



SCOPE OF WORK AND FORWARD PROJECT PLAN

DELIVERING THE DER IMPLEMENTATION PLAN – HORIZON ONE

In its Post-2025 Market Design Review, the Energy Security Board (ESB) recommended a Distributed Energy Resources (DER) Implementation Plan to support the effective integration of DER and flexible demand.¹ The Plan prioritises activities now to address emerging risks, and sequences technical, market and regulatory reforms over the next three years to enable co-design and collaboration with industry stakeholders and customer groups as a key part of its delivery. Reforms are intended to leverage technology and data, improve access and efficiency, enhance market participation, and strengthen customer protections and engagement.

The Plan includes reforms aimed at:

- **rewarding customers for their flexible demand**, enabling access to products and services that innovation offers, and managing risks to customers through the right protections, no matter how customers choose to use or receive energy, or their level of engagement
- **integrating flexible DER and flexible demand** into the market at all levels, safely and effectively,
- **supporting a phased implementation of reforms** where possible, to enable parties to transition earlier to new arrangements where standards are in place, and where barriers to enter the market can be safely removed,
- **development of reforms using a customer centric approach**. A collaborative approach will be used to consider and co-design solutions to key customer challenges, with insights informing activities and reforms across each horizon of the DER Implementation Plan pathway.

Energy Ministers have asked the ESB to progress the DER Implementation Plan. This includes progressing and coordinating the immediate and initial regulatory, technical and market reforms identified in the Plan, as well as providing Energy Ministers with advice on additional reforms that will be developed as part of it.

A copy of the Plan and the activities that will be coordinated over the three horizons of the Plan, are set out in **Attachment A**.

1. Context

The sheer size of consumer-driven growth in rooftop solar PV, the projected growth of battery storage, and continued advances in digital technology, have the combined potential to revolutionize the way many customers receive and use energy. These changes have already begun for many customers today, and the increase in EV ownership will add momentum towards an even more decentralised energy system. A significant amount of electricity is already generated at a smaller scale. The draft Integrated System Plan (ISP)² for 2022 sees distributed solar PV capacity, at around 15GW today, growing by five times by 2050, with substantial growth in distributed storage.

¹ ESB, Post-2025 market design: Final advice to Energy Ministers – Part A. Available at: <https://www.datocms-assets.com/32572/1629944958-post-2025-market-design-final-advice-to-energy-ministers-part-a.pdf>.

² On 10 December 2021, AEMO published the Draft 2022 Integrated System Plan (ISP). This can be found here: <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2022-integrated-system-plan-isp>



In seeking to integrate these distributed and (largely) customer owned assets into the system to deliver benefits to all customers, with and without DER, a range of different areas need to be addressed:

- **Customers are protected and have opportunities for new products and services:** Consumers are rewarded for their flexible demand and generation, have options for how they want to engage (including being able to switch between DER service providers), and are protected in a changing retail market by a fit-for-purpose consumer protections framework.
- **Market operation:** The wholesale market supports innovation, the integration of new business models and has a more efficient supply and demand balance.
- **System security:** AEMO has the visibility and tools it needs to continue to operate a safe, secure, and reliable system, including maintaining system security associated with minimum load conditions.
- **Network development:** Networks have appropriate visibility, are able to accommodate the continued update of DER and two-way flows and are able to manage the security of the network in a cost-effective way.

The protection of customers in an evolving marketplace requires new approaches. The range and complexity of products on offer means that measures such as listed tariffs may be of limited use in the future. The ESB considers that customers must be able to switch between retailers and aggregators without too much difficulty or cost. Data and technology are essential enablers to make this happen, but work is needed to make sure standards are in place to support effective sharing and communication of data, and market systems need to be fit for the purpose to meet the needs of the future NEM.

System security challenges are emerging with minimum system load in some regions already with the high penetration of solar PV uptake (notably in SA but forecast for Victoria and Queensland). Backstop measures are needed as tools to maintain system security in emergency conditions, but it is critical that work continues to progress towards two-sided market measures to encourage shifting of flexible demand to times of the day where it would be most valued.

In the short to medium term, the ESB recommended that retailers and aggregators access wholesale markets on behalf of individual customers, bundling competitive products to customers both overall and for particular energy uses or market sectors. Aggregated DER can provide a competitive alternative to large scale generation and potentially deliver low-cost system services. In a power system with a high penetration of variable renewable generation, flexible demand delivered through DER can also contribute toward more efficiently delivering customers energy needs, reducing the need for other resources.

Services provided by well-located DER and flexible demand can reduce the need for investments in networks. The ESB considers that steps could be taken through general tariff reform, through targeted tariffs or rebates and through contracts with aggregators to deliver some of these services.

The long-term interests of customers need to be at the centre of the development of these measures. The efficient and effective delivery of the new arrangements needs to involve a wide range of parties, each of whom has a role to play and a potentially valuable input into the development of the new arrangements. There are pressing needs and current opportunities that need early action. Other measures need to be developed overtime, both to ensure the measures are well developed and to take advantage of emerging technology and new business models.



2. Approach to delivering the Plan

In delivering the plan the ESB will:

- Keep customer issues and outcomes at the heart of the reform process,
- Coordinate delivery of the reform activities set out in the Plan across market bodies and other relevant DER related activities across the sector, and
- Build effective feedback loops to enable insights to inform activities and support stakeholder engagement.

2.1. Gathering customer insights to inform reform activities

In parallel with delivering the DER Plan reforms, the ESB will also facilitate a **Customer Insights Collaboration** (the Collaboration). The Collaboration will provide a collaborative forum to work with customer groups and industry stakeholders on key cross cutting customer issues that have implications for DER reform development and implementation.³

The ESB will use this forum to share and undertake research and analysis (independently and in partnership with other organisations), on current customer needs and issues to inform work with stakeholders and the delivery of reforms across the Plan. The intent of doing so is to build an open, accessible knowledge and evidence base relevant to the issues that will emerge over the three-year life of the program, informing development of the reforms as the work progresses.

This customer insights work will be organised in six-month releases considering key cross-cutting issues and involve a series of independently facilitated public workshops. These forums will draw on the best available evidence to stand in the shoes of customers and generate insights that can feed into the reform activities and inform adjacent policy or regulatory issues more broadly.

The ESB will commission and partner with other organisations on research projects to inform the collaboration. The research focus for Release One will be on gathering and synthesising insights from existing survey, trial, and other work relevant to the design and implementation issues arising in Horizon One. Consideration will be given to new primary research on issues that are likely to be a focus in Horizons Two and Three and will be informed by stakeholder and customer group feedback.

By taking this forward view, the Plan should also strengthen the alignment between the technical, regulatory and market frameworks, and inform industry trials and research and development work undertaken by ARENA, Energy Consumers Australia (ECA), and other institutions across Australia.

Further information regarding next steps for Release One of the CIC is set out in **Attachment B** alongside this scope of work.

2.2. Coordinating delivery of the reform activities

The ESB Board, comprising the chairs of the three market bodies,⁴ provides strategic oversight over the Plan, being accountable for overall delivery, as well as ensuring individual reform activities are integrated with the direction approved by Ministers. Reform activities specified in the Plan are led by

³ The Customer Insights Collaboration (CIC) was referenced as the Maturity Plan approach in the ESB Final Advice. As part of approaching the delivery of the DER reform activities, this has been reframed to have a clearer articulation of the intention of what this mechanism is doing. The CIC will be a collaborative forum to gain and gather insights on key cross cutting customer facing issues, building a collective evidence and knowledge base on current customer needs and issues to inform reform activities across market bodies and policy makers.

⁴ Australian Energy Market Operator (AEMO), Australian Energy Regulator (AER) and Australian Energy Market Commission (AEMC).



the market body or other agency (e.g., ARENA) best placed to progress the initiative, who will work with stakeholders through appropriate National Energy Market (NEM) review, rule change and other processes.

The Plan provides market bodies with a framework to take a whole-of-system view when progressing individual reform activities. ESB and market bodies will engage with stakeholders to identify interactions, interdependencies, and trade-offs between related activities to inform design and sequencing of implementation at the level of the individual activities across the Plan.

To facilitate coordinated delivery of the necessary activities and reforms to make the plan a reality, the ESB will:

- Work with individual market bodies and agencies leading key reform activities within the Plan to coordinate milestones within their processes and align stakeholder engagement activities. The ESB and market bodies have established an internal DER Working Group comprising of the reform activity leads from each of the market bodies, which is responsible for the day-to-day coordination of the Plan.
- Support stakeholder engagement on the issues that ‘cut across’ all the reform activities in the Plan and will benefit from being considered holistically. ESB will publish a forward schedule of the reform activities to be progressed over each annual Horizon, including an overview of the issues identified that impact across these activities and will need to be considered.
- A forward schedule for Horizon One is published alongside this document for stakeholder review and feedback (Attachment C). Feedback on the initial issues identified will be used to inform, and coordinate effective sequencing of, activities across the Plan.

2.3. Strategic engagement and reporting

Regular engagement

Deep collaboration and ongoing effective stakeholder engagement will be critical to effective delivery of the DER Implementation Plan and unlocking the greatest value to consumers.

The ESB and market bodies will also undertake public stakeholder consultation processes, consisting of submissions on consultation documents, stakeholder briefings and public forums/webinars as appropriate and relevant to each of the reform activities.

Delivery of the Plan will be further informed by a senior level Advisory Group, comprised with a diverse set of stakeholders with appropriate experience and expertise. A ‘DER Advisory Group’ has been established to gain strategic input on key issues associated with development and implementation of DER related reforms.

The Senior Officials Reference Group established for the Post-2025 program, comprised of senior officials from each of the NEM jurisdictions, will continue to provide the focal point for feedback from jurisdictions throughout the process.

As with the Post-2025 program, the ESB and market bodies will continue to provide updates to stakeholders and interested parties, with regular briefings across industry peak bodies.

Stakeholders are welcome to reach out to the ESB at any point if they would like to discuss or provide feedback on the implementation of the plan. Please contact us at info@esb.org.au.



Regular reporting

The ESB will publish quarterly reports that will provide:

- progress on reform activities within the Plan,
- updates on upcoming milestones and issues being considered across the reform activities relevant to the DER Implementation Plan,
- updates on the cross-cutting issues identified in the annual forward schedule for Horizons within the Plan, and
- additional reforms and/or issues the Board considers need to be considered for effective delivery of the Plan.

To support stakeholder engagement on these cross-cutting issues, and alignment through the Plan, ESB will publish an annual forward schedule of the reform activities to be progressed over the next Horizon, as well as an overview of the issues that cut across these activities that need to be considered.

A forward schedule for Horizon One is published in **Attachment C** alongside this document for stakeholder review and feedback.

3. Matters for consultation

The ESB has set out a number of key issues that it intends to work through to inform activities over Horizon One of delivering the Plan. The ESB welcomes feedback from interested parties to highlight where other key customer issues or linkages may exist across these activities to support development of reforms in Horizon One. These issues are set out as part of **Attachment C**. Any feedback should be sent to info@esb.org.au.

The ESB notes that stakeholders will have further opportunities to consider and provide feedback on the individual reform activities within the DER Implementation Plan during subsequent stages of the consultation process. An indicative timeframe for activities over Horizon One is set out in **Attachment C**.

The ESB will also work with peak bodies and interested parties to schedule workshop discussions on the issues and questions raised in this Attachment for **late January / early February 2022**.