the results relevant?
* What are the USPs of the planned project results?
* For projects of the research Category Industrial Research:
  + How about the knowledge increase in the relevant scientific-technical target group?
* For projects of the research Category Experimental Development:
  + What are the specified users, markets and market segments? – How is this substantiated by turnover figures?
  + What is the turnover potential of the innovation or added value of market growth in relation to the planned project costs?
  + What resources are required to bring the results to the market?
  + On what facts are your estimates based?

## Impact and significance of the project results for the organisations involved in the project

Describe the strategic significance of the project results and/or new technologies and planned innovations for the organisations involved in the project in both qualitative and quantitative terms (internal benefit):

* Long-term increase in R&D capacities
* Securing or extending the organisation's R&D position
* Expansion of existing R&D activities to include new fields of application
* Development of R&D platforms
* Opening up of new business fields etc.

## Exploitation strategy

Describe the exploitation strategy for the project results for each individual partner involved in the project in qualitative and quantitative terms. Please also indicate any specific exploitation expertise the relevant organisation has. **If the exploitation of the results has a significant impact on people, please also indicate how gender-specific issues have been taken into account in the exploitation of the economic potential.**

Research-oriented organisations:

* [Planned number of]: diploma and doctoral theses, publications in national and international journals (with or without review process), national and international conference papers, national, European and international patent applications, workshops, events and conferences, expert advisory boards, etc…

Companies and application-oriented organisations

* [Planned number of]: industrial property rights, licences, national, European and international patent applications (in selected countries)
* Exploitation via subsidiaries, distribution partners
  + based on competitive edge in fields such as production, expertise, trade secrets, market presence
  + collaborations with third parties aimed at development and exploitation
* Marketing strategy
* Sales strategy
* Business plans/models
* Investment plans

# Relevance of the Project

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(max. 2 pages)

## Relevance to the Call

* Please list the **call topic** (“Ausschreibungsschwerpunkt”) addressed by your project.
* Which **goals of the call** (“Ausschreibungsziele”) are primarily addressed by your project?
* Further explanation is not necessary.

## Incentive effect of funding (additionality)

Please explain how funding changes the project in terms of:

* **Enabling:** The project could not be carried out without funding.
  + Please explain why funding is necessary to enable the project.
* **Duration:** The project can be completed within a shorter period of time than possible without funding
  + Explain to what extent and why funding helps to speed up the completion of the project.
* **Size**: Size of the project can be increased compared to the project being carried out without funding
  + Give reasons why the size of the project can be increased compared to the project being carried out without funding.
* **Scope**: The scope of the project can be increased.
* Give reasons why the funding makes the project more ambitious. A higher level of ambition can mean that the project
  + is focused on more radical leaps in innovation
  + follows a more long-term and research-intensive [as opposed to market oriented and development intensive] approach
  + involves a higher technical risk
  + involves a higher market risk
  + leads to new or more extensive collaborations

Please demonstrate the incentive effect of the funding in accordance with the criteria applicable to the project.

# Call-specific supplementary information

The following supplementary information **must be annexed to this Project Description:**

* Quantification of the potential reduction of greenhouse gas emissions: The capability of the project or its results to reduce CO2-emissions has to calculated or estimated for the period until 2030. The results of this evaluation and the methods used have to be shown.
* Ecological effects of UFI investments: if investment costs that are relevant to the environment (funding by KPC) are to be funded, Annex 1 has to be completed

The following documents **must** be uploaded as **additional annexes to the eCall project data:**

• Declaration of SME Status (if no data are available in the Austrian Business Compass) (see [template](https://www.ffg.at/recht-finanzen/rechtliches_service_KMU))

# Annex 1: Description of the Pilot Plant / Ecological Effect (to be filled in only in the case of application for additional environmental funding from KPC)

For flagship projects or cooperative projects for experimental development that are conducted within the framework of the Climate and Energy Fund, the investment costs for pilot plants relevant to the environment may also be funded. A prerequisite for this funding is its effect on the environment (a reduction of energy consumption, an innovative use of renewable energy, a reduction of noise, waste or air emissions). A detailed technical description of the pilot plant is required, including a labelled plant diagram and floor plans. This description must make evident the source of the effect on the environment in addition to quantifying the environmental effect. It is also necessary to describe the feasibility and market potential of the project.

**Technical Description of the Pilot Plant**

Please present a detailed technical description of the pilot plant, including a labelled plant diagram and floor plans. This description must make evident the source of the afore mentioned environmental effect.

Please illustrate the innovative character of the pilot plant. To what extent does the technology of the pilot plant exceed standard technologies? Can it be used to test new technologies? Will it lead to the implementation of new or improved technologies?

**Ecological Effects**

**Potential reduction of greenhouse gas emissions**

Describe the environmental effect of the planned demonstration plant with regard to the prevention, mitigation and reduction of greenhouse gases, e.g. through the reduction or replacement of fossil fuels. This should include a clear presentation and quantitative prognosis of the effect on the environment according to the flow of energy and materials in comparison to the current situation or to a reference scenario, which provides the same services with conventional technologies. It is necessary to quantify the amount of the expected reduction. (For example: A comparison of the energy consumption split up between the various energy sources in MWh per year before and after the implementation of the pilot plant.)

**Potential for prevention or reduction of atmospheric pollution, noise or hazardous wastes**

Describe the environmental effect of the planned demonstration plant with regard to the prevention and reduction of atmospheric pollutants, noise or hazardous wastes. This should include a clear presentation and quantitative prognosis of the effect on the environment according to the flow of energy and materials in comparison to the current situation or to a reference scenario, which provides the same services with conventional technologies. It is necessary to quantify the environmental effect.

**Calculation of profitability**

Please prepare a calculation of profitability which includes a presentation of operative costs and profit of the pilot plant compared to the current situation or a reference plant.

**Feasibility and Market Potential**

Please present the feasibility and the market potential of the pilot plant.

**Cost Plan**

Please provide the cost plan for the planned infrastructure. https://www.ffg.at/Kostenplan-Foerderung/UFI