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Summary Information Sheet

27 MAY 2024 Council Meeting

Confidential Item 13.1
Renewable Energy Power Purchase Agreement for Council's Buildings

Background

At its Meeting of 27 May 2024, for Confidential Item 13.1 – Renewable Energy Power Purchase Agreement for Council's Buildings, Council's resolution was as follows:

That Council resolve:

1. **To receive and note the analysis and proposal to join the Victorian Energy Collaboration (VECO), based on the financial and policy benefits outlined in this report and the attached Procurement Report, at a total (projected) cost of $4.9 million (excl. GST) (or $5.4 million incl. GST) over 5.5 years from 1 July 2025 to 31 December 2030.**
2. **To authorise the Chief Executive Officer to approve the contract to join the Victorian Energy Collaboration (VECO) and sign the final Letter of Intent and VECO specific Renewable Electricity Supply Agreement (RESA) with Red Energy Pty Ltd by 31 May 2024.**
3. **Pursuant to Section 125 of the Local Government Act 2020, to authorise the confidential information in the officers' report and these resolutions to be publicly available for the limited purpose of communicating the effect of these Resolutions to the extent necessary to give effect to them.**
4. **For the purpose of informing the community about Council's decision, to request the Chief Executive Officer in due course, publish a summary information sheet on Council's website alongside the Agenda and Minutes of this meeting outlining Council's decision in relation to the Renewable Energy Power Purchase Agreement for Council's Buildings including such information from the report and these resolutions as the Chief Executive Officer (or such person the Chief Executive Officer selects) considers appropriate at their discretion.**

In accordance with the above Resolution, the following information is released with respect to Council's decision to enter into a Renewable Energy Power Purchase Agreement (PPA). Relevant information from the Procurement Report referenced under Council Resolution 1 above is summarised below.

Renewable Energy Power Purchase Agreement

The Victorian Energy Collaboration (VECO) is a renewable energy Power Purchase Agreement (PPA) formed to support the de-carbonisation ambitions of Victorian councils and reduce utility costs, with 51 currently participating. In October 2023, councils were provided with a renewed opportunity to access VECO up until 2030. Under VECO 2.0, Knox City Council has agreed to access renewable energy through energy provider Red Energy (now known as Snowy Energy) for Small and Large market sites (which includes all of Council's buildings). Red Energy is the existing energy provider under VECO 1.0.

Council's decision was to enter into a partially fixed price PPA at of a projected **total contract value of $4.9 million (excl. GST)**[1] **or $5.4 million (incl. GST)** for the period **1 July 2025 to 31 December 2030**, based on advice from independent energy specialist Energetics, who were engaged by Council to review the Power Purchase Agreement. The Agreement will commence once Council's existing energy contract ends in mid-2025.

Discussion

All of Council's buildings (Small and Large market sites) are currently powered by coal -dominated (Black) grid supplied electricity, through a contract with AGL until 30 June 2025; at which point Council can move to a new contract. The electricity used in Council's buildings account for 35% of Council's total carbon emissions.

The *Climate Response Plan 2021-2031* (CRP) has a goal for Council to reach net zero emissions by 2030. With 70% of

Council's carbon emissions attributable to electricity use, Council will need to purchase renewable electricity (with voluntary Large-scale Generation Certificates [LGCs]) in order to meet the net zero target. To address this requirement, the CRP includes an action to investigate the development of a solar farm, or to explore other measures to allow for a reduction in emissions, such as a PPA. As the 2022 investigation into progressing a solar farm within Cathies Lane Landfill was deferred to the latter half of this decade, the VECO 2.0 offer presents an important opportunity to address this action and Council's emissions targets. The purchase of renewable energy will come at a premium in comparison to 'business as usual' in order to reach Council's net zero target, irrespective of the form of contract this purchase takes.

The VECO 2.0 Offer

The VECO 2.0 offer presents an opportunity to secure the purchase of renewable energy from July 2025 to December 2030 through Red Energy and offers specific benefits. The design of the partially fixed pricing model allows for an appropriate balance in market risk sharing between Council and the retailer. Key features include:

- Fully fixed price in the initial years; and
- Beyond the initial fixed price period, a fixed price set at the start of the term applies to a portion of the load for the remainder of the PPA term; with a market-linked variable price applied to the residual load and re-set on a rolling basis every two years.

With significant market exposure, Council will benefit if prices trend lower in the future. Furthermore, the innovative price reset mechanisms, developed by Red Energy, and which apply to the variable priced portion of the load have two value adding features:

- transparency, with well-defined risk bounds that protect the Council in the event of significant price increases in the future; and
- a significant reduction in time-to-market risk compared to standard fixed price contracts. Thus, reducing Council's risk exposure to highly variable electricity prices and thus reducing year-on-year budget variability.

Finally, Red Energy is owned by the Federal Government and backed by generation assets owned and contracted by the Federally owned Snowy Hydro. Specifically, the ongoing supply of renewable energy through this contract is linked to two wind farm projects in south-western Victoria: Dundonnell Wind Farm and Murra Warra 2 (that will provide LGCs).

Analysis

Energetics were engaged to undertake an analysis of the VECO 2.0 offer on behalf of Council. Their analysis compared three products over 5.5 years:

- BAU Black - comparable to Council's Business As Usual (BAU);
- BAU + Green Power (includes ongoing purchase of grid-supplied electricity plus renewable energy certificates under a series of short-term contractual arrangements to help meet Council's Net Zero by 2030 target); and
- the VECO 2.0 offer (100% renewable energy under a long-term contract backed by nominated projects).

It is assumed that Council will seek to meet its emissions targets in some form over the next 5-6 years, therefore the most pertinent comparison is between BAU + Green Power and VECO 2.0. While Council could continue to utilise BAU Black, this scenario would not enable Council to meet its net zero target due to the continuing purchase of electricity with a high carbon emissions content due to the dominance of coal in the supply mix.

Australia's Renewable Energy Target is 82% by 2030. At present, renewables constitute approximately 40% of the electricity supply mix. The likelihood of Australia meeting the 82% target by 2030 will impact on the overall cost of purchasing renewable energy and is considered in the modelling provided by Energetics. Their report considers future electricity costs based on three scenarios relating to the pace of transition of Australia's electricity system. The report outlined the assumptions and conditions that would exist for the various transition scenarios, with the supply demand balance resulting in the following share of renewables by 2030 in the National Electricity Market supply mix:

- Slow Transition: Approximately 65% by 2030, falling short of the national target.
- Medium Transition: Approximately 73% by 2030, again falling short of the national target.
- Fast Transition: Assumes that the national renewable energy target of 82% by 2030 is met.

Based on the opinion of industry experts and peak bodies (such as the Australian Energy Council[2] and the Climate Change Authority[3]), the current pace of transition is unlikely to result in Australia meeting it's 82% target due to a number of reasons including shortage of labour, statutory obstacles, increasing cost of materials, community acceptance of large-scale renewable energy farms and technical buildout challenges. The Council Officer's assessment suggests that a slow pace of transition is probable.

Long Term Financial Forecast (LTFF) for Knox's electricity accounts

A further analysis was conducted by Energetics to map the difference between the VECO 2.0 offer and the amount budgeted for electricity supply to Council buildings from July 2025 - December 2030. This analysis was to help identify if the VECO 2.0 proposal falls within the existing budget, or if additional budget would need to be found to support Council's participation in the offer. Council's LTFF for the period 1 July 2025 – 31 December 2030 forecasts Council's overall expenditure on electricity costs for Council buildings at $5.7M total (excl. GST). This forecast assumes Council will continue with its BAU Black scenario over this period and includes annual increases of approximately 2.5-5.0% over this period.

The analysis identified that Council's expenditure under the LTFF scenario of $5.7M will be higher than the projected cost of the VECO 2.0 offer under the slow energy market transition scenario, at approximately $4.9M (excl GST). A contributing factor to the LTFF being higher than the cost of a renewable energy contract could be explained by the fact that electricity prices peaked after the COVID lockdown, and the current AGL contract was based on relatively higher prices.

Table 1 below outlines the key strengths and weaknesses of the various options considered. It also shows the modelling results under the three scenarios in Net Present Value terms over the full term of the Agreement (i.e. 5.5 years). Energy markets are highly variable, and other budget outcomes are possible driven by market developments and potential changes in Council's consumption.

Table 1. Electricity product comparisons

Offer	Council's Current AGL Contract	BAU Black	BAU + Green Power	VECO (Red Energy Offer)
Current (Knox Council) Practice	✓	✓	✗	✗
Helps meet Knox Net Zero Target by 2030	✗	✗	✓	✓
Approx. Emissions Savings (tonnes)	-	-	15,400	15,400
Risk of 'time-to-market' price hikes	High	High	High	Low
Protection from price shocks	Low	Low	Low	High
Ability to add/delete buildings to contract in the future	Limited to ±20%	Limited to ±20%	Limited to ±20%	Unlimited

[2] https://www.energycouncil.com.au/analysis/the-82-per-cent-national-renewable-energy-target-where-did-it-come-from-and-how-can-we-get-there/

[3] https://www.climatechangeauthority.gov.au/authority-publishes-its-advice-governments-second-annual-climate-change-statement

Offer	Council's Current AGL Contract	BAU Black	BAU + Green Power	VECO (Red Energy Offer)
Operational impact (staff time for procurement and manage a change of contract)	High	High (up to three contract changes)	High (up to three contract changes)	Low (one contract for 5.5yrs)
Fast Transition (excl. Pass Through Costs[4])	n/a	$1.4m	$1.9m	$2.2m
Medium Transition (excl. Pass Through Costs)	n/a	$1.7m	$2.2m	$2.35m
Slow Transition (excl. Pass Through Costs)	n/a	$2.0m	$2.6m	$2.3m
Comparison cost for 2024/25[5] (inc. Pass Through Costs)	$816,633	n/a	$953,553	$814,101
Total Estimated Cost (inc. Pass Through Costs)	$5.7m (LTFF)	$3.9m – $4.6m	$4.8m - $5.1m	$4.7m - $4.9m

The VECO pricing model design shields Council against extrene high price events. The effectiveness of the model is illustrated in the above table where the VECO price outcomes are the same under the medium and slow pace transition scenarios, compared to a approximately 18% increase under the BAU + GreenPower option under the slow pace scenario.

Alternative Options Considered

In summary, four options were considered to help meet Council's emissions target:

1. Enter into an agreement with Red Energy to purchase renewable energy from 1 July 2025 through to December 2030 under VECO 2.0.
2. Wait to see if VECO 3.0 would be offered between now and when Council's current electricity retail contract comes to an end in June 2025 (it should be noted that VECO has advised this option is unlikely).
3. Continue with the current procurement strategy of short-term contracts and add Green Power to all large and small electricity accounts.
4. Council commence its own Power Purchase Agreement (although Council's small energy load is unlikely to attract competitive bids from energy retailers).

Having considered the key strengths and weaknesses of the VECO offer (as per Table 1), the financial analysis conducted by Energetics, and further expert opinion on the current pace of transition towards Australia's renewable energy target, officers recommended that Knox join VECO 2.0 and Council resolved to do so.

Bruce Dobson
CEO

[4] Pass Through Costs are the non-contestable elements of an electricity bill and includes network charges
[5] This compares the actual AGL contract rates for 24/25, with actual VECO contract rates for the same period, allowing for comparison without any future uncertainty built in