

ARENA acknowledges the traditional custodians of Country across Australia and their continuing connection to land, sea and community. We pay our respects to elders past and present.



Australian Government
Australian Renewable
Energy Agency

ARENA
10 YEARS



Community Batteries Funding Round

Information Session
13th & 15th December 2022



Agenda

1. Welcome and Introduction to ARENA
2. Overview
3. Key links and dates



1. Welcome and Introduction to ARENA

ARENA's Purpose

ARENA is the Australian Renewable Energy Agency.

The Agency was established by the Australian Government in July 2012 .

Our objectives are to:

- improve the competitiveness of renewable energy technologies, and
- increase the supply of renewable energy in Australia.

To support the global transition to net zero emissions by accelerating the pace of pre-commercial innovation, to the benefit of Australian consumers, businesses and workers.



INVESTED

\$1.86B



PROJECTS

628



VALUE

\$8.05B



INVESTMENT LEVERAGE

\$1:\$3.32



INVESTMENT BY TECHNOLOGY

BIOENERGY



\$131M

GEOTHERMAL



\$42M

GRID INTEGRATION

\$348M



HYBRID

\$112M



HYDROGEN

\$88M



OCEAN

\$44M



SOLAR PV

\$732M



SOLAR THERMAL

\$177M



STORAGE - BATTERIES/PHES

\$188M



INVESTMENT BY STATE

NT PROJECTS
8
INVESTED
\$40M
VALUE
\$82M

WA PROJECTS
42
INVESTED
\$205M
VALUE
\$1.88B

SA PROJECTS
55
INVESTED
\$146M
VALUE
\$606M

TAS PROJECTS
21
INVESTED
\$40M
VALUE
\$99M

VIC PROJECTS
115
INVESTED
\$230M
VALUE
\$548M

QLD PROJECTS
65
INVESTED
\$259M
VALUE
\$2.01B

NSW PROJECTS
251
INVESTED
\$871M*
VALUE
\$2.62B

ACT PROJECTS
71
INVESTED
\$71M
VALUE
\$195M

INVESTMENT LEVERAGE ALONG THE INNOVATION CHAIN

STUDY

\$1:\$1.71



R&D

\$1:\$1.64



DEMONSTRATION

\$1:\$1.85



DEPLOYMENT

\$1:\$6.25



* Includes \$567 million contributed to projects inherited by ARENA in 2012.

OUR STRATEGIC PRIORITIES



**OPTIMISE THE
TRANSITION TO
RENEWABLE
ELECTRICITY**



**COMMERCIALISE
CLEAN
HYDROGEN**



**SUPPORT THE
TRANSITION TO
LOW EMISSIONS
METALS**



**DECARBONISING
LAND
TRANSPORT**

Deliver the Budget programs

Future Fuels Program | Industry Energy Transformation Studies Program | Regional Australia Microgrid Pilots Program | First Nations Community Microgrids Program | [Community Batteries for Household Solar](#)

2. Overview

Overview of the Community Battery Budget Measure

The Community Batteries for Household Solar Budget Measure was announced in the October 2022 Commonwealth Budget. Funding of up to **\$171 million** to be administered by ARENA over 4 years (until 2025-26).

“Deploy 400 community batteries across Australia to lower bills, cut emissions and reduce pressure on the electricity grid by allowing households to store and use excess power they produce.”

When considering ARENA’s objectives of improving technology competitiveness and increasing supply of renewable energy, potential enablers may include:

- Efficient and effective delivery of the target volumes of community batteries;
- Development of sustainable and scalable business models;
- How to overcome barriers (technical, commercial, regulatory, and social) that prevent large-scale deployment of community batteries without grant funding; and
- Building industry capacity to deploy community batteries at scale.

Challenge: Applicants

ARENA wishes to understand the ambition and readiness of the market to deploy community batteries, including what categories of organisations (legal entities) could seek grant funding.

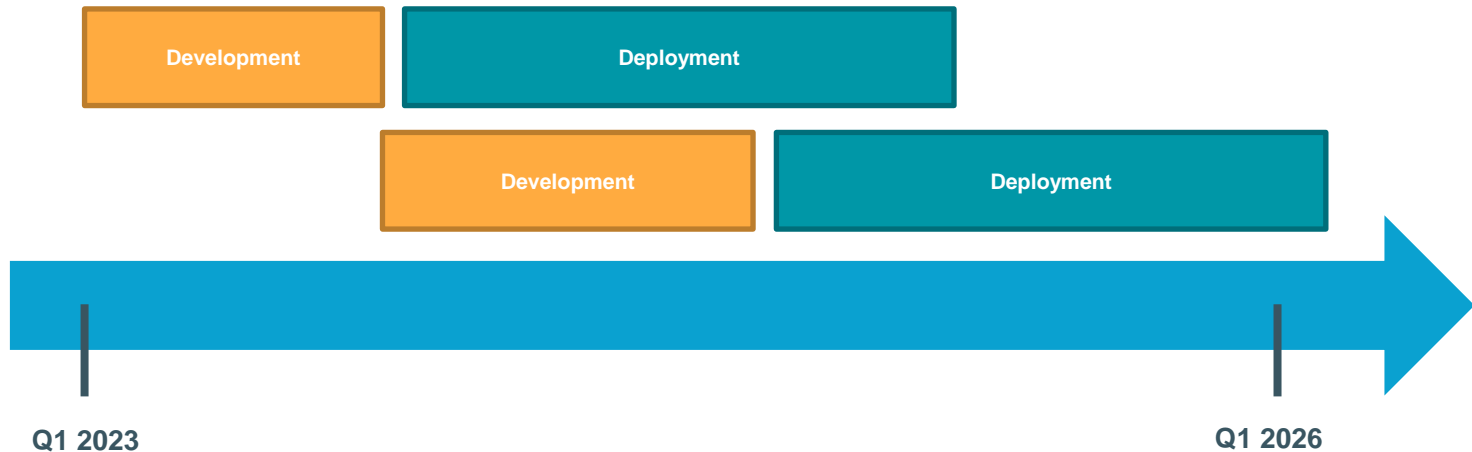
- Distribution Network Service Providers (DNSPs)
- Businesses (developers, retailers, community-oriented organisations)
- Local Government
- Government Owned Corporations
- Others?

Challenge: Market Readiness

Some stakeholders and business models are more suited to rapid deployment.

Challenge: accommodate early movers and projects with longer development times.

Noting the budget funding profile to 2025-26, ARENA wishes to understand the time required to develop, install and achieve operation of community battery projects.



Challenge: Front of Meter vs Behind the Meter

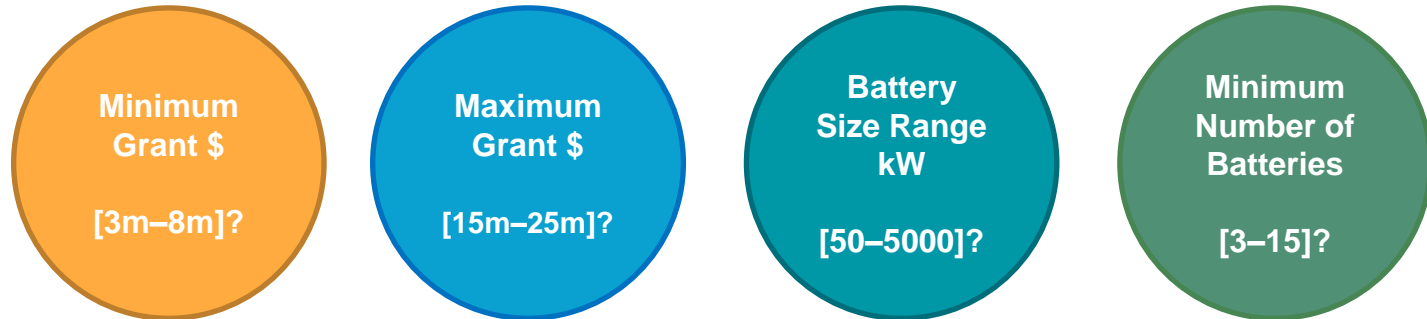
Many community battery trials to date have been deployed in a front of meter configuration in the distribution network. ARENA wishes to understand the potential size of the market for behind the meter batteries, and how they could achieve the objectives of the Budget Measure.

Front of Meter	Behind the Meter
<ul style="list-style-type: none">● Pole-top● Distribution kiosk● Zone substation● LV and MV?	<ul style="list-style-type: none">● Community facilities● VPPs● Other configurations?

Challenge: Efficient Delivery

Barriers to the efficient delivery of community battery trials include challenging business cases, high cost of development on a single battery basis, requirement for ringfencing waivers, lack of procurement scale, and bespoke control and communication schemes.

ARENA wishes to understand the potential to drive economies of scale in community batteries.



Challenge: Competition and/or collaboration with DNSPs

ARENA wishes to understand how to manage and support both DNSP and non-DNSP led community batteries, given the potential for asymmetric access to network information.

- What information (and in what form) do non-DNSP organisations require access to.
- How could DNSPs be encouraged to provide this information and are there any barriers to providing?
- What are the risks associated with DNSPs and non-DNSPs developing community batteries on the same network, how can these risks be managed?
- Other suggestions?

Challenge: Public Infrastructure

ARENA understands that a range of potential hazards and nuisance issues specific to community batteries. These include noise, vehicle impacts, fire, public safety, end of life management, and local amenity. Inadequate community engagement on these matters could lead to local opposition and delays to development.

ARENA would like to understand what requirements can be put in place to ensure appropriate management of public infrastructure risks, such as requirements for Risk Management and Community Consultation Plans.



Other Challenges?

ARENA would like to understand if there are additional barriers to community batteries, whether they be technical, commercial, regulatory, or social.

We encourage all attendees today to complete the survey form to help ARENA understand the challenges and risks of community battery deployment.



3. Key links and Contacts

Key links and contact

Community Batteries for Household Solar webpage

arena.gov.au/funding/community-batteries-for-household-solar/

Survey Form

<https://forms.office.com/r/FSh426P3rP>

Advancing Renewables Program Guidelines

arena.gov.au/funding/advancing-renewables-program/

Further questions?

Email: batteryround@arena.gov.au