

CER Data Exchange Industry Co-design Project Summary

Project overview

The Consumer Energy Resources Data Exchange (CER Data Exchange) Industry Co-design is a joint initiative between the Australian Energy Market Operator (AEMO) and AusNet Services to work collaboratively with industry to co-design a national CER Data Exchange. The Project is supported by a grant from the Australian Renewable Energy Agency’s (ARENA’s) Advancing Renewables Fund.

This project is the first step of a multi-stage process that seeks to create a digital foundation that supports multiple organisations to share CER-related information through a secure exchange. Providing lower cost access for organisations to connect and support the development of new and innovative services will provide greater value to all customers. The CER Data Exchange initiative will be a key enabler for CER to be an integrated part of a customer-centric, affordable, and data-enabled electricity system.



Figure 1 A CER Data Exchange will support the future energy system.

Currently, CER data is maintained and exchanged through a growing number of fragmented, often proprietary point-to-point connections, making the process complicated and inefficient. Global experience from jurisdictions such as the United Kingdom shows that with the absence of a national data exchange, organisations on behalf of customers must deal with a mine field of standards and data platforms to share CER information. This results in greater costs and reduced customer choice. In contrast, Australian CER trials have shown that a streamlined and secure data exchange between organisations is a much needed and critical enabler of CER integration and coordination.

The CER Data Exchange is part of a broader program of CER integration work

Across the electricity sector, governments, market bodies, consumer groups, academia and energy businesses are implementing reforms and taking actions to make CER an integrated and coordinated part of the electricity system.

The CER Data Exchange is part of this program of work and is the next logical step forward to take full advantage of the benefits CER can provide. While it does not address all the challenges of CER integration, it provides a digital foundation that complements and enables other market and regulatory reforms.

Project Context

Households and businesses will continue to invest in consumer energy resources and the ability to coordinate CER will maximise benefits for consumers

Residential and small business consumers have been adopting small-scale energy resources – such as rooftop solar systems, behind-the-meter battery storage, energy management systems and electricity vehicles (EVs) rapidly. These consumer energy resources (CER) are increasingly becoming a crucial part of the energy system.

When properly integrated, CER can provide significant benefits to all consumers. For individual customers, CER can help lower their energy bills and deliver additional value through new energy services. For the power system and customers as a whole, CER can reduce overall system cost by minimising grid scale generation as well as transmission and distribution network investment.

Organisations such as energy retailers, network service providers, the market operator, aggregators, and equipment manufacturers must develop common market arrangements and standards to maximise the benefits that CER can provide to all consumers.

A CER Data Exchange supports more efficient data exchange between organisations, separate to other protocols, trials, and initiatives underway to facilitate ‘Organisation to Device’ and ‘Device to Device’ communications (Figure 2).

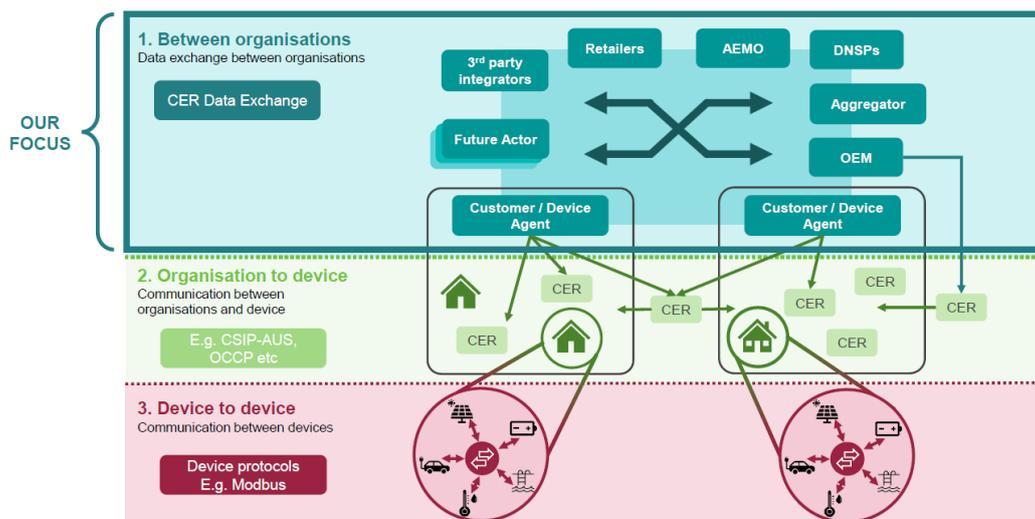


Figure 2 Digital enablement of CER coordination

Building on international experience

The project will build on both domestic and international trials and experiences which have demonstrated that a streamlined data exchange between organisations is a key enabler of scaled CER coordination to maximise CER value for all consumers. Australia is not alone in thinking about a data exchange for the energy sector. More information regarding the international examples can be found [here](#).

A national CER Data Exchange is needed to enable CER benefits at-scale

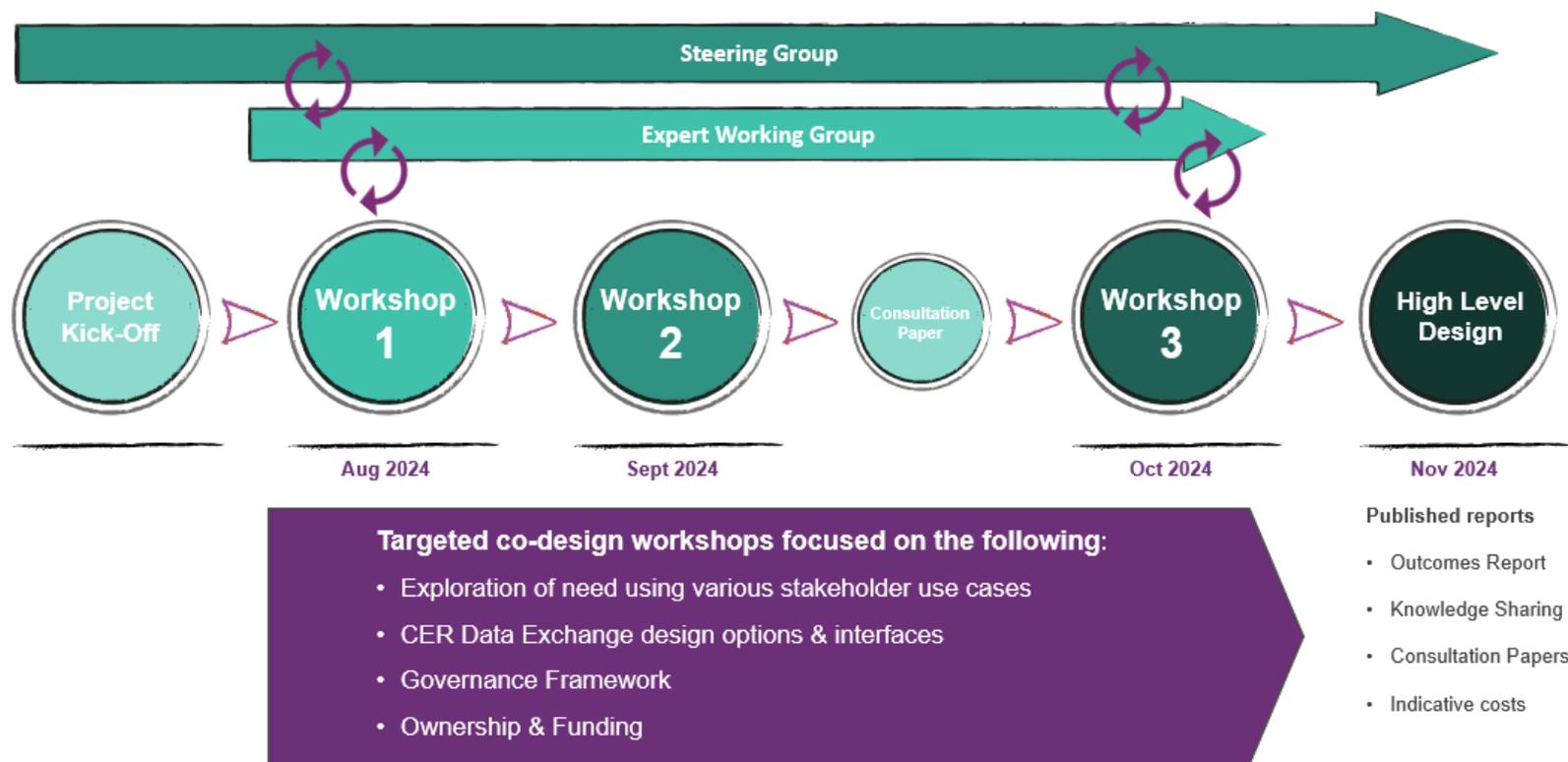
These benefits cannot be realised by one party alone, they require a coordinated approach from industry, operators and consumer to help us benefit in the long term and take advantage of what CER can provide as we move to a net zero grid.

By creating a consistent, efficient, and secure way for organisations to access and exchange CER data, the CER Data Exchange will benefit all consumers:

- **Support greater customer choice** | By providing secure access to data, the CER Data Exchange removes a key barrier for more businesses to provide service offerings to customers and allowing them to choose between a greater number of providers.
- **Reduce cost to serve customers** | Through a standardised way of integrating, sharing, maintaining, reporting and verifying data and identity between organisations, the CER Data Exchange will lower the cost of data access and exchange, which will in turn reduce the cost of providing energy services to customers with more ending up in their pockets.
- **Support entry of new and innovative products** | A lower cost data integration will support the development of new products and services and reduce their barrier to entry.
- **Provide a flexible foundation to enable future needs** | A foundational data exchange provides flexibility for new innovative functions to be added in the future as industry needs evolve with relative ease and at lower cost

Co-Design Process and Project Outputs

We will provide industry and interested stakeholders' multiple avenues to provide input into the development of the high-level design of the CER Data Exchange. Further detail on the how to get involved, the project outcomes and the role of the Expert Working Group are outlined in the Project's [Terms of Reference](#).



For more information on the CER Data Exchange, please email: cerdataexchange@aemo.com.au or visit the [CER Data Exchange Project](#) webpage.