

Community Energy Transformation

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Community Energy as Social Innovation

- What is the meaning of "community" in community energy
 - Is no predefined essential core
 - Context-dependent physical and human geography matters
 - Held together through social arrangements, or 'community norms' and values
 - Distributive equity dimensions in any community
 - The role of community-scale institutions eg local government

What does community energy do?

- Who does it empower?
- What does it enable?
- Who and what can be inspired?
- Who is included/excluded?

Key Questions

- What supports are needed to develop necessary literacies and a broad and diverse representation?
- What agencies/entities need to be brought on board to achieve this?
- What does energy justice and equity mean for the project?
- What are the best structures of coordination and ownership for the community?

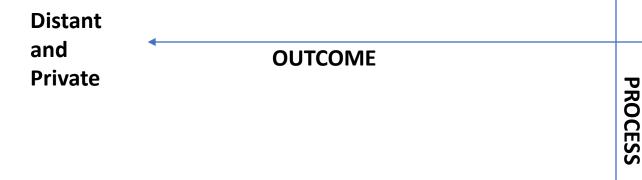
Immediate benefit Where does value lie for you? Reliability Gifting/sharing energy Commercial returns Independence/ Autonomy Non-Monetary Resilience monetary value value **Emissions** Local economic reduction development **Future** benefit

MELBOURNE

What/How it Should Happen?

Open and Participatory





Closed and Institutional

Local and Collective

- Who is driving the change?
- Who/what is blocking change?
- What supports/enablers are needed?
- What is the right scale for action?
 - What level of engagement does community want?

Walker, G. and Devine-Wright, P., 2008. Community renewable energy: What should it mean?. *Energy policy*, *36*(2), pp.497-500.



The AER's Energy Innovation Toolkit Regulatory Sandbox



Overview of the National Electricity Market

 The National Electricity Market (NEM) includes Queensland, New South Wales (including the Australian Capital Territory), South Australia, Victoria, and Tasmania.

 The NEM is one of the largest interconnected electricity systems in the world, covering around 40,000 km of transmission lines and cables, supplying around 9 million customers and delivering around 80% of all electricity consumption in Australia.

How does this all fit together?

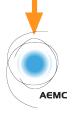
Energy Ministers

Federal, State and Territory energy ministers work together through Ministerial forums on priority issues of national significance and key reforms in the energy sector.











Australian Energy Market Operator

Gas and Electricity systems and market operator

Australian Energy Market Commission

Rule maker, market developer and advisor to government

Australian Energy Regulator

Economic regulation and rules compliance

Energy Security Board

Comprised of the most senior leaders of the AEMC (Chair), AEMO and the AER. The role of the Board is to provide Energy Ministers with advice on whole-of-system oversight for energy security and reliability of the national electricity market and improving long-term planning for the national electricity market.

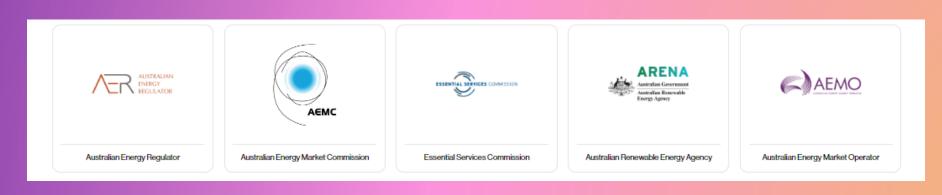
Essential Services Commission (Vic)

Victoria has partially implemented the national energy legislation. Victoria has implemented its own energy laws, which are administered by the ESC



What is the Energy Innovation Toolkit?

- The Energy Innovation Toolkit provides guidance on how the energy regulatory framework may apply to an idea or proposal
 - Covers the national energy rules and laws as well as the Victorian regime
- It is designed to reduce barriers to innovation and make navigating energy regulation easy
- Delivered with our project partners



What services are available?



An Innovation Enquiry Service

Answering consumer queries on what energy regulations might apply to different projects (IES) (noting that the IES isn't technically a sandbox, but still provides value to innovators)



A trial waiver power

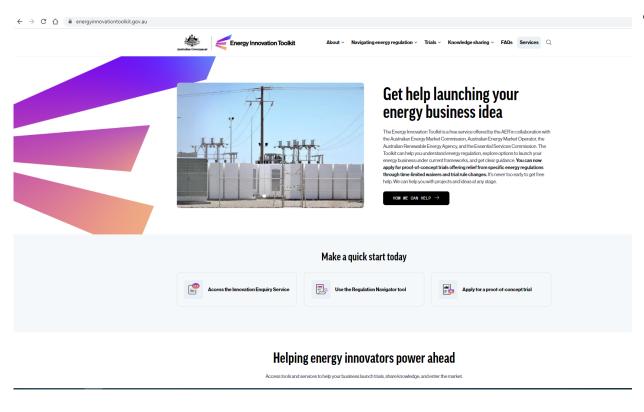
Allows the AER to waive specific energy rules to allow a trial to proceed



A trial rule change power

Allows the **AEMC** to make a **temporary rule** (or **rule change**) to allow a trial to proceed

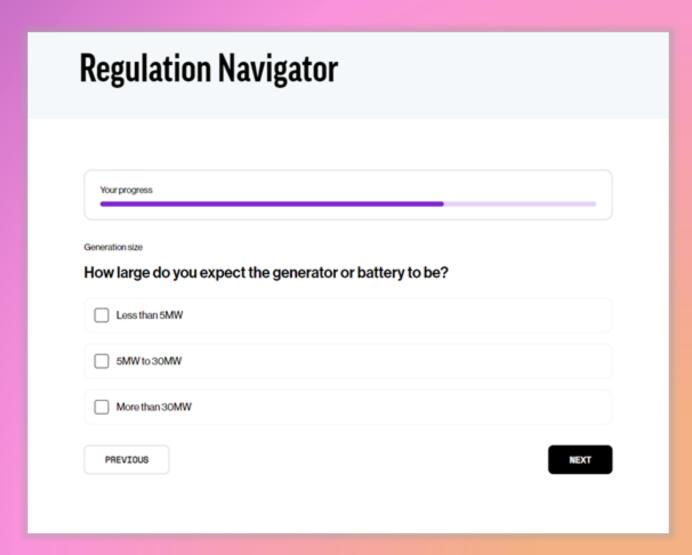
Other tools and helpful guidance



- We have our own dedicated microsite: https://energyinnovationtoolkit.gov.au/
- On this we have:
 - Our regulator navigator tool
 - Hypothetical case studies on:
 - Microgrids
 - Virtual Power Plants
 - Community batteries
 - EV Charging stations
 - Regulatory explainers and case studies on:
 - An 'islandable' microgrid in Cobargo
 - Introduction to selling energy
 - Introduction to Virtual Power Plants
 - A link to our secure portal to submit your enquiry

Regulation navigator tool

- The Regulation Navigator is an interactive tool that explains regulation which may apply to your product or service.
- It is designed to give you a high-level understanding of what licensing, registration and authorisation requirements could potentially apply to your business model, and where to look for more information.
- The tool will ask a series of questions about the kinds of services you'd like to provide.





What questions have you been getting?

I want to sell to my neighbour/local community

- Unless there is a direct physical connection (either a microgrid or other line) you cannot trace specific electrons back to where they were generated.
- Additionally, the National Energy Retail Laws requires a person to hold must hold a retailer authorisation (unless exempt from the requirement) prior to engaging in the retail sale of energy.

What happens when my microgrid is disconnected from the main grid?

- Cobargo microgrid case study
- Were considering options for a microgrid and wanted to understand how the regulatory framework would apply.
- The microgrid in this hypothetical scenario is intended to operate in "island mode" only when the network connection is offline and would otherwise remain connected to the grid.
- The guidance we gave is intended to provide an indicative explanation at a staff level of the current regulatory framework and provides the starting considerations for any potential islandable microgrid trial to consider.

I have a question – what are my next steps?

- Great!
- Visit the https://energyinnovationtoolkit.gov.au/ to find out more about us and visit our regulatory navigator tool and case studies.
 - The Essential Services Commission also has their own website <u>https://www.esc.vic.gov.au/electricity-and-gas/licences-exemptions-and-trial-waivers/regulatory-sandboxing-and-trial-waivers</u>
- Our 'Services' page explains how to access our secure portal for you to submit your question or application).
- This page also links to our contacts form if you'd like to discuss how our services could help your project before lodging a trial or enquiry.



Questions?

