



ENER-G's CHP helps reduce energy costs and lower greenhouse gas emissions on the Isle of Wight

Medina leisure Centre, Isle of Wight

Medina Leisure Centre in Newport is one of the Island's largest multi-purpose leisure and activity centres.

The centre is open all year and offers facilities for everyone, ranging from toddlers to fifty plus groups, participating in activities covering swimming to climbing, fitness classes to badminton, and Tone Zone Gym and training. Located on the Isle of Wight, Medina Leisure centre is ENER-G's most southerly located CHP.

ENER-G's combined heat and power technology has been installed on the site since April 2004. The system was acquired on a capital purpose basis.

The six cylinder MAN engine with 62kWe capacity has produced 1,431,710 kWe in the past six years which have helped reduce energy costs dramatically.

As a result of ENER-G's highly efficient heat and electricity generation, the leisure centre has achieved approximately 813 tonnes of carbon savings since 2004. This equals the environmental benefit of saving 81,300 trees.

ENER-G's experience in the cogeneration market dates back to 1984 when we began designing, manufacturing, installing and maintaining cogeneration systems.



The six cylinder MAN engine with 62kWe capacity

We have manufactured over 1400 CHP units from 4kW to 2MW and currently operate and maintain over 500 units around Europe.

Combined heat and power (CHP) – the simultaneous generation of electricity and useful heat - is almost twice as efficient as conventional power generation as the majority of heat is recovered and used on site, rather than wasted into the atmosphere. The Typical pay back period on CHP technology varies between two to four years.

ENER-G delivers small-scale 4kW to 10MW CHP solutions to customers around the world. We offer the broadest product range on the market, with more than 1,400

installed cogeneration systems across the globe – powered by natural gas, biogas, diesel, biogas, propane or biodiesel.

The applied CHP technology enables the organisation to generate its own electricity, radically reducing carbon emissions. This method is highly energy efficient (85 per cent) as it recovers heat created in the electricity generation process and avoids transmission losses because the energy is used locally.

In conventional power stations, which are only 30 per cent efficient, this heat is wasted because it disappears into the atmosphere. Instead, hotels and leisure centres can use it to provide heating and hot water.

The benefits of CHP in the Leisure sector:

- Offers financial savings over conventional energy supply
- Avoids Climate Change Levy
- Primary energy savings deliver lower energy bills
- Higher efficiency offers reduced greenhouse gas emissions offsetting the impact of the Carbon Reduction Commitment
- Greater security of supply and plentiful hot water
- Flexible procurement options
- VAT savings
- Possible grant funding

About ENER-G

ENER-G develops, delivers and finances sustainable energy solutions and technologies on a business to business basis worldwide. We offer a “one-stop-shop” for all commercial and industrial energy requirements, from combined heat and power (CHP), renewable electricity generation from biogas, heat pump technologies, efficient lighting, controls, metering and data solutions and energy from waste.

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