



Call Fiche FFG CAS 2023

Call Fiche Digital Technologies for Green

Cooperative R&D Projects between Austria, FFG and China, CAS

The Austrian-Chinese Cooperative Research and Development (R&D) Projects (CRDP) are jointly supported with funding from the Austrian topic “Digital Technologies” managed by the Austrian Research Promotion Agency (FFG) on behalf of the Austrian Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) and the International Cooperation with Chinese Academy of Sciences (CAS).

Deadline for submission to FFG via eCall and to CAS:

FFG: July 17th 2023, 12:00 Central European Summer Time (C.E.S.T.)

CAS: July 17th 2023, 18:00 China Standard Time (C.S.T.)

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1. Aim of the funding measure

The aim of this call for Austrian-Chinese Cooperative R&D Projects (CRDP) is to support the jointly identified research topics Digital Technologies for Green with mutual interests and scientific excellence based on the existing cooperation agreement between the Austrian Research Promotion Agency (FFG) and the Chinese Academy of Sciences (CAS). The call will foster the connections between Austria and China and improve the visibility of the successful collaboration between the two parties. Furthermore, it is expected that the Austrian-Chinese call for Joint Proposals will lead to further bilateral or multilateral collaborations at various levels.

The Austrian-Chinese joint Cooperative R&D Projects funded in the framework of this call are intended to intensify scientific and applied research collaborations between Austrian and Chinese research organisations and companies in order to set new impulses for excellent research between the two countries. The special focus of the projects lies in the expected scientific and applied research achievements, know-how transfer, as well as in the promotion of excellent young scientists, post-docs and PhD students in the framework of the Cooperative R&D Projects. The participation of female scientists is particularly welcome.

Future-oriented research and development seeks to achieve the current global, national and regional goals that are designed to put us on a path to a sustainable future. The call makes reference to the global Sustainable Development Goals of the United Nations (SDGs) and therefore requires applicants to address the key sustainability goals to which the proposed project makes a concrete positive contribution.

2. Subject of funding

- This call shall bring together research capacities from **one or more CAS research groups and one or more Austrian company** thus creating excellency with international standing and attractiveness to researchers in a key area of research. The **Austrian consortium can involve also research organisations** in addition to the obligatory Austrian company partner.
- Only **formal employee of CAS** are eligible to submit applications for funding at CAS. Furthermore, Institutes of CAS only, are eligible as partners in the consortium between CAS and Austria. For further information, please contact the contact person at CAS listed in Chapter 6.

- The call topics are designed to leverage common fields of expertise of Austria and the Chinese Academy of Sciences. The project must focus on one of the topics listed below, but may also address both of these topics:

Topic	Description
Digital Technologies for Green	<p>This topic includes digital technologies that save resources and that support climate protection and sustainability.</p> <p><i>Examples: Projects can focus on digital technologies that support the circular economy or technologies that support energy and resource savings in digital production. Another example is digital technologies that help replace, conserve or recover scarce resources such as energy, water, valuable materials, or rare earth elements. Projects can address sustainable microelectronics. Projects can also focus on digital technologies for democracy and participation in the context of sustainability and climate protection.</i></p>

The examples listed above are suggestions only. Projects in other development areas related to the specified topics can also be submitted.

- **Please notice that the following subject areas are excluded from the call:**
 - Cyber security and data transmission of digital technologies (e.g. quantum technology, IoT), also in the context of networked and automated mobility;
 - Critical infrastructure technologies (supply and transport);
 - Technologies that can be used to restrict European fundamental rights and freedoms (e.g. surveillance, biometrics, automated text and image analysis);
 - Power electronics for the control and conversion of electric power and process technology.
- In general, researchers of both countries should contribute equally to the competence of the partnership. In the partnership, researchers of the participating institutions work on a defined research project, which is divided into coordinated work packages, designed to reach a common research goal. The Joint Proposal provides sufficient level of skill, equipment and manpower capabilities necessary to work on the defined research project.
- The results of the research shall be shared by the participating Austrian and Chinese researchers. All Austrian and Chinese partners involved in the project have to conclude a consortium agreement on issues such as intellectual property rights, liability and confidentiality. **This consortium agreement has to be provided to FFG via eCall and to the headquarters of CAS before the respective national funding contract is signed.**

3. Scope of funding

- FFG is prepared to provide each selected Cooperative R&D Project with financial support for a maximum of 3 years. The total call budget for the Austrian project partners is 1 Million EURO (equivalent to around 7 Million CNY). Funding applied for an individual project has to lie between 100,000.- EURO and 1 Million EURO for Austrian partners within the joint project. The budget provided by FFG can only be used to cover costs linked to the implementation of the project parts executed by the Austrian project partners. Rules for funding of the Austrian project partners are laid down in the respective call documents¹.
- CAS is prepared to provide each selected Cooperative R&D Project with an annual support, for a total of 3 years. Each selected project can apply for CAS funding with up to 300000 CNY (equivalent to around 43000 EURO) per year for a total of 3 years. This part of CAS budget is from the CAS international cooperation fund and cannot be spent for personnel costs but just for one or more of the following cost categories:
 - to cover travel costs for Chinese project partners.
 - to purchase consumables necessary for the performance of the CRDP.
 - to cover other spending in accordance with the CAS.

Nevertheless, all costs, including the planned personnel costs CAS, must be listed in the application form. This is the basis for the calculation of the cooperation criterion.

- A minimum of 10% and a maximum of 80% of the eligible total project costs have to be carried by research organisations (no matter if Austrian and/or Chinese research organisations). Companies share is a minimum of 20% and a maximum of 90%.
- Individual enterprises account for a maximum of 70% of the eligible project costs with shares of affiliated companies counting as one enterprise.
- The Austrian and Chinese research organisations must have the right to publish the results of their work that has been conducted in the course of the project.

¹ The call documents include the call fiche, national call announcements, Austrian-Chinese Joint Proposal template and further national submission documents.

4. Conditions for funding

- For each CRDP a joint proposal in English language has to be submitted to FFG and the Headquarters of CAS. The proposal must indicate all Austrian and all Chinese project partners and must clearly lay down the division of work between the partners as laid down in the call documents. The submitted versions of the Joint Proposal have to be identical. Non-identical versions are not eligible.
- The Austrian project partners have to submit an Austrian Annex and a cost plan in addition to the Joint Proposal via FFG eCall in due time.
- The Chinese project partners should also prepare and submit in parallel an additional CAS application form in Chinese language to the CAS headquarters (see also below, "Submission of applications").

The joint proposals must meet the following goals and criteria.

The goals of this call are:

- **Promoting digital technologies that support climate protection and sustainability:**
Digital technologies enable efficiency and resource-savings for products and processes. Therefore, the objective of this call is to exploit the potential of digital technologies for sustainability, and to support the ecological transformation of the economy, especially with regard to climate and environmental protection. This involves the development, testing and use of digital platforms, tools, methods, business models, procurement models or standards. The call also aims to promote sustainable digital technologies, for example digital technologies that consume little energy resources. Innovative applications, services and integrated solutions must make a positive contribution to the energy transition, mobility transition, circular economy or climate-neutral city. Projects have to be in line with, and possibly even clearly relate to the goals of the EU Green Deal and the Sustainable Development Goals of the United Nations (SDGs).
- **Cross-cutting goals:**
 - **Conscious use of R&D data** means that projects must take a well-structured and well-documented approach to their data from the planning stage onwards. Unless competition reasons do not allow it, it is recommended to publish such data. At the same time, all measures to protect privacy need to be taken when dealing with person-related data. The conscious use of data concerns both the dimension of data protection and security, and the dimension of open data/open access.

- **Ethical aspects and human-centered design:** Ethical aspects and responsible technology assessment are important in the conception of the solution, during the entire runtime of the project as well as in the post-project phase. In terms of human-centered design, knowledge about future user groups and the context of future use should be part of the research and development of new systems. Systems should be developed for, together with and sometimes even by users.

Table 1: Call criteria - Quality of the project

1. Quality of the project (Points 30, Threshold 18)	
1.1.	To what extent does the innovation content of the project exceed the state of the art, existing products, services, processes or existing knowledge?
1.2.	Have the project goals been clearly defined and can they be realistically achieved? Are the approaches suitable for achieving the goals of the individual work packages? Have the risks in the work packages been adequately addressed and corresponding measures provided?
1.3.	Quality of planning: Is the structure of the work packages and the associated division of work adequate for the goals of the project? Is the overall planning adequate for achieving the project goals?
1.4.	<p>If the content of the project and the research results affect people: To what extent have gender-specific topics been taken into account in the planning process?</p> <ul style="list-style-type: none"> - Quality of the analysis of the gender-specific topics - Consideration in the methodological approach of the project <p>Projects in which content and focus have no gender relevance according to this analysis will score full points in this subcategory.</p>
1.5.	To what extent does the project take into account sustainability goals (ecological, social, economic), in particular in terms of climate neutrality? How is sustainability, in particular climate neutrality, taken into account in the planning and implementation of the project and is the methodological approach chosen adequate?

Table 2: Call criteria - Suitability of the applicant / project partners

2. Suitability of the applicant / project partners (Points 20, Threshold 12)	
2.1.	Does the consortium have the necessary subject-specific and management skills and qualifications and the skills required to achieve the sustainability goals?
2.2.	Does the project plan provide sufficient and appropriate resources for the planned implementation?
2.3.	Does the composition of the project team reflect the aim to improve the gender balance in the sector?

Table 3. Call criteria - Benefit and exploitation

3. Benefit and exploitation (Points 30, Threshold 18)	
3.1.	What is the benefit of the project for the target group(s) (e.g. users, customers, contracting authorities ...) and what are the impacts and effects (positive and negative) of the project in terms of sustainability (social, ecological, economic), in particular in terms of climate neutrality?
3.2.	What is the benefit of the project for the project participants (e.g. in terms of expanding R&D capacities, opening up new fields of business etc.)? How concrete, transparent and complete are the exploitation strategy and the exploitation potential?

Table 4: Call criteria - Relevance of the project to the Call

4. Relevance to the Call (Points 20, Threshold 12)	
4.1.	How relevant/important is the project in terms of achieving the call objectives? Does the project sufficiently and adequately address the call topic?
4.2.	What is the incentive effect of the funding? To what extent will the funding help to implement the project at all and/or within a shorter timeframe, and/or with higher ambition, and/or in a larger scope?

- Funding contracts will be concluded between the FFG and Austrian project partners for the Austrian side and by CAS and the Chinese Institutions for the Chinese side.
- A consortium agreement between all involved Austrian and Chinese partners has to be provided to FFG via eCall and to the headquarters of CAS before the respective national funding contract is signed.

5. Submission of Joint Proposal applications

- **Application in Austria at FFG:**
Joint Proposal Template - Austrian-Chinese Cooperative R&D Projects must be submitted electronically via FFG [eCall](#)
Deadline: July 17th 2023, 12:00 Central European Summer Time (C.E.S.T.)
- **Application in China at CAS:**
Joint Proposal Template - Austrian-Chinese Cooperative R&D Project must be submitted electronically via [CAS Website](#)
Deadline: July 17th 2023, 12:00 China Standard Time (C.S.T.)
- The Joint Proposal must be written in English language.
- In addition applications must fulfill all the respective national and/or general formal conditions for funding in order to be admitted to the evaluation procedure (amendments are not possible).
- In addition to the Joint Proposal applicants need to submit **national proposals** in Austria and China. Templates are available on the websites of CAS (for applicants from China) and FFG (for applicants from Austria).
- The final decision of the selected proposals will be announced approx. in October 2023.

6. Contact Information

- **Austria – FFG:**

FFG website related to the call: <https://www.ffg.at/digitaltechnologies-china2023>

eCall submission of application for Austrian organisations: <https://ecall.ffg.at>

FFG contact persons:

Mag. Julia Neuschmid, Programm Manager Digital

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DI Dr. Peter Kerschl, Programm Manager Digital

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- **China – CAS:**

CAS website related to the call: <http://www.bic.cas.cn/tzgg/>

CAS contact person:

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