



# CHPQA Submission - What's Involved

Pete Edwards
CHPQA

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### **Talk Coverage**

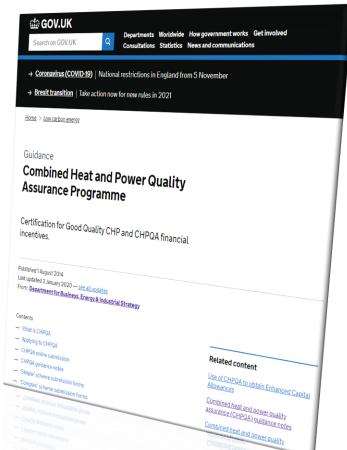
- Information & Guidance Notes
- Online system and recent updates
- Application process
- Form F1 registration & notification of change
- Simple or Complex? Simplified (s) or Standard forms?
- New or Existing?
- > Form F3s / F3 New Scheme submission
- ➤ Form F2s / F2 Existing Scheme description
- ➤ Form F4s / F4 Existing Scheme annual submission





### **CHPQA** Information

- Primary source of information
  - CHPQA Standards
  - Guidance Notes
  - Policy updates
  - Events



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





### **CHPQA Guidance Notes**

#### **CHPQA** guidance notes

The guidance notes help and guide applicants in completing the required forms and in carrying out self-assessment of their combined heat and power (CHP) schemes. They may be updated from time to time and the latest version of each notes and form will be available on the website.

The CHPQA Guidance Notes are structured as follows:

- · GN0 to GN9: Introduction
- GN10 to GN16: Scheme Details and Thresholds
- GN17 to GN29: CHPQA Analysis
- GN30 to GN39: Treatment of Special Cases
- GN40 to GN49: Uses for CHPQA
- GN50: Quantifying And Justifying Useful Heat Outputs
- GN60: Temporary COVID-19 Easement

#### Simple guides to CHPQA

This series of short, simplified guides is aimed at those new to the programme, or who need a quick refresher on key topics.

Simple guide to the CHP Quality Assurance (CHPQA) Programme (PDF, 696KB, 16 pages)

Simple guide to CHPQA eligibility (PDF, 299KB, 9 pages)

Simple guide to CHPQA monitoring (PDF, 658KB, 11 pages)

Simple guide to CHPQA uncertainty (PDF, 816KB, 11 pages)

Simple guide to good quality CHP and the quality index (QI) value (PDF, 343KB, 10 pages)

- Provide detailed information on the CHPQA Programme.
- Always refer to the latest Guidance Notes on website.
- "Simple guide to the CHPQA Programme" - provides an overview of application and certification procedures.
- Further four new "Simple guides to"

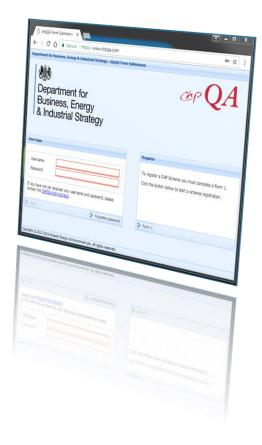
https://www.gov.uk/guidance/chpqaquidance-notes

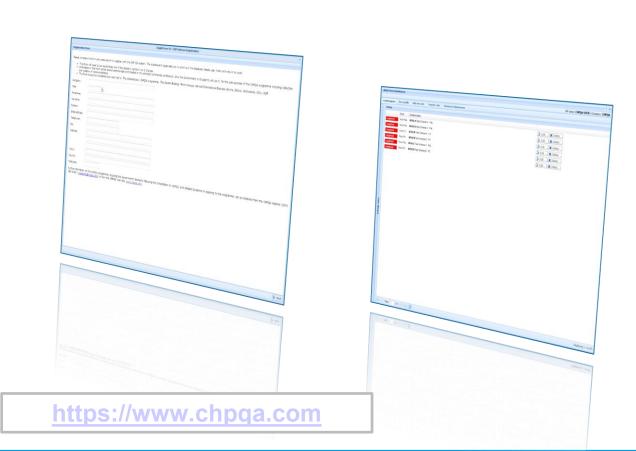




### **CHPQA Online Submission**

> The electronic process is the primary submission route



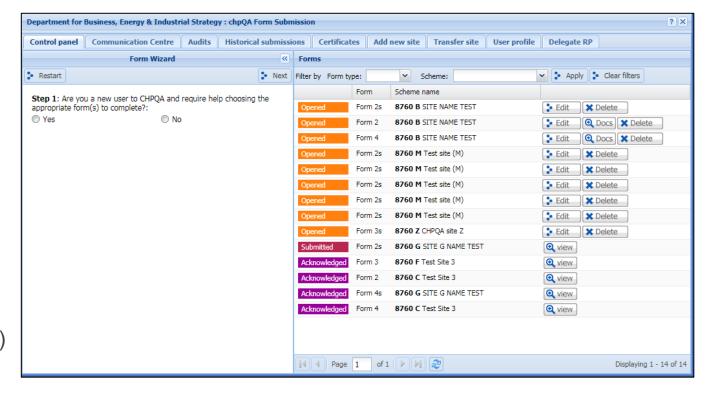






### **CHPQA Online Submission**

- User Control Panel
  - Control Panel
  - Communication
     Centre
  - Historical Submissions
  - Certificates
  - Site information (add new, transfer)
  - User Information (and delegated RP)



https://www.chpqa.com





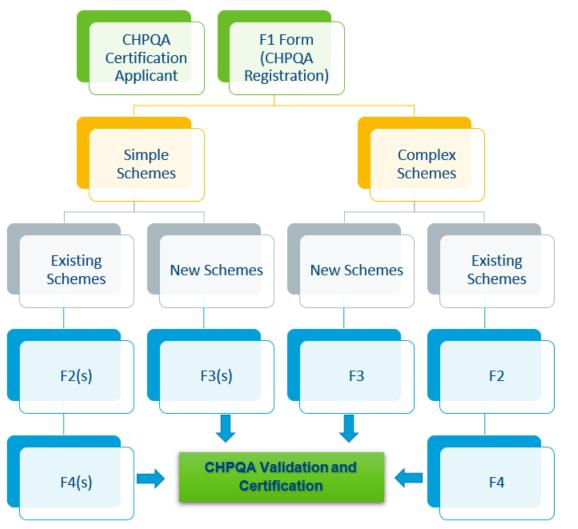
### **Useful Features of Online System**

- Provides links to Guidance Notes
- Calculations are made automatically by the system
- F4s Batch submission available for organisations with multiple sites
  - Upload of energy data in Microsoft Excel format
  - Template available on request
- > F4 Energy data upload via Microsoft Excel template
  - Download template during F4 submission





### **Application Process**



All applicants first submit F1

'Simple' Schemes follow a simplified (s) form route.

'Complex' Schemes follow the standard form route.

New Schemes require F3/F3(s) form

Existing Schemes require F2/F2(s) and F4/F4(s) forms

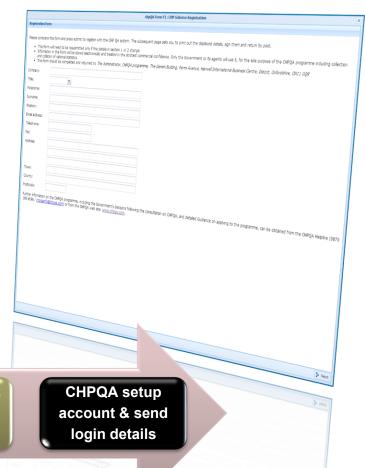




### Form F1 - Registration

Provides CHPQA with contact details for both RP and the site:

- Address
- Contact number
- Email



Complete F1 & send to CHPQA

CHPQA receive completed F1





### Simple or Complex?

A Scheme is defined as 'Simple' if it meets the following criteria:

#### Simple Scheme Criteria

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

If <u>yes to all</u> of the above – your Scheme is "<u>Simple</u>", follow simplified form route: F3(s) or F2(s)+F4(s)

If <u>no to any</u> of the above – your Scheme is "<u>Complex"</u>, follow standard form route: F3 or F2+F4





# Differences between Simplified (s) & Standard Forms

- Simplified forms require
  - Less detail

Notes

Standardised meter numbering

MWh

Standard Energy Flow Diagrams are available in Guidance

CHP gas meter **CHP Boundary** M2(FcQ) Exhaust MWh Natural gas gas bar To other users HTHX Main site gas meter feeding Generator Hot CHP & other water users to/from site M1(FcQ) LTHX Electricity meter Engine cooling water Packaged Gas Engine CHP, RE1 HW pump M3(EQ)

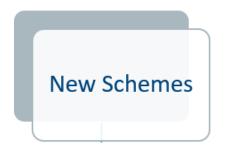




### **New or Existing?**

Is the CHP Scheme already commissioned, running and you have sufficient operational data for at least one month?

- If yes you are considered an <u>Existing Scheme</u>
- If no you are considered a <u>New Scheme</u>.

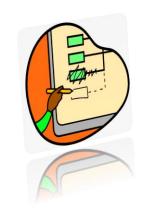








#### **Certification Process for New Schemes**



Form F1

Remain the same from one year to another unless changes occur to the RP details or site details (site name, etc.)



Form F3

Completed at design stage (can be rolled forward annually until operation, if no changes)

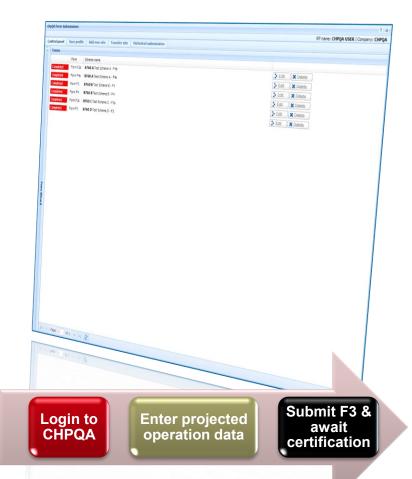




### Purpose of Form F3

Provides CHPQA with details of scheme **projected** annual performance:

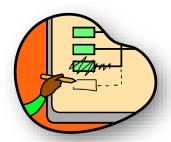
- Scheme description
- Projected commissioning dates
- Prime Mover design & spec
- Scheme drawings & boundaries
- Projected operation in initial,
   long term annual & max heat modes







### **Certification Process for Existing Schemes**







Remain the same from one year to another unless changes occur to the RP details or site details (site name, etc.)

Remain the same from one year to another unless changes occur to the scheme (equipment, monitoring, etc.)





## Annual reporting

Changes from one year to another





### Purpose of Form F2

Provides CHPQA with technical details for an existing scheme:

- Scheme description
- Prime Mover design & spec
- Scheme drawings & boundaries
- Metering details

After first submission, new F2 only necessary when there is a change to the CHP scheme







### Purpose of Form F4

Provides CHPQA with details of a Scheme's **actual** annual performance from the previous year:

- Energy Data
- Uncertainty Calculations
- Efficiency & QI Calculations
- QFI, QPO and QPC calculations







### **CHPQA Contact Details**

CHPQA Administrator

The Gemini Building

Fermi Avenue

Harwell

Didcot

**OX11 0QR** 

E-mail: chpqainfo@chpqa.com

Tel: 01235 75 3004

Web:

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