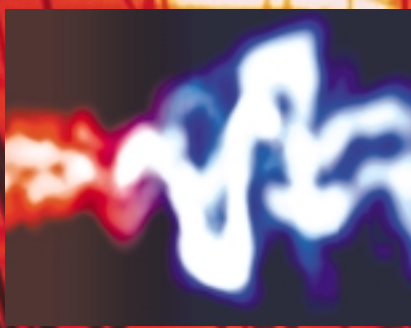


COGENERATION



saving money saving energy saving the environment



THE ENER·G GROUP

At ENER·G we deliver sustainable and energy efficient technologies on a business-to-business basis worldwide. Our four key technologies offer an energy solution for all markets:

Renewable Energy

Utilising biogas and biomass to produce 'green' electricity for our clients worldwide.

Energy from Waste

Extracting the energy value from pre sorted biodegradable municipal waste.

Energy Management

Using intelligent building controls and other innovative technologies, we provide risk free energy management with guaranteed savings.

Cogeneration

On site generation of electricity and heat for the public and private sector.



COGENERATION

Cogeneration or Combined Heat and Power (CHP) technology converts gas into both electricity and heat in a single process at the point of use. Cogeneration is highly energy efficient and as well as supplying a business with power, it can deliver a number of positive financial and environmental benefits.

ENER·G's experience in the cogeneration market dates back to 1980 when we began designing, manufacturing, installing and maintaining cogeneration systems across Europe. We are now firmly positioned as Europe's leading supplier of cogeneration systems from 33kW up to 10MW and bring a wealth of knowledge and experience to all projects we undertake.

THE BENEFITS OF COGENERATION

Cogeneration is a well-proven technology, recognised world wide as a cleaner alternative to traditional centralised generation. Its long-term future in the global energy markets is secured by its ability to provide operational, financial and environmental benefits from a single unit of fuel.

Operational advantages:

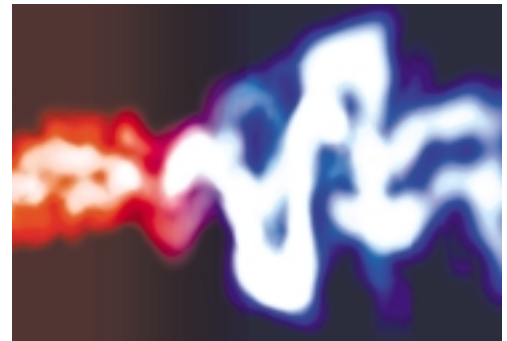
- Base load electrical supply
- Security of supply
- Legislative compliance of EBPD
- Increased diversity on heating and hot water
- Steam raising capabilities
- Trigeration, using absorption/mechanical chillers for cooling

Financial advantages:

- Reduced primary energy costs
- Flexible procurement solutions
- Stabilised electricity costs over a fixed period
- Reduced investment in surrounding plant eg boilers
- Tax effective asset management
- Avoid the Climate Change Levy

Environmental advantages:

- Improved fuel efficiency
- Reduced CO₂ emissions
- No transmission losses
- Reduction of energy consumed (not the energy available on site)
- Lower SO_x emissions with the use of natural gas as a fuel



APPLYING COGENERATION

Consistent demands for thermal energy, and considerable electrical base loads are most appropriate for cogeneration.

When to consider cogeneration:

- Designing a new building
- Installing new boiler plant
- Existing site re-development
- Continuity of power supply
- Increasing energy efficiency
- Improving financial performance
- Positive environmental impact
- Supporting the company's green image

Typical application projects:

- Hotels and Leisure Centres
- District Heating Schemes (ie Offices, Residential)
- Hospitals and Military Bases
- Universities / Government Sites
- Waste Water Treatment
- Industrial/ Commercial
- Horticulture and Airports



SOLUTIONS

We offer a wide range of cogeneration solutions both in terms of the technology and procurement options available.

The technology

ENER·G Cogeneration systems are available from 33kW to 10MW. Typical applications run on natural gas, however, systems can also be fuelled by propane, biogas or diesel.

ENER·G can undertake all aspects of the project from the design and manufacture of the system to the installation, commissioning and maintenance.

In the range up to 1MWe capacity; units can be delivered packaged as a single unit with the controls, heat recovery units and engine within neat, compact, acoustically insulated enclosures suitable for either internal or external installation

Above 1MWe, each one of our cogeneration units is bespoke, with engine and system carefully designed to meet each specific application.



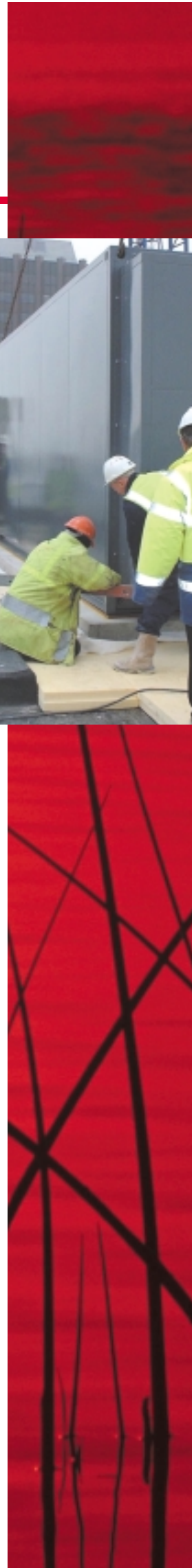
Energy Centres

We offer bespoke turnkey Energy Centre solutions for large industrial, commercial and public sector applications generally including cogeneration in addition to other technologies that are available from the ENER·G Group.

Such solution based schemes may include the provision of a dedicated Energy Centre together with all necessary infrastructure enhancements needed to fully optimise the energy requirements of a site.

In addition to turnkey project delivery we are able to offer a full range of comprehensive support services, which enables customers to out source operational risk.

For specific range guides and further information please email: chp@energ.co.uk



ENER·G PROCUREMENT SOLUTIONS

At ENER·G we thoroughly commit to making our products available to every business whether or not they have the capital to invest.

Purchase the System

We can provide you with a fixed cost for a complete turnkey package, including supply, installation and commissioning. A separate Operations & Maintenance package is offered in parallel and we can operate and maintain the system throughout its life.

Purchase the Energy

Discount Energy Purchase (DEP)

ENER·G will install, operate and finance the cogeneration installation, at no cost to you and simply sell the energy produced at a discounted rate.



Energy Services Performance Contracting (ESPC)

ENER·G undertake to promise real reductions in utility consumption associated with the provision and operation of various energy efficient technologies. This turnkey approach can be provided at no capital cost to the customer.

Flexible Finance and Project Funding

ENER·G also facilitate bespoke project specific funding, which we are happy to discuss on an individual customer basis.

In all cases our flexible approach to alternative financial solutions provide both quantifiable and tangible transfer of risk together with real and demonstrable value for money.



LONG-TERM CARE

ENER·G maintains the largest fleet of cogeneration systems in Europe. Our Customer Care Department, co-ordinates our engineering teams 7 days per week and 363 days a year.

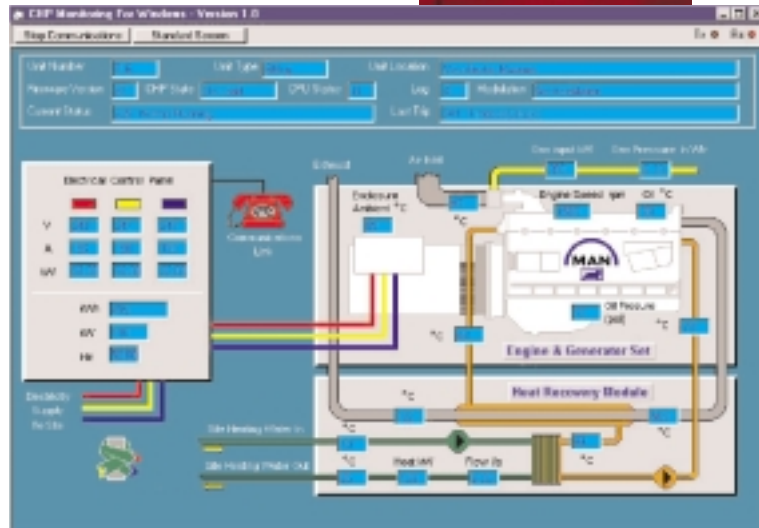
We offer a range of standard service packages. However, we take a flexible approach and are able to tailor service packages to suit the client and the site.



Service packages can also be offered independently of ENER·G installations, as our service technicians are fully trained in all aspects of engine maintenance, including complete engine overhauls.

Research & Development

Our continual dedication to research and development mean clients can guarantee that they are embracing up-to-the-minute technology with tried and tested methods.



Remote monitoring

An integral part of every ENER·G cogeneration unit is the patented on-board control system. The system monitors and manages the unit and is programmed to optimise its operation to suit the demands of the site.

Every day the system automatically communicates with our Command Centre to upload recorded operating data and, in the event of a problem, takes the appropriate corrective action.

Before travelling to a site, engineers can communicate with the system to assess the problem in more detail and, wherever possible, correct and restore the unit remotely.

Our monitoring system means that from a client perspective the cogeneration unit is simply 'fit and forget'.

For more information on service and monitoring packages available please email: service@energ.co.uk



PARTNERS

Limerick based Temp Technology have been working closely with the ENER·G Group within the cogeneration industry since 1991, becoming one of the leading suppliers of cogeneration technology to the Irish market with over 60 installations to date.

Temp Technology

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www.temptech.ie

AC Automation (UK) Ltd are the Northern Ireland agents for ENER·G. Since 1988, AC Automation have been market leaders in the supply of diesel generators and controls systems. By introducing ENER·G's cogeneration units into their product range, AC Automation are now offering the most advanced generation technology available.

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Carrickfergus
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COGENERATION

THE ENER·G GROUP WHAT MAKES US NUMBER ONE

- Our unique combination of in house technology and services means we are a single port of call for any business looking to increase energy efficiency
- We are world leaders in the field of delivering sustainable and energy efficient technologies with a wealth of experience and a proven track record
- From energy efficient generation to management of energy consumption we have a solution to help your business
- Our financial stability offers you long-term security
- We are able to offer the best financial, operational and environmental benefits without capital investment
- Continual Research and Development means we offer the very latest technology in the industry



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