

The following activities are performed by the New Energy team that focuses on use of innovative technologies and systems to enable better customer services and improved business operations:

- monitoring trends and pricing, and develops knowledge on the capability of innovative non-network energy technologies and their use cases
- combining data and knowledge from internal and external sources to investigate if the new technologies could provide a viable solution to known or forecasted capacity or power quality issues on the network
- implementing new energy technology solutions, including in combination with conventional network solutions, that provides an efficient and effective outcome for the customer and network
- providing data science capability and introducing new information tools, processes, forecasting and dashboards that improves customer service, connections, network planning, operations, and maintenance.
- Engaging with customers to understand and support their decarbonisation plans.

Recent innovation practices include:

- Survey of major industrial and commercial customers that have over 500kW of fossil-fuelled heating load, including their plan for decarbonisation. The learnings have helped us:
 - provide higher engagement and support to those customers that are interested in decarbonising in near term; and
 - develop of customer-centric processes and information channels that support customers with decarbonisation.
- Supporting decarbonisation of transport by providing information and advice to customers on suitable type of Electric Vehicle (EV) chargers, benefits of EVs and off-peak charging.
- Development of new process that helps identify parts of network where microgrids (generation and energy storage) may be more economic and reliable than conventional poles and wires solutions.
- Use of smart meter data and data science to create actionable information shared through interactive dashboards that improves customer services:
 - showing detailed loading of assets (e.g. lines, transformers, feeders) and enabling more cost-effective planning, maintenance and customer connections
 - power quality information to improve likelihood of identifying neutral issues and network congestion
 - real time outage notifications from smart meters enables faster detection and restoration of outages and proactivity with information to customers.
- Monitoring of Distributed Energy Resources (DER) such as Electric Vehicles (EV) and Distributed Generation (DG) and forecasting the growth in DERs to improve load forecasts for asset planning, operations and congestion management.

A business case is developed to justify an innovation practice before it can proceed to implementation. Assessment criteria includes how it helps improve customer service, meet strategic objectives, and its short and long-term benefits and costs. The success of an implemented innovation practice is measured through review of results against objectives at regular intervals post implementation.

Typically technology and service providers on the market are investigated when developing a solution for business improvement or innovation. Information and knowledge is also sought through collaboration with other EDBs, industry participants, customers and technology and service providers through mediums such as forums, direction communication, working groups, conferences and exhibitions.