

Renewable Combined Heat & Power Policies and Incentives



Combined Heat and Power Quality Assurance (CHPQA)

What: CHPQA is a voluntary scheme used to define, assess and monitor CHP schemes for their energy efficiency and environmental performance.

Gaining quality assurance is a requirement to ensure energy users can receive the full level of financial incentives available for their CHP.

How: Each CHP plant is evaluated on its fuel use, power generation and heat supply and provided with a Quality Index (QI) and power efficiency.

Existing plant must have a QI of 100 & power efficiency of 20% to be 'Good Quality'. New plant must have a QI of 105.

Outcome: Various benefits are linked to whether a CHP is 'Good Quality' or not, such as Carbon Price Floor relief and Enhanced Capital Allowances.

[More guidance can be found here](#)

Renewable Heat Incentive*

What: The Non-Domestic Renewable Heat Incentive (RHI) is a long-term financial support scheme for renewable heat.

How: Participants in the scheme are paid to generate and use renewable energy for their onsite heat needs or to other sites through heat networks.

Payments are provided over 20 years.

Biomass schemes must be CHPQA-accredited but do not need to be assessed as 'Good Quality'. They have to achieve a minimum power efficiency of 10% in order to fully qualify for the biomass-CHP tariff for all eligible heat use. This threshold may rise to 20% in 2017. Biogas schemes do not need any CHPQA accreditation.

Incentive: Biomass CHP above the efficiency threshold is eligible for a 4.29p/kWh tariff.

Biogas schemes will receive 3.2p/kWhth for small installations (less than 200 kWth), 2.51p/kWhth for medium installations (200-599 kWth) and 0.95p/kWhth for large installations (600 kWth and above)

EfW CHP will receive 2p/kWh for their biomass content (50% for municipal solid waste).

Renewables Obligation*

What: The Renewables Obligation (RO) is a support mechanism for renewable electricity generation which places an obligation on electricity suppliers to source a proportion of the electricity they supply from renewable sources.

The RO closed to new entrants in April 2017.

How: Generators of eligible renewable electricity will receive a specific number of Renewable Obligation Certificates for each MWh of eligible renewable output generated. These certificates are provided over 20 years. Certificates are then purchased by electricity suppliers who have not met their renewable electricity obligation.

Eligibility: 'Good quality' biomass CHP accredited before 1 April 2015 receives 2 ROCs/MWh. EfW CHP receives 1 ROC/MWh.

'Good quality' bioliquid CHP will receive 1.9 or 1.8 ROCs/MWh if accredited in 2015/16 and 2016/17 respectively. Find out more here.

A ROC is valued at approximately £40/MWh

Feed in Tariff

What: Feed-in tariffs (FiTs) are an incentive to encourage generation of electricity from renewable sources and micro CHP.

*denotes where incentive requires CHPQA

FiTs offer a payment for the electricity produced, with additional payments for electricity exported to the grid.

How: Anaerobic digestion (AD) CHP of $\geq 5\text{MWe}$ is supported, as is Micro CHP of $\leq 2\text{kW}$. AD from feedstock must meet the minimum GHG threshold ($66.7\text{gCO}_2\text{e/MJ}$ of electricity generated) and the land-use criteria. Payments relating to electricity for feedstock AD will be limited to 50% of the total annual biogas yield. Solid biomass, sewage gas and landfill gas are excluded from the FiT scheme. The tariff is paid over 20 years.

Incentive: Small anaerobic digestion CHP installations ($\geq 250\text{kWe}$) receive 6.93p/kWh , falling to 6.78p/kWh from January 2018 and 6.58p/kWh from January 2019.

Medium installations (250 to 500kWe) receive 6.56p/kWh , falling to 6.43p/kWh from January 2018 and 6.25p/kWh from January 2019.

Large installations (500kWe to 5MWe) receive 2.49p/kWh , falling to 2.38p/kWh from January 2018 and 2.24p/kWh from January 2019.

Enhanced Capital Allowances*

What: The Enhanced Capital Allowances (ECA) energy scheme aims to encourage businesses to invest in energy-saving technologies.

Details: The ECA allows businesses to write off 100% of their energy saving investment against the taxable profits of the period in which they made the investment.

Saving: ECA can be claimed on the cost of all equipment required by a 'good quality' CHP system, including gas engines, electricity generators and heat recovery systems.

Contracts for Difference

What: A Contract for Difference (CfD) is a private law contract between a low-carbon electricity generator and the government-owned Low-Carbon Contracts Company.

CfDs are designed to bring forward new low-carbon electricity generating capacity.

CfDs were introduced in 2014 and replace the now-defunct Renewables Obligation for new projects from 1 April 2017.

How: An electricity generator with a CfD is paid the difference between the 'strike

price' (price for electricity reflecting the cost of investing in a particular low carbon technology) and the 'reference price' (a measure of the average GB market price for electricity).

The rate of subsidy therefore fluctuates depending on the reference price in order to provide the generator with the strike price. Negative payments are possible.

Support is only paid to the proportion of metered electrical output assessed by CHPQA to be 'Good Quality'.

Outcome: Contracts are provided following a competitive auction process. A generator cannot receive a higher strike price than those specified, but strike prices could be lower based on the results of the auction.

The strike price for biomass CHP will be $\text{£}125/\text{MWh}$ in 2018/19, falling to $\text{£}115/\text{MWh}$ in 2021/22 and 2022/23. The strike price for advanced conversion technologies will be $\text{£}140/\text{MWh}$ in 2018/19, falling to $\text{£}125/\text{MWh}$ in 2021/22 and $\text{£}115/\text{MWh}$ in 2022/23.

Non-Domestic Building Regulations

What: Non-Domestic Building Regulations provide guidance for the installation of fixed building services in new and existing non-domestic buildings to achieve compliance with energy efficiency requirements and building regulations.

How: CHP plant in new and existing buildings must:

- Meet minimum CHPQA Quality Index of 105 and have an electrical efficiency of more than 20%
- Be sized to supply not less than 45% of annual total heating demand

Bioenergy boilers or CHP plant are required to calculate carbon emissions by a suitably qualified person using an accredited NCM tool such as SBEM.

[More guidance can be found here.](#)