



Federal Ministry
of Education
and Research



Federal Ministry of Education and Research

Announcement within the framework of the Strategy of the Federal Government for the Internationalization of Education, Science and Research

Regulations for funding international projects on the topic of green hydrogen

Funding call for “European transport infrastructures for green hydrogen”

(Module F of the announcement)

**Cooperation with Belgium (Flanders), Canada, Finland, Ireland, Netherlands, Portugal, Spain
of 6 August 2021**



1 **Federal Ministry of Education and Research**

2 **Announcement within the framework of the Strategy of the Federal Government for the Interna-**

3 **tionalization of Education, Science and Research**

4 **Regulations for funding international projects on the topic of green hydrogen**

5 **Funding call for “European transport infrastructures for green hydrogen”**

6 **(Module F of the announcement)**

7 **Cooperation with Belgium (Flanders), Canada, Finland, Ireland, Netherlands, Portugal, Spain**

8 **of 6 August 2021**

9

10 The Federal Ministry of Education and Research is providing funding for technology collaborations on the

11 topic of green hydrogen between industry and science which involve partners from EUREKA countries.

12 **Funding call: Green hydrogen research cooperation with EUREKA countries**

13 Hydrogen technologies offer considerable industrial potential while at the same time playing a key role in

14 achieving both German and European climate action goals. This funding call is issued under the Strategy of

15 the Federal Government for the Internationalization of Education, Science and Research, the National Hy-

16 drogen Strategy, the Federal Government’s High-Tech Strategy 2025 as well as in the context of the funding

17 programme “Innovation Union Europe – Germany’s Commitment to the European Research Area” under the

18 announcement of regulations for funding international projects on the topic of green hydrogen. This measure

19 therefore aims to facilitate and promote effective long-term links between the German hydrogen research

20 community and potential EUREKA partners in Europe in accordance with the objectives of the National Hy-

21 drogen Strategy.

22 The call complements the initiative for research and innovation for green hydrogen within the European Re-

23 search Area, particularly the process for developing a Strategic Research and Innovation Agenda that has

24 been driven by participating countries. During this process, stakeholders from science, industry and civil so-

25 ciety identify priority research issues and cooperation partners. The call focuses on one of the priority topics

26 identified in this context, namely European transport infrastructures for green hydrogen. The paramount ob-

27 jective is to establish collaborations with countries that play a central role with regard to European distribu-

28 tion grids.

29 EUREKA is a political initiative for cross-border European cooperation in technological research and devel-

30 opment for civil purposes. EUREKA enhances the competitiveness of businesses and research institutions in



31 the European and global markets in the long term.

32

33 **Projects for close-to-market research and development and priority topics:**

34 Funding is provided for collaborative research and development projects (not for individual projects) which
35 involve international collaboration with partners from one or more of the EUREKA countries

36 **Belgium (Flanders), Canada, Finland, Ireland, Netherlands, Portugal, Spain**

37 to address one (or more) of the following topics:

- 38 • Can existing (gas) infrastructure be used to transport (green) hydrogen? (European countries
39 have differing approaches concerning existing vs. alternative infrastructure, materials, prop-
40 erties of pipelines.)
- 41 • What requirements have to be fulfilled to use, if possible, existing gas pipelines to transport
42 hydrogen (safety, material resistance, etc.)?
- 43 • How can efficient transport and storage help to achieve higher efficiency levels?
- 44 • What properties are required for infrastructure to be used efficiently? (Different usage mo-
45 dels need to be taken into account.)
- 46 • What types of solutions are there for smart grid control (AI, digital technology) and inte-
47 grated grid planning (electricity, gas, heat)?

48

49 When addressing these research issues, applicants need to show how the proposed project will contribute to
50 the exploration of overarching issues such as:

- 51 • (comparative) potential analysis and economic viability assessment for different hydrogen
52 transport options (direct transport vs. LOHC vs. ammonium vs. synthetic gas, methanol ...)
- 53 • integration of gas and electricity grids into a flexible European 'supergrid', e.g. gas grid or
54 long-distance HVDC
- 55 • integrated grid planning for electricity and gas grids based on, for example, digital twins, re-
56 gional demand and production projections, etc.
- 57 • analysis of potential routes for hydrogen import from overseas to enable forward-looking
58 grid planning
- 59 • options for international certification models for hydrogen and hydrogen derivatives
- 60 • socio-economic aspects, regulatory frameworks, market models, acceptance, in particular
61 shaping the transformation of a natural gas grid into an integrated energy grid for Europe;

62 including the use of green hydrogen to replace all fossil fuels in various fields of application
63 and along the entire value chain

64

65 Further research topics can also be addressed, including:

- 66 • the interface between pilot plants for green hydrogen storage and transport grids
- 67 • novel systems and equipment for monitoring hydrogen distribution grids and the relevant
68 manufacturing processes (including novel materials and sensors)
- 69 • enhancing infrastructure for the production, use and continued expansion of hydrogen (plan-
70 ning, simulation, construction, logistics)
- 71 • pilots to demonstrate novel processes (up to TRL 6) for industrial applications of hydrogen
72 (e.g. cement, chemicals, shipping)

73

74 Collaborative projects submitted by German applicants in cooperation with at least one international partner
75 are eligible for funding. The projects will be expected to have great practical relevance and to produce insights
76 and research results in the above fields of application which can be exploited in Germany and will lead to new
77 technologies, products and/or services. Projects must make a clear contribution towards establishing a Eu-
78 ropean hydrogen economy and identify how the research findings will be implemented in society and indus-
79 try. **At the end of their duration, projects should achieve a technology readiness level between TRL 4 and**
80 **6.** The results of the funded projects should be used primarily in Germany, the European Economic Area or
81 Switzerland.

82

83 **Amount and duration of possible funding**

84 Funding will be awarded as non-repayable project grants. The funding call is targeted at businesses, non-
85 university research institutions and higher education institutions in Germany. Participation by at least one
86 SME from Germany is mandatory. The maximum funding amount per project is 1 million euros, of which a
87 minimum of 40% of the funding received by the German partner(s) must be granted to the SME involved. The
88 maximum amount of funding for higher education institutions and non-university research institutions is
89 300,000 euros per institution; the maximum amount of funding for businesses is 450,000 euros. Funding will
90 be provided for up to 36 months.

91 Applications may be submitted for the following types of funding:

- 92 a. Financial resources to cover staff required for the project
- 93 b. Project-related non-cash resources and funds for equipment (see guidelines for applicants) as well



94 as funding for contracts with third parties

95 c. Funding for travel and stays by German researchers and experts: The sending country will fund
96 travel and stays by project researchers and experts from the partner country

97 d. Travel expenses for international events: In special exceptional cases, funds can be granted for
98 travel to international events, e.g. for participating in international, project-relevant confer-
99 ences held in the home country or abroad. Conference fees will not be covered.

100 e. Patents Expenditure required for obtaining and validating patents and other industrial property
101 rights during the project period is eligible for funding (see annex for state aid for compa-
102 nies/SMEs).

103

104 **Procedure**

105 The funding procedure consists of **two phases**: The collaboration coordinator submits the project proposal
106 in English via the electronic application system of the EUREKA Secretariat (ESE) in Brussels. The project pro-
107 posal must include a description of the project and will be used for evaluation and as the basis of a funding
108 decision. It should outline in particular the added value of the collaboration, the quality of the project man-
109 ager(s) and consortium, the innovativeness and technological risks as well as the potential for commercial
110 exploitation of the project. Details are available at [https://www.eurekanetwork.org/open-calls/greenhydro-](https://www.eurekanetwork.org/open-calls/greenhydrogen-2021)
111 [gen-2021](https://www.eurekanetwork.org/open-calls/greenhydrogen-2021) . The deadline for submission of the international collaborative project proposal is 22 Novem-
112 ber 2021 (no cut-off deadline). In the second phase, German project partners whose project proposals have
113 been evaluated positively will be invited to submit a formal application for funding in German via the 'easy-
114 Online' system, taking into account the information provided at [https://www.eurekanetwork.org/open-](https://www.eurekanetwork.org/open-calls/greenhydrogen-2021)
115 [calls/greenhydrogen-2021](https://www.eurekanetwork.org/open-calls/greenhydrogen-2021) .

116

117 Applicants should contact the EUREKA Office at the DLR Project Management Agency (Department for Eu-
118 ropean and International Cooperation) before they submit their proposals.

119 Phone: +49 228/38 21-1352 or -1380

120 Fax: +49 228/38 21-1444

121 Email: eureka@dlr.de

122

123



124 **Further information is available at:**

125 [International research cooperations on green hydrogen - BMBF](#)

126

127 **Please note:**

128 This is an informal funding call based on the announcement of the Federal Ministry of Education and
129 Research of regulations for funding international projects on the topic of green hydrogen of
130 29 March 2021. The provisions of the above-mentioned announcement apply without alteration to
131 submitted project outlines.