



Bundesministerium
für Wirtschaft
und Energie



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Funding Guideline for International Hydrogen Projects

Division IIA2

Bilateral Energy Cooperation

17 November 2021

BMWi Funding Instruments



H2Global

Market incentive through compensation of differential costs between purchase and sales prices



FRL

Funding guideline for international cooperation projects



Fund

Global as well as bilateral innovation funds



H2-Uppp

Project scouting and support in strategic partner countries

Funding Guideline for International H2 Projects



Funding guideline for international cooperation projects (I) – jointly with BMBF



Objective: Establishment of production facilities for green H2 and derivatives as well as for storage, transport and integrated application of H2 outside the EU and EFTA countries. Additionally accompanying research projects and academic and vocational training.



Type and amount of funding: non-repayable grants as partial funding. Maximum amount of funding 15 million euros per applicant & project.



Publication of Guideline: October 4, 2021



Procedure: Funding applications/projects should be submitted to a project management agency on a continuous basis from then on. A decision on approval will only be made by a selection committee after a first deadline (**31 Oct 2021**). Two further rounds will follow in **Dec 2021** and **Feb 2022**.

Eligibility requirements



Funding guideline for international cooperation projects

Eligible applicants



- Companies with a **head office within the EU and a permanent establishment or branch in Germany** at the time of payment of the grant
- **Universities and research institutions in association with companies**
- **Associations of universities and research institutions (module 2)**

Eligibility requirements



Funding guideline for international cooperation projects

Eligibility requirements (selection)



- Country of implementation: Countries **outside the EU and EFTA**.
- Usage obligation: Plants must be used according to funding purpose for **at least 3 years after commissioning**.
- **Project implementation** must be **impossible without funding**
- Proof of the **pre-development status** of the project (e.g. preliminary studies, permits)
- Amount of actual or potential **greenhouse gas savings**
- Sustainability of water supply, local labor standards must at least meet relevant **ILO standards**
- **Carbon usage**: Carbon used has to originate from air capture, from biogenic CO₂ or capture of industrial emissions that are generated anyway.

Eligibility requirements



Funding guideline for international cooperation projects

Eligibility requirements (II)



- Definition of **green hydrogen**: Hydrogen, which is generated from water by electrolysis. The electricity required for electrolysis must be generated on the basis of renewable energies. When determining the property as renewable, the understanding of the term in Section 3 No. 21 EEG is applied.
- Use of **renewable electricity** must be proven via a **guarantee of origin certificate** or a **power purchase agreement**. If certificates cannot be obtained in the country of implementation, detailed descriptions on the source of electricity have to be provided. Applicant must show how incentives to invest in additional renewable energy installations are created and investments in additional fossil fueled power plants are disincentivized. The electricity used for the production of green hydrogen shall not impair the local power supply.

Type and amount of funding: non-repayable grants on a pro-rata basis – Module I

GBER Art.	Eligible costs	Amount	
Art. 25 Research, development and innovation	Personnel costs, costs of instruments, equipment, buildings, land, contract research Additional overheads and other operating costs	25% of the eligible costs	Medium-sized enterprise + 10 percentage points; Small enterprise + 20 percentage points;
Art. 36 Funding for environmental protection	Cost of an investment in environmental protection as a separate investment OR Difference between the cost of an investment in environmental protection and a similar less environmentally friendly investment	40% of the eligible costs	Maximum funding amount of €15 million per applicant and project
Art. 41 GBER Funding of renewable energy	Cost of an investment in renewable energy generation as a separate investment OR Difference in cost compared with a less environmentally friendly investment OR total investment cost of projects seeking to increase the level of environmental protection (small-scale projects)	30 to 45% of eligible investment costs	

Funding object – Module I

Funding object	Examples	Funding purpose
Electrolysis	Installation of electrolyzers (for example for PEM electrolysis, alkaline electrolysis, high-temperature electrolysis, TRG 7-9)	Production of hydrogen from renewable energy, testing of innovative generation technologies
Hydrogen storage	Exploration and preparation of storage infrastructure, installation of hydrogen tanks, processing plants, ancillary components (for example for compressed hydrogen storage, liquid hydrogen storage, absorption, metal hydrides, LOHC; chemical storage)	Temporary storage of renewable hydrogen, testing of new types of storage technology
Hydrogen processing	Converting hydrogen into chemical base substances or synthetic fuels (e.g. ammonia, air capture plants, e-fuel for aviation, e-diesel, methanol)	Provision of hydrogen derivatives for certain consumer technologies, testing of innovative processes
Transport/ infrastructure	Installation of facilities and infrastructure for loading and unloading H ₂ and H ₂ carriers for all types of transport (e.g. liquid hydrogen, ammonia, LOHC)	Transport of hydrogen and its derivatives to final customers, testing of innovative transport options
Use	Processes in the steel and chemical industry, applications in maritime transport, aviation and fuel cells	Greenhouse gas reduction thanks to the use of climate-neutral hydrogen
Integrated projects	Renewable energy + electrolyzers + processing into derivatives + transport + use	All aforementioned purposes depending on the funding object and synergies between individual process steps

Type and amount of funding: non-repayable grants on a pro-rata basis – Module II

GBER Art.	Eligible costs	Amount	
Art. 25 Research, development and innovation	Personnel costs, costs of instruments, equipment, buildings, land, contract research Additional overheads and other operating costs	Academia, research and scientific institutions up to 100% and industry 50% of the eligible costs	Medium-sized enterprise + 10 percentage points; Small enterprise + 20 percentage points;
Art. 28 Innovation aid for SMEs	Costs for obtaining, validating and defending patents and other intangible assets Costs for secondment of highly qualified personnel from a research and knowledge-dissemination organization or a large enterprise Costs for innovation advisory and support services	Maximum 50% of the eligible costs	Maximum funding amount of €5 million per applicant and project

Funding object – Module II

Funding object	Examples	Funding purpose
Material research	Secondary research for materials and process development	Accelerate processes, promote market ramp-up
Analysis and system studies	Secondary research for generation and integration of green hydrogen into the energy system, e.g. simulation/modelling, techno-economic analysis, potential analysis, path evaluation and feasibility studies	Preparatory analysis of underlying systemic conditions
Academic and vocational training	Projects integrating aspects of academic and vocational training into R&D	Support local capacity building to establish technologies and processes sustainably
Electrolysis	Innovative technologies for hydrogen generation, also in combination with technologies for water supply, e.g. seawater desalination, direct seawater electrolysis, disruptive processes	Secondary application-oriented basic research for technologies for the sustainable generation of hydrogen

Funding object – Module II

Funding object	Examples	Funding purpose
Hydrogen processing	Converting hydrogen into chemical base substances or synthetic fuels (e.g. ammonia, e-fuel for aviation, e-diesel, methanol and other alcohols), local container solutions	Secondary application-oriented basic research for provisioning of hydrogen derivatives to end users
Hydrogen storage	Material research for hydrogen tanks and pipelines, as well as carrier substances for all means of transport (e.g. liquefied hydrogen, LOHC, ammonia)	Secondary application-oriented basic research for storage and transport of hydrogen
Integrated applications	Fuel cells for cars and heavy duty applications, e-fuels for agriculture, decarbonisation of steel and chemical industries, e-fuels for aviation	Secondary application-oriented basic research for integrated applications for decarbonisation of processes in sectors that cannot be decarbonized otherwise

Further information and contact details

Contact Module I: ptj-modul1-h2int@fz-juelich.de

Contact Module II: ptj-egf-h2int@fz-juelich.de

Website Module I: <https://www.ptj.de/en/project-funding/international-hydrogen-projects-bmwi-module-1>

Website Module II (German): <https://www.ptj.de/projektfoerderung/anwendungsorientierte-grundlagenforschung-energie/internationale-wasserstoffprojekte-modul2>

Funding Guideline:

[https://www.ptj.de/lw_resource/datapool/systemfiles/cbox/8088/live/lw_bekdoc/preliminary translation_funding_guideline_international_hydrogen_projects.pdf](https://www.ptj.de/lw_resource/datapool/systemfiles/cbox/8088/live/lw_bekdoc/preliminary_translation_funding_guideline_international_hydrogen_projects.pdf)



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Thank you for your Participation!

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