

ITEM NUMBER: 11.1

CONFIDENTIAL REPORT

ELECTRICITY PROCUREMENT BY POWER PURCHASE AGREEMENT

Pursuant to Section 87(10) of the Local Government Act 1999 the Report attached to this agenda and the accompanying documentation is delivered to the Audit and Risk Committee upon the basis that the Audit and Risk Committee consider the Report and the documents in confidence under Part 3 of the Act, specifically on the basis that Audit and Risk Committee will receive, discuss or consider:

- d. commercial information of a confidential nature (not being a trade secret) the disclosure of which –
 - i. could reasonably be expected to prejudice the commercial position of the person who supplied the information, or to confer a commercial advantage on a third party.

Recommendation – Exclusion of the Public – Section 90(3)(d(i)) Order

1. That pursuant to Section 90(2) of the *Local Government Act 1999* the Audit and Risk Committee hereby orders that the public be excluded from attendance at this meeting with the exception of the Chief Executive Officer and Staff in attendance at the meeting in order to consider Report No: 339/24 Electricity Procurement by Power Purchase Agreement in confidence.
 2. That in accordance with Section 90(3) of the *Local Government Act 1999* Audit and Risk Committee is satisfied that it is necessary that the public be excluded to consider the information contained in Report No: 339/24 Electricity Procurement by Power Purchase Agreement on the following grounds:
 - d. pursuant to section 90(3)(d) of the Act, the information to be received, discussed or considered in relation to this Agenda Item is commercial information of a confidential nature (not being a trade secret) the disclosure of which could reasonably be expected to prejudice the commercial position of the person who supplied the information, or to confer a commercial advantage on a third party by supplying financial and energy market details disclosed in the feasibility study.

In addition, the disclosure of this information would, on balance, be contrary to the public interest. The public interest in public access to the meeting has been balanced against the public interest in the continued non-disclosure of the information. The benefit to the public at large resulting from withholding the information outweighs the benefit to it of disclosure of the information.
 3. The Audit and Risk Committee is satisfied, the principle that the meeting be conducted in a place open to the public, has been outweighed by the need to keep the information or discussion confidential.
-

Item No: 11.1**Subject:** ELECTRICITY PROCUREMENT BY POWER PURCHASE AGREEMENT

Summary

The City of Holdfast Bay has the opportunity to purchase renewable electricity collectively with other Adelaide councils (Renew 6 group) that will deliver cheaper electricity costs and more stable electricity pricing than the indicative LGAP contract renewal offer. The proposed Power Purchase Agreement (PPA) will also provide cheaper renewable electricity certificates making the decarbonisation of Council's Scope 2 electricity emissions cheaper than current utility-bought Green Power.

To realise the above benefits of a retail PPA, the contract term needs to be around 7–10 years. The PPA contract term is much longer than the typical electricity contracts of 2-3 years.

Recommendation

1. **That the Audit and Risk Committee supports the Chief Executive Officer to enter into a collective retail PPA electricity procurement process with the Renew 6 councils.**

RETAIN IN CONFIDENCE - Section 91(7) Order

2. **That having considered Agenda Item 11.1 Report No: 339/24 Electricity Procurement by Power Purchase Agreement in confidence under section 90(2) and (3)(d(i)) of the *Local Government Act 1999*, the Audit and Risk Committee, pursuant to section 91(7) of that Act orders that the report and attachments be retained in confidence for a period of 12 months and/or the Chief Executive Officer is authorised to release the documents when a new energy contract is signed and that this order be reviewed every 12 months.**

Background

The City of Holdfast Bay joined with the Cities of Port Adelaide-Enfield, Salisbury, West Torrens, Onkaparinga and Town of Gawler in early 2024 to form a working group to collaborate on a feasibility study into options for collective long-term procurement including renewable electricity. The 'Renew 6' project group was formalised on 30 April 2024 (Attachment 1 – Renew 6 Terms of Reference).

Refer Attachment 1

The Renew 6 initiative arose from councils in South Australia experiencing high electricity prices, especially in the current LGA Procurement (LGAP) group electricity contract. The LGAP contract for large sites/meters is due to expire on 30 June 2025. Typically in the past,

councils had the option of going to market directly or joining the LGAP group purchase. PPAs have become the third option for council electricity procurement.

A retail PPA is a commercial agreement where an electricity consumer can purchase electricity directly from the electricity generator. The retail PPA is typically based on procuring electricity from renewable electricity projects within the same state and ideally from new projects. The aggregation of electricity purchases across councils over a long-time horizon creates a bankable asset which provides essential support for new generators to enter the market. The proposed PPA can have the extra benefit of adding new renewable generation which contributes to transitioning the electricity market towards 100% renewables for all consumers.

Council groups have increasingly collaborated to collectively procure renewable PPAs in both NSW and Victoria since 2020. Examples include the Victorian Energy Collaboration led by the Eastern Alliance for Greenhouse Action, a formal collaboration of eight councils in Melbourne's east, and the Central NSW Joint Organisation's Retail PPA procurement of 2022 for 16 councils.

The City of Adelaide was the first council in South Australia to secure a PPA to supply 100% renewable electricity. The Eastern Region of Adelaide (ERA) councils and City of Tea Tree Gully (TTG) have formed an alliance to purchase renewable electricity from a collective PPA contract. The ERA/TTG group (seven councils) have tendered recently for market offers for supplying 100% renewable electricity. Most other Adelaide metropolitan councils have explored the PPAs for electricity procurement.

With other Adelaide councils having secured a PPA or working towards one, there was interest by the Adapt West councils to explore the PPA option. Cities of Port Adelaide and West Torrens invited other councils to form a working group to explore the option of a collective PPA. The Senior Leadership Team approved the inclusion of Holdfast Bay to the PPA project group for the Stage 1 feasibility study (19 February 2024). A project working group was set up to shape the collective goals and the structure of the Stage 1 Feasibility Study.

The Renew 6 group posted a tender on 12 March 2024 for an energy consultant to conduct a feasibility assessment into options for collective procurement of electricity (Attachment 2 – Tender Project Brief). Presync was selected as the successful consultant in April 2024. Their experience as the energy consultant for the ERA/TTG group was quite valuable with Presync now managing their Stage 2 electricity procurement.

Refer Attachment 2

For the Feasibility Study, Presync collected electricity data from all member councils to create a model to better understand both the size and timing of the combined electricity load. They also conducted a survey to gauge the risk appetite of the member councils.

Presync completed their feasibility study and issued a final report for each member council. (Attachment 3 – Presync Final Report). Their report confirmed that the aggregated load of Renew 6 group was large enough to secure a retail PPA with favourable indicative pricing.

Refer Attachment 3

By September 2024, the majority of metropolitan Adelaide councils have secured, are pursuing or considering a PPA in preference to the familiar LGAP electricity procurement. By securing electricity directly from the renewable generator, the PPA provides a cheaper price for both electricity and the related renewable electricity certification. Even though the electricity grid in South Australia is aiming to be 100% renewable by 2027, claiming 100% renewable electricity for SA councils for formal carbon neutral certification (e.g. Climate Active) will still require the retirement of renewable electricity certificates (e.g. Green Power, Large Scale Generation Certificates) to establish 100% renewable claims and avoid the double-counting for renewable electricity exported from South Australia to the other states in the National Electricity Market.

Report

With the first stage (Feasibility Study) completed, the Renew 6 Councils are considering the merits and risks of moving to the second stage (Electricity Procurement). At this stage, four of member councils have committed to test the market via a competitive tender process. The City of Onkaparinga are also considering the option of joining the Renew 6 second stage. The District Council of Mount Barker and the Adelaide Hills Council have separately expressed an interest in joining the Renew 6 group for the Stage 2 procurement.

City of Holdfast Bay is a relatively small consumer of electricity (2.3 GWh/year), so it does not have the electrical load to pursue a favourable electricity contract on its own, compared with the larger councils such as City of Adelaide (20 GWh/year) or City of Salisbury (10 GWh/year). To secure cheaper electricity prices than those offered by LGAP/Iberdrola, Council will need to join other council alliances to participate in a PPA. If Council declines to be part of this Renew 6 procurement stage, it is unlikely that another opportunity to participate in an Adelaide-based PPA procurement will emerge.

A summary of the benefits and downsides of the PPA is outlined below. Refer to Attachment 3 – Presync Final Report for further detail.

Benefits of a PPA

- The reduced electricity price compared with the current LGAP renewal offer.
- The reduced price volatility improving budget certainty.
- Virtual net metering:
 - The PPA contract allows for all included council sites/meters to be treated as single virtual meter. This would enable photovoltaic (PV) solar excess at one site (e.g. Works Depot) to be 'transferred' to another council site. This would enable the future development of PV generation and electric vehicle (EV) consumption to be optimised at a whole-of-council level rather than at any particular site.
- Opportunities to include social licence aspects into the PPA contract such as local biodiversity improvement or local indigenous employment.
- The opportunity to facilitate construction of new renewable electricity generation.

- The opportunity to build a strong linkage in the community between the council electricity purchases and its renewable electricity generator (e.g. City of Adelaide and their main supplier, Clements Gap wind farm in mid-north SA).

Downsides of a PPA

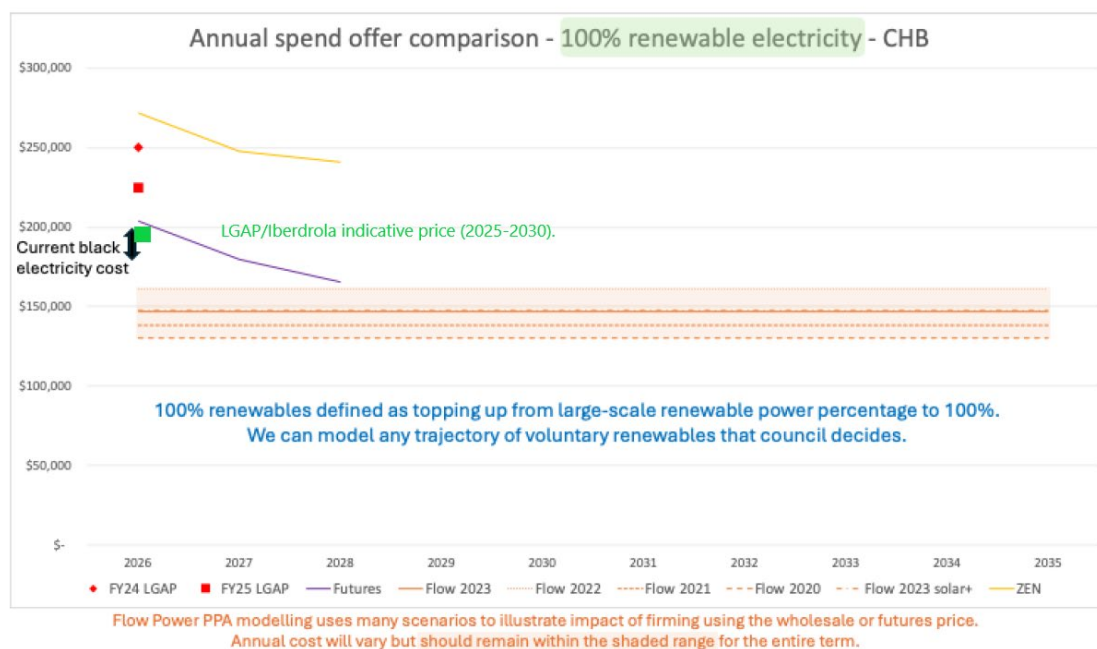
- Renew 6 membership
 - The Renew 6 member councils are still firming up for Stage 2 (PPA procurement). Four councils have executive approval to proceed with the PPA procurement. Cities of Holdfast Bay and Onkaparinga are still considering the merits of joining the PPA procurement stage. District Council of Mount Barker and Adelaide Hills Council have also expressed interest in joining the Renew 6 PPA procurement group.
 - The 'fluidity' of the final Renew 6 member councils is impacting on timelines for going to tender and finalising the ACCC authorisation.
- Long-time horizon (PPA contracts range from 5.5 years to 10 years)
 - Longer the contract length requires high level approval compared to business-as-usual procurement.
 - Hard to get fixed reference points, as firm prices rely on firm commitment of member councils to purchase (both with the PPA and the LGAP BAFO).
- Possible to be paying a higher price in the final years of the contract term.
 - The price and volatility of electricity is expected to remain with world energy markets exposed to political upheaval (e.g. Ukraine war) and lack of bipartisan support for an orderly transition of the National Electricity Market from fossil fuel generation to renewable energy generation.
 - ERA/TTG group gave their preferred time range of 5.5 years (match the current LGAP extension) to 10 years. It is expected the longer term will give a better price over the life of the contract.
- ACCC authorisation
 - As part of the risk assessment, the Renew 6 have sought advice from MinterEllison regarding the need to have authorisation from the ACCC to purchase electricity as a single group and avoid the legal risk for acting as an illegal cartel.
 - The advice from MinterEllison was conservative compared with the advice given to the ERA/TTG group and the experience of Presync setting up similar arrangements in the eastern states.
 - The Renew 6 group will seek authorisation from the ACCC. Due to the timeframe for the final authorisation, we will seek interim authorisation from ACCC to commence procurement.
- Load matching
 - To secure a lower price from the Renewable Electricity (RE) generator, there needs to be a close match between generator supply and consumer demand. Gaps between these two aspects are met with the wholesale

- market price. Large gaps between the two can create price risk as the wholesale electricity market can fluctuate a lot.
- The best strategy for both parties is to closely align generation and consumption on 30-minute intervals. Modelling so far shows that Council's electricity load is at its maximum in the evening and in the winter due to our largest load, street lighting so a windfarm would be a better match than say a solar farm.

LGAP contract renewal

During the hold point between the completion of the Feasibility Study (Stage 1) and the group re-forming for the PPA Tender (Stage 2), LGAP have secured an unsolicited offer from Iberdrola (current provider) to extend the current LGAP electricity contract from 1 July 2025 through to 31 December 2030. Council joined the first round of the LGAP Expression of Interest for Iberdrola to give an indicative electricity price based on the estimated contract size (GWh/year).

In-house modelling shows that the Iberdrola indicative contract renewal electricity pricing is lower than the previous two years with the LGAP/Iberdrola contract. However, the indicative Iberdrola pricing is not as low as the indicative PPA pricing as shown in the figure below. For further information see section 5 in Attachment 3 – Presync Final Report.



The LGAP/Iberdrola Best and Final Offer (BAFO) was expected to be posted on 8 October 2024 with councils having only two days to accept/sign the BAFO. Initially, some councils wanted the BAFO delayed so that PPA pricing/market offer could be firmed up. LGAP responded with an early close date for their BAFO. LGAP has since delayed their BAFO round until there is more certainty about the final number of councils joining (and staying) in the BAFO process.

The ERA/TTG tender will close in early October. While Council may not have access to the PPA pricing submitted as part of the ERA/TTG tender, it is likely that we will have an indication of the number of competitive tenders and the strength of pricing compared with the recent LGAP/Iberdrola indicative pricing. The outcome of the ERA/TTG tender will provide a further indication of the market prior to the Renew 6 group procurement stage.

Summary

The purpose of the Stage 1 Feasibility Study was to identify options for collective procurement of renewable electricity. Presync have provided a final report for each member council of the Renew 6 group with electricity/financial modelling based on the individual council.

To reduce the risk of high electricity costs and matching price volatility, Presync recommends that Council pursue a collective retail PPA with the Renew 6 councils. The linking of electricity consumption to the lowest-cost generation (i.e. new renewable electricity generators) provides the basis for cheaper electricity, pricing stability and support for decarbonising our electricity emissions in a cost-effective manner.

The feasibility study confirmed that a collective PPA was a viable alternative to LGAP electricity contract, with the combined electricity consumption large enough to secure a retail PPA. Having approval for Council to move to Stage 2 (PPA procurement) with the other Renew 6 councils would enable Council to have a more options for electricity procurement.

Budget

Stage 1 – Feasibility study completed within operational budgets.

Stage 2 – Group procurement estimated to be \$5,000 to \$10,000 per Council depending on the final number of participating councils. This is to be completed within 2024-25 operational budget.

Stage 3 – Contract management to be an additional \$12,000 per year into the operating budget. This is expected to be offset by significant energy cost savings.

Life Cycle Costs

Not applicable

Strategic Plan

Sustainability objective 2020-2030 to “*become a carbon-neutral council by 2030*”

An early goal of the Council’s *Carbon Neutral Plan* is the purchase of 100% accredited renewable electricity for Council’s operations. This goal has been achieved from early 2023 through the on-going purchase of 100% GreenPower from our electricity supplier, Iberdrola. Indicative pricing from the Presync’s Stage 1 Feasibility Study shows that the purchasing of renewable electricity certificates directly from the PPA generator is the most cost-effective way to ensure the purchased electricity is 100% accredited renewable.

Council Policy

Not applicable

Statutory Provisions

Not applicable

Written By: Climate and Utilities Data Officer

A/General Manager: Assets and Delivery, Mr B Blyth

CONFIDENTIAL

30–April -2024

Terms of Reference – Project Steering Group

Feasibility assessment into options for collective procurement of electricity

Introduction

This Terms of Reference (ToR) provides a governance and project management framework to deliver a multi-council approach to undertaking a feasibility study.

Background and Objectives

The Cities of Port Adelaide Enfield, Salisbury, West Torrens, Holdfast Bay, Onkaparinga & Town of Gawler (the Project Group) have agreed to collaborate on a feasibility assessment into options for collective long-term electricity procurement including renewable electricity.

The City of PAE will lead the project including procurement with assistance from City of Salisbury and guided by the Project Group.

The feasibility assessment will compare short term (business as usual) to various long-term electricity procurement options that could not only secure a more desirable electricity pricing in the long run, but also enable entry into purchase of certified renewable electricity for councils that want to. This may include entering into Power Purchasing Agreements (PPAs), establishment of Virtual Power Plants (VPPs) or other innovative arrangements.

Based on findings of the feasibility assessment the members of the Project Group will independently decide whether to pursue stage two of the project which would involve a procurement process for a long-term electricity arrangement and require establishment of new governance arrangements (such as a Memorandum of Understanding between participating councils).

Key objectives of the feasibility assessment project include:

- Reduction in corporate greenhouse gas emissions by accessing renewable electricity in a cost-effective manner (lower than current green power pricing) that reflects renewable energy prices and the need for reliable, stable energy supply (maintaining the output from a variable, intermittent power source, such as wind or solar, for a committed period of time).
- Reduction in volatility in electricity pricing and increase budget certainty.
- Support future electricity procurement processes.
- Identify electricity procurement options that deliver best return for councils in terms of cost and supporting decarbonisation goals, whether than be procuring electricity as a group or as sub-groups.
- Improve knowledge on renewable energy internally and better understand the latest renewable energy procurement strategies that can respond to a rapidly changing electricity market.
- Create the option to work together either as a group or sub-groupings on joint procurement should this be recommended pathway as part of feasibility.
- Improved billing:
 - clear itemisation of cost components and cost rates presented in a consistent manner with adequate description.
 - Disclosure of market based renewable electricity percentages (including mandatory renewables allocated to the grid and claimable, plus additional voluntary renewables)

- Disclosure of market based GHG emissions (and location based GHG emissions for context and dual reporting).

Governance Framework

A Project Steering Group with representatives from each participating council is established to provide governance and guidance for the feasibility study stage of the project. If participating councils decide to proceed to stage two (procurement) a new and separate agreement will be established.

Each participating council has nominated 1-3 representative/s to participate in the Project Steering Group and up to eight members to participate in the Tender Evaluation Group as listed in the Table 1 below.

1. **Project Steering Group:** Representatives from participating councils with skills and expertise in utilities management, sustainability and/or procurement to guide the project.
2. **Evaluation Group:** Up to eight members of the Project Group who are responsible for evaluation and making a recommendation on the consultancy proposals.

Table 1. Project Steering and Evaluation Group Membership.

| Name | Position | Council | Evaluation Group |
|---|--|--------------|---------------------|
| Ben Leonello Project Lead | Sustainability Coordinator | PAE | Yes |
| Lara Daddow Sub- Project Lead | Coordinator Strategic Sustainability | Salisbury | Yes |
| Maren Butz | Utilities Optimisation Lead | PAE | Yes |
| Michael Pavlovich | Energy & Lighting Specialist | Salisbury | Yes |
| Jon Foong | Manager Urban, Recreation and Natural Assets | Salisbury | No |
| Nicky O'Broin | Team Leader Sustainability | West Torrens | Yes |
| Gordon Andersen | Manager Strategy and Business | West Torrens | No |
| Tim Kelly | Environment & Sustainability Officer | Gawler | Yes |
| Bryce Norton | Manager Strategy | Gawler | No |
| Ben Calder | Senior Strategic Planner | Onkaparinga | No – But Preferable |
| Rachel Hamilton | Net Zero Coordinator | Onkaparinga | No |
| Charles Ling | Carbon and Utilities Data Lead | Holdfast Bay | Yes |
| Alex Gaut | Team Leader Environment & Coast | Holdfast Bay | No |

Frequency of Meetings

Meetings of the Project Steering Group and the Evaluation Group will be arranged by Cites of PAE and Salisbury as required depending on need. A more structured and formalised schedule will be agreed once a consultant is engaged.

Communication Protocols

All project communications should be directed to Project Lead (PAE) in the first instance unless otherwise agreed. As a fallback contact can be made with the Sub Project Lead (Salisbury).

Project Lead and Sub Project Lead will prepare agenda's, minutes and actions from Steering Group meetings.

Members to advise the Project Steering Group if any media or community enquiries about the project are received and any public response should be agreed with the Project Steering Group.

Any information shared within the Project Steering Group organisations or with Council Members about the project should be treated as confidential.

Responsibilities & Key Focus Areas

- For those who have nominated, participation in a group face to face evaluation meeting (to be hosted by PAE) in April 2024 to assess RFP submissions.
- Gain access and monitor MS Teams site.
- Support and facilitate cross council information transfer and learnings.
- Provide information sources and electricity load data in a timely manner given tight timeframes set for Stage 1 – to be guided by engaged consultant.
- Attend workshops and briefings facilitated by Project Lead and consultant.
- Attendance at Project Steering Group Meetings.
- Provide internal EM and Exec briefings and updates as appropriate, to maximise success of project.
- Monitor and contribute to the project risk register to be managed by Project Lead.

Financial


- Each Council to equally fund the cost of the feasibility study (estimated to be no more than \$5000 per council) and process any invoices sent through City of PAE in a timely manner ahead of the end of FY 23/24.
- Commence budget planning for 24/25 (estimated to be \$10,000 per Council) for those councils interested in participating in procurement Stage 2. A separate MOU will need to be developed for stage 2 between participating Councils that would be attached at a later date to this Terms of Reference.

Contractual

The authorised representatives listed below have agreed for PAE to enter into the contract with the supplier "Presync", and they confirm their commitment to the responsibilities and payment fees as stated above.

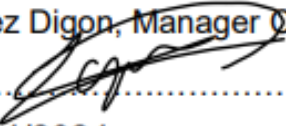
City of Port Adelaide Enfield

Ann Gibbons, Team Leader Environment

Signature: 
Date: ...29/04/2024.....


City of Salisbury

Leandro Lopez Digon, Manager City Shaping

Signature: 
Date.....30/04/2024.....


Nicky O'Broin

Team Leader Sustainability

Signature: ... 
Date.....29/04/2024.....


City of Holdfast Bay

Alex Gaut, Team Leader Environment & Coast

Signature: ... 
Date...29/04/2024.....

Town of Gawler

Bryce Norton, Manager Strategy

Signature: 
Date.....29 April 2024.....

City of Onkaparinga

Ben Calder, Senior Strategic Planner

Signature: ... 

Date.....29/4/24.....



PART B: Project Brief



| | |
|------------------|---|
| RFP Number: | TCN010/24 |
| RFP Description: | Feasibility assessment into options for collective procurement of electricity |

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1. BACKGROUND

For the purpose of this investigation, the **Cities of Port Adelaide Enfield, Salisbury, West Torrens, Holdfast Bay, Onkaparinga & Town of Gawler** (termed “Project Group” for the remainder of this brief), is looking to compare short term (business as usual) and long -term options for collective procurement of electricity (including renewable electricity).

Each of the six Council’s have their own strategic documents and policy context that address accelerating the reduction of greenhouse gas emissions and transitioning to sustainable operations. The includes:

1. **City of Port Adelaide Enfield** endorsed a corporate ‘[Net Zero Emissions Plan](#)’ to establish a pathway to net zero by 2030.
2. **City of Salisbury** adopted the [Sustainability Strategy 2035](#) that includes an action “Develop a new Organisational Carbon Emissions Reduction Action Plan 2030 to work towards carbon neutrality by 2035”.
3. The **City of West Torrens** has recently endorsed its [Climate Mitigation and Adaptation Strategy 2023-2027](#) , which includes a goal to become a low carbon council.
4. Through its [Climate Emergency Action Plan 2022-2030](#), **Town of Gawler** is striving for net zero emissions for Council operations by 2030 and enabling community emissions reduction towards net zero by 2030.
5. The **City of Holdfast Bay** has endorsed a corporate [Carbon Neutral Plan](#) to prioritise actions towards carbon neutral by 2030.
6. The **City of Onkaparinga** endorsed a corporate [Climate Change Response Plan 2022 - 2027](#) and an additional 25 actions to help the City of Onkaparinga reach its goal of net zero carbon emissions by 2040.

Electricity consumption currently represents a large percentage of the Project Group’s corporate greenhouse gas emissions. Facilitating the procurement of affordable and renewable electricity is therefore a key priority for the Project Group.

However, volatility in the electricity and gas markets has meant a rise in cost of electricity.

For the reasons above, the Project Group is looking to engage a suitably qualified / experienced consultant to undertake a feasibility assessment comparing short term (business as usual) to various long term electricity procurement options for the group that could not only secure a more desirable electricity pricing in the long run, but also enable entry into purchase of certified renewable electricity for councils that want to. This may include entering into Power Purchasing Agreements (PPAs), establishment of Virtual Power Plants (VPPs) or other innovative arrangements.

Refer to **Appendix 1** for the respective load sizes for each of the six councils to assist development of responses.

Key project objectives include:

- Reduction in corporate greenhouse gas emissions by accessing renewable electricity at a fair price (lower than current green power pricing) that reflects renewable energy costs and the need for reliant, stable energy supply (maintaining the output from a variable, intermittent power source, such as wind or solar, for a committed period of time).
- Reduction in volatility in electricity pricing and increase budget certainty.
- Support future electricity procurement processes.
- Improve knowledge on renewable energy internally and better understand the latest renewable energy procurement strategies that can respond to a rapidly changing electricity market.
- Explore and recommend procurement options that deliver best return for each council, whether that be procuring electricity as a single group or as sub-grouping.

A Project Steering Group will be established to work with the consultant, which would include representatives of each participating council (the Project Group).

2. REQUEST FOR PROPOSALS

The Project Group is seeking a return brief that meets the following requirements:

Stage 1 Feasibility Study

Undertake a feasibility study into options for purchasing electricity, with consideration of:

- Comparing current short term electricity procurement arrangements (including green power) against various long term electricity procurement options (for different load types and renewable electricity options) with respect to affordability and the decarbonising objectives of councils.
- Advice on whether to work together either as a group or sub-groupings on joint procurement should a long term arrangement be recommended (such as a Power Purchase Agreement).
- Opportunities to integrate optional add on components including:
 - Participation in a commercial Virtual Power Plant (VPP). This would primarily allow linkage to council 'Distributed Energy Resources' (e.g. current and future back-up generators, battery energy storage including from bi-directional electric fleet charging).
 - Inclusion of new below 100KW and above 100KW solar systems including solar farms.

- Consider a range of issues, uncertainties and risks including:
 - Upfront and ongoing costs;
 - Logistical and legal practicalities;
 - Australian Competition and Consumer Commission (ACCC) [authorisation](#) ;
 - Load generation matching with an understanding of each council's current and likely future electricity needs;
 - Optimum load and duration of commitment;
 - Return on investment;
 - Contract term and management;
 - Expertise required for ongoing management of contract;
 - Solar feed in tariff analysis and opportunities to maximise revenue;
 - End of solar feed in tariff scheduled for 2028;
 - New interconnector in 2026 resulting uncertainty in the futures market;
 - A rapidly decarbonising South Australian electricity grid;
 - Not all Project Group NMIs are supported by smart meters and the feasibility to consider switching at a later stage to accommodate a future PPA.
 - Reliability of power supply;
 - Any other risks and benefits to Project Group profiles: noting a mix between large sites, small sites, 12-24 hour streetlighting.
 - Defining 100% renewable electricity use (market based, location based accounting and default renewables allocation)

The feasibility study project shall involve the following components at a minimum:

- Initial briefing between consultants and Project Steering Group
- Data analysis (data to be provided by Project Steering Group)
- In-person workshop(s) to discuss the outcomes/recommendations
- Written report of results and recommendations for each council, with recommendations on how to implement the next steps.

Stage 1 shall be delivered within 2-3 months of engagement and is to be delivered within the 2023/24 financial year. The indicative budget for this project is approximately \$25,000 - \$30,000, so the project should be scoped accordingly.

A hold point will then be imposed to enable each council to consider the recommendations of Stage 1 before determining to proceed to the Stage 2 procurement phase.

The return brief for the feasibility study (Stage 1) could include a range of items outlined in further detail in **Appendix 2**.

Stage 2 - Procurement

Optional pricing is also sought from each participant council to engage a consultant separately to manage and run a procurement process on its preferred option recommended in the Stage 1 feasibility assessment. It is envisaged that Stage 2 would need to be delivered between Feb-March 2025 (or at an optimum time recommended by consultant) ahead of the LGAP electricity contract renewal in June 2025.

3. RFP EVALUATION

The evaluation criteria are (not necessarily in order of weighting):

| Criteria | Sub Criteria |
|--|---|
| Capacity | Availability to undertake work and proposed timeframe. |
| | Public Liability and Professional Indemnity Insurances |
| Capability - Experience & Performance | Proven experience in presenting and facilitating large groups. |
| | Extensive applied knowledge and experience of electricity data analysis, modelling and renewable energy procurement processes, in particular landing long term renewable energy contracts such as PPAs on behalf of Australian clients including Australian Councils. |
| | Demonstrated ability to effectively work in a complex environment across multiple organisations and effectively manage competing priorities. |
| | Demonstrated ability to engage stakeholders at all levels. |
| Methodology | Meets objectives and scope of brief and is well thought out, maximising success and linking in innovation. |
| | Staff engagement |
| | Presentation in a simplified and accessible format |
| | Benefit realisation and monitoring |
| Price | Value for money on each project deliverable and schedule of hourly rates for contractor personnel. |
| Corporate Social Responsibility | Local supplier, sustainable and environmental accreditations/ management systems & modern slavery initiatives. |

Short-listed respondents may be required to make a presentation in support of their submission to the selection panel.

4. TERMS AND CONDITIONS

Following the initial evaluation of tender submissions, the Project Group will determine whether it will proceed with one or multiple respondents. Councils reserve their rights to cease the process at any point in time.

At this time, the tender assessment panel may convene meetings and seek further information from the respondent(s) about their proposal to enable councils to effectively assess the viability and expected outcomes.

The Project Group reserves the right to award future projects to the successful Respondent(s), subject to performance, budget, and agreement on fees, and procurement policy.

5. DISCLAIMER

The information set in this RFP is not intended to be exhaustive and respondents should make their own enquiries regarding the contents of this invitation.

Neither the Council, the contact person nor any employee, agent or contractor of the Council provides any warranty or makes any representation, expressed or implied, as to the completeness or accuracy of the information either contained in or in connection with this Request for Proposal.

A respondent must undertake its own enquiries and satisfy itself in respect of all matters contained in any information provided to it.

6. RESPONDENT ACKNOWLEDGEMENTS

Each respondent agrees and acknowledges that:

- They have fully informed themselves of all conditions and matters relating to the RFP;
- They have sought and examined all necessary information which is obtainable by making reasonable enquiries relevant to the risks, contingencies and other circumstances;
- They do not rely on any expressed or implied statement, warranty, representation, whether oral, written or otherwise, made by or on behalf of the Councils, the contact persons or any employee, agent or contractor of any of the Councils;
- They have relied on their own investigations and enquiries in lodging a written response; and
- The Councils, the contact persons and any employee, or agent of the Councils are not liable for any incorrect or misleading information or failure to disclose information whether in connection with this RFP or any document attached to or related to it including any information on the website.

Appendix 1 – Project Group Load Summary Table 2022/23 FY

| SA Council | Above 160 (GWh) | Below 160M (GWh) | Unmetered 12/24 hour (GWh) | TOTAL (GWh) |
|--|--------------------|---------------------|----------------------------------|----------------|
| City of Port Adelaide Enfield (2022/23 FY) | 1 | 1.5 | 4.6 | 7.1 |
| City of Salisbury (2022/23 FY) | 3.9 | 1.6 | 4.2 | 9.7 |
| City of West Torrens (2021/22 FY) | 1.2 | 1.4 | 0.9 | 3.5 |
| City of Holdfast Bay (2022/23 FY) | 0.8 | 0.8 | 0.7 | 2.3 |
| Town of Gawler (2022/23 FY) | 0.5 | 0.3 | 0.8 | 1.6 |
| City of Onkaparinga (2022/23 FY) | 2 | 1.8 | 4.4 | 8.2 |
| | 9.4 | 7.4 | 15.6 | 32.4 |

Appendix 2 – Detailed Scope Guidance

The return brief for the Stage 1 Feasibility Study could include:

Stage 1 – Feasibility Study

1.1 Inception Meeting

- a. Clarify and discuss project deliverables, objectives.
- b. Presentation of educational material and substantial discussion on the current situation, opportunities and challenges.

Provision of Council Electricity Data

- c. Provision of electricity data from each council for small, large and 12-24 hour lighting NMIs (inclusive of current 2024 contract arrangements and tariffs to establish a baseline).

1.2 Preliminary Analysis

- d. Analyse current electricity usage and cost over a recent 12-month period, taking into account recent and anticipated future efficiency projects, solar installations, VPP opportunities and any addition of new facilities (e.g. Flex).

1.3 Phase 1 - Modelling

Develop a model capable of calculating each council's future electricity spend under business-as-usual and a variety of long term electricity procurement options (to be agreed by Project Group), in terms of:

- load types
- load profile and total consumption
- peak, shoulder and off-peak charges
- cost (inclusive of consumption, network environmental, regulatory and any associated charges such as meter reading)
- corporate greenhouse gas reduction impact
- solar feed in tariff revenue/costs

Create a business-as-usual baseline scenario using current and expected future electricity costs.

1.4 Informal Market Sounding & Advice

Undertake informal market sounding and seek advice from select retailers to determine indicative projects, contract structures and pricing that are currently

available in SA. This should also include consideration to the full list of issues, uncertainties and risks mentioned in in Section 2 in the main brief.

1.5 Phase 2 - Modelling

Model future costs under likely long term electricity procurement options, including several scenarios showing the impact of different wholesale electricity price futures.

Compare the BAU and long term electricity procurement options against each other in terms of total spend and net present value over the term.

1.6 Final Workshop and Report

Provide recommendations to Project Group leadership on the business case and, if this is attractive, on options for moving towards electricity procurement. Present results in a written report and via a second workshop presentation.

A draft report for comment and final report will be provided.

1.7 Hold point

Each council will assess findings and advise if they will proceed to Stage 2 of the Project.

Optional Stage 2 Procurement

The return brief should also include optional pricing for a subsequent procurement stage that could assist each council wanting to go to procurement stage. This stage could involve (1) PPA model creation, (2) evaluation of tenders using PPA model; (3) explanation of results; and (3) involvement in approval meetings.

2.1 Inception

Kick-off meeting with core team and relevant stakeholders to plan the tender process, information to be provided to tenderers and to decide on key terms to be included in the request for tender.

2.2 Scoping

Provide input on the technical and commercial content of the request for tender, provide drafts of documents within each Councils preferred procurement templates and finalise for release.

2.3 Tender Process

- a) Assist in answering tenderer questions throughout the tender process.
- b) Participate as a member of, or adviser to the tender evaluation panel, and attend all tender evaluation panel meetings.
- c) Use the models developed in Stage 1 above for each council to evaluate the tenders received, and rank the tenderers in terms of cost, quality and risk.
- d) Prepare evaluation materials and a PowerPoint report summarising the results leading to preferred tenderer selection.
- e) Assist with contract negotiations with the preferred tenderer.
- f) Stakeholder meetings throughout as required for the group as a whole and each council individually, particularly to secure necessary approvals, including individual meetings with key decision makers (to be confirmed by the Project Group).
- g) Assist with preparing approval documents leading to contract execution.

Renew 6 Council Group Report

Feasibility assessment into options for
collective procurement of electricity

City of Holdfast Bay



31 July 2024

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Purpose of Report

Presync was engaged by the group of six councils, referred to as the “Renew 6” Group, to investigate options for collective electricity procurement and to provide the results of an investigation into options for long-term electricity procurement undertaken collaboratively with the six councils known, namely:

- The City of Port Adelaide Enfield,
- The City of Salisbury,
- The City of West Torrens,
- The City of Holdfast Bay,
- The City of Onkaparinga and
- The Town of Gawler.

This report documents the findings of the investigation for the City of Holdfast Bay in particular. Similar reports have been presented to the other members of the group. The information in this report is intended to help inform decision-making by councils on future electricity procurement.

Executive Summary

Councils have experienced significant electricity price volatility in recent years and electricity costs are currently at unprecedented levels. The objective of the project is to seek cost-effective, renewable energy options, while mitigating price volatility. Presync expects at least another decade of electricity market transition with volatile and generally high prices; "normal" electricity procurement has been high risk since 2017, and promises to continue to be so. The experience of 2022, with councils signing up for electricity at unprecedented prices, suggests a rethink on how they should purchase electricity going forward. Clearly, the conventional practice of purchasing electricity for 1 to 4-year intervals has left councils exposed to cost volatility, and likely will continue to do so if this continues during the next ten years.

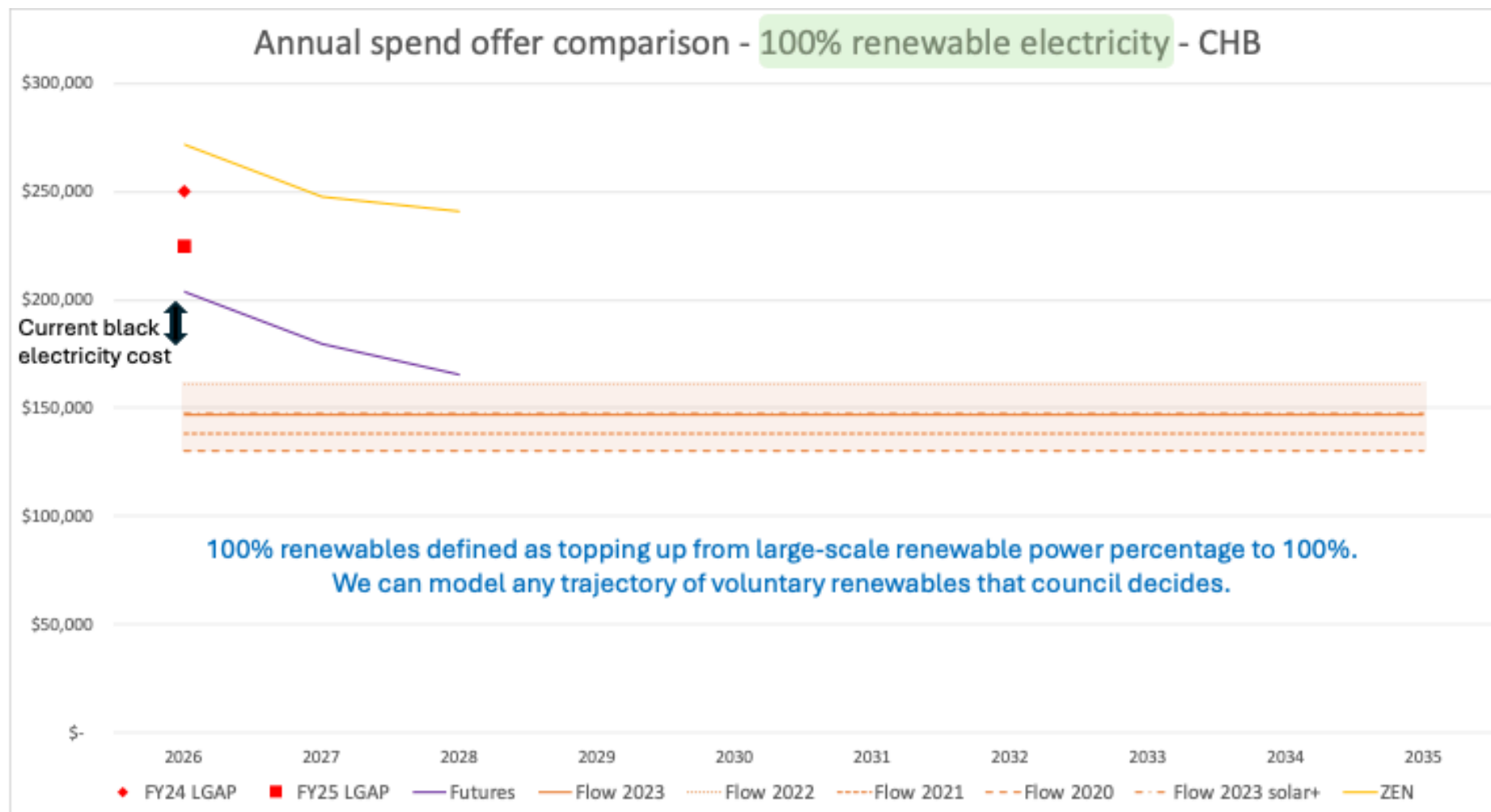
An alternative approach to electricity procurement offers the possibility of linking councils energy consumption to the lowest-cost source of generation - new renewables projects - via a Retail Power Purchasing Agreement (PPA). Such a contract is applicable to Council's large site and street lighting accounts, as well as high-consuming small sites with digital meters. Ideally, a Retail PPA would reduce and stabilise electricity costs, allow Council to reduce electricity emissions to zero immediately or on a bespoke trajectory, and assist a fair transition to a low-carbon economy by creating new economic opportunities in regional South Australia.

The work conducted during this project demonstrates that **procuring electricity from a Retail PPA is a viable choice and should provide significant cost savings and environmental benefits for the six councils.**

Based on this analysis, the market testing process, and our experience, Presync advises that the group of six councils has sufficient combined electricity consumption to secure a competitive Retail PPA. If some councils decide not to participate in the procurement process there would likely still be retailer interest in providing a PPA to the remaining councils, or to councils individually, though we expect prices would be higher. It may also be possible for the councils to join another similar group which has recently commenced a procurement process.

The indicative Retail PPA proposed by Flow Power has compelling economics compared to current pricing and to the ASX Electricity Futures market, as shown on page 5. **It appears this option would save Council between \$64k and \$120k annually compared to current prices for 100% renewable electricity.** This particular option is associated with specific new wind and solar projects in South Australia, mirroring the structure of the City of Adelaide's successful Retail PPA. It offers both lower prices and long-term price stability for electricity, further strengthened by the steady, flat-price Renewable Energy Certificates, facilitating the achievement of renewable goals while maintaining expenditure below current levels.

The table on page 6 Table - Risks and Benefits of the Options - highlights the benefits and risks of the various electricity procurement options. Benefits are in green, risks in red and other differences to current practice in blue.



Flow Power PPA modelling uses many scenarios to illustrate impact of firming using the wholesale or futures price.
Annual cost will vary but should remain within the shaded range for the entire term.

Table - Risks and Benefits of the Options

| | Electricity Procurement Option | | |
|--|---|--|---|
| Consideration | Standard retail contract (BAU) | Fixed-price Retail PPA as proposed by ZEN Energy | Project-linked PPA, wholesale firming, as proposed by Flow Power |
| <i>Price stability</i> | 1-4 years, then fully exposed to market volatility | 3 years, price then resets; firming exposed to market volatility | 7.5 or 9.5 years. Some day-to-day variability but more stable overall. |
| <i>Relative price</i> | Baseline | Similar to baseline | Lowest |
| <i>Renewable certificates</i> | Optional via GreenPower. No project link. | All customers must achieve 100% during the term. Project linked. | Optional via long-term LGC purchase and surrender. Linked to projects that provide electricity |
| <i>Renewable certificate cost</i> | Baseline cost, requires 100% on top of compliance | Cost similar to baseline, top up to 100% from compliance level | Long-term flat price, lower than market price at least in the first few years, maybe longer. |
| <i>Renewable certificate volume</i> | Follows consumption | Follows consumption | Follows generation, year-end reconciliation process needed (cost included in management cost below) |
| <i>Upfront costs, logistical and legal practicalities</i> | Baseline | Similar to baseline though longer term may increase approval workload | Higher approval workload due to longest term and suite of interrelated contracts |
| <i>Ongoing costs and management</i> | Baseline | Similar to baseline | More monitoring and contract management effort, estimated around \$1,000 per month. |
| <i>Renewable Generation Project links</i> | None | Indirect | Direct links to 1 to 3 projects. This brings a new risk of project non-performance which is mitigated by a ceiling product. |
| <i>Real-time renewable/ load matching</i> | None | Poor , solar generation only | ~70%, achieved by using a well-matched South Australia wind farm |
| <i>Solar feed-in and battery business case</i> | Low fixed feed-in tariff. Limited battery arbitrage opportunities. | Low fixed feed-in tariff. Limited battery arbitrage opportunities. | Feed-in tariff is the wholesale price, varies from high to negative. Incentivises batteries with significant arbitrage opportunities to maximise revenue; future proofed for potential end to feed-in tariffs. |
| <i>Inclusion of small sites</i> | No | Maybe | Yes , if advanced meters are installed. |
| <i>Support for Virtual Net Metering, Virtual Powerplants etc</i> | Baseline | Offers Customer Battery Program | Virtual net metering is included. Wholesale price maximises the business case for VPPs with batteries, smart EV charging etc. |
| <i>Need for ACCC authorisation</i> | Discuss with LGAP | Unlikely, see ACCC consultation draft report | Unlikely, see ACCC consultation draft report |

1. Methodology

The Cities of Port Adelaide Enfield, Salisbury, West Torrens, Holdfast Bay, Onkaparinga & Town of Gawler (the “Renew 6 Group”) engaged Presync to compare short term (business-as-usual) and long-term options for collective procurement of electricity, including renewable electricity.

Key project objectives include:

- Reduction in corporate greenhouse gas emissions by accessing renewable electricity at a price lower than current GreenPower pricing.
- Reduction in volatility in electricity pricing to increase budget certainty.
- Supporting future electricity procurement processes.
- Improving knowledge on renewable energy and procurement strategies that can respond to a rapidly changing electricity market.
- Exploring procurement options that deliver best return for each council, whether that be procuring electricity as a single group or as sub-groups.

Presync is experienced in facilitating retail renewable power purchase agreements (PPAs), including over thirty for councils in NSW and Queensland Councils, and is well advanced with another group of Adelaide councils coordinated by the Eastern Region Alliance on a very similar project to this one. We have worked with three similar groups of councils in NSW on business case development, procurement and in-service monitoring of retail renewable PPAs, with another councils group currently forming. We are familiar with the South Australian electricity market, having worked with a number of business customers on electricity projects in the state, and recently with another group of Adelaide councils which has proceeded into a procurement project.

Presync’s role in this project is to provide a renewable PPA advisory service including stakeholder engagement and capability building assistance internally, procurement strategy advice. Please note that Presync never accepts any form of commission or other payment from electricity retailers or equipment suppliers so as to remain independent and able to act in your best interests.

This project aims to explore the economics of various retail renewable electricity PPA arrangements compared to current and alternative future retail agreements, and considers upfront and ongoing costs, load/generation matching with an understanding of each council’s current and likely future electricity consumption, contract term, contract management and the practicalities and hurdles involved in arranging a suitable PPA. Alternative options for supply from additional behind the meter generation (including small and large scale on-site solar generation and consideration of feed-in tariffs going forward), integration of DERs, and the potential for supply via virtual power plants (VPPs) are also considered. Also considered are the logistical and legal practicalities, need for ACCC authorisation, optimal term length, contract management, and conversion of basic meters to advanced meters.

Significant background information and educational material is provided in Section 2 on the macro factors affecting the electricity grid and pricing in South Australia going forward, the

spectrum of renewable electricity structures available, and definitions of renewable electricity.

The methodology for this project, as agreed by the Project Steering Group, was as follows:

- Inception meeting with the Project Steering Group on 9 May, including initial provision of background information.
- Request for electricity data from councils, due 29 May.
- Survey of council leadership to gauge approach to electricity procurement, due 29 May (results are included as appendix A).
- Kickoff workshop with Project Group Leadership on 30 May including initial results on group consumption and survey findings.
- Load data analysis and forecasting, completed by 27 June.
- Market testing: indicative offers sought late June.
- Detailed commercial modelling indicative PPA structures against BAU options completed 15 July.
- Findings workshop held in person on 17 July, including presentation of all background material, the business case for various PPA models based on the indicative offers including annual cost and associated cost risk in multiple alternative future energy scenarios, and discussion of options to move into procurement.

2. Background

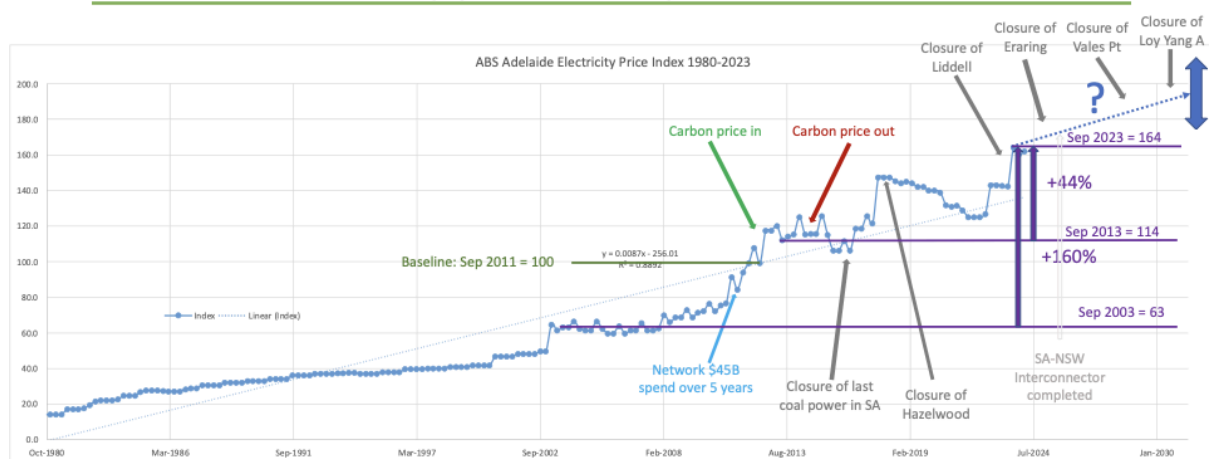
Many councils across South Australia recently renegotiated new electricity contracts in partnership with LGA Procurement. At the time, the electricity futures market was extremely high. Consequently, councils are paying record electricity prices. Additionally, while many councils were keen to purchase renewable electricity, some decided to defer this due to the high electricity costs, while others proceeded and are already 100% renewable though without any tangible links to specific projects in South Australia.

The primary objective of this project is to explore opportunities to acquire cost-effective, renewable energy while mitigating price volatility. The councils were aware of the City of Adelaide's successful approach to renewable energy procurement. The City of Adelaide was the first council in South Australia to secure 100% renewable energy through a PPA. Reportedly, the City of Adelaide has achieved significant financial savings and substantially decreased its greenhouse gas emissions. Many other councils across Australia are now benefiting from PPAs for the purchase of electricity, most in regional groups. In particular, Presync has facilitated approximately 50 Retail PPAs, including for Cairns Regional Council and over 30 for NSW councils.

2.1 Factors Affecting Electricity Prices

Electricity prices in South Australia have increased 160% since 2003 and 31% in the last two years, as demonstrated by data from the Australian Bureau of Statistics (ABS) in Figure 1. South Australia has a high proportion of renewable generation, leading to typically lower electricity prices when these sources are generating strongly. Conversely, during periods of reduced output from renewables, reliance on gas generation, coupled with imports of electricity from Victoria (largely brown coal), tends to elevate prices. This trend was particularly notable during 2022, as the Ukraine war exacerbated already high underlying international gas, oil, and coal prices, consequently driving up costs for gas and coal power stations. Such fluctuations underscore the vulnerability of an electricity system reliant on fossil fuels to international tensions and market instability.

Adelaide electricity price history



Electricity prices have almost tripled in the past two decades...
the changes in the coming decade are far greater than in the past two...
Normal electricity procurement has not been low risk, and is unlikely to be low risk



Figure 1 – Adelaide's electricity price history (source: ABS 6401.0 Consumer Price Index, Australia TABLE 9. CPI: Group, Sub-group and Expenditure Class, Index Numbers by Capital City)

The data indicates electricity procurement has been a rocky ride since the National Electricity Market (NEM) was created in the late 1990s. The electricity price is made up of the regulated transmission, distribution, market operation and environmental charges as well as the generation and retail costs. The significant price rises in the late 2000s were driven by network spending, including South AustraliaPN, to expand their networks. The carbon price in effect between 2011 and 2013 made only a slight impact in comparison with the other factors indicated.

South Australia faces additional exposure to the closure of coal-fired power stations in other states. In 2017, when the large Victorian brown coal plant Hazelwood shut with only a few months notice, unprecedented price rises resulted, and persisted for the next three years. New renewable generation gradually replaced the lost capacity and drove prices lower, until the Ukraine war in 2022 which exacerbated high underlying international gas/oil and coal prices, driving up costs for gas and coal power stations.

We have seen that an electricity system based on fossil fuels is susceptible to international tensions and market instability. Ongoing price risks for South Australia electricity include recent market announcements of early shutdowns of ageing coal power stations, notably Origin's Eraring plant in NSW, the largest in Australia, though the NSW Government recently intervened to underwrite Origin Energy to operate the Eraring Power Station until August 2027, potentially lengthening the transition period. These closures, largely driven by the inability of ageing coal power stations to compete with inexpensive renewables, alongside their high maintenance costs and unreliability, pose significant challenges.

The unreliability of these old coal power stations already regularly causes regular high prices, not just during 2022. An explosion at the Callide C power station in Queensland in April 2021 caused high prices for the following three months, and on 8-9 May 2024 unplanned outages at 2 NSW coal generators coupled with scheduled maintenance on the Victoria-NSW interconnector transmission line resulted in the highest prices there since 2022. These higher prices have flowed through to Victoria and South Australia in each case, as can be seen in the charts below.

Another large coal station in NSW (Liddell) shut in April 2023, and at least three more are now scheduled to shut by the early 2030s. Removal of such large chunks of supply in a finely balanced market tends to increase prices. This is more evident in the wholesale price history, as this removes the effects of changes to network and other regulated pricing. Figures 2 to 4 show recent wholesale price history by financial year and by month.

SA electricity wholesale market history - annual

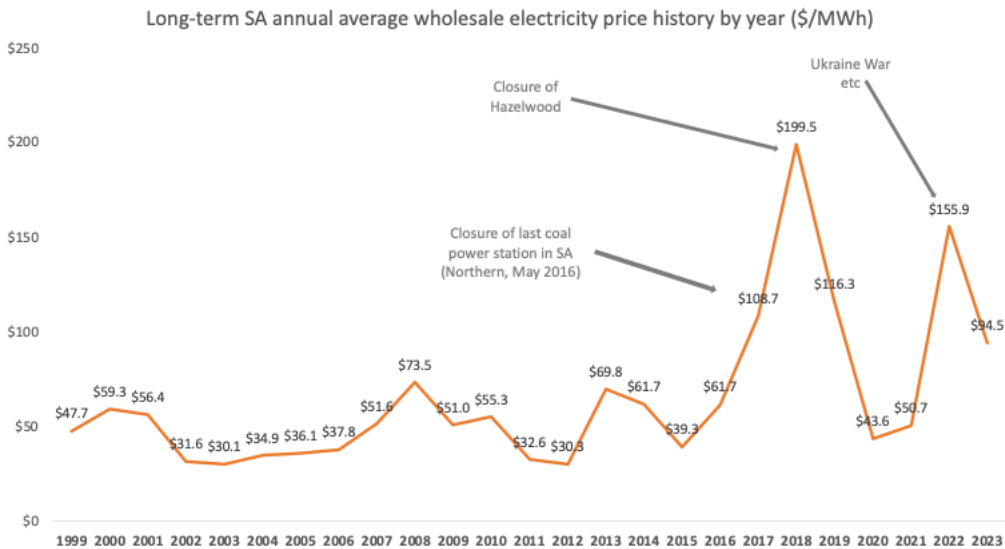
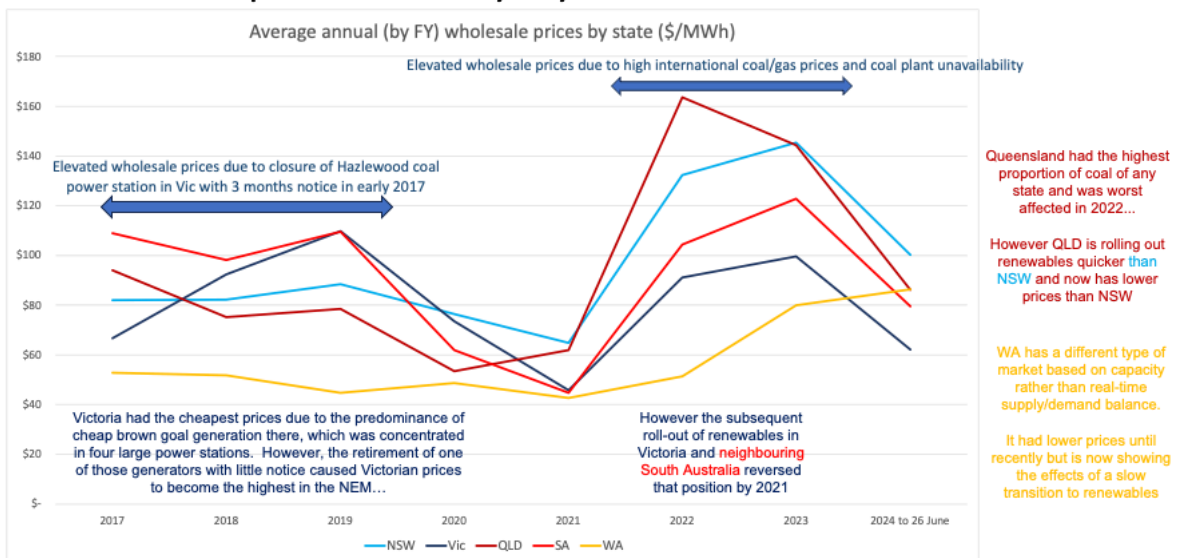


Figure 2: South Australia wholesale price history - by calendar year

The annual wholesale price in Figure 2 clearly shows the three-year impact of the short-notice retirement of Hazelwood in 2017, and indicates that events outside South Australia can still impact the state. In this regard it is worth comparing the different experiences of the main NEM states (and WA) since FY17 (Figure 3). Victoria had the cheapest prices due to the predominance of cheap brown coal generation there, which was concentrated in four large power stations. However, the retirement of one of those generators with little notice caused Victorian prices to become the highest in the NEM in the short term, however the subsequent roll-out of renewables in South Australia and Victoria reversed that position by 2021.

Wholesale price history by state – annual



Proportion of renewable generation is now correlated to lower electricity prices

Figure 3: Wholesale price history by state (financial years)

The last three years are an example of the impact of high international fossil fuel prices in a market where fossil fuel generation sets the prices for much of the time. Victoria and South Australia's higher

renewable proportion insulated those states from the 2022 energy price shock which clearly hit NSW and Queensland - which have the greatest proportion of coal generation - hardest, a position which remains today.

SA electricity wholesale market history/futures

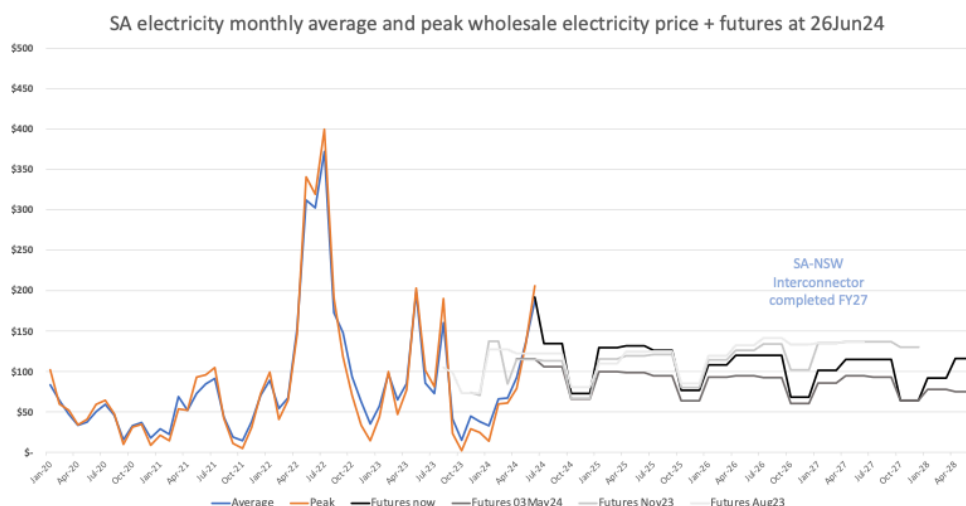


Figure 4: South Australia wholesale price history by month - with ASX futures pricing added for context

The monthly wholesale price trends in Figure 4 give a more granular picture of the same story. High prices last decade tended to occur on the hottest days of the year, when demand is highest and coal and gas generation most susceptible to heat-related outages. With the increasing deployment of solar PV, both behind the meter and as grid generators, this trend has changed due to high solar supply during hot weather. Since 2021 the highest prices have occurred in winter, and in 2021, 2022 and 2024 this was exacerbated by significant outages of coal-fired generation. 2023 also shows a spike in May but that was associated with the retirement of the Liddell power station, and was short-lived as this retirement was long expected and planned for.

The lines on the right of Figure 4 show the ASX futures market prices for as long as it looks (until mid 2028 only) and are the indicator of current business-as-usual electricity pricing for contracts one to four years in length. It is clear the market expects continued elevation of prices beyond historical levels, at above \$100/MWh in South Australia compared to the traditional range of \$30-60/MWh. The other feature of the futures market is that it can give no price assurance beyond mid 2028, a period in which further significant coal power retirement is scheduled.

The electricity system once delivered predictable, stable prices. When it is highly renewable it will again deliver predictable, stable and low prices. A glimpse of that future is available in Victoria and South Australia which have cheaper current and futures prices than NSW and Queensland due to higher renewable penetration. The South Australia wholesale market already exhibits very low prices during periods of high renewable generation, and high prices when relying on local gas generation and imported brown coal generation from Victoria. However the transition is not on track due to slowing commissioning and approval of new renewable and transmission projects, particularly wind farms, as shown in Figure 5.

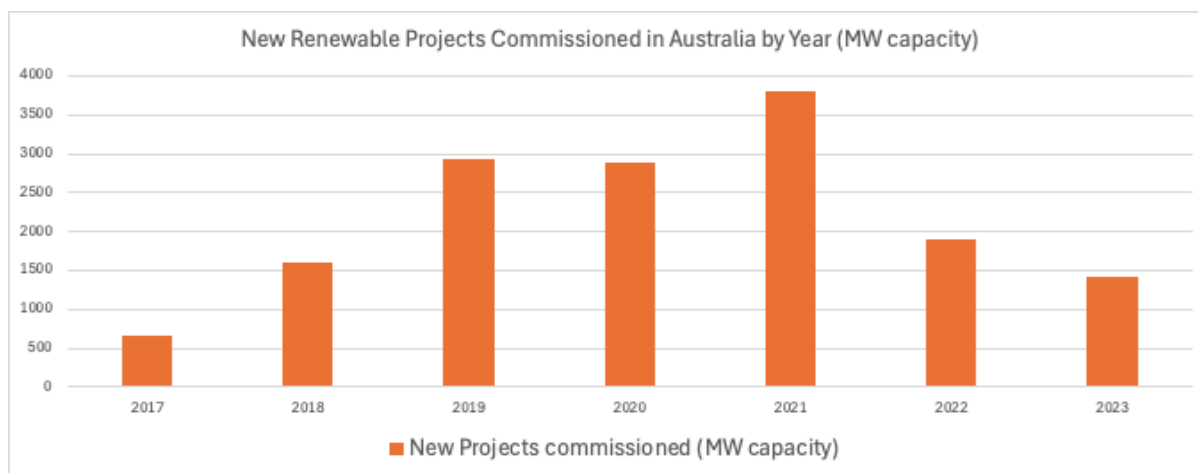


Figure 5: New Renewable Capacity Commissioned in Australia by Year (source Clean Energy Council)

Presync expects at least another decade of transition with volatile and generally high prices. We conclude that "normal" electricity procurement has been high risk since 2017, and promises to continue to be so.

The experience of 2022, with councils signing up for electricity at unprecedented prices, suggests a rethink on how they should purchase electricity going forward. Clearly, the conventional practice of purchasing electricity for 1 to 4-year intervals has left councils exposed to cost volatility, and likely will continue to do so if this continues during the next ten years. Below we present information on other options for consideration.

2.2 Relative Cost of Renewable Generation

As recently as fifteen years ago renewable generation was expensive, and coal and gas generation were relatively cheap. As Bloomberg shows in Figure 6, globally the cost of renewable generation has dropped fast with scale and since at least 2018, wind and solar have been cheaper than any other generation source. Higher international coal and gas prices are locking in that position. Some other generation technologies are shown as single points as there is no consistent history of their deployment.

Renewables are the cheapest new generation source

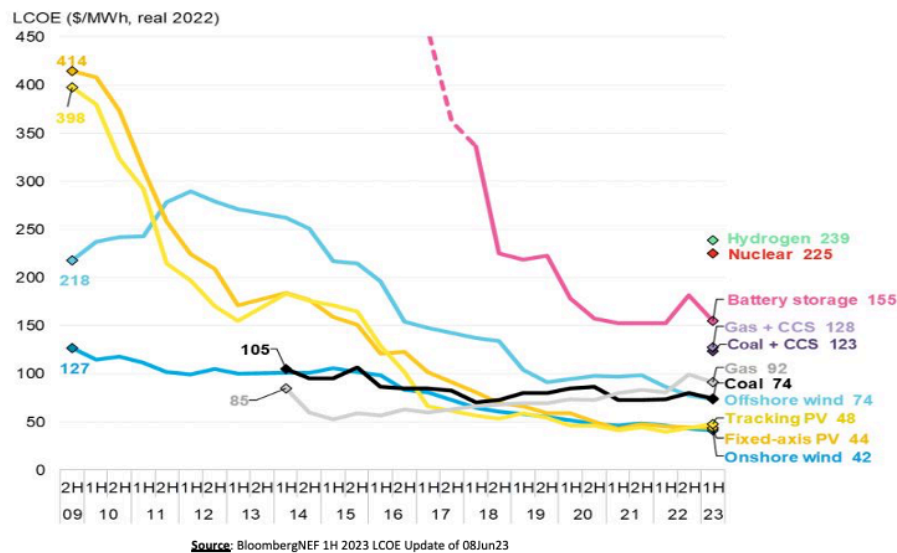
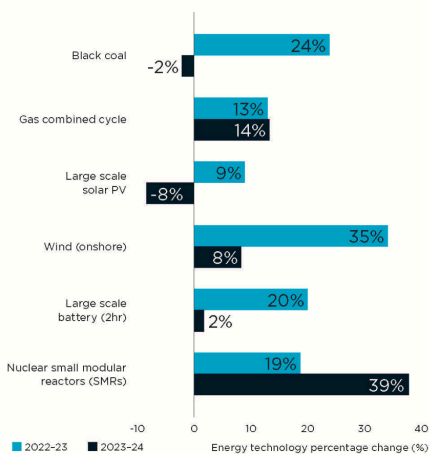


Figure 6: Bloomberg New Energy Finance levelised cost of energy trends for generation sources

The 2023-24 CSIRO GenCost analysis reinforces this position in Australia specifically in Figure 7.

Annual change in capital costs

Across the board, new build costs have generally stabilised as the impacts of inflation ease. However, cost pressure remains on gas, onshore wind and nuclear SMR.



Levelised cost of electricity (LCOE)

Solar PV and wind with firming have the lowest cost range of any new-build technology, both now and in 2030.

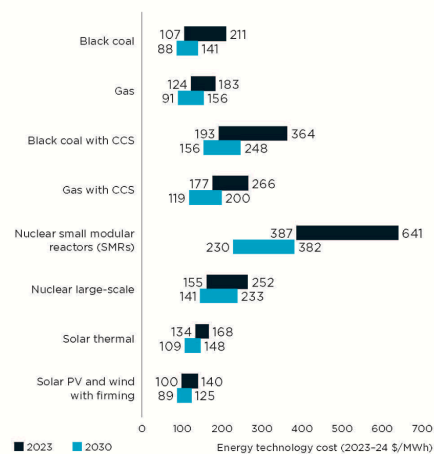


Figure 7: 2023-24 CSIRO GenCost analysis, source:

https://www.csiro.au/-/media/News-releases/2024/May/CSIRO-releases-2023-24-GenCost-report/24-00202_EN_INFOGRAPHIC_GenCost_FINAL.jpg

Our suggested electricity procurement approach for councils is based on the following principles:

- That electricity procurement, typically subject to substantial price volatility, is best handled with long-term contracting from sources not subject to input cost volatility, such as the price for fuel (oil, gas, coal etc); these long-term contracts give greater certainty over future electricity prices which allows more accurate long-term financial planning.
- That electricity procurement can and should support the transition of the NEM to an integrated system based largely on renewable energy.

For these reasons, we suggest basing procurement on securing electricity offtake from new, renewable electricity projects in your state, over a term sufficient to help make those projects bankable. Providing support to new generators which help transition the electricity market towards 100% renewables for all consumers is a co-benefit of this approach. Performance tracking of existing PPAs shows that this approach has resulted in much lower electricity costs for customers than business-as-usual procurement, and fixes those lower prices in place for a long term, typically seven to ten years.

We suggest three goals councils might consider when procuring electricity, see Figure 8. The first is purely about cost, and cost stability which is important for a council's Long-term Financial Plan.

The second brings in environmental goals such as those in the councils' various sustainability and climate strategies and action plans. Despite renewable electricity being cheaper to produce, traditional retail contracts charge renewable electricity as a significant price premium above the total cost of the electricity contract.

The third is about the bigger picture of a fair economic transition, for example as outlined by the South Australia Government [here](#) and [here](#).

We suggest that "normal" short-term electricity procurement doesn't achieve any of these goals, and that long-term procurement of renewable electricity from particular new projects in regional South Australia could achieve all three.

Why a PPA?

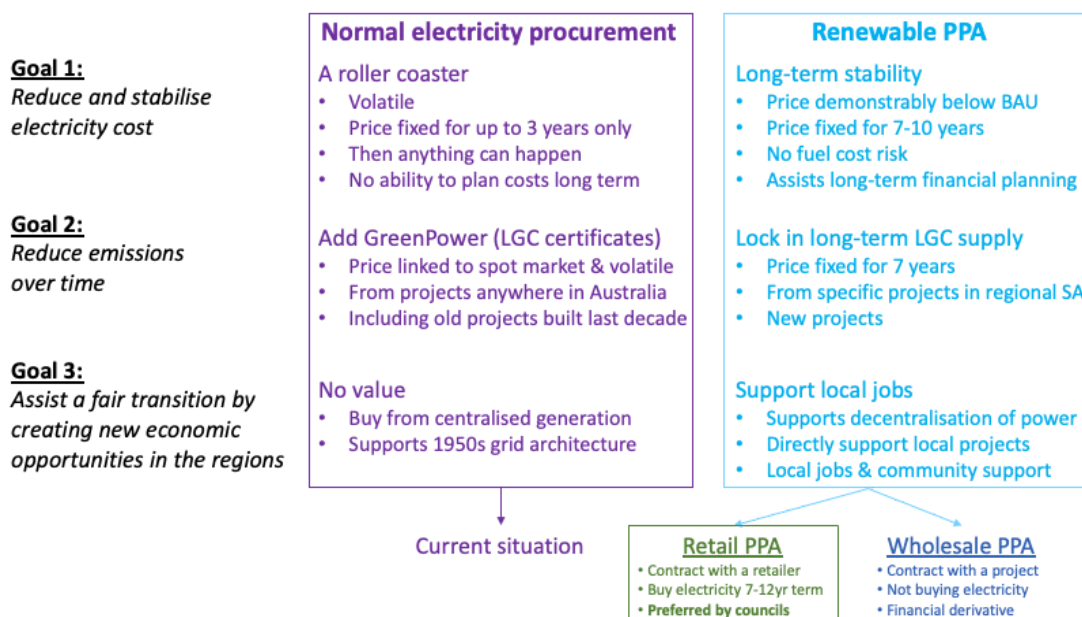


Figure 8: Goals for consideration in electricity procurement

Within the spectrum of renewable power purchase agreements there are wholesale and retail options.

- Wholesale means contracting directly with a project. Only a retailer can sell electricity, so this is a financial derivative rather than electricity procurement.
- Most councils pursue a Retail PPA, which puts a retailer between the customer and the projects, and allows a mix of wind and solar that best matches the timing of council's consumption to be procured. Retail PPAs are typically quicker and easier to achieve, and typically require commitment to a term of 7-10 years.

A wholesale PPA sits to the side of electricity procurement and would likely be considered a financial derivative requiring specialist accounting treatment. Most councils prefer to avoid structures which involve financial derivatives or require derivative accounting. A derivative is a financial instrument whose value changes in relation to changes in a variable, such as an interest rate, commodity price, credit rating, or foreign exchange rate; in this case the commodity price is the wholesale electricity price. An example is the contracts struck by the ACT Government with renewable projects starting in 2014.

A supply-linked Retail PPA involves actual electricity procurement from an electricity retailer which is substantially underpinned by renewable generation from a renewable electricity project, or projects, located in the same state as the consumption. We usually recommend a single agreement with a selected retailer rather than a wholesale PPA, which is a direct contract with a project developer or project owner. A Retail PPA typically avoids the derivative accounting issues which can apply to wholesale PPAs, and is also available to customers of all load sizes. Supply-linked retail agreements are increasingly available from progressive retailers and we have facilitated over fifty of these with seven retailers. No retail electricity contract affects the reliability of delivery of electricity to council sites, which is always the responsibility of South Australia Power Networks.

To achieve their goals we recommend councils consider options for a long-term Retail PPA. Some providers may propose a 5.5-year term to December 2030, as this is when the current Renewable Energy Target ends. We suggest this may not be long enough to skip the considerable volatility likely to exist at the end of the decade, and would coincide with a great number of other PPAs which end then for which replacements must be found starting January 2031.

2.3 History of Councils Procuring Renewables through the Grid

Energy users can skip the risk of volatile pricing during the transition of the electricity system by linking their consumption to the lowest-cost source of generation: new renewable projects. This has only become possible since around 2017, when the City of Adelaide led the way with a long-term renewable PPA which started in July 2020. The City of Adelaide's electricity cost is set by the fixed price of generation from Clements Gap wind farm in mid-north South Australia and two new solar farms on the Eyre Peninsula (Streaky Bay) and South East (Coonalpyn).

These solar and wind farms not only provide inexpensive renewable electricity but also yield Renewable Energy Certificates throughout the term of the contract. The certificates provide assurance that the electricity consumed by the council are matched by the generation of renewable electricity. Through its contract, the City of Adelaide purchases the certificates and can therefore assert that their electricity consumption has zero emissions.

The Cities of Sydney and Newcastle entered into similar agreements around the same period, while many other councils in NSW and Victoria, and a few in Queensland, have since adopted Retail PPAs. In addition to reducing and stabilising electricity costs, Retail PPAs allow cost-effective emissions reduction, and contribute to a fair transition to the low-carbon economy by creating new economic opportunities in the regions, increasing local energy independence and security.

Council groups have increasingly joined forces to collectively procure renewable PPAs in both NSW and Victoria since around 2020. Examples include the [Victorian Energy Collaboration](#) led by the Eastern Alliance for Greenhouse Action, a formal collaboration of eight Councils in Melbourne's east, and the Central NSW Joint Organisation's [Retail PPA procurement](#) of 2022 for 16 councils.

The Australian Competition and Consumer Commission recently issued a consultation draft report¹ on "Sustainability collaborations and Australian competition law", which notes that they have already granted authorisation for agreements that involve sustainability-related public benefits, including:

"Joint buying groups to purchase renewable energy, resulting in reduced greenhouse gas emissions by enabling members of the buying group to transition to renewables at lower cost and with less risk than if they each sourced renewable energy individually."

2.4 What is a Retail PPA?

A renewable Retail PPA is typically based on purchasing electricity from renewable electricity projects within the same state, ideally new projects, over a period of time sufficient to help make those projects financially viable. This arrangement not only provides essential support to new generators, but also contributes to transitioning the electricity market towards 100% renewables for all consumers as a co-benefit.

Within a Retail PPA framework, a retailer facilitates the connection between electricity customers and renewable projects. This arrangement enables the procurement of a mix of wind and solar that best aligns with how councils consume electricity (i.e., a mix of daytime and nighttime consumption).

Retail PPAs typically require commitment to a term of 7 to 10 years and are available in various commercial models, ranging from fully firm pricing fixed for up to ten years to those incorporating an element of wholesale price exposure. Each of these have advantages and disadvantages, as outlined in Section 6.

2.5 What are Renewable Energy Certificates?

To be able to claim they are using "renewable" electricity and reduce electricity emissions, the Greenhouse Gas Protocol requires electricity users to purchase and voluntarily surrender Renewable Energy Certificates (RECs) for their consumption. In this case the RECs are Large-scale generation certificates (LGCs) as defined under the Federal Renewable Energy Target (RET). Renewable projects create both electricity and LGCs and these can be sold independently or "bundled" together.

Retail PPAs enable the purchasers to decide how many LGCs they would like to buy beyond the mandatory ("compliance") volume, which currently covers around 18-19% of consumption. There are further small-scale certificates purchased by all electricity users, and there is an argument that these could also be included when a council sets its target for voluntary LGC procurement. The volume of LGCs purchased voluntarily reduces the scope 2 emissions of the council, and this volume may change over time. The trajectory of voluntary LGC purchase and surrender is a decision for each council individually, though we note that Holdfast Bay already procures 100% GreenPower, which is calculated as a further 100% of consumption above compliance levels. Recognising that Council already purchases compliance certificates, we suggest there is no need to go beyond topping up from the compliance level to 100%, and the figures below have been calculated based on topping up from the compliance level for LGCs to 100%.

1

<https://www.accc.gov.au/system/files/Sustainability-collaborations-and-Australian-competition-law-draft-for-consultation-July-2024.pdf> section 4.2.1, para 55.

The additional voluntarily-purchased LGCs are then “surrendered” to the Clean Energy Regulator (CER) by or on behalf of the electricity user, resulting in the additional generation of renewable electricity beyond the mandated RET volume for the year in question. Reconciliation of LGC volumes and surrender typically occurs in February for the preceding year’s electricity use, though can occur more frequently, with 1 LGC required per each 1 MWh electricity consumed. The PPA may offer a fixed, or otherwise known, price for a set term, or it may involve ongoing purchase at the market price.

Three examples are provided below for clarity. In each example, electricity is purchased through a Retail PPA with a consistent and relatively low price. The three examples explain how the certificates may be purchased to provide assurance over renewables, in addition to the electricity:

- Example 1. **Zero RECs** (purchase electricity with zero Renewable Energy Certificates): the electricity purchased cannot be claimed as renewable.
- Example 2. **50% RECs** (purchase electricity plus Renewable Energy Certificates for half the electricity consumed): the electricity purchased is 50% renewable. For this example, the 50% level is arbitrary; a council may decide to purchase any level of certificates (e.g., 25%, 80% or some other percentage), and could perhaps increase the renewable percentage over time.
- Example 3. **100% RECs** (purchase electricity plus Renewable Energy Certificates for all the electricity consumed): all electricity purchased is zero emissions (i.e., 100% renewable).

Additionally, a council may decide to increase their purchase of certificates over time. For example, a council may commence purchasing all its electricity through a Retail PPA but initially with certificates for half the electricity consumed each year. The council could then move to 100% renewables in 2030 to meet a climate-related goal. In this example, the electricity is always purchased through the PPA and only the percentage of certificates purchased has changed. While all these options are theoretically possible, the final options in any Retail PPA will be subject to contract negotiations (i.e., there may be some limitations on the flexibility of purchasing RECs, depending on the contract, and this flexibility will be part of the negotiations).

Any use of voluntarily-surrendered LGCs will require councils to use the market-based method electricity as the primary method when accounting for their greenhouse gas emissions. The market-based method reflects the emissions intensity of different electricity products, markets and investments, including Retail PPAs, whereas the location-based method reflects the average emissions intensity of the electricity grid in the location (state) in which the energy consumption occurs. Any council with renewable electricity goals above the state average will need to use the market-based method.

3. Forecast Electricity Use - Renew 6 Group

In May 2024, Presync was contracted to conduct a comprehensive analysis of electricity consumption and generate a forecast of future usage for the six councils involved in this project. The forecasting process included a detailed analysis and discussions on electricity consumption history and predicted future consumption for councils, such as:

- New build or replacement sites,
- LED upgrades, particularly for street and other outdoor lighting,
- Solar installations,
- Energy efficiency projects,
- Electrification, and
- EV charging.

Where possible we have included small sites with advanced meters in the forecast. We suggest councils continue to install advanced meters at their higher-consuming sites where this is practical, and it may be possible then include these sites in a future procurement process. Not all PPA retailers serve small sites, so we recommend that small site inclusion be optional rather than required in any future request for tenders.

The load profile of the six councils combined is shown in Figure 9, revealing that a significant proportion of their consumption occurs during nighttime hours. This nocturnal load can be attributed to street lighting in addition to the lack of solar generation, underscoring the necessity for grid renewable generation sources beyond solar to ensure a good real-time match with consumption patterns.

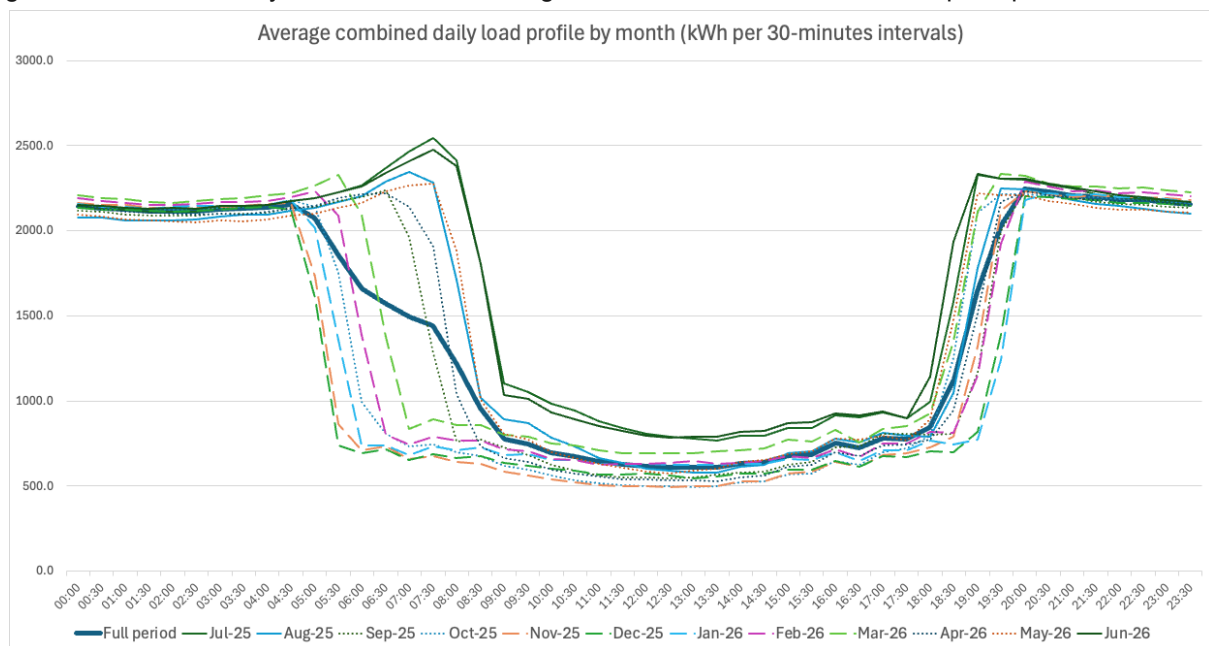


Figure 9 - Average 24-hour load profile of the six councils, aggregated. Electricity consumption is highest early in the morning and at night (i.e., the left and right ends of the graph), when streetlights are operating. Electricity consumption is lower during the day, represented by the dip in the middle of the graph.

3.1 Forecast Electricity Use - Holdfast Bay

Presync worked with Holdfast Bay staff to understand recent electricity consumption at the site level, as described above. A meeting on 31 May 2024 locked in the approach and a forecast was produced for review on 25 July.

The sites included in the forecast are as follows:

- 2 street lighting accounts forecast to consume 0.64GWh annually
- 3 “large” sites consuming 0.35GWh annually combined:
 - Glenelg Town Hall
 - Brighton Civic Centre
 - Glenelg Library
- 3 “small” sites consuming 0.24GWh annually combined:
 - Moseley Square
 - 6 Partridge St
 - Kauri Sports Centre

Council has two other large sites operated by subsidiaries (Alwyndor Aged Care and Brighton Caravan Park) that are not currently included, but may be able to be included in a future procurement project if so desired by Council and the operators of these sites. Inclusion of these sites would more than double Council's total electricity consumption compared to the current forecast below.

The combined Holdfast Bay forecast load is **1.22GWh**, with a profile as shown in Figure 10. We note the similarity of this consumption profile to the broader group's, with a significant proportion of consumption occurring during nighttime hours.

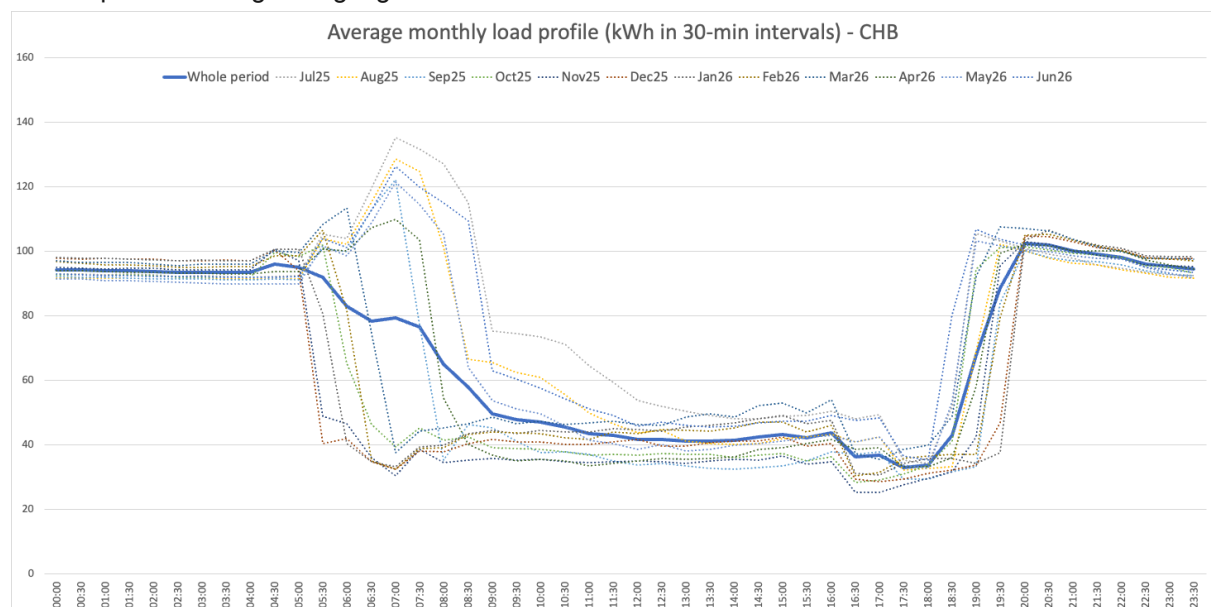


Figure 10 - City of Holdfast Bay forecast daily electricity consumption profile, by month

4. Market Testing

On behalf of the six councils, in late June 2024, Presync approached well-known PPA retailers to gauge their interest in supplying electricity to the councils. We sought indicative pricing for long-term Retail PPAs starting July 2025, based on the aggregated load for “a group of 6 Adelaide councils”.

The retailers approached were:

1. Flow Power
2. Iberdrola
3. ZEN Energy

All three have significant experience delivering Retail PPAs to councils in Australia.

Flow Power and ZEN Energy provided indicative pricing, while Iberdrola declined due to their long-standing relationship with LGAP South Australia through which they have contracted many of the Councils in the group, including Holdfast Bay. It appears Iberdrola prefers to continue to work directly with LGAP.

We have found that some companies offering Power Purchase Agreements may have policies only to deal directly with customers and will not tender in response to broker requests, so it is possible that our market testing and LGAP's process will yield non-intersecting groups of retailers.

The indicative offers received are summarised below.

4.1 Flow Power

Commercial structure and pricing:

- 9.5-year wind and solar offtake (July 2025 to December 2034), with the wind/solar mix optimised to best match the real-time consumption for each council.
- Three linked projects in South Australia offered:
 - Solar: Streaky Bay and Coonalpyn (City of Adelaide's linked solar projects, both operational since 2021); and
 - Wind: Goyder South wind farm stage 1 (Mid-north region, in late stages of construction; Flow Power is one of three parties with wholesale PPAs from this project, alongside the ACT Government and BHP for Olympic Dam).
- Flat offtake price over the whole term for each project with wholesale market firming.
 - Solar: \$65.48/MWh
 - Wind: \$73.19/MWh
- Flat renewable electricity certificate price over the term: \$29.65 per LGC (MWh)
- Retail margin TBD, likely around \$4.50/MWh on all consumption and export
- All network, market, and other environmental charges passed through at cost
- Allows unlimited changes in consumption
- There is some price volatility due to exposure to the wholesale price but the long-term matching with operating renewable projects provides cost stability, while an optional “ceiling” product can cap exposure to the wholesale price.
- The wholesale price exposure also improves the business case for local battery, virtual powerplant and load shifting projects.
- As wholesale prices are heavily correlated with grid carbon intensity, matching consumption to low-cost times also results in achieving low real-time emissions and assists the grid transition towards 100% renewables.
- Flow Power's model allows virtual net metering between sites (export from one site effectively replaces import at any other site on the same contract), and exposure to

the wholesale price maximises the battery business cas, including the ability to charge batteries at times of negative prices.

- Due to the exposure to the wholesale market it would be prudent to include some management costs when assessing an offer of this type. This may justify an extra FTE across the entire group, or alternatively, Presync could provide a monitoring and contract management service for around \$1,000 per month. This typically includes:
 - Monitoring consumption of all sites twice monthly.
 - Bill estimates at the end of each month.
 - Bill checks and follow up with retailer on any errors/surprises.
 - Ongoing contract management and advice, eg on the value of the ceiling product, changes to offtake volumes or projects and managing all correspondence with the retailer.
 - Annual forecasting of electricity budget and tracking to budget on a fortnightly basis.
 - Annual LGC reconciliation process as required.

Experience:

The respondent is the Retail PPA provider for City of Adelaide, City of Sydney and many other councils. Flow Power:

- Has over twenty years' experience in local market
- Is owned by Canadian Pension Fund OPTrust
- Pioneered the Retail PPA in 2018
- Offer offtake from multiple large wind and solar projects developed by others
- Develop their own mid-scale solar+battery projects
- Has a policy to deal directly with customers and not to pay trailing commissions to brokers.

Presync has 16 customers with Flow Power who have generally good experience with the commercial model and customer service provided.

When modelling this offer, Presync analysed the generation profiles of the nominated wind and solar projects and optimised the wind and solar mix to achieve a real-time match at the 30-minute level of around 70% between the generation sources and consumption for the group as a whole. The generation mix used to achieve this match was:

- 91% wind
- 9% solar

As the City of Holdfast Bay load profile differs slightly from the overall group's, we optimised the mix for Holdfast Bay individually, resulting in a real-time match of around 71% with the following generation mix:

- 87% wind
- 13% solar

4.2 ZEN Energy

Commercial structure and pricing:

- Fixed price 6-year term July 2025 to June 2031
- Only available projects in South Australia are solar, so not a good fit to this load profile, but ZEN note they are “expanding our wholesale position regularly and once our storage assets currently in various development phases are online, we expect to be able to provide more attractive pricing.”
- Fixed price for first 3 years (peak/off-peak \$/MWh):
 - FY26: \$263/\$135
 - FY27: \$247/\$126
 - FY28: \$257/\$117
- With a single price reset option for last 3 years
 - FYs 29-31 to be set when futures market available
- Renewable electricity certificate price declines each calendar year:
 - 2025 \$46.25
 - 2026 \$34.75
 - 2027: \$30.00
 - 2028: \$28.00
- Changes in consumption are typically limited to 20% in either direction.
- ZEN's Customer Battery Program provides benefits to battery hosts including demand management and other savings; they are working on deploying batteries with a Sydney Council.
- This is a simple electricity contract similar to current arrangements which would likely not require any extra management effort.

Experience:

- Local South Australia company with solid credentials, has had a retail licence since 2018 and was previously a solar installer
- Customers include South Australia Government, CSIRO, Bunnings, SSROC (26 NSW councils), and recently SBS (via Presync)
- Offtake from 20+ solar and wind farms and are now developing their own utility-scale projects
- Strong sustainability commitments via Science-Based Targets Initiative (SBTi), partnering with customers to transition contracts to 100% renewable electricity, and committed to only sign new contracts where 100% renewable is achieved within the contract period.

5. Indicative Economics - Renew 6 Group

Presync conducted techno-economic modelling of the proposed Retail PPAs for the councils combined, and for Holdfast Bay individually, over 10 financial years: FY 2026 to FY 2035. The model compares the costs for retail electricity along with renewable electricity certificates. The model excludes regulated network, market, and environmental charges as these remain constant across different retail approaches (i.e., these fees are mandatory on all retail electricity contracts). Other assumptions used in the model are listed at Appendix C.

The results of the modelling illustrate the price volatility associated with conventional electricity procurement. Current prices are significantly higher than historic pricing levels.

Figure 11 depicts the results of the pricing comparison. The indicative Retail PPA offer described above is compared to current pricing from the ASX Electricity Futures Market and expected future prices. The indicative Retail PPA pricing demonstrates clear cost advantages over current ASX Electricity Futures prices in 2026 and 2027, offering cost stability beyond those years until the middle of next decade. The modelling indicates that councils could achieve 100% renewable energy coverage with a long-term Retail PPA for much less than its current expenditure on conventional electricity.

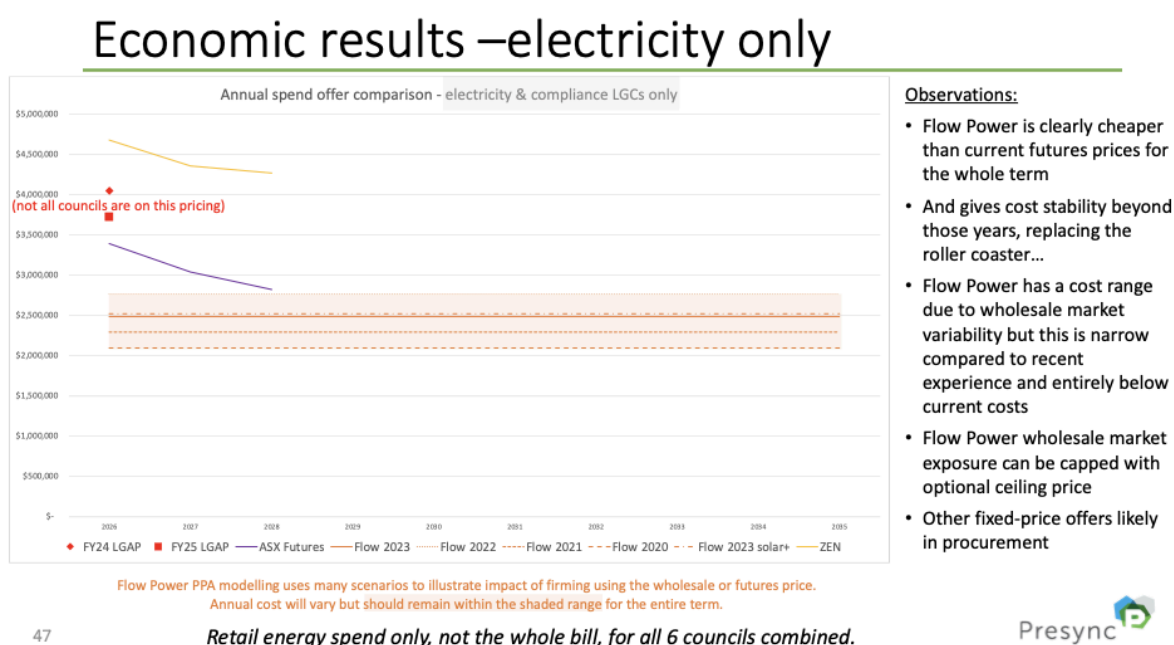


Figure 11 - Annual cost of the retail electricity options for the Renew 6 Group combined. The annual retail costs associated with the The ZEN offer are shown in yellow while the Flow Power indicative offer is shown as several orange lines; the orange shaded area indicates the range of expected annual retail cost given extremely different wholesale pricing scenarios. The red diamond and square depict the current FY24 and FY25 prices paid by most of the councils. The solid purple line depicts the ASX Electricity Futures Market price which is available only until FY28.

Figure 12 depicts the same pricing comparison for 100% renewable electricity, that is the same volumes of electricity as in Figure 11 plus enough renewable electricity certificates (LGCs) to “top up” from the LGC compliance level to 100% of consumption. Council might choose another LGC purchase volume, or vary the volume by year, and that can be modelled separately.

The LGC prices indicatively offered by the two retailers and the current market price are shown by year in Figure 13. Immediate savings would be possible with the Flow Power offer for all councils for

compliance LGCs, and particularly for those councils already buying voluntary LGCs, including some members of this group. These savings are included in the Figure 11 and Figure 12 annual costs.

Economic results –100% renewable electricity



Figure 12 - Annual cost of the 100% renewable retail electricity options for the Renew 6 Group combined. The annual retail costs associated with the The ZEN offer are shown in yellow while the Flow Power indicative offer is shown as several orange lines; the orange shaded area indicates the range of expected annual retail cost given extremely different wholesale pricing scenarios. The red diamond and square depict the current FY24 and FY25 prices paid by most of the councils. The solid purple line depicts the ASX Electricity Futures Market price which is available only until FY28.

Renewable electricity certificate pricing offers

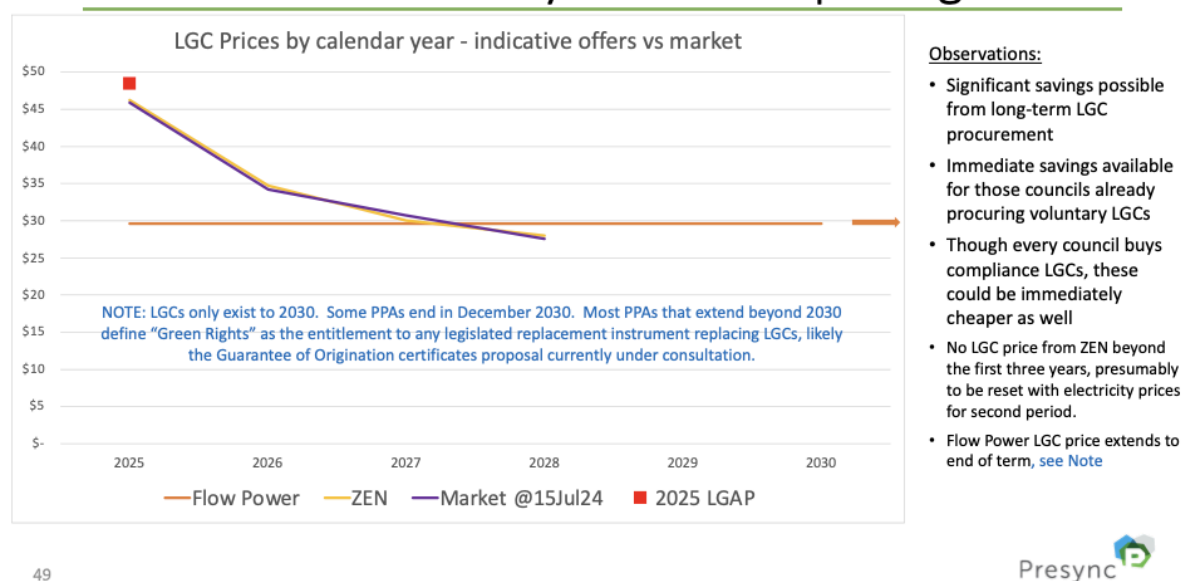


Figure 13 - Annual LGC prices indicatively offered

5.1 Indicative Economics - City of Holdfast Bay

The modelling presented above was based on the combined data of six councils. The situations of individual councils were also examined. The individual load forecast for Holdfast Bay was used with the two indicative offers and the current and projected future business-as-usual prices exactly as described above. The Flow Power offer was modelled with the wind/solar offtake mix discussed above. The results follow.

Figure 14 depicts the results of the pricing comparison for electricity and compliance LGCs for the forecast consumption of the City of Holdfast Bay sites. We see that business-as-usual electricity procurement conducted today should result in lower prices than were experienced in FY24 and FY25. The Flow Power indicative offer would lock in a cost range for almost 10 years which is entirely below this recent experience and almost all future projections for South Australia electricity prices as far as these are available. As discussed above, we expect continued price volatility on the futures and physical markets until the NEM is near 100% renewable generation, so insulating Council's electricity budget from these shocks seems advisable.

An annual retail electricity cost range (including compliance LGCs) of \$100-132k (equivalent to \$82-108/MWh) appears achievable, well below the comparable cost for the same amount and profile of electricity using Council's existing FY24 prices (\$199k, equivalent to \$163/MWh) and FY25 prices (\$182k, equivalent to \$149/MWh). ZEN's prices are currently much higher and don't offer any long-term cost stability, though this position may change should Council move to a procurement process.

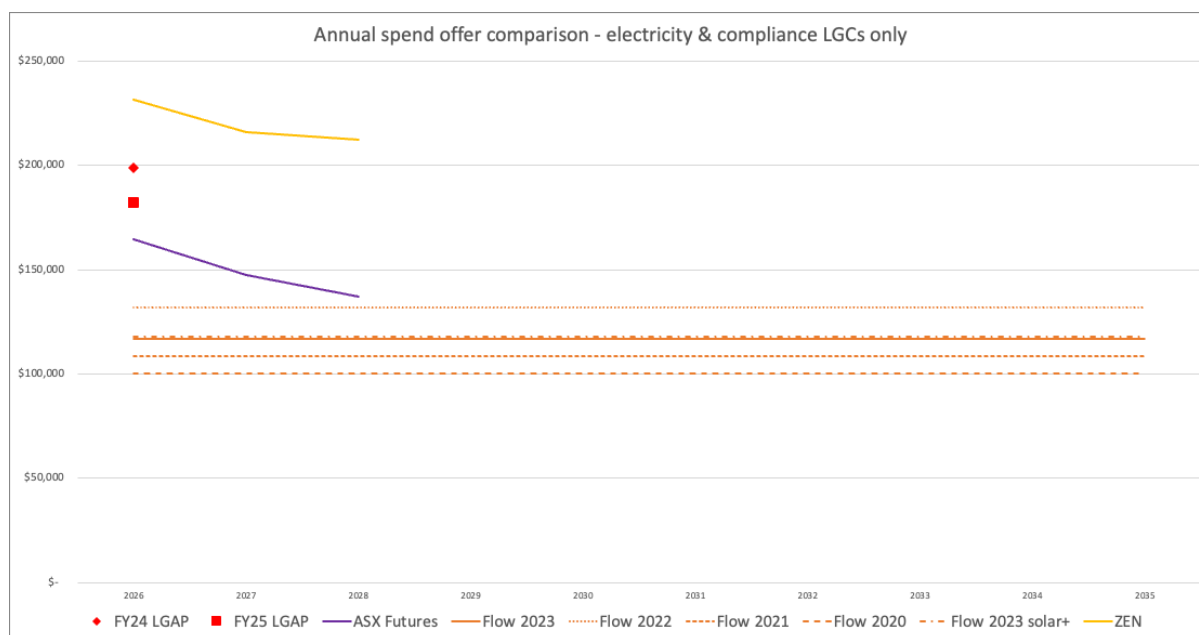


Figure 14 - Annual cost (by financial year) of the retail electricity options for City of Holdfast Bay alone.

Figure 15 depicts the same pricing comparison for 100% renewable electricity, that is the same volumes of electricity as in Figure 14 plus enough renewable electricity certificates (LGCs) to “top up” from the LGC compliance level to 100% of consumption. This is directly relevant as Council is buying 100% renewables today at the LGAP prices indicated.

An annual retail cost range (electricity plus top up from compliance to 100% LGCs) of \$130-161k (equivalent to \$106-132/MWh) appears achievable, well below the comparable cost for the same amount and profile of electricity and LGCs using Council's existing FY24 prices (\$250k, equivalent to

\$205/MWh) and FY25 prices (\$225k, equivalent to \$184/MWh). Indeed, the indicative Flow Power pricing for 100% renewable electricity from particular linked projects is cheaper than what Council is paying today for non-renewable electricity. ZEN's prices are currently much higher and don't offer any long-term cost stability, though this position may change should Council move to a procurement process.

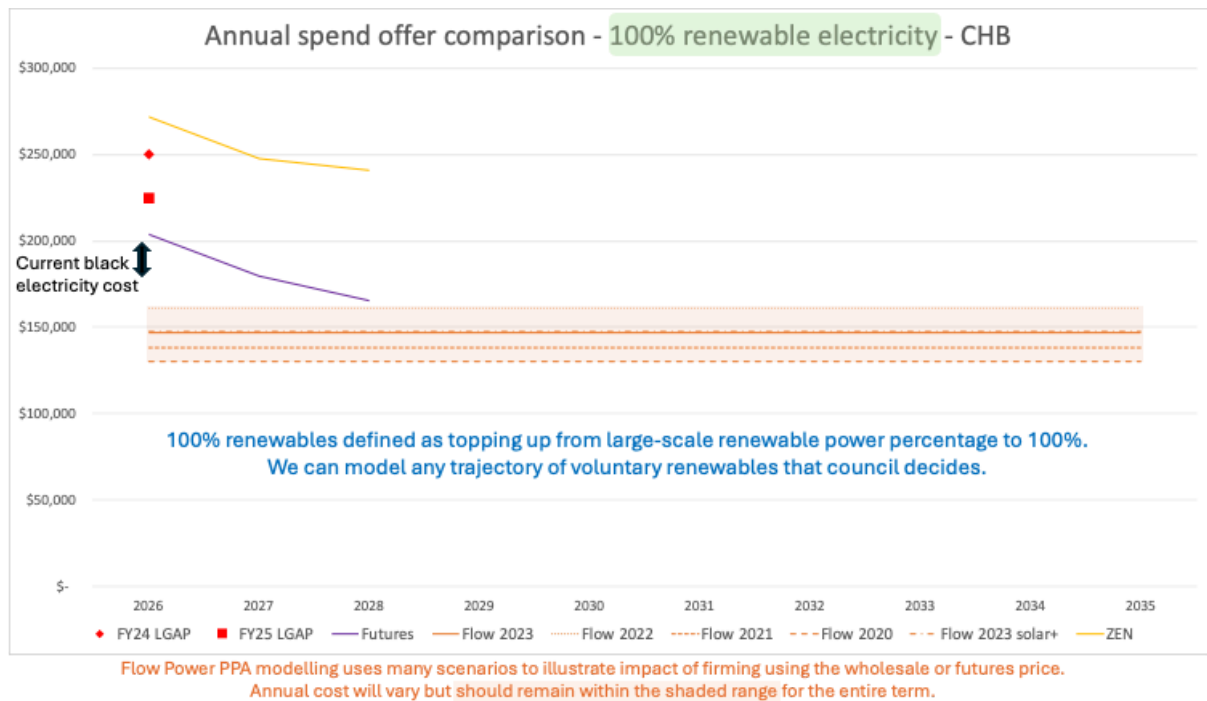


Figure 15 - Annual cost of the 100% renewable retail electricity options for City of Holdfast Bay alone.

6. Risks and Benefits of the Options

The following table highlights the benefits and risks of the various electricity procurement options. Benefits are in **green**, risks in **red** and other differences to current practice in **blue**.

| | Electricity Procurement Option | | |
|---|---|--|---|
| Consideration | Standard retail contract (BAU) | Fixed-price Retail PPA as proposed by ZEN Energy | Project-linked PPA, wholesale firming, as proposed by Flow Power |
| <i>Price stability</i> | 1-4 years, then fully exposed to market volatility | 3 years, price then resets; firming exposed to market volatility | 7.5 or 9.5 years. Some day-to-day variability but more stable overall. |
| <i>Relative price</i> | Baseline | Similar to baseline | Lowest |
| <i>Renewable certificates</i> | Optional via GreenPower. No project link. | All customers must achieve 100% during the term. Project linked. | Optional via long-term LGC purchase and surrender. Linked to projects that provide electricity |
| <i>Renewable certificate cost</i> | Baseline cost, requires 100% on top of compliance | Cost similar to baseline, top up to 100% from compliance level | Long-term flat price, lower than market price at least in the first few years, maybe longer. |
| <i>Renewable certificate volume</i> | Follows consumption | Follows consumption | Follows generation, year-end reconciliation process needed (cost included in management cost below) |
| <i>Upfront costs, logistical and legal practicalities</i> | Baseline | Similar to baseline though longer term may increase approval workload | Higher approval workload due to longest term and suite of interrelated contracts |
| <i>Ongoing costs and management</i> | Baseline | Similar to baseline | More monitoring and contract management effort, estimated around \$1,000 per month. |
| <i>Renewable Generation Project links</i> | None | Indirect | Direct links to 1 to 3 projects. This brings a new risk of project non-performance which is mitigated by a ceiling product. |
| <i>Real-time renewable/ load matching</i> | None | Poor , solar generation only | ~70%, achieved by using a well-matched South Australia wind farm |
| <i>Solar feed-in and battery business case</i> | Low fixed feed-in tariff. Limited battery arbitrage opportunities. | Low fixed feed-in tariff. Limited battery arbitrage opportunities. | Feed-in tariff is the wholesale price, varies from high to negative. Incentivises batteries with significant arbitrage opportunities to maximise revenue; future proofed for potential end to feed-in tariffs. |
| <i>Inclusion of small sites</i> | No | Maybe | Yes , if advanced meters are installed. |

| | | | |
|--|-------------------|--|---|
| <i>Support for Virtual Net Metering, Virtual Powerplants etc</i> | Baseline | Offers Customer Battery Program | Virtual net metering is included. Wholesale price maximises the business case for VPPs with batteries, smart EV charging etc. |
| <i>Need for ACCC authorisation</i> | Discuss with LGAP | Unlikely, see ACCC consultation draft report | Unlikely, see ACCC consultation draft report |

7. Considerations for Procurement

If considering group procurement of a Retail PPA, the participating councils should give some thought to their requirements and their relative weighting. It would be wise to start the procurement process by September 2024 in order to have sufficient time to run the procurement process in time for a start date of July 2025. An indicative timeline is shown at figure 16.



Figure 16 - Indicative procurement timeline

To ensure the broadest pool of participants in a tender process we suggest the following approach:

- Sites to be included:
 - Mandatory: large sites and street lighting accounts
 - Optional: small sites with advance meters, or all small sites
- Term:
 - Ideally 7 to 10 years, though retailers are free to propose any other term that may be more advantageous
- Inclusions of on-site solar generation, batteries, virtual power plants, smart EV charging etc:
 - Preference for a long-term energy partner able to integrate a portfolio of increasingly dynamic loads, potentially including stationary battery storage and electric vehicles, facilitating participation in the demand response and ancillary services markets as these evolve, and generally taking advantage of opportunities to further reduce electricity costs.
 - Addition of onsite generation is not to be restricted in any way and there must be no requirement to obtain consent from the retailer.
 - Export from behind the meter generation to be netted off at an account level (preferably) or a feed-in-tariff proposed.
- Inclusion of solar farms for one or more councils
 - Several councils have expressed interest in developing or partnering with third parties to establish solar farms (including battery storage) on their sites and land (owned or managed).
 - Retailers may optionally propose to facilitate such projects, whether they be behind council meters or on new sites acting as market generators, or even develop them on a council's behalf, but this should not be a mandatory requirement.
- Project type
 - Suggest no preference as long as renewable and with a preference for the best match between generation and consumption
 - Need to consider whether to indicate a preference for new projects (greatest impact) or existing projects (lower risk)

- Project location:
 - Suggest anywhere in South Australia
- Type of PPA:
 - Tenderers should be authorised electricity retailers able to provide an electricity supply agreement with each participant based on supply-linked PPAs rather than financial derivative products, substantially underpinned by renewable generation from identifiable renewable electricity generation projects in South Australia.
 - Each participant council should have common renewable offtake pricing based on the offtake volume of the entire group, while “firming” prices are expected to vary by participant.
- Contract structure:
 - Must be bilateral contracts with the retailer without reference to the group or other members.
 - Each participant council will make its own procurement decisions based on a common tender evaluation process and it is possible, though not likely, that some councils will proceed to contract negotiation with the selected tenderer while others will not.
- LGC volume:
 - Councils should determine their LGC requirement trajectory before commencing procurement.
 - Ideally the retailer will accommodate councils with different requirements
 - Perhaps have a minimum starting renewable content (suggest 50% including the mandatory large-scale and a portion of the mandatory small-scale percentages), and/or a commitment to increase LGC purchase over time.
- Consumption flexibility:
 - Terms should allow for the addition or removal of sites without additional retail fees and should provide maximum flexibility for changes in consumption and addition of onsite generation.

8. Conclusions

The work conducted during this project demonstrates that procuring a Retail PPA is a viable choice and should provide significant cost savings and environmental benefits for the six councils. Based on this analysis, the market testing process, and our experience, Presync advises that the group of six councils is a suitable size for a Retail PPA. If some councils decide not to participate in the procurement process there would likely still be retailer interest in providing a PPA to the remaining councils, or to councils individually, though we expect prices would be higher. It may also be possible for the councils to join another similar group which has recently commenced a procurement process.

The indicative Retail PPA proposed by Flow Power has compelling economics compared to current pricing and to the ASX Electricity Futures market. This particular option is associated with specific new wind and solar projects in South Australia, mirroring the structure of the City of Adelaide's successful PPA. It offers both lower prices and long-term price stability for electricity, further strengthened by the steady, flat-price Renewable Energy Certificates, facilitating the achievement of renewable goals while maintaining expenditure below current levels. There is some price volatility due to exposure to the wholesale price but the long-term matching with operating renewable projects provides cost stability, while an optional "ceiling" product can cap exposure to the wholesale price. The wholesale price exposure also improves the business case for local battery, virtual powerplant and load shifting projects. As wholesale prices are heavily correlated with grid carbon intensity, matching consumption to low-cost times also results in achieving low real-time emissions and assists the grid transition towards 100% renewables.

While ZEN Energy's initial indicative offer was not attractive it is likely that they and other retailers of Retail PPAs will participate in a competitive tender process should the councils choose to follow this route.

Appendix A - Leadership Survey Results

Survey of council leadership

- Getting early buy-in from decision makers has proven to be worthwhile in similar projects
- Steering Group members engaged approvers of a future long-term electricity contract
- To gauge feedback on key factors, including:
 - goals
 - term
 - risk appetite
 - preferred commercial structure
 - willingness to participate in group procurement
- We have compiled the results to enable discussion on the implications for the project
 - For individual councils and the broader group.

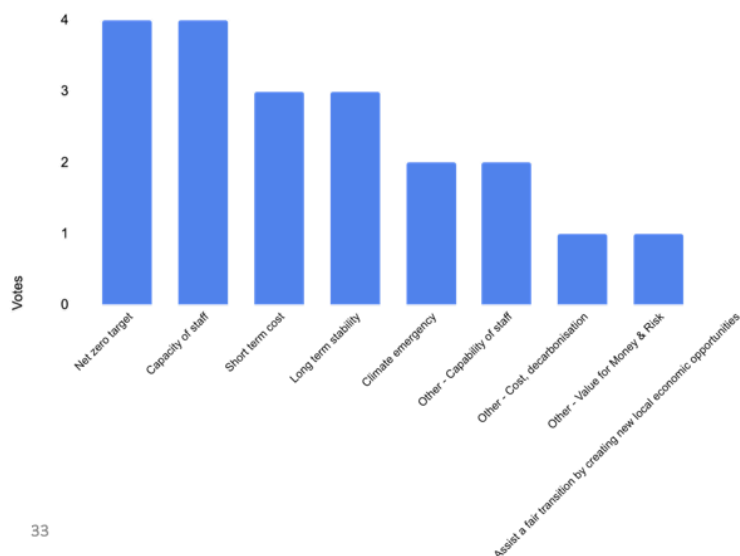
Thank you for your work on getting the surveys compiled and returned

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Factors in procurement decisions

Factors currently influencing electricity procurement decisions



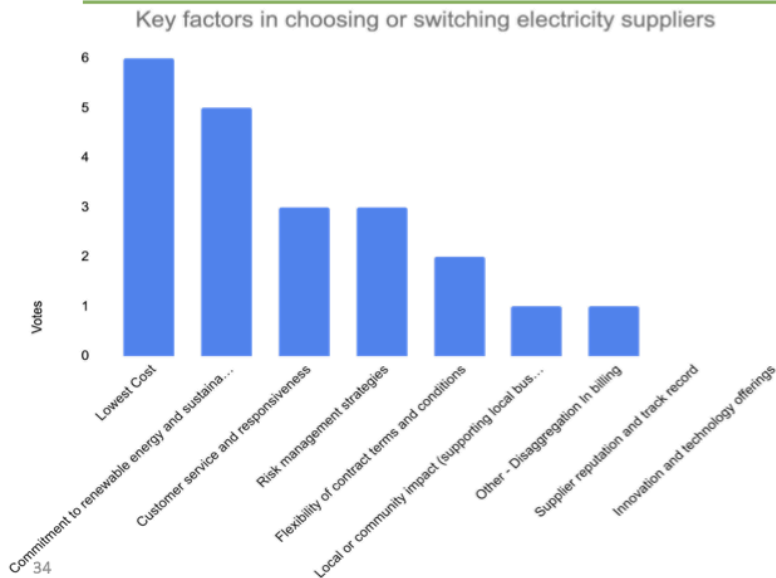
Comments and discussion points:

- Sustainability is a major driver
- Staff capacity/capability is a major concern
- Majority value long-term cost stability
- Though short-term cost important too

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Factors in choosing a retailer



Comments and discussion points:

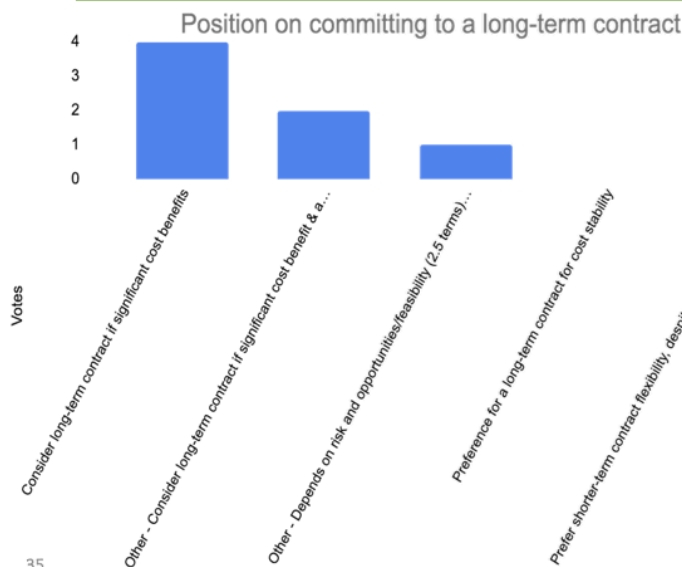
- Cost is the leading factor
- Followed by sustainability credentials
- also risk management approach
- and customer service/flexibility

Also mentioned:

- “disaggregation in billing”
- “Flexibility of contract terms and conditions – There was a question around setting up community VPP similar to Mitcham Council in the future and if the Council PPA would limit us to support such an initiative.”



Contract length

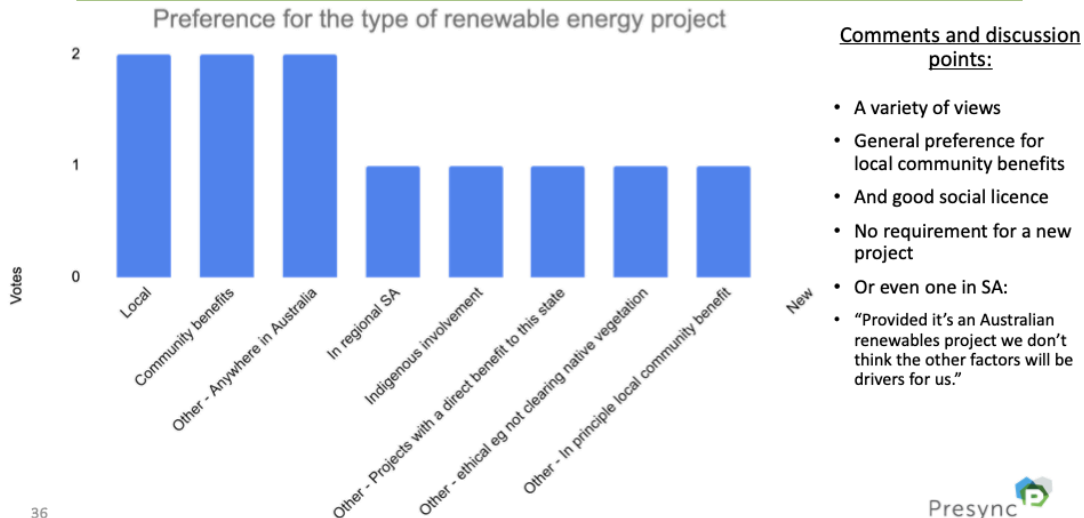


Comments and discussion points:

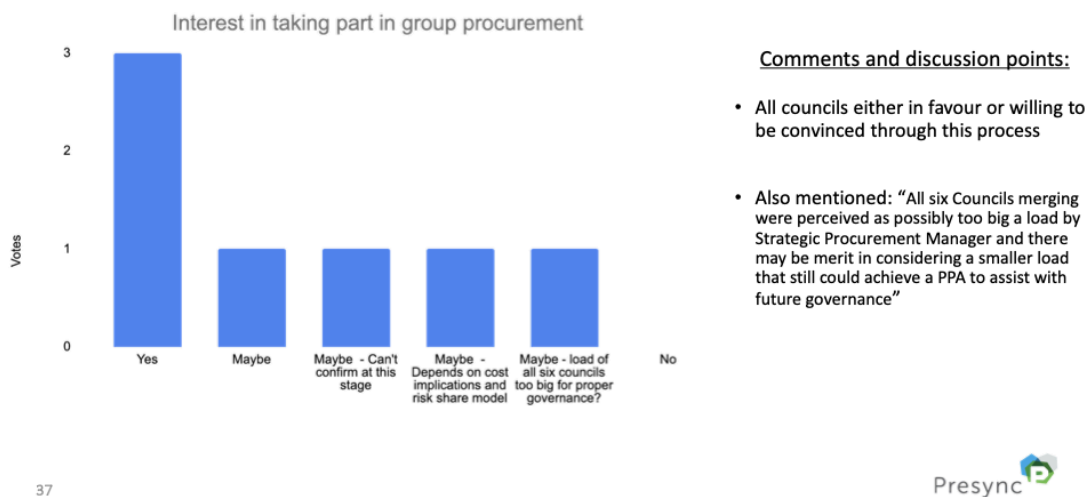
- Majority willing to consider long-term contracting
- Though “significant cost benefit & acceptable shared risk model” is a prerequisite for some
- “It depends on risk and opportunities / feasibility (over two and half terms) - strength of business case”
- One council disputes that pricing is volatile: “The cost of electricity, apart from a blip because of the RvU war, has remained predictable and steady. The cost uncertainty comes from the application of delivery costs and tariff changes...Apart from underpinning a single suppliers business model for a long period, there is a greater risk and cost, once committed to a single provider.”
- Another says: “CEO is comfortable with a longer-term PPA contract where it delivers firstly on price stability, and secondly on reduced pricing. Keen to avoid the BAU electricity re-contracting churn.”



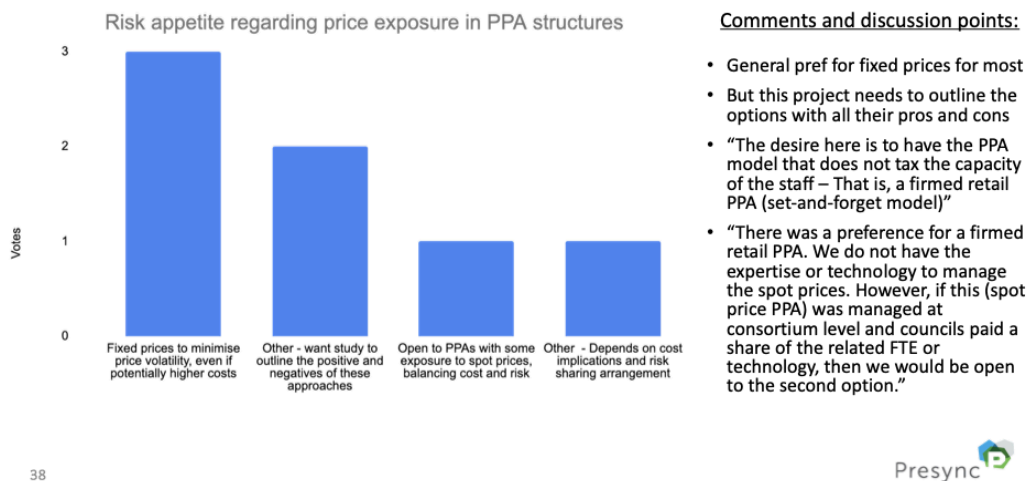
Attributes of linked projects



Interest in group procurement



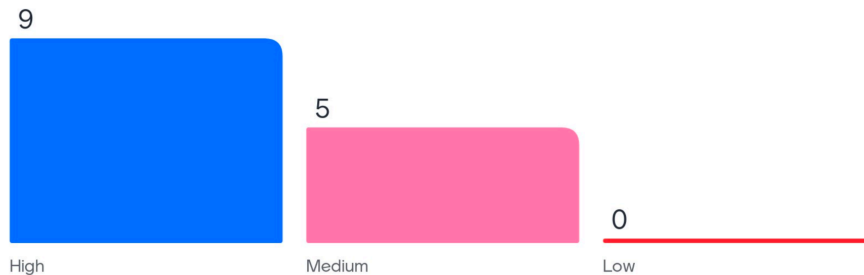
Risk appetite



Appendix B - Final Workshop: Menti Results

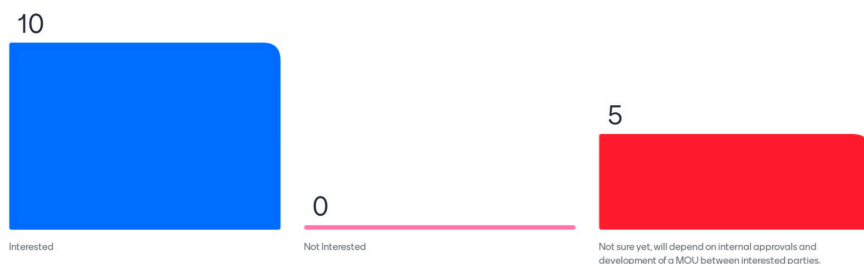
Mentimeter

Based on what you heard today, what's your level of understanding/comfort on the differences between short & long term (PPA) electricity procurement?



Mentimeter

Based on the findings and recommendations what is your interest to pursue a Stage 2 Procurement stage with the Renew 6 consortium?



Mentimeter

Apart from the feasibility findings report due late July, what else would be needed to secure approval to participate in a Stage 2 procurement phase?



Mentimeter

Appendix C - Electricity Cost Modelling Assumptions

Presync analysed the forecast load of the group, and each council individually at 30-minute resolution, which enabled calculation of retail electricity costs using both traditional time-of-use structures and structures related to the wholesale price. These load forecasts, which include all known efficiency, solar and other relevant projects, as well as forecasts for new sites to be added, were used to calculate electricity costs under the current electricity contracts for the current and previous financial years to establish the relative economics of the indicative PPA options against business-as-usual.

The model compares the annual costs by financial year for retail electricity along with renewable electricity certificates, starting in FY 2025-2026 and extending for a further nine financial years. The model excludes regulated network, market, and environmental charges as these remain constant across different retail approaches as these fees are mandatory on all retail electricity contracts.

To understand the future retail electricity cost for each council's consumption the model includes 5 years of historical South Australia wholesale price data plus the ability to tweak these data sets to explore future pricing scenarios. The wholesale pricing was simplified from 5-minute level to 30-minute level by averaging as this is the resolution we have on the consumption and renewable generation data.

One key trend to understand in the modelling is the impact of the divergence of daytime and nighttime electricity prices. Traditionally prices were higher during the working day and lower at night, the basis of peak/off-peak pricing. With the continued roll-out of behind the meter solar on the demand side and of solar farms on the supply side we have observed that daytime prices are increasingly depressed on sunny days, with negative prices now common in the middle of the day. This has implications for future electricity costs. First, the traditional peak/off-peak model of pricing is now meaningless as we are starting to see off-peak prices exceed peak prices. Second, the value of exported local solar generation continues to decrease, which should encourage shifting of discretionary loads to daytime and the use of storage to capture excess solar generation. Third, the value of non-solar renewable grid generation increases. Where there is discretion available to adjust the timing of consumption we suggest operating plant and equipment primarily during daylight hours.

Business-as-usual options are based on the base (all-time flat) South Australia electricity futures pricing available from the ASX on 15 July 2024. Likewise the pricing for LGCs for the calendar years 2025 to 2028 was based on observable market prices on 15 July 2024.

We modelled both indicative Retail PPA options from the market sounding as described in the body of this report. One of these offers fixed prices for each year based on a peak/off-peak structure, while the other offers direct "run-of-plant" offtake to particular wind and solar projects, supported by the spot price when renewable generation doesn't match consumption, modelled at the thirty-minute interval level. For this offer, the retailer provided

generation data for the linked solar and wind projects and this was used to assess the match on generation and consumption and to calculate the retail costs.

The wholesale-price-linked PPA is based on the optimal mix of wind and solar offtake (calculated for each council separately to achieve the highest real-time match at the 30-minute level for the full year) at known prices, and varies based on the spot price environment. We have modelled five scenarios to show the indicative range of cost variability, based on backcasts using the real price data for the calendar years 2020-2023, as well as a fifth scenario based on 2023 with additional solar depression (lower prices in the middle of the day and higher prices before sunrise and after sunset).

The economics of the two PPAs (yellow line and orange set of lines) starting in FY 2026 are shown against the known business-as-usual costs for FY 2024 and FY 2025 (noted as red points in year 1), and projected BAU costs for FYs 2026 to 2028 (purple line). Beyond this point there is no assurance on future BAU costs.

The assumptions made in the model are as follows:

- Addition to ASX futures price to account for load shape and retail margin: 10%
 - *We believe this is conservative given the councils load shape, which is high at night when prices are high and low during the day when prices are low.*
- NPV Discount Rate: 7.0% *(not used in the results presented in this report)*
- LGC volume required for “100% Renewable” scenario: top up from current large-scale renewable power percentage (18.48% in calendar year 2024) to 100% of annual consumption.
- Flow Power retail margin on all consumption: \$4.38/MWh