Measurement & analytics
CHP energy metering services

ABB’s energy metering services provide a comprehensive, packaged solution designed specifically to deliver bottom line results for combined heat & power users.

Measurement made easy

UK combined heat & power

The cogeneration of electricity and thermal energy sources is promoted by the government within the UK as an energy-efficient technology, because of the considerable environmental, economic and social benefits it can bring together with its contribution to security of supply.

To promote uptake of CHP, the CHPQA (combined heat & power quality assurance) framework was introduced to reward efficient CHP operation with direct financial benefits:

- climate Change Levy (CCL) exemption
- carbon allocation under EU-ETS Phase II
- business rates exemption/access to Enhanced Capital Allowance (ECA)
- options to sell Levy Exemption Certificates (LECs) at fair value

The CHPQA framework requires CHP users to measure and annually report metered energy totals to determine the level of qualification for CCL exemption. ABB’s CHP energy metering services solutions are designed to maximize the financial benefits of CHPQA participation by improving the quality of measurement.
Energy metering services
- Fully traceable verification of flow transmitters
- Certifiable inspection of primary flow devices
- Assessment of device installation
- Design of optimum calibration schedules
- Upgrade of measurement devices
- Verification of F4 self-assessment form
- Verification of measurement uncertainties
- Improvement of qualifying power output
- CHPQA (OFGEM) audit support services
- Installation & commissioning of new devices
- Life cycle services to maintain CHP performance
- Support with annual self-assessment process

CHPQA quality index assessment
The CHPQA responsible person undertakes a process as depicted overleaf, from initial registration of the CHP facility and equipment through to the inner annual cycle of recording performance data and submitting the annual F4 assessment form.

ABB has the tools, skills and expertise to support CHP facilities with all aspects of the CHPQA process, either as a complete packaged solution or modularized to align with your specific requirements.

The CHPQA responsible person follows the process shown in Fig. 1.

Comprehensive range of services
ABB provides a comprehensive range of services for a wide range of measurement devices:
- Life-cycle services
- Verification and calibration
- Commissioning
- Repair & spares
- Maintenance
- Upgrade
- Installation & commissioning
- Continuous gas analyzers
- Water analyses
- Recorders & controllers
- Pressure, differential pressure & level
- Flow metering (liquid & gas)
- Temperature

Fig. 1: CHPQA responsible person process