

Our specialist consulting service.

We have specialist consultants available to undertake investigations to assist your organisation to reduce energy costs and improve your working environment or manufacturing processes.

Lighting design and evaluation

Whether a retrofit, upgrade, or new installation, our lighting design team can provide you with practical, state-of-the-art, energy efficient solutions. Our engineers use the latest modelling techniques and software to simulate the effect of different lighting configurations and controls ensuring you achieve the optimal outcome.

Thermal diagnostic & imaging service

Our comprehensive, versatile and accurate thermal measurement system can aid programmed maintenance and detect 'hot spots'. Thermal imaging is used to detect faulty electrical components, poor connections or overheating mechanical components such as bearings. The technology is also effective in evaluating the condition of thermal insulation and lagging in steam/hot water systems as well as high temperature kilns and furnaces.

Compressed air specialist services

We can help you realise the maximum potential of your existing system, or can design, supply and install a new system. Origin also offers an ultrasonic leak detection and repair service which pinpoints, quantifies and tags all the air leaks in your system without having to shut down the compressed air plant.

Power quality analysis and metering

This service involves the temporary installation of sophisticated power analysers or data-loggers to identify issues with the power supply, for example voltage fluctuations, power factor, harmonics and load distribution balance. Potential solutions to any issues identified are also offered as part of the report.

Economic evaluations and feasibility studies

Our expert consultants can assist your organisation to evaluate specific energy or carbon mitigation projects and determine their technical feasibility and financial viability, for example:

- Cogeneration
- Natural gas cooling
- Lighting and air conditioning upgrades
- Variable speed drives
- Photovoltaic and solar hot water panels
- Waste heat recovery

Talk to us today about how our specialist consultants can assist your business.

For more information about our Specialist Consulting or if you'd like to discuss your energy needs, please call your Account Manager or our Sustainable Business Solutions team on 13 23 34, between 8.30 am and 5.00 pm, Monday to Friday.

Infrastructure project management.

Get the right technical advice with our energy infrastructure project management.

If your plant or building is undergoing an upgrade or expansion, chances are that you will be requiring additional infrastructure in terms of cabling, switchboards, protection gear, piping, valves, metering and more. Whether it is gas or electricity, we can design, supply and install the infrastructure associated with delivering end-use electrical power and gas for your site or facility.

Our services include:

- Electrical engineering design and calculations, for example, voltage drop, fault levels, switchboards, cable sizing, protection systems.
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- Independently engineered and cost competitive specification, sourcing and procurement of plant and components such as standby generators, UPS units, switchgear, harmonic filters, kiosks and transformers.
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- Gas network systems meter-to-burner designs including flow and pressure drop calculations, pipe material selection and sizing, control valves, sub-metering and more.
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- Installation and commissioning of Type A and Type B gas appliances and combustion equipment including conversion from LPG to natural gas.
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- Liaison with relevant safety authorities to ensure installation is compliant with the local regulations.

If you're considering upgrading or expanding make sure you talk to our team of experts, today.

For more information about Energy Infrastructure Project Management or if you'd like to discuss your energy needs, please call your Account Manager or our Sustainable Business Solutions team on 13 23 34, between 8.30 am and 5.00 pm, Monday to Friday.

Power factor correction.

Power factor correction can save energy, money and our environment.

In simple terms, power factor is a measurement of how effectively your business uses the electrical power supplied to the site.

A power factor of 1 (or unity) is excellent. A power factor of anywhere between 0.9 and 1 ensures your business is using its energy effectively. However a power factor of below 0.9 may mean a higher than necessary kVA demand. Your business may be using energy ineffectively, resulting in unnecessary expense charged on your electricity bills.

A power factor correction solution, tailored to your specific business needs, can be an effective way to improve your business' power factor and reduce distributor demand (measured in kVA) ensuring you get the most from your energy dollar.

What are the implications of a low power factor?

- Various distribution networks in New South Wales, Victoria and South Australia charge extra for sites with a poor power factor.
- Low power factor could also lead to stressing of the internal electricity infrastructure. This may cause unnecessary overheating and equipment degeneration.
- Added cost for new installations because of the need to oversize cables, switchboards and other electrical equipment.
- Poor power factor can also lead to lower than "normal" voltages within a plant and consequently present unreliable equipment performance.

What benefits can be realised by addressing poor power factor?

- Allows your business to lower its ongoing energy kVA demand charges, saving you money.
- Allows your business to optimise the life of its electrical assets and delay or avoid unnecessary electrical system upgrade and replacement costs.
- Reduces the threat of operational downtime caused by the overloading of your electrical assets within your facility.
- Benefits the environment by conserving resources thus reducing greenhouse gas emissions.

Power factor correction services.

Power factor can be improved through the installation of automatically controlled capacitor banks. These are designed and sized to suit particular site conditions and load.

Our specialist consultants can analyse the meter data, review site conditions, design and offer a turn-key power factor correction solution that is sensitive to your site's individuality and operations.

For more information about Power Factor Correction or if you'd like to discuss your energy needs, please call your Account Manager or our Sustainable Business Solutions team on 13 23 34, between 8.30 am and 5.00 pm, Monday to Friday.

Energy efficiency.

Energy efficiency – a positive step in your sustainable journey.

Our energy management consultants can provide a tailored energy optimisation solution for your business. We can assess your organisation's energy usage, identify areas where energy is being wasted and detail options to reduce or eliminate this waste.

Typically, the energy efficiency journey starts with a study of energy use. This is a structured analysis of energy consumption aimed at initially detecting and then developing potential solutions to inefficient energy applications.

We offer a range of Energy Study types to suit the varying requirements of different organisations.

Energy efficiency opportunity review

The service involves a short review of your business and includes an assessment of energy consumption by all fuels. A brief summary report is provided identifying the areas where energy savings may be possible.

This service also broadly establishes the emission of greenhouse gases as a result of your operations by considering selected fuels.

Detailed energy study

While there are varying degrees that this study can take, it is typically structured as a tailored engineering study of a building or industrial plant which identifies opportunities for energy efficiency improvements. This could be whole of site or application specific, for example lighting, compressed air, waste heat recovery and renewable energy.

Energy streams are broken down into usage areas and a carbon footprint is also established.

The audit is documented in a comprehensive report. It can also provide economic evaluations of the energy saving opportunities along with action plans and proposals for implementation of identified savings opportunities.

Talk to us today about the advantages of improving site energy efficiency, minimising waste and reducing your business' impact on our environment.

For more information about Energy Efficiency or if you'd like to discuss your energy needs, please call your Account Manager or our Sustainable Business Solutions team on 13 23 34, between 8.30 am and 5.00 pm, Monday to Friday.