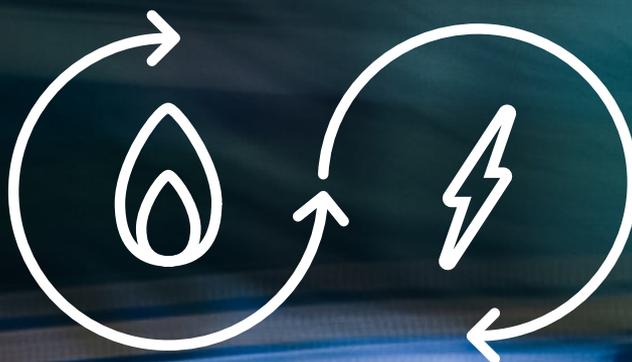


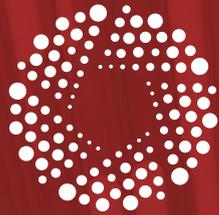
The journey to Combined Heat and Power

Taking control of your energy

Product series
September 2017



The Power of Cogeneration



Powering Resilience

ENER-G Combined Heat and Power (CHP) will help you take control of your energy, lowering the risk of business disruption and ensuring continuity of your operations



Powering Performance

ENER-G Combined Heat and Power (CHP) will help you improve operational efficiency and lower costs



Powering Growth

ENER-G Combined Heat and Power (CHP) will help you unlock value for your business

Understanding energy options

Global energy consumption is increasing fast – it's expected to rise 25% by 2040.¹ The demand for electricity will be even higher, up 65% in the same period.² Add increasing instability in the grid due to intermittent renewables, rising fuel costs and strict emissions targets into the mix and the future of traditional energy supplies looks anything but secure.

If you're to prevent potential impact on your operational efficiency, it's time to start looking at alternative energy sources.

You need a supply that will improve your on-site resilience, reduce costs and help meet your CO₂ emissions. Something that isn't going to eat up your entire energy budget in set up costs alone.

An ideal solution could be an ENER-G CHP system from Centrica.

1. US Energy Information Administration

2. US Energy Information Administration

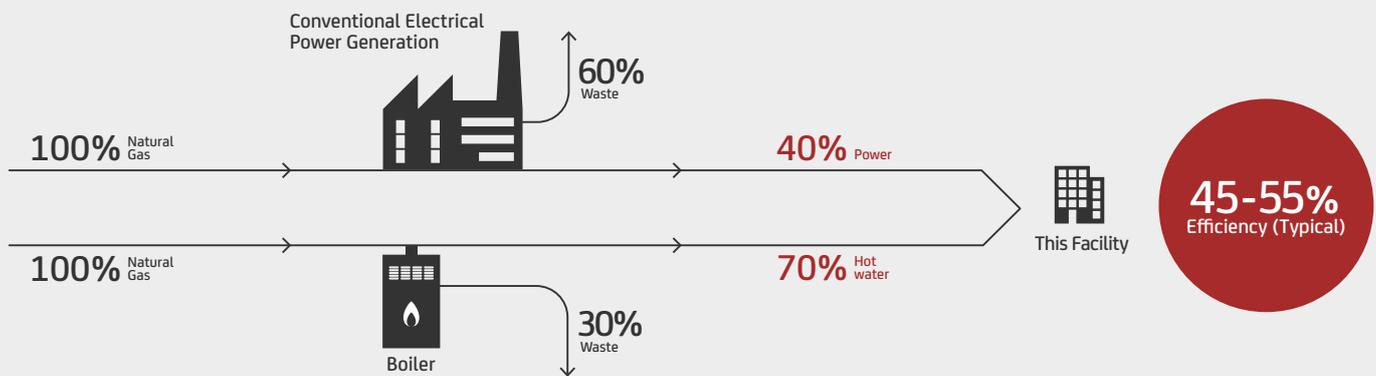


How ENER-G CHP works

An engine, normally fuelled by gas, is linked to a generator to provide electricity. Heat is recovered from the exhaust, jacket and water and oil cooling circuit simultaneously. Centrica's ENER-G CHP systems can deliver an improved efficiency of up to 25% compared to the separate systems it replaces:³

3. US Energy Information Administration

Typical case



Cogeneration



What can ENER-G CHP do for your operational efficiency?

ENER-G CHP is designed to give you the power to control your energy, including improved reliability of supply, reduced costs and a lower carbon footprint.



Increased resilience

- Reduces your dependency on the grid – giving you a reliable energy source
- Gives you flexibility and control over your energy
- Can be used to provide electricity if the grid supply fails
- Offers a cost-efficient heat supply



Reduced running costs

- Cuts your site's energy costs, enabling you to divert your energy budget elsewhere
- Stabilises energy costs, allowing you to forecast more effectively



Lower CO₂ emissions

- ENER-G CHP can help you reduce your energy consumption and emissions – supporting your compliance efforts and even unlocking access to certain government incentives



ENER-G CHP in action

Five-star savings at a luxury hotel spa

The hotel spa had a number of facilities that relied on a constant energy source, including a rooftop hydro-pool and a 19-metre infinity pool. With their ageing heat and power system becoming difficult to maintain, they needed a reliable, energy-efficient replacement.

The ENER-G's CHP units were ideal as they could generate sufficient electricity, then recover the heat created during the process to supply heating and hot water for the building. To maximise savings, we fitted two CHP units – one for the hotel, and one for the spa.

The results

ENER-G CHP technology has dramatically reduced the energy costs for the hotel and their on-site health spa, with carbon output cut by over 800 tonnes a year.

The savings were immediate, and both units are set to achieve payback within three years.



ENER-G CHP in five simple steps

1. Assess feasibility

There are two reasons for installing ENER-G CHP – performance and resilience. The feasibility for improving both is determined through a scoping study, taking into account your site's energy demands, it's infrastructure and any specific issues. This information can help you make a business case for the investment.

2. Choose the right ENER-G CHP for your site

Once we've established the energy requirements for your site, we can help you select an appropriately sized ENER-G CHP unit that's fit for purpose, ensuring maximum operational efficiency and longevity.

3. Finance your ENER-G CHP

There are several different ways to finance ENER-G CHP:

Discount Energy Purchase (DEP)

- Funds all or a proportion of the overall costs, you can choose what you want to pay
- Payment via a fixed p/kWh rate for an agreed period
- All ongoing maintenance costs are included in the tariff

Energy Savings Agreement (ESA)

- Allows the purchase of electricity and heat from the ENER-G CHP unit at a fixed cost
- Capital costs are funded by Centrica, limiting your capital outlay and risk
- Savings are immediate and guaranteed with ongoing maintenance costs included

Capital Purchase

- Complete turnkey solution at a fixed price
- Allows you to claim Investment Tax Credits towards the cost
- Optional service package to operate and maintain the system makes management hassle-free and allows for long term returns

4. Install your ENER-G CHP

Our experienced in-house team ensure that the CHP system is designed, manufactured and tested to the highest standards at our state of the art manufacturing facilities. Once all the checks have been completed, our specialist team ensure the system is installed on-site, causing minimal interruptions and ensuring your equipment is up and running and generating savings in the minimum possible time. We can even construct the system on site in case of restricted space or access.

5. Ongoing operation and maintenance

Our remote monitoring system actively checks over 200 data points on the ENER-G CHP equipment to anticipate any performance issues before they happen. This cloud-based monitoring system ensures optimum performance and maximises the lifespan of your ENER-G CHP unit and our expert engineering team also offer an immediate response.

Want to know more?

ENER-G CHP is generating new opportunities across all types of industry. Find out how we can help you power new levels of performance today.

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