

Targeting 100% Renewable Energy by 2025 Ambulance Victoria, Australia

GGHH Agenda Goals

- Energy
- Leadership

Health Service Goals

- To source 100% of energy needs from renewable sources by 2025
- To transition to net zero carbon by 2050

Progress Achieved

- Ambulance Victoria (AV) has an Action Plan to limit contributions to global warming.
- In mid-2020 Ambulance Victoria signed a power purchase agreement for sites with high electricity use. These sites are now powered by 100% Green Power, accredited renewable energy from a Victorian wind farm.
- This step represents 27% of AV's electricity usage and a 7% reduction in AV's overall emissions.



The Issue

Health care in Australia is estimated to contribute to 7% of national emissions¹. Climate change is not only an environmental and economic issue, it is also a health issue.

As a result of climate change, the state of Victoria can expect to experience an increase in the occurrence and severity of extreme natural events, including heatwaves and storms. AV believes it has a moral obligation to residents of Victoria to build a responsible business that leads by example. This translates to providing world class health care and social leadership in the most carbon efficient way possible.

The chart on this page shows that in 2015, AV emissions have been made up of approximately one third each of Road, Air and Buildings (energy), however this will change dramatically over time with the transition to renewable energy.

Sustainability Strategy Implemented

AV recognised the need to reduce its GHG emissions and contribution to climate change. Their Sustainability Team developed an 'Action Plan' to achieve renewable energy targets through the four pillars of: People; Community; Environment and Supply Chain. Each of these areas have actions that will guide AV to be a socially and environmentally responsible organisation with a dramatically reduced carbon footprint.

AV's goal is to reduce all aspects of their carbon footprint. However, it was important to prioritise the transition of electricity from traditional based

¹ <https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext>

sources to renewables in preparation for the road fleet transition to hybrid and electric/zero emission vehicle technologies. At the time of writing, some AV emissions are still generated from coal-based electricity, however we have a vision to be 100% renewable by 2025.

Implementation process

Renewable energy contracts had reached a tipping point in Australia in 2019, whereby Power Purchase Agreement (PPA) deals had demonstrated that it was the same cost, if not cheaper, to deliver renewable electricity through the grid rather than with “baseload” coal generation. Ambulance Victoria was aware of the changing opportunities in the energy markets, however at this stage, was unsure how to access them directly.

In November 2019, an opportunity presented for AV to join an initiative already underway with Procurement Australia (PA) leading a consortium of (mainly) local government members on a long-term renewable PPA to begin delivering electricity from July 2020. This seemed to be the exciting break that AV was looking for!

In pursuing a renewable PPA, AV’s energy solution was aiming to provide:

- Opportunities for emission reduction based on adoption of renewable sources
- Reasonable costs for renewables; and
- Energy security over the longer term.

This was achieved through a contract between AV and a renewable energy farmer to purchase renewable energy directly. It would give the renewable energy farmer assurance to invest and develop the project and support the Victorian Renewable Energy Efficiency Target (VRET) as a new renewable energy development project.

There was genuine interest in the opportunity and staff engaged well with the challenges to upskill on knowledge of new energy products and opportunities. Property, procurement, finance and the Executives were consulted to provide input on a proposal put forward to the AV Board.

Key benefits of the renewable PPA:

- Reduces the negative impact of our organisations footprint and contributes to AV’s organisational action around climate change.
- Enables AV to reduce its greenhouse impact by approximately 7% per annum from 2020
- Supports AV’s ability to realise its commitments in its Social and Environmental Responsibility Action Plan
- Supports AV’s compliance with the Victorian Climate Change Act; and
- Supports managing AV’s climate change enterprise risk in implementing climate change action.

The agreement was approved and the project went live on 1st July 2020. From late 2019 to the ‘Go Live’ date in July 2020, the project took ~8 months to deliver.

Tracking Progress

Success will be measured in terms of emissions reductions from our buildings portfolio, and we can track financials compared to ‘business as usual’ over time. Of note, forecasts for the cost of electricity that inform any financial modelling for energy pricing can change and are not easily

available beyond approximately 3 years. Given a contract for 10 years, this will be monitored against the forecast developed for benefit realisation tracking purposes.



Challenges and lessons learned

The challenge that AV and many others will face in undertaking a PPA is the learning curve that will ensure you are informed in the agreement you are creating. There are as many types of PPA, each designed to satisfy a particular set of priorities. AV had a preference for lower risk, 'firmed electricity' and 'retailer wrapped'. These are all terms that come to mean something as you investigate your options. For example, you might want the cheapest price and be willing to take on more of the risk in your attempt to achieve that.

A good way to familiarise yourself with all options is to research extensively or do a course. Staff attended a PPA Bootcamp covering energy training and support. See <https://businessrenewables.org.au/> for more information.

Once you know what you're after, you would consider your market options and approach. Our experience was quite positive and we learned a lot, and AV is hopeful to review further opportunities in assistance with technical aspects of the process, to support its renewables vision becoming a reality.

Next Steps

Through the power purchasing agreement for large sites, AV has reduced overall emissions by approximately 7%. Sourcing 100% of our energy needs from renewable sources by 2025 would mean a 27% reduction in our overall emissions profile. To do this we will implement further

actions to negate the impact of energy such as behind the meter solar projects, experimentation with battery storage and the design of a 'net zero carbon' ambulance branch.

Demographic information

Ambulance Victoria services an Australian state with 6.7 million residents. The service provides a wide range of services from 260 locations and attends approximately 1600 emergency incidents per day:

- Emergency medical response and pre-hospital care
- Emergency medical transport by road or air
- Non-emergency patient transport
- Major incident management and response
- Medical retrieval of critically ill adult patients
- Assistance for patients to access appropriate care when paramedic care or transport is not required
- Support for other health services in some rural communities where the full range of services is not easily accessible
- Community education in pre-ambulance arrival emergency care
- The Ambulance Victoria Membership Subscription Scheme (ambulance insurance)
- A program of research in clinical and operational practice
- First aid at public events by arrangement.

Links

<https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext>

<https://www.ambulance.vic.gov.au/about-us/strategic-plan/>

<https://www.ambulance.vic.gov.au/av-moves-towards-renewable-energy/>

Quotes:

'This summer's bushfires bought the realities of climate change home to many Victorians in a way that melting glaciers couldn't'. 'We saw a 51 percent spike in calls for help for breathing problems in one night'. 'Climate change is not only an environmental and economic issue – climate change is a health issue'². – Associate Professor Tony Walker, CEO of Ambulance Victoria.

Keywords / topics: energy/leadership, ambulance, emissions

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² <https://www.ambulance.vic.gov.au/av-moves-towards-renewable-energy/>