



# EDGE

# Project EDGE

(Energy Demand & Generation Exchange)

The National Electricity Market (NEM) is experiencing its largest transformation ever with fossil fuel exits, rapid uptake of renewables and Distributed Energy Resources (DER). Project EDGE can inform this transformation to be one where voluntary DER coordination supports more affordable, reliable and cleaner electricity for all consumers

Project EDGE has published its final reports, providing a practical evidence base for Australia's electricity reforms to integrate DER into the NEM in a way that benefits all consumers.

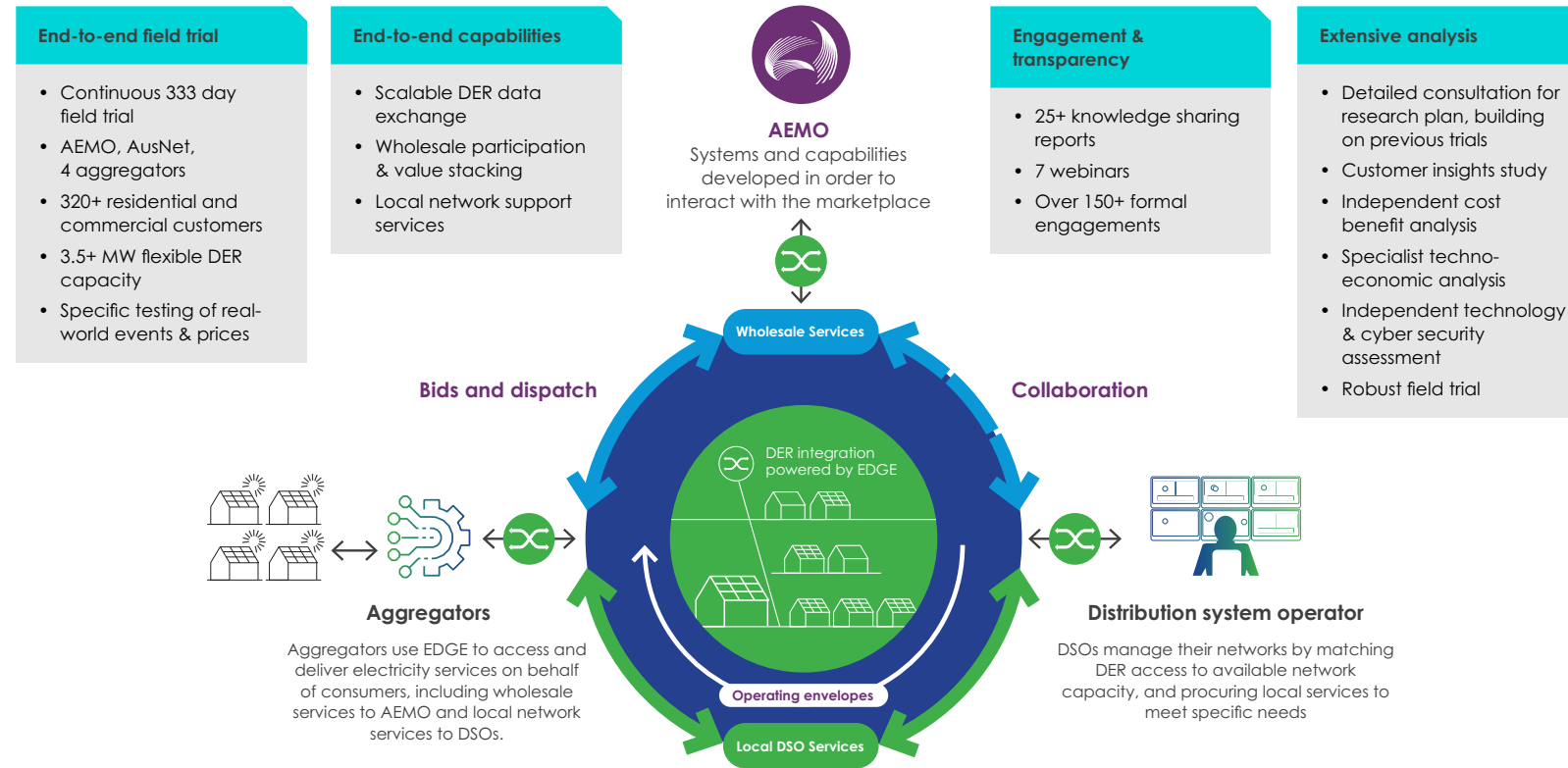
The findings were obtained over 3 years from July 2020 to October 2023 from various field tests and research activities funded by the Australian Renewable Energy Agency and conducted by the Australian Energy Market Operator (AEMO), AusNet Services (AusNet) and Mondo, with the cross-industry support of multiple participants, partners and stakeholders.

The reports also identify practical insights and priorities for consideration by policy makers, industry leaders, market bodies and industry participants.



## WHAT PROJECT EDGE TESTED

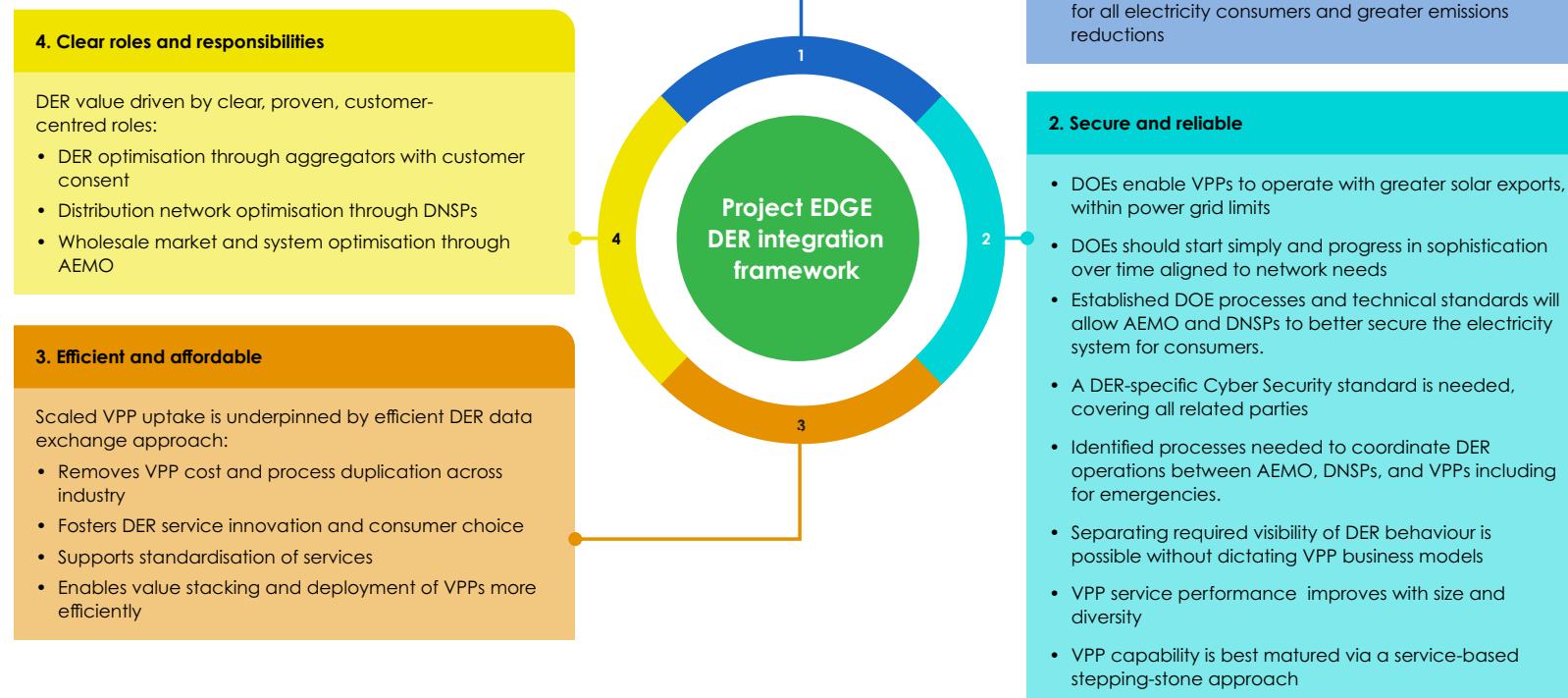
Project EDGE demonstrated a proof-of-concept two-sided arrangement that enables efficient & secure coordination of aggregated DER, and facilitates the delivery of both wholesale and local network services at the grid edge in the NEM



## PROJECT EDGE KEY FINDINGS

The trial successfully demonstrated feasible end-to-end technical capabilities that can scale

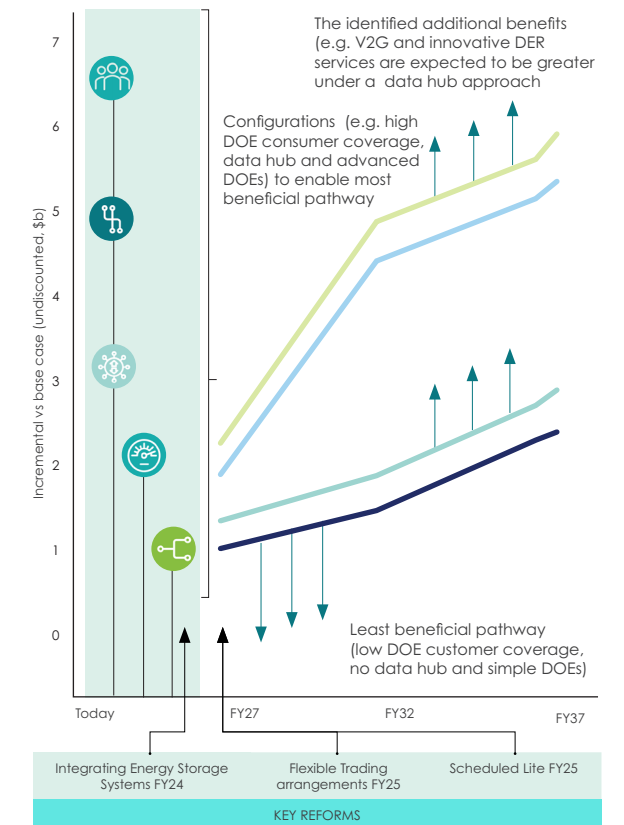
The findings provide a proven framework of roles and market configurations that have the flexibility to facilitate new innovations as industry needs evolve.



## COST-BENEFIT ANALYSIS FINDINGS

\$6 billion in cost savings for NEM electricity consumers

\$3 billion further societal benefits through emissions reduction



### The time for action is now

CBA Functions	Lead Times
DOF Customer Coverage	1-3 years
Visibility of DER	1-5 years
Scalable data hub	1-2 years
DOL Optimisation Methodology and Constraint Frequency	2-5 years
Local Services Exchange	Staged according to network constraints

- Scenario 2:** (Simple DOE, Moderate Coverage)
- Scenario 3:** (Simple DOE, Moderate Coverage with Data Hub)
- Scenario 4:** (Advanced DOE, High Coverage)
- Scenario 5:** (Advanced DOE, High Coverage with Data Hub)

### Focused cross-industry action is needed to deliver value for consumers

- Remove consumer constraints** on solar exports for as many customers as possible so all consumers can benefit from VPPs coordinating DER
- Set the rules for efficient DER coordination** with a clear set of roles and responsibilities for market participants
- Lay the foundations for DER market-enablement** with an efficient and scalable data exchange approach to reduce costs and expand consumer choice