

Powerlink: Linking Council assets to neighbourhood batteries

Final Report



Introduction

Merri-bek and Yarra City Councils partnered to deliver Powerlink: Linking Council assets to neighbourhood batteries (Powerlink or *The Project*), where 20 sites were selected to receive detailed technical and commercial investigations to better understand their suitability to host a battery. See appendix D for a complete list of sites within scope.

Three commercial models of 'neighbourhood batteries' were shortlisted (based on their 'best fit' with Councils' needs and objectives), and modelled over a 15-year period to understand their financial viability:

- **Model 1: The Solar Sponge** – charge the battery when wholesale electricity pricing is cheap, discharge when pricing is high;
- **Model 2: Virtual Storage Option** – a paid subscription offering to community members via a retailer, giving access to an amount of virtual storage each day. The retailer provides a tolling payment to Council for access to the battery; and
- **Model 3: Front and behind the meter hybrid model** – a smaller portion of the battery is assigned to provide storage for the load associated with the site (e.g. building), and the larger portion of the battery operates 'in front' of the meter and largely relies on revenues streams associated with arbitrage and ancillary services (frequency control).

When considering the performance of the three models across all sites, Model 1 generally produced more favourable financial outcomes, although did not consistently produce a positive net present value (NPV) for all sites¹ and relied on external funding to subsidise the upfront battery costs.

The top 3 sites for each Council that produced the most favourable financial outcomes (after grant funding based on most relevant available grant structure) were:

Council	Site and battery size	Model	P50 NPV	Cost (excl. network costs)	Assumed Grant Funding
Merri-bek	Saxon St Precinct (100KW/250kWh)	Solar Sponge	\$105,118	\$367,750	\$367,750
	Newlands Community Centre (100KW/250kWh)		\$76,863	\$381,675	\$381,675
	Glenroy Community Hub (300KW/750kWh)		\$192,999	\$672,400	\$500,000
Yarra	Victoria Park - Sherrin stand, (100KW/250kWh)		\$105,118	\$371,325	\$371,325
	Richmond Senior Citizens Centre (100kW/250kWh)		\$105,118	\$378,000	\$378,000
	Yarra Community Youth Centre (100KW/250kWh)		\$105,118	\$371,325	\$371,325

In the coming months, both Councils will consider applying for either state (via 100 Neighbourhood Batteries Program) or federal (via ARENA) funding.

¹ Based on a P50 scenario (i.e. a 50% probability of the project being delivered within that cost estimate) over 15 years

Project Background

Battery Landscape

With the help of [Neighbourhood Battery Initiative Round 3](#) funding (\$200,000), Merri-bek and Yarra City Councils have partnered to investigate the potential of Neighbourhood Batteries at Council owned sites. Councils recognise the role of Distributed Energy Resources (DER) in the clean energy transition, and observe that permutations of battery location, technology, and operating model have large implications for access to Battery Energy Storage Systems (BESS) value streams. Opportunity was identified to consider a broad range of operational configurations to develop a quantitative basis for future investment in neighbourhood batteries.

Scope

Councils set out to develop a business case for neighbourhood battery installations across a range of site typologies common across local government assets. The scope included 20 sites (12 Merri-bek and 8 Yarra) with and without onsite solar, and a spread of facility types including community halls, sports clubs, depots, civic buildings, children's centres and libraries.

The project was structured to take a broad view of available pathways before converging on site-specific business cases. The intended methodology was to:

- Gain an overview of how neighbourhood batteries operate generally while understanding the mechanics of all the relevant commercial models for operation;
- Define each Council's needs and objectives in relation to neighbourhood batteries;
- Overlay these needs and objectives to shortlist viable commercial models;
- Select BESS equipment based on site investigations, analysis and opportunities;
- Undertake energy and financial modelling of chosen battery equipment and commercial models to project financial performance under predicted scenarios over useful battery life; and
- Understand potential procurement pathways if Councils intended to advance these opportunities.

Advisors and external contributors

- Engineering advisors **Enhar Pty Ltd** were engaged to undertake technical assessments of the nominated sites' energy profiles and electrical infrastructure to determine optimal BESS equipment selections;
- Energy advisors **Energetics** were engaged to research commercial models and conduct energy/financial modelling of battery performance;
- **Maddocks Lawyers** provided advice on suitable governance arrangements between the two Councils as well as contractual advice; and
- Local Distribution Network Service Providers (DNSPs) **Citipower** and **Jemena** provided network-related data including where possible, estimations on any potential network augmentation requirements to support the proposed batteries.

Objectives

The project scope was designed to address the following objectives:

Objective	Discussion
<p>Establish each Council's priorities/objectives when considering neighbourhood batteries</p>	<p>Neighbourhood batteries are an emerging application of BESS technology, with proponents often having different aspirations for access to theoretical battery value streams. At the project's commencement both Councils agreed that establishing a set of key criteria would help in matching the optimal battery deployment parameters given each organisation's priorities.</p> <p>Furthermore, it was envisaged that by conducting this exercise with both Councils at the same time, it would present an opportunity to share different perspectives, insights and experiences. Some key questions to answer while developing neighbourhood battery objectives included:</p> <ul style="list-style-type: none"> • What outcomes can neighbourhood batteries achieve? • How does Council view its role in the battery space? • What are batteries best suited to achieve that other technologies/initiatives are not? • Which objectives can we measure achievement of?
<p>What are the possible models of battery operation and how do these align with priorities?</p>	<p>Both Councils recognised that there are a number of different commercial/operating models of neighbourhood batteries, in various stages of concept, trial, and implementation. To build a business case for neighbourhood batteries at Council sites, it was important to gain a holistic understanding of what the key features of these models are, and how they can be viewed in terms of the benefits/outcomes they are most likely to provide relative to each other.</p>
<p>What are the site specific conditions, limitations and opportunities?</p>	<p>Commercial/operating models must be matched to site specific conditions and opportunities to obtain a realistic business case. Much the same as for any other contemplated energy/infrastructure upgrade, it was intended for early-stage engineering investigations to establish a picture of:</p> <ul style="list-style-type: none"> • Site conditions: such as electrical infrastructure and site consumption patterns. • Limitations: Including electrical capacity (both at the supply point but also at the low voltage and substation level), spatial, or other factors that would influence either equipment selection and/or actual operating models. • Opportunities: Including largest battery a site could reasonably support and associated costs, considering both front of meter and behind the meter cases.
<p>How do site specifics and commercial models impact on the upfront and ongoing operating requirements?</p>	<p>Councils are conscious that battery value streams are just one half of the equation-upfront/ongoing costs, resourcing requirements, as well as other sources of challenge and complexity like contractual arrangements to enable battery operation must be considered to develop a comprehensive business case.</p>

Deliverables

The following deliverables were developed during the project:

Establishing Governance Arrangements

One of the initial project deliverables was establishing suitable arrangements around roles, responsibilities as well as decision making and dispute resolution processes, for the duration of the project agreement. *The Project's* legal advisors- **Maddocks Lawyers** assisted in developing a Memorandum of Understanding between the two parties.

Technical assessments of sites and battery technology

The Engineering Advisor **Enhar** reports included, for each site:

- Existing electrical infrastructure
- Site consumption analysis
- Nomination of key BESS equipment
- Capital costs for supply and installation of proposed BESS for Behind the Meter (BTM) and Front of Meter (FOM)
- Single line diagram for proposed battery installation, intended to support future design phases and DNSP applications
- Risk register

The main purpose of the engineering advisor deliverables was to establish an engineering basis for key inputs to the commercial/energy advisor's modelling, based on understanding site conditions and opportunities.

Neighbourhood Battery research and commercial analysis

The purpose of this deliverable was to gain a broad overview of available commercial models for neighbourhood battery operation to inform subsequent discussions and shortlisting of preferred options. Then to undertake comprehensive financial modelling to ultimately determine which models and sites were potentially suitable for future neighbourhood battery deployment. Energy Advisor's **Energetics** conducted:

- Desktop research of neighbourhood battery operating models- including interviews with some projects
- Workshops- with both Councils to develop key needs and objectives when considering operating models, and with the Engineering Advisor to understand any technical or site-specific considerations.
- A commercial research and financial modelling report that included:
 - Overview of operating models
 - Shortlisting operating models process and outcomes
 - Quantitative assessment of operating models
 - Deployment approaches and procurement models.

Stakeholder consultation

The local government sector was identified as a key stakeholder group (external audience) for the Project's findings. This is because the sector has similar asset profiles, risk appetite and prioritises community benefits. Engagement activities with representatives from local governments across Victoria included an online webinar- with the aim to provide the results of the key activities that were undertaken as part of *The Project*, as well as a webinar attendee survey to understand the value of the webinar. The results of these are captured in Appendix C.

Project outcomes

Objective	Outcome
<p>Establish each Council's priorities/objectives when considering neighbourhood batteries</p>	<p>Merri-bek and Yarra City Councils' priorities and objectives for neighbourhood batteries were developed over the course of two workshops facilitated by the energy advisors.</p> <p>While there were similarities between each Council's view of battery objectives, Yarra City Council took a big picture view of Council's role in facilitating the clean energy transition, aspiring to support wide-reaching benefits such as increased access to renewables and increased rooftop solar hosting potential. While Merri-bek also rated these objectives highly, Merri-bek's view was more centred on demonstrating the value of an individual candidate project, favouring financial returns and lower operational/contractual complexity.</p> <p>The final list of agreed priorities between both Councils were:</p> <ul style="list-style-type: none"> • Financial returns (certainty and extent) • Local rooftop solar benefits (increased solar hosting capacity and reduced curtailment of exports) • Emissions reduction • Demonstrability (measurability of benefits) • Operational complexity (exposure of Council to ongoing operational responsibility and complex operating requirements) • Contractual complexity (complexity and risk of contracting model)
<p>What are the possible models of battery operation and how do these align with priorities?</p>	<p>Based on the market scan of commercial models for neighbourhood battery operation, it was observed that models broadly fall into the following categories:</p> <ul style="list-style-type: none"> • Solar sponge • Network support • Virtual Storage • Behind-the-meter • FOM/BTM hybrid <p>Councils decided that the ability to maximise total benefits exceeded any specific preference for front or behind-the-meter configurations, and that only Council-owned models were to be considered within the scope of this project.</p> <p>Both Councils agreed on weightings to apply to evaluation criteria that were developed from the identified priorities/objectives. Based on these weightings, the energy advisors ranked the models in terms of favourability to each Council.</p> <p>After some discussion to resolve minor discrepancies between Councils' preferences, the shortlisted models judged to best match each Council's priorities were identified as:</p> <ul style="list-style-type: none"> • Solar soaker model • Virtual storage model • FOM/BTM hybrid model <p>Notably, as all candidate models operate very similarly in terms of charge/discharge pattern, differences in the models come down more to nuances in focus or allocation of value rather than fundamental differences in objectives or operating regimes.</p> <p>Furthermore, while these models were judged to best align with the identified priorities, this was based on a qualitative basis in relation to each model's aspirations, rather than hard data justifying each model's relative achievement of each objective. A quantitative basis for differentiating model performance was later explored through energy/financial modelling, but was limited primarily to financial returns.</p>

Objective	Outcome																
	Please refer to Figure 1 for a full list of how each operating model was assessed according to each Council's objectives/needs.																
<p>What are the site specific conditions, limitations and opportunities?</p>	<p>While each site was unique, common themes emerged in engineering investigations relating to BTM/FOM battery opportunities:</p> <p>BTM</p> <ul style="list-style-type: none"> • BTM battery opportunity is dependent on limitations of: the extent of existing on-site electrical infrastructure, site usage patterns, and on-site solar. • Lack of complete interval data for many sites for the baseline period required interpolation and presented a challenge to determining accurate site conditions. NB: BTM modelling was only considered (partially) in model 3. <p>FOM</p> <ul style="list-style-type: none"> • Bigger isn't always better – Battery ROI does not necessarily scale favourably with battery size due to factors including ability to secure favourable network tariffs (depends on site location, meter configuration, battery capacity), unfavourably scaling network augmentation costs (e.g. costly low voltage and/or high voltage upgrades), export limits that are imposed based on high voltage constraints that are unable to be resolved on an individual project level. <p>Both</p> <ul style="list-style-type: none"> • Spatial limitations – One of the most significant and consistent barriers to battery opportunity on existing sites is available space. This limitation is more significant for larger FOM batteries, and experienced more in geographic areas that are more 'built up'. • Location implications – Proximity to existing incoming supply is preferred from a cost and operational perspective, and must be balanced against other factors including battery noise impacts to building occupants/neighbours, fire risk, flood risk, structural risk for indoor batteries. • Incomplete data – many sites lacked complete as-built documentation, requiring additional time on-site to identify infrastructure configuration. 																
<p>How do the site specifics and commercial operating models impact on the potential upfront and ongoing operating requirements?</p>	<p>The three chosen operating models have different impacts on a wide variety of upfront and ongoing requirements:</p> <table border="1" data-bbox="501 1447 1401 1836"> <thead> <tr> <th></th> <th>Model 1: Solar Sponge</th> <th>Model 2: Virtual Storage</th> <th>Model 3: FOM/BTM hybrid</th> </tr> </thead> <tbody> <tr> <td>Operational Complexity</td> <td style="background-color: #d9ead3;"></td> <td style="background-color: #d9ead3;"></td> <td style="background-color: #d9ead3;"></td> </tr> <tr> <td>Contractual Complexity</td> <td style="background-color: #d9ead3;"></td> <td style="background-color: #ffeb3b;"></td> <td style="background-color: #f44336;"></td> </tr> <tr> <td>Value Generation</td> <td style="background-color: #ffeb3b;"></td> <td style="background-color: #ffeb3b;"></td> <td style="background-color: #d9ead3;"></td> </tr> </tbody> </table> <p>Whereas site specifics mostly impact the complexity/cost of the upfront installation, contractual and operational complexity is more specific to the chosen commercial model. Notably, all considered models were constrained to be Council-owned only. Alternative models where Council sites serve as a host to a 3rd party owned and operated battery transfer contractual and operational complexity away from Council, but limits the potential for Council themselves to</p>		Model 1: Solar Sponge	Model 2: Virtual Storage	Model 3: FOM/BTM hybrid	Operational Complexity				Contractual Complexity				Value Generation			
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Contractual Complexity																	
Value Generation																	

Objective	Outcome
	<p>generate value from the battery other than through (for instance) favourable lease agreements, theoretical benefits to residents through improved network conditions, or offers to residents by the battery owner.</p> <p>Of the shortlisted models, operational complexity is simple across the board as Council transfers most of the operational requirements to the financially responsible market participant (FRMP) partner. Council may retain maintenance or other responsibilities depending on the specifics of the contractual arrangement.</p> <p>Contractual complexity varies greatly between models, and potentially within each model depending on specifics of the arrangement between the battery host, owner, operator, and beneficiaries. Broadly, the solar sponge model can be considered a base case for complexity, with the virtual storage model increasing complexity by virtue of the community offer, and the FOM/BTM hybrid model layering on further complexity through the complex hybrid embedded network approach.</p> <p>Other sources of complexity may arise when seeking to firm up/guarantee revenue streams, manage risk, procurement processes or to pursue bespoke DNSP network tariff arrangements in regards the Value Generation.</p>
Stakeholder engagement (linked objective N/A)	<p>In addition to the above linked objectives and outcomes, The Project undertook a simple engagement process with the local government sector to understand the value of the outputs of this project.</p> <p>Beyond the overall identification of project outcome value, this activity also identified that including non-financial community benefits in the Cost Benefit Analysis process would be valuable to other local government also, as currently there is no standard or common methodology to do so.</p>

Data

While a more comprehensive view of data generated through *The Project* can be found in the full reports listed in the appendices, the following is a high-level overview of summary findings:

Qualitative assessment of operating models against Council needs and objectives.

Criteria	Weighting	Solar Sponge	Network support			Virtual storage			Behind-the-meter		FOM/BTM
		Fitzroy North Battery	Electric Avenue - UE	Cabarita Battery	Shell Cove / Ipswich BESS	Village Power BESS	PowerBank	Yackandandah BESS	Trent Basin Project	Power Melbourne	
Financial returns	20%	Green	Orange	Red	Red	Red	Red	Green	Green	Green	
Community access to renewables	33%	Green	Red	Yellow	Green	Green	Yellow	Orange	Orange	Orange	
Local rooftop solar benefits	15%	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow	
Emissions reduction	8%	Green	Red	Orange	Green	Green	Green	Yellow	Orange	Orange	
Demonstrability of benefits	5%	Green	Orange	Red	Orange	Orange	Orange	Orange	Orange	Green	
Operational complexity	10%	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Yellow	
Contractual complexity	10%	Green	Yellow	Yellow	Orange	Red	Orange	Yellow	Orange	Red	
Total rating		Green	Red	Yellow	Green	Yellow	Orange	Yellow	Orange	Yellow	

Figure 1. qualitative assessment results of possible neighbourhood battery operating models.

The assessment of operating models against council needs and objectives was intended to shortlist promising models for the subsequent energy/financial modelling stage. Weights were applied to each criterion for assessment based on Councils' prioritisation of battery

objectives. Each candidate model's achievement against the criteria was evaluated by the commercial advisor based on publicly available information on project principles and aspirations. Importantly, this implies that scores against each criteria involves a large degree of subjective judgement. Acknowledging this fuzziness, the final scores were collapsed to a traffic light rating. The solar sponge and virtual storage models were standouts in this assessment, a key input into the final decision to shortlist a solar sponge, virtual storage, and FOM/BTM hybrid model for subsequent energy/financial modelling. Councils acknowledge that the final 'ranking' of models is highly sensitive to interpretation of achievement of models against criteria as well as weighting and selection of criteria. Therefore, the intent of this assessment is to build understanding of the nuance between different models' principles and objectives, and how each Councils' objectives might align with each. The results should not be interpreted as an authoritative statement on how well individual models perform in practice.

Upfront supply and installation costs for FOM battery configurations

Upfront supply and installation costs, including network augmentation, are significant contributions to overall project financial performance. While costs for each site are highly site-specific and sensitive to factors including battery size, battery location, nature and extent of existing infrastructure, the following table shows a breakdown of the types of cost sources to consider, and the proportion of total cost typically associated with them:

Capital Costs Category	% of Total Cost (Sample 200 kWh battery)	% of Total Cost (Sample 750 kWh battery)
Provision of battery (includes delivery, 10 year warranty extension, provision of EMS system)	55%	65%
Provision of main switchboard	5%	5%
Engineering (inc. structural assessment)	4%	3%
Preparation of site	3%	1%
Fencing	5%	1%
Cables	2%	2%
DNSP fees – battery application	1%	1%
DNSP charge – new mains connection	7%	5%
Installation	14%	15%
Commissioning	4%	2%
Total Cost (excl. contingency and DNSP Augmentation)	\$284,500	\$668,750

Note: Estimated network augmentation costs are **highly impactful** to the overall project cost and can vary substantially. Considering two sample sites with proposed 500 kWh batteries,

the difference between a site with low network augmentation costs vs high network augmentation costs could be up to double the pre-augmentation project budget:

Proposed Battery	% Additionality Over Project Cost
Site A – 500 kWh battery	7%
Site B – 500 kWh battery	122%

Ongoing collaboration with the DNSP as early as the business case stage is critical to distinguish between favourable sites, as well as to identify opportunities to optimise battery sizing and operation to minimise upgrade complexity and best function within existing network constraints.

Summary of 15 year NPV for shortlisted commercial models

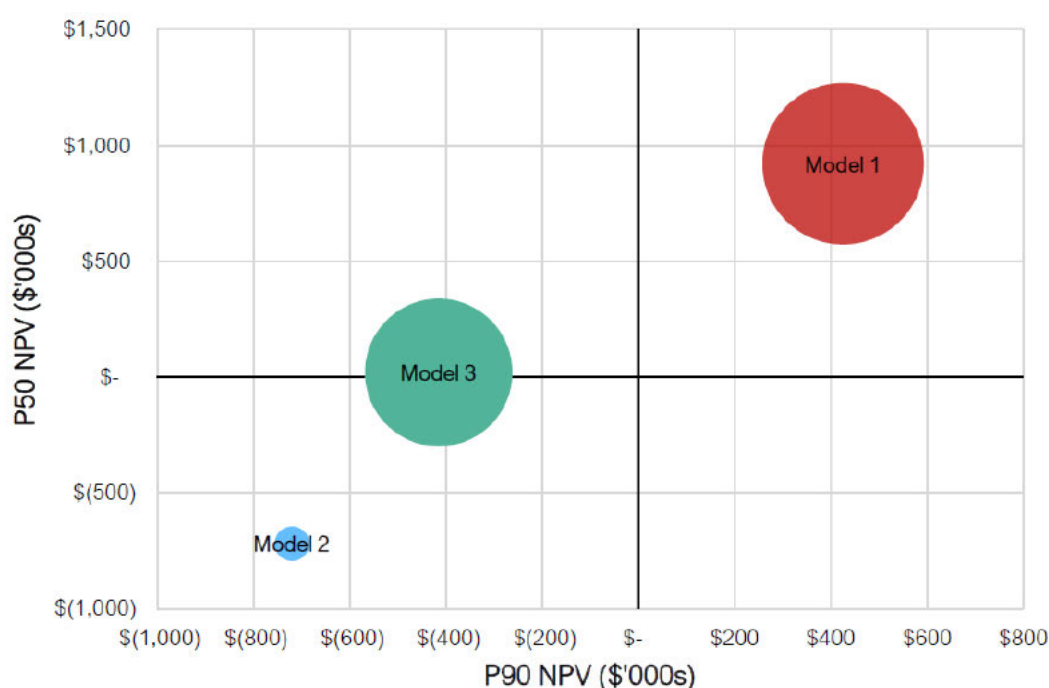


Figure 2. P50, P90 and standard deviation (bubble size) of NPV outcomes for commercial models across all sites

Figure 2 shows summary net present value after 15 years for each commercial model assessed, averaged across all sites, and considering highly conservative (P90) and less conservative (P50) modelling parameters. Importantly, there were large differences in individual site performance between different models, which can be found in the full report named in Appendix A. The results above do not include operational costs associated with project administration, or DNSP augmentation costs. These factors both act to reduce the NPV in practice. Additionally, the results include an assumed level of grant funding to offset upfront costs.

On an aggregate basis, Model 2 performs the worst based on financial returns to the BESS owner. This is because the virtual storage model acts to reallocate the majority of value from the BESS owner to the participants of the virtual storage program and the aggregator/retailer (for taking on the market risk of providing the community offer). The remaining benefit return to Council therefore is not sufficient to produce a positive return on investment within the battery's useful life expectancy.

Model 1 outperforms model 3 on aggregate. This is broadly because model 3 assigns a portion of battery capacity to BTM operation, which generates less revenue on a \$/kWh basis than FOM-allocated capacity. Under the methodology applied, access to FOM revenue

streams including frequency control ancillary services (FCAS) and wholesale arbitrage outweighed site-specific BTM savings except for sites with highly favourable BTM conditions (e.g. high solar exports). Notably, access to more favourable tariff structures for BTM operation (e.g. wholesale price passthrough) may enable more favourable BTM outcomes. As noted, sweeping conclusions of model performance should not be made without considering site-specific merits.

Stakeholder engagement

Results from *The Project's* engagement activities are captured in Appendix C

Future Outlook

Based on the project methodology and commercial models assessed, overall outcomes identified that the NPV-focused business case for neighbourhood batteries have high degrees of uncertainty. This is even after considering external grant funding contributions to subsidise upfront supply and installation costs.

Furthermore, measuring and capturing the non-financial benefits of neighbourhood batteries is yet to be resolved. While this may change in the future based on externally developed frameworks, collaboration with DNSPs, regulators and increasing grid-related constraints driven by high solar penetration and other macro factors, it remains a challenging task for current projects to confidently quantify these aspects.

Merri-bek City Council will now assess additional operating models for sites included in this project that focus more on BTM (non-hybrid) battery configurations as an alternative to those already analysed. Depending on the results, these outputs may form the basis of an application for current/future rounds of 100 Neighbourhood Batteries funding or other funding opportunities such as those administered by [ARENA](#).

In addition, Merri-bek City Council will continue to progress the implementation of the Brunswick Community Battery (non-state government project). Evaluation of the battery's performance during the initial operating phase will provide an opportunity to assess commercial model 3 suitability and financial returns in a real-world environment, serving as an important input to Council's decision-making on future neighbourhood battery involvement.

The City of Yarra will be leveraging the outcomes of the Powerlink project to develop a series of optimised BTM battery installations on four small Council facilities (three of which were modelled in Powerlink), which could underpin an increased deployment of solar systems on these buildings. The current consideration is for installation of 40kWh – 100kWh of battery storage at each site in addition to installation/expansion of solar generation.

In addition to providing community benefits in the form of reinvestment of revenue for community programs, the overarching objective is to maximise renewable energy in Yarra by developing replicable models and providing a proof of concept to encourage businesses and homeowners (and other councils) to install solar and batteries where they might not otherwise, supporting the achievement of the AEMO Integrated System Plan (ISP) Customer Energy Resource (CER) modelling under the step change scenario.

The City of Yarra intends on applying for 100 Neighbourhood Batteries funding as a result of the findings of this project.

Confidential

The following reports (and the information contained within) have been excluded due to confidentiality:

- Feasibility Study – Merri-bek Council Community Battery Sites – Jemena Electricity Networks (Vic) Ltd – 16 08 2024
- Network Data Report - Citipower Pty Ltd - Powerlink Project - 10 07 2024

NB: The relevant information from the above documents has been included in the following corresponding report, and therefore has certain datasets redacted due to confidentiality:

- Enhar Final Report (V2)- 30 08 2024

Appropriateness

Overall, the deliverables and outcomes achieved through *The Project*, broadly met the expectations of both Merri-bek City Council and its partner Yarra City Council. The level of information provided by the consultants has provided the necessary detail to consider future investment in these neighbourhood battery opportunities.

However, areas where *The Project's* outputs would have benefited from, if they were able to be addressed, include:

Modelling a broader range of battery operating approaches

In hindsight, it may have been beneficial for *The Project* to include an operating model that considers a completely BTM scenario for comparison purposes. If a chosen site for modelling includes an asset with an existing energy load, then Council would recommend that other proponents consider both behind and front of meter configurations.

Electricity Network information

Whilst *The Project* was provided some valuable network information in relation to possible upgrade costs, it wasn't available for all sites. As such, it creates a level of uncertainty not only for the accuracy of the financial estimates of the business case. It also creates risk through seeking future funding that is not truly representative of the final capital works costings, since (in some situations) network upgrade costs can be a significant portion of the total installation cost that would have made a project non-feasible if accurately estimated.

Calculating broader economic impacts of neighbourhood batteries

One of the aspects of *The Project's* modelling approach highlighted, is the ongoing challenge of quantifying the community benefits in the financial modelling process.

As Council's stakeholder engagement report highlights, whilst there is general support for capturing the community benefits in economic modelling, there are no current methodologies to do so. Future neighbourhood batteries would benefit from a more holistic approach to CBA that include assessing the economic impacts of the community benefits to improve their value proposition.

Signature

The contents of this Final Report, including all attachments, are true and correct, to the best of my knowledge after having made all due enquiries.



Signed.....

Name of authorised representative...Michaela Skett.....

Position Title...Unit Manager Sustainable Communities.....

Date 10 September 2024.....

Appendices

Appendix A – Neighbourhood/Community Batteries – Final Report – Energetics 15 07 2024

Appendix B – Site Investigations, Analysis and Battery selection -Final Report V2 – Enhar – 30 08 2024

Appendix C – Stakeholder engagement – reflections, lessons learned and insights – 12 08 2024

Appendix D – Merri-bek and Yarra Sites included within project scope:

Site	Site name	Site address	Network area
MB1	Saxon St Precinct	33 Saxon Street	CitiPower
MB2	CERES	Cnr Stewart Street & Roberts Street	CitiPower
MB3	Coburg Civic Centre	90 Bell Street	Jemena
MB4	Bob Hawke Community Centre	24-26 Hudson Street	Jemena
MB5	Coburg Basketball Stadium	1 Outlook Road	Jemena
MB6	Newlands Community Centre	20 Murray Road	Jemena
MB7	Jackson Reserve Sports Pavilion	40 Whitton Parade	Jemena
MB8	CB Smith reserve - Pavilion and Netball Lights	Jukes Road	Jemena
MB9	Glenroy Community Hub	50 Wheatsheaf Rd	Jemena
MB10	Walter Street Depot	5 Walter Street	Jemena
MB11	Pascoe Vale Community Centre	7 Prospect Street	Jemena
MB12	Pascoe Vale Pool	Cumberland Road	Jemena
YC1	Victoria Park - Sherrin stand	Lulie Street	CitiPower
YC2	Alphington Park Pavilion	Parkview Road	Jemena
YC3	Fairfield Park Maxwell Sutherland Pavilion	Yarrabend Road	Jemena
YC4	Richmond Library/MCHC	415 Church St	CitiPower
YC5	Mark St Hall	1 Mark St	CitiPower
YC6	Richmond Town Hall	333 Bridge Road	CitiPower
YC7	Richmond Senior Citizens Centre	Hosie St	CitiPower
YC8	Yarra Community Youth Centre	156 Napier St	CitiPower