

CRC Energy Efficiency Scheme

1.0 EXECUTIVE SUMMARY

- 1.1 This paper outlines the key elements of the CRC Energy Efficiency Scheme that has been introduced on a mandatory basis across the UK by the Government and is aimed at improving energy efficiency and cutting carbon dioxide (CO₂) emissions in large public and private sector organisations. It has been introduced as an essential component in achieving the UK Government's overall targets for reducing greenhouse gas emissions by at least 80% by 2050 compared to the 1990 baseline.
- 1.2 The CRC scheme is designed to incentivise the reduction of CO₂ gas emissions where not already covered by climate change agreements and the EU Emissions Trading Scheme.
- 1.3 The CRC originally came into force in April 2010 and based on the qualifying criteria employed in Phase 1, Argyll and Bute Council was one of only three local authorities who were not required to participate at that stage. However, Phase 2 which will run from 1 April 2014 to 31 March 2019, has been introduced with qualifying criteria based on electricity consumption between 1 April 2012 to 31 March 2013. The qualifying threshold for participation was 6000MWh of electricity through all settled half hourly meters, whereas the Council's consumption during that period was 7337MWh.
- 1.4 Participation in the scheme requires the Council to monitor energy use, report each year and purchase allowances based on the Council's CO₂ emissions. For 2014/15 it should be noted that allowances to the value of £252,704 were purchased at the forecast sale rate. This purchase was taken forward to ensure compliance with the scheme following consultation with the Head of Strategic Finance and was absorbed for this year within existing budgets.
- 1.5 The paper also outlines potential mitigating actions.

1.6 Recommendations

Members are asked to note:

- a) The Council's qualification for participation in Phase 2 of the CRC and the nominations of Senior Officer, Primary Contact, Secondary Contact and Invoice Contact for the Council's participation in CRC;

- b) The CRC scheme detail and implications, especially financial, of participation in Phase 2 of the CRC.
- c) That after consultation with the Head of Strategic Finance, an order was placed for the purchase of CRC allowances at the 'forecast sale', and was paid in June 2014.
- d) The proposed mitigating actions and next steps.

CRC Energy Efficiency Scheme

2.0 INTRODUCTION

- 2.1 This paper provides Members with an indication of the current position in respect of Council participation in Phase 2 of the CRC Efficiency Scheme (abbreviated to CRC – previously known as Carbon Reduction Commitment).
- 2.2 Guidance associated with the scheme is extensive and there are many complexities but this simplified paper outlines the key points.

3.0 RECOMMENDATIONS

- 3.1 Members are asked to note:
- e) The Council's qualification for participation in Phase 2 of the CRC and the nominations of Senior Officer, Primary Contact, Secondary Contact and Invoice Contact for the Council's participation in CRC;
 - f) The CRC scheme detail and implications, especially financial, of participation in Phase 2 of the CRC.
 - g) That after consultation with the Head of Strategic Finance, an order was placed for the purchase of CRC allowances at the 'forecast sale', and was paid in June 2014.
 - h) The proposed mitigating actions and next steps.

4.0 DETAIL

- 4.1 **Background:** The CRC Energy Efficiency Scheme is a mandatory UK scheme aimed at improving energy efficiency and cutting carbon dioxide (CO₂) emissions in large public and private sector organisations. This is deemed vital in achieving the UK Government's overall targets of reducing greenhouse gas emissions by 2050 by at least 80% compared to the 1990 baseline.
- 4.2 The CRC is designed to incentivise the reduction of CO₂ gas emissions where not already covered by climate change agreements (CCA's) and the EU Emissions Trading Scheme (EU ETS).

- 4.3 The CRC came into force in April 2010 under the CRC Energy Efficiency Scheme Order 2010 and was replaced with the CRC Energy Efficiency Scheme Order 2013 (CRC Order 2013). Phase 1 of the CRC ran from 1st April 2010 to 31st March 2014. Based on qualification criteria, Argyll and Bute Council were not required to participate in Phase 1 (one of only three Scottish Local Authorities who did not qualify).
- 4.4 Phase 2 CRC participation is based on how much qualifying electricity was consumed from 1st April 2012 to 31st March 2013. Phase 2 will run from 1st April 2014 to 31st March 2019.
- 4.5 The Council meets the qualification criteria for Phase 2 (using 7,373MWh of electricity in 2012/2013 against the qualifying threshold of 6,000MWh of electricity through all settled half hourly meters) and, as a scheme participant, will be required to monitor energy use, report each year and surrender allowances equal to Council CO₂ emissions.
- 4.6 CRC policy is the responsibility of the Coalition Government (led by the Department of Energy and Climate Change (DECC)) and the Scottish Government and is administered by the Environment Agency and Scottish Environment Protection Agency (SEPA). The Environment Agency manages the CRC Registry, which is used to administer the scheme for the whole of the UK and for on line data entry by participants. SEPA audits and enforces the scheme in Scotland.
- 4.7 Appendix 1 contains information on the 'Main aspects of the CRC scheme', extracted from 'CRC Energy Efficiency Scheme – CRC Energy Efficiency Scheme guidance for participants in Phase 2 (2014-2015 to 2018-2019).
- 4.8 **Phase 2 Registration:** The registration process for Council participation has been completed. Under the CRC convention the required contact information has been provided as follows:
- Senior Officer: Chief Executive
 - Primary Contact: Energy and Building Services Performance Manager
 - Secondary Contact: Head of Facility Services
 - Invoice Contact: Energy and Building Services Performance Manager
- 4.9 **Energy Supplies:** Phase 2 participants are responsible for their CO₂ emissions calculated on the basis of the energy it uses. Whilst qualifying criteria related only to half hourly settled electric meters, scheme participation includes for emissions associated with the following:
- Non Domestic Metered Electricity
 - Unmetered Electricity – mainly street-lighting
 - Self Supplied Electricity – various considerations
 - Gas Supplies – where heating is included; over 73,200kWh usage per annum

Consumption associated with NPDO sites is included.

- 4.10 **Reporting:** Participants need to submit an annual report via the CRC Registry by the last working day of July after the end of each compliance year e.g. Friday 31st July 2015 for compliance year 2014/2015.
- 4.11 **Calculating CRC Emissions:** CRC emissions (in tonnes of CO₂) are calculated by the CRC Registry based on the data provided in the annual report and entered into the online system by the Council. For CRC purposes, CO₂ emissions are based on standard, published emissions factors for electricity and gas.
- 4.12 Supply data is determined by the energy used during a compliance year and is normally calculated through a combination of meter readings and supplier invoices/statements.
- 4.13 It should be noted that where adequate data is not available, supplies (and hence emissions) can be estimated. If, for a given compliance year, there are not at least two meter readings six months apart, then the supply is considered to be a CRC 'estimated' supply. The CRC Registry will add 10% to the annual emissions associated with any individual estimated supply.
- 4.14 **CRC Allowances:** For each compliance year, participants must order, pay for and surrender allowances to cover their annual CRC emissions in tonnes of carbon dioxide (tCO₂). One CRC allowance equals one tonne of carbon dioxide (CO₂).
- 4.15 Allowances can be purchased in government sales of allowances or, if available, on the secondary market. The government allowance sales price is subject to the Budget process and depends on whether the allowances are bought from the 'forecast sale' or 'buy to comply' sale for each compliance year.
- 4.16 In the Autumn Statement 2013, the Chancellor of the Exchequer announced that the allowance prices in 2014/2015 will be £15.60 per tonne of carbon dioxide in the forecast sale (order April 2014; payment June 2014) and £16.40 per tonne of carbon dioxide in the buy to comply sale (order June/July 2015; payment September 2015).
- 4.17 **Publication of Annual Emissions:** Each year the Environment Agency will publish a table as part of the Annual Report Publication (ARP) including the total emissions (tCO₂) and type of organisation of each participant in the CRC scheme. Emissions from previous years in the phase will also be published.
- 4.18 **Implications of Phase 2 Participation:**

The most significant consideration for the Council in terms of Phase 2 participation is that of a new budget pressure being introduced.

Table 4.18 below estimates the cost of allowances that the Council will have to purchase/fund on an annual basis (based on 2014/2015 rates):

Energy Source	tCO ₂ Emissions	Forecast Sale (£15.60/tCO ₂)	Compliance Sale (£16.40/tCO ₂)
Buildings Gas (Non NPDO)	2,050	£31,980.00	£33,620.00
Buildings Electricity (Non NPDO)	8,494	£132,506.40	£139,301.60
Buildings Gas (NPDO)	813	£12,682.80	£13,333.20
Buildings Electricity (NPDO)	1,736	£27,081.60	£28,470.40
Unmetered Electricity	3,106	£48,453.60	£50,938.40
Totals:	16,199	£252,704.40	£265,663.60

Table 4.18: Expected annual CRC costs based on Council energy supplies (source Carbon Management Plan Update 2011). Assumes no estimation penalties.

- 4.19 Staff resource to support CRC scheme administration will also require to be assessed at an early stage. It is proposed that the use/suitability of the current energy monitoring and targeting software be reviewed to ensure that the most advantageous solutions are adopted.
- 4.20 Council emissions information will be published on a national level, thereby opening the Council to greater scrutiny in terms of corporate responsibility, green credentials etc.
- 4.21 **Funding:** The £950 registration fee for CRC Phase 2 participation has already been paid from the Council's Utility Fund.
- 4.22 The ongoing cost of the annual CRC allowances can be accommodated from within the current budget for fuel costs.
- 4.23 Following consultation with the Head of Strategic Finance, steps were taken for the council to purchase the CRC allowances from the 'forecast sale', i.e. an order for the allowances was placed in April 2014 and payment was made in June 2014.
- 4.24 **Mitigating Actions:** Whilst CRC scheme participation presents a significant administrative and cost pressure for the Council, it does offer further incentive to reduce energy consumption/carbon emissions and improves potential project viability.
- 4.25 Mitigating actions could include:
- § Greater focus on reducing electricity consumption in all asset groups including NPDO schools; electricity being the CRC energy supply with higher p/kWh rate and greater carbon emissions. Consider new or re-directed staff resource to deliver further project solutions (e.g. efficient lighting (including street lighting), heating controls, insulation, air conditioning, ICT etc.) and allocation of spend to save funding where required.

- § Continued development of the Renewable Sourcing Strategy (RSS) and implementation of renewable technologies including solar pv panels and wind turbines (The Council has already given approval for the installation of solar pv panels in 8 Non NPDO schools and a contract has been awarded that should see these installations completed primarily over the school summer holiday period 2014).
 - § Review of electric authorised capacities – with a view to reducing these for cost savings (understanding risk).
 - § Stronger policy regarding the use of supplementary/portable heating and other non-essential energy consuming equipment used on a personal basis.(The Strategic Asset Management Board have requested a paper on this for consideration at its August meeting.)
 - § Avoiding penalties for estimated data through extending use of AMR (advanced meter reading) and ensuring support for regular utility meter read collection. Higher levels of information will also assist identification of energy waste through data analysis.
 - § A greater emphasis on behavioural change initiatives to encourage reduced consumption.
 - § Review existing use of settled half hourly meters – with a view to replacing, where possible, with non-half hourly metering.
- 4.26 Each of these potential mitigating actions would require to be evaluated for impact, affordability, deliverability and risk and would in effect have to be subject to a business case to ensure that they deliver a business benefit/financial saving.
- 4.27 It should also be noted that potential restrictions associated with the installation of wind turbines can materialise from the need to comply with planning policy and the availability/capacity of connection to the electricity grid. These restrictions have been considered in more detail in the Council’s Renewable Sourcing Strategy which is currently being reviewed against the strategy that is being developed by Fife Council. The outcome of this will be reported to the SMT as soon as possible.
- 4.28 **Next Steps:** A number of steps will have to be undertaken within the month of September 2014. These will include:
- § Confirm staff responsibilities. This will largely involve staff in Property Services and Finance working together.
 - § Conduct more detailed research into the CRC scheme to ensure all actions, implications and opportunities are identified/understood.
 - § A review of potential mitigating actions.

5.0 CONCLUSION

- 5.1 This report advises Members of the requirements of the CRC scheme and the consequences to the Council.
- 5.2 The CRC scheme presents a major challenge to the Council within an existing, constrained financial environment.
- 5.3 There is a new annual cost pressure to the Council of circa £252,704 (based on purchase of allowances at the forecast sale rate) and there are additional implications for staff resources in terms of scheme administration and mitigating project implementation.
- 5.4 The CRC scheme presents additional incentive to reduce energy consumption/carbon emissions and there are opportunities to mitigate its impact.

6.0 IMPLICATIONS

- 6.1 **Policy:** Participation in the CRC scheme is mandatory in view of the Council's electricity consumption and is compatible with the objectives of Council's Carbon Management Plan implementation.
- 6.2 **Financial:** CRC presents a significant annual cost pressure to the Council for 2014/15. This was £252,704 and was met from existing budgets. Allowances will also have to be purchased in future years for the duration of Phase 2 of the CRC scheme. The rate for this is set on an annual basis and the actual cost will depend on our utilities consumption thereby creating an annual cost pressure.
- 6.3 **Legal:** The CRC came into force in April 2010 under the CRC Energy Efficiency Scheme Order 2010 and was replaced with the CRC Energy Efficiency Scheme Order 2013 (CRC Order 2013). Given Council qualification for Phase 2, participation is mandatory.
- 6.4 **HR:** A review of staff resources is required, both to deliver carbon reduction projects and to administer CRC scheme participation.
- 6.5 **Equalities:** None.
- 6.6 **Risk:** The Council will have to comply with the CRC scheme on an ongoing basis through the purchase of the requisite number of allowances.
- 6.7 **Customer Service:** None.

Executive Director of Customer Services

3 July 2014

For further information contact:

Malcolm MacFadyen, Head of Facility Services - 01546 604412

Paul Gillies, Energy & Building Services Performance Manager - 01369 708573

APPENDICES

Appendix 1 - Main aspects of the CRC scheme

Appendix 1 - Main Aspects of the CRC Scheme

The following has been extracted from 'CRC Energy Efficiency Scheme – CRC Energy Efficiency Scheme guidance for participants in Phase 2 (2014-2015 to 2018-2019); Section 2, Pages 14-17 inclusive.

(http://cdn.environment-agency.gov.uk/LIT_9008_4c42a3.pdf).

Main Aspects of the CRC Scheme

During a typical year in the CRC scheme your organisation will need to:

- collate your applicable energy supplies (see section 3)
- report your CRC supplies via the CRC Registry by the last working day in July (see section 4)
- purchase and surrender allowances equivalent to your CRC emissions (see section 5)
- keep records of your supplies and other relevant information in your evidence pack (see section 6)
- keep the CRC administrator up-to-date with any changes affecting your organisation (see section 7)
- Table 2.1 gives the dates for the annual ordering, payment, allocation and surrendering windows.

The flow charts below (Figures 2.1, 2.2 and 2.3) guide you through the annual report submission steps, the allowances process, and the overall reporting and allowances flows. Please note that forecast sale dates refer to the start of the compliance year i.e. April 2014 for the 2014-15 compliance year and the buy to comply dates refer to the previous compliance year i.e. the buy to comply order for the 2014-15 year is in June and July 2015.

Fig 2.1 Annual reporting

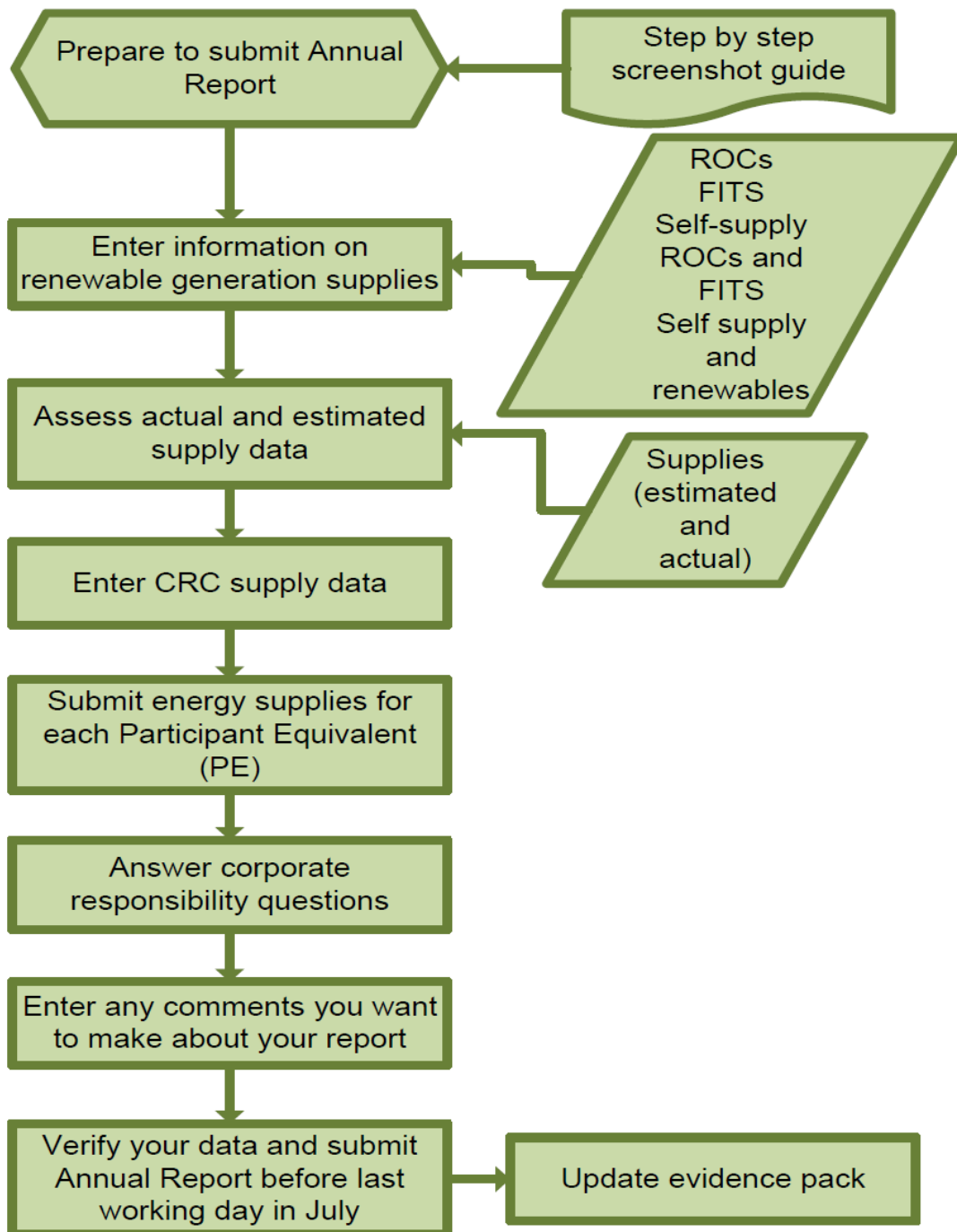


Fig 2.2 Allowances process

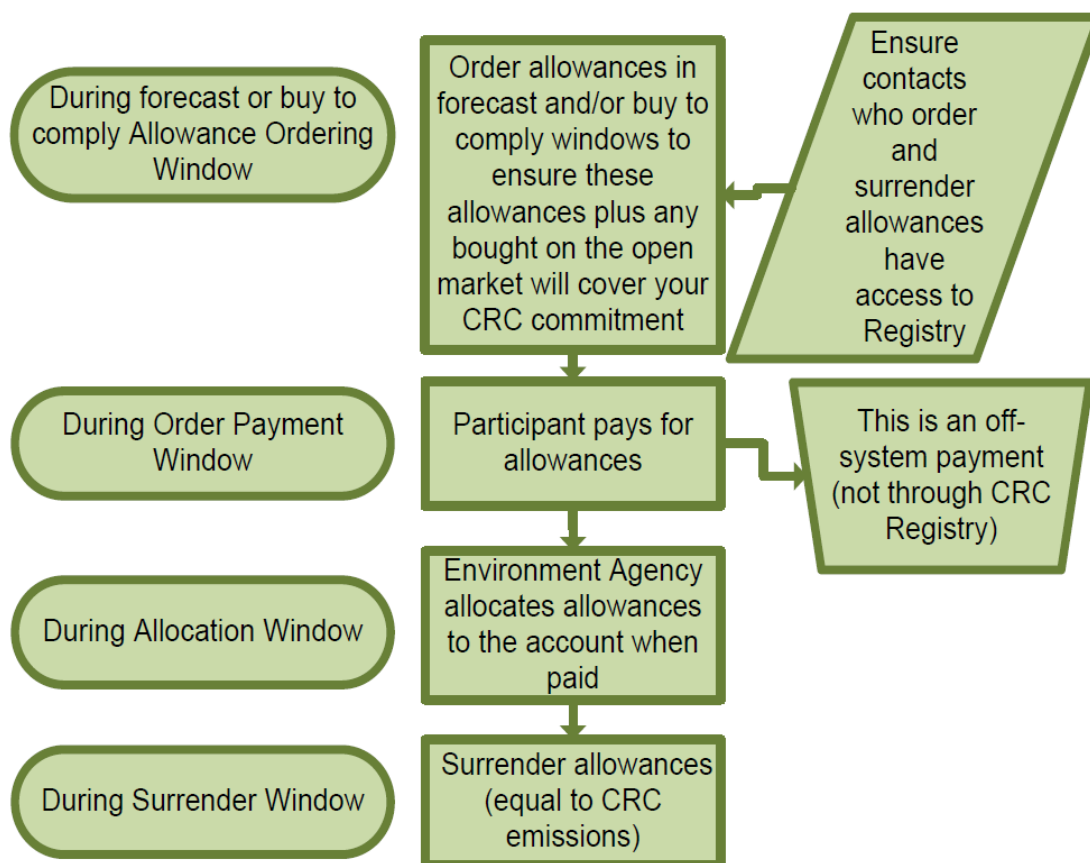


Table 2.1: Forecast and buy to comply sales – allowance order, payment, allocation and surrender dates for Phase 2

Action required	Annual deadline
Order forecast sale allowances	1 April to 30 April
Payment for forecast sale allowances	2 June to 20 June
Allocation of forecast sale allowances	2 June to 15 July
Order buy to comply sale allowances	2 June to 31 July
Payment for buy to comply sale allowances	1 Sept to 19 Sept
Allocation of buy to comply sale allowances	1 Sept to 15 October
Surrender of allowances	Last working day in October

Fig 2.3 Reporting, allowances and emissions data annual cycle for 2014 to 2015 onwards

