

Energy Innovation Toolkit

Year in review 2025



Energy Innovation Toolkit

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Introduction

2025 was a busy and productive year for the Energy Innovation Toolkit (EIT). In February 2025, the Australian Energy Regulator (AER) launched policy-led sandboxing. We commend industry's response to the call, which led to the AER granting our first policy-led sandboxing trial waiver in December to Ausgrid. This was the second of two trial waivers granted in 2025. We continue to welcome and encourage applications for both policy-led and demand-led trial waivers.

Our Innovation Enquiry Service during 2025 received numerous novel ideas from a range of innovators at various stages on the commercialisation pathway. We provided support to several innovators through a range of services, such as formal and informal regulatory guidance, helping to refine ideas, and facilitating referrals and introductions to relevant experts and potential partners within the energy sector. Through these functions, we continue to support productivity in the energy sector and reduce regulatory burden.

We continued to support the energy market by translating what we have learnt into easy-to-understand case studies and explainers. These regulatory explainers covered a range of topics, including the [AEMC's review of the Wholesale Demand Response Mechanism](#) and [Stand-Alone Power Systems](#). We also published [guidance](#) on the AER's openness to considering ring-fencing waiver applications through the regulatory sandbox framework. Distribution network service providers (DNSPs) can now consider which of these two frameworks are more appropriate for their project.

In the past year we again worked extensively with our project partners. We are grateful for their ongoing and valuable contributions, and particularly appreciate their support given the intensive workload involved with trial waivers in 2025. Our work with project partners included receiving and providing guidance and referral as well as supporting the development of rule change proposals.

Thanks so much for the session with you and your colleagues, it was super helpful, particularly as we are an innovator navigating a new geography in the electricity sector. It has saved me many hours of research!

- Innovation Enquiry Service user



About the Energy Innovation Toolkit

The EIT was launched in 2022 and is a free service designed to help innovators navigate complex energy regulation while providing a framework to trial new products and services. The EIT assists market entrants and industry veterans alike by offering a variety of services. Innovators can access instant information through our online resources, including our Regulation Navigator tool and case studies, or approach us for targeted guidance through our Innovation Enquiry Service (IES). We offer a supportive foundation to facilitate the development of new ideas through our demand and policy-led trial waiver powers.

Energy Innovation Toolkit project partners



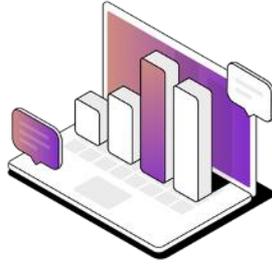
2025 – Year on a page

Assisted **over 70** innovators and organisations



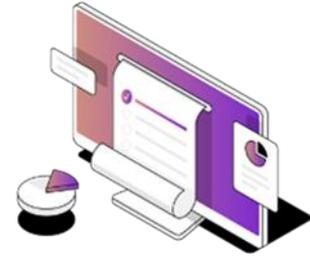
2

Trial waivers granted



11,331

Unique website visitors



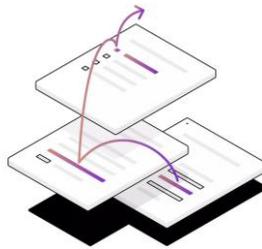
37

Innovation Enquiry Service responses provided



56

Consultation submissions to the EIT in response to trial waiver applications



80+

External participants in 3 public workshops



14

International and domestic engagement events in which we participated

Trending topics

The most common topics we saw in enquiries this year were:

1. **Electric vehicle charging:** our most requested guidance topic in 2025 including regarding metering and jurisdictional differences.
2. **Virtual power plants:** both in relation to home batteries and greenfield commercial developments
3. **New landlord-tenant solar partnerships:** innovators are seeking to support increased access to solar for renters.
4. **Batteries:** community-scale batteries with different ownership and business models.
5. **Energy Trading:** new market participants often asked about the feasibility of energy trading between participants in microgrids.



Celebrating one year of policy-led sandboxing

The AER launched [policy-led sandboxing](#) in February 2025, with a call out for large-scale innovative trial ideas that test how the regulatory sandboxing framework can:

- accelerate understanding of the best models to overcome barriers to access, deployment and orchestration of customer energy resources (CER) and distributed energy resources (DER)
- create incentives in a way that is both effective for, and protective of, consumer interests.

The energy industry responded with enthusiasm, with multiple proponents reaching out to discuss potential trial ideas. We engaged extensively with a variety of market participants and innovators to provide guidance on the policy-led sandboxing application parameters and process.

In December 2025, the AER granted its first ever policy-led sandboxing trial waiver to Ausgrid for its Community Power Network trial.

Why policy-led sandboxing?

Increasing electrification and accommodating greater uptake of CER and DER is adding to pressure to augment existing networks. The AER considers that better network assets utilisation can help reduce the need for network augmentation. Additionally, CER and DER are predicted to become the largest source of generation capacity in the National Electricity Market by 2050.¹ However, not all consumers can access the benefits of CER and DER, and there are limited mechanisms to support the integration of these resources into the energy system. CER and DER orchestration is critical to address these challenges but remains limited.

Policy-led sandboxing provides the opportunity to move quickly to test things at scale and in market through trials related to the themes identified below. Policy-led sandboxing can also accelerate our understanding of how to increase access, deployment and orchestration of CER and DER to deliver a least-cost energy system for all consumers.

To support the development of meaningful evidence, the AER particularly encourages trial proposals related to one or more of the following themes:

- network-led orchestration or coordination
- network data visibility as an enabler
- flexible metering and electric vehicle (EV) charging
- social retailing
- tariff innovation
- virtual power plant (VPP) aggregation incentives.

¹ AEMO, [2024 Integrated System Plan](#), accessed February 2026.



Trials relating to these topics are likely to generate useful insights and their outcomes will assist to inform policy change. The themes also reflect feedback we have received from innovators and other participants since the launch of sandboxing, as well as feedback from participants in workshops held in late 2024 to develop policy-led sandboxing.

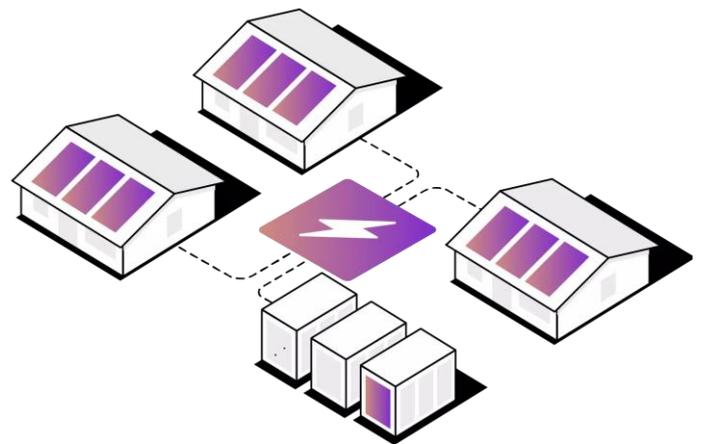
The policy-led sandboxing approach builds on the existing EIT, Innovation Enquiry Service and demand-led sandboxing trial waivers, which have been in operation since 2022 and continue alongside policy-led sandboxing.

Sandboxing trials

The AER approved two new sandboxing trial waivers during 2025. These successful trial waivers represent many months of engagement between the EIT and trial proponents, collaboration with our project partners and significant public consultation. These trials explore new EV charging technologies and network-led CER/DER orchestration.

Ausgrid Community Power Network trial waiver

Ausgrid's Community Power Network (CPN) proposal was the inaugural trial waiver application under the policy-led sandboxing framework. The innovative and ambitious nature of the proposal precipitated a high level of engagement between EIT staff at the AER, our project partners and Ausgrid, as well as substantial stakeholder input through public workshops and consultation.



In December 2025, the AER granted Ausgrid a trial waiver to enable it to conduct its CPN trial at two sites in New South Wales. This trial seeks to stimulate investment in rooftop solar on residential, commercial and industrial rooftops to increase local renewable generation. Ausgrid will also install local batteries to store and redistribute local generation within the trial areas to reduce the cost of energy to consumers during the evening peak. It is intended to manage the local network more efficiently and to generate value by trading in energy markets and through lower network charges and will share this value with customers.

The trial aims to assess whether locally shared storage, pooled solar and network-led CER/DER orchestration can increase the benefits to customers who face structural barriers to installing solar and batteries, including renters, apartment owners and commercial and industrial sites.

Ausgrid identified a range of potential benefits from the trial, including value directly returned to customers via a dividend mechanism and premium feed-in tariff, improved local grid resilience to short-term outages, increased capacity to host more local generation and load, reduced reliance on upstream supply, reduced need for future network augmentation and lower emissions associated with more efficient use of rooftop solar and distributed storage.



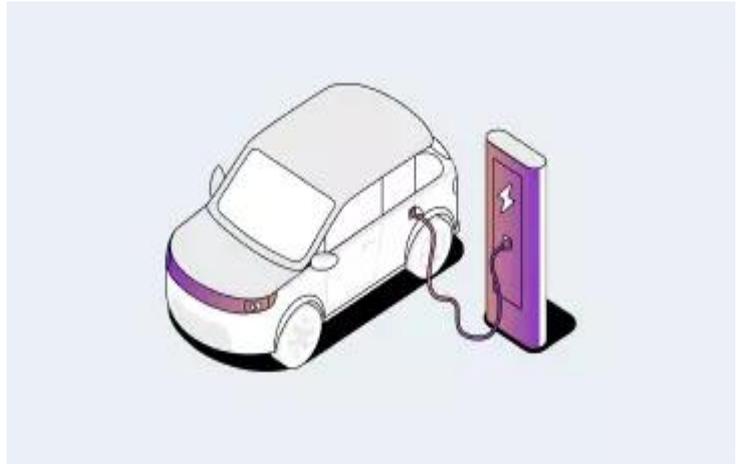
In response to stakeholder feedback, additional network data will be published for a third location at which Ausgrid is not operating a CPN. This will provide a point of comparison and support analysis of whether the trial's outcomes are driven by local conditions, the trial model or a combination of both.

Ausgrid will be able to start the trial once it has finalised its financial arrangements. For more information about the trial, please see our Ausgrid CPN [trial overview](#) page.

PLUS ES trial waiver

The PLUS ES trial waiver granted in February 2025 was the culmination of a significant workstream for the EIT and our project partners throughout 2024 and the start of 2025.

PLUS ES was granted the waiver to trial an innovative metering solution for up to 1,000 pole-mounted kerbside EV chargers. The solution improves the efficiency and cost of public EV chargers by packaging the metering and charging elements within a single EV charging unit.

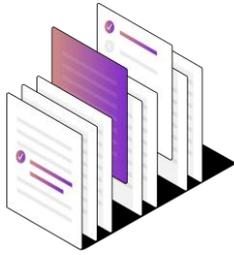


We see this trial delivering benefits to consumers by contributing to a potentially cheaper and faster EV charging rollout. We also expect this trial to provide insights to the market, including by providing AEMO with learnings to support implementing the [Unlocking CER benefits through flexible trading](#) rule change and to support amending AEMO's Metrology Procedure to better integrate EV chargers with smart meter capabilities.

For more information about the trial, please see our PLUS ES [trial overview](#) page.



Engagement and trending topics



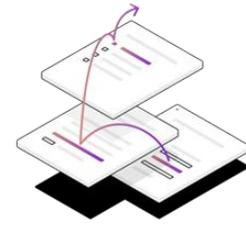
70+

Total innovators and organisations helped



37

Innovation Enquiry Service enquiries resolved



186

Regulation Navigator Tool submissions

In 2025, the EIT supported over 70 innovators. We helped innovators understand where new technologies and business models fit within current frameworks by providing free informal guidance and online tools and resources. These included the interactive [Regulation Navigator](#), which helped 186 users in 2025 by identifying the licensing, registration and authorisation requirements that could apply to each user's business model. We finalised 37 formal enquiries over the year through our IES function, supporting innovators from diverse organisations and backgrounds with projects at various stages of the innovation pathway. In addition to providing tailored guidance, we also supported several innovators through referrals to other AER teams and project partners, coordinated meetings and introductions to subject matter experts, and we provided guidance on options and assistance available to support project development. Below are some of the EIT's highlights and achievements for 2025.

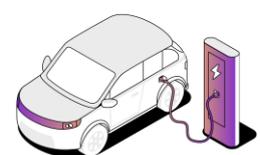
Trending topics

Throughout 2025, the range of innovator enquiries and guidance sought from the EIT reflected the rapidly evolving energy industry and technologies, and the continued energy system shifts to accommodate a more decentralised, electrified grid with increasing CER/DER. We experienced a surge in requests for tailored guidance on 5 trending topics: electric vehicle charging, virtual power plants, new landlord-tenant solar partnerships, batteries and energy trading. These trending topics are further elaborated below.

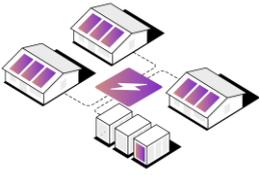
We also continued to see commonly asked questions around metering and tariffs, as well as emerging interest in EIT queries involving network resilience and the changing regulatory landscape around early fault detection technologies.

Electric vehicle charging

EV charging was our most requested guidance topic in 2025. Innovators were particularly interested in understanding the regulatory framework, metering and differences in allowable business models between jurisdictions. In addition to our free IES function, EV charging and associated metering was also a frequent theme in trial waiver proposals and submitted applications.



Virtual power plants



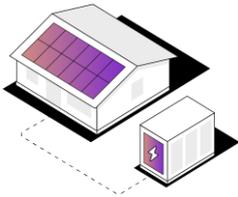
The AEMC recently finalised reforms allowing VPPs to compete directly with large-scale generators, a move that will provide the grid with greater visibility into decentralised resources. We continue to respond to multiple requests for guidance in understanding the evolving regulatory framework around VPPs. In 2025 we updated our VPP case study, [Introduction to virtual power plants](#), in response to changes in the energy sector.

New landlord–tenant solar partnerships

We received multiple queries from innovators exploring novel landlord–tenant solar partnership business models that aim to overcome the ‘split incentive’ problem, where the landlord pays for the installation of a solar system but the tenant benefits from lower electricity bills. We see significant potential for these types of arrangements to assist in greater levels of uptake for commercial and industrial customers. Questions received focussed on the exemptions framework, with many of these projects able to enter the market presently without a trial waiver.



Batteries



The topic of batteries was again trending in 2025. We received and responded to multiple enquiries about community-scale Battery Energy Storage Systems (BESS), including both DNSP-led and third party-led models, and some BESS proposed within microgrids. In 2025, the Australian Government’s Cheaper Home Batteries Program accelerated the rollout of VPP-ready home batteries. The EIT continued to receive frequent regulatory questions related to VPP participation by home batteries.

Energy trading

Energy trading is a topic of great interest, particularly for aspiring and new market participants. The [Unlocking CER Benefits through flexible trading rule change](#), due to commence in 2026, will enable customers to separately meter their ‘flexible’ CER from ‘passive’ loads at their premises. Additionally, market participants will be able to use in-built measurement capability in technology, such as EV chargers and smart streetlights, to create innovative products and services.



We continue to receive and respond to queries on these reforms, as well as questions on the feasibility of energy trading between participants in microgrids and embedded networks. To support innovators and new retailers on these matters, we published an [introduction to selling energy](#).

CSIRO – NEAC Living Lab

During 2025, the EIT provided regulatory guidance and assistance to the National Energy Analysis Centre (NEAC) at CSIRO in its development of a Living Lab. The NEAC Living Lab is an innovative approach to energy research that gives innovators, researchers and policymakers access to a pre-recruited pool of thousands of diverse people and appliances in homes and businesses across



Australia. The Living Lab will support innovators with access to large-scale real-world data to fine-tune their products and services and attract investors. More information can be found on the [NEAC website](#). This high-value support complements the EIT's trial waiver power, as well as our ability to provide regulatory guidance to all manner of innovators.

International engagement and knowledge sharing

Through international engagement, the EIT facilitates the exchange of best practices, emerging trends across the international energy sector and experimental outcomes. Throughout 2025, we held bilateral discussions with regulatory counterparts in New Zealand, Singapore, the United Kingdom and Canada. Through this work, the AER ensures that Australia's regulatory sandbox framework continues to evolve and that our insights are shared to support the global energy transition.

Southeast Asian region collaboration

The AER has been increasing engagement with regulators and partners within the Association of Southeast Asian Nations (ASEAN) region. Building on momentum from the [Singapore Energy Market Authority's](#) ASEAN conference, the EIT held a bilateral knowledge-sharing session with the EMA.

Key discussions focused on:

- the administration and scaling of Singapore's regulatory sandbox
- outcomes from innovation and trials
- comparing approaches to emerging areas such as wholesale demand response, contingency frequency control ancillary services and data centre integration.

New Zealand: Electricity Authority Te Mana Hiko

The AER has established a strong collaborative relationship with the New Zealand Electricity Authority regarding their [Power Innovation Pathway](#) (the NZ equivalent of the EIT). Facilitated by Austrade, this partnership involved the AER sharing critical regulatory assets – including our *Trial Project Guidelines* and *Consumer Risk Assessment Tool* – to assist in the development of their processes. The AER continues to provide expert input into New Zealand's ongoing sandbox feasibility studies and, in turn, learn from their novel approach.

Global Communities of Practice

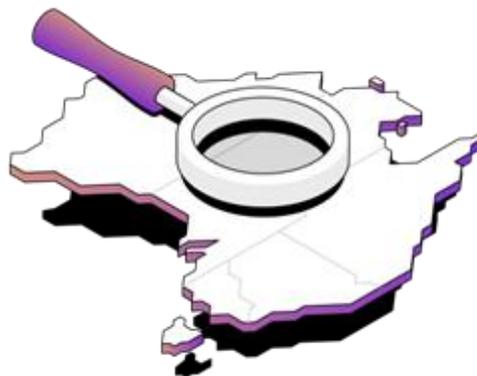
The EIT actively participates in global regulatory forums, including quarterly engagements with sandbox practitioners. Central to this is our involvement in the International Smart Grid Action Network. The network meets quarterly and comprises of representatives from 27 members (including 26 countries and the European Commission). Membership includes national energy departments, regulatory authorities and technical experts dedicated to accelerating the development of smarter, cleaner electricity grids worldwide. Our recent presentation garnered significant interest from Canada and Spain on the Australian approach to regulating standalone power systems and temporary standalone power systems.



What's next?

As we enter the second year of policy-led sandboxing in February 2026, we look forward to the expected commencement of the Ausgrid Community Power Network trial, which we hope encourages further interest in new trial waivers.

Over the next year we expect to announce and progress additional trials currently under consideration, as well as moving into a phase of monitoring and reporting on trial outcomes. We anticipate keen public interest in the outcomes and learnings gained from the impending final report for the [Endeavour trial](#).



In response to the government's request for ideas for regulatory efficiency in July 2025, the EIT is also seeking to develop a fast-tracked sandboxing waiver pathway for small technical metering trials. This pathway will improve assessment timeframes and reduce unnecessary compliance burdens for proponents. We will be publishing a guidance note with further details in the coming months.

We will keep sharing the knowledge gained from trials and case studies with market bodies and policymakers in the interests of consumers. As our sandbox continues to learn from the market, over the next year we will accumulate more real-world data on emerging trends and areas of potential reform. We look forward to providing updates on these engagements in future.

We encourage innovators to reach out to the Toolkit team with any questions about energy regulation or ideas about new business models. It's never too early to get in touch – we can help at all stages of a project.

To discuss how our services could help your project before lodging a trial or enquiry, get in touch with us through our [contacts form](#).

To see how we can help innovators, visit our website
energyinnovationtoolkit.gov.au

