

**ICS** | Industrial  
Cogen  
Solutions

# Powering British Business



# The ultimate energy cost reduction solution

As more sources of renewable energy generation come on to the National Grid the instability of the UK's electricity supply network has increased. Obviously, the wind doesn't always blow and the sun doesn't always shine on the UK's shores. This means that the supply and demand for electricity is becoming more difficult to manage, especially as the base generation assets – coal, gas and nuclear power stations – are being either closed down, not coming through fast enough, or cancelled due to rising costs.

Combined heat and power (CHP) is a great way of using natural gas more efficiently. This is because a great deal of heat generated in the production of electricity at traditional power stations goes to waste via large cooling towers.



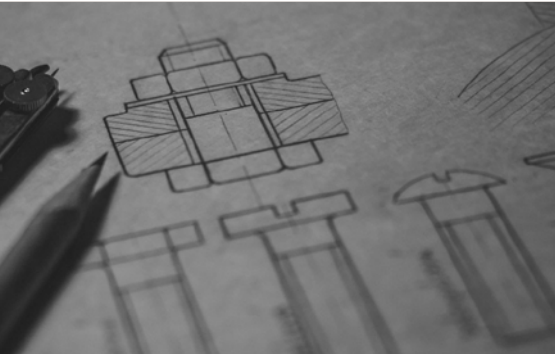


However, on-site generation allows this waste heat to be captured and reused. Many hospitals and universities have been using this technology over the past 40 years, and now the UK manufacturing industry is adopting it to power its development.

Until recently, cogeneration in the manufacturing industry was focused on large-scale sites with many megawatts (MWs) of demand for both electricity and heat. Today – and with soaring electricity prices – cogeneration is viable for sites with a sub 1MW electrical demand, resulting in considerable cost savings. Using natural gas engines as a prime mover with outputs typically in the 1MW to 2.5MW range, a cogeneration system can be developed for almost any site and significantly reduce energy costs.

# Why ICS?

Industrial Cogen Solutions (ICS) is an independent CHP provider drawing on 60 years of experience in the design of industry leading cogeneration and trigeneration systems. We provide the latest reciprocating gas engine technology, optimised for efficiency and reliability.



From initial surveys to installation and commissioning, and through long-term maintenance partnerships, you can continue to benefit from your system for many years to come. Our solutions are designed around your needs in order to maximise both technical and financial efficiencies.

Let our experienced and professional team guide you to the best solution that matches precisely the needs of your facility.

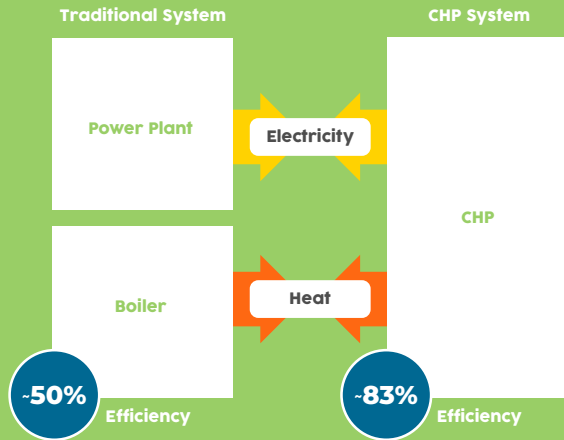


# How does it work?

## What is CHP

CHP technology is widely used across a range of sectors, from small units operating in leisure centres to larger systems serving the needs of education, healthcare and industrial manufacturing.

Compared to conventional generation, CHP is more efficient and makes the best use of any fuel source – typically natural gas. Cogeneration provides significant savings on energy costs, due to the increasing disparity between the cost of mains natural gas, and that of imported grid electricity.

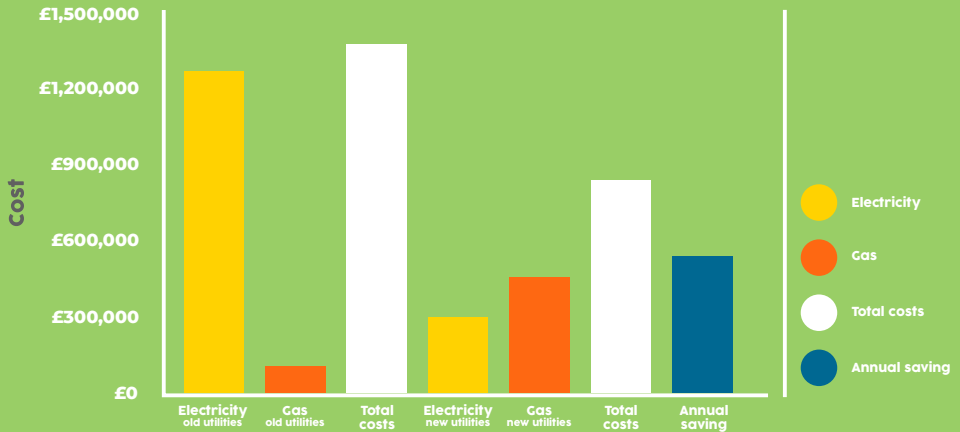


While all energy costs increase over time, the use of lean burn, extremely efficient engines (and the subsequent recovery of generated heat), provides energy cost security long into the future.

# What are the benefits?

Most, if not all, facilities can benefit from generating their own on-site power. Indeed, hundreds of manufacturing plants, hospitals, universities, leisure centres, and many other types of facilities are enjoying the significant financial benefits of CHP technology.

In short, it uses approximately 2.5 units of natural gas to generate 1 unit of electricity.

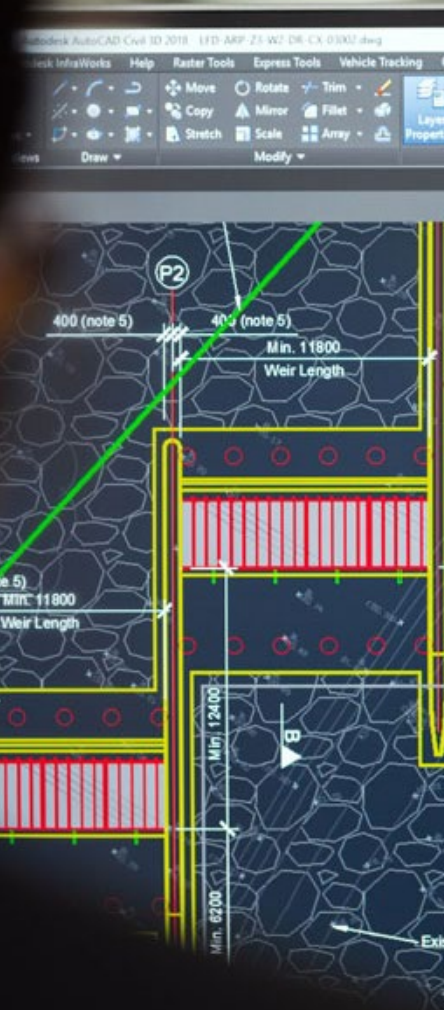


# How we work with you

We gather the necessary data and site information from which we produce an initial desktop study. From this we can look at equipment selection options and undertake a full site survey (free of charge), including recommendations for location.

We then perform feasibility study to assess the best use of recovered heat and how this integrates with your existing site services. From this we provide a range of scenarios for you to consider, assessing your future requirements and working with you to deliver the best solution.

At all times, you can rest assured that you're partnering with the best in the industry.



# Finance Options

## Capital purchase

Investing your own capital in a CHP scheme will typically payback in around two to three years. If you take out a comprehensive operation and maintenance package the equipment is fully guaranteed and maintained for up to 15 years. This means that you can rest assured that your investment is safe and will continue to provide substantial savings for many years to come.

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## EcoSave

Even if you don't wish to invest your capital in our market-leading systems, we can provide the same quality of installation and a fully comprehensive maintenance package for up to 15 years using our EcoSave option.

Through this, electricity is purchased from us rather than a conventional utility supplier. In addition, any other benefits such as steam or chilled water produced through our generation process will be free.

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## The net zero carbon journey with Industrial Cogen Solutions EcoCare

One of your concerns may be any carbon impact. After all, the last thing any of us want to do is add to our footprints.

However, net zero carbon CHP is within your reach. All of our systems can be carbon offset for a tiny percentage of their financial savings, typically around 2%.

In this way, you effectively retain 98% of the financial savings without incurring any extra carbon. The route to net zero isn't clear for most organisations but carbon offsetting is quickly becoming the most popular way of reducing our carbon footprints and facilitating the transition.





# GreenCare

We offer three levels of cover tailored to your individual site requirements.

## Gold

This is our comprehensive cover and includes remote monitoring, all parts, consumables, labour, routine maintenance, minor and major overhauls, and the major engine rebuild. This will ensure that your system has an operational life of up to 15 years.

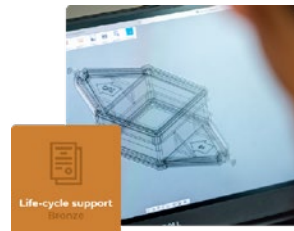


## Silver

This level of cover includes all routine maintenance and the remote monitoring of the engines. Engine rebuild and callouts (including additional parts) are not included with this package.

## Bronze

Remote monitoring and engine care advice is included. We can remotely access – and stop and start – the CHP unit to respond to site needs leading to minimal operational disruption.





## Food and Beverage



## Pharmaceutical



## Chemical



## Plastics



## Automotive



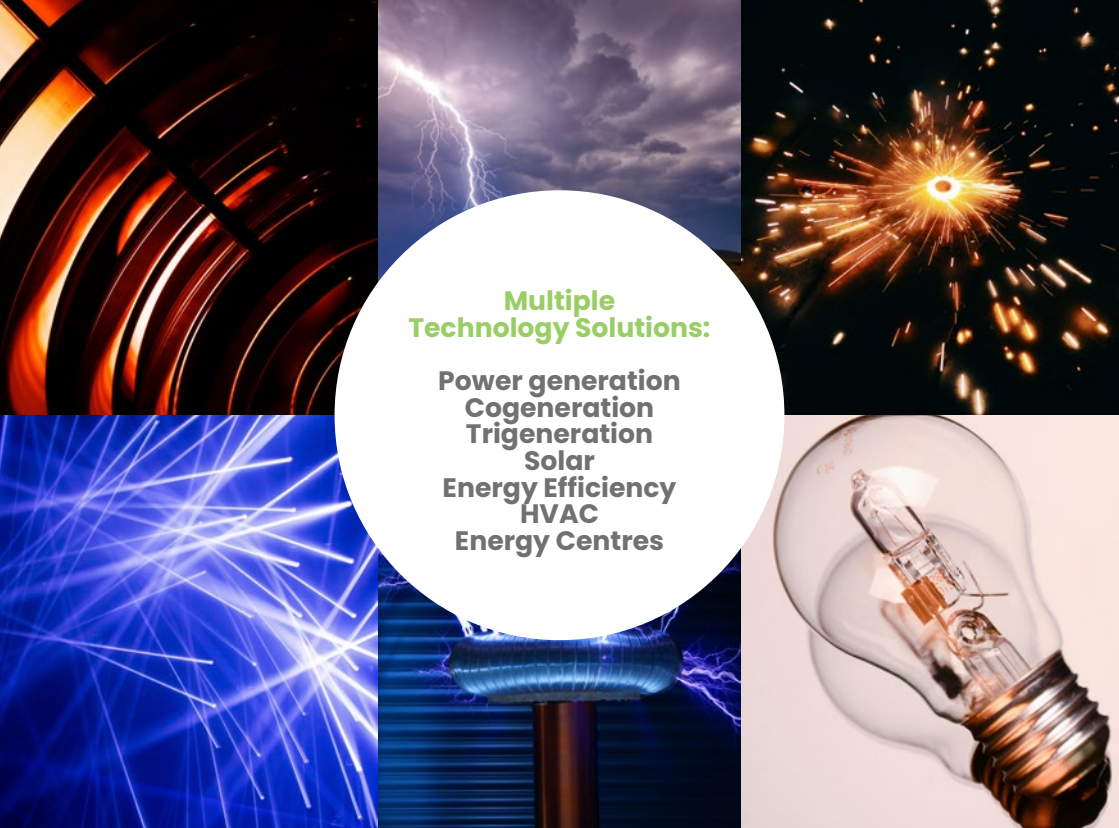
## Aerospace



## Healthcare



## Education



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