



new energy technology, policy & strategy

Find us at enxconsulting.au

Capability Statement

June 2023



About enX

enX is a boutique consultancy focussed exclusively on the grid and market integration of distributed energy resources (DER). We see DER as a heavy lifter in Australia's energy transition and, we want to unlock its full potential.

We bring deep experience in energy policy, commercial innovation, and technology integration, with over 30 years of collective experience working across a range of senior energy industry roles.

We aim to meet the needs of Australia's energy industry decision-makers for contemporary, evidence-based insights that reflect the unique characteristics of Australia's market and regulatory frameworks, consumer preferences and emerging product landscapes.

Our capabilities

- **Techno-economic analysis and advisory** – We use industry-leading modelling tools to assess the business case for new technology and service offerings, including solar, batteries, water heater controls, HEMs, IoT devices, and virtual power plants. We create deep and actionable insights for government and commercial decision-makers.
- **Policy and regulatory design** – We apply our extensive knowledge of Australia's market and technical regulatory and standards landscapes, and our active network of senior energy industry stakeholders, to help our government clients develop robust policy interventions to address inefficient barriers to DER uptake. This includes detailed cost-benefit analysis, legislative and regulatory advice.
- **Specialist EV integration insight** – We are industry-leading specialists in smart charging and V2X, combining a deep understanding of core EV and EV charging technologies with an appreciation of the range of ways they can create value for consumers and industry participants.

Our track record

We are very pleased with the positive feedback we have received with every engagement and our ability to deliver each project on time and, on or under budget.

Some of the projects we have delivered to date include:

- **Post 2025 market design initiatives** – For the ESB, we provided technical leadership and developed advice to jurisdictions on national EV and behind-the-meter interoperability standards, EVSE standing data collection, and the harmonisation of network flexible export limit implementations and cybersecurity arrangements.
- **Technology integration strategies** – For local and international technology providers, we have supported the development of new product and market participation strategies. This includes informing decisions on technology integration and strategic partnerships, risk management and revenue maximisation.
- **Power system technical integration** – For AEMO, we are leading the development of a comprehensive assessment of transmission-scale system security risks associated with mass EV uptake.
- **State of the market reporting** – For ARENA, we have assessed the opportunities and challenges for V2X in the Australian market, informed by local and international stakeholder consultations and case study revenue modelling.
- **DER policy advocacy** – For the Climate Council, we are conducting techno-economic modelling of DER investment options to support evidence-based policy advocacy to accelerate electrification and decarbonisation across QLD households.

Why governments and businesses choose enX

Feedback from our clients indicates they value enX for our depth of specialist insight and our commitment to achieving genuinely positive outcomes for our clients with every engagement.

We appear somewhat unique in that, while we have a tight focus on DER, we have demonstrated capabilities extending from product engineering, through to new standards, regulatory compliance, and top-level state and national-level policy development. This is complemented by decades of experience working directly with senior executives and government ministers through to corporate boards. We know how to translate strategy into concrete results in a wide range of industry contexts.

Our small size also means we are generally cost competitive against larger firms, and clients can be assured that our senior resources will be involved in each aspect of project delivery.

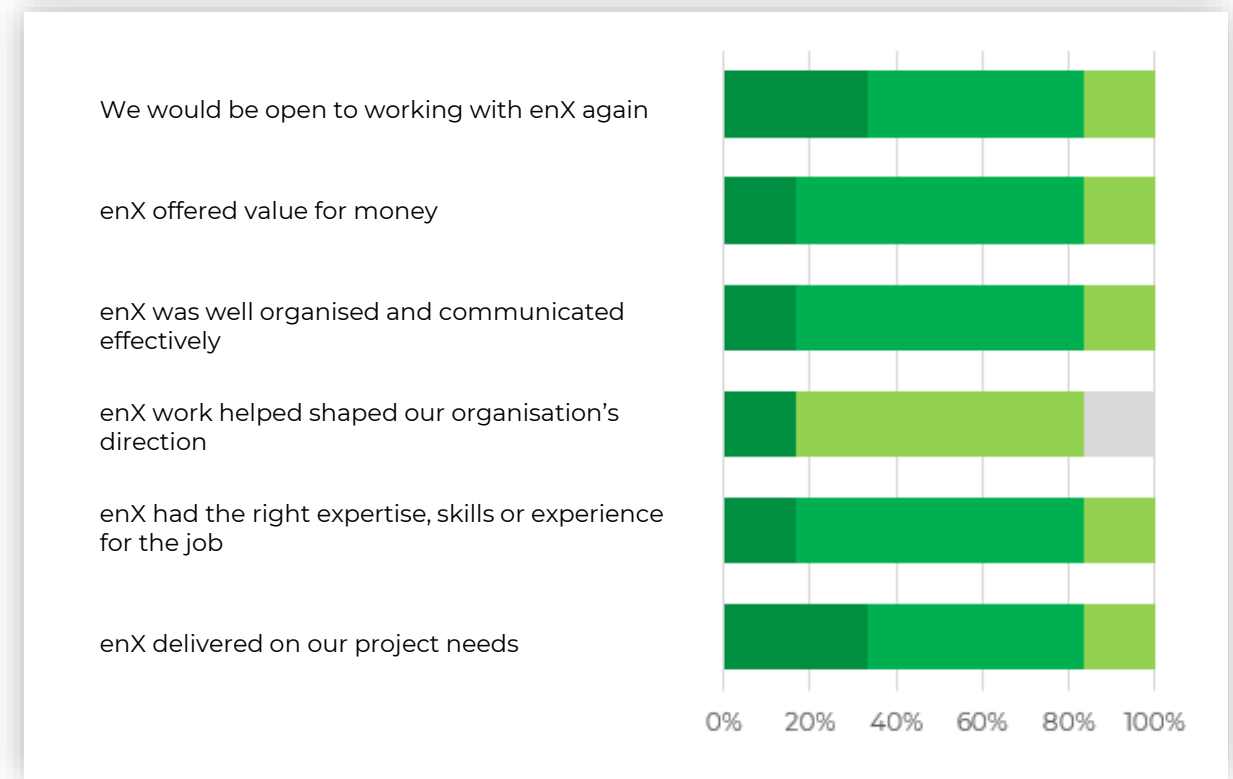
Testimonials

“The team at enX did a fantastic job on our project, and I wouldn't hesitate to work with them again. Project management and communications were clear and visible throughout the project and the team had the right expertise to undertake complex modelling, analysis and stakeholder engagement. They were receptive to feedback and strongly focused on the intended impact of the work, not just ticking the boxes and getting it done.”

“enX provided a deep level of technical and market insight that will greatly influence our company direction and we will certainly engage enX in other strategic projects in the future.”

“enX is a team of passionate energy professionals who are dedicated to support Australia's energy transition. I like that they are not 'transactional' in their approach and their work and advice help clients in shaping their organisation's direction towards a clean and affordable future energy system.”

enX year-1 customer feedback survey results



- enX went above and beyond!
- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Data and modelling assets

We have developed a range of data assets and modelling capabilities that can be leveraged to generate fast insights and a robust evidence-base for action. These assets include:

- **DER product database:** We maintain a database of over 1100 contemporary DER technologies including smart inverters, batteries, EV chargers, water heaters and HEMS controllers, allowing efficient, comprehensive analysis of relevant technical and financial performance characteristics, opportunities and risks.
- **EV model database** – We maintain a database of over 320 (growing each month) EV models detailing their energy technical characteristics and V2X capabilities. This is linked to our separate database of over 260 EV charger products.
- **EV availability probability model** – We have developed in-house tools to determine when different customers are likely to have their vehicles grid-connected in any time period. This allows for aggregation of multiple user travel typologies as an input into revenue and load flow modelling.
- **Residential customer load and generation profiles** – We continually add to our database of anonymised customer load profiles across each NEM jurisdiction to facilitate robust techno-economic modelling at the residential and low-voltage network scale. This includes submetering data for water heater electrical loads and solar production.
- **Asset optimisation modelling** – We have the in-house capability to model DER revenue and power flows, as site-integrated or standalone assets (e.g., community batteries) and we regularly use third-party tools (like Gridcog) for modelling trade cash flows in energy and FCAS markets.



We would love to discuss how we can help you realise your DER project objectives

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