

One51 Case Study

Empowering Ausgrid through a successful mass data migration

Client Profile

As the largest electricity distributor on Australia's east coast (by population served), Ausgrid is pivotal to keeping energy flowing to homes and businesses across Sydney, the Central Coast, and the Hunter region.

Co-owned by the NSW Government and private investors, the company owns and maintains infrastructure that distributes energy to 1.8 million customers.

With Ausgrid directly responsible for network performance – including outages, faults, and upgrades – the company's leadership relies heavily on trusted data to support decision making. They've been proactively strengthening their data capability for many years, and most recently sought to overhaul their existing data platform for a next generation solution that would enable the level of insight they aspired to achieve.

In need of migration support from a team they could trust, Ausgrid brought in One51's specialist data team.

More than 600 billion records in various formats

To put it into perspective, Ausgrid captures readings from millions of energy meters as well as network sensors; some of which provide readings every 5 minutes – resulting in billions of records for analysis. These readings are associated with complex geographical, weather and asset data that is stored in different formats.

Ausgrid's existing data platform, based on Synapse, was struggling to accommodate the newer expectations of the team and was:



Lacking in consistency



Difficult to configure and adapt



Poorly equipped to support data governance

It was also in need of rationalisation – removing duplicate data, standardising formats, improving quality, and reducing complexity.

Successfully migrating to the new data platform would allow Ausgrid to address these issues, and provide a much improved experience for end users. These users had differing levels of requirements, for example:



1. Everyday users

Leadership and management who rely on reports to support everyday work and strategic decision making.



2. Citizen developers

Technical staff who could be empowered to build models and create innovative data-led solutions leveraging machine learning and artificial intelligence.

Lachlan Hope, Data Services and Platforms Manager for Ausgrid, says: 'Our previous data platform had evolved over time, but we recognised that the need to scale, govern and extract value from our data was going to be a key priority for our business going forward.'

Migrating to Azure Databricks using a rapid ELT framework

Working with Ausgrid's internal data team, One51's data specialists set about retrieving data from over 50 sources, migrating into the new D2I (data-to-intelligence) platform.

Azure Databricks was selected by Ausgrid due to its ability to scale and integrated storage, compute, governance and AI capabilities. It meant everyday users could be set up to receive all the insights and reports they needed, while citizen developers would have the ability to create new insights, ingest new data, and develop AI models.

For all data movement, our team used an ELT (extract-load-transform) framework developed by Ausgrid staff that allowed for rapid data ingestion, standardised processing, and ease of use for data engineers.

It also ensured key data compliance requirements were maintained throughout the migration, such as 'ring-fencing' residential and commercial data and preserving access control measures.

The team followed Ausgrid’s rigorous checking and release management protocols to verify that outputs delivered meaningful comparisons between the old and new systems, all legacy system bugs were identified and resolved prior to go-live, and performance met expectations.



Our partnership with One51 was crucial to the success of this milestone, enabling a smooth migration and immediate improvements in performance and usability.

Lachlan Hope

Data Services and Platforms Manager, Ausgrid



Seamless launch with immediate benefits realised



Following go-live, there was not a single escalation. Users saw immediate improvements in performance, efficiency, and usability.

Ultimately, Ausgrid was able to turn off and remove the legacy Synapse-based system – eliminating all costs associated with running and maintaining it.

Lachlan Hope, Data Services and Platforms Manager for Ausgrid, says ‘We managed to successfully migrate all data and processing capability from our old platform through our data program, with minimal disruption to our end users. This is a major milestone in transforming the data and capabilities we provide our business users and optimizing both performance and cost in our platform. Our partnership with the team from One51 was crucial to the success of this milestone’

Of working with Lachlan and his team on the migration, Peter Hopwood (Director of Consulting Services at One51) says, “We thoroughly enjoyed working with Ausgrid on this significant data migration. Our team worked in close partnership with Ausgrid’s team, and it was an intense but very successful project.”

“Ausgrid’s commitment to providing the best possible centralised data platform for their users will enable faster insights for staff, better decision making across the business, and improved service delivery to end customers.”

***Want to achieve results like this in your organisation?
To speak with a One51 consultant, contact us.***

☎ 1300 015 100

🌐 one51.consulting/contact-us/

✉ info@one51.com.au

🌐 [/company/one51consulting](https://www.linkedin.com/company/one51consulting)