



Overview and Interactions of Fiscal Benefits for GQCHP

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Fiscal Measures and GQCHP

Existing measures:

- CCL Exemption (on fuel input and electricity output where directly supplied)
- Business Rates Exemption (embedded schemes)
- Hydrocarbon Oil Duty Relief
- CRC—no emissions attributed to heat from CHP (**Zero Carbon Heat**)
- Carbon Allocation for Heat under EU-ETS Phase III
- Enhanced Capital Allowance
- 1ROC/MWh of electricity from EfW CHP, 2 ROCs/MWh for dedicated biomass CHP (April 2009)
- CPS:-
 - Schemes > 2 MWe:- Exemption to fuel for heat
 - Schemes ≤ 2 MWe:- Full exemption from CPS

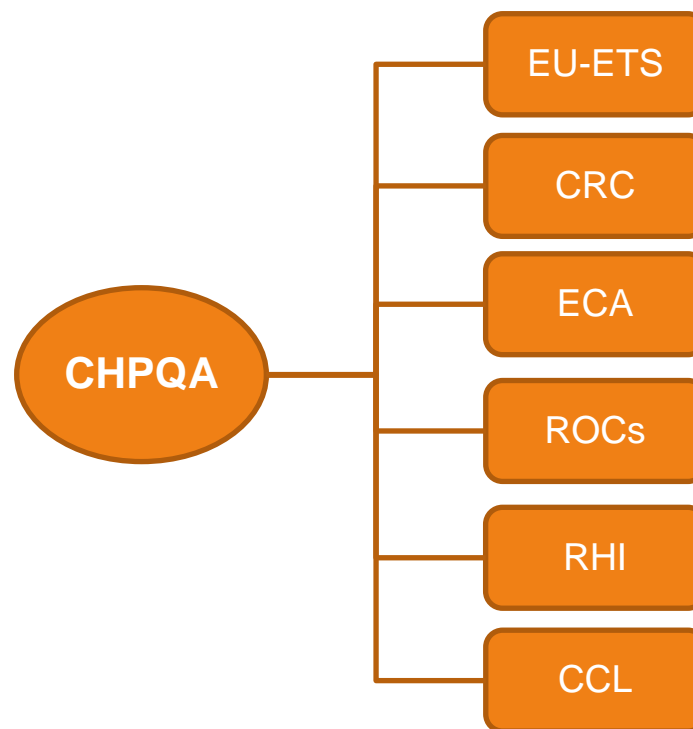
New measures:

- RHI-Proposal to replace RO CHP uplift with specific tariffs for biomass & bioliquid fuelled GQCHP
- CfD and exemption from the Biomass Cap



Talk Coverage

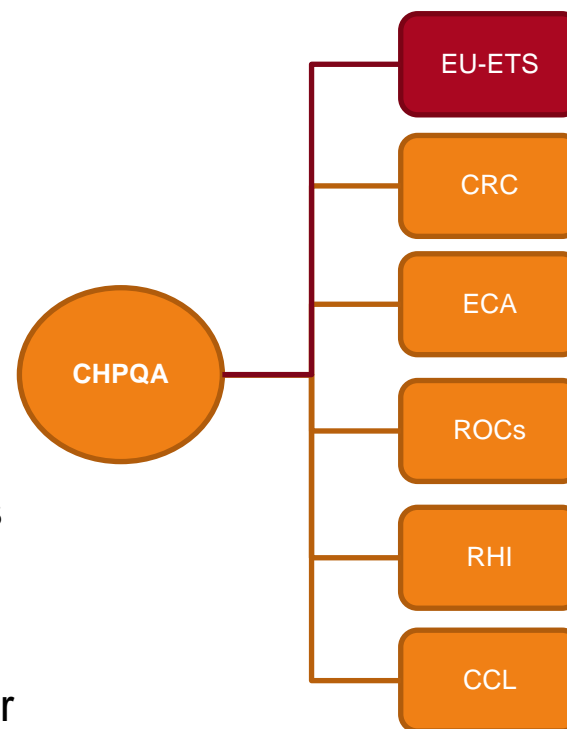
- EU-ETS Phase III allocations
- CRC: New simplified arrangements
- ECA: Clarification only
- ROCs: 2013-2017 regime
- RHI: GQCHP benefits under Phase II
- CCL: LECs withdrawal and CPS





EU-ETS Phase III

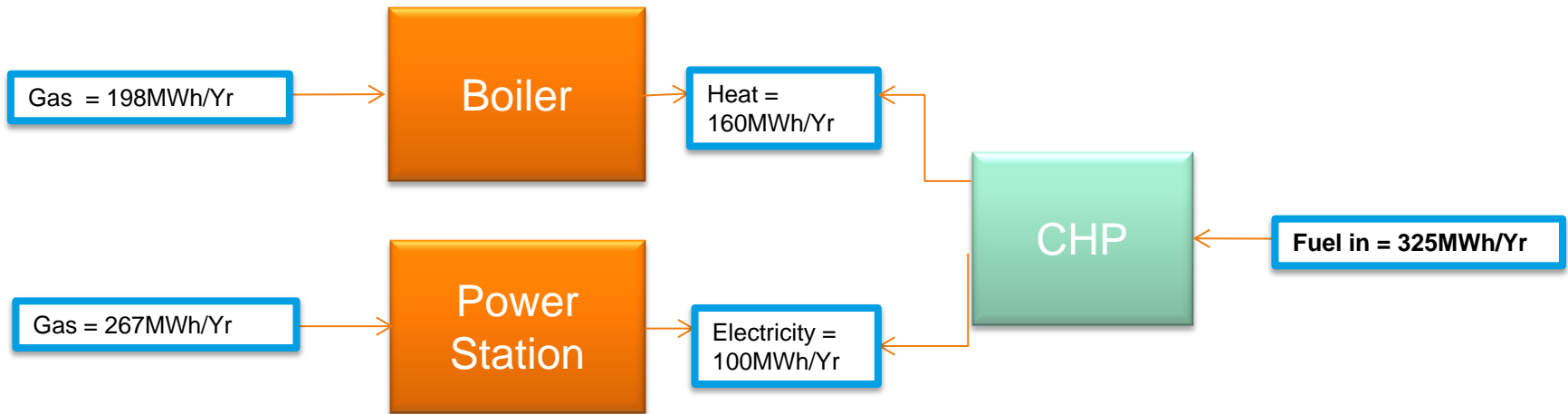
- Started January 2013,
- Broadening of the “Combustion” definition to include:
 - All types of boilers, burners, heaters, furnaces, incinerators, dryers.
- The 20MW thermal threshold continues to apply
- Catches large stand alone CHP Schemes
- Also catches smaller CHP schemes embedded within an energy intensive users site
- No allocation to Electricity Generators (operators have to purchase allowances)
- Allocation to heat decreases over time
- Two methods for allocations are used; Product or Heat benchmark allocation



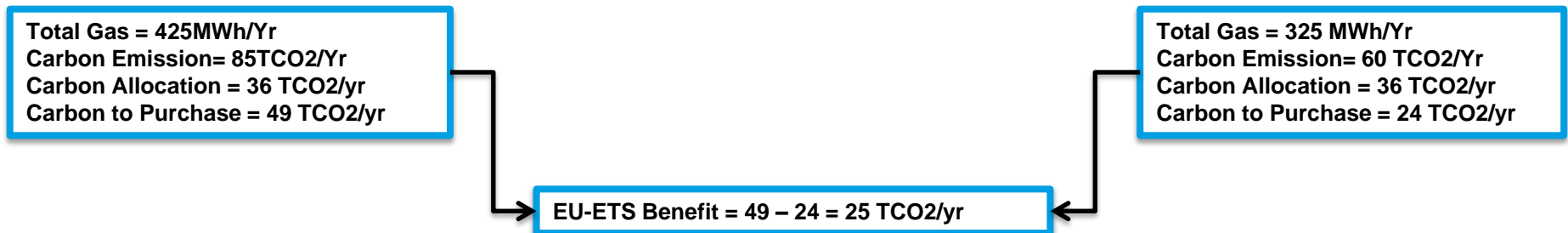
- Likely to make investment in CHP more attractive, when compared with the alternatives



EU-ETS Phase III



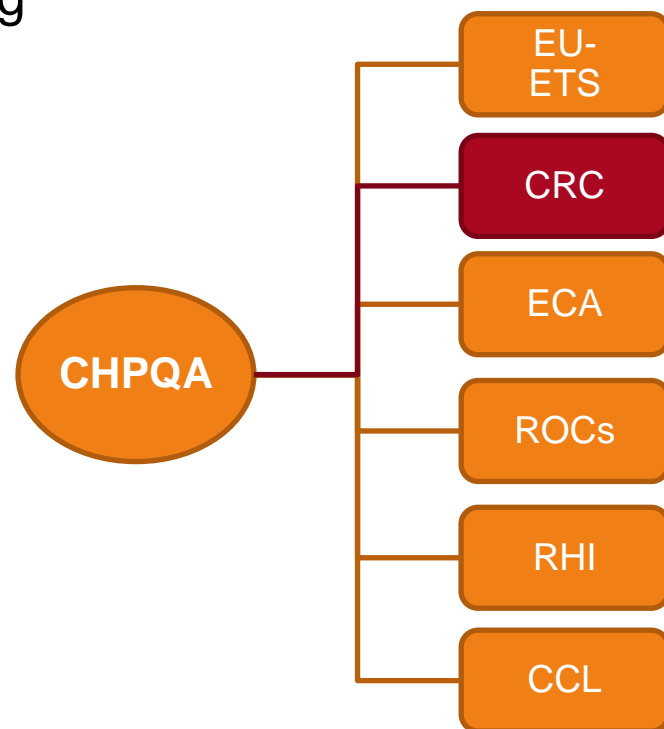
Savings from CHP:





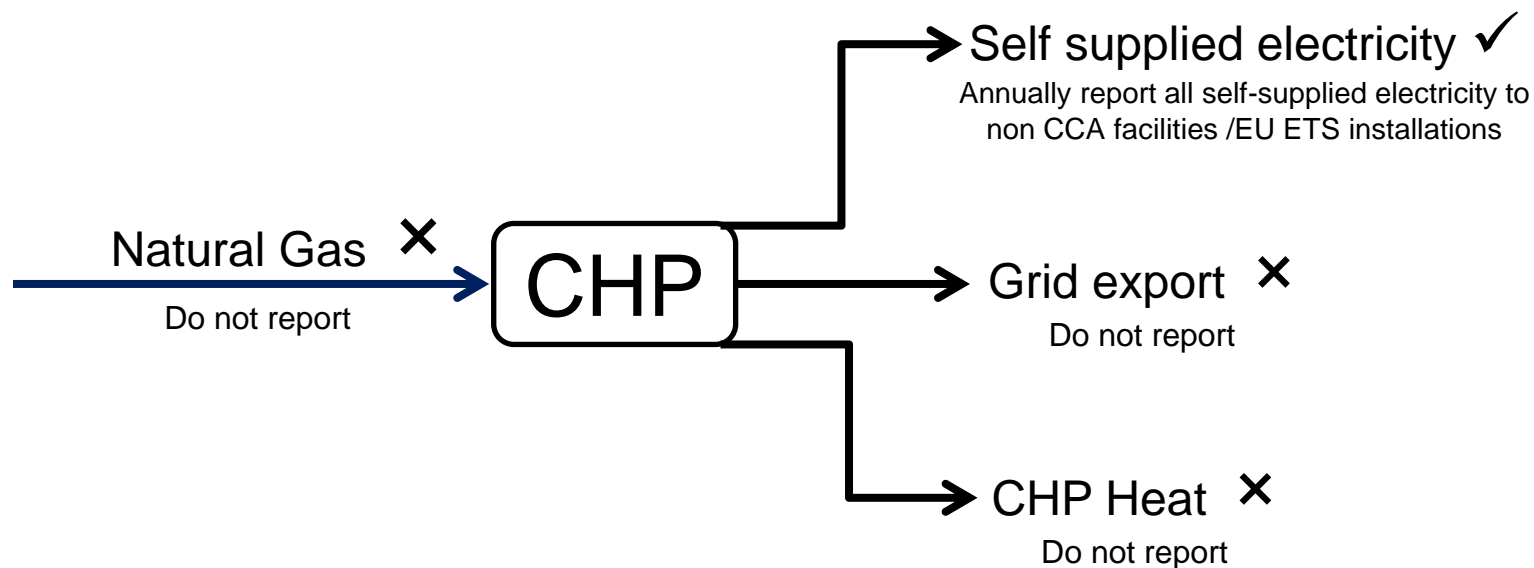
CRC Energy Efficiency Scheme (CRC)

- Captures emissions not covered by existing measures such as EU ETS and CCAs
- A mandatory CO₂ emissions trading scheme affecting large non-energy intensive businesses and public sector **organisations**
- Began in April 2010
- Applicable to organisations with total electricity consumption > 6,000 MWh/y (based on half hourly meters).
- Simplified arrangements from 2012 onwards





CRC- Current simplified arrangements



- CHP at EU-ETS or CCA installations.... Is out of CRC
- CHP at non-ETS/CCA ... Only electricity used on site to be reported
- Makes it very simple but still fair
- For Renewable generation. If ROCs are claimed then electricity must be reported as an import at the grid electricity factor

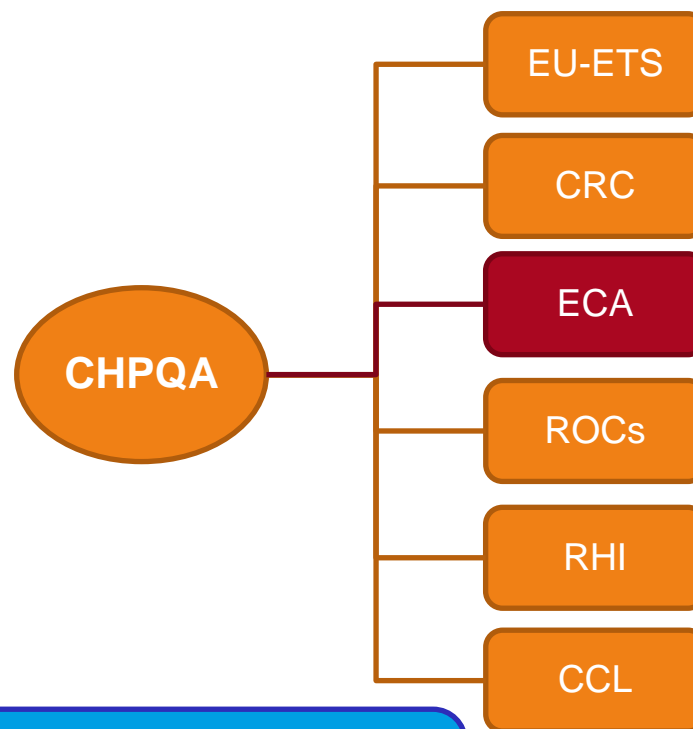
➤ Incentivising higher electrical efficiency and heat recovery



CHP ECA Eligibility

➤ CHP scheme operators need to demonstrate that they comply with the following eligibility criteria:

- *that applicant's main business is not the production of electricity for sale to unknown end users*
- *that applicant is not a subsidiary of a company group where the core business of that group is electricity production*



- This is likely to impact on renewable schemes sized for exporting electricity that intend to sell the majority of their electricity to the grid
- Further information will be required on ownership and revenue streams



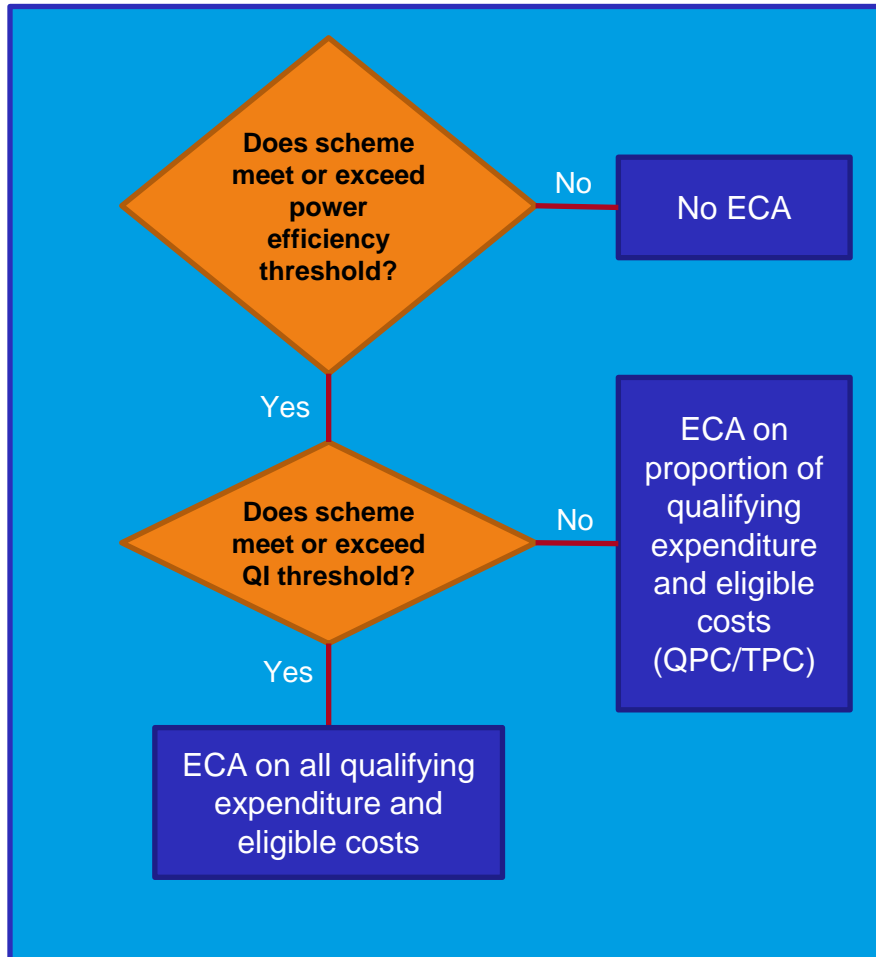
ECA Process

- Scheme specific: no type approval/product certification route
- Applicants must identify heat load
- This need to meet the “Useful Heat” definition
- Need to obtain a Certificate of Energy Efficiency (Combined Heat and Power) – also known as an Energy Efficiency (EE) Certificate
- EE Certificate is issued by DECC

A CHPQA Certificate is required to obtain an EE Certificate



Calculation of ECA value to a CHP Scheme



Power Efficiency Threshold

- 20% for conventional fuels
- 10% for wholly biomass or solid/liquid waste
- Between 20% and 10% for partly biomass or solid/liquid waste (dependent on fuel mix)

Quality Index (QI) Threshold

- ≥ 105 under MaxHeat conditions



Non compliant schemes

Certificate will be revoked:

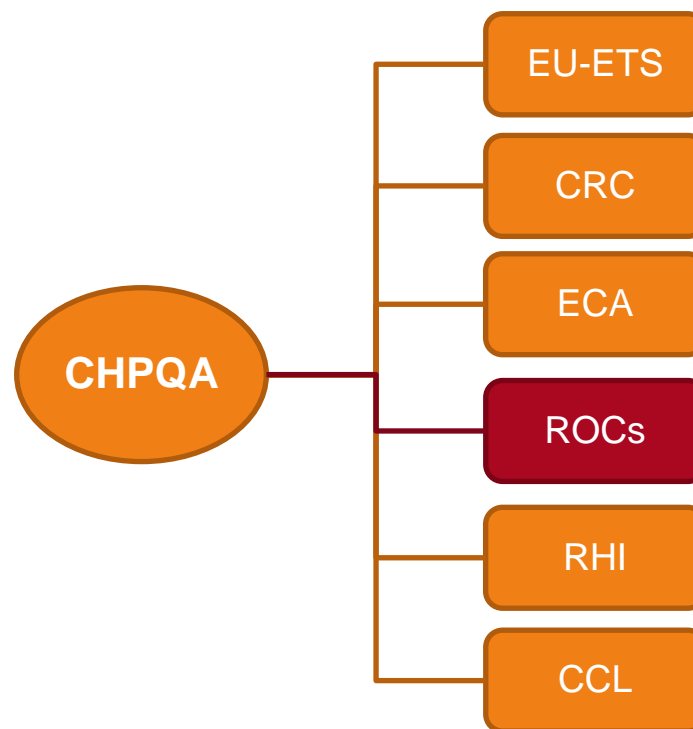
- If the original design has changed after certification and a new EE certificate has not been obtained from CHPQA, or
- If no heat customers present at time of commissioning (i.e. not operating as CHP)

If certificate is revoked, applicant will have to contact HMRC to return any claimed benefits



CHP & ROCs

- Current arrangement:
- Increased the level of support (ROCs/MWh) available to GQCHP fuelled by biomass from 1st April 2009 to 2.0 ROCs/MWh (0.5 ROC uplift)
- 1.0 ROC/MWh for waste-fuelled Good Quality CHP
- 1.0 ROC for Co-fired CHP



Only for schemes certified as GQ CHP



Latest RO Review for 2013-2017

- The 0.5 ROC CHP uplift will continue to be available for plant accredited up to March 2015
- Between April 2013 and March 2015, operators will have a one-off choice between claiming the RO CHP uplift or the RHI
- The CHP uplift will be grandfathered **but operators will still need to retain annual certification with CHPQA**
- **Support for EfW CHP will remain at 1 ROC until March 2017 - EfW CHP under RO cannot claim RHI**
- The upper limit for RO support will reduce from 2 ROCs to 1.9 ROCs for 2015/16 new accreditations and 1.8 ROCs for 2016/17 new accreditations



RO Dedicated Biomass Cap

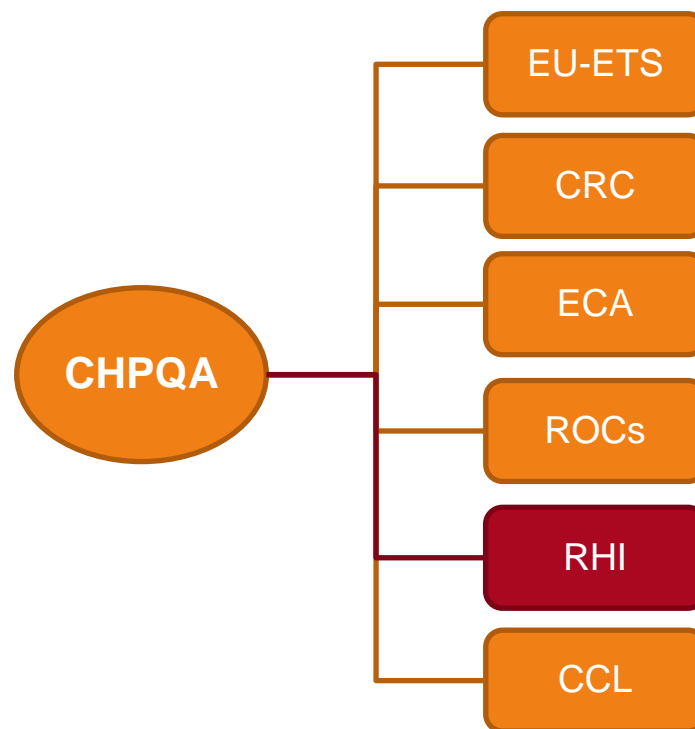
- In December 2012, DECC announced their intention to introduce a cap on new dedicated biomass generating capacity benefitting from the RO grandfathering policy
- The cap is set at 400MW_e of new capacity
- Projects will need to apply to DECC to secure a place within the cap
 - Applicants will need to provide supporting declarations and evidence
- Notification process opened on 21st August 2013 for priority applications and 11th September 2013 for other projects
- Projects accredited before 21st August 2013 are exempt from the cap
- 73.5MW_e of capacity has been allocated so far

New dedicated biomass with CHP will not be subject to this cap



Renewable Heat Incentive

- Non-domestic scheme launched in November 2011
- Provides support for variety of renewable heat technologies, including
 - Biomass (including biomass in MSW)
 - Biogas
 - Geothermal
- Support extends to eligible heat-only and CHP installations
- Currently at 1.0 P/kWh for schemes > 1 MW in capacity
- CHP must have been commissioned or converted to CHP operation on/after 15th July 2009



- Current band for large biomass schemes (>1MW_{th}) is £10/MWh
- CHP cannot claim both RHI support and CHP uplift under the RO



RHI Expansion

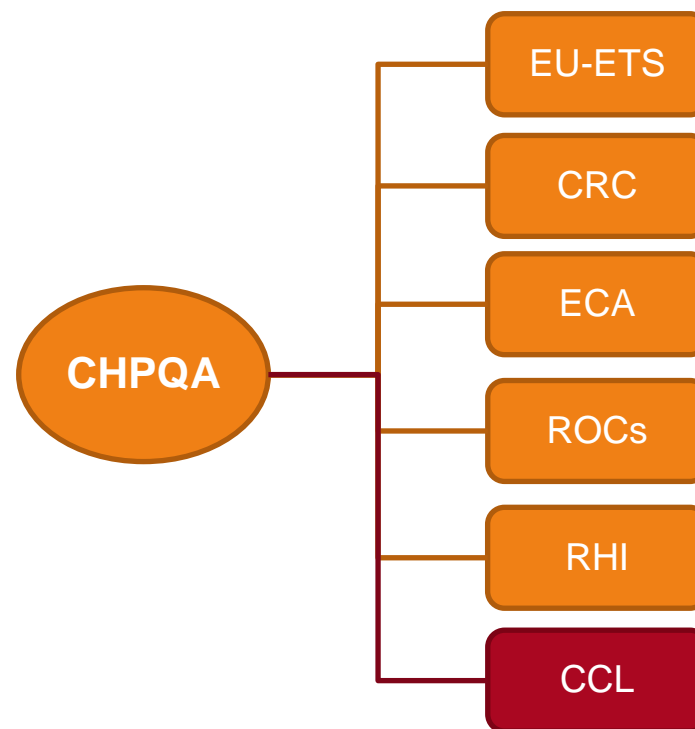
In 2012/2013 DECC Consulted on the expansion of the Non-Domestic Scheme

- Proposal to provide specific tariffs for biomass and bio-liquid fuelled GQCHP
 - *Proposed tariff for **large biomass CHP is 4.1p/kWh** (compared to 1p/kWh for large-scale biomass boilers)*
 - *Bioliquid will only be supported under RHI when used in GQCHP*
- Further details later.....



CHP LECs – Post 2013

- CCL exemption on exported electricity from GQCHP was granted by the issue of LECs
- The LECs benefit was subject to EU State Aid approval, which expired at the end of March 2013
- Withdrawal of LECs does not affect schemes exporting electricity to known parties (direct supply)
- Schemes that are likely to have been affected:
 - 20 schemes with capacity greater than 50MW_e
 - About 59 schemes with capacity between 5-50 MW_e
 - Several smaller schemes ~ 75
 - In addition over 200 foreign schemes are certified by CHPQA, and were receiving LECs





CCL and CPS

- Government has introduced **a floor price for carbon** to stabilise price signals to investors in low carbon technologies
- CPS rates came into effect from 1 April 2013
- **GQCHP certified with CHPQA are exempt from CPS rates on fuel that is attributable to the scheme's "Qualified Heat Output (QHO)"**

Full presentation later



To summarise...

To obtain any of the fiscal benefits available for GQCHP the Scheme must be certified by CHPQA and must have a valid Certificate

Submission any time from 1 Jan 2014

Thank You