

# LARGE SCALE BATTERY STORAGE FUNDING ROUND

FREQUENTLY ASKED QUESTIONS

UPDATED MARCH 2022



Australian Government  
Australian Renewable  
Energy Agency

**ARENA**

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# FREQUENTLY ASKED QUESTIONS

This document contains frequently asked questions (FAQ) regarding the Funding Announcement for ARENA's Large Scale Battery Storage Funding Round (Funding Round). ARENA will update this FAQ list as the Round progresses. For further details, please refer to the Funding Announcement located on the ARENA website at [arena.gov.au/funding/grid-forming-battery](https://arena.gov.au/funding/grid-forming-battery).

Applicants can submit questions relating to the Funding Round by emailing [batteryround@arena.gov.au](mailto:batteryround@arena.gov.au). Questions should be of clarificatory nature only. ARENA is unable to work with applicants during the Expression of Interest stage of the Funding Round. Any questions regarding the assessment process, information requirements and timetable may be submitted to [batteryround@arena.gov.au](mailto:batteryround@arena.gov.au). ARENA reserves the right to publish any such questions and answers in this FAQ document.

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## APPLYING FOR THE PROGRAM

### WHAT ARE THE OBJECTIVES OF THE FUNDING ROUND?

The Funding Round is targeting projects which:

- a) accelerate demonstration of advanced inverter capabilities on LSBS projects at scale;
- b) overcome barriers that prevent LSBS projects from incorporating advanced inverter capabilities;
- c) improve industry understanding of the potential role of advanced inverters in supporting system stability during periods of very high inverter-based generation;
- d) reduce the reliance on synchronous generators and/or synchronous condensers for system stability;
- e) demonstrate the capability of advanced inverters (at scale) in multiple states and across multiple inverter types, such that they can be relied upon for critical system services in power system planning; and
- f) inform the market regulatory bodies to facilitate the efficient delivery of services from grid-forming batteries.

### DO I NEED TO ADDRESS ALL OBJECTIVES IN MY APPLICATION?

While it is not mandatory to address all objectives, projects that can address all objectives may be considered of higher merit. Merit Criterion A is focused on assessing how projects meet the Funding Round objectives. Please refer to the Funding Announcement located on the ARENA website at [arena.gov.au/funding/grid-forming-battery](https://arena.gov.au/funding/grid-forming-battery) for further details.

### WHAT IS MEANT BY “ADVANCED INVERTERS”?

In this Funding Round, “advanced inverters” is used to describe inverters with the capability to directly support power system operations as described by the Australian Energy Market Operator (AEMO) in its August 2021 white paper titled Application of Advanced Grid-scale Inverters in the NEM.

Key characteristics of advanced inverters include:

- The ability to set an internal voltage waveform reference and adjust power output to help maintain this voltage.
- No reliance on external grid voltage to maintain predictable power production so it can operate with or without the support of other generators; and
- Can inherently help stabilise the grid by adjusting output power instantaneously to maintain local voltage and frequency (i.e., synthetic inertia).

This capability is often described as “grid-forming inverters”, however there is no firm international consensus as to the specific definition of ‘grid-forming inverters’. More detail on AEMO’s description of advanced inverters can be found on the AEMO website at [aemo.com.au/newsroom/news-updates/application-of-advanced-inverters](https://aemo.com.au/newsroom/news-updates/application-of-advanced-inverters).

## ARE GRID-FOLLOWING INVERTERS CONSIDERED UNDER THIS FUNDING PROGRAM?

To be considered high merit, Applications must be strongly aligned with the objectives of the Funding Round. It is expected that grid-forming inverters will be better placed in this regard. However, ARENA notes that advanced versions of grid-following inverters may also be able to provide services that are aligned with the objectives of the Funding Round.

To be rated high merit under Merit Criterion A, Applicants will need to provide evidence that the selected inverter technology is strongly aligned with the objectives of the Funding Round. Evidence could include previous project experience, modelling and simulation studies, and hardware-in-the-loop testing.

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## PROGRAM TIMELINE

### WHAT ARE THE KEY TIMEFRAMES AND DEADLINES REGARDING THE FUNDING ROUND?

Application and assessment for the Funding Round will involve a two stage Application process. The opening and closing dates for an Application are:

Stage	Opening Date	Closing Date and Time
Expression of Interest (EOI)	Tuesday 1 February 2022	Thursday 31 March 2022 at 5:00 PM local time in Canberra
Application outcome	Applicants will be notified as to whether they are invited to submit a Full Application within 30 business days of EOI due date. ARENA will advise all Applicants in writing as to the outcome of their Application.	
Full Application	The dates for Full Application are to be stipulated in the Updated Funding Announcement	

*Note: these dates are subject to change at ARENA's discretion.*

### ARE THERE ANY RESTRICTIONS ON THE START AND END DATES OF PROJECTS?

Projects are required to reach financial close before 31 December 2023. ARENA has not specified a maximum duration for the construction period.

ARENA's Knowledge Sharing Plan requires that funding recipients report project performance for the first 2 years of operation.

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## ELIGIBILITY

### WHO IS ELIGIBLE TO APPLY FOR FUNDING UNDER THE LARGE SCALE BATTERY STORAGE FUNDING ROUND?

For details regarding eligibility, please refer to the Eligibility Criteria outlined in sections 2.2 to 2.10 of the Advancing Renewables Program Guidelines available at [arena.gov.au/funding/advancing-renewables-program/](https://arena.gov.au/funding/advancing-renewables-program/). Please also read the Funding Announcement located on the ARENA website at [arena.gov.au/funding/grid-forming-battery](https://arena.gov.au/funding/grid-forming-battery) to ensure your project fits the Scope of Activity as defined in the Funding Announcement.

To be eligible for funding, your organisation must hold an Australian Business Number (ABN) and be:

- a) an Australian entity incorporated under the Corporation Act 2001 (Cth) or an Australia.

- 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.

Research institutions such as Universities are not eligible to apply for funding however may partner with an eligible Applicant.

## **IS A PROJECT ELIGIBLE FOR FUNDING IF IT HAS ALREADY REACHED FINANCIAL CLOSE?**

Where an Applicant wishes to retrofit advanced inverter capability (e.g. grid-forming) onto an existing or committed LSBS asset, these projects would be considered eligible for funding under the Funding Round. In this scenario, an applicant may elect to either:

- (retrofit only) request Grant Funding to contribute towards costs associated with retrofitting advanced-inverter functionality onto the existing asset; or
- (expansion) request Grant Funding to contribute towards costs of expanding the existing LSBS asset and incorporating advanced inverter functionality.

For both retrofit scenarios, an Applicant should demonstrate how its proposal represents additionality and acceleration for demonstration of advanced inverter capabilities.

## **MY PROJECT IS NOT WELL ALIGNED WITH THE FUNDING ROUND OBJECTIVES, CAN I APPLY UNDER THE ADVANCING RENEWABLE PROGRAM?**

Yes, battery projects may fit under ARENA's investment priority of optimising the transition to renewable electricity. Please contact ARENA via [proposals@arena.gov.au](mailto:proposals@arena.gov.au) to discuss further. To ensure you meet the eligibility requirements, please read the ARENA Advancing Renewables Program Guidelines available at [arena.gov.au/funding/advancing-renewables-program/](https://arena.gov.au/funding/advancing-renewables-program/). Please note that only applications that meet the requirements in the Guidelines and are assessed as high merit against the merit criteria will be considered for funding.

## **CAN AN ORGANISATION OR INDIVIDUAL SUBMIT MORE THAN ONE APPLICATION OR BE A MEMBER OF MORE THAN ONE PROJECT TEAM?**

Yes, there is no limit to the number of applications that can be submitted by an individual or organisation. However, if you or an organisation intends to be part of more than one application you must be able to justify that you will have, or be able to allocate, sufficient time and resources to all of the projects should they be successful. Each application must meet the requirements set out in the Funding Announcement and the ARENA Advancing Renewables Program Guidelines.

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# **ASSESSMENT PROCESS**

## **HOW DO I APPLY FOR FUNDING?**

The Funding Round is a two stage application process containing an Expression of Interest (EOI) and Full Application. Applications must be submitted using ARENA's Grants Management System (ARENANet). ARENANet can be accessed through the Funding Round website. Applicants can commence an online application after 1 February 2022 by going to ARENANet.

Each section of the application contains instructions on what information is required and any word limits which may apply. Applicants can save their application at any time before submitting. Applications must be submitted on ARENANet before Thursday 31 March 2022 at 5:00 PM local time in Canberra

Each section of the application contains instructions on what information is required and any word limits which may apply. Applicants can save their application at any time before submitting to ARENA before the relevant closing date, as noted in the Program Guidelines.

## **HOW DOES ARENA DECIDE WHICH PROJECT WILL RECEIVE FUNDING?**

ARENA will score and rank eligible projects against the merit criteria. ARENA will engage an expert panel to undertake this process. Each merit criteria will be weighted equally. Guidance on how the Merit Criteria will apply to Applications is provided in the Funding Announcement.

In addition, ARENA may work with AEMO or other external advisors to help determine the technical merit of a project, including its alignment with the objectives of the Funding Round. This assessment will include consideration of factors such as the grid-connection location, the size of the project (MW), and the inverter characteristics.

All projects will be assessed at an EOI stage. Only a subset of the proposals will be invited to submit a Full Application.

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## FINANCE

### WHAT IS THE MAXIMUM AMOUNT OF FUNDING I CAN APPLY FOR?

ARENA has stipulated that the maximum grant available to a single project is \$35 million for the Funding Round. ARENA intends to provide grant funding for at least three projects as part of the Funding Round. Applicants should clearly articulate the quantum and justification of the ARENA grant ask. ARENA will assess the cost competitiveness of the project against other applications received in accordance with Merit Criteria A as set out in the Funding Announcement.

### HOW DOES ARENA CONSIDER RECOUPMENT WITH GRANTS?

Recoupment mechanisms enable ARENA to receive funds back if greater returns are generated than expected on a project. ARENA will issue a revised Funding Agreement template at the commencement of the Full Application stage. This revised Funding Agreement will specify ARENA's approach to recoupment and grant resizing rights at Financial Close.

### HOW SHOULD APPLICANTS DEFINE TOTAL PROJECT COSTS?

Applicants should clearly outline all costs associated with delivering their project. For new build projects, this should include major equipment, balance of plant, labour, and project management costs. The cost of these components should be clearly articulated in the Proposal. ARENA will assess the cost competitiveness of the project against other applications received in accordance with Merit Criteria A as set out in the Funding Announcement.

To ensure you comply with all eligible expenditure requirements, please review Appendix B of the ARENA Advancing Renewables Program Guidelines available at [arena.gov.au/funding/advancing-renewables-program/](https://arena.gov.au/funding/advancing-renewables-program/)

### HOW DOES ARENA CONSIDER THE INCLUSION OF OTHER GRANT FUNDING OR CONCESSIONAL FUNDING?

ARENA will consider the total amount of concessional funding that an Applicant has applied or received for the project in assessing projects. This includes both ARENA funding and other grant funding a project may receive from State or Commonwealth Government initiatives. ARENA will also assess any project arrangements that may not be on commercial or arm's length terms in its consideration of concessional funding. ARENA retains discretion on any classification adopted.

ARENA encourages Applicants to investigate opportunities for funding from state and territory governments. However, any such funding must not be used to reduce the Applicant's In-Kind Contributions and cash contributions.

Consideration of concessional funding specifically excludes finance that may be obtained from the Clean Energy Finance Corporation (CEFC) or the Northern Australia Infrastructure Facility (NAIF).

### WHAT ARE THE REQUIREMENTS AT THE EXPRESSION OF INTEREST APPLICATION STAGE FOR THE "FINANCING PLAN" REFERRED TO AT APPENDIX A (C)?

As noted in Appendix A of the Funding Announcement at the Expression of Interest stage, Applicants are required to submit a financing plan which notes the proposed sources of funds including the proposed financing

parties, the level of commitment, status of negotiations or discussions, proposed timing for binding commitments and any key terms or conditions of funding. Applicants are encouraged to provide supporting evidence such as term sheets or letters of support to demonstrate the level of commitment from each source of funds.

Merit Criterion D will assess the deliverability of the financing plan and the level of conditionality of the funding commitments.

## **IS ARENA ENGAGING WITH THE CLEAN ENERGY FINANCE CORPORATION (CEFC) ON ITS FUNDING FOR BATTERY SYSTEMS?**

ARENA encourages projects to engage with the CEFC to discuss project financing opportunities. The CEFC's capacity to lend will depend on the degree of revenue support or contracted off-take and the characteristics of each project. If you have any further questions regarding CEFC financing, please contact Simon Brooker ([simon.brooker@cefc.com.au](mailto:simon.brooker@cefc.com.au)) or Monique Miller ([monique.miller@cefc.com.au](mailto:monique.miller@cefc.com.au)).

## **IS THERE ANY LIMIT ON OVERSEAS EXPENDITURE?**

Any ARENA-funded expenditure incurred by the project outside of Australia, other than for equipment or materials, must be limited to no more than 10 percent of the total amount of ARENA funds, except in exceptional circumstances that must be justified by you and agreed to in writing by ARENA before submission of a Proposal. Please refer to the Advancing Renewables Program Guidelines for further details.

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# **OTHER**

## **HOW IS CONFIDENTIAL INFORMATION PROVIDED AS PART OF AN APPLICATION TREATED?**

All information provided as part of an Application will be treated as confidential in accordance with section 6.1-6.3 of the Advancing Renewables Program Guidelines. Once a Funding Agreement is executed between the successful Applicants, Confidential Information will be managed in accordance with the terms of the Funding Agreement.

## **WHAT IS A PORTFOLIO APPROACH?**

When selecting projects for funding ARENA may take a portfolio approach to selecting projects for funding. That is, ARENA may choose not to fund an otherwise meritorious project if it is considered to not be complementary to the broader objectives of the Funding Round. For example, ARENA may specifically have a preference to fund no more than two projects using the same inverter Original Equipment Manufacturer, and no more than two projects with the same NEM region.

## **WHAT FEEDBACK CAN I GET ON MY APPLICATION?**

ARENA reserves the right to work with Applicants that are invited to submit a Full Application but does not intend to work with Applicants during the EOI stage. Further guidance on how ARENA will work with Applicants will be contained in the Updated Funding Announcement at the commencement of the Full Application stage. If requested, following notification of an unsuccessful application, ARENA will provide feedback to Applicants who are unsuccessful in a form that it deems to be appropriate.

## **CAN ARENA PROVIDE AN EXAMPLE APPLICATION FORM?**

No, ARENA does not provide sample answers or Applications for any of its programs. ARENA does not have standard expectations on how questions should be answered. ARENA expects all answers to be honest, succinct, well justified and complete.

## **IS THERE A TEMPLATE THAT APPLICANTS SHOULD USE TO STRUCTURE THEIR APPLICATION, OR CAN APPLICANTS CHOOSE THEIR OWN FORMAT?**

Applicants should follow the instructions on ARENANet when completing the online application form. Applicants are required to attach further documentation as set out in the Additional Information Requirements at Appendix A of the Funding Announcement and the Advancing Renewables Program Guidelines. ARENA has not provided a template for the Additional Information Requirements.

## **WILL YOU ACCEPT A REQUEST FOR EXTENSION TO THE APPLICATION DUE DATE?**

Any requests for extension to the due date (either Expression of Interest or Full Application) should be made via email to [batteryround@arena.gov.au](mailto:batteryround@arena.gov.au). Your request should specify the reasons why an extension is required and a proposed extension date. ARENA retains the right to not accept an Expression of Interest or a Full Application submitted after the respective due dates. If an extension of time is granted, ARENA reserves the right to extend the timeframe for all Applicants.

## **IF I CAN'T MEET YOUR DEADLINES, CAN I APPLY FOR FUNDING OUTSIDE OF THE ROUND?**

Yes, the Advancing Renewables Program is continuously open; however, ARENA takes a portfolio approach to funding as stipulated in our Advancing Renewables Program Guidelines (Clauses 4.23 and 4.24). This may result in ARENA not funding an otherwise meritorious project if the objectives or outcomes of the project are similar to a project ARENA has already funded.

## **WHAT ARE ARENA'S REQUIREMENTS FOR KNOWLEDGE SHARING?**

Knowledge sharing does not include any commercially valuable information or intellectual property (IP). For any successful Applicants, ARENA support must be acknowledged in all communications material distributed by Grant Recipients in relation to the ARENA-funded Study. Knowledge sharing refers to lessons learnt throughout the Study and creating opportunities for further uptake of the studied technologies in the wider energy and industrial sectors. In some cases, this may be made publicly available, in others it may be restricted to a relevant audience within the specific sector.

For this Round, Knowledge Sharing is an Eligibility Criterion. Applicants are required to agree to a Knowledge Sharing Plan which can be found on the Program webpage and in the Guidelines and in the Program Funding Agreement template.

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# **FAQ ADDITIONS (FEBRUARY 2022)**

## **WHAT DOES ARENA MEAN WHEN IT REFERS TO IMPROVING SYSTEM STABILITY "WITHIN A REGION" OR FACILITATING HIGHER LEVELS OF INVERTER-BASED GENERATION "WITHIN A REGION"?**

The "region" refers to either the relevant NEM region (i.e. NSW, Qld, SA, Vic or Tas) or the entire Western Australian WEM.

ARENA is seeking to support projects that can materially increase the maximum instantaneous penetration of inverter-based generation in its region by providing the system stability services and reducing the reliance on synchronous generators.

## **WHAT SERVICES IS ARENA TARGETING FROM PROJECTS?**

ARENA has not provided a detailed specification for the services to be provided by projects. Instead, ARENA has only specified the use of advanced inverters.

However, the Merit Assessment will consider the ability of a project to contribute to system stability at a regional level (i.e. across an entire NEM region, or the entire WEM) during periods of high inverter-based generation, and thereby reduce the reliance on synchronous generators within that region.

The Applicant will be assessed based on its potential to defer operational constraints (also at a regional level) and facilitate higher penetrations of inverter-based generation. ARENA's assessment will consider the quality and completeness of information provided by Applicants to support claims regarding technical performance.

## **WOULD A DC-COUPLED PROJECT BE ELIGIBLE FOR FUNDING?**

ARENA considers that DC-coupled LSBS projects can meet the Scope of Activity as described in the Funding Announcement.

## **FOR NEW-BUILD HYBRID PROJECTS, IS THE APPLICANT REQUIRED TO PROVIDE DETAILS OF THE PROJECT AS A WHOLE, OR ONLY DETAILS RELATED TO THE LSBS COMPONENT?**

For scenarios where a new-build LSBS is to be constructed in combination with another generator (e.g. hybrids), ARENA may require information (including financial models) for the combined project. While ARENA's funding can only support the LSBS scope (including balance of plant and connection costs), this is necessary to ensure that ARENA understands the project in context.

## **WHAT ARE ARENA'S KNOWLEDGE SHARING EXPECTATIONS FOR APPLICANTS?**

ARENA expects that Applicants will review and identify any proposed non-compliances with the Knowledge Sharing Plan provided. In their applications, Applicants should also explain the knowledge sharing value of their project with a focus on how it contributes towards the Funding Round objectives.

## **IF TWO PROJECTS ARE THE SAME IN EVERY WAY EXCEPT THEIR LOCATION – WILL MORE MERIT BE GIVEN TO A PROJECT THAT IS CONNECTED TO LOW SYSTEM STRENGTH GRID?**

ARENA will assess projects based on their ability to contribute to system stability across a whole region and (in doing so) facilitate higher levels of inverter-based generation in that region by reducing the reliance on synchronous generators.

Nonetheless, ARENA understands that the project's location is just one element that could determine its contribution to system stability. Other elements such as the project size (MW) and inverter selection are also relevant.

Applicants are encouraged to explain their own rationale for why their project meets the Funding Round Objectives.

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# **FAQ ADDITIONS (MARCH 2022)**

## **ARE PROJECTS REQUIRED TO OPERATE WITH ADVANCED INVERTER FUNCTIONALITY ENABLED AT ALL TIMES?**

Projects will be required to operate with advanced inverter functionality enabled at all times.

## **IS THERE ANY REQUIREMENT TO RESERVE HEADROOM (MVA) OR CAPACITY (MWH) IN THE BATTERY TO MAXIMISE THE PROJECT'S CONTRIBUTIONS TO SYSTEM STABILITY?**

There is no requirement to reserve headroom (MVA) or capacity (MWh) in the battery

## **ARE APPLICANTS ABLE TO MAKE CHANGES TO THEIR PROPOSED SOURCES OF FUNDING DURING THE APPLICATION PROCESS?**

It is normal for large projects to seek low-cost capital for their project and ARENA understands that sources of capital may evolve during project development. However, if an applicant's proposed sources of funds change this could affect the merit assessment. Should such changes occur, ARENA will determine - at its sole discretion - whether any such change is material in nature. If a material change occurs, ARENA reserves the right to determine if the changes are acceptable and support the Funding Round Objectives

Further information is available at  
arena.gov.au

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