



Federal Ministry of Education and Research of the Federal Republic of Germany

and

Japan Science and Technology Agency

Call for Proposals 2025

German – Japanese Academia-Industry International Collaboration Program
on Sustainable Hydrogen Society:
Technical, Environmental, Economic and Social Analyses
Terms and Conditions

Proposal Submission Period:

September 22nd 2025 to January 7th 2026

(Open: 9:00 German time /16:00 Japanese time) (Closure: 9:00 German time /17:00 Japanese time)





German Side:

Please refer in any case to the official call text ("Regulations for funding international projects on the topic of green hydrogen") which was announced on September 22nd 2025 in German in the Bundesanzeiger (Federal Gazette).

Japanese Side:

For further application instructions and guidance, please refer to the appendix for Japanese side (available only in Japanese).

1 Background and Purpose of the Call

I. Background

Both Japan and Germany are transforming their energy systems and are leaders in innovation-oriented research and development in this area. In view of concerns about climate change as well as developing industry, both countries recognize the need to both develop and utilize hydrogen technology in order to create a sustainable society. As one such effort, Germany and Japan jointly launched a Hydrogen Technologies Academia-Industry Collaborative Joint Research call for proposal in 2021. Since then, hydrogen as a growth industry has attracted increased investment from both the public and private sectors, and both countries' hydrogen strategies have developed accordingly.

In Germany, the National Hydrogen Strategy was updated in 2023 in order to accelerate market ramp-up, ensure sufficient availability of hydrogen, develop an efficient hydrogen infrastructure and implement hydrogen applications in various sectors.

In Japan, the revised Hydrogen Society Promotion Act enacted in October 2024 initiated policies to promote the supply and utilization of low-carbon hydrogen, or clean hydrogen, through enabling a transition to a decarbonized growth-oriented economy.

II. Purpose

In a time when both countries seek to increase the role of hydrogen technology, there is a growing need for research which enhances our understanding of its role and potential both in the energy system and in society, such as using integrated scenarios and models. These approaches require not only insights from hydrogen technology research itself, but also broader studies at different scales. As a part of more comprehensive analyses, they also need to integrate various aspects from economics, policy as well as impact assessments. Despite the critical need for these types of research, there has until now been relatively limited support available.

Recognizing these needs, this call for proposals aims to support research which expands and contributes to knowledge necessary for an integration of hydrogen into various sectors as a part of a transition to a hydrogen society. To achieve this, this call seeks to





support collaboration which goes beyond purely academic work to involve industry actors, such as private sector enterprises. To usher in a hydrogen society within a cross-sectoral framework comprising a diversity of stakeholders, the cooperation of academia and industry allows to devise more realistic approaches to transforming the energy sector.

With both countries facing shared challenges in both energy and industrial sectors, this call for proposals seeks unlocking new solutions by drawing on the combined academic and industrial strengths of the two countries to help realize a hydrogen society.

To enable a successful transition to a sustainable hydrogen society, several challenges must be addressed, including accurately assessing the transition to a decarbonized growth-oriented economic structure incorporating hydrogen, identifying priority areas through considering advantages and disadvantages of technology applications across peripheral industries, and continuously optimizing and adjusting scenarios incorporating integrated approaches, also drawing on social sciences. Given the critical role of industry and the markets, this call strongly encourages participation of both academia and industry on both sides.

2. Scope of the Call

This call for proposal addresses technical, environmental, economic and social analyses towards a sustainable hydrogen society in Japan and Germany. Participation of both academia and industry on both sides is strongly encouraged.

Funding will be provided for research projects in the field of hydrogen technologies that involve international collaboration between researchers in Germany and Japan and address the following topics in line with the funding purpose described above.

Research, including analyses, modelling and simulations, and other approaches, supporting the development of a hydrogen society based on CO₂ free hydrogen in particular from renewable sources, for example including but not limited to:

- ✓ Smart energy systems, such as synergistic sector coupling design for systems highly reliant on renewable energies and multi-energy systems
- ✓ Hydrogen or synthetic fuels or synthetic NH₃ applications to hard-to-abate sectors that are difficult to electrify, such as for steel, chemical and ceramics production
- ✓ Techno-economic analyses of hydrogen technologies and analysis of social acceptability of hydrogen technology use
- ✓ Scenarios for effective development of the transition to a hydrogen society
- ✓ Life cycle assessments of technologies for smart energy systems including hydrogen production, synthesis, storage, and utilization toward sustainability





Research on tools and methodologies related to the above research topics are also invited, for example for complexity reduction for multi-scale models, for monitoring and decision-making in large-scale energy systems.

The benefits for Germany and Japan should be clearly identifiable and strategies for implementing the research findings in industry and society should be set out. Furthermore, the projects should contribute to achieving the following cooperation objectives:

- International networking and intensification of German-Japanese cooperation in the stated priority areas
- Preparation of follow-up activities, e.g. application for funding under specialist BMFTR programmes, DFG, Horizon Europe and similar programmes for the German side, JST programmes and similar programmes for the Japanese side.

3 Funding recipients

German side

Applications may be submitted by universities, non-university research institutions and other organisations performing research as well as commercial companies which have a plant or branch in Germany at the time of payment of the grant – particularly small and medium-sized enterprises (SMEs) as defined by the European Commission at http://ec.europa.eu/growth/smes/business-friendly-environment/sme-

<u>definition/index_en.htm</u> – which fulfil the funding purpose and requirements. Research institutions which receive core funding from the Federal Government and/or the *Länder* can only be granted project funding supplementary to their basic funding to cover additional project-related expenditure or costs under certain preconditions.

Japanese side

Any independent researcher personally affiliated with and actively conducting research at a domestic Japanese research institution (or who would fulfil this requirement by the start of the research project), regardless of nationality, is eligible to apply.

Note: "Domestic Japanese research institution" in Japan refers to universities, independent administrative institutions, national/public testing and Research Institutions, specially authorized corporations, public-service corporations and enterprises, etc. that must satisfy pre-determined requirements designated by MEXT. Please refer to the MEXT homepage for more information:

http://www.mext.go.jp/a menu/kansa/houkoku/1324571.htm (in Japanese only).

4 Special prerequisites for funding

Projects are highly encouraged to include the participation of both academic and industrial partners on the Japanese and German sides.





Projects proposed for funding under this call should document their potential for longer-term sustainable cooperation.

Additional information for collaborative projects:

The terms of cooperation between the partners in a collaborative project must be set out in a written cooperation agreement. Before a funding decision on a collaborative project is taken, the cooperation partners must prove that they have reached a basic agreement on certain criteria stipulated by the BMFTR.

Funding recipients are obliged to participate in possible evaluation measures and to provide any information needed to assess the success of the funding measure.

5 Type, scope and amount of funding

5.1 Type and amount of funding

German side

Funding will be awarded as project grants usually amounting to 600,000 euros per collaborative project for a maximum period of 36 months.

Japanese side

The funding amount will be up to 46.8 million Japanese yen per project (including 30% overhead expenses). The project period should be 36 months.

5.2 Type of financing

German side

The basis for calculating the grants for universities, non-university research institutions and similar institutions is the eligible project-related expenditure (in the case of the Helmholtz Centres and the Fraunhofer Gesellschaft [FhG] the eligible project-related costs) which can be individually funded up to a maximum of 100 percent.

In the case of research projects at higher education institutions (public and private) and teaching hospitals (irrespective of the legal form), a flat-rate grant amounting to 20% of total expenditure will be awarded in addition to the eligible expenditure. It should be noted that the flat-rate grant is already included in the above-mentioned maximum grant amount of 600,000 euros.

Grants for commercial companies will be calculated on the basis of the eligible project-related costs, up to a max 50% of which can, as a rule, be covered by government grants, depending on the project's relevance to application. The General Block Exemption Regulations (GBER) allow various additional payments for small and medium-sized enterprises (SMEs) which could in some circumstances lead to a higher rate of funding.





Financing rules are laid out in more detail in the underlying BMFTR "Regulations for funding international projects on the topic of green hydrogen".

Japanese side

Japan-based commercial companies shall submit to JST annual financial reports of the own contribution to the research project. It shall be included in the annual report which is described in 8.3. JST expects commercial companies to cover at least 50% of project related costs through their own contribution. All of the eligible costs in 5.4 can be calculated in the project-related costs, including personal costs and equipment cost.

5.3 Form of financing

Funding will be awarded in the form of non-repayable grants.

5.4 Expenditure/costs eligible for funding

The following expenditure/costs will be eligible for funding:

German side

- a. Financial resources to cover staff required for the project
- Project-related non-cash resources and funds for equipment (see guidelines for applicants). Funding applications may also be submitted for contracts with third parties.
- c. Funding for travel and stays by German and Japanese researchers and experts
- d. Travel expenses for international events In special exceptional cases, funds can be granted for travel to international events, e.g. for participating in international, project-relevant conferences held in the home country or abroad.
- e. Expenditure/costs for workshops
- f. Patents
 - Expenditure required for obtaining and validating patents and other industrial property rights during the project period is eligible for funding (see annex for state aid for companies/SMEs).
- g. Scientific communication

Further details are found in the national Call text.

As a rule, no funding will be provided to cover any of the cost of the participating institutions' normal basic equipment.

The GBER must be taken into account in determining the respective eligible costs.

Japanese side

a) Eligible direct costs





In principle, eligible direct costs are those costs directly necessary for accomplishing the research, indicated below. Please refer to the guidance documents available at the following link for further details of eligible direct costs (available in Japanese only). http://www.jst.go.jp/inter/research/contract/contract.html

(a-1) Facilities, Equipment and Consumables: costs of research equipment, spare parts, prototypes, software (in-line products) and purchase of books, reagents, materials and consumables.

Only for commercial companies: Equipment costs are not eligible. Equipment includes facilities for which the estimated usable period is more than a year and acquisition price is more than 500 thousand yen.

- (a-2)Travel Expenses: costs and associated living expenses of the project members registered in the project plan, and costs of inviting external experts.
- (a-3)Personnel costs: costs of the researchers, temporary staff, post-docs, etc., who are hired for the research and other costs such as honoraria for invited lecturers.

Only for commercial companies: Personnel costs are not eligible.

(a-4)Others: costs for the organisation of small scientific events in Japan including rental costs for the venue, food & beverage (excluding alcohol) costs and other costs which are deemed to be necessary for organizing the event.

b) Eligible indirect costs

Please refer to the following link for the provisions regarding indirect costs:

https://www8.cao.go.jp/cstp/compefund/shishin2.pdf (available in Japanese only)

6 Project Description and Evaluation

The applicants must jointly prepare their Project Description. The Project Description should not exceed ten pages. The Project Description should include the following aspects:

- Form 1 Basic Information
- Form 2 Project Description
- Form 3 Originality and Excellence of the Proposal
- Form 4 Objectives and Research Plans
 - 4-1 Objectives and Comprehensive Description of Work Plans
 - 4-2 Expected Impact and Sustainability of Research Results
 - 4-3 Research Budget Plan
 - 4-4 Funding Justification





Form 5 Project Organization (Overall)

Annexes

Committees consisting of experts and/or peer reviewers selected by BMFTR and JST, respectively will evaluate all proposals. Based on the results of the evaluation, BMFTR and JST will make a joint decision regarding funding of the selected proposals.

The Project Description received will be evaluated on the basis of the following criteria:

I. Purpose and expected results

The proposal aims and expected results align with the objectives of the call.

II. Originality and research excellence

The proposal demonstrates originality and research excellence in a context of the current research landscape, both domestically and internationally.

III. Objectives and plans

The objectives of the research proposal to be achieved within the research period and plans (including budget) are well-defined and appropriate for the project. The sustainability of the results is being addressed.

IV. Organization

The project organization is suitable for implementing the proposed research project.

V. Required experience and ability of researchers

The participating researchers possess the required experience and ability to effectively carry out the proposed research project. The added value of international cooperation is defined.

VI. Impact of the project at a scientific, economic and societal level

7 Procedure in Germany

7.1 Involvement of a project management agency, application documents, other documents and use of the electronic application system

The BMFTR has currently entrusted the following project management organization with implementing the funding measure:

DLR Project Management Agency

European and International Cooperation

Heinrich-Konen-Strasse 1

53227 Bonn, Germany

Website: http://www.internationales-buero.de

Contact persons:

Contact for scientific questions:

Dr. Nicola Hartlieb

Phone: +49 228/38 21-1409

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E-mail: nicola.hartlieb@dlr.de

Dr. Sabine Puch

Phone: 49 2 28/38 21-1423

Fax: +49 228/38 21-1444 E-mail: sabine.puch@dlr.de

Contact for administrative questions:

Birgit Ehrenberg

Phone: +49 228/38 21-1471

Fax: +49 228/38 21-1444

E-mail: Birgit.Ehrenberg@dlr.de

Any modifications will be announced in the *Bundesanzeiger* (Federal Gazette) or in another suitable form.

Applicants are recommended to contact the project management agency for advice on applications. The agency will provide further information and details. Please also refer to the BMFTR website for funding anouncements: <u>Bekanntmachungen - BMFTR</u>

A webinar will be held on 16 October 2025 from 9.00 a.m. to 10.30 a.m. to provide information on the objectives of the funding guideline and the expectations of the applications and projects. Questions can be asked during the webinar. Please refer to the JST call page for further information: https://www.jst.go.jp/inter/english/program e/announce e/announce ge hydrotech2.html

7.2 Two-step procedure

The application procedure takes place in two steps.

Applicants must use the 'easy-online' electronic tool for drafting project outlines and formal proposals.

7.2.1 Submission and selection of project outlines

In the first step, project outlines must be submitted to the project management agency in written and/or electronic form by January 7th 2026 at the latest using the 'easy-Online' electronic tool.

It may not be possible to consider project outlines received after the above date.





Suitable project outlines will be selected for funding on the basis of the above criteria and evaluation. Applicants will be informed in writing of the result of the selection process.

Applicants have no legal claim to the return of their project outlines and of any other documents which they may have submitted in this phase of the procedure.

7.2.2 Submission of formal applications for funding and decision-making procedure

In the second step of the funding procedure, the applicants whose project outlines have been successful in step 1 will be invited to submit full formal proposals.

Formal proposals must include:

- I. A detailed (sub-)project description
- II. A detailed work plan and time schedule which allows to evaluate
 - a. Feasibility of the work plan
 - b. Plausibility of the time schedule
- III. Detailed information about the financing of the project
 - a. Appropriateness and need for the requested amount of funding
 - b. Guarantee of overall financing during the entire project period

The work and financing plans will be evaluated in accordance with the criteria listed under 7.2.2 (II and III).

The formal proposals must observe and fulfil any thematic or funding requirements above and/or the evaluators' recommendations for the implementation of the project.

When several German partners are involved (collaborative project), the formal proposals of the individual partners must be submitted in consultation with the envisaged coordinator.

Formal proposals must be drafted using the "easy-Online" electronic application system. It is absolutely imperative for applicants to include a project description in German in their formal proposals. The description should not exceed 12 pages.

Guidelines, information for applicants and the auxiliary terms and conditions for the award of grants are available at

https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare&formularschrank=bmbf.

The BMFTR reserves the right to seek advice from experts before making the final decision on funding.

A legal claim to funding cannot be derived from the submission of a formal proposal. Applicants have no legal claim to the return of their formal proposals. A funding decision will be taken after a final review based on the above criteria and evaluation procedure.





8. Procedure in Japan

8.1 Submission

The joint proposal and Japanese application information should be submitted electronically via the Cross-Ministerial R&D Management System (e-Rad): https://www.e-rad.go.jp/index.html

For further application instructions and guidance, please refer to the additional guidelines for Japanese researchers (available only in Japanese).

Complete a research ethics training program conducted by the research institute with which they are affiliated and then declare the completion of the program to JST by the deadline of the call for proposals. If it is difficult for them to undertake a program provided by their own institute, they should contact JST to register for a research ethics programs. Unless applicants complete a research ethics programs, their application will be deemed ineligible for funding.

A webinar will be held on 16 October 2025 from 9.00 a.m. to 10.30 a.m. to provide information on the objectives of the funding guideline and the expectations of the applications and projects. Questions can be asked during the webinar. Please refer to the JST call page for further information: https://www.jst.go.jp/inter/program/announce/announce ge hydrotech2.html

8.2 Payments

JST's support will be implemented according to a multiple-year contract for commissioned research entered into between JST and institution to which the Japan based Principal Investigator (PI) belongs. Since the contract is agreed on condition that all administrative procedures related to the funded research are handled within the institution, the Japan based PI should consult with the relevant department(s) at their institution.

8.3 Reporting

Japan-based PIs shall submit to JST annual research plans for the year ahead and reports on the progress of the past year, and the institution with which the PI is affiliated shall submit an annual financial report.

At the end of the period of support and after completion of the joint research activities, the Japan-based PI shall promptly submit to JST a final report which shall include a financial report and a description of the research activities and outcomes. The report shall include a general summary of the activities of both the Japanese and the German research teams. If papers describing results of the research activities are presented to academic journals, societies, and similar, a list of those papers and other related information should be attached to the final report. Detailed instructions for preparation of the final report will be provided to





the Japan-based PI during the final year of the project. Completed projects will be duly evaluated and and final reports will partially be made public on the JST website.

Contact point:

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E-mail: jointge(at)jst.go.jp

Website: https://www.jst.go.jp/inter/english/index.html