

Strategic Focus Area: Protect.Enhance.Adapt

Avenel Memorial Hall

Problem and opportunity:

In 2021 solar panels and a storage battery were installed in Avenel Memorial Hall, with support from Strathbogie Shire Council, to provide standby power to enable the Hall to operate as a heat refuge for residents during days of extreme heat, periods of heatwave and/or power outage.

However, it has been the unfortunate experience during a December 2023 community meeting, where temperatures were high (34°), and power was lost to the town, that the solar battery system is unable to operate as an air-conditioned cooler place for more than 2-3 hours during a power outage. The capacity of the system is further reduced if there is overcast weather or later in the day when the solar panels are no longer charging the battery.

In 2023 members of the Avenel Memorial Hall Committee participated in Council's LEAPing into Resilience Project to develop Avenel's Local Emergency Action Plan (LEAP). Following community consultation Avenel's LEAP:

- identified heatwave as one of Avenel's local emergency risks, primarily due to the high proportion of elderly and/or isolated residents with pre-existing health conditions; and
- committed the Avenel Memorial Hall Committee to organising a list of volunteers to open the Hall as a cooler place in times of a heatwave (Action 3.1).

The Avenel LEAP also states that, "if activated as an Emergency Relief Centre (ERC) the Hall will have additional backup power in the form of a generator organised by the Council."

At this time, however, there do not appear to be any agreed state or national emergency protocols for declaring an emergency due to extreme heat and power outage that would result in activation of Avenel Memorial Hall as an ERC.

Consequently, Council officers advised during the development of the Avenel LEAP that any decision to operate as a heat refuge is a matter for the community to organise and resource on a voluntary basis.

The Avenel Heatwave Project Group has since been established to help meet the community's need for cooler places during days of extreme heat, heatwave and/ power outage. The Group has membership from the Avenel Memorial Hall Committee, the Avenel LEAP Steering Committee and the Avenel Fire Brigade.

Council supported this volunteer effort through publication of the Avenel Cooler Spaces brochure, which promotes the availability of the Avenel Memorial Hall as the township's primary air-conditioned cooler place to provide heat relief on extreme heat and heatwave days.

Avenel Memorial Hall cannot, however, operate effectively as a cooler place during power outages lasting more than 2-3 hours without increased standby power capacity.

Waiting for activation of the Hall as an ERC or for the Council to determine whether to provide a generator during simultaneous extreme heat and power outage could have

significant consequences for the health of residents who are vulnerable to extreme heat. These health risks are amplified when they coincide with power outages, which are common year round in Strathbogie Shire and have extended for days in some instances.

Our Pitch My Project proposal is to enable the Avenel Memorial Hall to operate more reliably as a heat refuge by installing a fixed 21-25 kW standby generator to ensure power and cooling can be provided quickly in the event of simultaneous extreme heat and power outage, protecting community health and building community resilience to emergency heat events.

The proposal is consistent with Council Plan Strategic focus area 3: Protect. Enhance. Adapt and Council's related strategy "to provide a range of 'cooler places' for our community during heatwaves and power outages".

References:

- Avenel Local Emergency Action Plan - https://www.strathbogie.vic.gov.au/wp-content/uploads/2023/12/20231218_Avenel_LEAP_FA_Screen.pdf
- Strathbogie Shire Council 2021-25 Council Plan - https://www.strathbogie.vic.gov.au/images/Plans_policies_Strategies_reports/Strathbogie_Shire_Council_20212025_Council_Plan.pdf

How does it affect or impact the community?

Heatwaves have caused more deaths in Australia than bushfires, cyclones, earthquakes, floods and severe storms combined. Since 1960 the number of record hot days has doubled and heatwaves have become longer, hotter and more intense (Climate Council, 2016).

Climate change will continue to accelerate the frequency, duration and temperature of heatwaves increasing the serious health threats to many more Australians.

The public health impacts of extreme heat and heatwaves are well-known and include excess deaths and hospitalisations; dehydration, heat exhaustion and heat stroke; and exacerbation of pre-existing illnesses such as heart disease, kidney disease and asthma. Children, the elderly, people with disabilities, the socially isolated and outdoor workers are among those most at risk.

Strathbogie Shire Council's Heatwave Plan 2022 notes that elderly people are more prone to heat stress and that people aged over 60 years represented 37.8% of the Shire's population at the 2016 census compared to the Victorian regional average of 27.2%.

This is consistent with Avenel's population profile. The 2021 Australian Census recorded that Avenel's population had:

- a higher proportion of older persons than the Victorian average in every age cohort from age 40 to 85 years and older
- greater rates of long-term health conditions than the Victorian average for every selected condition including asthma, heart disease, kidney disease, stroke and lung conditions
- 28.4% of the population lived alone, greater than the Victorian average of 25.9%; and
- the median weekly income for individuals, families and households was significantly lower than the Victorian average.

These factors combine in Avenel to significantly increase the health risks of extreme heat and heatwave, particularly during power outage, as we have more than the average proportion of residents who are aged and/or isolated, with pre-existing health conditions, and who may not be able to afford to install or run air-conditioning or a standby generator for their home.

There is also a lack of public and retail cooler places in Avenel to meet the community's need for heat relief during power outage. Additionally, limited public transport available in Avenel means that aged or unwell residents and others who are unable to drive have few options to relocate to urban centres where larger retail shopping precincts may offer air-conditioned cooler places.

While the Avenel Memorial Hall Committee and the Avenel Heatwave Project Group are willing to organise a volunteer-based heat refuge operations, our capacity to do so is limited during power outage by the limited capacity of our standby battery, particularly in hot evenings when solar generation decreases.

It is also important to note that the Avenel Memorial Hall is one of the heart centres of Avenel as locals come together for a variety of activities and events such as yoga, bridge club, birthday parties of all ages, musical events, local school performances, travelling shows, painting classes, the list goes on.

The Avenel community and surrounds would greatly benefit from a standby generator so that these and other activities are not disrupted as well as provide a secure, reliable and safe place as a designated heat refuge. There is considerable community support for this initiative, who would be more than happy to provide letters of support for the standby generator.

References:

- Climate Council: The silent killer: Climate Change and the health impacts of extreme heat 2016 - <https://www.climatecouncil.org.au/resources/silentkillerreport/>
- <https://www.health.vic.gov.au/environmental-health/research-and-reports-extreme-heat-and-heatwaves>
- Strathbogie Shire Council Heatwave Plan 2022 - <https://www.strathbogie.vic.gov.au/wp-content/uploads/2022/08/20220216-Heatwave-Plan-Feb-2022.pdf>
- <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL20086>

What is your idea and what difference would it make?

Our Pitch My Project proposal is that Council install a 21-25kVA fixed standby generator at Avenel Memorial Hall to enable the Hall to operate effectively as the township's primary power outage and heat refuge location, by ensuring standby power and cooling can be provided quickly in the event of simultaneous extreme heat and power outage.

This would require:

- installation of a fixed, hard-wired 21-25kV capacity standby generator with electric start
- update Hall circuits and connections as required
- installation of concrete slab
- installation of a generator security cage

We have consulted an experienced electrician who has estimated a 21-25kV generator of the required quality (for example Himoina or Promac brands) at \$17,000 plus GST.

We estimate remaining costs to install a slab, update electrical circuits and connections, and purchase and install a security cage would bring total project cost in the order of \$30,000, subject to quotes by Council's preferred suppliers and any price inflation by 2024-25 financial year.

We note that any installation will need to be easily and safely operable by Hall Committee representatives and will require installation of safety notices and instructions at the point of use.

Further information:

This Pitch My Project application is supported by Avenel Active, the local community action group empowered by Strathbogie Shire Council to develop four-yearly strategic community development plans for the Avenel township in consultation with residents, community organisations and local businesses.

This application is consistent with the following Theme, Objective and Project within the Avenel Community Plan 2022-26:

Theme 3: Conservation, Environment and Climate Change

- Objective: Facilitate community adaptation and resilience to climate change
- Project: Support operation of the Avenel Memorial Hall Heat Refuge during power outages

Letters of support for this proposal are also available on request from:

- Avenel Active
- Avenel Heatwave Project Group
- Avenel LEAP Steering Committee
- Jubilee Park Committee of Management
- Avenel Fire Brigade