



1 **Federal Ministry of Education and Research (BMBF)**
2 **Announcement within the framework of the Strategy of the Federal Government for**
3 **the Internationalization of Education, Science and Research**
4 **Regulations for funding international projects on the topic of green hydrogen**

5
6 **Funding call**

7 **Research cooperation with Ukraine, the countries of the South Caucasus and**
8 **Central Asia and Iran**

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10 Cooperation with Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and
11 Uzbekistan), Iran, the South Caucasus (Armenia, Azerbaijan and Georgia) and Ukraine is of
12 great strategic importance for Germany and the European Union (EU) with regard to the
13 German National Hydrogen Strategy and the EU Hydrogen Strategy. These regions or
14 countries have a number of advantages which are essential for generating and exporting green
15 hydrogen. These include relatively inexpensive solar, wind and water resources, comparatively
16 low production costs, developed transport infrastructures, geographical proximity, strong
17 mutual interest in cooperation and, last but not least, relatively high scientific potential.

18 With reference to the announcement of regulations for funding international projects on the
19 topic of green hydrogen, funding will be granted under this funding call for projects related to
20 the rapid development of economically competitive technologies for the sustainable
21 production of hydrogen under realistic conditions as well as to its storage, transport and use.
22 This also includes support projects for investigating the resulting societal implications and the
23 potential for protecting the climate.

24 This funding call is intended to support the development and intensification of research
25 cooperation with the partner countries listed above on the topic of hydrogen and thus to
26 realize the economic, environmental and development policy opportunities offered by
27 transnational cooperation. The production of green hydrogen can be used to stimulate the
28 development of local production capacities for renewable energies and to help countries
29 which have previously focused on exporting fossil fuels to switch their supply chains to



30 hydrogen. Research into appropriate technologies for the production, storage, transport and
31 use of hydrogen thus constitutes an important basis for jointly addressing the opportunities
32 and challenges of the energy transition and contributing to the achievement of the climate
33 goals.

34 In accordance with the [National Hydrogen Strategy](#), research projects on turquoise hydrogen
35 serving this purpose can also be considered and funded in addition to green hydrogen during
36 a transitional period. Furthermore, the scientific and technological potential of each of the
37 above-mentioned partner regions provides the basis for forward-looking cooperation for the
38 development of a sustainable hydrogen economy. The funding measure is to serve as an
39 incentive particularly for German universities, non-university research institutions and
40 research-oriented SMEs to develop cooperative approaches with partners from the regions
41 listed above in accordance with their scientific strengths and problem-solving expertise in the
42 field of carbon-neutral hydrogen. The aim is to significantly strengthen relevant research and
43 development capacities in Germany, support the internationalization and international
44 visibility of German research institutions and drive application-oriented approaches for
45 developing and establishing a green hydrogen economy. Opportunities for German companies
46 to enter new markets in the target regions are welcome.

47 This funding call is issued under the Strategy of the Federal Government for the
48 Internationalization of Education, Science and Research based on the regulations for funding
49 international projects on the topic of green hydrogen
50 ([https://www.bmbf.de/en/international-research-cooperations-on-green-hydrogen-
51 14113.html](https://www.bmbf.de/en/international-research-cooperations-on-green-hydrogen-14113.html)). Specifically, funding will be provided for pilot projects in accordance with
52 **Module B** of the announcement of regulations for funding international projects on the topic
53 of green hydrogen.

54 Under this funding call, funding will be provided for international research projects (individual
55 or collaborative projects) which primarily aim to advance R&D cooperation between German
56 institutions and international partners in accordance with the above-mentioned funding
57 purpose. In addition to the participation of at least one international partner from the
58 countries addressed in this funding call, participation of partners from third countries is also
59 generally possible.



60 The project outline must be submitted by the German applicant or collaborative alliance
61 together with at least one or several scientific partner institutions from the nine specified
62 countries in Central Asia, Iran, the South Caucasus and/or Ukraine.

63 In principle, the approach pursued should not be tied to any specific technology. Funding will
64 be provided for projects covering aspects related to the entire spectrum of the topic
65 “development of a green hydrogen economy”. Possible aspects are:

- 66 - Generation / catalytic processes: (further) development of efficient catalytic processes
67 including identification of sustainable materials for catalysts and processes for directly
68 obtaining high-quality chemicals such as olefins and liquid aromatic compounds
- 69 - Hydrogen electrolysis: research into hydrogen electrolysis processes using renewable
70 energy sources according to the specific local potential of the regions addressed
- 71 - Biomass: research into technologies for producing hydrogen from or by means of biomass
72 (e.g. catalytic hydrogen generator on the basis of organic raw materials, biotechnologies
73 for producing hydrogen from food waste, etc.)
- 74 - Renewable energies: linking methane pyrolysis to the generation of electricity from
75 renewable sources of energy according to local potential
- 76 - Hydrogen storage, transport and distribution: use of existing pipelines and other transport
77 infrastructures, industry requirements and certification
- 78 - Carbon utilization: development of environmentally sustainable processes for utilizing the
79 carbon produced during pyrolysis to contribute to increasing the economic efficiency of
80 the overall process
- 81 - Climate protection potential: analysis of the associated potential for protecting the climate
82 arising from the development of sustainable hydrogen production and the possible
83 utilization of by-products
- 84 - Society and ecology: analysis of societal implication and acceptance; analysis of the
85 greenhouse gas balance and/or ecological balance

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87 Funding will be provided to the German side as non-repayable project grants usually
88 amounting to a maximum EUR 200,000 per project, including a 20% flat-rate project grant
89 where appropriate and normally for a period of between 24 and 36 months.

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93 In the first phase, project outlines must be submitted to the project management agency in
94 written and/or electronic form by 30 June 2021 at the latest using the “easy-Online”
95 electronic tool for compiling project outlines
96 (<https://foerderportal.bund.de/easyonline/reflink.jsf?m=IB->
97 [GUS/RUS&b=WASSERSTOFF EAP 2021&t=SKI](https://foerderportal.bund.de/easyonline/reflink.jsf?m=IB-GUS/RUS&b=WASSERSTOFF_EAP_2021&t=SKI)).

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99 The outline should include the following aspects of the project:

100 I. Information about the project coordinator and the German and foreign project partners
101 (please attach letter of intent)

102 II. A meaningful summary (of goals, research priorities, exploitation of results)

103 III. Scientific framework of the project

104 a) Planned activities for implementing the above-mentioned goals of the funding call

105 b) Description of the project’s scientific objective

106 c) Information about the current state of science and technology

107 d) Participation of third parties, e.g. SMEs (if appropriate)

108 IV. International cooperation within the scope of the project

109 a) Added value of international cooperation

110 b) Contributions made by international partners; access to international resources

111 c) Experience of the participating partners in international cooperation; previous
112 collaborations

113 V. Long-term impact of the measure/utilization plan

114 a) Expected scientific results

115 b) Lasting consolidation of the cooperation with the international partners

116 c) Plans for cooperation in follow-up projects

117 d) Plans for expansion of cooperation to other institutions and networks

118 VI. Description of the planned work steps of the cooperation project

119 VII. Estimated expenditure/costs (prospective funding requirement) broken down by type of
120 expenditure/costs and project partners

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122 The deadline for submission is not a cut-off deadline. However, it may not be possible to
123 consider project outlines received after the above date.



124 Please address your questions to:

125 DLR Project Management Agency
126 (European and International Cooperation)
127 Heinrich-Konen-Straße 1
128 53227 Bonn

129 For more information about the subject of the call, please contact:

130 Dr Hendrik Meurs
131 Email: Hendrik.Meurs@dlr.de
132 Phone: +49 228 - 3821-1944

133 For questions relating to administrative matters, please contact:

134 Svenja Schäufele
135 Email: Svenja.Schaeufele@dlr.de
136 Phone: +49 228 - 3821-2215

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138 **Further information is available at:**

139 [https://www.bmbf.de/en/international-research-cooperations-on-green-hydrogen-](https://www.bmbf.de/en/international-research-cooperations-on-green-hydrogen-14113.html)
140 [14113.html](https://www.bmbf.de/en/international-research-cooperations-on-green-hydrogen-14113.html)

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142 **Please note:**

143 This is an informal funding call based on the announcement of the Federal Ministry of
144 Education and Research within the framework of the Strategy of the Federal Government for
145 the Internationalization of Education, Science and Research of regulations for funding
146 international projects on the topic of green hydrogen of 29 March 2021. The provisions of this
147 announcement apply without alteration to submitted project outlines.