Renewable Energy

Switching the energy used to power households and local businesses to renewable energy reduces greenhouse gas emissions, and stop us spending more money on electricity, gas and petrol too.

The most common form of renewable energy in Australia is solar. We are also seeing more large-scale wind farms being developed in regional areas. These renewable energy solutions are just one way we can fight climate change.

We can transition from being energy consumers to being energy generators by installing rooftop solar or buying renewable energy through a community wind or solar farm.

Renewable energy can be stored in an electric battery to save us paying for energy off the grid during peak periods, or else shared amongst neighbours through the establishment of a community microgrid network. We can switch our cars to electric vehicles and can charge them with solar power, rather than pay for petrol.

Renewable energy not only reduces greenhouse gas emissions, but reduces power bills as well. For example the Social Foundry in Kyneton is estimated to save $5,000 in their annual power bill after installing a 20kW rooftop solar system.

Of course, not everyone owns their own home and can afford to install solar. Government incentives, community bulk buys and GreenPower can help more people access renewable energy.

IN ROMSEY AND LANCEFIELD

Households and businesses in Romsey and Lancefield are eligible for government rebates to install rooftop solar and replace gas and electric hot water systems with solar hot water systems.

MASH (More Australian Solar Homes) is a Central Victorian community solar bulk-buy program which is active in the Macedon Ranges. It leverages community buying power to negotiate heavily discounted prices for solar systems.

What ideas are you keen to work on to help people create or use renewable energy like solar power or Green Power?

EXAMPLES OF COMMUNITY PROJECTS

1. COMMUNITY WIND FARM

Established in 2007, Hepburn Wind is Australia's first community-owned wind farm The two turbines generate enough renewable energy to power the homes of its 2000 strong members. Locals can buy a membership through a shareholder system for a minimum of 100 shares, non-locals can also become members for a 1000 shares. As well as powering local homes, Hepburn Wind providing the option for households, businesses and individuals to purchase offsets and offers wind farm tours. With this diversified income stream, Hepburn Wind reinvests back into the community providing local sponsorship and community grants. The group is now expanding and is in the process of establishing a community solar farm.

2. COMMUNITY MICROGRIDS

The Yackandanah community has built three microgrid networks in order to reach its goal of being powered by 100% renewable energy. The microgrid aims to reduce household energy bills, provide a reliable source of power and reduce carbon emissions. With a grant from the Victorian Government, 33 households have come together to install solar panels on each rooftop. The energy generated by the solar panels is stored in 8 battery storage units and then shared amongst the households.

A local community power retailer, Indigo Power, has now been established to buy and sell locally generated energy to a broad range of community members.

Large scale solar farm. Photography by Tolotola

Rooftop solar. Photography by Jake Roden

HIP V. HYPE