

SIMPLE GUIDE TO THE CHP QUALITY ASSURANCE (CHPQA) PROGRAMME

Abstract

This is a simple guide on how to apply for CHPQA certification

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1. Introduction

Combined Heat & Power (CHP) covers a wide range of sizes and technologies. Certifying the inputs and outputs from your CHP as 'Good Quality' through CHPQA is the route through which eligibility for a range of financial benefits is determined.

The supporting documentation found on the website is extensive and can appear daunting to the newcomer. This simple guide has been produced to give an overview of CHPQA, covering the application and certification procedures and the benefits of being certified as Good Quality (GQ) CHP. This Guide also provides a list of relevant contacts, such as the Office of the Gas and Electricity Markets (Ofgem) and HM Revenue & Customs (HMRC). This guide is aimed at both existing and new applicants to the programme.

Important links to CHPQA Forms and guidance notes:

CHPQA Website

<https://www.gov.uk/guidance/combined-heat-power-quality-assurance-programme>

CHPQA Standards

<https://www.gov.uk/government/publications/chpqa-standard>

CHPQA Forms

<https://www.gov.uk/government/collections/combined-heat-and-power-quality-assurance-forms>

CHPQA Guidance Notes

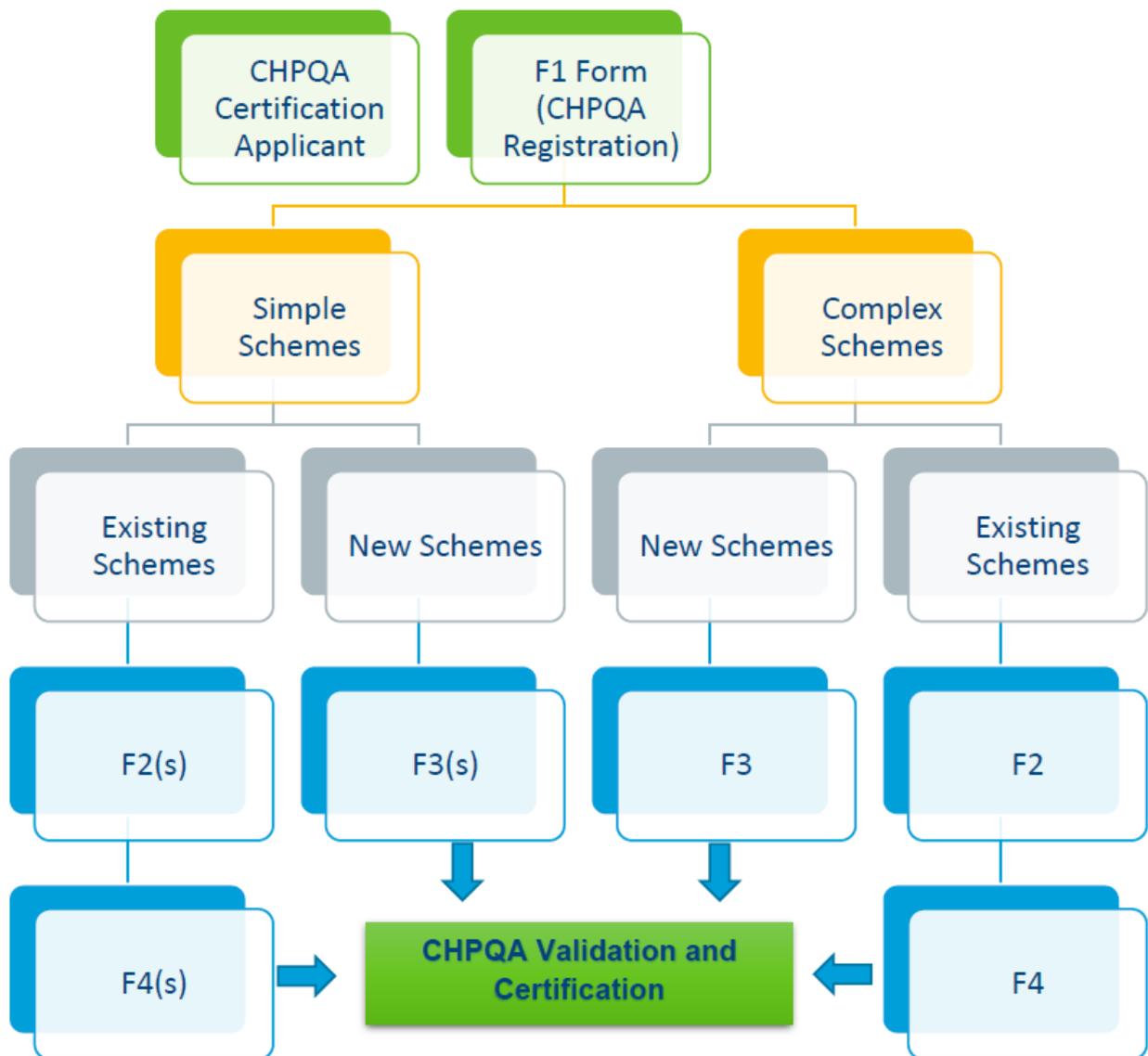
<https://www.gov.uk/guidance/chpqa-guidance-notes>

CHPQA Electronic Submission Portal

<https://www.chpqa.com/>

2. How do I apply for CHPQA Certification

The procedure is summarised in the flow chart below and followed by some explanatory text explaining the purpose of the various forms to be submitted. All forms can be found on the GOV.UK website.



The first step for all schemes wishing to apply for CHPQA certification is to register for the programme by completing [Form F1](#).

Form F1 is a basic administration form used to record the address of a proposed or existing scheme and the contact details of the Responsible Person (RP) and is the first form that you have to complete.

This form must be signed by the RP prior to submitting. If the RP is responsible for more than one CHP scheme, only one F1 form needs to be submitted but a list of the relevant scheme addresses must be attached.

Following the receipt of Form F1, the CHPQA administrator will send you a unique reference number for your scheme(s) and a user name and password.

These are required to access the online electronic submission system. Note that CHPQA applications may also be submitted on paper if preferred, though the online system is much simpler.

CHPQA Electronic Submission web portal: <https://www.chpqa.com/>

Following receipt of your reference number and login details for the electronic submission system, consider the type of scheme you are submitting data for and whether it is a 'simple' or 'complex' scheme.

2.1. 'Simple' scheme submission

A scheme is defined as 'simple' if it meets the following criteria:

Simple Scheme Criteria

- **Generating capacity < 2 MWe**
- **Single reciprocating engine**
- **Single conventional fuel used**
- **No heat only boiler present**

If this is the situation, then the shortened versions of the CHPQA forms can be used which simplifies the submission procedure. These are denoted by the letter "s" following each form name e.g. F2(s), F3(s) and F4(s). There are two categories of simple schemes – existing and new– which are covered below.

2.1.1. SIMPLE SCHEMES - EXISTING

If your scheme is already commissioned and running and you have sufficient operational data for at least one month, then you need to complete Form F2(s) and F4(s).

- Form F2(s) – this is used to provide details of the CHP scheme, such as installed equipment capacity, type, etc, and metering arrangements. *Note: Form F2(s) only needs resubmitting if changes are made to the scheme.*
- Form F4(s) – If your scheme has at least one month of operational data, this form is used to provide details of the scheme’s actual performance. You only need to submit the annual energy figures for:
 - Electricity generated
 - Fuel consumed*
 - Heat utilised

** Where the scheme is <500 kWe with no appropriate gas metering, the fuel input may be estimated based on power efficiency using the CHPQA ‘Unit List’ which can be found on the CHPQA webpage.*

Note: Form F4(s) is resubmitted each year with scheme performance details for the previous calendar year enabling a new CHPQA certificate to be issued. If there are any significant changes to the scheme (e.g. boundaries, metering) a new Form F2(s), must also be resubmitted.

2.1.2. SIMPLE SCHEMES - NEW

Form F3(s) is for self-assessment of schemes which are not yet operational enabling you to provide technical details and anticipated performance, based on design information prior to commissioning. It is not a requirement to complete a F2(s) at this stage.

It also allows you to request an energy efficiency certificate for the scheme that is used in claiming Enhanced Capital Allowances (ECAs). If a Certificate of Energy Efficiency is required you need to tick the box at the bottom of the declaration of the F3(s) form, provide a list of identified potential electricity customers and complete part 5.

Note: Form F3(s) is resubmitted each year enabling a new CHPQA certificate to be issued, where there is no change from the previous calendar year, this may be reflected by entering “as in F3(s) Self-Assessment for 20xx”.

The CHPQA certificate provided will be valid until the 31st December of the year of issue.

For further information see [CHPQA Guidance Note 10.](#)

2.2. 'Complex' Scheme Submission

The sequence of forms is the same as for the 'simple' scheme submission, however more detail is required and thus the forms are longer. The descriptor 'complex' therefore covers all other schemes that are not 'simple':

2.2.1. COMPLEX SCHEMES - EXISTING

If your scheme is commissioned and running and you have sufficient operational data, then Form F2 and F4 must be completed.

- Form F2 – this form is used to provide a description of the scheme. This requires a list of all installed equipment (prime movers, boilers, their capacity, type, age etc) and metering equipment that will be used to monitor the performance of the CHP scheme. You will also need to provide scheme schematics showing all the listed equipment and meters. Note: Form F2 needs only resubmitting if any changes are made to the scheme.
- Form F4 – If your scheme has at least one month of operational data, this form is used to provide details of actual performance. You need to submit the following monthly energy figures:
 - Electricity generated
 - Fuel consumed
 - Heat utilised

You will also need to submit more supporting documentation than for simple schemes. This may include additional calculations necessary for determining the overall efficiency (the "Quality Index") of the scheme.

Note: Form F4 is resubmitted each year with scheme performance details for the previous calendar year enabling a new CHPQA certificate to be issued.

2.2.2. COMPLEX SCHEMES - NEW

If your scheme is still at the design stages, under construction or you don't yet have sufficient operational data, then you have to complete Form F3.

The procedures are otherwise the same as for new simple schemes outlined above.

2.3. Summary

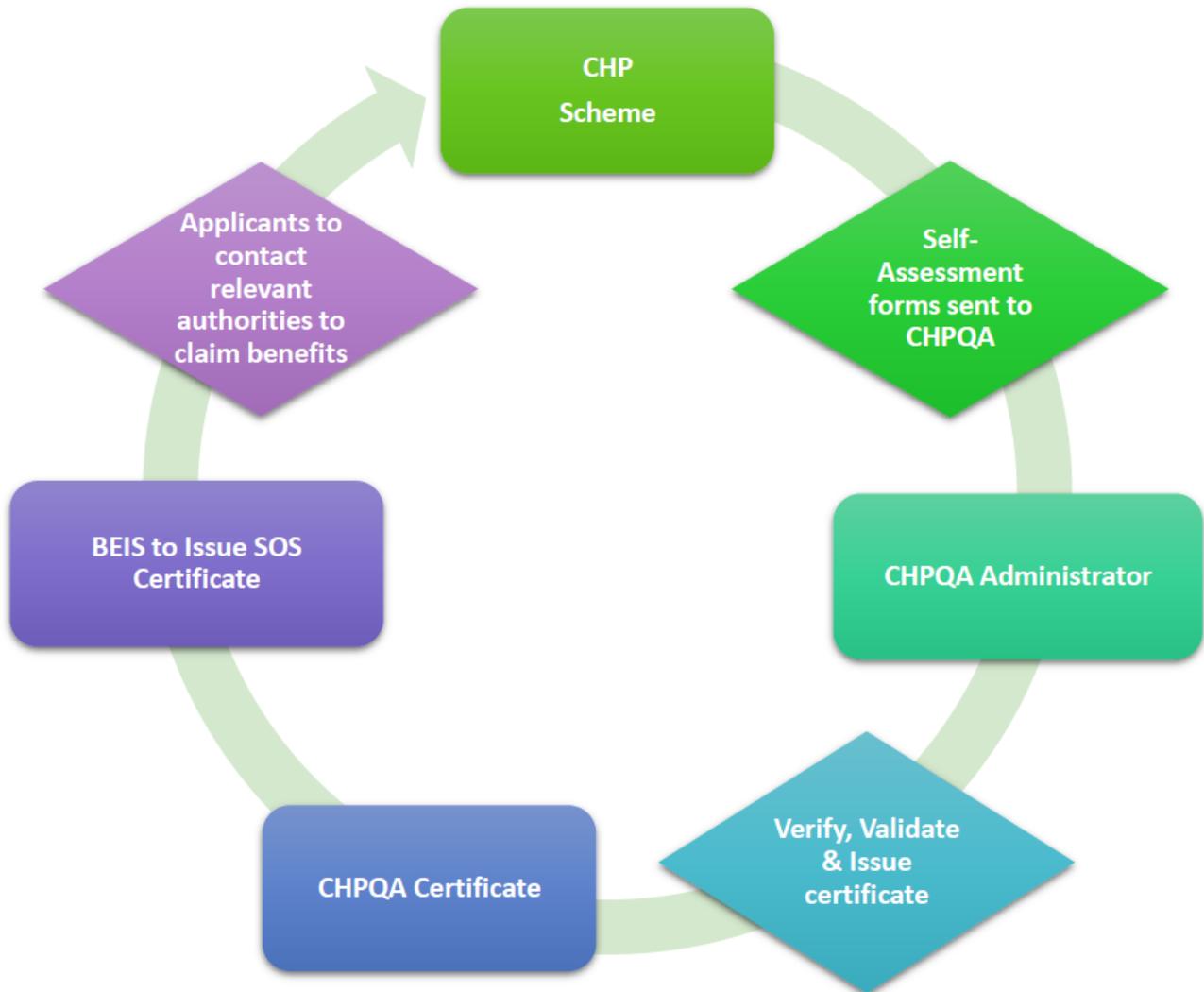
The forms used to comply with CHPQA requirements are summarised as

- Use Form F1 to register scheme and contact details
- Use Form F2 & Form F2(s) to enter scheme description
- Use Form F3 & Form F3(s) to enter predicted performance for new/upgraded schemes
- Use Form F4 & Form F4(s) to enter actual performance data for previous calendar year
- [Guidance notes](#) (GNs) are available to help you complete these forms. They are referenced at the appropriate stages in the forms.

If you need further assistance with completing the forms described in this section, you can either contact our helpline on 0123 575 3004 or send an e-mail to chpqainfo@chpqa.com.

3. The CHPQA Certificate

The basic CHPQA certification cycle and process is illustrated and described below. An example of a CHPQA Certificate is shown in Appendix 1.



Having a valid CHPQA certificate allows you to obtain or maintain your Secretary of State CHP Certificate (SOS certificate). A request should be made by completing the appropriate section at the end of the annual CHPQA self-assessment form.

The SOS certificate is then issued by the Department for Business, Energy & Industrial Strategy (BEIS) and gives legal entitlement to claim CCL exemption on Good Quality CHP fuel and electricity from its date of issue and Enhanced Capital Allowance on eligible capital expenditure on new and upgraded CHP.

3.1. CHPQA Timescales

CHPQA is an annual certification process. Shortly after the end of each calendar year, it is necessary for the Responsible Person (RP) to:

- compile the CHP scheme energy data that was monitored over the previous year
- assess the scheme's performance
- submit the resultant figures on the appropriate forms for validation to CHPQA

RP's wishing to renew their CHPQA Certificate are encouraged to submit the completed forms by the end of March, allowing the CHPQA Administrator time to validate their forms and issue a new certificate in good time for the SOS Certificate to be maintained by BEIS at the end of June deadline.

Whilst the Administrator will accept forms beyond March, there is a risk that this delay will result in this deadline being missed. This means entitlement to CCL exemption will be removed from the beginning of the calendar year up until the time a new SOS Certificate is issued.

Certification Timetable

- CHPQA Certificates cover a calendar year and expire at the end of December
- SOS (CHP Exemption) certificates are open ended, provided that a valid CHPQA certificate is sent to BEIS by no later than end of June every year.

Schemes failing QI criteria

If the threshold QI criterion is not met then the Qualifying Power Output is scaled back i.e. the Qualifying Power Output (QPO) is less than the Total Power Output (TPO).

If the Power threshold criterion is not met then the Qualifying Fuel Input is scaled back i.e. the Qualifying Fuel Input (QFI) is less than the Total Fuel Input (TFI).

3.2. Contact details

In the first instance, all queries on CHPQA should be directed to the CHPQA helpline, or emailed to the Administration team using the details below:

CHPQA Helpline:

- Tel: 0123 575 3004
- E-mail: chpqainfo@chpqa.com
- Website: <https://www.gov.uk/combined-heat-power-quality-assurance-programme>

Other Contacts:

BEIS (for Secretary of State Certificates)

- Contact: Hannah Taylor
- Tel: 0207 215 0742
- Email: hannah.taylor@beis.gov.uk
- E-mail: enquiries@beis.gov.uk
- Website: <https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy>

HM Revenue & Customs

- Tel: 0300 200 3700
- Website: <http://www.hmrc.gov.uk/>

Ofgem – Renewable Heat Incentive (RHI) and Renewable Generation (ROCs)

- Contact: Fuelling and Sustainability Team, Renewable Electricity
- E-mail: fuellingandsustainability@ofgem.gov.uk
- For Non-Domestic RHI
 - Email: rhi.enquiry@ofgem.gov.uk
 - Tel: 0300 003 2289 (Monday to Thursday 9am to 5pm and to 4.30pm on Fridays)
- Website: <http://www.ofgem.gov.uk>

4. Gas CHP - Exemption from the Main Rates of Climate Change Levy

4.1. How to Claim CCL Exemption on Fuel

The administration of the Climate Change Levy is the responsibility of HMRC and to obtain the benefits afforded under the CCL legislation, some further forms need to be completed: PP10 and PP11.

Guidance on completing Forms PP10 and PP11 can be found in the [HMRC notice CCL 1/3 Reliefs and special treatments for taxable supplies](#) downloadable from their website. Alternatively, contact HMRC

<https://www.gov.uk/government/organisations/hm-revenue-customs/contact/climate-change-levy>

A Supplier Certificate (Form PP11) must be completed and sent to your fuel supplier(s). All the exemptions and reductions relating to an individual supplier account, not just the CHP Scheme, must be claimed on one PP11.

A copy of both PP10 and PP11 must also be sent to HMRC.

4.2. How to Claim CCL Exemption on Electricity

4.2.1. Non-Exporting Schemes

Relief from CCL is based on the Qualifying Power Output of the scheme. If this is less than the Total Power Output (i.e. the scheme does not fully qualify as Good Quality) there is a requirement to register with HMRC in order to pay the CCL on the difference. Guidance for non-exporting schemes can be found in HMRC Notice CCL 1/2 Combined heat and power schemes.

4.2.2. Exporting Schemes

Good Quality electricity that is produced in either a fully exempt CHP scheme or a partially exempt CHP scheme on or after 1 April 2013 that is supplied to a consumer other than direct from the scheme itself can no longer benefit from CCL relief. In recognition, CHP LECs are no longer issued in respect of electricity produced in a CHP after 31 March 2013.

5. Gas CHP - How To Claim Exemption From The Carbon Price Support (CPS) Rates of CCL

From the 1 April 2015, the Government introduced an exemption from the Carbon Price Floor (CPF) for fuels that are used in CHPs to generate Good Quality electricity for self-supply or use 'on site'. The CPF is made up of the UK ETS carbon price and a UK only tax known as the Carbon Price Support (CPS).

5.1. How to claim CPS rate CCL exemption on fuel

The operator of CHPQA certified schemes with an individual generating capacity of 2MW and above are liable to account for the CPS rates of CCL on the proportion of supplies of fuel used to generate electricity. Fuel used to supply 'useful heat' from GQCHP Schemes (the Qualifying Heat Output) is not subject to CPS rates.

On receipt of a new CHPQA certificate and following its submission to BEIS for Secretary of State (CHP) exemption certificate, the correctness of the deemed supplies over that period and the amount of CPS rates of CCL paid must be accounted for on your next CCL return form (CCL 100).

See CHPQA Guidance Note 41 for an overview on the use of CHPQA to obtain exemption on CPS rates of CCL.

See Excise Notice CCL1/6: a guide to carbon price floor for more details.

6. RENEWABLE CHP - Renewables Obligation

The level of support available to GQCHP under the Renewable Obligation Order (2009) is:

- 2.0 ROCs/MWh for schemes fuelled wholly by biomass
- ROCs/MWh for schemes fuelled by waste.

6.1. How to claim renewable obligation certificates (ROC)

All CHP schemes wishing to claim CHP ROCs have to obtain an additional certificate known as “CHP ROC Eligible Certificate” based on a separate assessment to that used to access other benefits available to GQCHP but using the same performance data. Like a ‘Regular’ CHPQA certificate, the ROCs certificate will be valid until the end of the year of issue and require renewal by annual submission to CHPQA. However, if you use the online system, then requesting this certificate only requires answering a Yes/No question.

See CHPQA GN 44 for details of how to go about this.

6.2. Who actually issues CHP ROCs?

Ofgem issues CHP ROCs through the Ofgem Renewables and CHP Register and to participate, you must register for an account.

See <http://www.ofgem.gov.uk> for further details.

7. RENEWABLE CHP – Contracts for Difference (CfD)

The Contracts for Difference (CfD) regulations came into force in Great Britain on 1 August 2014; CfDs will replace the RO for new projects targeting commissioning from 1 April 2017 (RO grace periods allow certain slippage to commissioning beyond 31 March 2017). A final decision has still to be taken by Northern Ireland as to its inclusion in the CfD mechanism.

7.1. How to claim for contracts for difference

To be eligible for CHP specific CfDs, the operator will need to provide a CHPQA GN44 certificate, confirming that the scheme either partially or fully qualifies as Good Quality under the CHPQA criteria.

Support under the CfD will be paid only on the proportion of metered electrical output assessed by CHPQA to be Qualifying Power Output. This is applied in the CfD contract by applying a CHP Qualifying Multiplier (in normal circumstances the Qualifying Power Output / Total Power Output ratio) to the total electrical output of the plant.

For CfD purposes, the validity of the CHPQA GN44 certificate will continue on, and not cease on its expiry date, until such time as a new GN44 certificate is obtained - but the continued validity of a GN44 certificate after its expiry date will apply only in respect of electricity generated during periods when the reference price is above the strike price and the term of the CfD has not expired.

See CHPQA Guidance Notes GN44 for more details. Whilst policy responsibility for the CfD policy lies with BEIS, a CfD is a private law contract between the generator and the Low Carbon Contracts Company, a Government-owned company.

See <https://www.lowcarboncontracts.uk> for further details.

For details on how CfDs are administered, refer to the Electricity Market Reform: Contracts for Difference.

8. RENEWABLE CHP - Renewable Heat Incentive (RHI)

8.1. How to claim Renewable Heat Incentive (RHI) for renewable CHP

For CHP Schemes wishing to claim the RHI solid biomass CHP tariff, the applicants will have to provide evidence of current CHPQA certification as part of the RHI accreditation process with Ofgem. Once accredited, participants in receipt of the solid biomass CHP tariff have to continue to be certified with CHPQA each year in order to retain the tariff. Where Ofgem establish an installation is not certified under CHPQA for any year, the installation will be assigned the relevant solid biomass (non-CHP) tariff for the period of non-certification.

See Ofgem's Non-domestic RHI main guidance for eligibility requirements of renewable CHP.

See Ofgem's Tariffs and payments: Non-domestic RHI for the latest renewable CHP tariffs.

Appendix 1 Sample CHPQA Certificate





Department for
Business, Energy
& Industrial Strategy

Quality Certification for an existing CHP Scheme

CHPQA Certificate No: F12345678

CHP Scheme
- name and address

Scheme: **CHPQA ADMINISTRATOR**
THE GEMINI BUILDING
FERMI AVENUE
DIDCOT
OX11 0QR

Responsible Person
- for the operation of Scheme

CHPQA Scheme Reference No: 1234 A

CHPQA Scheme Reference
- provided on

Power Efficiency
(η_{power}) - total annual power output (CHP_{TPO}) divided by the total annual fuel input (CHP_{TFI})

Heat Efficiency
- useful heat output supplied annually (CHP_{QHO}) divided by the total annual fuel input (CHP_{TFI})

CHP Total Fuel Input (CHP_{TFI})
- annual fuel (MWh)

This is to Certify that the Self-Assessment of the above CHP Scheme undertaken by **RESPONSIBLE PERSON** of Scheme performance during the calendar year: 2018 has been **Validated** under the Combined Heat and Power Quality Assurance programme and that:

1. The Total Power Capacity of this Scheme is: 1.020 MWe
and the **Qualifying Power Capacity** is: 1.020 MWe
2. The threshold Power Efficiency criterion for this Scheme is: 20 %
and the **Power Efficiency** of this Scheme is: 29.12 %
3. The **Qualifying Heat Output** from this Scheme is: 5,155 MWh
and the **Heat Efficiency** of this Scheme is: 39.73 %
4. The threshold Quality Index criterion for under **Annual Operation** is: 100
and the **Quality Index** of this Scheme is: 118.20
5. The Total Fuel Input to this Scheme is: 12,975 MWh
and the **Qualifying Fuel Input** is: 12,975 MWh
6. The Total Power Output from this Scheme is: 3,778 MWh
and the **Qualifying Power Output** is: 3,778 MWh
7. The fuel supply reference(s) (e.g. TRANSCO/MPR gas meter reference nos. and/or other unique ID descriptors) for this Scheme are: [12345678]

CHP Total Power Capacity (CHP_{TPC})
- maximum power generation (MW_e)

CHP Qualifying Power Capacity (CHP_{QPC})
- power generation capacity (MW_e) qualifying as Good Quality CHP

Quality Index (QI) - indicator of the energy efficiency and environmental performance of a Scheme

CHP Qualifying Heat Output (CHP_{QHO})
- useful heat supplied annually from a

CHP Qualifying Fuel Input (CHP_{QFI})
- annual fuel input qualifying as GQ CHP (MWh)

CHP Total Power Output

CHP Qualifying Power Output (CHP_{QPO})
- annual power generation (MW_e) that qualifies as Good Quality CHP

This certificate is a statement of Scheme performance over the period 01/01/2018 to 31/12/2018 and is valid until 31/12/2019.

Approved by the CHPQA Administrator on behalf of BEIS. Date: 5th February 2019

The CHPQA programme is carried out on behalf of the Department for Business, Energy & Industrial Strategy, the Scottish and Welsh Governments, and the Northern Ireland Department for the Economy.

For the purposes of the Climate Change Levy (General) (Amendment) Regulations 2003 only, the QPO limit shall be equal to the actual output of the station multiplied by the following ratio: the Qualifying Power Output referred to at item 6 above over the Total Power Output referred to at item 6 above.