

Energy Infrastructure



Together we can
make a difference.™

We're with you every step of the way

Origin Solutions simplify your energy management by project managing your solution from beginning to end. We have the engineering and technical experience to ensure you get the best possible advice. Plus our tailored solutions are designed and delivered to suit the needs and budget of your business. It's all about making your job easier. Not to mention helping your business save energy and costs by maximising the performance of your plant and machinery.



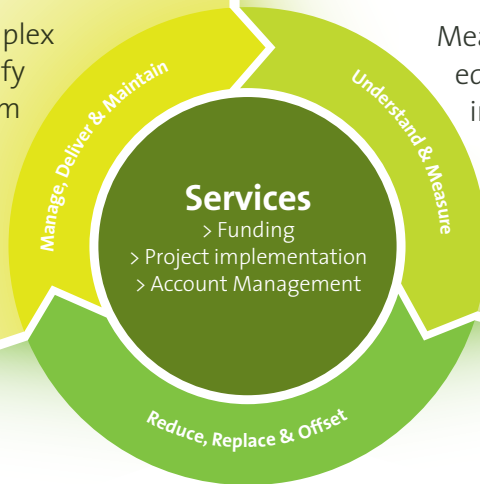
Energy Infrastructure

Source and project manage complex installations, monitor and verify savings and manage long term equipment maintenance.



Energy Intelligence

Measure and understand energy and equipment usage, efficiencies and impacts through assessment of customer operations.



Energy Sustainability

Source and install energy efficiency solutions, and offset environmental impact where emissions can't be avoided, enabling customers to reduce costs and make a difference.

Let us do the hard work for you

There are many ways Origin Solutions can help your business manage energy infrastructure. This includes every aspect from the design, supply and installation of large or small plants and equipment.

Whether it's the installation of a new cogeneration plant, serviced hot water or gas meters, our Solutions team has it covered. We can even manage government approvals, implementation, commissioning, maintenance and ongoing operations.

Our infrastructure project management services include solutions for:

- Expanding your business.
- Installing new plant equipment.
- Upgrading energy supply infrastructure.
- Relocating your premises or changing your layout.
- Starting a new business.

Co & trigeneration provide multiple opportunities

Cogeneration is the production of two forms of energy from one fuel to produce heat and power. Trigeneration adds the third dimension of cooling from the same source and via absorption chillers. In essence, heat from a typical natural gas fuelled engine is recovered and used to heat water or provide cooling.

Generating multiple forms of energy from one fuel can result in energy efficiencies of up to 80% - compared to 38% for the most efficient coal fired power station.¹

For the same delivery of energy, natural gas cogeneration can reduce greenhouse gas emissions by up to 50% compared to electricity generated from coal.²

The installation of a co or trigeneration plant can significantly increase your building's National Australian Built Environmental Ratings System (NABERS) star rating. Depending on the system design, up to a two star improvement can be achieved. Improving the star rating of your building will not only improve your environmental performance, but can result in reduced costs and higher rental returns. Co and trigeneration can also increase the security of your sites electrical supply.



You'll warm to our Bulk and Serviced Hot Water Service

Origin Solutions works closely with building developers and hydraulic consultants during construction of residential building to supply hot water plant and hot water meters in one of two different ways.

Firstly, with Bulk Hot Water only hot water meters are in some cases supplied to the development. Origin remains responsible for all the energy consumed by the hot water plant and sells hot water to whoever uses it in the apartments.

Secondly, with Serviced Hot Water we supply the plant and equipment with little or no up-front cost to the developer in return for hot water supply contracts. We build, own, operate and maintain the centralised hot water plant and sell hot water to whoever uses it in the apartments.

BOOM and BOOT Schemes that put you in control

Where infrastructure projects incur significant capital expense, Origin Solutions may provide the option to build, own, operate and then finally transfer (BOOT) assets such as trigeneration, compressed air systems, lighting, boilers and hot water plants.

So when it comes to managing infrastructure equipment, Origin Solutions takes on the operating and performance risk. This provides businesses with full use of new or upgraded services without capital investment.

Origin can also build, own, operate and maintain (BOOM) plant and equipment for customers allowing them to use freed capital to implement other projects. BOOM and BOOT schemes are typically 10 to 20 year terms.

Pursue your energy projects with confidence

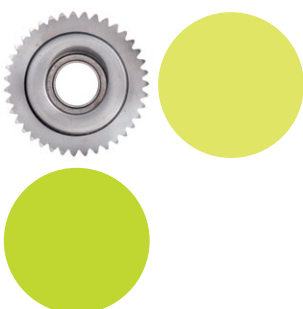
At Origin Solutions, our expert consultants can assist your organisation to evaluate specific energy and carbon mitigation projects. By doing this, we can also determine their technical and financial viability. Such projects can include:

- Co and trigeneration.
- Natural gas cooling and air conditioning.
- Lighting and air conditioning upgrades.
- Variable speed drives.
- Photovoltaic and solar hot water panels.
- Waste heat recovery.
- Fuel conversion.
- Waste-to-energy plants.

Whatever you need, we can help you find it

Our commitment to work closely with you ensures the correct equipment for your project is identified and used. This includes cost competitive specification, sourcing and procurement of plant and components such as:

- Standby generators, UPS, switchgear, harmonic filters and power systems.
- Power factor correction equipment.
- Gas boilers, centralised hot water, heating and reticulation systems.
- Lighting (industrial and commercial).
- Metering and load management systems.



Dual Fuel Burners or Electric Systems. The choice is yours

Our specialists can provide the design, supply, installation and commissioning of a dual fuel burning system, including Multi-fuel Alternative Burners and Multi-fuel Simultaneous Burners.

Deciding which one you need depends on your business infrastructure. For instance, Multi-fuel Alternative Burners use one fuel, but when a switching system has been set up it can use multiple fuels at any one time. Whereas Multi-fuel Simultaneous Burners can use more than one fuel at a time and in various combinations, such as oil and gas or land fill gas and natural gas.

Our energy savings are guaranteed

An Energy Performance Contract provides businesses with a low risk way to implement energy efficiency improvements that may pay for themselves. In principle, Origin guarantees the energy savings which may translate into dollar savings.

Our EPC savings guarantee³ ensures that the implementation of energy efficiency projects will deliver results.

Financial solutions that work for you

Origin Solutions can help if your business is expanding faster than existing infrastructure can support. The same is also true if your business is in the process of altering, modernising or upgrading electricity or energy infrastructure. We may even be able to assist with a payment solution if you're preparing to implement a large capital project such as infrastructure management or cogeneration. Our payment options are designed to suit your business needs and project, including:

- Monthly payments / amortisation of costs.
- Build, own, operate (transfer) or BOOT schemes.

1. Based on the emissions intensity of a gas-powered cogen plant generator compared to the grid electricity emissions intensity for NSW (1.07 kgCO₂-e/kWh) or VIC (1.35 kgCO₂-e/kWh), compared to the average emissions achieved from a Cogent Energy gas powered cogen plant (0.609 kgCO₂-e/kWh). www.cogentenergy.com.au

2. www.cogentenergy.com.au

3. If the guaranteed savings are not achieved Origin will either (a) pay you the savings shortfall for the savings guarantee period; (b) install alternative or additional equipment to achieve the guaranteed savings.

Origin Solutions for your peace-of-mind

Origin has been part of the energy industry for over 150 years. From this depth of experience we've grown to become Australia's leading green energy provider, delivering sustainable energy solutions that can have a positive impact on your business – and the environment.

Origin Solutions has extensive experience in delivering efficiency solutions to Australian industry. We're committed to working closely with your business to deliver:

- End-to-end energy solutions.
- Sustainable strategies.
- Specialised payment options tailored to your pay back needs.
- The advantages of a fully integrated energy company.

Best of all, you don't have to be an existing Origin customer to speak with an Origin Solutions specialist about making your business more efficient and sustainable.



We're ready to talk when you are

Contact one of our specialists today and see how we can help your business become more energy efficient and sustainable. At the same time, you can also request a free brochure for more information about any of our energy management solutions.

Call 13 23 34 or email originsolutions@originenergy.com.au

Contact us today:

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or visit originenergy.com.au/solutions

