

INDUSTRIAL ENERGY TRANSFORMATION STUDIES PROGRAM GUIDELINES

**STREAM B -
ENGINEERING STUDIES
SEPTEMBER 2022**



Australian Government
**Australian Renewable
Energy Agency**

ARENA

EXECUTIVE SUMMARY

ABOUT THE INDUSTRIAL ENERGY TRANSFORMATION STUDIES PROGRAM

1. The Industrial Energy Transformation Studies Program (**the Program**) aims to support feasibility and engineering studies and associated metering which can enable an investment decision in energy efficiency and renewable energy solutions for industrial processes.
2. The Program seeks studies investigating the use of technologies which will:
 - a. deliver a transformational improvement in industrial energy efficiency as compared to business as usual energy use; and/or
 - b. deliver a transformational increase in renewable energy use as compared to business as usual energy use; and
 - c. deliver transformational reduction in greenhouse gas emissions below business as usual emissions, and
 - d. demonstrate high replicability potential across similar industrial settings.
3. Proposals can currently be submitted in one of the following Streams:
 - a. Feasibility Studies (**Stream A**): eligible for grant funding up to \$500,000 per Study
 - b. Engineering Studies (**Stream B**): eligible for grant funding up to \$5 million per Study
4. The funding allocated for Stream A and Stream B is up to a total amount of \$43 million. This amount may be reduced or increased at ARENA's discretion.
5. Studies may address:
 - a. existing facilities (retrofit) or new low-emission facilities (new build);
 - b. a single site;
 - c. a single technological solution across:
 - i. a single organisation with multiple sites, or
 - ii. a multi-tenanted precinct;
 - d. a group of sites with similar processes and equipment; or
 - e. Scope 1 and/or Scope 2 greenhouse gas emissions
6. To be eligible for funding under the Program, Applicants should, at the time of applying and for the life of the Study, hold an Australian Business Number (ABN) and be one of the following:
 - a. an Australian entity incorporated under the *Corporations Act 2001* (Cth);
 - b. an Australian State or Territory owned corporation or a subsidiary of an Australian state or territory owned corporation; or
 - c. an Australian local government or council.

ABOUT STREAM B - ENGINEERING STUDIES

7. This Guideline document addresses **Stream B Engineering Studies only**. A separate Guideline document addresses Stream A Feasibility Studies.
8. The application and assessment process for Stream B involves two stages: an Expression of Interest (EOI), followed by a Full Application.
9. An EOI for ARENA funding under this Program can be submitted at any time while this Program remains open. The assessment of EOI proposals will generally occur on a quarterly basis commencing from the Program Open Date. ARENA has the discretion to assess proposals more or less frequently depending on the volume of applications received during the assessment period.
10. Assessment timeframes will be communicated to Applicants through the Program webpage arena.gov.au/funding/industrial-energy-transformation-studies-program/. Applicants are encouraged to check the Program website regularly for upcoming assessment periods.
11. The Eligibility Criteria for the EOI and Full Application stages are set out in Part 3 of these Guidelines.
12. Applications assessed to be high merit at EOI stage may be invited by ARENA to submit a Full Application.

13. ARENA will award Grant funding to eligible Applications that are selected following a Merit Criteria assessment, as set out in Part 4 of these Guidelines. The four Merit Criteria will be equally weighted, and are as follows:
 - a. Merit Criterion A: Contribution to Stream B Objectives
 - b. Merit Criterion B: Applicant capability and capacity
 - c. Merit Criterion C: Study design and methodology
 - d. Merit Criterion D: Value for money and co-funding commitment
14. In addition to the Merit Criteria assessment, ARENA will consider whether the Study is complimentary to ARENA's existing portfolio and the overall risk of ARENA providing funding to the Applicant. More information on unweighted assessment considerations are included in Part 2 of these Guidelines.
15. Applications must be completed and submitted through ARENA's Grants Management System, ARENANet which is accessible from the Program webpage at arena.gov.au/funding/industrial-energy-transformation-studies-program/.

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PART 1. OVERVIEW

PURPOSE

- 1.1 The purpose of these Guidelines is to provide rules and guidance for Applicants seeking an ARENA Grant through Stream B of the Industrial Energy Transformation Studies Program (**the Program**).
- 1.2 Applicants should read the Guidelines in conjunction with any supporting information provided on ARENA's website at arena.gov.au/funding/industrial-energy-transformation-studies-program/. Applicants are encouraged to regularly check the Program webpage for any updates to the Guidelines or process prior to submission.
- 1.3 In these Guidelines, the common meaning of the word applies, unless defined in the Glossary at the end of the Guidelines.
- 1.4 In the event of any inconsistency between other ARENA materials and these Guidelines, the Guidelines will prevail.

OBJECTIVES OF STREAM B -ENGINEERING STUDIES

- 1.5 Stream B of the Program aims to support Engineering Studies and associated metering which can enable an investment decision in energy efficiency and renewable energy solutions for industrial processes that:
 - a. deliver transformational improvement in industrial energy efficiency as compared to baseline or business as usual energy use; and/or
 - b. deliver a transformational increase in renewable energy use as compared to business as usual energy use; and
 - c. deliver transformational reduction in greenhouse gas emissions below baseline or business as usual emissions ; and
 - d. demonstrate high replicability potential across similar industrial settings.

FUNDING AVAILABLE

- 1.6 The ARENA funding available under the Program is up to a total amount of \$43 million. This amount may be reduced or increased at ARENA's discretion.
- 1.7 All funding provided will be in the form of ARENA grants. Requests for grants under Stream B should be between \$250,000 and \$5 million per Study. ARENA may consider requests for grants outside of this range, at its discretion.
- 1.8 The ARENA Grant may be used to cover up to 50% of the total eligible Study costs. Applications with higher co-contributions (that is, lower ARENA Grant request) may be considered of higher merit.

TARGET SECTORS

- 1.9 ARENA is targeting Studies from organisations which align to at least one of the following ANZSIC sectors (as defined in Appendix B):
 - a. Agriculture;
 - b. Mining (excluding coal mining and oil and gas extraction);
 - c. Manufacturing;
 - d. Gas Supply;
 - e. Water Supply, Sewerage and Drainage Services;
 - f. Waste Collection, Treatment and Disposal Services; or
 - g. Data Centres.

TECHNOLOGIES

- 1.10 To be eligible under the Program, the proposed Study **must** focus on one or both of the following themes.
- 1.11 **Energy efficiency:** Energy efficiency studies must investigate technologies that improve the energy efficiency of an industrial process or processes on the identified site/s. These technologies will be primarily focussed on reducing the energy requirements of existing processes on site. Eligible technologies must have been proven to work through successful operation on existing processes and/or be qualified through test and demonstration.
- 1.12 Examples of eligible technologies include, but are not limited to:
- heat pumps for process heat,
 - improved process control,
 - high efficiency equipment,
 - waste heat and energy recovery.
- 1.13 **Renewable energy:** Renewable energy studies must investigate renewable energy or enabling technologies that will result in a significant reduction in the greenhouse gas emissions of an industrial process or processes on the identified site
- 1.14 ARENA recognises that renewable energy technologies may be less developed in commercial settings however, the technology should either:
- have been proven to work through successful operations and/or is qualified through test and demonstration, or
 - be currently at a working prototype stage which requires demonstration of an actual system prototype in an operational environment.
- 1.15 Examples of eligible renewable energy technologies include but are not limited to:
- electrification technologies, where the electricity is intended to be sourced from renewable supply;
 - renewable fuels, such as bioenergy or renewable hydrogen;
 - solar thermal energy;
 - geothermal energy;
 - energy storage (including thermal energy storage) where this enables or supports the renewable energy technology; and
 - load flexibility (such as processes with flexible energy demand that can be more easily matched with renewable electricity supply).
- 1.16 Studies that demonstrate innovative or novel integration of renewable energy technologies or enabling technologies into the industrial process with significant emissions reduction compared to business as usual, are likely to be considered of high merit.
- 1.17 Applicants should refer to the full list of Eligibility Criteria in the table at Part 3.

SCOPE OF ENGINEERING STUDY

- 1.18 ARENA defines an Engineering Study (**Study**) as a Study conducted after completion of Conceptual Design or Feasibility Study and with the purpose of providing sufficient Project detail to enable a Final Investment Decision to be made and a subsequent EPC (Engineering, Procurement and Construction) contract to be executed.
- 1.19 ARENA expects that Engineering Studies will be completed within a maximum duration of 24 months.
- 1.20 The Study must investigate a technology solution that improves the energy efficiency and/or increases the use of renewable energy and reduces the greenhouse gas emissions of an industrial process or achieves both and should demonstrate appropriate consideration of all the following aspects:
- technical approach including but not limited to performance and commissioning and acquisition of materials, expertise etc;
 - plan for how and when the intervention would be deployed and how any disruption to existing processes would be managed;
 - process flow diagrams;
 - process and Instrumentation Diagrams;
 - electrical diagrams;

- f. facility plot plan;
 - g. civil and structural design and layout
 - h. piping and mechanical design
 - i. defined budget and scope for the project
 - j. carbon reduction by volume, cost and/ or analysis of other benefits;
 - k. health and safety, and permitting;
 - l. planning and consent;
 - m. environmental impacts;
 - n. Project delivery requirements and scheduling including identified contractors;
 - o. Project risks and risk management strategy; and
 - p. an estimated amount of any additional grant funding required to implement the Project and the basis for this estimate.
- 1.21 ARENA will not fund the following Study activities:
- a. options analysis, opportunity assessments or trade studies (trade-off studies)
 - b. repair and maintenance projects that would be undertaken in the normal course of business
 - c. plant closure projects;
 - d. measures that are not integral to the industrial process, including but not limited to:
 - i. building space heating and cooling
 - ii. building lighting
 - e. electricity generation, such as solar, wind, or combined heat and power without renewable fuel switching; and
 - f. other technologies not incorporating energy efficiency or renewable energy technologies (or enabling technologies).
- 1.22 Applications may include either temporary or permanent metering or monitoring equipment where this is necessary to provide adequate quantitative data to inform the Study. Applicants should demonstrate why the proposed metering or monitoring is necessary and that the cost of this is proportionate to the cost of the study.

PART 2. APPLICATION AND ASSESSMENT PROCESS

- 2.1 Application and assessment for Stream B involves two stages: an Expression of Interest Application (EOI), followed by a more detailed Full Application. An EOI can be submitted at any time while the Program is open. The assessment of EOI proposals will generally occur on a quarterly basis commencing from the Program Open Date. ARENA has the discretion to assess proposals more or less frequently depending on the volume of application received during any given assessment period
- 2.2 Assessment timeframes will be communicated to Applicants through the Program webpage arena.gov.au/funding/industrial-energy-transformation-studies-program/. Applicants are encouraged to check the Program website for upcoming assessment periods.
- 2.3 All Applications must be submitted online using ARENA's Grants Management System, ARENANet, unless otherwise notified by ARENA. ARENANet is accessible from the Program website arena.gov.au/funding/industrial-energy-transformation-studies-program/.
- 2.4 The mandatory Eligibility Criteria are set out in Part 3 of these Guidelines.
- 2.5 The Merit Criteria are set out in Part 4 of these Guidelines.
- 2.6 Eligible Applications will be assessed against the Merit Criteria as set out in Part 4 of these Guidelines. Applications that do not meet all Eligibility Criteria will be considered ineligible and will not be assessed. Applications that ARENA considers to be of obvious low merit against one or more merit criteria will not proceed to assessment by the ARENA Advisory Panel. Only eligible Full Applications that satisfy the Merit Criteria with overall high level of merit, will be considered for an award of funding by ARENA. Applications assessed as overall high merit may be invited to negotiate a Funding Agreement.
- 2.7 For all Applications, other than those of obvious low merit, the merit assessment will be undertaken by the ARENA Advisory Panel in its role as advisor to ARENA. Information on the members of the ARENA Advisory Panel is available on the ARENA website at arena.gov.au/about/advisory-panel/.
- 2.8 Applicants may be required to present the details of their proposed Study to the ARENA Advisory Panel. Presentations may take place virtually or in person in Sydney. The requirement to present will be discussed with the Applicant and subject to consideration by ARENA in its sole discretion.
- 2.9 Applications assessed as overall high merit at EOI stage may be invited to submit a Full Application. Applications assessed as overall high merit at Full Application stage may be invited to negotiate a Funding Agreement subject to the Applicant meeting any condition(s) that may be determined by ARENA during its assessment process.
- 2.10 All Applicants will be expected to share data and knowledge from their Study as an eligibility requirement. This will include provision of: a confidential copy of the Study to ARENA; a public summary of the Study; and participation in knowledge sharing activities. ARENA does not require applicants to share commercially sensitive information publicly. The Knowledge Sharing Plan is outlined at Appendix C of these Guidelines and will form part of the Funding Agreement.
- 2.11 By submitting an Application, you acknowledge and agree to ARENA's right to reject, refuse to consider or cease evaluating your Application, at any time, as set out in these Guidelines.
- 2.12 Further detail on the assessment process is set out in Part 6 of these Guidelines.

PART 3. ELIGIBILITY CRITERIA

- 3.1 All of the Eligibility Criteria set out in the table below must be met to submit an EOI and a Full Application and must continue to be met throughout the assessment process.
- 3.2 Applicants should also meet other applicable requirements described in these Guidelines, including compliance with relevant legislative requirements.

ELIGIBILITY CRITERIA	
CRITERION	REQUIREMENT
A - Eligible Applicant	<p>At the time of applying and throughout the life of the Study, hold an Australian Business Number (ABN) and be:</p> <ul style="list-style-type: none"> › an Australian entity incorporated under the <i>Corporations Act 2001</i> (Cth); or › an Australian State or Territory owned corporation or a subsidiary of an Australian state or territory owned corporation; or › an Australian local government or council
B - Eligible Study	<p>The Applicant must be able to demonstrate to the satisfaction of ARENA that the Study described in the Application:</p> <ol style="list-style-type: none"> a. involves energy efficiency and/or renewable energy and/or enabling technologies; and b. applies to an industrial site or sites located in Australia with demonstrated alignment with one of the Target Sectors identified at Item 1.9; and c. addresses either or both Scope 1 and Scope 2 greenhouse gas emissions.
C - Study takes place in Australia	<p>The Applicant must demonstrate to the satisfaction of ARENA that the Study will primarily take place in Australia.</p> <p>Any ARENA-funded expenditure incurred by the Applicant outside of Australia, other than for equipment or materials (including items such as software), must be limited to no more than 10 percent of total ARENA funds, except in exceptional circumstances that must be justified in the Application and agreed to in writing by ARENA.</p>
D - Intellectual property	<p>The Applicant must warrant it has ownership of, access to, or the beneficial use of, any intellectual property rights, including moral rights (IP) necessary to carry out the Project. ARENA's IP requirements are set out in the Funding Agreement.</p>
E - Workplace Gender Equality	<p>The Applicant must not be named as an organisation that has not complied with the <i>Workplace Gender Equality Act 2012</i> (Cth) (Gender Equality Act). Any Applicant so named will be excluded from further consideration. The relevant list is accessible at https://wgea.gov.au.</p> <p>Applicants must make a declaration in the application form to demonstrate that they understand and meet their obligations, if any, under the General Equality Act.</p>
F - Modern Slavery	<p>The Applicant must agree that it will:</p> <ol style="list-style-type: none"> a. take reasonable steps to identify, assess and address risks of modern slavery practices in the operations and supply chains used in delivering the Study; b. if applicable, comply with its obligations under the <i>Modern Slavery Act 2018</i> (Cth); and c. assist ARENA to comply with its obligations under the Modern Slavery Act. <p>The Applicant must make a declaration in the Application form that it will meet these requirements in relation to the Modern Slavery Act.</p>
G Sanctions	<p>ARENA requires that the Applicant warrants that:</p> <ul style="list-style-type: none"> › <u>the Applicant, its Related Bodies Corporate (as defined under the <i>Corporations Act 2001</i> (Cth)) and their Personnel, has not contravened any Australian Sanctions Laws;</u> › it will comply and ensure that any Related Bodies Corporate, comply with Australian Sanctions Laws in delivering the Project and undertake reasonable endeavours to ensure compliance by any Recipient subcontractors to this Project; <p>Australian Sanction Laws means the Charter of the United Nations Act 1945 (Cth) and the Autonomous Sanctions Act 2011 (Cth) including the Autonomous Sanctions Regulations 2011 (Cth);</p>
H - Knowledge Sharing	<p>Applicants must agree to ARENA's Knowledge Sharing Plan for this Stream, which can be found on the ARENA website at https://arena.gov.au/funding/industrial-energy-transformation-studies-program/.</p> <p>ARENA may negotiate additional or amended requirements for individual Applications, which will be agreed upon with the Applicant and set out in the Funding Agreement.</p>

PART 4. MERIT CRITERIA

- 4.1 Eligible Applications will be assessed for overall value for money and risk against the Merit Criteria set out below. The Merit Criteria are equally weighted. The Merit Criteria are the same at the EOI and Full Application stage. However additional questions, detail and attachments are required to be provided for a Full Application.
- 4.2 At both EOI and Full Application stages, ARENA may also consider portfolio fit in determining which Applications should progress to Full Application (in the case of EOI assessment) or funding agreement negotiations (in the case of Full Application assessment). Portfolio fit considerations may involve ARENA preferring a selection of Studies that, when viewed together, provide coverage of a range of industry sectors and technology types within the scope of these Guidelines.
- 4.3 All applications must be submitted through ARENANet which is accessible through the Program website. Applicants should ensure they select 'Stream B - Engineering Studies' to ensure they access the correct application form.
- 4.4 The application form requires a mix of mandatory fields, optional fields (including free text fields) and attachments. ARENA may, acting in its sole discretion, elect not to read words beyond the specified word limit or any attached document beyond the last page of the specified page limit.
- 4.5 Applicants who are invited to submit a Full Application will be provided with written feedback on their EOI submission. This feedback should be addressed in the Full Application with the option to include a separate attachment to address feedback as necessary. ARENA may make amendments to the requirements of a Full Application based on the EOI submission received.
- 4.6 The ARENANet application form will pre-populate answers from the EOI into the Full Application template where relevant. If required answers can be amended to include additional detail. Material changes to the overall scope and intent of an application between the EOI to Full Application may result in the application being assessed as low merit. This does not apply to recommendations associated with the ARENA feedback provided.

MERIT CRITERION A - CONTRIBUTION TO STREAM B OBJECTIVES

- 4.7 This Merit Criterion focuses on the extent to which the Study contributes to the Stream B Objectives detailed in Part 1 of these Guidelines.

EXPRESSION OF INTEREST

A1 - Sector Focus

Identify which sector best aligns to your Study:

- a. Agriculture
- b. Mining
- c. Manufacturing
- d. Gas supply
- e. Water Supply, Sewerage and Drainage Services
- f. Waste Collection, Treatment and Disposal Services
- g. Data Centres

If the Study addresses multiple sites, select the sector which aligns with the majority of sites.

A2 - Technology Solution

Provide an overview of each of the following:

- a. how the technology solution will be utilised in the Project (maximum 200 words).
(Additional information, diagrams or visual images can be included as part of your Work Plan attachment).
- b. How the solution is innovative and has the potential to deliver transformative change in energy efficiency and/or renewable energy use and reduction in greenhouse gas emissions in the target industrial application (maximum 200 words).
- c. a clear pathway to how you will deploy the technology solution (maximum 200 words).

A3 - Potential for energy efficiency and emission reduction

Identify the potential of the proposed Project when implemented, to deliver:

- a. Reduction in energy use
 - i. in absolute terms (GJ p.a.); and
 - ii. in relative terms (as a percentage of total site annual energy use);
- b. Increase in renewable energy use
 - i. in absolute terms (GJ p.a.); and
 - ii. in relative terms (as a percentage of total site annual energy use);
- c. Decrease in greenhouse gas emissions
 - i. in absolute terms (t CO₂-e p.a.); and
 - ii. in relative terms (as a percentage of total site annual greenhouse gas emissions);
- d. Information and calculations should be based on both Scope 1 and Scope 2 Greenhouse Gas Emissions

Guidance on emission estimates: Estimates must be in relation to a counterfactual scenario (e.g. what would happen if the identified Project were not deployed). If the level of output of the industrial process being studied would change as a result of the Project, also provide details of this and how it has informed the estimates. ARENA understands that until the Study is complete there will be uncertainty around these estimates. Where possible, include a range around a central estimate and identify any key assumptions or data sources. Estimates must reference the [National Greenhouse Accounts Factors 2021](#) and for electricity, the projected emission factors published in [Appendix D of Australia's emissions projections 2021](#).

A4 - Replicability

- a. Provide your best estimate of the potential for energy and emission reductions, if the studied Project was scaled across the relevant industry or process within Australia; for example, for similar sites or other sites with similar processes or technologies.
- b. Describe how the technology could be replicated or adopted by others in the sector (maximum 200 words).
- c. Describe the existing barriers to broad adoption of the technology solution to be studied and how your proposed Project would help to address these (maximum 200 words).

A5 - Corporate ambition

- a. Identify if your organisation has a formal emission reduction goal, pathway or strategy. If yes, briefly explain this (maximum 100 words).
- b. Explain how the proposed Project is consistent with (i) above (maximum 100 words). Your answer should consider how the proposed Project supports longer term, deeper emission reduction and avoids 'emission lock-in'.

FULL APPLICATION

A1 - Sector focus

Confirm which sector best aligns to your Study:

- a. Agriculture
- b. Mining
- c. Manufacturing
- d. Gas supply
- e. Water Supply, Sewerage and Drainage Services
- f. Waste Collection, Treatment and Disposal Services; and/or
- g. Data Centres

If the Study addresses multiple site locations, select the sector which aligns with the majority of sites.

A2 - Technology solution

Elaborate on your Expression of Interest response, providing further detail where appropriate on:

- a. The technology (or technologies) to be studied (400 words).
Full Application only: Additional information, diagrams or visual images can be included as part of your Work Plan attachment.
- b. How the solution is innovative and has the potential to deliver transformative change in energy efficiency and/or renewable energy use and reduction in greenhouse gas emissions in the target industrial application (400 words).
- c. A clear pathway to how you will deploy the technology or technologies (400 words).

A3 - Potential for energy efficiency and emission reduction

Confirm or update the potential for energy and/or emission reduction provided at the EOI stage.

Provide information and calculations supporting the estimates for:

- a. Reduction in energy use
 - i. in absolute terms (GJ p.a.); and
 - ii. in relative terms (as a percentage of total site annual energy use);
- b. Increase in renewable energy use
 - i. in absolute terms (GJ p.a.); and
 - ii. in relative terms (as a percentage of total site annual energy use);
- c. Decrease in greenhouse gas emissions
 - i. in absolute terms (t CO₂-e p.a.); and
 - ii. in relative terms (as a percentage of total site annual greenhouse gas emissions);

Information and calculations should be based on both Scope 1 and Scope 2 Greenhouse Gas Emissions

Mandatory Attachment: Supporting evidence for emission reduction potential (e.g. spreadsheet calculations).

***Guidance on estimating emissions:** Estimates must be in relation to a counterfactual scenario (e.g. what would happen if the identified project were not deployed). If your level of output would change as a result of the Project, also provide details of this and how it has informed the estimates. ARENA understands that until the Study is complete there will be uncertainty around these estimates. Where possible, include a range around a central estimate and identify any key assumptions or data sources. Estimates must reference the [National Greenhouse Accounts Factors 2021](#) and for electricity, the projected emission factors published in [Appendix D of Australia's emissions projections 2021](#).*

A4 - Replicability

- a. Provide additional information and calculations supporting the estimates provided at Expression of Interest stage, addressing:
 - i. Your best estimate of the potential for energy and emission reductions, if the studied Project was scaled across the relevant industry or process within Australia; for example, for similar sites or other sites with similar processes or technologies.
 - ii. How the technology could be replicated or adopted by others in the sector (maximum 200 words).
 - iii. Describe the existing barriers to broad adoption of the technology solution to be studied and how your proposed Project would help to address the existing barriers to broad adoption of the technology solution to be studied (maximum 200 words).

Mandatory Attachment: Supporting evidence for the estimate of scaled-up energy and/or emission reductions.

A5 - Corporate ambition

Provide supporting evidence for your Expression of Interest response providing further detail on:

- a. Your organisational emission reduction goal, strategy or pathway
- b. How the proposed Project is consistent with (a) above (maximum 100 words). Your answer should consider how the proposed Project supports longer term, deeper emission reduction and avoids 'emission lock-in'. (200 words).
- c. What future opportunities will this Project unlock for your organisation? (maximum 200 words)

MERIT CRITERION B – APPLICANT CAPABILITY, CAPACITY AND COMMITMENT

- 4.8 This Merit Criterion focuses on the extent to which the Application demonstrates that the Applicant and its Partner Organisations have the capability and capacity to deliver the Study.

EXPRESSION OF INTEREST

B1 – Capability

Outline the management, technical, commercial and professional expertise and experience of the key personnel, as relevant to the Study (250 words).

B2 – Capacity

Demonstrate the Applicant organisation, any Partner Organisations and key personnel have the resources, including personnel, physical resources, facilities and infrastructure (or that these will be accessible or made available) to achieve the Study outcomes (250 words).

FULL APPLICATION

B1 – Capability

Elaborate on the management, technical, commercial and professional expertise and experience of the key personnel, as relevant to the Study. This should include examples of other similar Studies (and their outcomes) undertaken by the Applicant, partners or the key personnel (in the past five years) or other Studies of a similar nature, scale or value in Australia or internationally. Describe the capability and capacity of the Applicant and Partners to deliver the Study (maximum 500 words).

Optional attachments:

1. up to five (5) CVs of Key Personnel (limit of 2 pages per person)
2. Letter(s) of Support from partners or key suppliers.

B2 – Capacity

Describe the resources (including personnel, physical resources, facilities and organisation capacity) the Applicant will use to deliver the Study, including confirmation that such resources will be available for the duration of the Study. Detail the Full Time Equivalent (FTE) of each of Key Personnel listed (maximum 500 words).

B3 – Corporate commitment

Demonstrate strong, genuine support at senior levels in the host organisation to the Engineering Study and the subsequent Project.

Mandatory Attachment: Show evidence of appropriate management support for this Study. (maximum 500 words).

MERIT CRITERION C – ENGINEERING STUDY DESIGN AND METHODOLOGY

- 4.9 The purpose of this Merit Criterion is to assess how well the Applicant has designed and planned the Study, including identifying and managing risks (e.g. personnel, delivery, technical and financial), in order to successfully deliver the Study within the timeframe and budget set out in the Application.

EXPRESSION OF INTEREST

C1 – Clear objectives and work plan

- a. Describe the objectives for the Study and how the Study meets the requirements outlined in these Guidelines at *Part 1 Scope of Engineering Studies* (maximum 250 words)
- b. Provide a high-level overview of the Study activities to achieve these outcomes (maximum 500 words).

C2 – Risks

Provide a summary of key risks to the Study achieving its objectives and the proposed approach to mitigate the key risks (maximum 250 words).

FULL APPLICATION

C1 - Clear outcomes and work plan

Expand on the outcomes for the Engineering Study and how the study meets the requirements outlined in these Guidelines at *Part 1 Scope of Engineering Studies*. (maximum 500 words)

Attach a work plan to achieve these outcomes (25 page limit), which should include:

- a. a clear description of the Study;
- b. a Study timeline, including start-dates and end-dates (and each phase, if relevant);
- c. objectively verifiable milestones and deliverables;
- d. Study phases and stage-gates (if relevant);
- e. a resource plan;
- f. the proportion (if any) of the Study that will take place outside Australia;
- g. any dependencies that are outside the control of the Applicant and other participating institution(s) or entity(ies), such as any resources or approvals from third parties that are needed to start the Study (other than funding from ARENA); and
- h. any other relevant information including any monitoring or metering planned.

Mandatory Attachment: Work Plan (guidance 25 pages maximum)

C2 - Risks

Provide a Risk Management Plan (optionally using ARENA's template if required), which should include:

- a. consideration of personnel risk and how this will be managed;
- b. consideration of technology risk and how this will be managed;
- c. any other key project risks; and
- d. Work Health and Safety Management System Plan.

Mandatory Attachment: Risk Management Plan in the ARENA template provided on the Program website.

C3 - Compliance Table to Funding Agreement

Using the Program Funding Agreement template, state any general conditions that the Applicant does not accept, accepts in part, or does not consider to be applicable. If there are no proposed departures, a blank version should be submitted.

ARENA will take into account the extent of any departures raised and may choose not to fund an otherwise meritorious Application should the Applicant have poor compliance with the Funding Agreement.

Mandatory Attachment: Compliance Table to the Funding Agreement in the ARENA template provided on the Program website. If there are no proposed departures, a blank version should be submitted.

MERIT CRITERION D - VALUE FOR MONEY AND CO-FUNDING COMMITMENT

4.10 This Merit Criterion considers the value for money to ARENA in supporting the Study. This assessment will take into account the level of abatement potential and applicant contribution relative to the funding contribution requested from ARENA, and the value of the potential knowledge sharing benefits that will be made available to the broader industry.

EXPRESSION OF INTEREST

D1 - Budget

Provide a budget table as per the ARENANet application form. Budget figures provided at the EOI stage are indicative only. ARENA will accept a variance of up to 25 per cent (+ or -) between the figures provided in an EOI and the Full Application. This variation applies to both the ARENA grant funding requested and the total Study budget.

Provide a brief explanation and justification of the key budget elements (maximum 250 words).

Note: Applicants should refer to the Eligible Expenditure Guide at Appendix A for information on what the ARENA funding may and may not be used for.

D2 - Additionality

Briefly explain why ARENA funding is required for the Study (maximum 100 words)

D3 - Business Case

- a. Provide an overview of the expected business case for the proposed Project (i.e. approximate costs and benefits and how these are expected to be assessed as part of a Final Investment Decision). (maximum 100 words).
- b. What investment hurdle/s will the Project be required to meet (e.g. simple payback, internal rate of return etc.) (maximum 100 words).
- c. Provide the estimated amount of any additional grant funding required to implement the Project and the basis for this estimation (maximum 100 words).

D4 - Financial capacity

Provide an overview of the financial capacity of the Applicant and any Project partners to deliver the proposed Project, should it proceed (maximum 250 words).

FULL APPLICATION

D1 - Budget

- a. Complete the ARENANet budget table which will include the following:
 - i. a breakdown of expected expenses for the Study, including any overseas expenses;
 - ii. the total cost of the Study;
 - iii. the funding sought from ARENA; and
 - iv. details and amounts of cash and In-Kind Contributions from the Applicant and all other sources.
- b. In addition to completing the ARENANet budget table, provide a full detailed budget breakdown in your own template style; for example, itemising key equipment, labour and costs.
- c. Budgets should be realistic and feasible in relation to the nature of the Study and the expected cash flow. Applicants are required to:
 - i. explain any underlying assumptions in the calculation of proposed expenditure;
 - ii. indicate where quotes have been received or contracts are already in place; and
 - iii. provide relevant document(s) to support expenditure calculations.

D2 - Additionality

Elaborate on your Expression of Interest response by providing further detail where appropriate on why ARENA funding is required to support this Study or whether some or part of the Study may have proceeded without ARENA funding (maximum 250 words).

D3 - Business Case

- a. Elaborate on your Expression of Interest response on the business case for the identified Project (i.e. costs and benefits and how these are expected to be assessed as part of a Final Investment Decision). (maximum 500 words)
- b. Confirm the required hurdle rate (Simple Payback, Internal rate of Return or other) a successful Project would be required to meet. (maximum 50 words)
- c. Confirm the estimated amount of any additional grant funding required to implement the Project and the basis for this estimation (maximum 100 words).

D4 - Financial capacity

Elaborate on your Expression of Interest response on the financial capacity of the Applicant and any Project partners to deliver the proposed Project, should it proceed (maximum 500 words).

PART 5. FUNDING AGREEMENTS

FUNDING OFFERS

- 5.1 All funding offers and any payment of funds under Stream B are conditional upon the execution of a Funding Agreement with ARENA and any condition(s) to funding being met to ARENA's satisfaction.
- 5.2 In addition, ARENA may withdraw its offer of funding should an Applicant not comply with any of the following requirements:
 - a. Applicants must ensure that funding offers are kept confidential until the execution of the Funding Agreement by both the Applicant and ARENA.
 - b. Any public statements relating to the Application or the proposed Study by the Applicant between the Application lodgement date and execution of the Funding Agreement require ARENA's prior written consent.

FUNDING AGREEMENT

- 5.3 The Funding Agreement will provide the legal framework for the obligations of each party and payment in relation to the Study. Applicants should review and understand the draft Funding Agreement prior to submitting an Application.
- 5.4 ARENA expects Applicants to have reviewed and identified any proposed departures from ARENA's template Funding Agreement, which is available on the Program's webpage at arena.gov.au/funding/industrial-energy-transformation-studies-program/. ARENA is unlikely to accept any proposed departures that were not raised in the Applicant's Application. ARENA may choose to not fund an otherwise meritorious Application should the Applicant have poor compliance with the Funding Agreement. In making a decision as to whether or not to provide funding to an Applicant, ARENA will take into consideration the extent of any non-compliances raised.
- 5.5 Details of the process for management and variation of the Funding Agreement are set out in the Funding Agreement.

USE OF FUNDING

- 5.6 Applicants are required to prepare a budget for the Study, which is to be submitted with the Full Application.
- 5.7 An agreed budget will form part of the Funding Agreement.
- 5.8 Funding from ARENA must be used only for approved expenditure on the Study, as set out at Appendix A (Eligible Expenditure) of these Guidelines.

KNOWLEDGE SHARING AND PUBLICATION OF STUDY INFORMATION

- 5.9 A condition of funding through the Program is agreement to a Knowledge Sharing Plan to inform industry and the broader community about the Study's development and findings. ARENA will adopt a standardised process for refining knowledge sharing requirements for the Study. The template Knowledge Sharing Plan is included at Appendix C of these Guidelines and in the ARENA Funding Agreement Template.

EVALUATION

- 5.10 You must submit data and reports as specified in the Funding Agreement which ARENA will use to:
 - a. check that payment milestones have been met;
 - b. evaluate your Study to see it has achieved the benefits described in your proposal;
 - c. make sure that your Study has contributed to the overall objectives of the Program; and
 - d. create and maintain a register of Grant recipients and publishable Study case studies. ARENA may publish aggregated statistics on the benefits of the Program.

PART 6. FURTHER INFORMATION

GENERAL

- 6.1 In the event of any inconsistency between other ARENA materials and these Guidelines, the Guidelines will prevail.

COMMENCEMENT AND AUTHORITY FOR GUIDELINES

- 6.2 The Guidelines commence on 29 September 2022 otherwise known as the Program Open date.
- 6.3 The Guidelines may be revoked or varied by ARENA from time to time. Where this occurs, all current Applicants will be notified in writing of any such amendment and a notice will also be posted on the Program web page at arena.gov.au/funding/industrial-energy-transformation-studies-program/.
- 6.4 Without limiting its rights, ARENA may, in its absolute discretion:
- suspend, defer or terminate this Stream B at any time; or
 - amend the Program.
- 6.5 The ARENA Board is responsible for approving financial assistance under Stream B and may delegate this responsibility in accordance with the ARENA Act.

FURTHER APPLICATION REQUIREMENTS

- 6.6 Applicants should ensure they have completed each section of the online application form, including mandatory attachments.
- 6.7 Documents required to be attached to the Application are listed under the Eligibility Criteria set out in Part 3 and the Merit Criteria set out in Part 4 of these Guidelines.
- 6.8 If the Application does not include the information required (and in the format set out in ARENA's prescribed online application system) ARENA may, acting in its sole discretion, decline to assess the Application or seek supplementary information or clarification from the Applicant.
- 6.9 If an Applicant is not successful at either the EOI or Full Application stage of the process, ARENA will allow submission of one revised proposal in relation to the Study. ARENA may decide whether to allow any additional revised proposals.
- 6.10 ARENA may request information related to the Project, including on the number of jobs created by the Project as well as the estimated carbon abatement resulting from the proposed Project. Applicants will be required to cooperate with ARENA to provide the data required to complete this reporting. Specific details relevant to the proposed Study will be agreed with the Applicant and included in the Funding Agreement.

ASSESSMENT PROCESS

- 6.11 ARENA may seek further information from the Applicant at any time throughout the application process in relation to any matter arising from the assessment of the Application.
- 6.12 ARENA may, at any time during the application process, undertake due diligence activities when assessing an Application. It may also modify the due diligence activities it proposes to undertake. Due diligence activities may include, but are not limited to: commissioning or completing relevant research, analysis and modelling to support assessment of Applications; and contacting any relevant Commonwealth, State, Territory, local or municipal and international government agencies, Study partners or other relevant parties about an Application.
- 6.13 Following its assessment of the Application ARENA may, in its discretion:
- not accept the Application submitted by the Applicant;
 - work with Applicants to make minor changes to their Application; or
 - offer successful Applicants funding for their Study and invite them to negotiate a Funding Agreement with ARENA.

- 6.14 ARENA may take a portfolio approach to selecting Studies for funding. That is, ARENA may choose not to fund an otherwise meritorious Study if it is considered not complementary to the broader ARENA or Program portfolio.
- 6.15 The decision on whether funding will be offered to an Applicant under Stream B will be final. ARENA may also stipulate conditions to this funding.
- 6.16 ARENA will advise the Applicant in writing of the outcome of the assessment of their Application, including the amount and nature of any funding support to be offered by ARENA and any conditions attached to the funding offer. A funding offer under the Program may be for less or more than the amount of funding requested by the Applicant. A funding offer may exclude parts of a Study submitted by an Applicant, or include additional parts as requested by ARENA.
- 6.17 Applicants may request feedback from ARENA on their Application at the conclusion of the assessment process, with such feedback in a form determined suitable by ARENA.
-

COLLABORATION

- 6.18 ARENA may seek to work with Applicants or potential Applicants and their Partner Organisations who are in the process of preparing an Application.
- 6.19 ARENA may, in its discretion, elect to facilitate collaboration between any Applicants with similar or complementary proposals or between Applicants and other organisations or funding bodies, to develop consortia to finance and carry out Studies. Any such facilitation of collaboration, including the release of confidential information to another Applicant or person, will be subject to the Applicant's prior consent.
- 6.20 When facilitating collaboration, ARENA is not responsible or liable for any comments, consultation or assistance provided by ARENA, its staff or any consultants. Any such facilitation does not constitute a commitment by ARENA that it will offer funding for such Study.
-

COMPETITIVE ROUNDS

- 6.21 ARENA may choose to use a Competitive Process to target certain activities as outlined in a Funding Announcement on the Program webpage.
- 6.22 ARENA will announce the start of a Competitive Round on the Program webpage. The corresponding Funding Announcement will include:
- The level of funding available under the Competitive Round for eligible Studies.
 - The application and assessment process, including deadlines for application submission and the stages of application required (i.e. EOI, Full Application).
 - Clarifications of elements of the Guidelines, including eligibility and merit including confirmation of any criterion that will not apply to the Competitive Round.
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CONFIDENTIALITY AND DISCLOSURE OF INFORMATION

- 6.23 Subject to this clause, information of a confidential nature which is provided by an Applicant as part of or in connection with any application or negotiation process (if any) will be treated as commercial-in-confidence information by ARENA and will only be disclosed with the consent of the Applicant and in the circumstances outlined below, whereby ARENA may disclose such information to:
- ARENA's Portfolio Minister and the Minister's office;
 - the Parliament of the Commonwealth of Australia in response to a request by a House or a Committee of the Parliament of the Commonwealth of Australia;
 - the Auditor General, Ombudsman, Information Commissioner or Privacy Commissioner;
 - the Australian Energy Market Operator (AEMO);
 - ARENA staff, Consultants and advisers;
 - any Commonwealth agency or body, or any other organisation or individual considered by ARENA to have a need or an entitlement to know that information (including any state or territory agency or body), where that need or entitlement arises out of or in connection with ARENA's assessment, verification or due diligence of any aspect of an Application; or
 - where authorised or required by law to be disclosed.
-

- 6.24 Any ARENA Confidential Information provided to the Applicant as part of this process is not to be disclosed to any third party, unless required by law or with ARENA's prior written consent.
- 6.25 ARENA may publicly release the details of successful Studies, including Applicants, project partners, ARENA Grant and total project cost.
-

ACKNOWLEDGEMENT AND PUBLICITY

- 6.26 Unless otherwise agreed, ARENA requires that all funding Recipients acknowledge the financial and other support received from ARENA in all publications, promotional and advertising materials, public announcements, events and activities in relation to the Study, or any products, processes or inventions developed as a result of that Study. The requirements of any such acknowledgement are set out in the Funding Agreement.
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REVIEW OF DECISIONS AND COMPLAINTS

- 6.27 ARENA has in place a Complaints Handling Policy, which is available [here](#) and on the ARENA website at arena.gov.au. It is preferred that any complaints concerning assessments or processes are discussed with the ARENA personnel involved in the assessment or process in the first instance
-

CONFLICTS OF INTEREST

- 6.28 ARENA has in place policies to manage any conflicts of interest that may arise with respect to the ARENA Board, personnel and Advisory Panel members.
- 6.29 Applicants must advise ARENA in writing of any actual, apparent or potential conflicts of interest that arise in their Application and during any part of the Application process. A conflict of interest declaration is included in the Application form in ARENANet.
- 6.30 The Applicant must comply with any directions from ARENA as to the management of a conflict of interest that it considers material.
- 6.31 ARENA reserves the right to cease consideration of an Application at any stage of the process, where a conflict arises that ARENA considers, in its sole discretion, cannot be appropriately managed.
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NO CONTRACT OR LIABILITY

- 6.32 Despite anything in the Guidelines or in any Application submission, or any other documentation that forms part of this process (in part or together), by submitting an Application, each Applicant:
- Acknowledges that neither ARENA nor the Applicant intends to create any contract or other relationship under which ARENA is obliged to conduct the process in relation to the Program in any manner or at all, and that there is in fact no such contract or other relationship in existence.
 - Acknowledges that neither the Guidelines nor any submission will create any legal or other obligation upon ARENA to conduct the process in any manner or at all.
 - Agrees that ARENA will not be liable whatsoever for any costs incurred by the Applicant in preparing an Application for the purposes of applying for funding under this Program.
 - Releases ARENA from any claim it might otherwise have been able to make or bring against ARENA, arising out of or in connection with ARENA's conduct of, or failure to conduct, the process in any manner or at all.
-

WORK HEALTH AND SAFETY

- 6.33 All organisations have obligations under relevant Work Health and Safety law (WHS Law) to ensure the health and safety of workers so far as is reasonably practicable and that the health and safety of other persons is not put at risk from their undertakings. This obligation includes funding Recipients ensuring that safe systems of work are in place for each of their activities. ARENA expects Applicants to be committed to health and safety management in the proposed Study.
- 6.34 ARENA also has a policy of ensuring that it enters into agreements with, or provides funding to, only those organisations that take a proactive approach to managing work health and safety risks in accordance with the requirements of WHS Law. ARENA's requirements with respect to WHS Law is set out in the Funding Agreement.
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OTHER APPLICABLE REQUIREMENTS

- 6.35 All Applicants must disclose any litigation, arbitration, mediation, conciliation or proceeding or any investigations (Proceedings) that to the best of the Applicant's knowledge, after having made proper enquiry, are taking place, pending or threatened, against them or a Related Body Corporate (as defined in the *Corporations Act 2001* (Cth)), where such Proceedings have the potential to affect either:
- a. the Applicant's capacity to undertake the proposed Study, or
 - b. the Applicant's reputation.
- 6.36 A range of legislative requirements may also affect the conduct of Studies funded through the Program. Applicants should seek their own advice on any relevant legislation that may be applicable under the Funding Agreement.

APPENDIX A – ELIGIBLE EXPENDITURE

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- A.1 This Appendix A specifies the kinds of expenditure that are eligible or ineligible for Studies funded through the Program. Eligible Expenditure requirements are incorporated in the Funding Agreements for the Program, and are to be followed in the preparation of the Study budget that is submitted with an Application for funding under Stream B.
- A.2 Where an Applicant is in any doubt as to the eligibility of proposed expenditure, the Applicant must bring the matter to ARENA for decision. ARENA's determination on the eligibility of expenditure will be final.
-

GENERAL PRINCIPLES

- A.3 The following principles apply in the consideration of Eligible Expenditure:
- a. Eligible Expenditure is expenditure related directly to the undertaking of the Study and is calculated net of GST;
 - b. Expenditure that does not fall under Eligible Expenditure can be included in the total Study cost as ineligible expenditure, however, ARENA funds (Grant amount) can only be used for Eligible Expenditure.
 - c. Expenditure that is undertaken prior to the signing of the Funding Agreement may be eligible, if prior written approval has been granted by ARENA. ARENA reserves the right to approve expenditure incurred implementing the Study after ARENA has made a funding offer, but before a Funding Agreement has been executed. Requests must be submitted in writing after an offer of funding has been made. Note that any such expenditure made before the execution of a Funding Agreement in the absence of ARENA's prior approval is ineligible expenditure and incurred at the sole risk of the Applicant.
 - d. Where resources are used on a Study and on unrelated activities elsewhere in the Recipient organisation, the cost of those resources should be apportioned to the Study on the basis of the proportion of those resources that were used by the Recipient in undertaking the Study. Where it is not possible to make such a proportionate allocation, the Recipient should allocate the cost of the resources on a reasonable basis and provide information to ARENA to support this allocation of the cost of the resources.
 - e. Related party transactions must be treated on an at cost basis, without any cost mark-up, unless the Recipient can demonstrate to the satisfaction of ARENA that the transaction has been calculated on an arm's-length basis.
 - f. Generally accepted accounting principles are to be followed and it must be possible to track expenditure relating to the Study through a Recipient's accounting system to meet the financial reporting and audit requirements in the Funding Agreement.
-

IN-KIND CONTRIBUTIONS

- g. In-Kind Contributions are non-monetary resources used on the Study where no cash has been transferred to the Recipient's account(s) for the Study. In-Kind Contributions may be considered as Eligible Expenditure, provided that the Applicant can demonstrate to the satisfaction of ARENA that the requirements in these Eligible Expenditure Guidelines are satisfied;
-

ELIGIBLE EXPENDITURE

- A.4 The following is Eligible Expenditure:

ELIGIBLE CONTRACT EXPENDITURE

- A.5 Eligible contract expenditure is the cost of any activities to support the Study performed for the Recipient by another organisation. Work to be performed on a Study must be the subject of a written contract, including a letter or purchase order, which specifies the nature of the work to be performed for the Recipient and the applicable fees, charges and other costs payable. The written contract must be executed prior to the commencement of the work undertaken under the contract.

- A.6 It is not a requirement for contracts to be in place at the time an Applicant submits an Application to ARENA. However, for major items of contract expenditure Applicants will be expected to have some form of documentary evidence, such as written quotes from suppliers, to substantiate the expenditure included in the budget for the Study.
- A.7 Where the contractor and the Applicant or Recipient are not at 'arm's-length', the amount assessed for work performed will be an amount considered to be a reasonable charge for that work and contain no unacceptable overheads and no element of 'in group profit'. Organisations considered not at 'arm's-length' include related companies and companies with common directors or shareholders.

ELIGIBLE LABOUR EXPENDITURE

- A.8 Eligible labour expenditure is the gross amount paid or payable to an employee of the Applicant or Recipient's company or organisation. Labour expenditure, such as salaries and wages, including reasonable on-costs for personnel employed directly on the Study. Labour on-costs include: workers' compensation insurance, employer contributions to superannuation, recreation and sick leave, long service leave accrual and payroll tax. Eligible salary includes any components of the employee's total remuneration package that are itemised on their Pay As You Go (PAYG) annual payment summaries submitted to the Australian Taxation Office (ATO).
- A.9 Where personnel are already engaged by the Recipient prior to the commencement of the Study and have not been engaged specifically to work on the Study, this cost should be classified as an In-kind Contribution. In addition, where an existing member of personnel is transferred to work on the Study (for all or part of the time), then the proportion of time that is spent on the Study shall be classed as an In-kind Contribution. If the personnel are new to the organisation and hired specifically for the Study this cost (either full or part time) can be classified as a cash contribution.
- A.10 Recipients must provide evidence to demonstrate the amount of time that an employee spent on the Study. Evidence to support Eligible Expenditure on labour could include timesheets, job cards or diaries.
- A.11 Labour costs cannot be claimed based on an estimation of the employee's worth to the company, where no cash has changed hands.

OTHER ELIGIBLE EXPENDITURE

- a. Administrative expenses, including expenses incurred on communications, accommodation, computing facilities, travel, recruitment, printing and stationery, where such expenses are related directly to the Study;
- b. Expenditure for monitoring or metering or other associated equipment required to inform the Study.
- c. Expenditure activities that directly contribute to or enable knowledge including database development, websites, applications and reports.
- d. Expenditure on legal, audit and accounting costs related directly to the Study.
- e. Expenditure related to the raising of funds for the Study, or the formation of consortia or joint ventures or other partnering arrangements, where such activities can be related directly to the Study;
- f. Expenditure such as relevant licence fees or intellectual property purchase costs, where the Applicant needs to access specific technology to undertake the Study; and
- g. Expenditure related directly to obtaining government approvals to undertake the Study.

The following expenditure is ineligible:

- A.12 For the avoidance of doubt, expenditure that is not Eligible Expenditure includes, but is not limited to:
- a. Out of scope Study activities as outlined in item 1.21
 - b. Opportunity Costs are not Eligible Expenditure: Opportunity Costs are any benefits or production lost due to the allocation of resources to the Study ahead of any other possible activities by the Recipient;
 - c. expenditure related to the general operations and administration of the Applicant or Recipient that the Applicant or Recipient could reasonably be expected to undertake in the normal course of business, other than costs that are directly related to the Study;

- d. expenditure on activities that a local, state, territory or Commonwealth government agency has the responsibility to undertake, unless the Applicant or Recipient can demonstrate to the satisfaction of ARENA that the expenditure is related to a co-contribution;
 - e. interest on loans for new and pre-existing capital items used for the Study;
 - f. expenditure on the acquisition of land for a Study;
 - g. sales or promotional activities that do not directly support the successful completion of the Study;
 - h. membership fees;
 - i. donations; and
 - j. any other expenditure that does not directly support the delivery of the Study.
-

OVERSEAS EXPENDITURE

- A.13 Any ARENA-funded expenditure incurred by the Applicant outside of Australia, other than for equipment or materials (including items such as software), must be limited to no more than 10 per cent of total ARENA funds, except in exceptional circumstances that must be justified and agreed to in writing by ARENA in its assessment of the Application. Any such request should include an explanation of why Study activity conducted overseas:
- a. cannot be done in Australia: and/or
 - b. would benefit from being performed outside Australia.
- A.14 Following execution of a Funding Agreement, expenditure on goods and services overseas may be subject to approval by ARENA as specified in the Funding Agreement.
-

ACCOUNTING SYSTEMS

- A.15 Recipients and any relevant Study partners are required to have suitable accounting systems in place that allow for:
- a. the separate and accurate identification of contributions and Eligible Expenditure on the Study; and
 - b. a clear audit trail of all Study funding contributions and Eligible Expenditure to be available upon request and as required to meet the requirements in the Funding Agreement.

APPENDIX B – GLOSSARY

ANZSIC Sectors - refers to the following ANZSIC codes:

A: Agriculture

- 01 Agriculture
- 02 Aquaculture
- 03 Forestry and Logging
- 04 Fishing, Hunting & Trapping
- 05 Agriculture, Forestry and Fishing Support Services

B: Mining

- 06 Coal Mining is EXCLUDED from this Program
- 07 Oil and Gas Extraction is EXCLUDED from this Program
- 08 Metal Ore Mining
- 09 Non-Metallic Mineral Mining and Quarrying Exploration and Other Mining Support Services
- 10

C: Manufacturing

- 11 Food Product Manufacturing
- 12 Beverage and Tobacco Product Manufacturing
- 13 Textile, Leather, Clothing and Footwear Manufacturing
- 14 Wood Product Manufacturing
- 15 Pulp, Paper and Converted Paper Product Manufacturing
- 16 Printing (including the Reproduction of Recorded Media)
- 17 Petroleum and Coal Product Manufacturing
- 18 Basic Chemical and Chemical Product Manufacturing
- 19 Polymer Product and Rubber Product Manufacturing
- 20 Non-Metallic Mineral Product Manufacturing
- 21 Primary Metal and Metal Product Manufacturing
- 22 Fabricated Metal Product Manufacturing
- 23 Transport Equipment Manufacturing
- 24 Machinery and Equipment Manufacturing
- 25 Furniture and Other Manufacturing

D: Electricity, Gas, Water and Waste Services

- D26: Electricity Supply is EXCLUDED from this Program
- D27: Gas supply
- D28: Water Supply, Sewerage and Drainage Services
- D29: Waste Collection, Treatment and Disposal Services

J: Information Media and Telecommunications

- J5921 Data Processing and Web Hosting Services (Data Centres)

Applicant - an eligible entity that has submitted a proposal for funding under Stream B of the Program.

Application - An application for ARENA Grant funding that is submitted by an Applicant through the ARENANet Application form for funding under Stream B of the Program.

Competitive Process - A process under which ARENA calls for Proposals from Applicants in accordance with the requirements of these Guidelines (to the extent they are expressed to apply to Competitive Processes), including those set out in clauses 6.21 to 6.25.

Conflict of Interest - a situation where a person's private interests (financial or non-financial) or associations influence, or can be perceived to influence, their decisions or conduct.

Corresponding WHS Law - as defined in the *Work Health and Safety Act 2011* (Cth), means each of the following:

- › the *Work Health and Safety Act 2011* of New South Wales
- › the *Occupational Health and Safety Act 2004* of Victoria
- › the *Work Health and Safety Act 2011* of Queensland
- › the *Occupational Safety and Health Act 1984* of Western Australia
- › the *Work Health and Safety Act 2012* of South Australia
- › the *Work Health and Safety Act 2012* of Tasmania
- › the *Work Health and Safety Act 2011* of the Australian Capital Territory
- › the *Work Health and Safety (National Uniform Legislation) Act 2011* of the Northern Territory' or
- › any other law of a State or Territory prescribed by the regulations, as amended from time to time.

Eligibility Criteria – the Eligibility Criteria for Studies listed in Part 3 of these Guidelines.

Eligible Expenditure – expenditure of the kind set out in Appendix A of these Guidelines.

Enabling technology – technologies that enable greater, or more cost-effective use of renewable energy

Engineering Study – a detailed project plan that identifies specific technical and operational requirements, also known as a Front-End Engineering and Design (**FEED**) study.

Final Investment Decision – (FID) is the point in the capital project planning process when the decision to make major financial commitments is taken. At the FID point, major equipment orders are placed, and key delivery service contracts are signed.

Funding Agreement – the agreement between a Recipient and ARENA for funding under the Program.

Grant – an amount awarded for a particular Study in return for the completion of specified milestones. A Grant is not to be confused with a gift or a loan. In the case of Stream B, the Grant is the amount identified in the Funding Agreement.

Guidelines – these Stream B Guidelines.

In-Kind Contribution – non-monetary resources used on the Study where no cash has been transferred to the Recipient's account(s) for the Study.

Knowledge Sharing Plan – an agreement entered into between ARENA and the Applicant under a Funding Agreement to share knowledge from the Study.

Merit Criteria – the Merit Criteria listed in Part 4 of these Guidelines.

Opportunity Costs – any benefits or production lost due to the allocation of resources to the Study ahead of any other possible activities by the Recipient.

Partner Organisations – a person, organisation or institution that the Applicant has engaged as a joint venture, contractor, financier or consultant to help deliver the Study as part of its Proposal. These Partner Organisations may also be identified as Project Participants in the Funding Agreement

Program Open Date – the date in which the Program opens and the Guidelines are valid.

Project – refers to delivery of the technology solution which forms the basis of the Study

Renewable energy technology – includes energy that is produced using natural resources that are constantly replaced and never run out. Renewable energy sources include but are not limited to solar PV, wind, hydro, geothermal, bioenergy and ocean energy.

Scope 1 Greenhouse Gas Emissions – are the emissions released to the atmosphere as a direct result of an activity or series of activities at a facility level. Scope 1 emissions are sometimes referred to as direct emissions. Examples include emissions produced from manufacturing processes or from the burning of fossil fuels.

Scope 2 Greenhouse Gas Emissions – are the emissions released to the atmosphere from the indirect consumption of an energy commodity. For example, these indirect emissions may be from the use of electricity produced by the burning of fossil fuels in another facility. For clarification, Scope 2 emissions from one facility will be part of the Scope 1 emissions from the production facility.

Study – the Study proposed to be delivered as set out in the Application.

Recipient – An entity that has entered into a Funding Agreement with ARENA for funding of a Study.

WHS Law or WHS Legislation – the *Work Health and Safety Act 2011* (Cth), Corresponding WHS Law or superseded work health and safety or occupational health and safety law in any jurisdiction. The WHS Law includes regulations established under the relevant Acts.

APPENDIX C – KNOWLEDGE SHARING PLAN

C.1 Knowledge sharing context

Under the ARENA Act, ARENA's mandate is to promote the sharing of information and knowledge about renewable energy technologies, with the objective of accelerating the development and growth of Australia's renewable energy sector.

C.2 Knowledge Sharing Objectives

The knowledge sharing objective of the study is to provide sufficient information that can lead to replicability and improved final investment decision making across similar industrial settings.

C.3 Key Performance Metrics

The key performance metrics are the relevant metrics that enable the calculations of the renewable energy use, and greenhouse gas emissions reduction for the solution studied in comparison to the current base case.

C.4 Knowledge Sharing Stakeholders / Target Audiences

The target audience for the study is companies and supporting industry participants with similar industrial processes which they are looking to transform energy use and significantly reduce greenhouse gas emissions resulting from the use of energy in industrial processes

C.5 Knowledge Sharing Deliverables

ARENA may make requests from Studies (and portfolios of Studies) for particular topics to be covered through ad hoc reports, as required. Where ARENA has not made a specific request, topics are to be relevant and/or topical and have an appreciation for the key audiences. For the avoidance of doubt, business development and marketing material is not considered to be Knowledge Sharing Deliverables.

All deliverables are to be prepared to a standard acceptable to ARENA and where relevant, reflect ARENA's report writing tips and guidance document which will be provided by ARENA to the Recipient.

STUDIES MODULE

KS ITEM NO.	DELIVERABLE TITLE	PURPOSE	FREQUENCY	WHEN	ACCESSIBILITY - PUBLIC OR CONFIDENTIAL	CONTENT AND DELIVERY
1.	ARENA 15 minute Project survey	Efficient qualitative and quantitative data gathering. ARENA may use this information in anonymised portfolio analysis and reporting.	Quarterly	From Commencement Date to Final Milestone Date	Confidential (ARENA and ARENA Knowledge Sharing Agent only)	ARENA will provide a link to the survey each quarter.
2.	Seminar/webinar/workshop participation Participation is voluntary	Share Study information with other ARENA funded Projects and key stakeholders	Once	From Commencement Date to the Final Milestone Date	Public	Recipient to provide documentation (i.e. slides, word document, pdf etc) to ARENA following attendance, to contain sufficient information to be read as a standalone document.
3.	Engineering Study report	Share findings with ARENA	Once only	Final Milestone Date	Confidential	Complete copy of the final Engineering Study report including any attachments

KS ITEM NO.	DELIVERABLE TITLE	PURPOSE	FREQUENCY	WHEN	ACCESSIBILITY - PUBLIC OR CONFIDENTIAL	CONTENT AND DELIVERY
4.	Public case study report	Share findings with the market	Once only	Final Milestone Date	Public	Public report to be published on a public platform determined by ARENA. See section C.6 for report outline.
5.	Ad hoc reports, products and activities	Capture information not yet known	No more than one per year	As required	Identified at time of request	Format and topic to be agreed at the time of request.

C.6 Public Case Study Report Outline

The final public case study report of at least 10 pages should include at a minimum the following sections:

1. Executive Summary
2. The issue/ problem being addressed
3. The technology / process solution chosen for study
4. Why this solution was chosen
5. The development status of the chosen solution prior to study
6. Key outcomes
 - a. Technical viability
 - b. Commercial viability
 - c. Other considerations (such as regulatory, process integration, supply chain limitations etc)
 - d. Key performance of the studied solution metrics vs BAU case
 - i. Reduction in energy consumption;
 - ii. Increase in renewable energy use;
 - iii. Reduction in greenhouse gas emissions; and
 - iv. Improvement in energy productivity (if relevant)
 - e. Potential replicability
 - i. Addressable market - high level quantification and rationale
 - ii. Potential reduction in energy consumption and greenhouse gas emissions and increase in renewable energy use - high level quantification and rationale

C.7 Knowledge sharing third parties

A) Knowledge Sharing Agent

ARENA reserves the right to engage a Knowledge Sharing Agent, to perform the following activities under strict confidentiality requirements:

- › collection and storage of data from ARENA projects;
- › analyse, present and report on data from ARENA projects;
- › provide detailed disaggregated information to ARENA; and
- › provide identified/aggregated analyses suitable for public release that do not reveal commercially sensitive information.

Further information is available at
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Engage with us

ARENAWIRE



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