

Applied Energy – Fact Sheet

CHP HEAT METERS

Key Information for Building Owners and Operators

What are they? Electronic devices used to measure and record the amount of heat energy a Combine Heat and Power (CHP) unit and/or boiler has produced based upon flow volumes and temperature differences.

Why are they needed? Heat meters are required for CHP installations to record the amount of heat utilised within the building which is required to undertake CHP Quality Assurance (CHPQA).

How are they installed? Heat meters are installed in line with the specific manufacturer's requirements. A typical arrangement for a heat meter used for a CHP installation has been shown and highlighted in red.

Is there any legislation for verification? There is currently no British legislation requiring the verification of heat meters. There are however regulations in other European country's, like Denmark, that require 6 yearly off-site batch testing of heat meters. The verification of heat meters in Europe must adhere to EN 1431:2007.

Is there any industry guidance? Guidance notes have been provided on the CHPQA website which make reference to the calibration of heat meters to ensure effective monitoring. The keys recommendations are:-

- Recalibration/replacement of heat meters is required on expiry of the manufacturer's calibration certificate.
- All repairs require a subsequent re-verification.
- Off-site or on-site calibration is recommend every 5 years
- Calibration of secondary components every 2 years

Although the above European legislation is not currently enforced in this country, it is predicted to be brought into the UK soon.

Why are heat meters important? Heat meters allow CHPQA assessments to be carried out. If 'good quality' CHP is shown as a result of the CHPQA process, this exempts owners and operators from Climate Change Levy (CCL) charges on a percentage of their utility bills. The reclaiming of CCL can typically show annual savings of up to 5% on electricity and gas bills.

Contact: Stuart Daniels (stuart.daniels@appliedenergy.co.uk, 07817 893819) at Applied Energy for an initial chat and some guidance on how best to proceed.

