



Two whole town energy pre-feasibility studies underway

Heyfield 'MyTown Energy: Community energy at the grid edge' & 'Totally Renewable Phillip Island'

There are many options for communities looking to develop local energy systems and determining a viable path can be difficult to navigate. There is already substantial momentum on a number of existing local energy projects, but how can they be combined for optimal benefit? What complementary resources can be developed to maximise local energy independence and support grid integration? What technologies and partners should they choose? What business models will be financially viable? How can they be financed? What ownership and governance can ensure customers are protected, while benefits are equitably shared within the community? *

A faster and easier way for understanding, designing and implementing local energy systems is needed for interested communities. Replicable models would allow these benefits to be capitalised on for the whole Gippsland region, as well as other edge of grid areas around the country.

Heyfield Community Resource Centre are partnering with the Institute of Sustainable Futures, EkoCentric Applications and many local businesses, community organisations and residents to undertake a pre-feasibility assessment of a whole town energy system and to gather community input to inform design of a full feasibility study.

Totally Renewable Phillip Island (TRPI) is a collaborative partnership between six community-based groups and the Energy Innovation Co-operative, and they are partnering with Bass Coast Shire Council, Phillip Island Nature Parks and Westernport Water to undertake a pre-feasibility assessment of how they might collectively achieve their goal of being 100% renewably powered by 2030. Consultant David Coote from Analytical Engines is undertaking the pre-feasibility study.

"Local energy systems are becoming increasingly viable and important parts of our wider energy systems. Local energy systems aim to match energy supply and demand within a defined area, to the benefit of a range of stakeholders" *

* Excerpts from Heyfield 'My Town' Innovation proposal



Upcoming Energy Innovation Group Meetings

- Bioenergy Innovation Group
Friday May 8th
- Smart Grids Innovation Group
Tuesday May 12th
- Geothermal Innovation Group
Thursday May 14th

All meetings will be online, invitations will be emailed with connection details.

If you have received this eBulletin and have an interest in the Innovation Groups, but have not previously participated, please email:

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Planning for Australia's first offshore wind project, Star of the South, is underway and they want to hear from you.

Get involved online at:

starofthesouth.com.au/getinvolved

Share your feedback by Sunday 17 May.

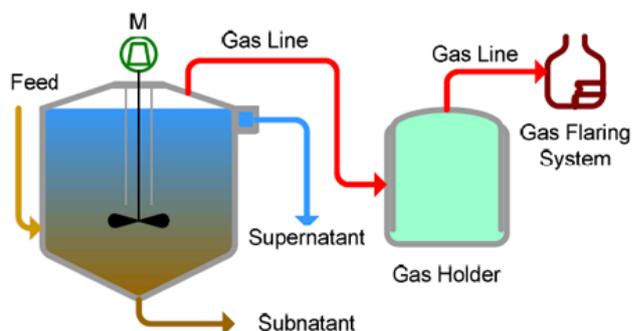
Boosting Gippsland's bioenergy science and training capability at TAFE Gippsland Yallourn Campus

EnviroMicroBio and TAFE Gippsland will design and construct two large lab-scale Anaerobic Digestion Units for research and training purposes

The Innovation proposal put forward by Gippsland entrepreneur, Emily Scholes from EnviroMicroBio was endorsed by the Bioenergy Innovation Group at its February meeting. Partners in the proposal EnviroMicroBio, TAFE Gippsland, Biopathways Partnership and Federation University aim to engage students and teachers from electrical and plumbing trades at TAFE and an Industry Placement Program Student from Federation University in the real-world project work of designing, procuring, constructing and commissioning two lab-scale anaerobic digestion units.

These facilities will provide important foundational infrastructure for supporting growth of the emerging bioenergy sector in Gippsland.

Continuous Stirrer Tank Reactor



This unique opportunity will encourage collaboration between different groups of technicians and better prepare students for workplaces of the future.

Australia is entering a phase where anaerobic digestion is becoming a viable option for waste management, nutrient recovery and energy generation. Provision of local lab-scale systems will enable research and development to occur in Gippsland and will also help develop the Latrobe Valley as the location within Australia to access research and pre-project design data.



Australian Electric Vehicle sales went up 200% in 2019

Newly released figures show 6,718 EVs were sold in Australia last year, up from 2,216 in 2018. In the same period, combustion engine vehicle sales dropped by 7.8 per cent. However, EVs still represent 0.6 per cent of sales in Australia. That compares poorly to 3.8 per cent of sales in Europe and 4.7 per cent of sales in China

Visit the [Electric Vehicle Council](#) website and check out the nearly twenty EV models available in Australia. Use their [cost calculator](#) to get an understanding of the comparative costs of owning an electric vehicle in Australia, with and without batteries and solar. Also, on the website is an Australia-wide [charger location map](#) that demonstrates the ever-expanding network of EV charging points.

Source: Kirsty Roche, Climate Ready Hume, DELWP



Innovation Proposals under development and for report back at May meetings

Bioenergy

Name: Bioenergy Project Development Framework
Project lead: Wellington Shire Council

Community Energy

Name: Solar PV panel reuse feasibility study
Project lead: Latrobe Valley Community Power Hub

Geothermal

Name: Geothermal resource mapping and cost and beneficial use tool
Project lead: Geological Survey Victoria and University of Melbourne

Smart Grids

Name: Loch Sport Microgrid
Project lead: Analytical Engines
Name: Smart Refuge Centres
Project lead: Voices of the Valley

Emerging Innovation Proposals for presentation and discussion at the May meetings

Bioenergy

Name: Biogas Pre-feasibility
Project leads: TBD
Name: Gippsland biodiesel
Project lead: Frontier Impact Group

Community Energy and Smart Grids

Name: Enabling community participation in the renewable's revolution – a social research piece
Project lead: TBD

Geothermal

Name: Geothermal energy global market scan
Project lead: Graeme Beardsmore, Hot Dry Rocks Pty Ltd

Smart Grids

Name: Smart Refuge Centred Smart Grids – Global Market scan
Project lead: Institute of Sustainable Futures
Name: Hallora SWER line microgrid
Project lead: TBD

Some useful links to some interesting reading

- [Community Models for Deploying and Operating DER](#)
- [3-D printed ventilators from Open Source design](#)
- [7 open hardware projects working to solve COVID-19](#)

We hope to produce this eBulletin monthly to keep people in the Gippsland energy innovation space connected.

Thank you all in advance for working with us creatively to keep the work going and the ideas flowing.