

GERMAN-AUSTRALIAN HYDROGEN INNOVATION AND TECHNOLOGY INCUBATOR (HyGATE) FUNDING ANNOUNCEMENT

FULL APPLICATION STAGE

AUGUST 2022



Australian Government
**Australian Renewable
Energy Agency**

ARENA

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1. CONTEXT: THE HYGATE INITIATIVE

THE INITIATIVE

HyGATE is one of the three major initiatives developed as part of the *Declaration of Intent between the Government of Australia and the Government of Germany on the Australia-Germany Hydrogen Accord* (the Accord). HyGATE is intended to support real-world pilot, trial and demonstration projects along the hydrogen supply chain. Australia and Germany have respectively committed up to \$50 million and €50 million to establish HyGATE.

ARENA will administer the HyGATE Initiative on behalf of the Australian Government (through the Department of Industry, Science, Environment and Resources (DISER)). Projektträger Jülich (PtJ) will administer the HyGATE Initiative on behalf of the German Government (through the German Federal Ministry of Education and Research (BMBF)).

The objectives of the HyGATE Initiative (HyGATE Initiative Objectives) are to:

- › Facilitate collaboration between Australian and German partners from research, industry and civil society to stimulate the innovation process in both countries
- › Expedite scaling up and commercialisation of the renewable hydrogen industry in both Australia and Germany through cross-country collaboration and knowledge sharing
- › Allow Research and Development (R&D) findings or new technologies to be proven up through trial or demonstration projects in Australia, with deployment taking place in the short to medium term
- › Support the development of a renewable hydrogen supply chain between Australia and Germany.

The HyGATE Initiative Objectives will be achieved through providing funding to projects that will deliver real-world joint pilots, trials, demonstrations and associated applied research to bring together technology suppliers and companies working in the field of hydrogen production, transport, storage and usage. The projects will promote highly innovative real-world research collaborations and projects among partners from research, industry and civil society. The projects can occur along the whole value chain for hydrogen produced from renewables, being the production, transport, storage and use of hydrogen produced from renewable energy sources.

The goal of these activities is to test and demonstrate forward-looking approaches and novel solutions on a pilot scale under real-world conditions, including application-oriented basic research taking place and focusing on the issues that are relevant for the industrial partners in scaling up and enabling progress towards commercialisation.

These industry based projects will, inter alia, support technical refinement of hydrogen technologies, with a focus on improving safety, affordability, reliability, efficiency and other performance measures. This will help provide real-world information and technical refinement, to support the technologies to progress closer towards at-scale demonstration and commercialisation including attracting private investment. The close integration of application-oriented basic research and product development will help to generate knowledge and quickly transfer it into practice. The required de-risking and ramp-up of products and processes will also be accelerated.

THE ROUND

This Funding Announcement details the competitive process ARENA will use to fund projects under the Advancing Renewables Program (ARP), in line with the HyGATE Initiative Objectives. This process is referred to as the Funding Round (the Round). The Round is a Competitive Process as defined in the ARP Guidelines and clauses 4.27 to 4.32 apply.

This Funding Announcement should be read in conjunction with the ARP Guidelines which apply to the Round. Definitions contained in the ARP Guidelines also apply to this Funding Announcement. Applicants should also refer to the Call for Proposals published by BMBF and carried out via PtJ, however note that Applicants applying to ARENA will be assessed in line with the ARP Guidelines and this Funding Announcement. Please refer to Section 5 Process below for more detail on the application and assessment process for the Round.

2. ROUND KEY OBJECTIVES

The Round will support the achievement of the broader HyGATE Initiative Objectives through providing funding to projects that will deliver one or more of the following outcomes:

1. **Demonstration of highly innovative technology** across the value chain of renewable hydrogen, supporting the technical viability of renewable hydrogen
2. **Reduction of the cost** of hydrogen production, transport, storage and use, supporting the commercial viability of renewable hydrogen
3. **Development of an Australian-German supply-chain** for renewable hydrogen
4. Encourage **cross country collaboration and knowledge sharing** between Australian and German organisations, including the establishment of cross-country partnerships related to the project activities
5. Provide **price discovery and transparency** in relation to the current and projected economics for renewable hydrogen technologies.

Projects that have direct and substantial involvement of both German and Australian organisations will generally be viewed as being able to better deliver the Round Key Objectives. Project activities are expected to occur primarily in Australia.

3. FUNDING ALLOCATION

Up to \$50 million (AUD) has been allocated to ARENA to administer the HyGATE Initiative (Total Funding Allocation), which may be committed over one or more funding rounds. ARENA may allocate an amount of funding that is less than the Total Funding Allocation if the Proposals received under the Round are not considered to be of sufficient merit to support an offer of ARENA funding or if it is not possible to support all high merit projects within the Total Funding Allocation. At its discretion, ARENA may also allocate an amount of funding greater than the Total Funding Allocation if it considers this to represent value for money and if ARENA has sufficient available remaining funding. ARENA may also propose to assess Proposals submitted through the HyGATE Initiative under other available funding programs under certain circumstances.

Applicants to the Round are required to undertake the proposed project as part of a consortium that includes German-based partners (the Consortium). In line with the eligibility criteria included within the ARP Guidelines, the Total Funding Allocation will be available only to the Australian member(s) of the Consortium. German based Consortium members are required to apply directly to PtJ, clearly indicating in their submission the names of both the Australian and German Consortium members. The Consortium must be consistent for both the ARENA and PtJ applications.

Applications will need to be assessed as high merit or equivalent by both ARENA and BMBF/PtJ to be successful at Full Application stage.

Funding will be available under the HyGATE Initiative for a period of four years from the date a funding agreement is executed (Funding Period). Projects should therefore structure any funding request milestone payments within this four year period.

4. SCOPE OF THE ROUND

To achieve the Round Key Objectives, the Round is targeting projects that illustrate collaboration between German and Australian Consortium members from research, industry and civil society to advance the development and commercialisation of innovative technology across the hydrogen value chain.

Projects to be funded could relate to any aspect along the entire value chain for hydrogen produced from renewables - from hydrogen generation from renewables, further processing into derivatives such as synthetic fuels or green ammonia, to transport, storage, usage and unlocking commercial or financing models. The Applicant must present a credible commercialisation pathway (cost reduction pathway) for renewable hydrogen technology.

The following are priority areas of funding for the Round. Projects that can demonstrate progress towards one or more of these priority areas will be assessed as higher merit under Merit Criteria A (Contributes to the Program Outcomes):

- › Reduction of the cost of hydrogen production, transport and use across the entire value chain, including:
 - reducing electrolyser cost or increasing electrolyser efficiency
 - lowering the cost of hydrogen storage and handling
 - lowering the cost of hydrogen conversion/re-conversion facilities
 - delivering new innovative solutions for the use of hydrogen with commercial potential
- › Demonstrating or enabling renewable hydrogen use cases that will support future deployment of relevant technology or commercial models
- › Planning and operation of large-scale electrolysers within integrated solar or wind power stations, including plant management issues, electrolyser optimisation, and design with respect to the underlying environment
- › Contribution to the realisation of an Australian-German supply-chain for hydrogen produced from renewables, including to support projects to reduce the cost of exporting hydrogen from Australia to Germany. This may include accelerating the commercial readiness of the supply and value-chains for hydrogen produced from renewables, considering the role of further processing into derivatives such as synthetic fuels or green ammonia in transport, storage and usage
- › Shipping of renewable hydrogen from Australia to Germany, including a focus on conversion and re-conversion technologies and processes and storage
- › Deployment and use of renewable hydrogen based fuels and technologies for decarbonising the Australian mining industry
- › Sustainable production of industrial intermediate products, such as green ammonia or green steel, and hydrogen for export using renewable energy sources.

The following projects will not be funded under this Round:

- › Projects that use hydrogen related feedstocks from a non-renewable source
- › Projects where the Consortium does not include both Australian and German partners. The German part of the Consortium must consist of at least one partner from research (non-university or university) and one from industry
- › Projects where an eligible project Proposal has not been submitted to both ARENA and PtJ, including the Joint Scientific Project Document by the Full Application Due Date (refer to Section 5 Process)
- › Projects where relevant project activities (i.e. feasibility studies, pilot, trial or deployment) will not commence or will not be substantially completed by the end of the Funding Period (noting funding will only be available for four years from the date of execution of a funding agreement). However, the operations phase of the project may continue for a longer period
- › Projects that do not involve or directly support the deployment of technology as outlined in the Funding Announcement, including projects where the primary focus is conducting basic feasibility studies, desktop based activities, research or significant project development work (i.e. significant early stage engineering and design development)
- › Projects that are substantially similar to existing projects within ARENA or the German government's portfolio or the broader industry, or where limited innovation is demonstrated
- › Projects where applications targeting substantially similar innovations or aspects of the hydrogen value chain have been received as part of the HyGATE Initiative and have been assessed as having higher merit than the proposed project.

- › Projects where there is limited direct involvement of Australian or German Consortium members, or where labour and project key activities primarily occur outside of Australia
- › Projects involving the demonstration, trial or deployment of hydrogen fuel cell electric vehicles (FCEVs) where limited innovation or decarbonisation potential is demonstrated
- › Projects involving the demonstration, trial or deployment of FCEVs where third party documentation providing firm evidence of the terms of vehicle supply (for example, cost, specifications, delivery timeframe, production location, evidence of compliance with relevant regulations, etc.) is not provided.

Projects that do not fit within these parameters will not be assessed as high merit under the Round.

5. PROCESS

APPLYING TO THE ROUND

- › Applicants are to form a Consortium consisting of at least one eligible Australian partner (refer to Section 6 Eligibility Requirements below) and two German partners (one from research and one from industry).
- › The Consortium is to prepare a 'Joint Scientific Project Document', to be included in both the ARENA and PtJ applications. For the purposes of the ARENA application, this document will be referred to as a 'project plan' and is to be provided in English. Greater detail around the expected contents of the project plan is provided in Appendix A.
- › Consortium members are to submit separate applications for funding to both ARENA and PtJ through each organisation's specific application process for the HyGATE Initiative:
 - Only an eligible Australian Consortium member is to apply to ARENA on behalf of the Consortium (the Australian lead Applicant / national coordinator).
 - Only an eligible German Consortium member is to apply to PtJ on behalf of the Consortium (the German lead Applicant / national coordinator).
 - The identity of all Consortium members must be made clear within the application and associated documentation to enable Proposals to be linked by ARENA and PtJ.
- › Applicants are to review the documentation requested as part of the specific ARENA and PtJ application processes and ensure all required information is provided in the requested format. This may involve provision of information that differs between the ARENA and PtJ application processes. Please refer to Appendix A for more detail.
- › Upon submission of an application, Applicants will be required to provide consent that any information provided to ARENA may be shared with PtJ and BMBF. Information will be shared with PtJ as part of the assessment process.
- › Each application is to specify the total project cost and the funding requested from each of ARENA and BMBF/PtJ. This should be provided in Australian dollars, with any foreign exchange assumptions specified. Note ARENA expects any foreign exchange risk to be borne by Applicants; the grant funding request should not be conditional or linked to foreign exchange movements. Funding requested from ARENA should be in line with the ARP Guidelines for Eligible Expenditure and should be structured to support the predominantly Australian elements of the project, for example activities undertaken in Australia using Australian technology, materials, labour or expertise.
- › For the avoidance of doubt, all material elements of the submission made to ARENA are to be provided in English. Materials that are not provided in English will not be reviewed and may result in your application being viewed as incomplete and unable to be assessed.

ASSESSMENT OF PROPOSALS

- › Applications to each of ARENA and PtJ will be assessed independently by each respective organisation. The assessment process and criteria used to assess the merit of Proposals by ARENA is provided within Section 3 and 4 of the ARP Guidelines unless otherwise stated within this Funding Announcement.
- › Applications will need to be assessed as high merit or equivalent by both ARENA and BMBF/PtJ to be successful at Full Application stage.
- › To the extent an application is assessed as high merit by ARENA under the Round but is not assessed as high merit by BMBF/PtJ, ARENA may elect to continue to process the high merit application. In such circumstances, the application will no longer be considered part of the HyGATE Initiative and ARENA will provide subsequent guidance to Applicants.
- › ARENA and PtJ will communicate the outcome of the Full Application assessment process to the respective lead Applicants for each Proposal.

6. ELIGIBILITY REQUIREMENTS

Applicants under this Round are required to meet all eligibility criteria as outlined in the ARP Guidelines. Note that under the ARP Guidelines, projects must have achieved a Technology Readiness Level (TRL) of 4 or above. Projects that involve primarily research activities will therefore not be eligible for ARENA funding.

Applicants should also consider the guidance on project scope in Section 4 Scope of the Round above, in particular projects that will not be funded under this Round.

7. CLARIFICATION OF MERIT CRITERIA

The following table sets out the merit criteria for the Round. These criteria include all criteria in clause 3 of the ARP Guidelines (left hand side column), with additional clarifications included below (right hand side column). Applications must address each of these merit criteria. A list of requirements and supporting documentation for each stage of the application process is provided at Appendix A. These requirements should be addressed, in addition to the items set out in this section.

ARP MERIT CRITERIA	APPLICATION TO ROUND
<p>A - Contributes to the Program Outcomes</p> <p><i>This criterion assesses how well the Activity contributes to the Program Outcomes, taking into account the investment focus areas in the Investment Plan and any relevant Funding Announcements and the priority low emissions technologies and emerging and enabling technologies outlined in the Technology Investment Roadmap, First Low Emissions Technology Statement - 2020 that support renewable energy technologies.</i></p>	<p>In assessing the contribution of a Proposal to the Program Outcomes, ARENA will consider alignment to the Program Objectives, Round Key Objectives and Scope of the Round, including:</p> <ul style="list-style-type: none"> › How well the project demonstrates direct involvement and collaboration between Australian and German Consortium partners; › How the project contributes to the realisation of an Australian-German value chain for hydrogen produced from renewables; › The potential for the project to accelerate the cost reduction and commercial readiness of the supply and value-chains for hydrogen generation from renewables or its further processing into derivatives for transport, storage or usage. This may include: <ul style="list-style-type: none"> – Analysis of renewable hydrogen cost drivers to demonstrate cost reductions beyond this project, which might allow the project to be replicated with a reduced subsidy in the medium term; and – Analysis of any planned expansion of the project and impact on the renewable hydrogen production, transport, storage or compression costs enabled by the expansion; and › The technical quality, innovativeness and knowledge gain of the project, for example how the innovative novel solutions will lead to an acceleration in hydrogen produced by renewables or demand for such products.
<p><i>Additional guidance for Full Application stage</i></p>	<p>ARENA will focus on the extent to which Applicants clearly demonstrate the potential of the project to achieve the Program Objectives, Round Key Objectives and alignment of the project with the Scope of the Round.</p>
<p>B - Applicant capability and capacity</p> <p><i>This criterion assesses the capability and capacity of the Applicant and Activity Partners to deliver the Activity.</i></p>	<p>In assessing this criterion, ARENA will consider:</p> <ul style="list-style-type: none"> › The demonstrated level of experience and expertise of the Applicant and Consortium members including where members of the Consortium have successfully delivered hydrogen or other projects of a similar nature, scale or value in Australia or internationally; › Whether the Consortium includes the required partners, being an eligible Australian organisation and two German partners (one from both industry and research as specified within Section 4 Scope of the Round). Evidence of commitment to the Consortium must also be provided (for example, a Memorandum of Understanding between all Consortium members); › Appropriateness of roles and responsibilities within the Consortium and any project partners; and › The quality and completeness of project documentation and agreements provided to ARENA, as well as the extent to which these provide evidence of the Applicant and Consortium's capability and readiness to implement the project.
<p><i>Additional guidance for Full Application stage</i></p>	<p>ARENA will have a particular focus on the Applicant and its Consortium's demonstrated ability to develop the project from its current stage to achieve financial close or otherwise commence and undertake the project in line with the proposed timeframe.</p> <p>ARENA will focus on the level of commitment and engagement of key project partners (including but not limited to major equipment suppliers, advisors and commercial partners) to support the delivery of the project.</p>

ARP MERIT CRITERIA	APPLICATION TO ROUND
<p>C - Activity design, methodology, risk and compliance</p> <p><i>This criterion assesses:</i></p> <ul style="list-style-type: none"> › <i>how well designed and planned the Activity is, including whether it has clearly defined objectives and methodology, as well as your approach to identifying, managing and reporting the personnel, delivery, technical and financial risks of the project;</i> › <i>Activity risk in terms of the likely success of the Activity, the achievement of intended outcomes that align with the Program Outcomes, investment focus areas in the Investment Plan and any relevant Funding Announcements;</i> › <i>the risk of negotiating and executing a Funding Arrangement which is acceptable to ARENA; and</i> › <i>compliance with any other requirements outlined in Part 5 of the ARP Guidelines.</i> 	<p>In assessing this criterion, ARENA will consider (as relevant to the project proposed):</p> <ul style="list-style-type: none"> › the quality and completeness of the project plan, including the level of project definition, this includes all activities in the project regardless of location or provider; › the technical quality and innovativeness of the project; › the completeness and reasonableness of the project timeline covering the timing of project development and delivery up to and including the point of commissioning; › the level of project technical definition and pathway to complete the front end engineering and design phase (FEED) and undertake a final investment decision (FID); › the level of information and analysis provided to support the proposed timeline for the project (including third party evidence where available); › the level of detail regarding access to and management of electricity, water and any other material inputs for the project; › the level of detail and certainty regarding the hydrogen use case or offtake agreement where relevant; › the quality of the risk management plan (including hazard and operability analysis, workplace health and safety and safety management plan) and the extent to which key risks have been identified and mitigated in project contracts and the financial model; › the identification and consideration of all required permits (including environmental and planning) and approvals and consents for the project; › the extent to which the Applicant accepts the terms of the Funding Agreement template; and › the Applicant's compliance with any other requirements outlined in Part 5 of the ARP Guidelines.

Additional guidance for Full Application stage

ARENA will particularly focus on the quality of the project plan and the project timeline, which should demonstrate that the Applicant has the commercial agreements, resources, permits, licences and plans in place to develop the project to achieve financial close and/or ultimately deliver the project as described in the Full Application. **Please refer to Appendix A for the required contents of a project plan and supporting evidence / attachments at Full Application stage.**

Proposals that demonstrate a clearly defined project that has a clear potential to achieve the Round Key Objectives may be assessed as higher merit.

Pilot, trial or deployment projects that have a more timely proposed Financial Close and commissioning timetable may be assessed as higher merit. The timetable should provide an expected timing of key development events supported with firm internal and external evidence.

ARENA expects the Applicant to have reviewed and identified any proposed areas of non-compliance with the template Funding Agreement and will be unlikely to accept subsequent material proposed amendments that have not already been raised in the Applicant's EOI (refer to Appendix A for further details).

ARP MERIT CRITERIA	APPLICATION TO ROUND
<p>D - Financial viability and co-funding commitment</p> <p><i>This criterion assesses your financial capacity to deliver the Activity; whether the Activity is commercially viable without ARENA funding; whether the amount of ARENA funding sought (and the form in which it is to be provided) and the total cost of the Activity is appropriate. In doing so ARENA assesses:</i></p> <ul style="list-style-type: none"> › whether you and any Activity partners have the financial capacity and appropriate levels of co-funding commitment to deliver the Activity successfully › the extent to which you or other Activity partners are providing funding or in-kind support for the Activity › relevant industry benchmarks for the economics of a particular Activity › whether the Activity could likely proceed in the absence of ARENA funding. 	<p>In assessing this criterion, ARENA will focus on the level of funding certainty to deliver the project within the proposed timetable and the appropriateness of resources and funding requested, including:</p> <ul style="list-style-type: none"> › deliverability of the financing plan › level of conditionality of the funding commitments (including evidence of investment terms and conditions for all forms of finance required) › the risk of cost overruns › quality of the financial model and assumptions for the project › the capacity of the Applicant to manage cost overruns. <p>A Project Budget and detailed financial model are to be provided which should include an appropriate breakdown of activities, cash flow and expenses over the project life indicating the commercial gap and how this informs the funding request. Proposals are expected to clearly set out the level of confidence regarding project cost estimates which should include external evidence where applicable.</p> <p>ARENA will assess the value for money relative to the amount of concessional funding sought, total cost of the project and the potential to contribute to outcomes outlined under Merit Criterion A. High merit Proposals may illustrate value for money through indicating to what extent the project may contribute to a cost reduction in hydrogen technologies, for example:</p> <ul style="list-style-type: none"> › a reduction in electrolyser cost or improvement in efficiency; › lowering the cost of hydrogen storage and handling; › lowering the cost of hydrogen conversion/re-conversion facilities; or › delivering new innovative solutions for the use of hydrogen with commercial potential. <p>The ARENA grant request is not expected to change materially between the EOJ stage and the Full Application stage, refer to Section 8 Application and assessment process, part d) for further clarification.</p> <p>Applicants are to disclose any other grant or concessional funding that Consortium members have applied for or intend to apply for with respect to the project (including funding requested from BMBF/PtJ). ARENA will take all concessional funding into account in determining merit against Criterion D, with higher concessional funding requirements indicating a greater economic gap to commercialisation.</p>
<p><i>Additional guidance for Full Application stage</i></p>	<p>High merit Proposals should include the following (as relevant to the project):</p> <ul style="list-style-type: none"> › provide evidence of total project cost estimates to a confidence level of +/- 20% (excluding contingency costs) or firmer, noting key assumptions and including third party verification of cost estimates; › provide evidence of preferred major component supplier firm pricing (quotes) and details of performance guarantees; › provide detailed term sheets for EPC contractor and O&M costs including pricing, key terms and any conditions; › have a clear financing strategy in place for all capital required for the project, including countersigned term sheets or similar with equity and debt financiers setting out the key terms and conditions of the funding; › outline how all financing activities align with the project Financial Close timetable; › include a detailed plan for how cost overruns will be managed and funded; › provide detail on any development costs, profits or fees paid or payable to all parties (with supporting documentation); › provide a project budget, including cash and in-kind contributions from all Consortium members and project partners; and › provide a detailed financial model for the project including all associated assumptions (refer to Appendix A for further clarification).

ARP MERIT CRITERIA	APPLICATION TO ROUND
<p>E - Knowledge sharing This criterion assesses:</p> <ul style="list-style-type: none"> › the value of the knowledge generated by the Activity in contributing to the Program Outcomes › how well that knowledge is targeted to specific audiences › how you will capture, store and disseminate the data, information and lessons learned from the Activity. <p><i>Additional guidance for Full Application stage</i></p>	<p>In assessing this criterion, ARENA will consider:</p> <ul style="list-style-type: none"> › how well the knowledge generated will contribute to the Round Key Objectives and aligns with the Scope of the Round; › the scientific and technical quality, innovativeness and knowledge gain of the project, for example how the innovative novel solutions will lead to an acceleration in hydrogen produced by renewables or demand for such products; › the extent to which a project helps to build and strengthen linkages between Australian and German industry and research institutions, and enable exchange of skills and expertise to support the development of the industry; › the extent to which additional valuable knowledge may be generated and shared from the project; and › the extent to which the knowledge generated supports the development of new markets and supply chains. <p>Subject to the considerations above, ARENA may also assess the following projects as providing superior knowledge sharing outcomes, relevant to the Round Key Objectives:</p> <ul style="list-style-type: none"> › Projects that, as part of a deployment, involve the exploration or demonstration of the pathway to achieving emissions certification of renewable hydrogen › Projects that, as part of a deployment, involve the identification of regulatory barriers to the adoption of green hydrogen both in domestic use cases and in international transport and use, including development of a pathway to overcome these barriers <p>Applicants must provide a completed version of the template Knowledge Sharing Plan, including any additional knowledge sharing deliverables proposed.</p>

Proposals must address the relevant additional information requirements set out in Appendix A.

8. APPLICATION AND ASSESSMENT PROCESS

An application made under the Round must be completed according to the ARP Guidelines. Please refer to Section 5 Process above for further details on the application process for the HyGATE Initiative.

Further detail is outlined below on the application and assessment process that is specific to each stage of the Round.

a. Assessment of Proposals

When evaluating Proposals against the Round Key Objectives, ARENA will assess Proposals against the Scope of the Round parameters and the ARP merit criteria provided in Sections 4 and 7 above.

Note that Section 6.7 of the ARP Guidelines allows ARENA (in its absolute discretion) to reject, refuse to consider, or cease evaluating a Full Application at any time if ARENA determines (at its absolute discretion) that the Full Application is unlikely to be successful. This will apply particularly when a Proposal does not fit within the Scope of Round parameters (as presented in Section 4).

b. Full Application stage

A Full Application will only be accepted from Applicants invited by ARENA to submit a Full Application following the assessment of EOIs. Full Applications must clearly address each of the ARP merit criteria, taking into account the clarifications provided in Section 7 above. Full Applications will be assessed against the ARP merit criteria and rank ordered. Each merit criterion has equal weight.

Only Proposals that are assessed as being of high merit against the ARP merit criteria and having received an equivalent assessment by BMBF/PtJ at Full Application stage will be considered for funding.

Following that assessment, the highest ranked Proposals will be recommended to the ARENA Board for funding approval subject to the Total Funding Allocation available and the portfolio approach described below.

Full Applications must be submitted via ARENAnet under 'Advancing Renewables Program - ARENA German-Australian Hydrogen Innovation and Technology Incubator (HyGATE) Funding Announcement' no later than 5pm (AEDT) on the Full Application Due Date.

Further information on the requirements for the Full Application stage is presented at Appendix A.

ARENA reserves the right to re-approach Applicants who were unsuccessful at EOI stage if necessary to carry out the HyGATE Initiative Objectives. This could occur in the event that funding remains available under the total Funding Allocation after the successful Full Application Proposals are selected.

c. Material changes

To ensure accurate Proposals at both the EOI and Full Application stages, and to ensure fairness in the assessment, no material change to the Proposal will be permitted between the EOI and Full Application stages.

ARENA retains the right to not assess Full Application Proposals where a material change(s) is observed from the EOI stage. ARENA will determine, at its discretion, whether any such change is material in nature.

A material change may include but is not limited to:

- › a change in the use case of the renewable hydrogen to be produced from the project;
- › a change in the geographic location of the project;
- › a decrease in the size of the Electrolyser Capacity of more than 10% of the MW capacity;
- › a change in timing of target Financial Close by more than 6 months; and/or
- › an increase in the size of the grant request greater than 10% of the grant request at the EOI stage.

Similarly, no material change to the project is expected between the Full Application and Financial Close. ARENA will determine, at its discretion, whether any such change is material in nature. In the event that a material change occurs, ARENA reserves the right to determine if the changes are acceptable and support the Round Key Objectives. ARENA may, at its discretion, determine it is appropriate to increase the amount of ARENA funding if it is considered to represent value for money and in line with the Round Key Objectives and subject to the Applicant meeting the conditions of the Offer to Negotiate letter.

d. Q&A process

A Q&A process may be undertaken during the application process to respond to Applicant queries on applications and assessment. Queries can be emailed to hydrogen@arena.gov.au. Responses for commonly asked questions will be published on arena.gov.au/funding/german-australian-hydrogen-innovation-and-technology-incubator-hygate

e. Publication of information

ARENA may look to publish aggregated and non-identifiable data¹ from the Proposals received at the conclusion of the Full Application stage of the Round where appropriate. This may include information on the following:

- › Proposed electrolyser capacity sizes (non-identifiable range)
- › Number of project by State or Territory
- › End use cases
- › ARENA grant as percentage of total project cost
- › PtJ grant as percentage of total project cost
- › Estimated reduction in carbon footprint in CO₂e compared to the alternative technology (e.g. Steam Methane Reforming (SMR) vs renewable hydrogen)
- › Number of full time equivalent employees (FTEs) required during the construction period and number of ongoing FTEs during the operation of the project

ARENA may also publish the name of Applications, Applicants and the public project description provided in the ARENAnet application form that receive an offer of funding.

f. Portfolio approach

ARENA intends to apply a portfolio approach when offering funding under the Round (as allowed for under ARP Guidelines clauses 4.23 and 4.24). ARENA may elect not to fund an otherwise meritorious project, or in the case of a Competitive Process, a higher ranked project, if the aims or outcomes of that project are the same as, or similar to, the aims and outcomes of a project that ARENA is intending to fund through the Round or has previously funded.

¹ Where relevant, ARENA expects to present data and information on the basis that it has been received.

9. OFFER TO NEGOTIATE

Upon the award of ARENA funding, ARENA will issue a non-binding offer to negotiate a Funding Agreement (Offer to Negotiate) to Applicants that are successful at the Full Application stage of the Round. The Offer to Negotiate will outline the terms under which ARENA is prepared to enter into negotiations for a Funding Agreement for the Proposal. The Offer to Negotiate will outline:

- › the amount of ARENA funding that is being offered;
- › the terms and conditions associated with the offer of ARENA Funding;
- › any further due diligence ARENA may wish to undertake as a condition to ARENA funding;
- › that the ARENA funding is linked to the production, storage, transport or use of renewable hydrogen;
- › the development milestones that the Applicant is required to meet (such as relevant milestones up to and including Financial Close);
- › the terms under which ARENA may withdraw the offer of funding;
- › requirements for monthly confirmation that the Applicant is proceeding with the project; and
- › other relevant information.

PtJ will separately notify the respective lead German Applicant of successful Consortiums.

10. COMMUNICATIONS AND PUBLIC ANNOUNCEMENTS

Any media releases by Applicants related to Proposals in the Round are to be jointly agreed between ARENA and the Applicant. All media announcements, releases or other public disclosure to third parties relating to the Proposal and the Round must only be with the prior written approval of ARENA. Once a Funding Agreement is executed, the terms of the Funding Agreement will govern any public announcements.

11. FUNDING AGREEMENT

The Funding Agreement will provide the legal framework for the obligations of each party and terms of payment for each successful Full Application under the Round.

ARENA's Funding Agreement template is provided on the ARENA website page dedicated to the Round at arena.gov.au/funding/german-australian-hydrogen-innovation-and-technology-incubator-hygate. Applicants are expected to accept this Funding Agreement with no, or very limited, changes. Based on limited feedback from Applicants during the EOI stage, ARENA has not updated the Funding Agreement template. Compliance with the Funding Agreement will form part of ARENA's assessment of project risk under ARP Merit Criterion C.

A detailed mark-up of the Funding Agreement is to be provided at the Full Application stage. ARENA is unlikely to accept material proposed amendments to the Funding Agreement template that have not been raised in the Applicant's EOI or Full Application.

The Funding Agreement will stipulate the development milestones for the project that the Recipient will be expected to adhere to.

12. KNOWLEDGE SHARING PLAN

A template Knowledge Sharing Plan for hydrogen production projects is provided at arena.gov.au/funding/german-australian-hydrogen-innovation-and-technology-incubator-hygate. Applicants are required to provide a response to the Knowledge Sharing Plan (in conjunction with the Funding Agreement) with both their EOI and Full Application. The Knowledge Sharing Plan submitted as part of the Full Application should be comprehensive, and Applicants are encouraged to adapt the Knowledge Sharing Plan as required (particularly for projects that are focused on other aspects of the hydrogen value chain), including any incremental knowledge sharing outputs that it considers to be valuable to the market.

13. TIMETABLE

The timetable for the Round is presented in the table below.

EOI STAGE	
EOI Open Date	8 March 2022
EOI Due Date	9 June 2022, 5:00 pm Australian Eastern Standard Time (AEST)
FULL APPLICATION STAGE	
Applicants invited to submit a Full Application or EOI outcome notification	8 August 2022
Full Application Due Date	12 October 2022, 5:00 pm Australian Eastern Daylight Time (AEDT)
Offer to Negotiate or communication of outcome of the Full Application stage	ARENA aims to issue outcome letters from the Full Application stage during December 2022. ARENA and PtJ will aim to notify both Australian and German Applicants of the Full Application outcome at the same time.
IMPLEMENTATION	
Financial Close Satisfaction Date	ARENA may assess, as higher merit, projects that have a more timely and more certain proposed date of Financial Close and commissioning timetable. The timetable should be developed to provide an expected timing of key development events, supported with firm internal and external evidence.
Commissioning Date	ARENA anticipates that supported projects should achieve commissioning no later than 18 months following Financial Close.
ARENA reporting period	Extends to the third anniversary of the Commissioning Date

ARENA reserves the right to not accept a Full Application submitted after the Full Application Due Date.

The above dates represent the current timetable for the Round. ARENA retains the right to amend proposed timelines and stages or alter any element of the Round at its discretion. If ARENA, at its discretion deems it beneficial to achieving the objectives of the Round, ARENA may extend or change the timetable for the Round.

GLOSSARY

\$	All references to dollars or \$ are to Australian Dollars.
The Accord	The Australia-Germany Hydrogen Accord
AEDT	Australian Eastern Daylight Time
AEST	Australian Eastern Standard Time
ARP	Advancing Renewables Program
AUD	Australian Dollars
BMBF	German Federal Ministry of Education and Research
Commissioning Date	Expected to be the final completion of the project in accordance with the Engineering Procurement and Construction contract and the relevant project documents
Consortium	Collectively, the Australian and German entities intending to undertake the proposed project
DISER	The Department of Industry, Science, Environment and Resources
Electrolyser Capacity	Electrolyser Capacity is the electrolyser stack capacity warranted by the equipment provider at the Commissioning Date
EOI	Expression of Interest
EOI Due Date	9 June 2022
EOI Open Date	8 March 2022
FCEV	Fuel Cell Electric Vehicle
FEED	Front End Engineering and Design
FID	Final Investment Decision
Financial Close	At ARENA's discretion, a phase of the delivery of the project whereby all relevant parties and commercial contracts move to a binding and irrevocable stage
Full Application Due Date	12 October 2022 5:00 pm AEDT
Full Application Open Date	8 August 2022
Funding Agreement	The agreement between a Recipient and ARENA for funding under the ARP. A template is available on the ARENA website
Funding Period	The length of time that funding under the Round is available, being four years from the date of execution of a funding agreement under the Round
Grant Funding	Grant funding includes both BMBF/PtJ and ARENA funding and other grant funding a project may receive from State or Federal Government initiatives. It excludes concessional finance such as CEFC or NAIF funding
Hydrogen Delivered	Calculated as the annual tonnes of hydrogen delivered in normal operations over a 12 month period based on the designed average System Efficiency guaranteed by the equipment supplier, and the electricity capacity factor (the extent to which the electrolyser is used) as assumed in the financial model and / or relevant commercial agreements
HyGATE	German-Australian Hydrogen Innovation and Technology Incubator
Knowledge Sharing Plan	Template plan setting out the minimum knowledge sharing deliverables expected to be provided by the Applicant
MOU	Memorandum of understanding or equivalent type document
Offer to Negotiate	ARENA will issue a non-binding offer to negotiate a Funding Agreement to those Applicants that are successful at the Full Application stage of the Round
P&ID	Piping and Instrumentation Diagrams
PFD	Process Flow Diagrams
PtJ	Projekträger Jülich, the German delivery partner for the HyGATE Initiative
HyGATE Initiative Objectives	The overarching objectives of the objectives of the HyGATE Initiative.
R&D	Research and Development
The Round	The competitive process that will be used by ARENA under the ARP to fund projects as set out in this Funding Announcement
Round Key Objectives	The specific outcomes targeted by the Round, which support the broader objectives of the HyGATE Initiative

Proposal	Has the same meaning as in the ARP Guidelines
Renewable Energy Certificates / RECs	As defined by the Clean Energy Regulator under the Renewable Energy Target scheme or equivalent certificate scheme.
SMR	Steam Methane Reforming
Total Funding Allocation	\$50 million allocated to the HyGATE Initiative
Total Project Cost	All costs incurred to construct and finance the project including costs incurred during the development stage
TRL	Technology Readiness Level - refer to Appendix A of the ARP Guidelines for greater detail
Updated Funding Announcement	Updated version of the Expression of Interest Funding Announcement, published at the commencement of the Full Application stage to provide additional guidance on the Round

APPENDIX A – ADDITIONAL INFORMATION REQUIREMENTS

Proposals should refer to the information in this Appendix in addition to the guidance provided in Section 7 Clarification of Merit Criteria when preparing the project plan (joint scientific project document).

1. PROJECT PLAN STRUCTURE AND CONTENTS

The project plan should be structured using the headings and subheadings provided in Table B below, including (at a minimum) the information specified in this table. Any information specified in Section 7 Clarification of Merit Criteria should also be provided as part of the project plan.

For the avoidance of doubt the project plan should cover all aspects of the project including any proposed participation and activities to be undertaken by both the Australian and German counterparties.

The project plan is expected to be updated at Full Application stage with a greater level of detail and to reflect any feedback provided at the Expression of Interest stage and progress in project development. Guidance is provided in Table B on the expected content and incremental level of detail to be included at the Full Application stage.

To assist Applicants in structuring a project plan, the following explanatory guidance is provided in Table A:

TABLE A: STRUCTURE INTERPRETATION

ITEM	PROJECT PLAN STRUCTURE	EOI	FULL APPLICATION
1	Section heading (required at both EOI and Full Application)		
1.1	Subheading (required at both EOI and Full Application) Minimum expected content to be included under this subheading (if any). If no expected content is specified, Applicants are recommended to include content that illustrates how their Proposal supports the relevant merit criterion.	✓ indicates content is required within EOI	✓ indicates content is required within Full Application

TABLE B: EXPECTED PROJECT PLAN STRUCTURE AND MINIMUM CONTENT

ITEM	PROJECT PLAN STRUCTURE	EOI	FULL APPLICATION
1	Executive Summary of the Proposal		
1.1	Summary of the project including description, size, proposed location and use of the hydrogen		
2	Context and objectives of the Proposal Indicate how your Proposal supports Merit Criterion A, using the subheadings below:		
2.1	Objectives Indicate how the project will contribute to the commercialisation pathway for renewable hydrogen in Australia and internationally.		
2.2	Context and relevance of the Proposal to the Funding Announcement / call		
2.3	State of the art and relevant patents filed (by Applicants, third parties)		
3	Project consortium and collaboration Indicate how your Proposal supports Merit Criterion B, using the subheadings below and including the information as specified for an EOI/Full Application:		
3.1	Qualifications and contributions of each partner List the Consortium members key project partners including proposed equipment suppliers, incorporation details, major subsidiaries and associated entities and details of current Australian operations and relevant experience in Australia and internationally.	✓	✓
	Include any examples where the Applicant and/or Consortium members have successfully delivered hydrogen production or hydrogen related projects in Australia, or internationally.	✓	✓
	Provide detail of the Applicant's long term hydrogen investment strategy.	✓	✓

ITEM	PROJECT PLAN STRUCTURE	EOI	FULL APPLICATION
3.2	Synergies and role of partners in the consortia Provide a clear description of the activities that will be undertaken by each of the Consortium members, detailing their role in the project and relevant skills/ expertise. Outline how the Consortium members will work together to undertake the project.	✓	✓
3.3	Collaboration with third parties List the key project partners including proposed equipment suppliers, key consultants and any subcontractors. This should include details of current Australian operations and relevant experience in Australia and internationally. Provide an overview of the role of each project partner in undertaking the project.	✓	✓
4	Technical program, work plan Indicate how your Proposal supports Merit Criterion C, including using the subheadings below and including the information as specified for an EOI/Full Application:		
4.1	Technical programme and overall project structure (include further subheadings as required) Summarise the current design of the project including the source of renewable energy as well as Process Flow Diagrams (PFD). Summarise the current technical design of the project including the source of renewable energy and Piping and Instrumentation Diagrams (P&ID). Detail on current status of development, planning and environmental approvals, permits and /or licenses required for the project and anticipated pathway and timing to finalisation. Detail any land access requirements, including current status of approval. Evidence of land access for the proposed site of the project. Detail of any regulatory licences required to carry out the project and current status of registration. If relevant, detail regarding the status of connection agreement process and where possible, evidence provided to confirm the current status. If relevant, detail regarding proposed source of water, annual water consumption, water quality, access, costs and any related approvals required (including status). Provide key project metrics for example targeted electricity supply cost (\$/MWh), capacity factor (%), hydrogen production cost (\$/kg hydrogen), CO2 reduction potential (t/a) or other key metrics as relevant. Details on any climate risk aspects identified for the project. Details on the proposed maintenance and replacement regime for the lifetime of the asset.	✓	✓
4.2	Description of work packages		
4.3	Milestones and task schedule (and Gantt chart) Summarise the level of project technical definition and pathway to undertake any remaining development works, FEED, FID, construction and operations. Include evidence of feasibility or design work undertaken to date or further development work to be undertaken as part of the project. Timetable for the project, including key milestones, target final investment decision, target Financial Close date and target commissioning date. Note the status of any community consultation that has occurred to date and any planned activities.	✓	✓
5	Dissemination and exploitation Indicate how your Proposal supports Merit Criterion E, using the subheadings below and including the information as specified for an EOI/Full Application:		
5.1	Scientific, technical and economic utilisation of the results A section summarising the estimated reduction in carbon footprint in CO2e compared to the alternative technology (e.g. SMR vs renewable hydrogen).	✓	✓
5.2	Added value for the Australian-German research cooperation		
5.3	Statement that the partners have reached an understanding of how the intellectual property and know-how arising from the accomplishment of the joint research projects will be handled and exploited by each partner and will enter into a cooperation agreement if selected, conforming to both national regulations.		

ITEM	PROJECT PLAN STRUCTURE	EOI	FULL APPLICATION
6	Calculation and explanation of estimated costs and funding requests for each partner Indicate how your Proposal supports Merit Criterion D, using the subheadings below and including the information as specified for an EOI/Full Application:		
6.1	Estimated costs and funding requests Details of all development costs including any pre-feasibility, feasibility and FEED costs spent to date.	✓	✓
	Breakdown of development costs including FEED costs estimated to be incurred prior to Financial Close, including evidence for cost estimates if applicable.	✓	
	Detailed breakdown of all development costs required for the project including FEED costs. This should include the timing of all costs and third party evidence for cost estimates. Development costs expected to be incurred prior to Financial Close should be clearly identifiable.		✓
	An outline of the proposed capital structure to fund the project including evidence of the proposed sources of such funds, noting level of commitment in line with the compulsory requirements above, including timeline for financing becoming unconditional.	✓	✓
	Details on how the Applicant will manage contingency costs and cost overruns.	✓	✓
	Analysis to demonstrate a clear path to further cost reductions beyond this project, which might allow the project to be replicated with a reduced subsidy within the medium term.	✓	✓
7	Justification of the grant request from Australia and Germany Indicate how your Proposal supports Merit Criterion D (to the extent not covered in Section 6 of the project plan), using the subheadings below and including the information as specified for an EOI/Full Application:		
7.1	Justification of the grant request from Australia and Germany Details on all concessional components of the project.	✓	✓
	Analysis demonstrating that the project would not be able to proceed without the requested ARENA and BMBF/PtJ funding.	✓	✓
8	References Appendices		
	An appendix noting responses to any EOI feedback.		✓
	Documentation as specified below in Section 2 of Appendix A - Application attachments Note: required supporting documentation can be provided as appendices to the project plan or can be provided separately as attachments within your online Application	✓	✓

2. APPLICATION ATTACHMENTS

Applicants must provide the following supporting documentation as part of any Application. This documentation can be provided as appendices to the project plan or can be provided separately as attachments within your online Application.

TOPIC	REQUIRED DOCUMENTATION - EOJ	REQUIRED DOCUMENTATION - FULL APPLICATION
Project plan	Required at both stages. Refer to Appendix A sections 1 and 2 for project plan contents and required supporting documentation.	
Project financial model	Required at both stages. Refer to Appendix A section 3 for financial model requirements.	
Project budget	Required at both stages. ARENA budget template must be completed as part of online Application. Detailed spreadsheets, calculations and budgetary evidence/quotes should be provided to support the Application budget.	
Funding Agreement compliance table	Required at both stages. Table identifying areas of non-compliance with the standard terms and conditions in the Funding Agreement template and summarising proposed amendments. Template provided by ARENA.	
Risk Management Plan	Required at both stages. A detailed risk management plan for the project, including hazard and operability analysis, workplace health and safety, and safety management plan. Applicants to use their own template.	
Community Consultation Plan	Not required at EOJ.	Required at Full Application. Applicants to use their own template.
Knowledge Sharing Plan	Required at both stages. Template provided by ARENA.	
Consortium commitments	Required at both stages. MOU governing the relationship of the Consortium members and respective commitments to the project.	
Evidence of financial capacity of Consortium	Optional but encouraged. Documentation to support the Consortium's ability to support its proposed financial contribution to the project. For deployment projects, this includes the capacity to provide the proposed equity contribution and execute on the proposed financing plan.	
Timetable	Required at both stages. Timetable for the key development milestones of the project which should include expected timing of: <ul style="list-style-type: none"> > total project cost becoming more definitive (e.g. from +/- 30% or +/- 20% to a binding price); > key technical and commercial milestones; and > Financial Close and commissioning. 	
Letters of Support from key stakeholders / partners not otherwise required	Optional but encouraged.	
Any other key documents available for diligence	Optional but encouraged.	
PtJ online application form	At EOJ: EOJ form completed and submitted in PtJ from online portal. Refer to PtJ guidance for more detail. (This does not need to be attached to the ARENA application)	At Full Application: Full Application form plus additional requirements according to invitation letter submitted via email. Refer to PtJ guidance for more detail. (This does not need to be attached to the ARENA application).

TOPIC	REQUIRED DOCUMENTATION - EOI	REQUIRED DOCUMENTATION - FULL APPLICATION
DOCUMENTATION TO BE PROVIDED IF RELEVANT TO THE PROJECT (NOT MANDATORY WITH ALL APPLICATIONS):		
Equity contribution	At EOI: MOU for sponsor and other equity (including key terms and conditions).	At Full Application: Detailed countersigned term sheet(s) for all equity funding or Consortium contributions to the project including any conditions.
Financing plan	At EOI: A financing plan for all other capital required for the project.	At Full Application: Detail on the current status of funding approval for all sources of funds required for the project and how all financing activities align with the timetable for project Financial Close or commencement. Detailed countersigned term sheet for any debt or concessional debt funding including any conditions.
Renewable energy supply or renewable hydrogen supply	At EOI: If renewable hydrogen is being produced, MOU for renewable energy supply including pricing, term and key conditions if contracted, or agreement to acquire and retire required RECs. If Applicants are constructing renewable energy assets for the project, detail should be provided on the proposed sizing of the renewable energy assets, construction timelines and costs.	At Full Application: If renewable hydrogen is being produced, detailed long form countersigned term sheet for renewable energy supply including pricing, term and key conditions if contracted, or a signed agreement to acquire and retire required RECs. If Applicants are constructing renewable energy assets for the project, detail should be provided on the proposed sizing of the renewable energy assets, construction timelines and costs. If renewable hydrogen is being used but not also produced within the project, detailed long form countersigned term sheet for renewable hydrogen supply including provider, location of production, method of transportation to the project, pricing, term and key conditions.
Offtake	At EOI: MOU with third party for offtake or hydrogen use. The MOU should specify timing, volume, price and any specific conditions. In the case of self consumption, Applicants should provide comprehensive detail on the use case for the hydrogen.	At Full Application: Detailed countersigned term sheet for offtake or hydrogen use. The term sheet should specify timing, volume and price and any specific conditions. In the case of self consumption, Applicants should provide comprehensive detail on the use case for the hydrogen. Detailed analysis to support the assumptions relating to any non-contracted revenue reflected in the financial model, including third party support for the assumptions where relevant.
FCEVs	Required at both stages. Where a project involves fuel cell electric vehicles, the application must include third party documentation that provides firm evidence of the terms of vehicle supply (for example, cost, specifications, delivery timeframe, production location, evidence of compliance with relevant regulations, etc.) The proposed timeline for vehicle delivery should be articulated clearly with supporting evidence.	
Feasibility studies	Not required at EOI.	At Full Application: If pilot, trial or deployment stage project, Applicants should have completed feasibility engineering studies and provide evidence or copies of these studies.
Cost estimates	At EOI: Evidence of total project cost estimates to a confidence interval of +/-30% (excluding contingency costs) or firmer.	At Full Application: Evidence of total project cost estimates to a confidence interval of +/-20% including third party verification of the cost estimates.

TOPIC	REQUIRED DOCUMENTATION - EOI	REQUIRED DOCUMENTATION - FULL APPLICATION
Supplier pricing	At EOI: Evidence of proposed electrolyser or other key component supplier(s) pricing.	At Full Application: Evidence of preferred electrolyser or other key component supplier firm pricing (quotes) and details of performance guarantees. Detailed term sheet for EPC contractor and O&M costs including pricing, key terms and any conditions.

3. FINANCIAL MODEL REQUIREMENTS

A dynamic financial model should be provided with both the EOI and Full Application, which the following information and functionality included (at a minimum):

- › All associated costs of deployment with clear breakdown of cost categories. ARENA expects to support electrolyser and balance of plant equipment or other major capital costs. These costs should be clearly identifiable.
- › All assumptions to be clearly labelled and dynamic.
- › Note the proposed tax treatment of the ARENA funding.
- › Note key project metrics including targeted electricity supply cost (\$/MWh), capacity factor (%), hydrogen production cost (\$/kg hydrogen), CO2 reduction potential (t/a) or other metrics as relevant with supporting calculation.
- › Ability to clearly sensitise the model to view the equity IRR (pre and post tax) with and without ARENA funding (and other Grant Funding).
- › Full Application only - Comprehensive assumption book with evidence of third party information for all key inputs. This should include, but not limited to, the following (as relevant):
 - Hydrogen offtake key terms including price, term and volumes.
 - Energy supply key terms including price, term and volumes.
 - Water supply key terms including price, term and volumes.
 - Any other revenues (e.g. ammonia, oxygen, electricity, etc).
 - Other key electrolyser assumptions including operating efficiency (MWh / Hydrogen Delivered), availability, degradation rate, stack replacement lifecycle costs.
 - Operating costs by type.
 - Sources of funding including key terms such as tenor, repayments and interest rate (if relevant).
- › All costs should be provided in AUD (showing conversion from foreign currency as required). Additionally, partners applying for funding from Germany should provide costs in EUR. All foreign exchange risk remains with the Consortium.

Further information is available at
arena.gov.au

Australian Renewable Energy Agency

To explore potential for funding visit:
arena.gov.au/funding

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ARENAWIRE



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