

1 **Federal Ministry for Economic Affairs and Energy and Federal Ministry**
2 **of Education and Research**

3
4 **Funding guideline for international hydrogen projects**

5 **Within the scope of the National Hydrogen Strategy and the Economic Recovery Plan:**
6 **to combat the effects of the coronavirus pandemic, secure prosperity**
7 **and strengthen future viability**
8

9 **1. Preamble**

10 The Federal Government is pursuing the long-term goal of achieving climate neutrality in line with
11 the goals of the Paris Agreement in order to keep global warming well below 2 degrees and, if
12 possible, to limit the temperature increase to 1.5 degrees. With the amendment to the Climate
13 Change Act, Germany has set itself the goal of becoming climate neutral by 2045 and making an
14 important contribution to achieving the European climate target. This means that greenhouse gas
15 emissions that are very difficult to reduce in particular, such as process-related greenhouse gases
16 from industry, must also be avoided. Hydrogen offers new solutions for avoiding such emissions.

17 A successful energy transition means combining security of supply, affordability and environmen-
18 tal compatibility with innovative and intelligent climate protection measures. In order to do this,
19 alternative options to the fossil fuels that are still being used today will be needed. This applies in
20 particular to gaseous and liquid energy sources, which in the long term will remain an integral part
21 of the energy system in an industrialised country like Germany. Hydrogen, therefore, will play a
22 key role in the further development and completion of the energy transition.

23 In the Federal Government's view, only hydrogen produced on the basis of renewable energy
24 sources ("green" hydrogen) is sustainable in the long term. For this reason, the goal of the Federal
25 Government is to use green hydrogen, promote a rapid market ramp-up and establish the corre-
26 sponding value chains – and also do this on an international scale.

27 In order to meet Germany's future demand for hydrogen and its derivatives, the vast majority of
28 the requirement will have to be imported. In addition to deeper collaboration with EU states, pro-
29 duction opportunities are also to be systematically developed in other partner countries. With its
30 National Hydrogen Strategy, the Federal Government's goal is to develop production capacities
31 and new, sustainable supply chains abroad in close collaboration with partner countries, the aim
32 being to ensure that local markets and local decarbonisation efforts are supported by green hy-
33 drogen production. This will also generate employment effects in Germany and in our partner
34 countries, which will subsequently result in long-term pathways to growth.

35 There is still considerable need for innovation and scaling along the entire value chain of hydrogen
36 and its derivatives in order to bring about an international market ramp-up. What is needed now,
37 therefore, is an investment and innovation campaign.

38 A strategic element when preparing for success on international markets is research combined
39 with innovation. For this reason, the funding measures outlined in this guideline are linked to the
40 7th Energy Research Programme (ERP).

41 On the basis of this funding guideline, an offer of support is provided for international projects to
42 set up facilities for the production of green hydrogen and its derivatives, in addition to the storage,
43 transport and the integrated use of hydrogen and of accompanying research projects in line with
44 the National Hydrogen Strategy.

45 This funding guideline creates a new framework for funding the above-mentioned projects as
46 soon as possible in countries outside the EU and EFTA states. The programme is designed to
47 support the setting up of industrial production facilities, pilot and demonstration projects, accom-
48 panying research projects, in addition to any accompanying or preparatory scientific analyses and
49 studies. With these funding options, the Federal Ministry for Economic Affairs and Energy and the
50 Federal Ministry of Education and Research will take into account the various financing needs of
51 the institutions eligible to apply for funding, applying their well-proven allocation of responsibilities
52 between the ministries within the scope of the 7th Energy Research Programme.

53

54 **2. Legal basis**

55 The Federal Government will award grants on the basis of this funding guideline and in particular
56 in accordance with the following regulations, in each case in the currently valid version:

- 57 – Sections 23 and 44 of the Federal Budget Code and the general administrative regulations
58 adopted thereunder;
- 59 – Articles 25, 28, 36 and 41 of Commission Regulation (EU) No. 651/2014 of 17 June 2014
60 declaring certain categories of aid compatible with the internal market in application of
61 Articles 107 and 108 of the Treaty on the Functioning of the European Union in the version
62 of Commission Regulation (EU) 2020/972 of 2 July 2020 (OJ L 215/3 of 7 July 2020)
63 (General Block Exemption Regulation - GBER);
- 64 – Regulation (EU) No. 517/2014 of the European Parliament and of the Council of 16 April
65 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006.

66 There is no legal entitlement to a grant. The awarding authority will decide freely after due as-
67 sessment of the circumstances within the framework of the budget funds available. The approval,
68 payment and accounting of the funds as well as the proof and examination of the proper use and,
69 if necessary, the revocation of the award and the reclaiming of the funds awarded are governed
70 by Sections 48 to 49a of the Administrative Procedure Act, Sections 23 and 44 of the Federal
71 Budget Code and the related general administrative regulations, unless deviation from the general
72 administrative regulations is allowed under the present funding regulations.

73 The Federal Audit Office is entitled to carry out audits in accordance with Sections 91 and 100 of
74 the Federal Budget Code. Depending on the module, the Federal Ministry for Economic Affairs
75 and Energy or the Federal Ministry of Education and Research as awarding authorities, the audit
76 bodies of the European Union as well as the appointed project management organisation and

77 authorised representatives in accordance with No. 8.1 General Auxiliary Terms and Conditions
78 for Funds Provided for Project Funding on a Cost Basis (ANBest-P-Kosten) or Administrative
79 Regulation No. 11.1 relating to Section 44 of the Federal Budget Code are also entitled to carry
80 out audits.

81

82 3. Definitions

- 83 - **Derivatives** within the meaning of this guideline are gaseous or liquid energy carriers
84 based on green hydrogen; these include, for example, methane, ammonia, methanol, pet-
85 rol, diesel and paraffin.
- 86 - For the purposes of this guideline, **green hydrogen** means hydrogen produced from wa-
87 ter by electrolysis. The electricity required for electrolysis must be generated on the basis
88 of renewable energy sources. When designating the characteristics of an energy source
89 as being renewable, the definition in Section 3 no. 21 of the Renewable Energy Sources
90 Act is applied to the situation abroad.
- 91 - **Investment costs** within the meaning of this guideline include the costs of an investment
92 in tangible and intangible assets (e.g. patents, concessions) excluding VAT (if the appli-
93 cant is not entitled to deduct VAT, then including VAT) and must be directly related to the
94 supported measures (green hydrogen production facilities and facilities for the production
95 of derivatives, in addition to projects for the storage, transport and integrated use of hy-
96 drogen).
- 97 - **Extra investment costs** within the meaning of this guideline are the costs required to set
98 up the facilities, less the costs for comparable conventional facilities.
- 99 - **Small and medium-sized enterprises (SMEs)** within the meaning of this guideline are
100 all undertakings that meet the requirements of Annex I of the GBER.
- 101 - **Market ramp-up** within the meaning of this guideline refers to the successful development
102 of markets for green hydrogen and its derivatives as well as the creation and establish-
103 ment of supply and demand, the basic principle being to achieve economies of scale and
104 learning effects along the entire value chain, in addition to promoting and implementing
105 innovations.
- 106 - **Additional costs** within the meaning of this guideline are costs for planning and installa-
107 tion. They primarily include the costs for set-up, assembly and connection to existing sys-
108 tems to prepare the investment for operational readiness. The costs must be directly re-
109 lated to the projects.
- 110 - **Carrier substances** are substances that can absorb and release green hydrogen by a
111 chemical reaction, e.g. liquid organic hydrogen carriers (LOHC). This allows green hydro-
112 gen to be transported or stored more easily.

- 113 - **Technology Readiness Level (TRL)** refers to a scale used for assessing the maturity
114 level of new technologies. On a scale of 1 to 9, the TRL¹ indicates how advanced a tech-
115 nology is (cf. specification in Horizon 2020 - Work Programme 2018-2020 General Annex
116 G.
- 117 - The **country of implementation** is the country outside the territory of the European Union
118 and the EFTA countries in which the funded project is to be implemented.
- 119 - An **undertaking** is any independent entity engaged in economic activities, regardless of
120 its legal form, the way in which it is financed, and its intention to make a profit. An economic
121 activity is any activity that consists in offering goods and services on a given market.
122

123 4. Aims and purpose of the grants

124 The grants provided under this directive are aimed at promoting cross-border collaboration in the
125 field of green hydrogen and the derivatives produced from it, in addition to storage, transport and
126 the use of integrated application technologies. The aim is to provide effective support for the
127 urgently needed market ramp-up for green hydrogen and its derivatives, to speed up the creation
128 of an international market for these products and thus contribute to achieving the climate targets
129 and strengthening the economy. The establishment of trade relations with potential exporters of
130 green hydrogen and its derivatives is also expected to benefit from the funding programme.

131 The following four main goals are being pursued:

- 132 1. the targeted creation of a global market for green hydrogen within a short space of time
133 and a subsequent price reduction through scaling and innovation
- 134 2. promoting the use and application of hydrogen technologies by companies with a subsid-
135 iary or permanent establishment in Germany within the meaning of Article 49 of the TFEU
136 (see definition in Chapter 6 below) along the hydrogen value chain.
- 137 3. the preparation of an import infrastructure to Germany
- 138 4. setting up capacity along the entire value chain in terms of both academic and vocational
139 training. This will enhance potential and build bridges for sustainable collaboration.
140

141 Funded projects are intended to facilitate the implementation of the above-mentioned goals (cf.
142 Chapter 10.2.2: Selection criteria). In addition, it must be borne in mind that partner countries are
143 to be supported in their efforts to move ahead with their energy transition and the development of
144 an industrial policy perspective with regard to development and growth opportunities in line with
145 the goals of the Paris Climate Agreement. At the same time, it will be possible to establish inter-
146 national trade relations for hydrogen at an early stage.

147 To achieve the goals, sustainable production options for green hydrogen and its derivatives in
148 Module 1 in particular are to be systematically developed in cooperation with partner countries
149 outside the European Union and the EFTA states. At the same time, projects for the storage,
150 transport and the integrated use of hydrogen and its derivatives abroad are to receive funding,

¹ https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

151 which may also be used for integrated projects that cover several value-added steps. The funding
152 can also be used for other investments that are important for developing a market for green hy-
153 drogen or for preparing green hydrogen for export to Germany, but not used solely for the produc-
154 tion of (green) electricity.

155 In Module 2, the funding programme aims at research projects that are designed to accompany
156 projects funded in Module 1. This includes preparatory or accompanying scientific analyses and
157 studies. Aspects that may be used to train the next generation of scientists and economists can
158 also be included in projects.

159 In line with the Action Plan for the National Hydrogen Strategy, the funded projects are to focus
160 on the entire value chain in order to provide planning security for future hydrogen producers,
161 suppliers, consumers and other investors and research actors at home and abroad. The funding
162 guideline is thus an integral part of the investment and innovation campaign with those partner
163 countries announced in the Action Plan. It does not assume that projects are necessarily suited
164 to the preparation of green hydrogen or its derivatives for export to Germany or elsewhere in the
165 European Union, but is deliberately designed to be global in nature.

166 Under the funding guideline, advanced approaches are also to be further developed to marketa-
167 bility in order to accelerate the market readiness of technologies and to support the accumulation
168 of implementation experience in a variety of geographical and climatic conditions. The aim is to
169 help bridge the difficult phase between technology development and market penetration.

170 The funding is intended to contribute as far as possible to decarbonisation through the use of
171 hydrogen and its derivatives in the partner countries and in Germany as well in the longer term,
172 depending on the development of transport and storage options. The special concerns of small
173 and medium-sized enterprises will be taken into account in the implementation of funded projects.

174 In line with the National Hydrogen Strategy, the guideline is intended to implement projects that
175 are suitable, sustainable and scalable with different investment volumes, using different types of
176 technology, in different countries and with potentially competitive location conditions in order to
177 move ahead with the market ramp-up of green hydrogen on a global scale and to support the
178 accumulation of experience based on a variety of different technologies.

179

180 **5. Object of the funding**

181 Within the scope of the present funding guideline, international, interdisciplinary and innovative
182 projects are to be funded. Module 1 focuses on projects in the field of industrial application and
183 experimental development; Module 2, on the other hand, addresses accompanying projects in
184 basic and industrial research, scientific studies and capacity building.

185 In **Module 1**, international projects for the production of green hydrogen and its derivatives, in
186 addition to storage, transport and its integrated use in the field of industrial application and exper-
187 imental development will receive funding in accordance with Articles 25, 36 and 41 of the GBER.

188 In the field of experimental development (Article 25), funding will be provided for technologies that
189 make a decisive contribution to an early market ramp-up with Technology Readiness Levels (TRL)
190 7-8 as well as preparatory or accompanying experimental development, where applicable.

191 Module 1 thus comprises the following:

192

- 193 - Projects for the production of green hydrogen and the further development of innovative
194 production technologies, such as the installation of electrolysers (e.g. PEM electrolysis,
195 alkaline electrolysis, high-temperature electrolysis). The purpose of funding projects of
196 this type is to support the production of renewable hydrogen and near to market testing
197 of innovative generation technologies that are relatively close to market readiness in the
198 operating environment. Funding will be provided on the basis of Article 41 of the GBER.
199 To the extent that funding will be provided for experimental development when testing
200 innovative generation technologies (TRL 7-8), this will be based on Article 25 of the
201 GBER.
- 202 - Projects for the production of hydrogen derivatives based on green hydrogen (further
203 processing) include the conversion of green hydrogen into chemical raw materials and
204 synthetic fuels (e.g. ammonia, e-kerosene, e-diesel, methanol, incl. CO₂ capture sys-
205 tems). The purpose of the funding in this case relates to the provision of hydrogen deriv-
206 atives for specific end-user technologies and near to market testing of innovative pro-
207 cesses that are relatively close to market readiness in the operating environment. Invest-
208 ment aid will be provided on the basis of Article 36 of the GBER. To the extent that fund-
209 ing is provided for experimental development when testing innovative technologies and
210 processes, this will be based on Article 25 of the GBER.
- 211 - Projects for the storage of green hydrogen can include the exploration and preparation
212 of storage infrastructure, for example, the installation of hydrogen tanks, processing fa-
213 cilities, ancillary equipment (e.g. compressed gas storage, in addition to LPG, absorp-
214 tion, metal hydride and chemical storage facilities) and carriers (such as LOHC). The
215 purpose of the funding in this case is the intermediate storage of green hydrogen and
216 the near to market testing of novel storage technologies in the operating environment.
217 Funding will be provided for off-grid projects on the basis of Article 41 of the GBER. To
218 the extent that funding is provided for experimental development when testing innovative
219 technologies and processes, this will be based on Article 25 of the GBER.
- 220 - Projects for the transport or provision of off-grid infrastructure. Examples of such projects
221 include the provision of facilities and infrastructure for loading and unloading hydrogen
222 and carrier substances for all forms of transport (e.g. liquid hydrogen, ammonia). The
223 purpose of the funding in this case is to support the transport of green hydrogen and its
224 derivatives to end customers as well as the near to market testing of innovative transport
225 options that are relatively close to market readiness in the operating environment. Fund-
226 ing will be provided on the basis of Article 41 of the GBER. To the extent that funding is
227 provided for experimental development when testing innovative transport options, this
228 will be based on Article 25 of the GBER.
- 229 - Projects for the integrated use of hydrogen in sectors that cannot otherwise be decar-
230 bonised. These include fuel cell vehicles, for example, ammonia-driven propulsion tech-
231 nologies for shipping, processes in the steel and chemical industries and the uptake of
232 e-kerosene in the aviation sector. In this case, it must be demonstrated that the aim is
233 the use of green hydrogen in the medium to long term and that this is the ultimate goal.

234 In the transport sector, funding will be provided for applications that are in line with the
235 National Hydrogen Strategy. Priority will be given to applications in areas where more
236 energy-efficient technologies, such as the direct use of renewable energy sources, can-
237 not be used at all, or only marginally in the foreseeable future. The purpose of the fund-
238 ing in this case is to support greenhouse gas reduction. Funding will be provided on the
239 basis of Article 36 of the GBER. To the extent that funding is provided for experimental
240 development when testing innovative application technologies, this will be based on Arti-
241 cle 25 of the GBER.

242 - Projects for the implementation of integrated projects that combine several process
243 steps simultaneously (renewable energy + electrolyser + further processing into deriva-
244 tives + transport + application). The purpose of the funding for integrated projects in-
245 cludes all the above-mentioned purposes for the respective funding objects, in addition
246 to synergies between the various process steps; funding will be based on Articles 25, 36
247 and 41 of the GBER.

248 In **Module 2**, funding will be provided for accompanying international projects focusing
249 on basic and industrial research, scientific studies and capacity building under Article
250 25(2) of the GBER and innovative projects by SMEs under Article 28 of the GBER.
251 Funding will be provided for accompanying projects along the entire hydrogen value
252 chain, from production, storage and transport to final use, including systemic issues.
253 These include:

254 - Accompanying projects that investigate material research and process development. The
255 purpose of funding is to accelerate processes and thus benefit the market ramp-up. Fund-
256 ing will be provided on the basis of Article 25, and - in the case of innovative projects by
257 SMEs - on the basis of Article 28 of the GBER.

258 - Projects focusing on accompanying analyses/system studies for the production and inte-
259 gration of green hydrogen into the energy system (e.g. simulations/models, techno-eco-
260 nomic analyses, potential analyses, pathway assessments, feasibility studies). The pur-
261 pose of the funding is the preparatory analysis of underlying systemic conditions. Funding
262 will be provided on the basis of Article 25, and - in the case of innovative projects by SMEs
263 - on the basis of Article 28 of the GBER.

264 - Projects that take into account aspects of capacity building through academic and voca-
265 tional training. The purpose is to support the development of local capacities and know-
266 how. Funding will be provided on the basis of Article 25, and - in the case of innovative
267 projects by SMEs - on the basis of Article 28 of the GBER.

268 - Accompanying research projects focusing on the generation of green hydrogen and the
269 development of innovative production technologies, including systems combined with
270 technologies designed to provide water as one of the basic resource required, e.g. by
271 means of seawater desalination plants using renewable energy sources or direct seawater
272 electrolysis. Other efficient forms of water splitting, e.g. with decoupled hydrogen and ox-
273 ygen generation or disruptive processes, can also be the focus of projects. The purpose

274 is to support corresponding application-oriented basic research on technologies for the
275 production of renewable hydrogen. Funding will be provided on the basis of Article 25, and
276 - in the case of innovative projects by SMEs - on the basis of Article 28 of the GBER.

277 - Accompanying research projects for the production of green hydrogen derivatives based
278 on green hydrogen. These include the conversion of hydrogen into chemical feedstock
279 and synthetic fuels (e.g. ammonia, e-kerosene, e-diesel, methanol and other alcohols).
280 The development of so-called "onsite container solutions" (facilities that produce the de-
281 sired derivative on site at the end user's premises in combined process steps) is also
282 possible. In this case, the purpose of the funding is to support the accompanying applica-
283 tion-oriented basic research for the provision of hydrogen derivatives for specific end us-
284 ers. Funding will be provided on the basis of Article 25, and - in the case of innovative
285 projects by SMEs - on the basis of Article 28 of the GBER.

286 - Accompanying research projects for the storage and transport of green hydrogen. This
287 includes materials research in the field of hydrogen tanks and hydrogen pipelines, for ex-
288 ample, in addition to research on carrier substances for all forms of transport (e.g. liquid
289 hydrogen, LOHC, ammonia). The purpose of the funding is the accompanying applica-
290 tion-oriented basic research for the intermediate storage and transport of green hydrogen.
291 Funding will be provided on the basis of Article 25, and on - in the case of innovative
292 projects by SMEs - the basis of Article 28 of the GBER.

293 - Accompanying research projects for the integrated use of green hydrogen in sectors that
294 cannot be easily decarbonised. These include fuel cell vehicles in the automotive field and
295 heavy-duty operations, for example, e-fuels in agriculture, the decarbonisation of steel and
296 chemical companies, and the use of e-kerosene in the aviation sector. The purpose of the
297 funding is to support the accompanying application-oriented basic research for the inte-
298 grated use of green oxygen to foster the decarbonisation of processes in these sectors.
299 Funding will be provided on the basis of Article 25, and - in the case of innovative projects
300 by SMEs - on the basis of Article 28 of the GBER.

301 The projects are to have a clear practical relevance to the extent that the know-how gen-
302 erated will contribute to the further development of the national and international hydrogen
303 economy.

304 The following are not eligible for funding under this guideline:

- 305 - facilities for the production of hydrogen and its derivatives based on fossil fuels, electricity
306 from nuclear power plants (grey or red hydrogen) or using technologies such as CCS (blue
307 hydrogen) or the pyrolysis of hydrocarbons, such as methane (turquoise hydrogen),
- 308 - stand-alone research projects that are eligible for funding under the regular procedures of
309 the 7th Energy Research Programme,
- 310 - projects implemented in Germany or within the EU or in EFTA countries,
- 311 - projects that are required to be implemented by a law or by order of the government,
- 312 - projects that have already started (as defined under Chapter 7),

- 313 - the purchase of used facilities or new facilities predominantly equipped with used system
314 components,
315 - projects that already receive adequate state funding from elsewhere (see Chapter 8.4 Ban
316 on cumulation), in addition to
317 - taxes, levies and other charges to be paid by the applicant.

318 One or more investments by an applicant are eligible for funding. The maximum amount of aid
319 permitted per project, however, may not be exceeded (see Chapter 8.2).

320 Costs eligible for funding in accordance with the exemptions are defined in Chapter 8.1.

321 Aid provided for activities related to exports to third countries or Member States, in particular aid
322 that is directly linked to the quantities exported, to the establishment or operation of a distribution
323 network, or to other current costs linked to the export activity, is not be eligible for funding.
324

325 **6. Recipients of grants**

326 Applications may be submitted by:

- 327 - legal persons governed by private law, in addition to natural persons, provided they are
328 economically active within the meaning of Section 2 (1) of the German Value Added Tax
329 Act;
330 - universities (of applied sciences) and research institutions in collaboration with compa-
331 nies;
332 - consortia made up of universities (of applied sciences) and research institutions (Module
333 2 only).
334

335 Applicants must have their head office in the European Union at the time of payment of the grant
336 and must have a permanent establishment or subsidiary (as defined in Article 49 TFEU) in Ger-
337 many.

338 Business consortia are eligible to apply for funding if the share of value added of the eligible
339 business(es) involved is at least 51% (Module 1).
340

341 Funding provided for applicants with no permanent establishment or subsidiary in Germany is
342 possible only in designated individual cases by means of a grant agreement.

343 Small and medium-sized enterprises (SMEs) and start-ups are encouraged to become actively
344 involved, whether by submitting applications for individual projects of their own, on behalf of other
345 project partners or in association with other project partners.

346 Universities and non-university research institutions with research and development capacities in
347 Germany that implement a project in association with companies eligible to apply for funding are
348 themselves also eligible to apply for funding.
349

350 Research institutions that receive basic funding from the Federal Government and/or the Länder
351 may be granted project funding for any additional expenditure they may have in addition to their
352 institutional funding under certain conditions only. For information on the conditions as to when

353 state aid is/is not available, and to what extent funding can be granted free of aid, see R&D&I
354 Framework.² (Module 2 only)

355
356 Applicants must demonstrate that they are able to carry out the research and development tasks,
357 to set up pilot and demonstration facilities, in addition to industrial-scale facilities, and to provide
358 regular operation in terms of whatever personnel and equipment is required. The qualifications of
359 the applicants must be demonstrated in an appropriate manner - by means of relevant preliminary
360 work, for example.

361 Applicants in those cases outlined in Article 1(2) to (5) of the GBER are not eligible for funding.
362 They include, but are not limited to:

- 363 - undertakings that are subject to an outstanding recovery order following a previous
364 decision by the Commission declaring an aid granted by the same Member State illegal
365 and incompatible with the internal market,
- 366 - undertakings in difficulty within the meaning of Article 1(4)(c) in conjunction with Article
367 2(18) of the GBER, in particular undertakings where insolvency proceedings have been
368 applied for or initiated against their assets, in addition to undertakings that have submit-
369 ted or are required to provide information on its financial circumstances and the assets
370 owned by the undertaking in accordance with Section 802c of the Code of Civil Proce-
371 dure or Section 284 of the Fiscal Code. However, undertakings that were not undertak-
372 ings in difficulty on 31 December 2019, but became undertakings in difficulty in the pe-
373 riod from 1 January 2020 to 31 December 2021 are eligible for funding.

374

375 **7. Prerequisites for the award of grants**

376 7.1 General prerequisites for the award of grants

377 Funding is available for projects implemented in countries outside the territory of the European
378 Union and the EFTA states (country of implementation).

379 The investments funded under this guideline must be operated appropriately after commissioning
380 (first use of a technology for its intended purpose) for at least three years in accordance with the
381 intended purpose (compulsory use). The compulsory use of the technology may be waived in
382 individual cases if the project is funded under Article 25 or 28 of the GBER. Within this period, a
383 funded investment may only be sold when evidence of its continued operation is presented to the
384 awarding authority (represented by the project management organisation, if applicable). A sale or
385 decommissioning of the funded investment, or a sale, decommissioning or demolition of the build-
386 ing of which the funded investment is an essential part within the meaning of Section 94(1) of the
387 German Civil Code within this period must be reported to the awarding authority (representing the
388 project management organisation, if applicable) without delay. This may result in the full or partial
389 revocation of the award and the obligation to repay the grant. Further details are provided in
390 Chapter 9 of the General Auxiliary Terms and Conditions for Funds Provided for Project Funding

² Communication from the Commission (2014/C 198/01) of 27 June 2014 (OJ C 198 of 27.6.2014, p. 1 et seq.) as amended by Communication of the EU Commission C(2020) 4355 final of 02.07.2020 (OJ C 224 of 8.7.2020, p. 2) in particular Section 2.

391 on a Cost Basis (ANBest-P-Kosten), Chapter 8 of the General Auxiliary Terms and Conditions for
392 Funds Provided for Project Funding (ANBest-P), Chapter 6 of the Auxiliary Terms and Conditions
393 for Funds Provided by the Federal Ministry of Education and Research for the Promotion of Pro-
394 jects on an Expenditure Basis (NABF) and Chapter 6 of the Auxiliary Terms and Conditions for
395 Funds Provided by the Federal Ministry of Education and Research to Commercial Companies
396 for Research and Development Projects on a Cost Basis (NKBF 2017).

397 Applicants must demonstrate that the project would not be economically viable without funding.
398 They must also confirm in writing that they are able to bear their own share of the eligible and
399 non-eligible costs of the funded investment in full. In Module 1, the applicant's own share is to be
400 at least 10% of the eligible costs incurred. In Module 2, the applicant's own share is to be 50% of
401 the eligible costs incurred. No confirmation is required in designated cases in Module 2, provided
402 that the applicant qualifies for full funding as defined in Chapter 8.3. The start financing of projects
403 for which the total financing is not secured is not permissible.

404 Before work on the project or activity begins, a written application for funding must have been
405 submitted and notification of the grant award issued.

406 Only projects that have not yet started at the time of approval are eligible for funding. The start of
407 a project is deemed to be the conclusion of a contract for the supply of goods or services, including
408 a contracting or guarantee agreement. Planning and consultancy services may be conducted by
409 the applicants prior to submission of the application, but cannot be taken into account as eligible
410 costs under the grant.

411 Funding is excluded in the cases specified in Article 1(2) to (5) of the GBER.

412

413 7.2 Special prerequisites for awarding grants

414 Funding is available solely for projects for the production of green hydrogen, in addition to further
415 processing, storage, transport and the integrated use of hydrogen and its derivatives, as well as
416 integrated projects. The projects must fulfil the following specific funding requirements:

417 - Pre-development stage: the applicants must demonstrate the feasibility of the project in a project
418 outline. The evidence required includes a joint declaration of intent to collaborate with local actors
419 in the country of implementation.

420 - Funded projects for the production of green hydrogen and its derivatives must contribute to a
421 cost-effective market ramp-up.

422 - Presentation of the purchase of renewable electricity: applicants must explain how the purchase
423 of renewable electricity will create incentives for investments in additional renewable energy
424 sources and how investments in additional fossil fuel power plants or the increased operation of
425 existing fossil fuel power plants are disincentivised, thereby ensuring that project implementation
426 will not be detrimental to the energy transition in the partner country. Furthermore, the purchase
427 of renewable electricity for the production of green hydrogen must not be allowed to contribute to
428 the systematic impairment of the local electricity supply (e.g. grid stability, grid bottlenecks). The
429 purchase of renewable electricity must be verified by means of guarantees of origin or power

430 purchase agreements. If guarantees of origin for renewable energy sources cannot be provided
431 in the respective partner country, the purchase must be described in detail.

432 - Carbon used for the production of derivatives may be based on air capture, capture of non-
433 avoidable process-related industrial emissions or biogenic CO₂ emissions. For the carbon used,
434 credit for avoided emissions is not given for CO₂ of which the capture has already received an
435 emission credit under other provisions of law.

436 - Sustainability of water supply: the water used for projects eligible for funding must be sustainable
437 so that the project does not lead to a local shortage or an increase in the price of water at the
438 location. This applies in particular to emerging and developing countries. Applicants must de-
439 scribe how the water is sourced, in particular how it will ensure that a local water shortage can be
440 ruled out.

441 - Waste and pollution management must at least comply with the relevant UN environmental
442 standards, and with ISO 14001 in particular.

443 - Social and environmental impact: applicants will be required to demonstrate in their application
444 that a social and environmental impact assessment has been carried out and that planned con-
445 struction work and operation of the facilities will have the least possible impact on the environment
446 and the surrounding communities.

447 - The local labour standards must at least comply with the relevant ILO international labour stand-
448 ards. Measures on how this prerequisite for the award of a grant is to be met are also be outlined
449 in the application.

450 - The use of hydrogen and its derivatives must be outlined in the project concept. Projects in
451 which hydrogen or its derivatives are to be used for the production or operation of armaments are
452 excluded from funding.

453 The partners in a collaborative project are to formalize their collaboration in a written collaboration
454 agreement. In Module 2, in the case of collaborations with the sole involvement of universities
455 and research institutions, all collaboration partners, including any research institutions within the
456 meaning of Article 2 (point 83) of the GBER, are to ensure that, within the scope of the collabora-
457 tion, no indirect aid flows to participating undertakings. To ensure this is done, the provisions of
458 point 2.2 of the R&D&I Framework must be observed. Before a funding decision is made on a
459 collaborative project, evidence that the collaboration partners have reached a basic agreement
460 on any further criteria specified by the BMBF must be provided (cf. BMBF Form no. 0110).³

461
462 7.3 Availability of budget funds
463 Funding is provided following a thorough examination (exercising all due care and diligence) and
464 is subject to the availability of the budget funds required.

³ https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare, BMBF General templates and report templates.

465 **8. Grant types and amounts**

466 8.1 Grant types

467 Projects are supported by means of project funding based on federal grants in the form of partial
468 financing or, in designated cases, full financing (Module 2 only). These are non-repayable grants
469 which may subsequently be reduced, particularly during the regular operating phase. If, after the
470 grant has been approved, the total costs estimated in the preliminary calculation for the purpose
471 of the grant should decrease (e.g. due to developments on the market or the entry into force of a
472 new regulatory framework for renewable energy), or if the total resources available should in-
473 crease or new capital (e.g. investment grants) be added, then the grant will be reduced propor-
474 tionately. Ancillary costs are also eligible for funding.

475 The eligible costs for basic research (Module 2) and experimental development (Module 1) pro-
476 jects (Article 25 of the GBER) are as follows:

477 a) personnel costs: costs for researchers, technicians and other staff, to the extent they are em-
478 ployed on the project;

479 (b) costs for instruments and equipment to the extent and for the period used for the project. In
480 the event that such instruments and equipment are not used for the project throughout their entire
481 life cycle, only the depreciation costs that correspond to the duration of the project, as calculated
482 on the basis of generally accepted accounting principles, are considered to be eligible;

483 (c) costs for buildings and land to the extent and for the period used for the project. With regard
484 to buildings, only the depreciation costs that correspond to the duration of the project, as calcu-
485 lated on the basis of generally accepted accounting principles, are considered to be eligible. For
486 land, the costs for the commercial transfer or actually incurred capital costs are eligible;

487 d) costs for contractual research, know-how and patents purchased or licensed from outside
488 sources at arm's length conditions, in addition to costs for consultancy and equivalent services
489 required solely for the project (with the exception of consultancy fees and equivalent services
490 incurred prior to receipt of the funding decision);

491 (e) additional overheads and other operating expenses (including costs for materials, supplies
492 and the like) incurred as a direct result of the project.

493 The eligible costs for innovation aid for SMEs (Article 28 of the GBER) are as follows:

- 494 - costs for obtaining, validating and defending patents and other intangible assets;
- 495 - costs for the secondment of highly qualified personnel from a research and knowledge
496 dissemination organisation or a large undertaking to carry out research, development or
497 innovation activities in a newly created function within the beneficiary SME, albeit with no
498 other personnel being replaced;
- 499 - Costs for innovation advisory services and innovation support services.

500
501 With regard to environmental aid (Article 36 of the GBER), eligible costs are the extra investment
502 costs needed to go beyond the level of environmental protection required by Union standards or,

503 in the absence of such standards, to increase the level of environmental protection. The eligible
504 costs are determined as follows:

505 (a) if, in the total investment costs, the costs for an investment in environmental protection can be
506 identified as a separate investment, then these environmental protection-related costs are the
507 eligible costs;

508 (b) in all other cases, the costs of an environmental investment shall be determined on the basis
509 of a comparison with a similar less environmentally friendly investment that could well have been
510 carried out without aid. The difference between the costs of these two investments are the envi-
511 ronmental protection-related costs, and thus eligible costs.

512 Costs not directly related to environmental improvement are not eligible for funding.

513 At the same time, investment projects for the production, storage and transport of green hydrogen
514 as an energy carrier, in addition to integrated projects (as defined in Chapter 5), are eligible for
515 funding under Article 41 of the GBER (funding of renewable energy sources).

516 For investment aid under Article 41 of the GBER, the eligible costs are the extra investment costs
517 required to support the production, storage and transport of green hydrogen. The eligible costs
518 are determined as follows:

519 (a) If, in the total investment costs, the costs for an investment in the production of energy from
520 renewable sources can be identified as a separate investment (e.g. readily identifiable as an ad-
521 ditional component of existing facilities), then those costs related to renewable energy are the
522 eligible costs.

523 (b) Where the cost of an investment in the production of energy from renewable sources can be
524 determined on the basis of a comparison with a similar, less environmentally friendly investment
525 that could well have been made without aid, then the difference between the costs of these two
526 investments corresponds to the costs to fund the renewable energy sources and thus represents
527 the eligible costs.

528 (c) For certain small facilities, where no less environmentally friendly investment can be identified,
529 because there are no small installations available for comparison purposes, then the eligible costs
530 are considered to be the total investment costs required to increase the level of environmental
531 protection.

532 Investment aid in accordance with Article 41 of the GBER is available for new facilities only. No
533 aid will be granted or paid once the plant has become operational; aid will be granted regardless
534 of the production capacity. Costs not directly related to increasing the level of environmental pro-
535 tection are not eligible for aid.

536 In both modules, the stand-alone generation of (green) electricity for the production of hydrogen
537 and its derivatives is not eligible for funding.

538

539 8.2 Grant amounts in Module 1

540 Projects will be funded at a fixed percentage of the eligible costs. The funding for projects is
541 dependent on the object of the funding and is also limited in terms of the absolute amount per
542 applicant and investment project, as follows:

543
544 The amount of the grant is determined in accordance with Articles 4, 25, 36 and 41 of the GBER,
545 depending on the specific object of the funding. More specifically, the following applies:

546 8.2.1 Grant amounts for the funding of environmental protection (Article 36 of the GBER)

547 Grants for projects that enable undertakings to go beyond Union standards for environmental
548 protection or, in the absence of such standards, to increase the level of environmental protection,
549 are funded in line with Article 36 of the GBER at a rate of 40% of the eligible costs in accordance
550 with Article 36(6) of the GBER.

551 In line with Article 36(7) of the GBER, the amount of eligible costs may increase if the recipient of
552 the grant

- 553 - is a medium-sized undertaking by 10%, or
- 554 - a small undertaking, then by 20%.

555 According to Article 4(1) lit. s) of the GBER, the maximum level of funding is €15 million per
556 applicant and project.

557 8.2.2 Grant amounts for the funding of green hydrogen production, in addition to hydrogen storage
558 and transport projects (Article 41 of the GBER)

559 Investment funding for the production of green hydrogen as a renewable energy source may be
560 granted in accordance with Article 41 of the GBER.

561 The additional investment costs required to fund the production of energy from renewable sources
562 are eligible for funding.

563 Following application of Article 41(7)(a) and (b) of the GBER, the level of funding can be between
564 30 and 45% of the eligible investment costs.

565 In line with Article 41(8) of the GBER, the amount of the funding contribution may increase if the
566 recipient of the grant

- 567 - is a medium-sized undertaking by 10%, or
- 568 - a small undertaking, then by 20%.

569 According to Article 4 (1) (s) of the GBER, the maximum level of funding is €15 million per appli-
570 cant and project.

571 8.2.3 Grant amounts for the funding of research, development and innovation (Article 25 of the
572 GBER)

573 Grants for experimental development projects are awarded in accordance with Article 25(5) lit. c)
574 of the GBER at a rate of 25% of the eligible costs in accordance with Article 25(3) GBER.

575 In accordance with Article 25(6) of the GBER, the level of funding in the area of experimental
576 development of eligible costs may increase if the recipient of the grant

- 577 - is a medium-sized enterprise by 10%, or
- 578 - a small company, then by 20%.

579 The maximum level of funding for projects that focus primarily on experimental development is
580 15 million per applicant and project in accordance with Article 4(1) lit. i), iii) of the GBER.

581 For the purpose of calculating aid intensity and eligible costs, all figures used must be taken be-
582 fore any deduction of tax or other charge. Eligible costs are to be supported by documentary ev-
583 idence that is clear, specific and contemporary.

584 The level of funding for the implementation of integrated projects covering more than one step
585 along the value chain is based on the above-mentioned Articles 25, 36 or 41. The maximum level
586 of funding in accordance with Article 4(1) lit. i), iii), (s) thus amounts to 15 million per applicant
587 and project.

588

589 8.3 Grant amounts in Module 2

590 The calculation of the grants available for higher education institutions, research and science
591 institutions and similar establishments will be based on the eligible project-related expenditure
592 (in the case of the Helmholtz centres and Fraunhofer, the eligible project-related costs), which
593 may be funded by as much as 100% in individual cases. This is only valid for the case that
594 these activities are not allocated in the category of economic activities in the respective institu-
595 tion.

596
597 The calculation of grants available for commercial undertakings and for projects implemented by
598 research institutions that fall into the category of economic activities will be based on the eligible
599 project-related costs.

600 Taking legislation on state aid into account, a proportional share of these costs can be financed.
601 In line with BMBF policy, applicants are expected to provide an appropriate financial contribu-
602 tion towards the eligible costs incurred.

603

604 Eligible expenditure/costs are governed by the BMBF's regulations governing applications for
605 expenditure-based grants (AZA) and/or cost-based grants (AZK).

606

607 For the determination of the respective eligible costs and the funding rate the GBER must be
608 taken into account. Specifically, the following applies:

609

610 8.3.1 Funding in accordance with Article 25 of the GBER - Aid for research and development 611 projects

612 In accordance with Article 25(5) of the GBER, the aid intensity for each beneficiary may not ex-
613 ceed the following rates:

- 614 - 100% of the eligible costs for basic research,

- 615 - 50% of the eligible costs for industrial research;
616 - 50% of the eligible costs for feasibility studies.

617 The aid intensities for industrial research may be increased to a maximum of 80% of the costs
618 eligible for state aid as follows, provided the prerequisites stated in Article 25(6) are fulfilled:

- 619 - by 10% for medium-sized companies;
620 - by 20% for small enterprises;
621 - by 15% if one of the following conditions is fulfilled:
622
623 i. the project involves effective collaboration
- 624 • between undertakings, among which at least one is an SME, where no single un-
625 dertaking bears more than 70% of the eligible costs, or
 - 626 • between an undertaking and one or more research and knowledge-dissemination
627 organisations, where the latter bear at least 10% of the eligible costs and have
628 the right to publish their own research results
- 629 ii. the results of the project are widely disseminated through conferences, publications,
630 open access repositories, or through free or open source software.

631
632 8.3.2 Funding in accordance with Article 28 of the GBER - Innovation aid for SMEs
633

634 Permissible aid intensities

635 The aid intensity may not exceed 50% of the eligible costs.

636 In the particular case of aid for innovation advisory and support services, the aid intensity can
637 be increased to 100% of the eligible costs, provided that the total amount of aid for innovation
638 advisory and support services does not exceed €200,000 per undertaking within any three-year
639 period.

640 Article 7(1) of the GBER requires that the eligible costs be supported by documentary evidence
641 which must be clear, specific and contemporary. For the purposes of calculating aid intensity
642 and eligible costs, all figures used must be taken before any deduction of tax or other charge.
643
644

645 The maximum level of funding in Module 2 is 5 million EUR per applicant and project.

646 8.4 Ban on cumulation

647 Funding may not be cumulated with state aid for the same project unless the funding relates to
648 different identifiable eligible costs or the different grants awarded do not exceed the eligible cost
649 share (aid intensity and maximum aid amount). In the event of a breach of the above provision,
650 the grant awarded under these Guidelines, including any interest benefits obtained, must be re-
651 imbursed in full.

652 8.5 EU state aid legislation

653 The level of funding granted for a project in accordance with these guidelines may not exceed the
654 maximum permissible aid intensity under EU state aid law, in particular in accordance with the
655 GBER. When calculating the maximum permissible aid intensity, the special rules for small and

656 medium-sized enterprises relating to the maximum permissible aid intensity for investments ap-
657 plicable to the respective exemption under the GBER will be taken into account. The project man-
658 agement organisation is responsible for calculating the maximum permissible aid intensity in each
659 case.

660

661 **9. Other terms and conditions**

662 The "General Auxiliary Terms and Conditions for Funds Provided for Project Funding on a Cost
663 Basis" (AN Best-P Kosten) in Module 1 and the "Auxiliary Terms and Conditions for Funds Pro-
664 vided by the Federal Ministry of Education and Research to Commercial Companies for Research
665 and Development Projects on a Cost Basis" (NKBF 2017) in Module 2 will be part of the notifica-
666 tion of award for grants on a cost basis.

667 The "Auxiliary Terms and Conditions for Funds Provided by the Federal Ministry of Education and
668 Research for Project Funding on an Expenditure Basis (NABF) in Module 2 will be part of the
669 notification of award for grants on an expenditure basis.

670 The "General Auxiliary Conditions for Project Grants Awarded to Territorial Authorities and Asso-
671 ciations of Territorial Authorities " (ANBest-GK) and the "Special Auxiliary Terms and Conditions
672 for Funds Provided by the BMBF for Project Funding on an Expenditure Basis" (BNBest-BMBF
673 98) in Module 2 will form part of the notification of award for grants to territorial authorities.

674 If the funds are provided in the so-called indirect call procedure, the "Special Auxiliary Terms and
675 Conditions for the Call of Grants in the Indirect Call Procedure in the Business Area of the BMBF"
676 (BNBest-mittelbarer Abruf-BMBF) also apply.

677

678 **10. Procedure**

679 10.1 Programme administration

680 The approval authority for Module 1 is the BMWi. The BMWi reserves the right to commission a
681 project management organisation to act as administrative assistant tasked with managing the
682 funding programme. The project management organisation will be announced in the Federal Ga-
683 zette.

684 The Federal Ministry of Education and Research has currently commissioned the following project
685 management organisation to implement Module 2 of the funding programme.

686 Project Management Agency Jülich

687 Contact person: Dr Martin Wiesenmayer

688 E-mail: ptj-egf-h2int@fz-juelich.de

689 Any changes will be announced in the Federal Gazette or in another suitable form.

690

691 10.2 Grant award procedure

692 The grant award procedure consists of two stages: a project outline and a formal application for
693 funding. Submission of the project outlines takes place in three funding rounds (deadlines for
694 submission: 31.10.2021, 31.12.2021, 28.02.2022). For Module 1, submissions are to be made by
695 e-mail or via the "easy-Online" system (to be submitted by 24:00 h). For Module 2, submission is
696 permitted via the easy-Online portal only, which can be accessed via the following link:
697 https://foerderportal.bund.de/easyonline/reflink.jsf?m=GLF_ENERGIE&b=INT_H2. Further infor-
698 mation as well as templates and supporting documents for Module 2 are available for download
699 at: <https://www.ptj.de/internationale-wasserstoffprojekte-modul2>.

700 Application forms for funding, guidelines, leaflets and information, in addition to auxiliary terms
701 and conditions, are available for download at [https://foerderportal.bund.de/easy/easy_in-
702 dex.php?auswahl=formularschrank_foerderportal&formularschrank=bmbf](https://foerderportal.bund.de/easy/easy_index.php?auswahl=formularschrank_foerderportal&formularschrank=bmbf).

703 The project outline should not exceed 30 pages (Module 1) or 12 pages plus appendices (Module
704 2) (font size 12). A joint presentation of both modules in one outline is not permitted. A separate
705 project outline must be submitted for each awarding authority. When applying for funding under
706 both modules this must be referenced in the respective project outlines. The submission deadline
707 in each case is a cut-off deadline.

708 Applications are to be submitted by the eligible applicant or an authorised representative. The
709 submission of project outlines does not represent a claim to a grant. In the case of collaborative
710 projects, the project outlines are to be submitted in consultation with the appointed collaboration
711 coordinator.

712 The project outline must demonstrate that both the general and specific funding requirements are
713 met as described in Chapter 7. The project outline is also to include statements on those aspects
714 specified as selection criteria in Chapter 10.2.2.

715

716 10.2.1 Structure of the project outline

- 717 1. Allocation to Module 1 or 2. When allocated to Module 2: acronym and long title of the
718 associated project in module 1 must be included.
- 719 2. Informative summary of the project: an overview of the planned project is to be provided;
720 this should include a brief description of the overall concept, in addition to the goals to be
721 achieved, plus a brief description of the project's contribution to achieving the goals of the
722 funding programme and the expected positive effects for the applicant. In the case of pro-
723 ject outlines for Module 2, the outline section for Module 1 can be included as an appendix
724 to explain the basis of allocation.
- 725 3. Indication of whether the funding is requested in accordance with Article 25 of the GBER
726 (research, development and innovation), Article 28 of the GBER (innovation aid for SMEs),
727 Article 36 of the GBER (environmental protection) or Article 41 of the GBER (renewable
728 energy sources).

- 729 4. When applying for funding in accordance with Article 25 of the GBER: the state of the art
730 of the science and technology, the innovativeness of the approach and the patent situation
731 are to be indicated.
- 732 5. When applying for funding on behalf of a network consisting of several applicants: the
733 division of responsibilities and the individual partners' shares in the value added, inclusion
734 of the addresses and contact persons of each partner with details of the main contact
735 person are to be indicated.
- 736 6. Resource/financing plan: this is to include the resource planning for the project (planning
737 of the total costs, including the presentation of applicant's own funds, in addition to the
738 funding requirement and type of costs, such as ancillary costs, personnel costs, etc.).
739 Funding by means of a grant requires the presentation of the expected funding require-
740 ment per calendar year and is to be accounted for accordingly.
- 741 7. Description of the individual parts of the project: this is to include a work plan with work
742 packages and tasks of all partners involved.
- 743 8. Description of the transformative impact in the country of implementation: this is to include
744 the contribution of the project to climate protection (additionality, GHG emissions savings),
745 taking into account overarching sustainability aspects and the expected development and
746 growth effects (including local value added).
- 747 9. Time schedule: the project outline is to include a time schedule for the implementation of
748 the project, taking into account the deadlines for the approval period. It must be clear from
749 the time schedule when results of the project will be available and what kind of results
750 they will be.
- 751 10. Utilisation plan: this is to include information on the economic, scientific and technological
752 prospects and potential uses. A description is also to be included of how the sustainable
753 use of the structures created is to be guaranteed. Information as to what further develop-
754 ment is planned after the end of the project period is to be provided with as much detail
755 as possible.
- 756 11. Description of experience to date in the target country and description of previous collab-
757 oration with local actors (companies, government organisations, etc.)
- 758 12. Necessity of the grant: this is to include an explanation of the scientific, technical and
759 economic risk, stating reasons why government funding is required.

760 The project outline is to include statements on those aspects specified as selection criteria in
761 Chapter 10.2.2.

762 10.2.2 Selection procedure

763 The BMWi and BMBF as awarding authorities intend to provide funding for several projects. The
764 actual number of funding commitments will depend on the quality of the project outlines and the
765 budget funds available. Preference will be given to projects that focus on achieving a rapid and
766 sustainable market ramp-up or on securing technological competitiveness. Preference will also
767 be given to projects implemented by small and medium-sized enterprises. The details of the pro-
768 ject outlines will be reviewed and evaluated. If the project outlines meet the requirements, the
769 applicants will be invited to submit a formal application. As a result of the different assessment
770 priorities of the funding Ministries, it is possible that a full formal application is only requested for

771 the basic project (Module 1) but not Modul 2. Initially, an examination will be made to determine
772 whether the project outlines give reason to expect that the funding requirements specified in
773 Chapter 7 will be met. The project outlines that meet all the funding requirements will then be
774 evaluated on the basis of the following general and guideline-specific selection criteria:

775 **General criteria**

776 - Feasibility and soundness of the project concept

777 - Appropriateness of expenses/costs

778 - Cost and funding efficiency are to be presented, for example, as an estimate of the costs per
779 unit of hydrogen, per unit of a derivative, or of the application technology, or of other project-
780 specific results.

781 - Leverage effect of the funds used

782 - Plausibility of the financing of the applicant's share

783 - Pre-development status, to be demonstrated, for example, by means of preliminary studies, the
784 availability of land in the country of implementation of the project, permits, etc.

785 - Scientific and technological innovation level

786 - Contribution to transformation in partner countries:

787 - Contribution to the energy transition in the partner countries by way of decarbonisation - amount
788 of greenhouse gas savings achievable with the project

789 - In the case of application technologies: avoidance of path dependencies and absence of more
790 efficient decarbonisation technologies (e.g. direct use of renewable electricity).

791 - Planned share of local value added

792 - Planned environmental protection standards, for example in the areas of water supply, waste,
793 chemicals and pollution management.

794 - Planned employee relations standards in potential production facilities in non-European coun-
795 tries

796 **Criteria for meeting the goals of this funding guideline**

797 In accordance with the four main goals (Goal 1, Goal 2, Goal 3 and Goal 4) as defined in Chapter
798 4 (Aims and purpose of the grants), a number of sub-criteria can be identified. As a basic principle,
799 the sub-criteria of Goal 1 must be met by all funded applications, while additional advantages
800 regarding the assessment result can be obtained optionally with the sub-criteria of Goal 2, Goal
801 3 and (for Module 2) Goal 4.

802 **Re Goal 1 – Targeted creation of a global market for green hydrogen with a subsequent**
803 **price reduction through scaling**

804 - To what extent is the project suited to supporting the development of a global green hydrogen
805 market (incl. derivatives) on an industrial scale (large production and transport volumes, scalable
806 and/or market roll-out applications, etc.)?

807 - To what extent do political and legal framework conditions exist in the country of implementation
808 that make a long-term and ecologically sustainable expansion of the production of green hydro-
809 gen or its derivatives seem very possible or likely?

810 - To the extent that the project focuses on application technologies: to what extent could the
811 project contribute to developments in the use of hydrogen or its derivatives that are required and,
812 in particular, to cost-reducing scaling effects?

813 - To what extent can the project claim to be part of a global and also geopolitically significant
814 development on the way to creating a green hydrogen market (incl. derivatives)?

815 **Re Goal 2 - Promoting the use and application of hydrogen technologies by companies**
816 **with a subsidiary or permanent establishment in Germany within the meaning of Article 49**
817 **of the TFEU (see definition in Chapter 6 below) along the hydrogen value chain.**

818 - To what extent are H2 technologies used by companies with a subsidiary or permanent estab-
819 lishment in Germany within the meaning of Article 49 of the TFEU and within the scope of the
820 funded project?

821 **Re Goal 3 – Preparation of an import infrastructure to Germany**

822 - To what extent can the project be expected to contribute to the creation of a green hydrogen
823 market that increases the import opportunities for green or climate-neutral hydrogen or its deriv-
824 atives or application technology to Germany?

825 - To what extent do infrastructure links exist that are suited to the export of green hydrogen to
826 Germany or are such links planned?

827 - To what extent do political and legal framework conditions exist in the country of implementation
828 that make the export of green hydrogen or its derivatives seem very possible or likely?

829 **Re Goal 4 – Setting up capacity along the entire value chain in terms of both academic and**
830 **vocational training**

831 - To what extent can the project be expected to contribute to capacity building? How do the re-
832 spective project activities contribute to securing these capacities locally in the long term?

833 - To what extent do appropriate educational structures and infrastructures already exist to support
834 academic or vocational training?

835 - To what extent can the partnership with German institutions have a decisive impact on speeding
836 up capacity building?

837 Depending on the module, the final decision will be made by the BMWi or the BMBF, taking into
838 account the recommendations of the project management organisation, which is entitled to re-
839 quest further documents and provide additional information if necessary. Applicants will be in-
840 formed of the results of the selection procedure in writing.

841

842 10.2.3 Submission of formal grant applications, grant notification

843 In the second stage of the procedure, the authors of those project outlines that have been posi-
844 tively assessed will be invited to submit a formal application for funding, which will then be decided
845 on by the Federal Ministry for Economic Affairs and Energy and/or the Federal Ministry of Educa-
846 tion and Research, depending on the module, following a final review that will take into account
847 the general criteria stated in Chapter 10.2.2.

848 For applications in Module 2, the "easy-Online" electronic application system is to be used for
849 drafting formal funding applications (<https://foerderportal.bund.de/easyonline>).

850 In the case of collaborative projects, funding applications are to be submitted in consultation with
851 the appointed collaboration coordinator.

852 The period within which the project is to be made ready for operation (approval period) must end
853 no later than mid-2024.

854 Any deviations from the project as approved in the notification of funding or in the decision to
855 award the grant must be reported to the project management organisation without delay.

856 10.2.4 Payment and proof of use

857 Proof of the proper use of the funds (proof of use) must be submitted to the project management
858 organisation using the forms provided for this purpose, including all necessary documents – dif-
859 fering from the ancillary provisions to be applied - within three months after the end of the approval
860 period.

861 In the event that proof of use is submitted after this deadline without stating reasons for doing so,
862 this may result in the withdrawal of the notice of approval.

863 The grant will be paid according to the progress of the project. The final 10% tranche of the fund-
864 ing amount will be paid after verification of proof of use (this does not apply to projects on an
865 expenditure basis in Module 2).

866 The following documents are required for verification of proof of use:

- 867 - Factual summary of the implementation of the project
- 868 - Proof of the costs/expenses (for each module) invoiced for the implementation of the pro-
869 ject,
- 870 - Declaration by the applicant that no other public funds have been used to finance the
871 project,
- 872 - Confirmation of the use and operational readiness of the facilities as applied for in accord-
873 ance with the notification of funding or decision (Module 1 only),
- 874 - Specialist contractor declaration with which the installing contractor in each case certifies
875 the proper installation and commissioning of the investment(s) applied for in accordance
876 with the technical requirements of the directive and information sheets (Module 1 only).

877 The project management organisation is entitled to request further documents if necessary.

878 10.3 Subsidy significant facts

879 The grants awarded under this guideline are subsidies within the meaning of Section 264 of the
880 German Criminal Code. In the application procedure, before the grant is awarded, therefore, the
881 applicant will be informed of the criminal nature of subsidy fraud and of his or her obligations to
882 inform the awarding authority of any facts that may preclude the approval or granting of the sub-
883 sidy in accordance with Section 3 of the Subsidies Act, as well as in accordance with Administra-
884 tive Regulation No. 3.4.6 relating to Section 44 of the Federal Budget Code (BHO), which itemises
885 facts relevant to subsidies in the specific case in the form of a conclusive positive list.

886

887 10.4 Information access rights, performance review at project level, monitoring

888 The recipient of the grant is required to submit an interim report each year - in accordance with
889 the applicable ancillary provisions - on the progress of the project, not exceeding 10 pages in
890 length.

891 In addition, depending on the module, representatives of the Federal Ministry for Economic Affairs
892 and Energy and/or the Federal Ministry of Education and Research, the Federal Court of Audit
893 and the auditing bodies of the European Union are entitled, upon request, to provide whatever
894 information is required, to inspect books and documents and to conduct audits. In addition, pub-
895 lication obligations under state aid law, in accordance with Article 9 of the GBER, for example,
896 apply for individual grants of more than €500,000. In the application for funding, the applicant
897 must declare that he or she is willing to accept the fact that

- 898 - all documents submitted with the application or in any subsequent procedures will be
899 made available to the project management organisation and, depending on the module,
900 to the BMWi or the BMBF;
- 901 - data on individual funding measures will be stored in a centralised system of the Federal
902 Government (funding database) due to the funding being provided on the basis of Section
903 44 of the Federal Budget Code in conjunction with Administrative Regulation Nos. 9.1 and
904 9.2 relating to Section 44 of the Federal Budget Code or a similar application of these
905 regulations;
- 906 - any data and proof of use of the funds that is made available in connection with the funding
907 may be stored on data carriers by the project management organisation or, depending on
908 the module, by the BMWi or the BMBF, or an agency commissioned by either of them; in
909 addition, the data may be used and analysed by them or on their behalf for statistical
910 purposes, and for evaluating and reviewing the funding programme's performance; the
911 applicant's declaration also includes his consent to the results of the assessment being
912 published and forwarded to the German Bundestag and to federal and European Union
913 institutions, unless this should conflict with a legitimate interest in keeping business and
914 trade secrets confidential;
- 915 - he or she will provide more detailed information on request, in particular in the course of
916 an evaluation in compliance with data protection regulations;

917 - depending on the module, BMWi or BMBF will provide members of the German Bundes-
918 tag with information on the funding in individual cases.

919 For quality assurance purposes, the facilities erected on the basis of the funding may be examined
920 by means of an on-site inspection based on a qualified random sampling concept.

921 In order to carry out performance reviews within the meaning of Administrative Regulation No.
922 11a relating to Section 44 of the Federal Budget Code, depending on the module, the recipients
923 of funding are required to provide either the BMWi, the BMBF or the institutions commissioned to
924 carry out this task with the data required for the performance review in a timely manner.

925 The following applies to Module 2: if the recipients of funding publish the results of their research
926 project in a scientific journal, then this to be done in such a way that the results will be made
927 available free of charge on an open access basis. This may be done through publication in an
928 electronic journal that is accessible to the public free of charge. If the results are not initially pub-
929 lished in a journal that is electronically accessible to the public free of charge, then the publication
930 must be made publicly available free of charge by electronic means (secondary publication), if
931 necessary, following a reasonable time period (embargo period). Embargo periods for secondary
932 publications are not to exceed 12 months. The BMBF expressly welcomes secondary open ac-
933 cess publication of scientific monographs resulting from the project.

934 10.5 Evaluation at programme level

935 For the funding guideline, an evaluation of the programme will be carried out annually to assess
936 the efficiency of the use of funds in terms of the defined goals to be achieved (e.g. development
937 of electrolysis capacities abroad, setting up infrastructure, gaining knowledge through accompa-
938 nying basic research that can be used to benefit the creation of a global hydrogen market, etc.).
939 Based on the programme evaluations, a review of the effects of the funding guideline will be
940 carried out for the purpose of further optimising the guideline and as a basis for decisions on the
941 possible continuation of the funding programme.

942 10.6 Regulations to be observed

943 The approval, payment and accounting of the funds, in addition to the proof and examination of
944 the proper use and, if necessary, the revocation of the award and the reclaiming of the funds
945 awarded are governed by Sections 48 to 49a of the Administrative Procedure Act, Sections 23
946 and 44 of the Federal Budget Code, and the related general administrative regulations, unless
947 deviation from the general administrative regulations is permitted under the present funding reg-
948 ulations. The Federal Audit Office is entitled to carry out audits in accordance with Sections 91
949 and 100 of the Federal Budget Code. Depending on the module, the Federal Ministry of Economic
950 Affairs and Energy (BMWi) and/or the Federal Ministry of Education and Research (BMBF) as
951 funding authorities, the audit bodies of the European Union and the project management organi-
952 sation are also entitled to carry out audits.

953

954 **11. Duration**

955 These funding regulations will enter into force on the day of their publication in the Federal Ga-
956 zette. They will remain valid until 31 December 2024. In the event that the temporal application
957 of the GBER is extended with no amendments relating to state aid rules, the duration of these
958 funding regulations will be extended accordingly, albeit not beyond 31 December 2024. Should
959 the GBER not be extended, but replaced by a new GBER, or should relevant amendments be
960 made to the content of the currently applicable GBER, follow-up funding regulations will be
961 adopted that comply with the exemption provisions that will then become applicable and will re-
962 main effective at least until 31 December 2024.

963 Berlin, 27 September 2021.

964 Federal Ministry for Economic Affairs and Energy

965 Commissioned by

966 Dr Christine Falken-Großer Dr. Falk Bömeke

967 Federal Ministry of Education and Research

968 Commissioned by

969 Dr Christoph Rövekamp

970