Bodalla
Micro Grid Feasibility
Discussion Forum #2

Record of Discussion

These design briefs developed within communities will contribute to SuRF project Milestone 5.4 High level concept and design for the eight communities

BODALLA COMMUNITY HALL
18 MAY 2023

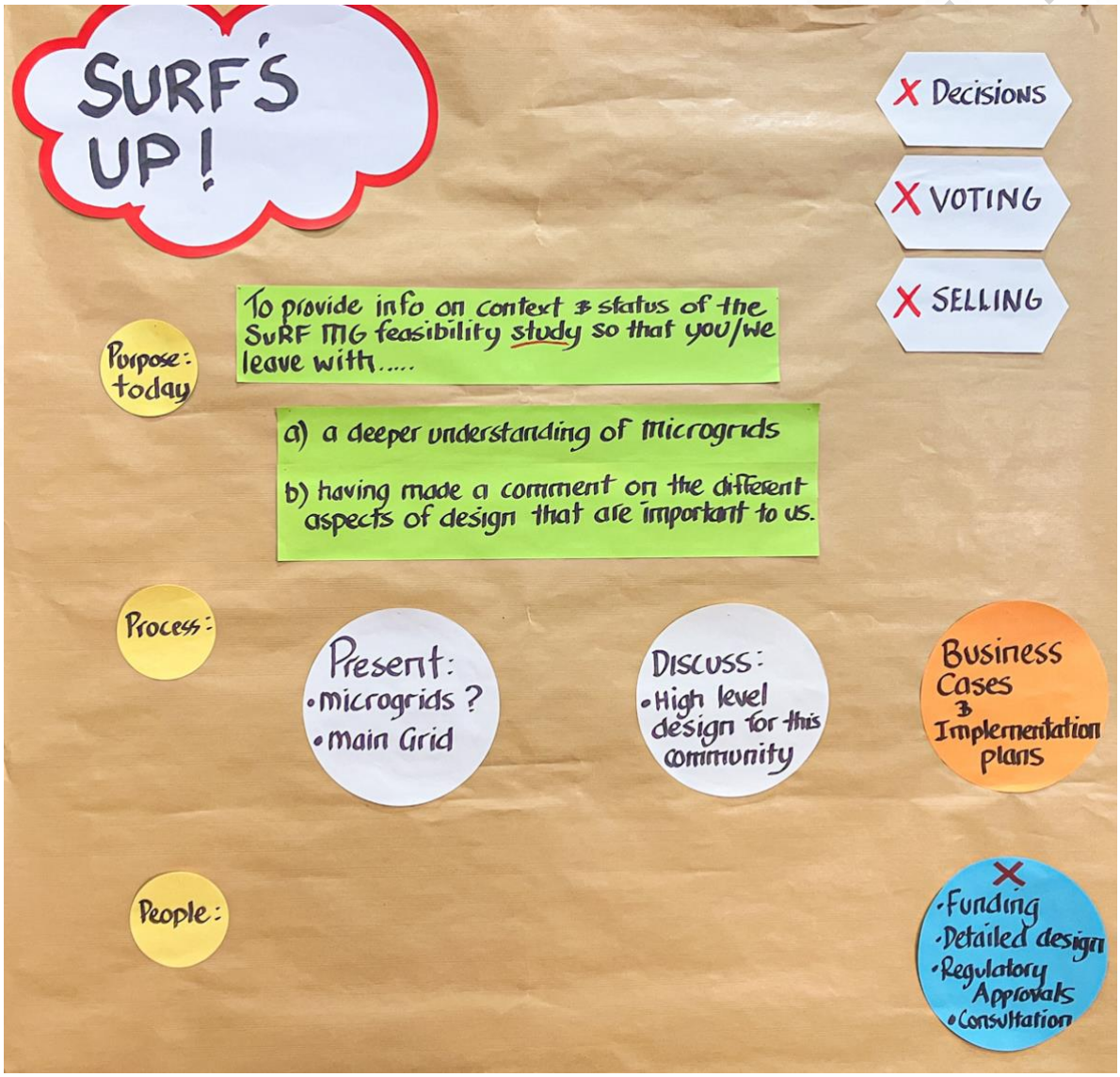
Presented by & Bjorn Sturmberg (ANU) and Matt O'Neill (Essential Energy).
Moderated by Phil Shorten (SHASA)

Introduction & Context

The first step of the forum was to introduce the purpose and process of the forum and recognise the group participating in the discussion.

The purpose being to provide information on the context and status of the SuRF Microgrid feasibility study so that those participating leave with a deeper understanding of Microgrids and have a chance to comment on the different aspects of design that are important to them.

The context was provided by way of a series of project fact sheets about the SuRF project.



Moderator Notes…

Introduction and Context

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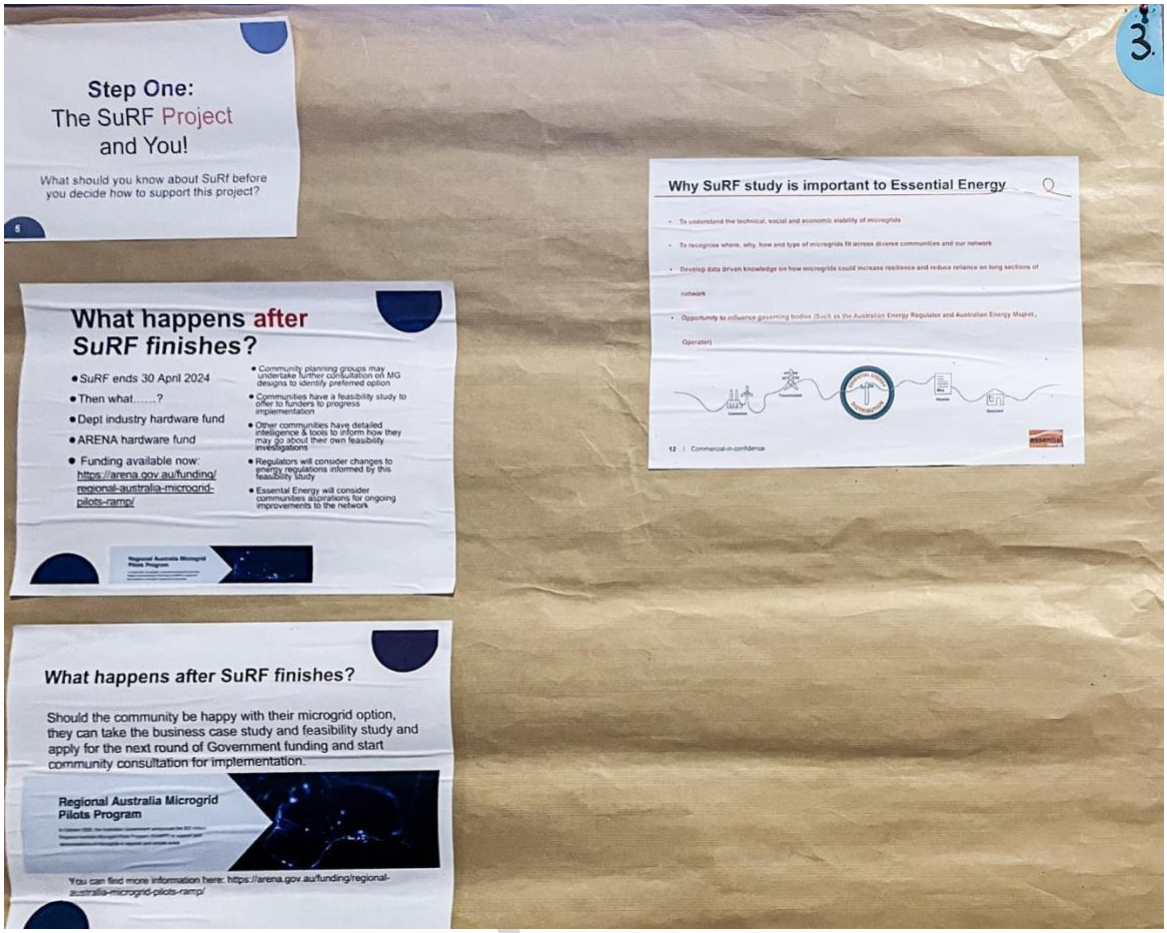
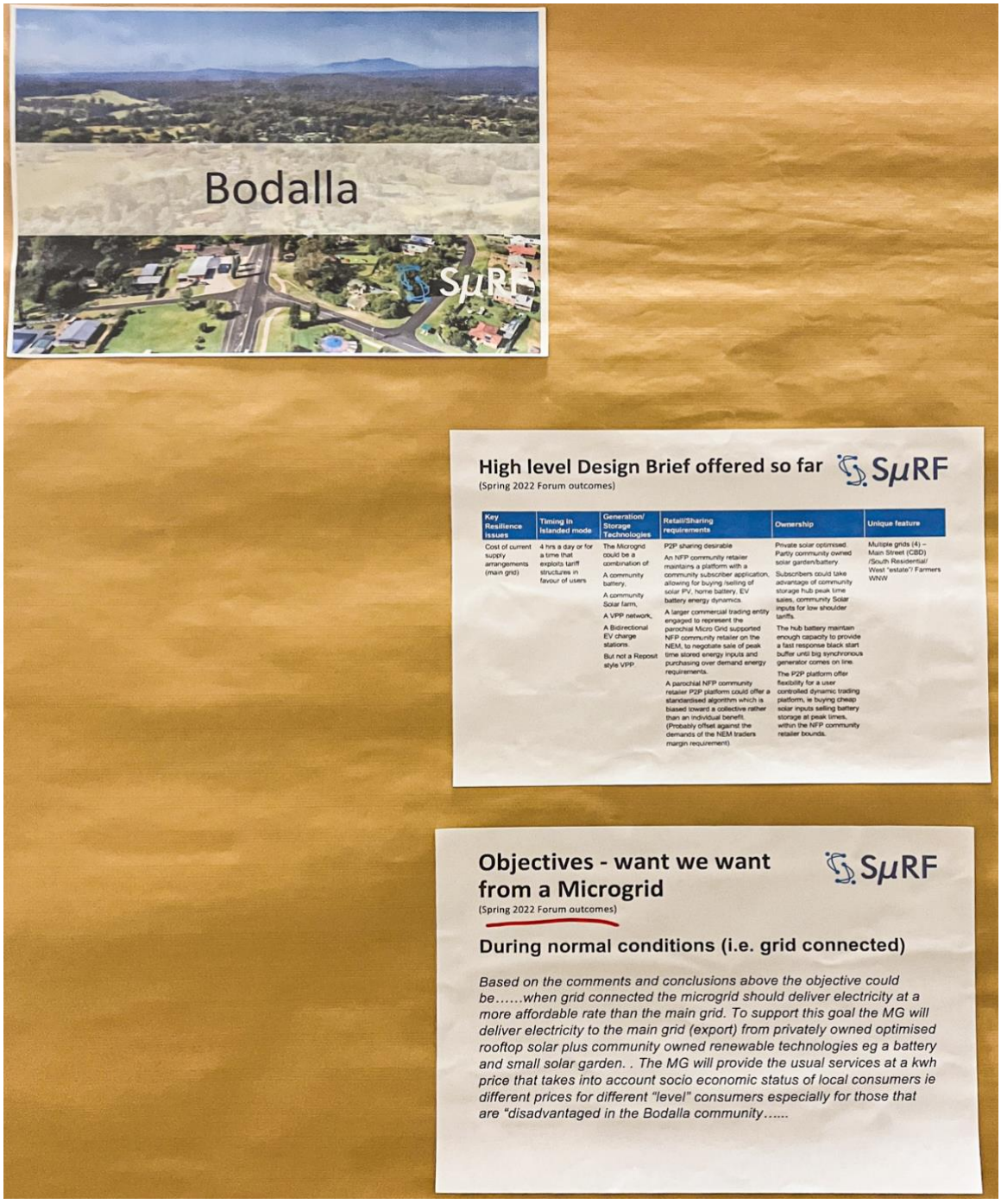


Moderator Notes…

STEP 1

Design Objectives from Round 1 Community Discussion Group



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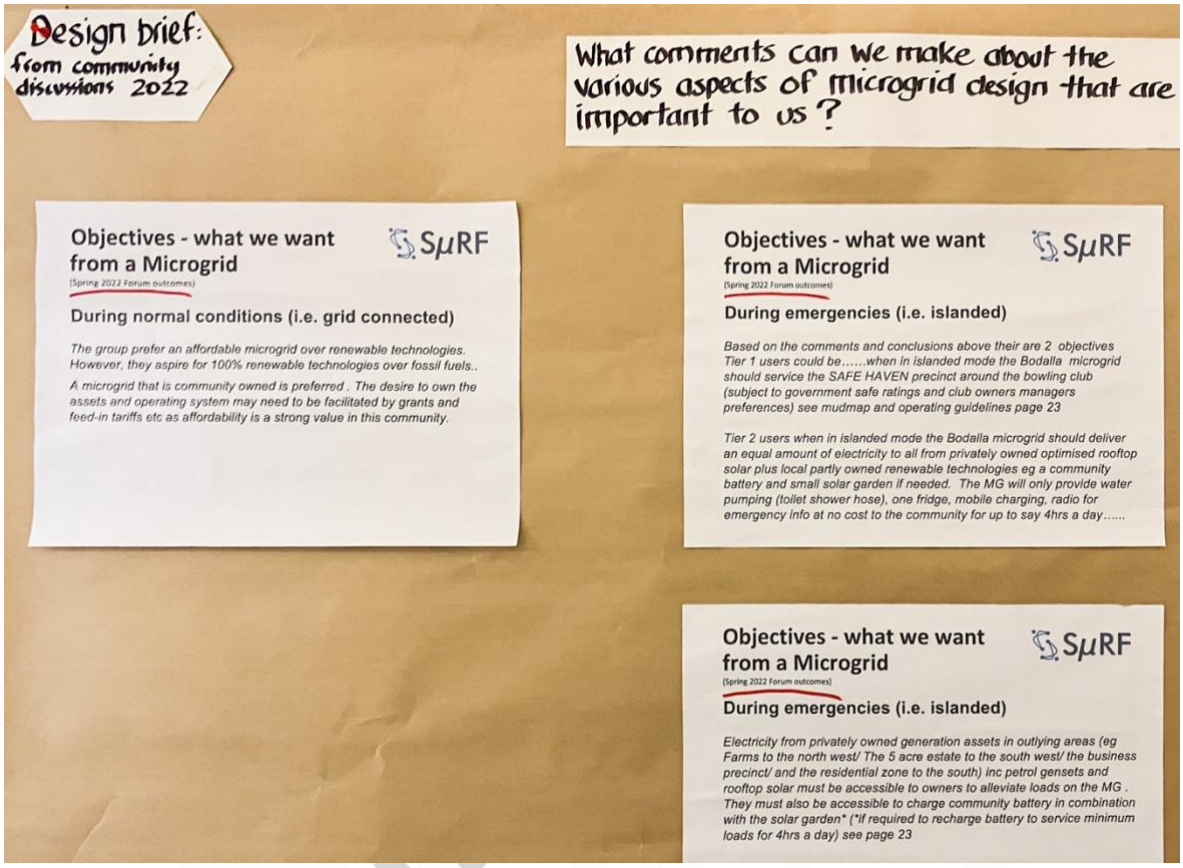
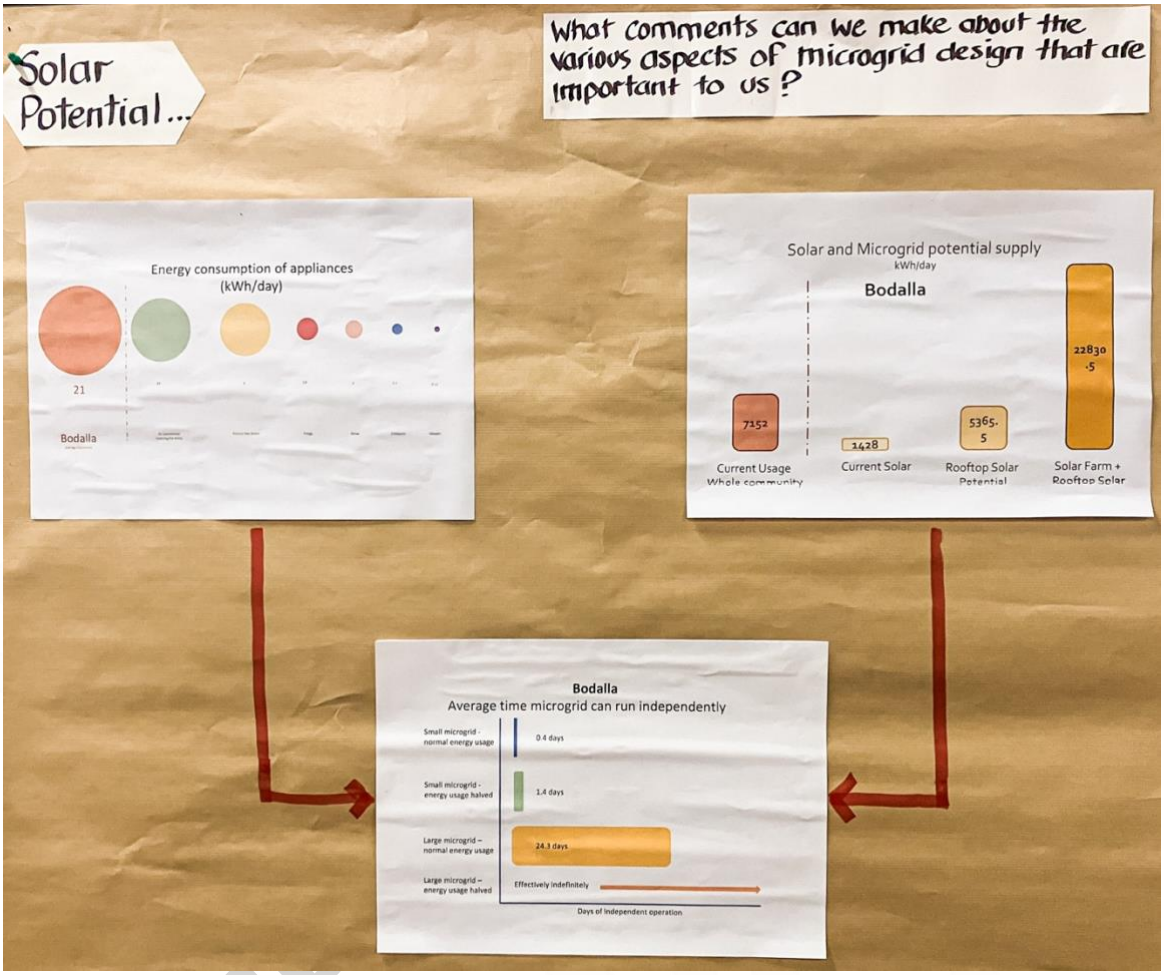


Moderator Notes…

STEP 2

Analysis of solar potential within the community

Analysis showing the potential generation available from rooftop solar and the time the microgrid could operate in islanded mode.



Moderator Notes…

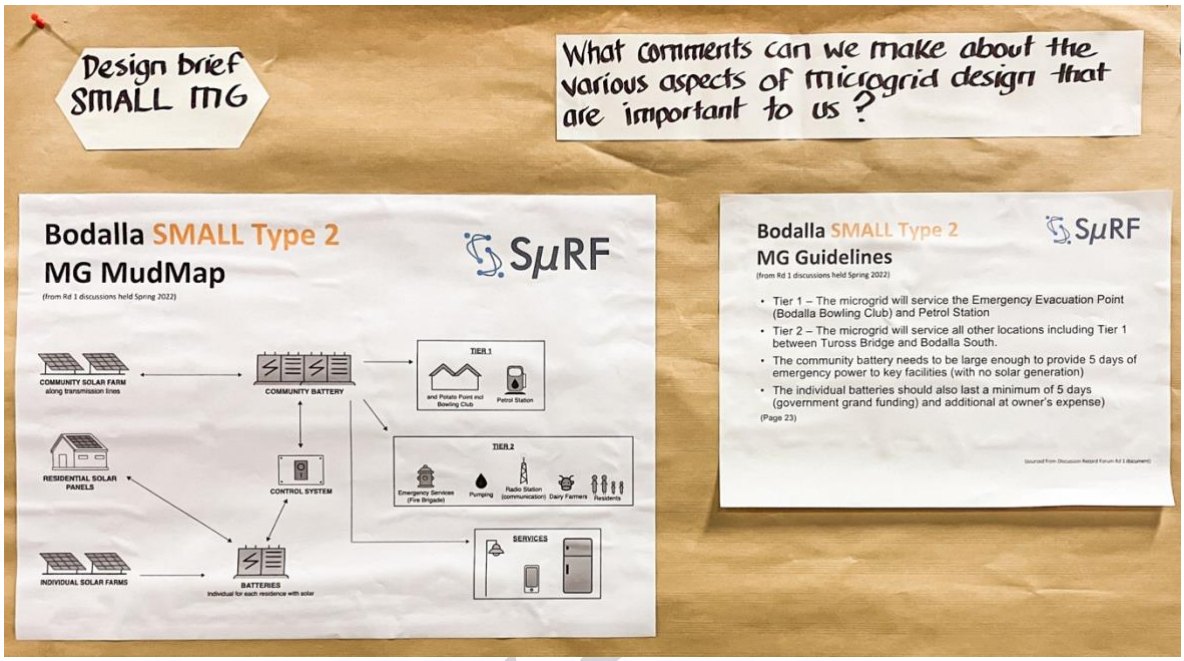
The analysis suggests that battery offered in the microgrid design by the SuRF team will provide almost half (0.4) a day of electricity in islanded (switched off from main) during a main grid outage.

If the community was to restrict their usage by 50% then the islanded time could be extended to 1.4 days

STEP 3

Small Microgrid: Design brief offered from Rd 1 community discussion group

The design brief was informed by the outcomes from the Round 1 consultations held during the Spring of 2022.

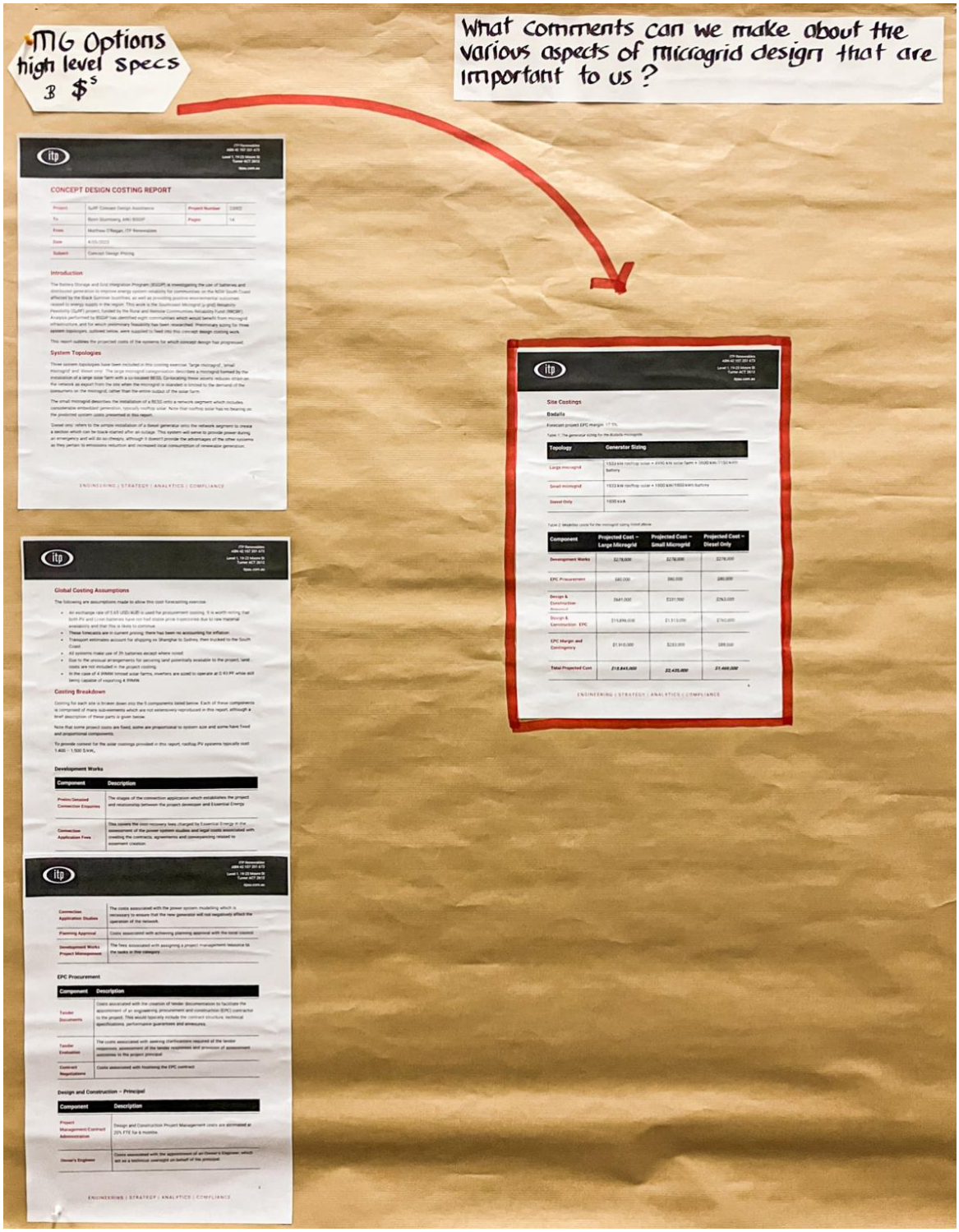


Moderator Notes…

STEP 3

Small Microgrid: High Level Design Concept

Technologies with technical specifications and costings compiled by the SuRF team for the small Microgrid were made available for comment.

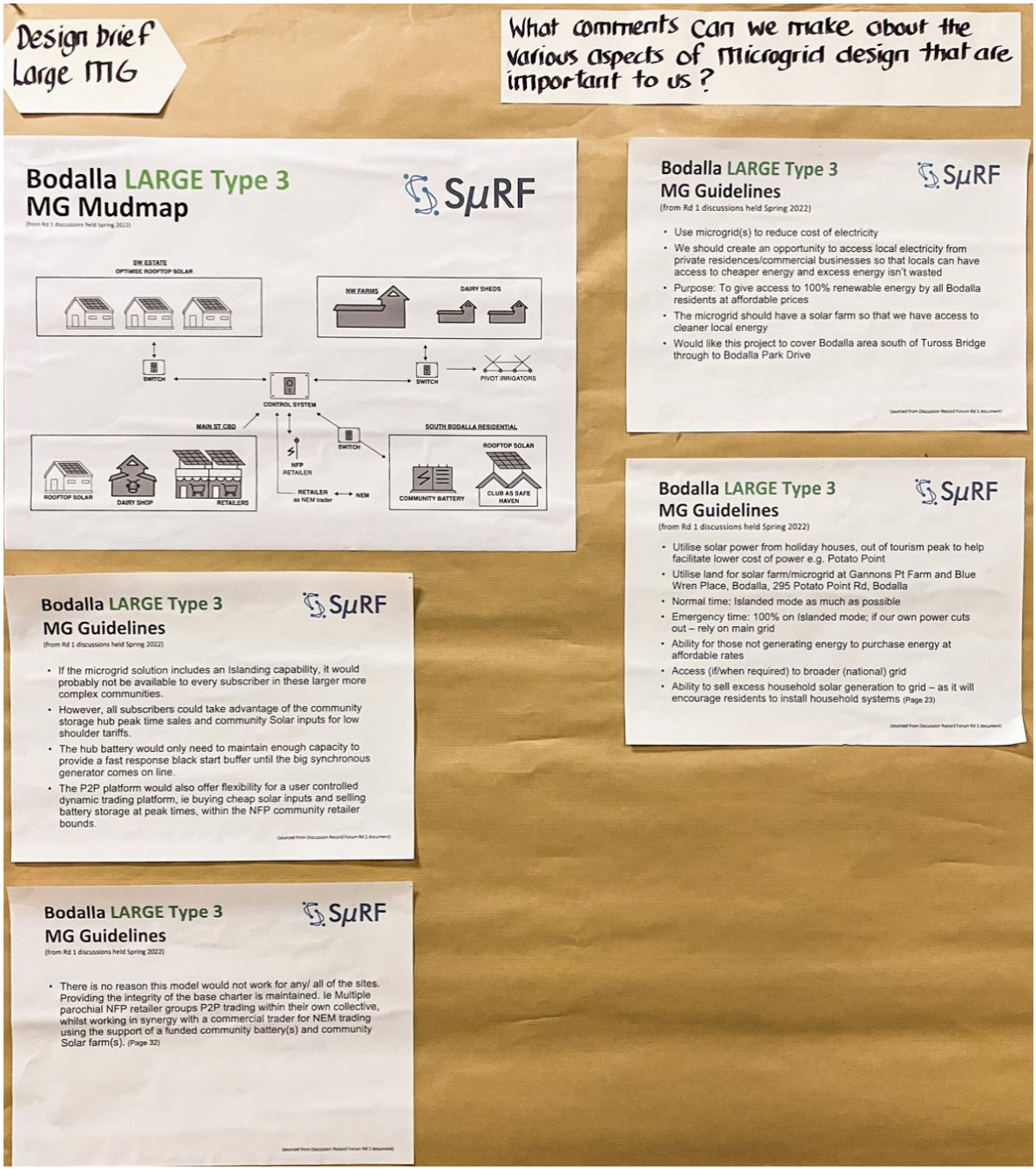


Moderator Notes…

STEP 4

Large Microgrid: Design Brief offered from Rd 1 community discussion group.

The design brief was informed by the outcomes from the Round 1 consultations held during the Spring of 2022.



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STEP 4

Large Microgrid: High Level Design Concept

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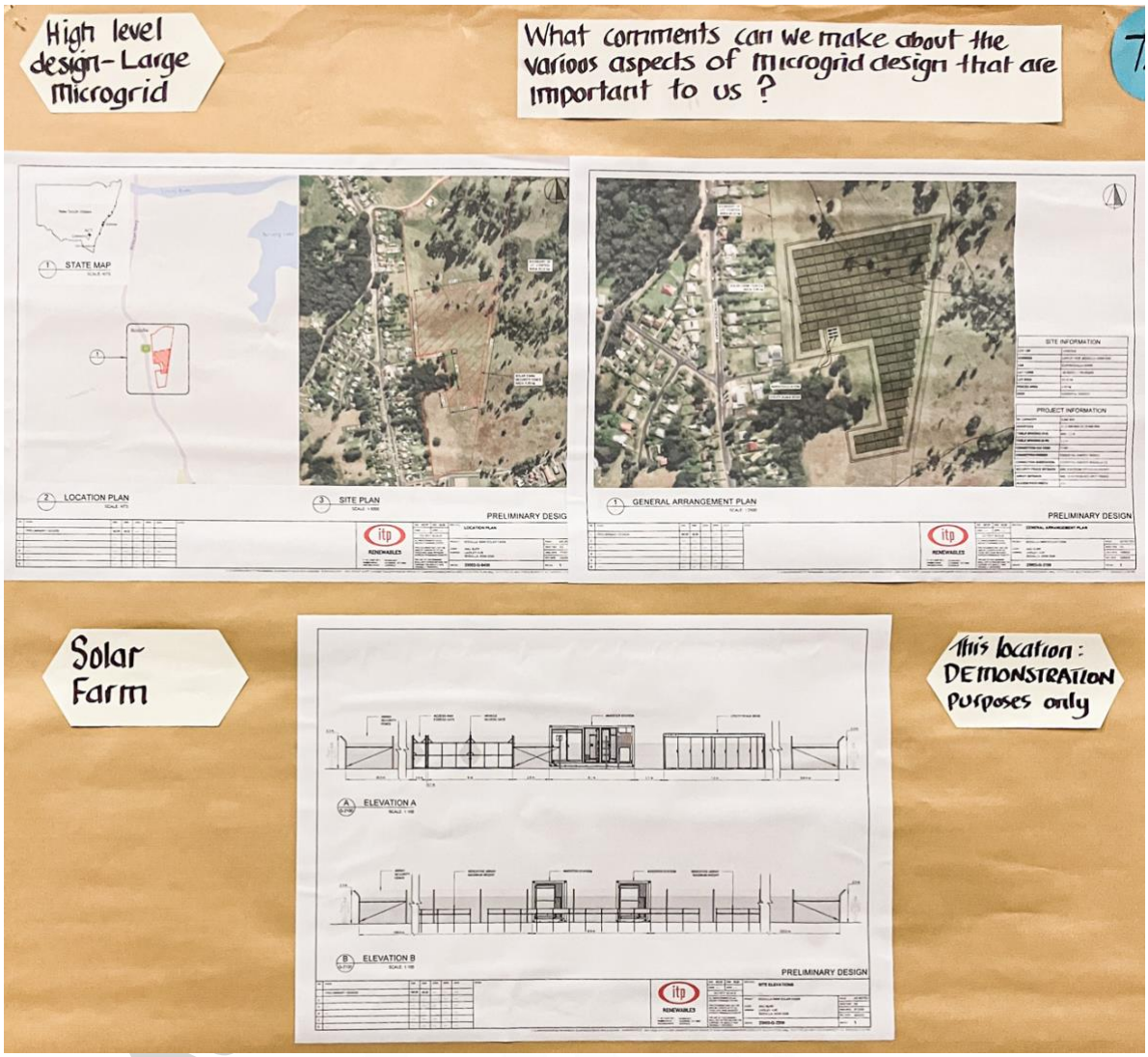

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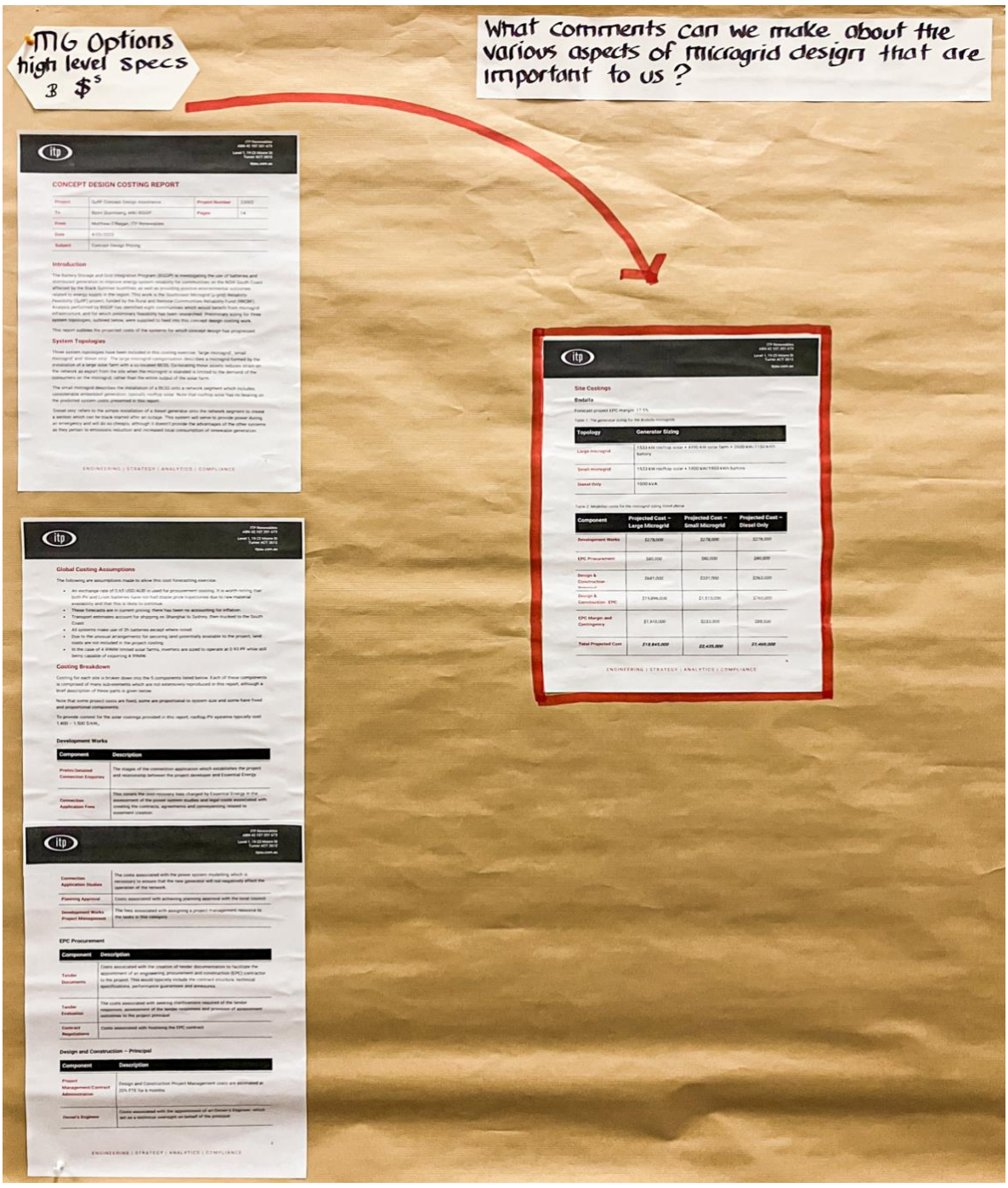
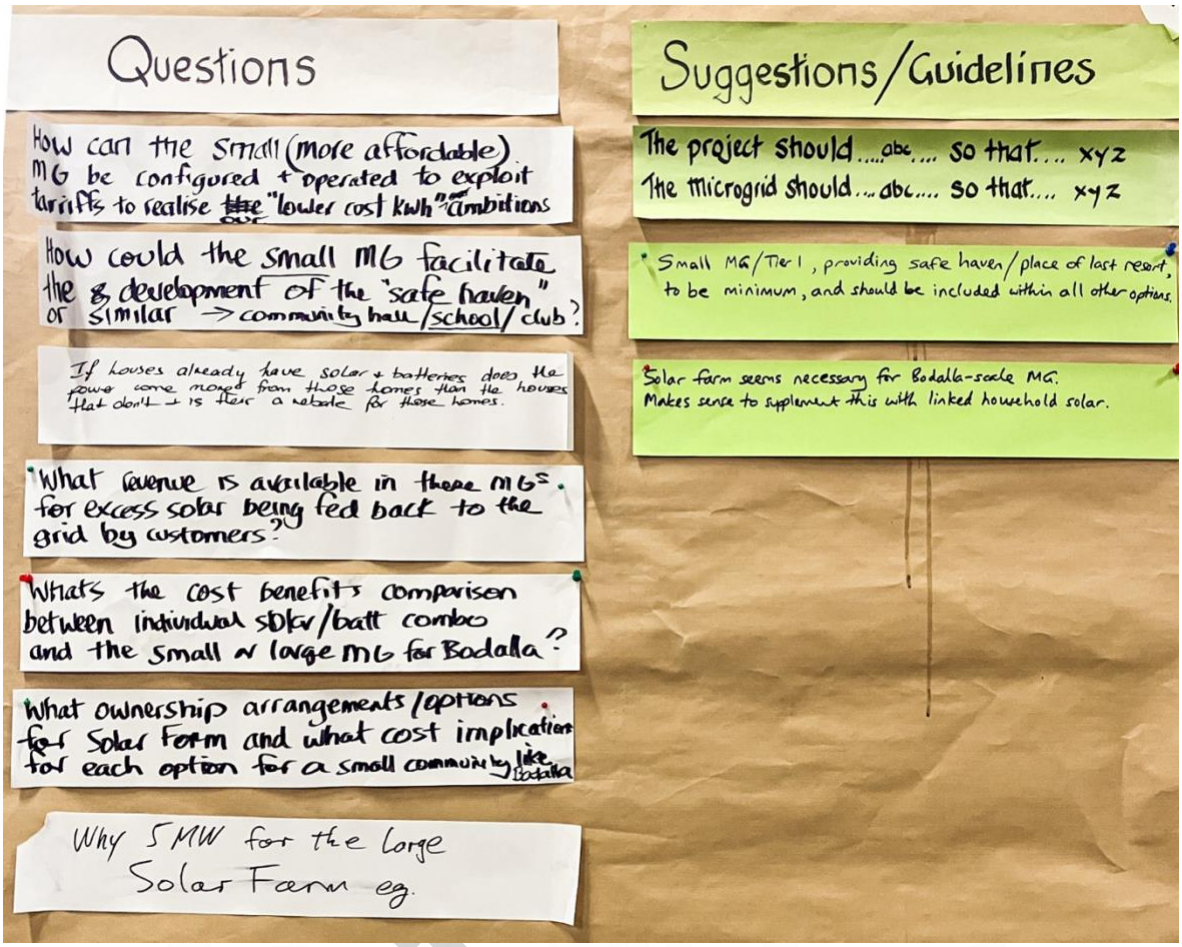


Moderator Notes…

STEP 5

Questions, Suggestions/Guidelines



QUESTIONS

QUESTION	RESPONSE FROM SuRF team
1. How can the small (more affordable) microgrid be configured and operated to exploit tariffs to realise our “lower cost kwh” ambitions?	
2. How could the small microgrid facilitate the development of the “safe haven” or similar (such as the community hall/school/club?)	
3. If houses already have solar and batteries does the power come more from those homes than the houses that don’t and is there a rebate for these homes?	
4. What revenue is available in these microgrids for excess solar being fed back to the grid by customers?	
5. What’s the cost benefits comparison between individual solar/battery combo and the small or large microgrid for Bodalla?	
6. What ownership arrangements/options for solar farm and what cost implications for each option for a small community like Bodalla?	
7. Why 5MW for the large solar farm?	

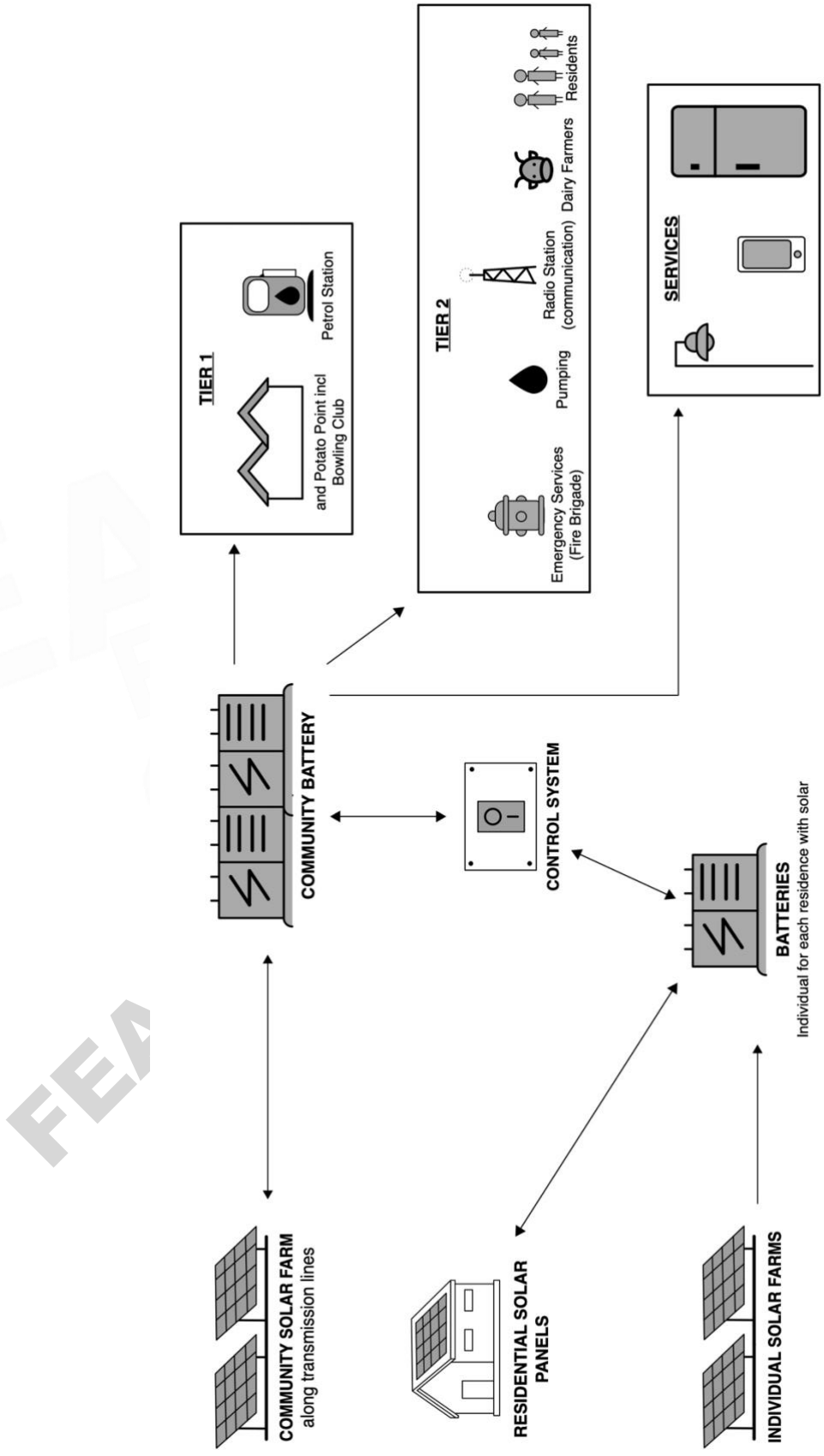
SUGGESTIONS/GUIDELINES

The project should … abc … so that … xyz
The microgrid should … abc … so that … xyz

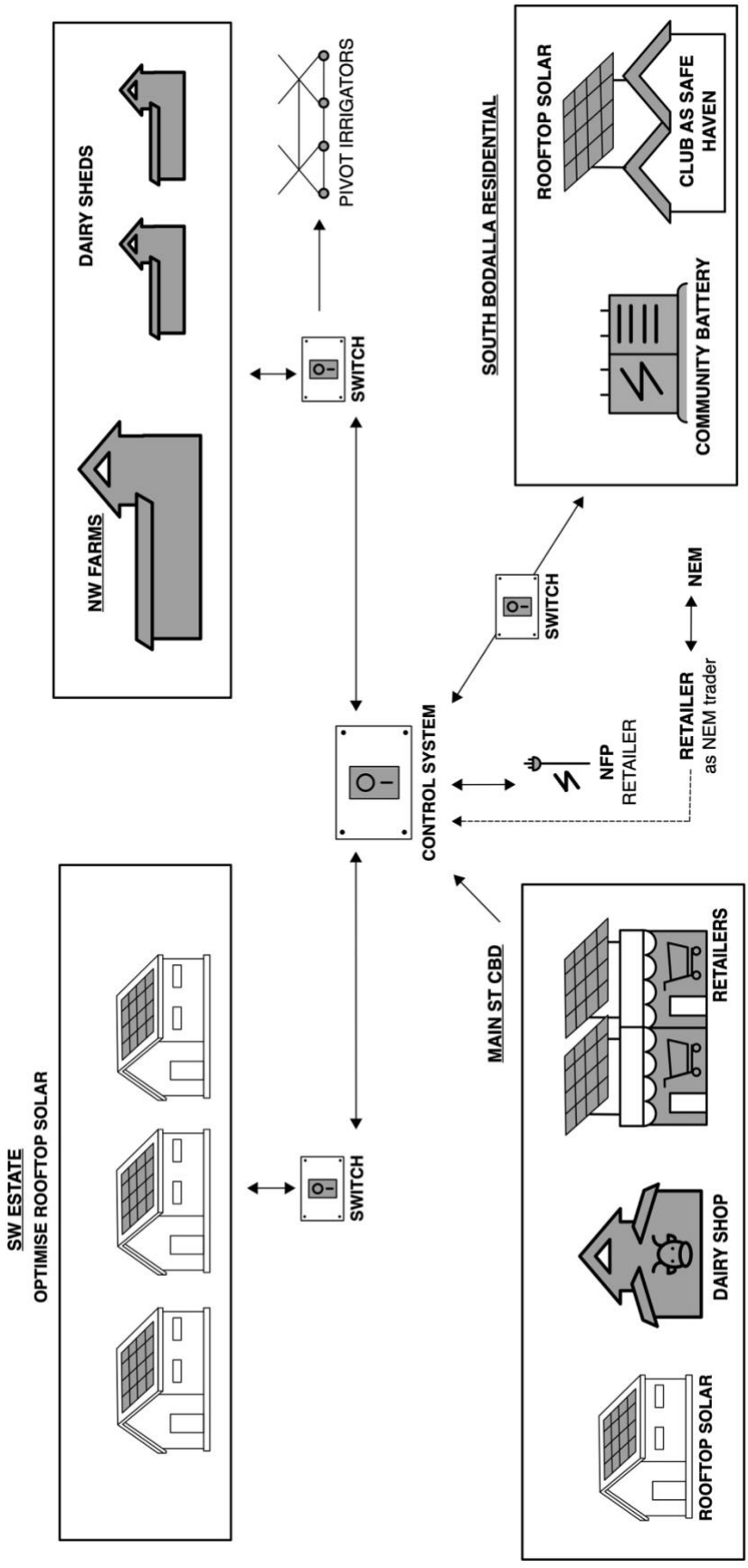
QUESTION	RESPONSE FROM SuRF team
Small Microgrid/Tier 1, providing safe haven/place of last resort, to be minimum, and should be included within all other options	
Solar farm seems necessary for Bodalla-scale microgrid. Makes to supplement this with linked household solar.	

APPENDIX

APPENDIX A: SMALL (Type 2) MG design mud map offered from Rd1



APPENDIX B: LARGE (Type 3) MG design mud map offered from Rd1



ACKNOWLEDGEMENTS

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The SuRF team would like to thank ITP for their valuable analysis and concept design insights.

The SuRF project team would like to acknowledge and thank the members of the Bodalla community who gave their time, provided their insights and support for this important Microgrid feasibility work

Donna Murray
Barry Ryan
Karyn Outten
Jim and Chris Longworth
Michael Brown
Valerie Faber
Tony Lowe

The SuRF project team acknowledges that we meet at various locations across the traditional lands of the Yuin People. We pay our respects to the Elders, past, present and future.

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