

Engineering

Enerven Engineering develops and delivers solutions to assist owners and operators of energy infrastructure to better monitor and maintain their assets, using the latest technology and innovative approaches.

We have extensive experience in engineering data collection solutions that also analyse and interpret the information gathered, producing reports that deliver insights you require.

We also provide extensive Technical Design services, delivering tailored technical solutions for telecommunications networks, including communications, digital, electrical and spatial designs.

Our extensive experience in constructing and maintaining energy infrastructure provides us with an intimate knowledge of energy assets, which means we know what to look for and what matters to you - enabling us to provide you with a complete solution.

We work closely with operators of transmission and distribution networks, substations, wind and solar farms, utilities and mining sites, and we are closely monitoring the developments in those sectors to service our clients better. Our focus on innovation sees us continuously developing new approaches to asset management, including new asset management services that monitor and report on conditions such as temperature, humidity and pollution.

As a key contractor for SA Power Networks and ElectraNet, we know utilities inside out and have a proven track record of producing detailed designs and solutions to different specifications. We understand the risks associated with working close to utilities (including gas pipelines), and incorporate all relevant safety implications in our design.

Our Capabilities

Enerven Engineering's capabilities can be divided into three main operational areas: Spatial Data, Asset Management and Inspection, and Technical Design.

Spatial Data/LiDAR

LiDAR (Light Detection and Ranging) technology collects highly accurate spatial data that informs 3D representation of a surveyed area, capturing any asset at a particular point in time and space.

Our capabilities include scanning, data input, analysis and processing through to presentation of insights. Our team is highly experienced in operating both static and mobile LiDAR equipment and will find an appropriate option for your asset and situation based on the uses and benefits as follows:

Static LiDAR:

- Detailed site surveys to identify potential issues such as leakage, degradation, cracks and debris before they become a real problem
- Targeted landscape, vegetation and built environments
- Capture and monitor high risk assets without exposing staff to potentially unsafe working environments

Mobile LiDAR:

- Road mapping
- Rapid asset capture
- Infrastructure projects (eg measuring safe working distance on dangerous assets)
- Measure exact distance between stobie poles



Enerven's mobile LiDAR scanner is one of only six devices in Australia.

The technology is used for a diverse range of applications in agriculture, natural resource management, land development, wind and solar energy, transport planning and mine mapping, to name a few.

An additional benefit of the technology is our ability to GEO-reference the data collected - positioning the data into its global surroundings so the operator can pin-point the exact location of the image in reference to the entire asset.

Technical data:

Static scanner: Faro Focus 3D X330; range of 330m and capability to scan in direct sunlight

Mobile scanner: Topcon IS-S2 HD; collects 1.3 million points per second at a range of 100 metres, with a 360-degree field of view. It also has on-board inertial measurement unit and external wheel encoders, in addition to GPS positioning.

While other surveyors may offer similar data capture services, they often don't have the equipment or capability to interpret the data, analyse it and present it in a meaningful format that can help inform next steps.

Asset and Data Management/Inspection/Remotely Piloted Aircraft (RPA)

Enerven develops complete solutions to facilitate asset management through the collection and analysis of data, gathering information via drone technology.

Our team captures visual and thermographic data for clients such as, BHP, wind farm operators, local councils, and mining sites, capturing highly accurate data from assets even in difficult conditions such as high-risk environments, extreme winds and high altitudes.

Our capabilities include:

- Asset inspection, data collection and interpretation, reporting
- Still, thermographic and 3D mapping of assets
- Thermographic analysis
- Powerline stringing
- Maintenance and repairs of infrastructure assets

Our team consists of highly skilled RPA operators and fully trained linesman, allowing us to inspect an asset, review the data and immediately address any technical issues or arrange for repairs while onsite.

Our proactive approach significantly increases the safety of the asset, and results in cost savings and higher productivity rates for the operator.



Technical Design

Our local team of designers are specialists in devising technical solutions for a variety of electrical, renewable, and telecommunications infrastructure requirements.

Consisting of architects, engineers, draft professionals and telecommunications designers, the Technical Design team is multi-skilled and multi-functional, allowing us to devise tailor-made solutions to meet your communications, digital, electrical and spatial design needs.

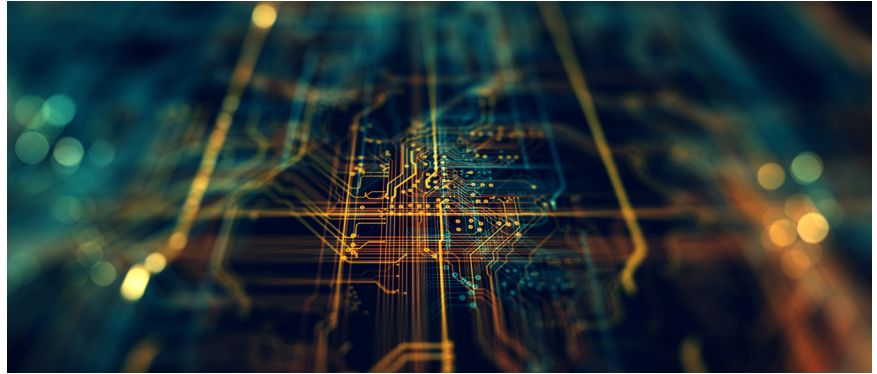
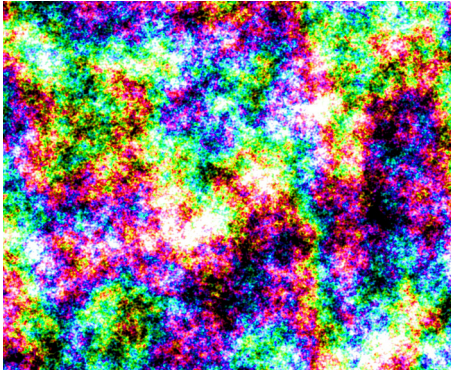
Our capabilities include:

- Microwave and radio network design
- Software development (including CAD)
- Spatial design
- Telecommunications network design (fibre, radio and copper)
- Local fibre network design
- Project management
- Surveying and scoping of asset and geotechnical services
- Relocation of telecommunications infrastructure
- Design and construction of electric vehicle recharge stations
- Pole load design and calculations
- Power connection design
- Underground fibre and copper network design
- Single line and straight line drawings
- Engineering data collection

Our team has been working with the NBN in South Australia and the Northern Territory since 2013, and we have established ourselves as a valued, dependable partner, working closely with the local team to troubleshoot issues and deliver solutions

We have held the position of Number 1 delivery partner on the NBN project nationally, a true testament to our consultative and collaborative approach and the skill and expertise of our staff.





Why Enerven?

We develop solutions with customers and communities to enable them to choose, create and adapt how they connect with, make, store and use energy, on their terms.

We pride ourselves on thoroughly understanding each project and client's needs and we work with you to create a tailored solution that fulfils and exceeds expectations.

Our extensive experience in the industry make us a reliable player in the market with a service offering that is hard to beat.

Building on the 100-year foundation, Enerven is a proven expert in the development of major infrastructure, energy and telecommunications solutions.

Proactive, Collaborative, Dependable

Our values are the DNA of our business. They embody what we stand for and focus firmly on our customers' needs to accomplish long term, sustainable improvements that are reliable, maximise profitability and minimise costs.

Further to this, everything we do is underpinned by an unrelenting focus on safety and wellbeing.

We build our customers' vision. Our driving ambition is to connect you with tomorrow.

Who We Are

Enerven provides construction and maintenance services to clients both within SA and nationally. We believe innovation and technology will continue to drive efficiencies, but no more so than the experience and knowledge of our people.

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