Energy Savings Sheet: Combined Heat & Power (CHP)

2EA have produced this sheet to identify areas of potential energy savings. It consists of notes and checkpoints that can be used by managers to help reduce overall energy consumption.

Notes

- Combined Heat and Power (CHP) is the simultaneous generation of heat and power, (usually electricity), in a single process. Compared with the centralised generation of electricity, where the waste heat produced from the generation process is generally discarded; CHP systems can be significantly more efficient and yield substantial financial savings for the user.
- CHP is a key technology in reducing carbon dioxide emissions, and the government has set a target of 10,000 MW of Good Quality CHP electrical capacity by 2010.

Checkpoints

- ✓ Fuel inputs to and electricity outputs from Good Quality CHP are exempt from the Climate Change levy.
- ✓ CHP plants are available in a wide range of sizes, and so can be tailored to many applications.
- ✓ Where a site has simultaneous demands for heat and electricity for more than 4,500 hours per year, it is worth considering the CHP option. The grade of heat required is an important consideration. A cooling demand may also be served through the use of absorption chillers, which are driven by heat, rather than electricity.
- ✓ Most CHP plants run on natural gas, and the economics of a scheme are sensitive to the relative difference between gas and electricity prices.
- ✓ CHP plant is capital intensive, but in the right circumstances energy services arrangements are available whereby a third party will finance the plant.
- ✓ When examining the economics of a prospective CHP system, it is important not to overlook the costs of maintenance, additional gas supply and connection to the electricity network.

2EA provide three packages to help you manage your CCL exemption as well as helping to obtain and maintain a valid CHPQA certificate. Quotations for individual packages are available upon request.