Department for
Energy Security
& Net Zero

Government response to Climate Change Agreements: consultation on a new scheme

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Introduction

Purpose of this document

This document is the current Government's response to the consultation, published by the previous Government, on *'Climate Change Agreements: consultation on a new scheme'*, which ran from 22 November 2023 to 14 February 2024; and for which 62 responses were received.

The targets under the current scheme end on 31 December 2024 with reduced Climate Change Levy (CCL) rates available until 31 March 2027 for those who meet targets and other obligations under the scheme, such as reporting or paying buy out fees. In November 2023, the previous administration confirmed that there would be a new 6-year CCA scheme that continues the incentive of reduced CCL rates for eligible businesses in return for delivery of negotiated energy efficiency or carbon targets. The current Government re-affirms a new 6-year scheme. Having a 6-year CCA scheme gives eligible businesses confidence in the longer-term measures necessary beyond business-as-usual investments. The new CCA scheme will have targets to the end of 2030 and provide CCL reduced rates for those meeting their obligations until March 2033.

Policy context

The voluntary Climate Change Agreement (CCA) scheme, established in 2001, aims to make energy and carbon savings through energy efficiency targets. It also helps to reduce energy costs in eligible industrial sectors by providing participating businesses with access to significantly reduced rates of Climate Change Levy (CCL). While the scheme is voluntary and eligible businesses are not mandated to participate, the scheme intends to contribute to meeting our net zero obligations under the Climate Change Act by driving investment in energy abatement or decarbonisation measures by providing tax incentives. The targets provide a basis on which organisations can make improvements to the energy efficiency of their facilities over a set period, ensuring their contribution to UK-wide goals, in return for reduced rates of CCL on their energy bills, estimated to be worth around £310m per year in 2027-28 and 2028-29 for the period of the latest CCA extension[1]. Between 2016-2023, CCL raised between £1.9-£2.1bn per year [2] and a new CCA Scheme is projected to be worth an estimated £1.9bn over the 6-year period. Participants can also see significant energy bill savings from the energy efficiency improvements they make towards these targets.

The new Government has announced a national mission to make Britain a clean energy superpower and accelerate our journey to net zero. Delivering on this mission will help make the UK energy independent, protect billpayers, create good jobs and tackle the climate crisis.

Since its establishment, the CCA scheme has helped businesses become more energy efficient and remain competitive internationally, with strong support for a future scheme in the evaluation of the scheme published in 2020[3].

The current scheme's Target Period 5 ended on 31 December 2022 with reduced rates of CCL available until 31 March 2025 for those who have met the targets and other obligations under the scheme. The Industrial Decarbonisation Strategy, published in March 2021, set out the intention to undertake further assessment of the purpose and targeting of a potential long-term CCA scheme following the Target Period 5 extension. The announcement of this new, long-term scheme was the result of this assessment and is reaffirmed by the new Government.

In December 2021, the previous Government published its initial consultation setting out key aspects of any potential future scheme and reforms under consideration.

On 15 March 2023, the previous Government confirmed that the current scheme would be extended by adding a further Target Period 6 (TP6), with targets in place from 1 January 2024 to 31 December 2024, with performance against those targets allowing reduced rates of CCL to continue to be available for eligible businesses for a further two years until 31 March 2027.In March 2023, a second consultation seeking views on the proposed changes for the 2-year

[1] https://www.gov.uk/government/publications/spring-budget-2023/spring-budget-2023-html#policy-decisions. Table 4.1, policy 44
[2]https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/ukenvironmentaltaxes/2023#:~:text=Environmental%20taxes%2C%20using%20an%20internationally,and%20resource%20(2.4%25)%20taxes.
[3] BEIS (2020). Second Climate Change Agreements scheme: evaluation

scheme extension and further detail of a potential long-term scheme was published. There was strong support through both consultations for a new longer-term CCA scheme.

In the 2023 Autumn Statement, a new, 6-year CCA scheme was announced, with target periods running to 31 December 2030, which would allow applications from new entrants in currently participating sectors and provide access to reduced rates of CCL until 31 March 2033. Existing eligibility criteria will apply to new and existing participants from currently participating sectors. Existing participants are expected to be transferred to the new scheme subject to the eligibility re-confirmation as set out below. In addition to the previous consultations, the previous Government consulted on the new scheme from 22 November 2023 to 14 February 2024. The new Government reaffirms the announcement of the previous Government. This response sets out the evidence received, and decisions taken for the new 6-year CCA scheme.

Summary of government response to the consultation

This government response outlines the consultation proposals, a high-level summary of the stakeholder responses to the consultation and the new UK Government's decision having considered the evidence and consultation responses provided.

In reporting the overall response to each question, 'majority' indicates the clear view of more than 50% of respondents in response to that question, and 'minority' indicates fewer than 50%. 'About half' indicates an overall response within a few percentage points of 50% (either way).

The following terms have been used in summarising additional points raised in the responses: 'many respondents' indicates more than 70% of those answering the particular question, 'a few respondents' means fewer than 30%, and 'some respondents' refers to the range in between 30% and 70%. This is consistent with the approach of other UK Government responses to consultations.

In the Government responses sections, 'we' refers to the current or previous UK Government.

We received a total of 62 responses to the consultation, 27 responded online and 35 by email. Of the 62 responses, 41 were from sector/trade associations, 17 were from businesses, three were from consultants and one from an academic.

Not all respondents answered the specific questions. Of those who did, the majority of responses were from those who responded online. Responses which did not explicitly express their support or disapproval of the positions set out, particularly for those received by email, were categorised as 'other.' When summarising stakeholder responses to the consultation, all accompanying written text was analysed for each question.

Summary of Government decisions in response to the consultation

- **Target Period and Certification Period Dates –** The start date of the first Target Period of the new scheme will be 1 January 2026. See 'Next steps' section below for further detail.
- **Eligibility** – Sectors/processes who expressed an interest in joining the scheme will be assessed against eligibility criteria (set out under "New eligible sectors/processes"). The indicative timing for decisions from assessing the eligibility of any new sector/process to join the CCA Scheme is Spring 2025. For those who are assessed as eligible under the eligibility criteria set out below, new eligible process definitions will be developed and the required legislative amendments made before operators in those sectors or those carrying out the new eligible process can access the reduced CCL rates. Subject to parliamentary approval and timings, the legislative requirements and subsequent operational processes to assess new applications are likely to mean that new sectors will not be able to join until 1 January 2027. Expressions of interest were invited as part of the consultation. As the consultation period has ended, we will not accept further expressions of interest at this time.
- **New Entrants –** New entrants in existing sectors will be able to join the scheme between 1 January to 31 August in every year throughout the scheme and will not be required to wait a minimum period before being certified to receive CCL relief. New entrants in existing sectors will be able to apply to join the scheme from 1 May to 31 August 2025 to join from the start of the first Target Period under the new scheme, using existing eligibility criteria as set out in the existing legislation.
- **70:30 Rule –** An annual self-certification will be required confirming facilities remain compliant with the threshold.
- **Baseline for Targets –** 2022 will be the new baseline year.
- **Target Setting –** Data will be collected from a representative sample of facilities from each sector to inform calculation of initial targets. Final targets will be agreed through bilateral negotiation between DESNZ and sector associations.
- **Target types and managing performance -** We will introduce a unified target type.
- **Carbon emissions factors and Primary Electricity Factors –**. We will update these factors prior to the new scheme commencing but will fix these factors for the entirety of the new 6-year scheme.
- **Treatment of self-generated electricity –** The multiplication factor for self-generated electricity will be updated to 1.0 and the carbon emissions factor will be 0 tCO2e/kWh
- **Inclusion of UK Emissions Trading Scheme (ETS) energy in targets –** UK ETS energy will not be included in CCA targets, but UK ETS data will be collected to inform target setting and improve the understanding of the decarbonisation journey of scheme participants.

- The special reporting methodology (SRM) will be mandatory for combined heat and power plants (CHPs).
- **Reporting –** The new scheme will move to facility level reporting. We intend to introduce light touch annual reporting on energy usage and emissions data at the end of year one of a two-year Target Period (which will not be used to formally assess performance). We will not take forward the introduction of additional reporting on energy efficiency and decarbonisation potential, although will seek to collect information on such potential through the target setting process (and through other schemes such as the Energy Savings Opportunity Scheme (ESOS)).
- **Buy-out Price –** We intend to set a buy-out price in advance of each Target Period based on the weighted average of CCL gas and electricity rates.
- **Surplus –** Surplus will be allowed to be brought over between target periods, only within the new scheme and on a facility basis. Target Period 6 surplus will therefore not be carried forward.
- **Penalties –** The penalties available to the Environment Agency will remain the same as for the current scheme. We will however significantly increase the number of audits carried out in the new CCA scheme. There is a £500 minimum penalty. The penalty for inaccurate information in relation to baselines or reporting will remain the greater of £500 or £25/tCO2e in line with the buy-out price. The maximum penalty will be updated in line with any changes to the buy-out price. Separately, HMRC may apply penalties for tax non-compliance.
- **Energy Management Systems (EMS) –** ISO50001 or other EMS will not be mandatory for the new scheme. We do however recommend such systems as good practice, including for those covered by ESOS.
- **Next Steps, Milestones for Target Setting and Variations to Agreements –** We have noted the concerns from respondents on the indicative timeline for setting robust targets and administrative reporting burden. We have provided an updated indicative timeline, reflecting timing of this response and current expectation on laying and legislation coming into force. This can be found on page 33, under the 'Consultation position' section.

Next Steps

Since the consultation has closed it has become clear that more time is necessary for Government and business to implement the proposed changes to the CCA scheme effectively. We have, therefore, decided that the first Target Period of the new CCA scheme will begin on 1 January 2026. The Government intends to implement the proposed changes listed above to the CCA scheme from 1 January 2026, subject to Parliamentary scrutiny of the necessary legislation. Participants in existing sectors will be able to join from this date and required to report performance by 1 May 2027. The Department for Energy Security & Net Zero (DESNZ) and the Environment Agency (EA) will issue further communications regarding new/varied agreements.

Scheme length

The previous Government announced, at the 2023 Autumn Statement, a new CCA scheme which will have targets covering 6 years. We consider that a 6-year scheme strikes the right balance between providing an incentive to drive measures with longer payback periods, while managing the estimated £310m annual cost to the taxpayer of reduced CCL rates to March 2033. The current Government reaffirms this announcement.

We proposed an indicative start date to the new scheme of 1 January 2025. Respondents to Q18 of the consultation noted their concern around the limited time available to implement the proposed policy changes before 1 January 2025, with particular concern around the target setting process. Since the consultation has closed, it has become clear that more time is necessary for Government and business to implement the proposed changes to the CCA scheme effectively. We have, therefore, decided that the first Target Period under the new scheme will start on 1 January 2026, which will provide an additional 12 months of preparation time to complete data collection exercises, negotiate targets and lay the necessary legislation (subject to Parliamentary approval and timing) for the scheme. The target periods will continue to the dates provided below, meaning the scheme will have targets explicitly covering 5 years; although the first Target Period in the new CCA Scheme will assume businesses make continued progress in 2025 building on TP6 performance. Participants in existing sectors will be able to participate in the scheme from 1 January 2026, while those in newly eligible sectors will be able to join from Target Period 2.

Target Period dates

- Target Period 1: 1 January 2026 to 31 December 2026
- Target Period 2: 1 January 2027 to 31 December 2028
- Target Period 3: 1 January 2029 to 31 December 2030

Certification Period dates

- Certification Period 1: 1 July 2027 to 30 June 2029
- Certification Period 2: 1 July 2029 to 30 June 2031
- Certification Period 3: 1 July 2031 to 31 March 2033

Though there will be a gap in Target Periods, there will be no gap in Certification Periods. As the final certification period of the current scheme extension ends on 31 March 2027, this certification period will be extended to 30 June 2027. This will ensure there is no gap in certification before the first certification period of the new scheme and reflect the reporting deadline for the first Target Period. This replicates the approach previously taken for the extension of the scheme to 2025. New entrants in existing sectors will be eligible for CCL relief from the point at which they enter the scheme. The first Target Period will be one year long, and subsequent Target Periods will remain at two years in length.

The reporting of performance which will be used to determine if targets have been met will be required by 1 May in the year following the end of each Target Period as in the current CCA Scheme.

Eligibility

Existing participating facilities will not automatically be transferred to the new scheme. The Government intends to take a proportionate approach to assessing the eligibility of currently participating facilities. All facilities will be asked to confirm that they meet the existing eligibility criteria (including eligibility under the appropriate sector process definitions) before the start of the new scheme, and the administrator will subsequently audit a proportion of participants during the scheme to assess whether they meet existing eligibility criteria.

New eligible sectors/processes

In the consultation, the previous Government provided an opportunity for new sectors to supply evidence to support potential admission of new sectors/processes to the scheme.

Sectors who have notified DESNZ of their intention to register a new sector or for a new process to be added to the scheme will need to provide evidence to allow an assessment against the existing eligibility rules, i.e. they need to evidence that either their energy costs:

- amount to at least 10% of their production value (i.e. Energy Intensity (EI) ≥ 10%); or
- amount to 3% or more but less than 10% of their production value so long as there is an Import Penetration (IP) ratio of at least 50% (i.e. 3% ≤ EI < 10% and IP ≥ 50%).

These criteria remain the same as for existing sector eligibility for the most recent sectors to join the current CCA scheme. These are the criteria that were applied to applications to join the scheme from 2006 onwards. DESNZ will make a recommendation based on the assessment against the energy intensity and where necessary the IP ratio and final decisions will be made by government ministers.

Several stakeholders have notified DESNZ of their intention to register a new sector or for a new process to be added to the scheme. This notification has been to initiate the process of gathering sufficient information to determine if the process meets the above criteria and therefore whether it should be added. DESNZ will begin a data collection exercise to assess any new sector or process against the energy intensity and if required, the IP ratio criteria. We are not accepting further notifications of intent to make a proposal to be added to the scheme at this time.

DESNZ will gather the necessary information from each sector through a data gathering exercise on the additional process proposed for inclusion into the scheme. The processes will be measured against the energy intensity threshold and where it is below 10%, the IP ratio will be assessed. Sectors will be notified of the outcome and, subject to parliamentary approval and timing, the necessary legislative amendments made where the eligibility criteria set out above are met. All information relating to eligibility will be submitted to Ministers to decide whether the process or sector is to be admitted into the scheme. This exercise is planned to commence in Autumn 2024 and we intend for final decisions to be made in Spring 2025 before the relevant legislative amendments are laid.

New eligible process definitions will be developed for any new sectors or processes joining the scheme and the relevant legislative amendments will be made. DESNZ will collect data from a sample of facilities in each new sector/process to inform the development of initial target offers, and subsequently enter into target negotiations with the sector associations. Subject to legislative requirements and other administrative processes, this is likely to mean that new sectors will not be able to join until 1 January 2027. New sectors will not join the scheme from 1 January 2026. Government will provide further information on timings for businesses in new sectors/processes to join the scheme in due course.

New entrants to the scheme

Consultation question 1	**Number of responses**
Do you agree with the proposal to allow new entrants to the scheme at any time?	59

Consultation question 2	**Number of responses**
Do you agree that new entrants should complete a Target Period before receiving certification for reduced rates of CCL?	59

Consultation position

The previous Government proposed that new entrants in currently eligible sectors will be able to apply to enter the CCA scheme at any time, with the proposed start date for applications as 1 May 2025.

The previous Government proposed that new entrants who join partway through a Target Period will be required to complete one Target Period before being certified to receive reduced rates of CCL.

Summary of stakeholder responses to consultation

- Question 1 received a total of 59 responses.
- The majority of respondents agreed with the proposal to allow new entrants into the scheme at any time.

- A few respondents did raise that there should be a cut-off point, suggesting a specific window of several months each year.
- A few respondents commented that this could encourage more businesses to become eligible, apply and move forward with EE measures.
- Question 2 received a total of 59 responses.
- The majority of respondents disagreed that new entrants should complete a Target Period before receiving certification for reduced rates of CCL.
- Some respondents raised concerns about unfairness on new entrants in existing sectors, particularly the prospect of waiting nearly two years after entering the scheme to gain the reduced rates of CCL if performance across a full Target Period was needed.
- A few respondents were concerned that this proposal could impact competitiveness with overseas companies and investment in UK businesses but did not elaborate further.

Government response:

New entrants in currently eligible sectors will be able to apply to join the scheme between 1 January and 31 August of each year within a Target Period and will not need to provide a minimum period of performance data after activation of their CCA before being certified to receive CCL relief. A deadline of 31 August will allow the Environment Agency (EA) enough time to assess all applications and issue agreements for successful applicants before the start of each calendar year.

There will be an additional application window, which will run from 1 May – 31 August 2025, for new entrants from all currently eligible sectors to apply before the start of the new scheme (*timings are subject to legislative requirements)*.

The 70:30 rule

Consultation question 3	Number of responses
What are the potential impacts of the proposal that operators should make an annual confirmation to the scheme reporting that their facilities remain compliant with the threshold?	56

Consultation position

The 70:30 rule is part of the process of determining the eligible facility. The basic principles of the rule are as follows:

If the installation consumes 70% or more of the site's total primary energy (reckonable energy), an operator can claim that all the site's energy consumption falls within the eligible facility.

If the installation consumes less than 70% of the site's total reckonable energy, an operator can claim the installation's energy consumption, plus energy consumed by other activities on site up to a value equal to an additional 3/7ths of the installation's energy consumption, as falling within the eligible facility. However, both the installation and any additional energy claimed under the 3/7ths provision must be separately sub-metered. The addition of the 3/7ths can occur at any point during the CCA except for the last two months of a Target Period.

The previous Government did not propose any changes to the 70:30 rules for determining the eligible facility for the 6-year scheme. We have not seen sufficient evidence for what benefits a further change to the threshold would bring, noting that the threshold has changed from 90% in the first scheme to the current 70%.

We proposed that operators should make an annual confirmation in the scheme that their facilities remain compliant with the threshold, to ensure better practice in how participants are monitoring this requirement. This question sought to understand the potential impacts of this proposal.

Summary of stakeholder responses to consultation

- Question 3 received a total of 56 responses.
- Many respondents were concerned about additional administrative burden, with some suggesting the introduction of a tick-box exercise for confirmation.
- Some respondents noted that they would expect limited or minimal impact on operators if the annual confirmation does not require submission of extensive data.
- A few respondents were concerned about an increased cost resulting from this proposal.

Government response:

It is a requirement under current scheme rules that the Environment Agency is notified of any changes to a facility's eligibility under the 70:30 rule. To promote transparency whilst also considering any potential administrative costs, we have decided that participants will be required to confirm compliance to this rule each year, as part of either their target period reporting or interim reporting, by re-confirming whether the facility's eligible energy consumption ratio remains within this 70% limit. This would be subject to review as part of any audit checks by the scheme administrator.

Scheme Targets

Consultation question 4	Number of responses

Do you agree with the proposal to gather data at a facility level to inform target setting?	56

Process for setting targets

Consultation question 5	Number of responses
Do you agree with the proposal that the proposed data gathering exercise be conducted prior to any target setting process?	58

Consultation question 6	Number of responses
Can you provide suggestions on how to reduce potential administrative costs of this approach?	54

Consultation position

The previous Government proposed using facility level data to inform target setting as it is considered that it would be beneficial for the scheme. It was proposed that, in order to build a more representative and accurate picture of performance, this would involve facility level data from all participants and a data collection exercise would be conducted prior to proposing new targets to each sector. Where possible, this exercise would also build upon data reported via other government schemes. Views were also sought on how to reduce the potential administrative costs of the proposed approach to data collection and target setting.

Summary of stakeholder responses to consultation

- Question 4 received a total of 58 responses.
- The majority of respondents agreed with the proposal to gather data at a facility level to inform target setting.
- Some respondents were against the proposal, primarily citing concerns relating to administrative burden, commercial risks regarding confidentiality and sensitivity issues, and the difficulty that Operators will face in collecting sufficient and quality data.

- Question 5 received a total of 58 responses.
- The majority of respondents agreed with the proposal that the data gathering exercise be conducted prior to any target setting process.
- Some respondents expressed that sufficient time would be required to allow operators to submit sufficient and quality data.

- Some respondents suggested that further information on the data gathering and target-setting processes would be needed.
- A few respondents expressed concern that confidentiality issues would lead to a low return rate from Operators and that the process would be time-consuming for sector associations.

- Question 6 received a total of 54 responses.
- Some respondents suggested, where possible, to align the data collection to that collected for other Government schemes.
- A few respondents raised concerns on how this would impact SMEs, including the fact that they often lack internal resources to complete such detailed data collection requests.
- A few respondents suggested using a sampling approach in order to reduce administrative costs of the proposed approach.

Government response:

The majority of respondents agreed with the proposal to gather data at a facility level to inform target setting. Moreover, the majority of respondents agreed that this should be conducted prior to any target setting process. We have decided to proceed with this approach, given the benefits that understanding the potential for energy (and, where appropriate, carbon) savings at a facility level will have in setting stringent yet realistic targets ahead of the new scheme, recognising that it is estimated to be worth c. £1.9bn in CCL reduced rates over the six years of the scheme.

However, concerns around the administrative burden of participating in such a data gathering exercise and the difficulties in collecting sufficient and quality data have been taken into consideration. On the former, we will employ a sampling approach to gather the required data, where data will be collected from a representative sample of facilities (according to factors including, but not limited to, business size, number of facilities, industrial processes employed and sub-sectors within the wider sectoral umbrella agreements). This will enable us to build a picture of the facility-level potential within each sector without requiring every single facility participating in the scheme to submit data, although we will want as many facilities as possible to provide data. This approach was suggested by some respondents to the consultation. We have worked with scheme participants and stakeholders to develop the template for data collection to streamline the process for sampled facilities where possible and to ensure that it is proportionate.

Concerns around the timescale required for collection of this data have been taken into consideration, and we will strive to provide sufficient time for operators to collect required data, as recommended in many responses to the consultation and through our engagement with scheme participants. This has also been reflected in our decision to delay the start of the scheme's first Target Period by 12 months to allow sufficient time for target setting. Due to the time required for data collection and target setting, further information on the details of the proposed data gathering and target-setting process have been shared with participating sectors prior to the publication of this document.

All suggestions by respondents on ways to reduce potential administrative costs of this approach are greatly appreciated and have been taken into consideration for the design of the data collection process. Impacts on SMEs specifically are a key concern, together with the different needs of different operators. As suggested by respondents, a sampling approach will be employed to minimise the number of facilities required to submit data ahead of the target-setting process, whilst ensuring that sufficient and quality data is gathered from enough facilities to set credible targets.

Continued scheme focus on energy efficiency

The scheme is currently based primarily on encouraging energy efficiency and provides access to reduced rates of Climate Change Levy, a tax to incentivise energy efficiency. We believe the scheme should continue to be mainly focused on energy efficiency technologies and should drive the adoption of the remaining energy efficiency potential in eligible sectors, given the significant relief provided towards this objective, and energy efficiency's significant and continued contribution to the overall action required to decarbonise, as well as reducing the cost of deep decarbonisation.

As stated in the consultation, through the evidence-based target setting process we will also look at the potential for carbon targets and supply side measures and will consider where these measures may be an appropriate focus of the scheme. Through our evidence-based target setting process we will agree suitable targets so that the final target is one which is appropriate and achievable for the sector, will lead to greater efficiencies and will deliver Value for Money.

Base Year

Consultation question 7	**Number of responses**
Do you agree that 2022 should be used as the baseline year for the new scheme?	55

Consultation question 8	**Number of responses**
If you believe the baseline year should be revisited, which year should be used and why?	28

Consultation position

The previous Government proposed that the baseline year should be updated to 2022, as this was the latest complete year of reported data available before January 2025 at the time of publishing the consultation. In addition, as UK ETS was launched in 2021, this would make 2022 an appropriate base year to account for our proposal to include UK ETS energy as part of CCA target setting.

Summary of stakeholder responses to consultation

- Question 7 received a total of 55 responses.
- Some respondents agreed with the proposal that 2022 should be used as the baseline year.
- Some respondents neither agreed nor disagreed.
- Question 8 received a total of 28 responses.
- Some respondents proposed maintaining 2018 as the baseline year, suggesting it would be more representative.
- A few respondents suggested that baseline years be chosen on a sector-by-sector basis
- A few respondents proposed using an average taken over multiple years

Government response:

We welcome the views and comments received from respondents, including alternative baseline year proposals. We noted the concerns shared on moving away from 2018 as the baseline year, which included recovery from the pandemic and the impact of the Russian invasion of Ukraine and subsequent energy price rises. However, we have decided to maintain our proposal to update the baseline year for the new scheme to 2022. Changing the baseline year to 2022 (a) provides a distinction between the previous scheme and the new scheme; (b) means 2030 targets wouldn't be based on pre-pandemic data – particularly relevant as technologies and measures have developed over the last 6-years (especially in light of higher energy prices which has made investment in measures more attractive); and (c) allows the opportunity to factor in UK ETS more explicitly into the scheme given UK-ETS commenced in 2021 (with the UK participation in the EU-ETS ending in 2020).

Reporting & performance assessment

Facility level reporting and targets

In the consultation published in March 2023, it was proposed to move to Facility level reporting in a longer-term scheme. Currently multiple facilities operated by a business can be grouped, or 'bubbled' together with one target applied to all. Applications to join the CCA scheme are at

Facility level, and then Operators are allowed to combine Facilities together into a Target Unit (TU). In doing so, there is no requirement for each individual Facility to report its performance.

Of the 3,416 TUs currently included in the CCA scheme, 405 (~12%) contain more than 1 Facility. The bubbled TUs contain 5,828 (66%) of the 8,839 Facilities currently included in the scheme. TUs with very large numbers of Facilities tend to be in the supermarket, craft baking and poultry meat rearing sectors.

While the option to combine Facilities into a single TU can be beneficial to businesses in some ways, in practice bubbled TUs creates significantly more administration:

- For Sector Associations in combining Facility level data to submit reports at TU level
- For DESNZ and the Environment Agency in establishing various complex rules to calculate improvement targets following changes to the TU
- For Operators in working out which Facilities to group together and appreciating the implications of doing so
- For Operators in working out the relative performance of their Facilities – understanding which had performed best and which needed more improvement investment.

For the new scheme, we proposed that it will no longer be possible to combine Facilities into a single TU, and instead each target performance will be reported and assessed at a Facility level. This would mean that businesses will be incentivised to invest in energy efficiency or decarbonisation measures at all their participating sites.

Moving to Facility level agreements removes the following complex rules/requirements currently in the scheme:

- Rationalisation rules
- Stringency test
- Including Facilities that have different Base Years in a TU
- Revising a target when including/excluding a new Facility in a TU
- Including greenfield Facilities in a TU
- Conditions for including/excluding Facilities in a TU
- Types of variations for Facilities joining/leaving a TU

It also significantly simplifies:

- Treatment of data errors and secondary reporting
- Cumulative correction of data for more than one Target Period

As stated in the consultation published in November 2023, we still believe that moving to Facility level reporting will be beneficial, both for government and scheme participants. As set out above, we believe that Facility level reporting will simplify several rules and requirements in the scheme and will reduce the administrative burden. In addition to this, by requiring businesses to report at a Facility level, businesses will be incentivised to invest in energy efficiency or decarbonisation measures across all of their sites participating in the scheme to ensure they meet their targets. Other schemes provide opportunities for investing in transformational technologies and trading emissions allowances for participating businesses, such as the Industrial Energy Transformation Fund and UK ETS. Reporting at a Facility level will also provide government with a more detailed view of energy usage across participating sectors which will be valuable in identifying future policy levers.

Target types & measuring performance

In the consultation published in March 2023, it was proposed to implement a unified target type which would replace all existing target types. The current methodology, which considers absolute energy or carbon for absolute targets or energy in relation to throughput for relative targets, has the potential to obscure actual improvements made to energy/carbon efficiency as throughput and product mix at a Facility change. The proposed unified target type would be adapted from the Novem methodology, and would consider the proportion of energy which is fixed (i.e. which must be consumed before any of the activity constituting the Facility's selected throughput is incurred) and energy which is variable (i.e. directly linked to production). It would also offer the opportunity, as the current Novem method does, to report performance broken down by types of products at a Facility.

The proposed method is intended to give a more accurate view of performance and how this links to production, allowing better understanding of how a Facility is performing in terms of energy/carbon savings.

Previously, the system of Absolute and Relative Targets meant that Operators were only able to assume their fixed energy consumption to be:

- Close to 100%, and therefore an Absolute target type was appropriate, or
- Close to 0%, and therefore a Relative target type was appropriate.

Either of these target types could cause a significant distortion in the calculation of performance if production changed significantly between the Base Year and Target Period. A mechanism intended to address this issue for Absolute targets was introduced, but no such mechanism was appropriate for Relative targets.

In the November 2023 consultation, we proposed that reporting will be at a Facility level using a Novem approach, with Facilities offered the opportunity to estimate their Fixed Energy Consumption (FEC) as a percentage of total energy consumption. Operators may still set this FEC to 0% or 100% if they wish, in which case the Novem-style target would simplify to either a Relative or Absolute target type respectively. However, in this case, no allowance would be made should a significant change in production during the Target Period influence the calculation of performance. Any estimate of FEC between 0% and 100% would therefore reduce the risk that a change in production could influence this performance calculation.

It is anticipated that Facilities which have a significant fixed energy component will be aware of this, however, there are various methods which could be used to calculate the FEC of a Facility for this purpose, including regression analysis or use of sub-meter and product run data. It would not be essential for Operators to determine this FEC rigorously using dedicated sub-metering, but Operators would be required to provide justification for any estimation method.

Under the proposed methodology, Facilities would therefore be required to provide their total energy consumption broken down by fuel, an estimate of their FEC as a percentage of this total consumption, and their total production. This would allow the calculation of the Variable Energy Consumption (VEC) for one unit of production. If Operators have submetering on production lines and products of significantly different energy intensities of production, they may decide to offer VEC and production levels broken down by product.

This proposed consideration of FEC would bring some changes to the way that performance within the scheme is calculated. Currently, Target Units with different types of targets report using different templates, which each use a slightly different calculation to determine performance. For those with Absolute targets, two years of reported energy must be accounted for, whilst for those with Relative targets, the ratio of base year and target period SECs are used. Under the proposed methodology, only one Target Period reporting template would be needed, and calculation of performance will change to the adapted Novem method. This method determines performance by calculating a reference energy, that is, the energy consumption which would have occurred in the base year for the same level of production as in the Target Period. For Facilities which produce one product, the adapted Novem method gives the same result as the Relative method and is simply a different mathematical approach to the same calculation. For Facilities which produce more than one product, it would not be required that Facilities submit data broken down by product. However, we would recommend that Operators consider doing this, and introducing submetering to do so, if they have a mix of products with significantly different energy intensities of production.

We believe that this proposed adapted Novem approach would bring significant simplifications to the scheme, removing the need for various rules associated with Target Unit level reporting and different target types (Absolute, Relative and Novem).

Further detail is also set out in Annex A.

Carbon Emissions Factors and Primary Electricity Factors

Carbon Emissions Factors

Currently the scheme uses a fixed set of emissions factors established at the start of the scheme[4]. The consequence of this is that carbon emissions are calculated for each Target Period using emissions factors that may have changed since the start of the scheme. This means that the emissions reported may not accurately reflect the actual emissions for the years in question and may not align with those recorded for other regulations or schemes.

[4] https://www.gov.uk/government/publications/climate-change-agreements-operations-manual--2

The consultation published in March 2023 proposed that for a new scheme the emissions factors would be updated during each Target Period, using the latest published emissions factors at that time. This change would mean that for agreements with carbon targets, the reported performance will change as a result of changing emissions factors over time. This would be factored into target setting using assumed trajectories for emissions factors.

The majority of respondents agreed that carbon emission factors should be updated to the currently available factors for each Target Period, with reasons cited including allowing emissions factors to remain relevant, aligning better with other schemes, and aligning with factors used in reporting for other government departments.

We have considered the views and evidence received. We have decided to update the emissions factors before the start of the new CCA scheme to reflect the significant recent progress on grid decarbonisation. We envisage using the latest published emissions factors ahead of the target setting process commencing, but for the Carbon Emissions Factor to be consistent for the 6-year scheme. This will provide greater certainty for participants, particularly those with carbon targets, implementing energy efficiency and decarbonisation measures across the lifetime of the scheme; whilst avoiding undue complexity associated with multiple changes of emissions factors and targets across the 6-year Scheme.

Primary Electricity Factors

Consultation question 9	Number of responses
Do you agree that the primary electricity factor should be updated before each Target Period?	57

Consultation question 10	Number of responses
What would be the impact of updating the primary electricity factor before each Target Period?	53

Consultation position

The scheme operates on the basis of primary energy rather than delivered energy.

For grid electricity consumed, this is currently multiplied by 2.6 to account for the primary fuel used to generate the electricity.

The consultation published in March 2023 proposed that for the new scheme the grid electricity multiplication factor should be updated to account for greening of the grid and consideration should be given to reviewing and updating it for each Target Period.

Having considered the views and evidence received in the consultation published in November 2023, it was stated that in line with the Carbon Emissions Factors, the primary electricity factors would be updated for a new scheme; we also proposed that the primary electricity factor should be updated before each Target Period.

Summary of stakeholder responses to consultation

- Question 9 received a total of 57 responses.
- The majority of respondents agreed with the proposal to update the primary electricity factor before each target period, noting that updating the primary electricity factor would reflect the greening of the grid.
- In contrast, a few respondents noted that it would be preferable for the factor to be updated at the start of the scheme and then remain constant for the duration of the scheme.
- Question 10 received a total of 53 responses.
- Some respondents highlighted the importance of a clear process for updating the primary electricity factor and for whether targets would be updated to account for the change.
- Some respondents noted that projections for updating the primary electricity factor would need to be accounted for in the target setting process.
- A few respondents noted that updating the primary electricity factor before each target period could create uncertainty for participants.

Government response:

A large majority of respondents agreed that the primary electricity factor for electricity should be updated before the start of the new scheme. The primary electricity factors will be updated for the new scheme. They will be based on the emissions factors most recently published by DESNZ prior to the start of the scheme.

However, some respondents raised concerns around the potential impact of updating the primary electricity factor before the start of each target period as it could create uncertainty for businesses to direct investments.

The current Government is keen to balance the need to ensure the primary electricity factor reflects the changing carbon intensity of the grid, whilst providing certainty for participants to implement greater energy efficiency measures over the period of the scheme. We have considered the views from stakeholders and have decided to update the primary electricity factor ahead of the new scheme commencing, but for this to be consistent for the 6-year scheme given the concerns on potential impact on investments. The updated factor will be communicated with participants during the target setting process.

It was noted that this policy change will potentially allow CCA participants to take into account renewable energy tariffs which are increasingly common with energy suppliers. Businesses can also factor in published UK Government projections of carbon emissions that go much beyond the timescales of the new CCA Scheme[5].

Treatment of self-generated electricity (PV, wind or hydro)

In the consultation published in March 2023, it was proposed that the primary electricity factor for self-generated electricity (Photovoltaics (PV), wind or hydro) will be updated to 1.0, and the carbon emissions factor will be 0 tCO2e/kWh. A large majority of respondents agreed that self-generated electricity should be accounted for as set out in the proposal, with a few respondents also noting that self-generated electricity is an important aspect of company and national decarbonisation plans so needs to be acknowledged.

As stated in the consultation published in November 2023, having considered the views of respondents to the prior consultation, the new Government has decided that the primary electricity factor for self-generated electricity PV, wind or hydro will be updated to 1.0, and the carbon emissions factor will be 0 tCO2e/kWh.

Inclusion of UK Emissions Trading Scheme (UK ETS) energy in target energy

As part of the consultation published in March 2023, we asked respondents whether UK ETS energy should be included in the target energy for any potential future CCA scheme. It should be noted that CCA participants receive CCL relief on energy that may also fall under UK ETS scheme requirements, even where they do not agree to targets on that energy under the CCA scheme at the moment. The UK ETS is a separate scheme which ensures the covered sectors (industry, power and aviation) reduce their emissions in line with net zero and has separate payment requirements and penalties.

About half of respondents to the 2023 consultation agreed with the proposal to bring UK ETS into the target energy for any new scheme, and of these, a few commented that it may allow for more options to improve energy efficiency. Some respondents disagreed with the proposal, with concerns raised including the potential for double counting, and an increased administrative burden. A few respondents commented that UK ETS compliant sites should be exempt from the CCA scheme and CCL relief should be conditional on compliance of UK ETS.

We have considered the views and evidence received in response to the March 2023 consultation and we believe that there are benefits to including UK ETS energy in CCA target energy reporting. We have decided that participants should report on the energy that is covered by UK ETS alongside CCA reporting, but that the CCA targets on which any buy-out is

[5] https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal

payable should continue to be based on energy that is not covered by the UK ETS. This will give a holistic view of the energy used across sites, which is unavailable under the second CCA scheme.

In addition, we will also be requiring that all CHP Schemes use the special reporting methodology (SRM) for CHP where the following criteria are met:

- all the facility's direct fuel consumption is covered by the UK Emissions Trading Scheme (UK ETS)
- the facility consumes electricity generated in a CHP plant and this CHP plant is covered by UK ETS
- the facility can import electricity from the grid

Where an eligible facility meets all three criteria, the SRM must therefore be used to determine the performance of the facility in the base year and at subsequent target periods. Making the SRM mandatory will ensure all CHP schemes are treated equally and that changes in apparent performance at sites meeting the criteria more closely reflect changes in their actual performance.

We are conscious that businesses may be reporting similar information to multiple schemes in the energy and emissions area and are looking at streamlining data requests, as much as we can, in order to reduce the potential administrative burden.

Annual Reporting

Previous consultations asked if the reporting of energy and throughput data should be reported annually. Currently the reporting of this data is required at the end of a Target Period only.

As stated in the consultation published in November 2023, having considered the views and evidence received, we intend to introduce annual reporting for a new CCA scheme. The annual reporting will take the same form as the energy and throughput data reporting required at the end of a Target Period, together with a brief report of the key actions taken to meet a target or any other issues that might impact on achievement of the target. However, this would not be used to formally assess performance against targets. We intend for the interim reporting to be used to provide an estimate of the performance outcome at the end of a Target Period – and given the shortened Target Period 1 it would only be introduced from early 2028 (to cover the first year of TP2). This data would not be published.

Consultation position

The consultation also sought views on a proposal to extend reporting to include providing further evidence of energy efficiency and decarbonisation potential within the next 6 years, on a rolling basis, as part of annual reporting. It was not proposed to publish at individual facility level the data provided in connection with this energy efficiency and decarbonisation potential reporting, unless required to do so by law.

Consultation question 11	Number of responses
Do you agree with the proposal to extend reporting to include providing further evidence of energy efficiency and decarbonisation potential?	57

Consultation question 12	Number of responses
If so, do you agree that the energy efficiency and decarbonisation reporting should capture potential within the next 6 years on an annual, rolling basis?	54

Summary of stakeholder responses to consultation

- Question 11 received a total of 57 responses.
- The majority of respondents disagreed with the proposal.
- Many respondents who disagreed with the proposal raised concerns on the increased administrative burden, including costs for SMEs.
- Those who agreed with the proposal noted that it would provide valuable information, that could help better decision making on energy efficient measures.
- Some respondents noted that this requirement should be aligned with other schemes such as ESOS, SECR, and ISO50001.
- Some respondents raised concerns around publishing sensitive information
- Respondents also noted that government should be clear on the purpose of the additional reporting.
- Question 12 received a total of 54 responses.
- The majority of respondents disagreed with the proposal.
- About half of the respondents who disagreed with the proposal raised an increased administrative burden on participants as a concern.
- Some respondents stated that government would need to be clear on the justification for requesting this information.
- A few respondents suggested that this proposal could be streamlined with other schemes such as ESOS or BEAS, while others raised concerns that the data provided could show potential that is technically feasible but not commercially viable.

Government response:

Most respondents disagreed with the proposal to extend reporting to include provision of further evidence of energy efficiency and decarbonisation potential and the proposal for this reporting to cover potential within the next 6 years on an annual, rolling basis.

Having considered the concerns raised around the potential cumulative administrative burden on participants of extending reporting to include evidence of energy efficiency and decarbonisation potential, it has been decided not to take this proposal forward.

Participants will be required to report energy and throughput data and to report actions taken during Target Periods to improve energy efficiency (and where appropriate, decarbonisation), as part of the interim and end of TP reporting. Information on energy efficiency and decarbonisation potential should also be collected through the target setting process.

We have noted the issues on administrative costs, sensitive information and streamlining of reporting for those subject to other schemes (such as ESOS and SECR); and will seek to streamline reporting requirements and avoid duplication where possible.

Buy-out

Consultation question 13	Number of responses
Do you agree with the proposed methodology for calculating the buy-out price, including a weighted average between the respective electricity and gas CCL discount per tCO2e?	55

Consultation question 14	Number of responses
Do you agree that the buy-out price should be reviewed ahead of each new target period to account for the potential continued equalisation of the CCL?	56

Consultation position

The consultation proposed to use a formula to calculate the buy-out fee. This formula would use a weighted average between the CCL discount per tCO2e between electricity and gas, in line with changes to the CCL rates for gas and electricity in recent years, which saw them equalised from April 2024. We proposed for the buy-out fee to be reviewed ahead of each new target period in order to account for the potential future decisions on CCL rates, alongside wider macroeconomic conditions.

Summary of stakeholder responses to consultation

- Question 13 received a total of 55 responses.
- A few participants were against the proposed changes as they suggested that it leaves scheme participants vulnerable to signing up to a scheme without knowledge of what the buy-out price per tonne of CO_2 would be if they failed their target.
- Many respondents felt a worked example would be beneficial, with the majority suggesting that there was not enough clarity to be able to agree with the proposal.
- A few respondents expressed that the current buyout methodology is well understood, so increased complexity is unnecessary, with some suggesting that it is already one of the most complex aspects of the scheme and would drive operators away.
- Some participants suggested that buyout should be based on energy and not carbon emissions.
- Question 14 received a total of 56 responses.
- Around half of the respondents disagreed with the proposal that the buy-out price should be reviewed ahead of each new target period to account for the potential continued equalisation of the CCL.

Government response:

Feedback from respondents on the proposed methodology for calculating the buy-out price for the upcoming new scheme is welcomed. As laid out in the consultation, we will continue to use a calculated tCO_2e figure to calculate the buy-out, given that the current method is well understood and can operate for both energy and carbon targets.

The buy-out is intended to incentivise participants to continue implementation of energy efficiency measures while offering a safeguard for participants to maintain their certification for reduced rates of CCL. Consequently, to ensure the continued relevance relative to the value of the CCL, we will move forward with reviewing the buy-out price ahead of each target period, noting that CCL rates have yet to be set out beyond March 2026. This would take a weighted average between the respective value of electricity and gas CCL relief, factoring in any future setting of electricity and gas CCL rates. This buyout price will be published in line with changes to the main and reduced CCL rates.

It is acknowledged that this would create some uncertainty for scheme participants, and the department will communicate this ahead of each Target Period commencing. It is noted that a few respondents consider increased uncertainty would discourage participation in the scheme. However, since the increase of the buy-out price for Target Period 5 of the previous scheme, there has not been a significant change to the number of businesses participating.

Surplus

Consultation question 15	Number of responses
Do you agree with the proposal to allow surplus to be carried forward between Target Periods?	58

Consultation position

The consultation proposed that surplus should be able to be carried across Target Periods for individual Facilities. This would mean that if an individual Facility overperforms in one Target Period, the surplus can be carried forward to the next Target Period to offset any potential underperformance of that facility.

Summary of stakeholder responses to consultation

- Question 15 received a total of 58 responses.
- The majority of respondents agreed with the proposal to allow surplus to be carried forward between target periods.
- Some respondents stated that it is an incentive to continue energy efficient practices and using energy efficient equipment in the future.
- Some respondents suggested that this would make it more cost-effective if extended to between facilities and TUs.
- Some respondents mentioned that it allowed for the reduction of anomalies, and for weather fluctuations faced by their sectors.

Government response:

It has been decided to allow surplus to be carried forward to subsequent target periods in the new CCA Scheme for each facility. It is recognised that this mechanism incentivises investments which often benefit performance early on. Therefore, the Government would like to allow operators to offset any underperformance at a later target period. It is acknowledged that external factors such as weather conditions and exceptional events can impact energy usage for which surplus can be used. However, surplus from the current scheme (including TP6) will not be carried over and any new generated surplus will only be attributed to individual facilities.

Penalties

Consultation question 16	Number of responses
Do you agree with the proposal to keep the current financial penalties for a new CCA scheme?	53

Consultation position

For the recent TP6 scheme extension, we increased the level of financial penalties that may be imposed where there is a failure by an operator to provide information under the relevant legislation, if that information is inaccurate, or if they fail to make any other notification required under the terms of an underlying agreement.

Currently there is a £500 minimum penalty. The penalty for inaccurate information in relation to baselines or reporting for Target Period 6 is to be the greater of £500 or £25/tCO2e in line with the buy-out price.

We proposed to keep the new minimum financial penalty of £500 for a new CCA scheme and update the maximum penalty in line with any changes to the buy-out price.

HMRC may separately apply penalties for tax non-compliance. HMRC penalties were not considered in the consultation.

Summary of stakeholder responses to consultation

- Question 16 received a total of 53 responses.
- The majority of respondents agreed with the proposal to keep the current financial penalties for a new CCA scheme.
- Many respondents expressed support for the discretion of the administrator and right to waive.
- Some respondents commented that genuine errors should be dealt with fairly before fines are imposed.
- A few respondents disagreed, commenting that the £250 seemed fairer or that there should be no penalty at all, some commenting that participants deliberately do not comply and that most are errors which penalties will not prevent or there is no incentive to not comply as the scheme is voluntary.
- There were a few comments requesting a maximum penalty of £500 rather than minimum penalty, as this can lead to uncertainty, particularly for SMEs.
- A few respondents commented that keeping at the current rate provides long-term certainty.

Government response:

Overall, there was strong support from respondents for the proposal to keep the current penalties for a new CCA scheme, including a link to the buy-out price. Therefore, we have decided that we will maintain our proposal to keep the current financial penalties and update the maximum penalty in line with any changes to the buy-out price.

The Environment Agency will continue to have discretion to waive a penalty, impose a lower amount, withdraw an existing penalty, reduce an existing penalty, and extend the time for payment of an existing penalty where they consider it appropriate.

Miscellaneous Elements

Energy Management Systems

In the consultation published in December 2021, there was discussion of making the implementation of an Energy Management (EMS) scheme such as ISO50001 mandatory. These energy management systems enable companies to follow a systematic approach to improve their energy performance and consequently to meet scheme targets.

A few respondents were supportive of mandating the implementation of an EMS and many felt that it was suitable for larger businesses who likely already have one in place. However, the majority of respondents believe an EMS requirement should not be made compulsory for reasons including the difficulty for SMEs and the cost impact. A few suggested incentivising this requirement through increased CCL discount or making this a route into the scheme for those not in an eligible sector.

As stated in the consultation published in November 2023, views have been considered and evidence received in response to the consultation published in December 2021 and it is not proposed to make the implementation of an EMS mandatory. The Government does however continue to recommend implementation of EMS, including ISO50001 and ISO50005 (with the latter allowing a phased approach to implementation that may be particularly appropriate for SMEs).

Administrative changes

Consultation question 17	**Number of responses**
Beyond the proposals listed above, are there any other reforms / changes you would recommend for this new scheme?	50

Summary of stakeholder responses to consultation

- Question 17 received a total of 51 responses
- A few respondents expressed concerns about the removal of bubbling, noting that it would increase the administrative burden for facilities and the number of buy-outs. A few respondents suggested that facilities that are already ‘bubbled’ should be given the opportunity to remain ‘bubbled’.
- A few respondents commented on the move to NOVEM targets, noting that there will be an increased administrative burden for sectors and facilities. Respondents noted that operators are at a disadvantage when proposing a Novem target type because of a lack of sub-metering. A few respondents requested further clarity on the proposed methodology.
- Some respondents raised concerns for operators who have transferred production to newly built greenfield sites to improve energy efficiency. It was noted that applying as a new entrant may put them at a disadvantage to other operators.
- Some respondents expressed reservations about the inclusion of UK ETS energy. It was noted that the inclusion may increase the administrative burden on operators, with a risk of double-counting.
- A few respondents expressed concerns for SMEs and the potential of increased admin burden.
- A few respondents noted their intention to apply for additional sector eligibility.

Government response:

Thank you to respondents for the suggested reforms/changes for the new, 6-year scheme.

Many of the responses to this question were to respond to proposals outlined in the consultation document that we did not ask questions on. These policies are set out again elsewhere in this document.

Timing

Consultation question 18	Number of responses
Please provide any comments on the timeline set out above.	48

Consultation position

We provided an indicative view of the proposed next steps and timings, updated since the publication of the consultation. This continues to be subject to change.

Summary of stakeholder responses to consultation

- Question 18 received a total of 40 responses.
- The majority of respondents commented that the timings were tight or unreasonable.
- Some raised concerns of activities over the summer period, some mentioning that the Scottish school holidays begin before those in England/Wales.
- Some also commented that 2024 coincides with ESOS reporting and ETS reporting, so those months should be avoided for CCA activities if possible.
- Some respondents commented that more clarity is needed on some of the proposals so they can understand how this might impact timings.
- A few respondents also requested an update on timings and for stakeholders to be kept up to date with any changes to timelines or the scheme.
- Some respondents raised concerns regarding the general election and how this would impact timings, but some did state they understand this is hard to plan for.
- A few respondents felt the timeline was reasonable. A few commented that it might be reasonable but need further details as to what the data collection exercise involves.

Government response:

Feedback from respondents on the proposed timeline for implementing the new CCA scheme is welcomed. Many respondents raised concerns about the time available and the potential challenges it raised, particularly when considering data collection exercises and the target setting process.

Since the consultation has closed, it has become clear that more time is necessary for Government and business to implement the proposed changes to the CCA scheme. It has therefore been decided to delay the start date of the first Target Period by 12 months, and that the new CCA scheme will begin for existing sectors on 1 January 2026. The end of the first Target Period will remain as 31 December 2026 and the certification period will begin on 1 July 2027

We have updated the indicative timeline accordingly which is set out below.

Action	Date
Consultation closed	14 February 2024

Government response published	October 2024
Data collection and target setting process letters sent to sector associations	November 2024
Data collection exercise begins	November 2024
Contact sectors/processes who have expressed an interest in joining the scheme	Autumn 2024
Applications for new entrants in existing sectors open	01 May 2025 to 31 August 2025
Government to send target offer letters to sector associations	June 2025
New Sectors to provide 2022 baseline data to the EA	June 2025
Department for Energy Security & Net Zero issue final target offers to sectors & instruct the Environment Agency to prepare agreements	30 September 2025
Sector associations distribute targets amongst participants for agreement with the Environment Agency	October 2025
New umbrella and underlying agreements issued to existing eligible sectors and assented	November 2025
Legislation providing for the new scheme for existing sectors to be in force	December 2025
Amendments to legislation to allow new sectors to enter the scheme to be in force	Spring 2026
New sectors to join the scheme (*timings are subject to legislative requirements)*	From January 2027

Annex A- The relationship between throughput and energy consumption

The relationship between energy consumption in a facility can be very complex and difficult to determine. However, consideration of a simple case can be used to identify key elements of the relationship that are most important to include in the measurement of performance improvement that is attributable to improved energy efficiency.

Figure 2 illustrates a typical relationship between energy consumption and throughput for a facility producing a single consistent product. The relationship includes:

- Fixed energy consumption which is not a function of the Facility's production activity.
- Variable energy consumption which depends on production activity.

The viable range of production would depend on the processes and facility capacity. The viable range may be small if for instance the production equipment is designed to run continuously at an optimum rate, or the viable range may be significant if for instance production is batched depending on orders placed. The slope of the curve may vary for various reasons, but a typical trend may be that energy efficiency improves up to the optimum production rate and then declines again. Non-viable low production would be the range over which it is not economically worth running the production equipment, not just in terms of energy consumption but other factors such as staff costs.

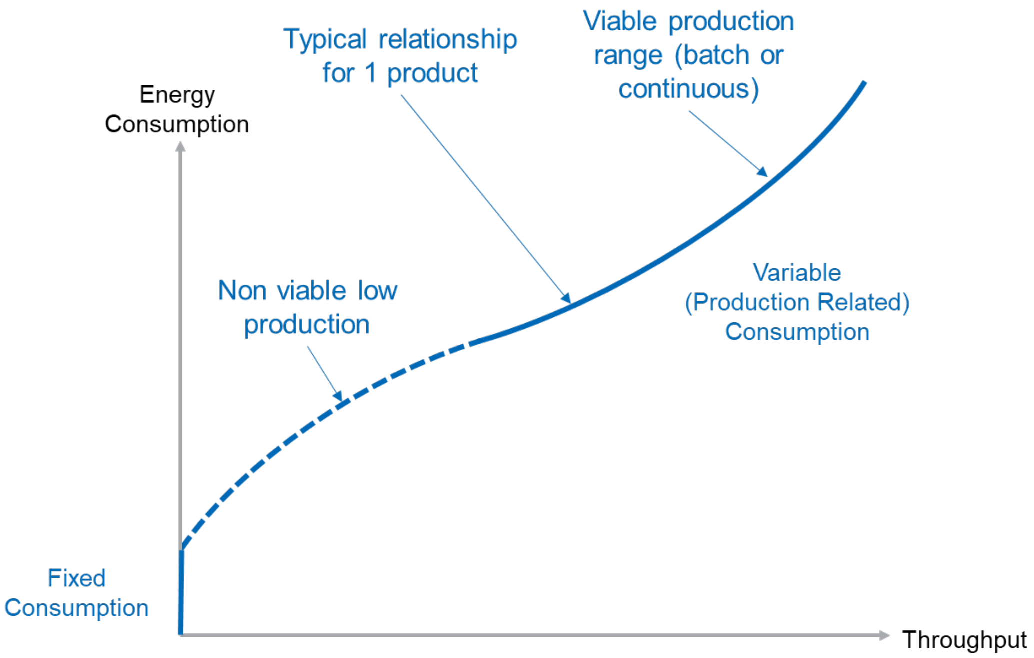


Figure 2 Typical relationship between energy consumption and throughput

In practice establishing such a detailed relationship over a range of production may be impractical and could be subject to variability depending on many factors: the equipment condition, staff experience, environmental conditions etc. However, the baseline relationship between energy consumption and throughput can reasonably be described by the amount of fixed energy consumption and the slope of the curve around the optimum production rate. Figure 3 shows this baseline relationship as the Fixed Energy Consumption (FEC) + the Baseline Variable Energy Consumption (VEC).

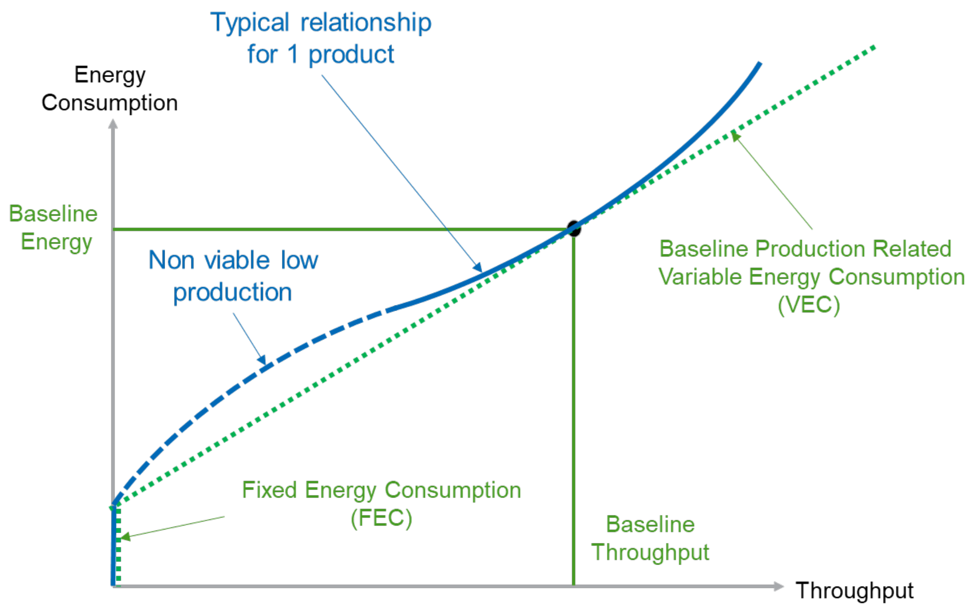


Figure 3 Baseline relationship between energy consumption and throughput

The difference between this baseline relationship and the actual relationship is due the effect of productivity on energy efficiency. Figure 4 illustrates that if productivity was optimal for the baseline and productivity subsequently dropped or increased in a Target Period then the Target Period VEC may increase indicating a reduction in energy efficiency. Essentially a change in performance between the baseline and a subsequent Target Period may include a contribution arising from a change in productivity. This seems reasonable – effectively it is incentivising optimum utilisation of Facilities as a contribution to energy efficiency improvement. If the baseline is based on low or high productivity, then an apparent energy efficiency improvement in a Target Period could be gained simply by shifting to optimum production but again this seems like a reasonable improvement to incentivise.

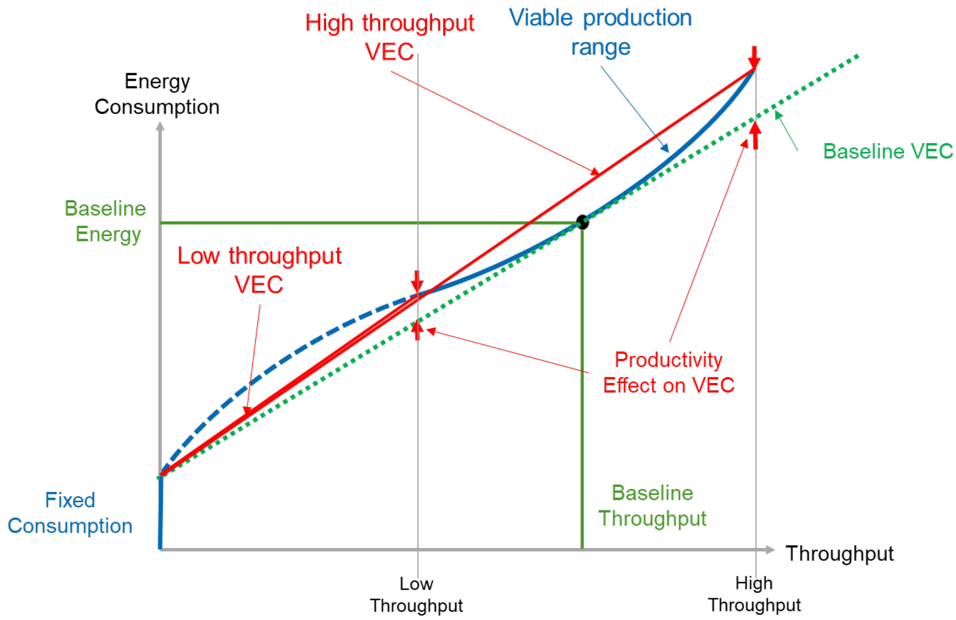


Figure 4 Productivity effect on performance

The current CCA scheme does not describe the baseline relationship between energy consumption and throughput in terms of FEC and throughput related VEC. It measures performance in terms of Specific Energy Consumption (SEC) alone (Relative energy targeting) or in terms of Total Energy Consumption (TEC) alone (Absolute energy targeting). This introduces a significant mathematical error in the measurement of performance as demonstrated below.

Fixed Energy Effect (Facilities with Relative Targets)

Figure 5 compares the measurement of performance using FEC and VEC against the measurement of performance using SEC.

If throughput in a Target Period increases relative to the baseline SEC an apparent 'mathematical' performance improvement is generated.

If throughput in a Target Period decreases relative to the baseline SEC an apparent 'mathematical' performance decline is generated.

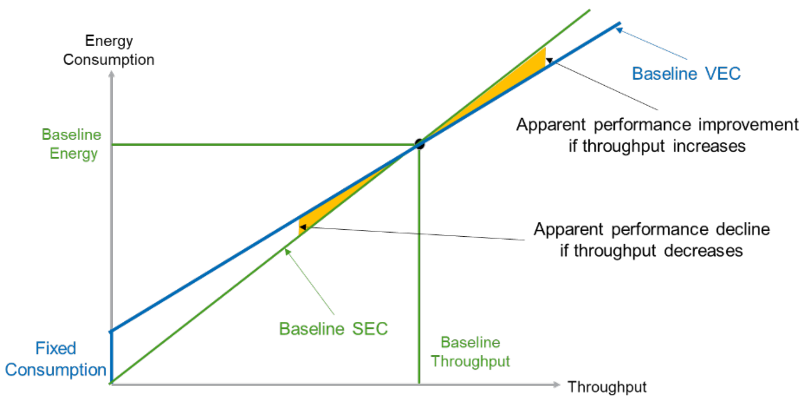
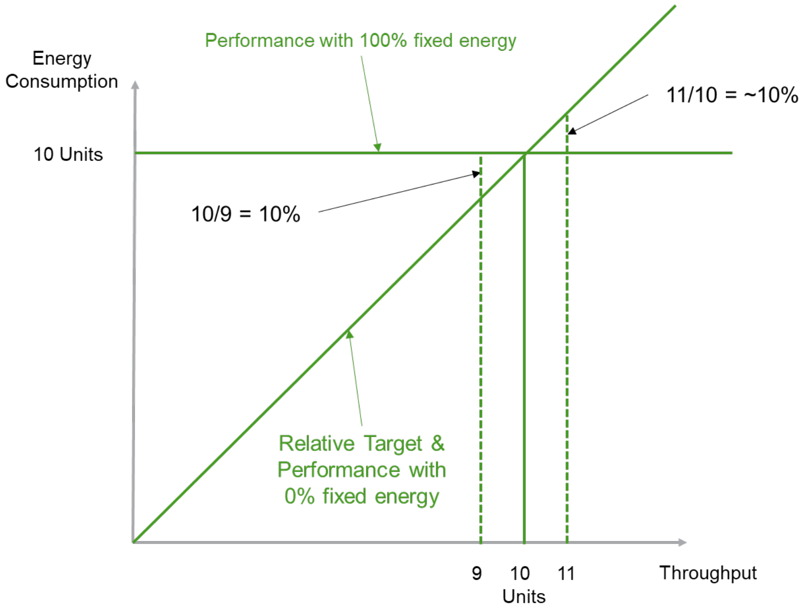


Figure 5 The effect of fixed energy consumption for a relative energy target

This mathematical effect occurs irrespective of whether energy efficiency measures have been implemented and it can be significant compared with the performance improvement target. Figure 6 illustrates the effect if a facility assigned a Relative Target has 0% or 100% FEC and there is a change in Target Period throughput of 90% or 110% relative to the Base Year.



Fixed Energy	Relative target
0% (Relative Performance)	90% Throughput 0% Apparent Improvement in Performance
	100% Throughput 0% Apparent Improvement in Performance
100% (Absolute Performance)	90% Throughput 10/9 = 10% Apparent Decline in Performance
	110% Throughput 10/11 = ~10% Apparent Improvement in performance

Figure 6 Illustration of effect for Facility with a Relative Target

It would be an extreme case if a facility with 100% FEC was given a Relative Target. However, the apparent performance improvement if there is a change in Target Period throughput of

90% or 110% relative to the Base Year can be calculated for small percentages of FEC. The results are:

Fixed energy %	Apparent performance improvement at 90% of Base Year Throughput	Apparent performance improvement at 110% of Base Year Throughput
5%	-0.55%	0.46%
10%	-1.10%	0.92%
20%	-2.17%	1.85%

The significance of this effect depends on the Sector Target. Some Sectors have had a fairly small % target over 4 Target Periods, for instance around 5% improvement and so the effect of fixed energy consumption can easily be significant compared with the target improvement in one Target Period.

Since this mathematical effect can overwhelm performance improvement that can be attributed to energy efficiency measures we would be minded to remove it in any new potential CCA scheme by measuring performance in terms of FEC and VEC.

Fixed Energy Effect (Facilities with Absolute Targets)

Essentially a similar mathematical effect applies for facilities with an Absolute Target where performance is measured relative to the baseline TEC.

Figure 5 compares the measurement of performance using FEC and VEC against the measurement of performance using the TEC.

If throughput in a Target Period decreases relative to the baseline TEC an apparent ‘mathematical’ performance improvement is generated.

If throughput in a Target Period increases relative to the baseline TEC an apparent ‘mathematical’ performance decline is generated.

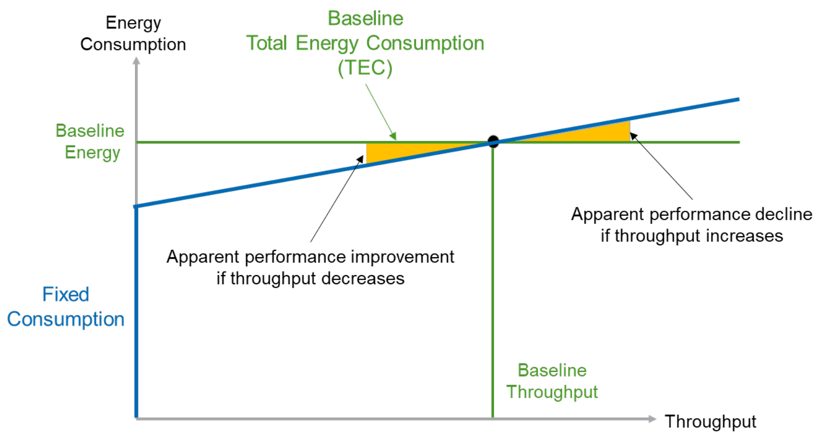
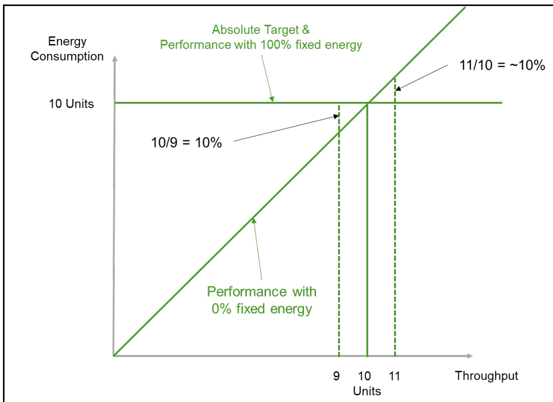


Figure 5 The effect of throughput for an Absolute Energy Target

Measuring performance relative to the Base Year energy consumption (or carbon emissions) is only suitable if there is a very high proportion of fixed energy (for instance in a facility that must run major plant continuously) or if throughput is very stable. The apparent improvement in performance with decreased throughput does not represent an improvement in energy efficiency and is not economically sensible as the fixed energy is being consumed for less purpose. The CCA scheme limits the reduction in throughput to 10% before an absolute target is adjusted via a 'taper' to reset it to a relative target.

This mathematical effect occurs irrespective of whether energy efficiency measures have been implemented and it can be significant compared with the performance improvement target. Figure 6 illustrates the effect if a facility assigned an Absolute Target has 0% or 100% FEC and there is a change in Target Period throughput of 90% or 110% relative to the Base Year.



Fixed Energy	Absolute Target
0% (Relative Performance)	90% Throughput 9/10 = 10% Apparent Improvement in performance
	110% Throughput 11/10 = ~10% Apparent Decline in Performance
100%	90% Throughput

	(Absolute Performance)	0% Apparent Improvement in Performance
		110% Throughput 0% Apparent Improvement in Performance

Figure 5 Illustration of effect for Facility with an Absolute Target

The apparent performance improvement if there is a change in Target Period throughput of 90% or 110% relative to the Base Year can be calculated for small percentages of Fixed Energy Consumption. The results are:

Fixed energy %	Apparent performance improvement at 90% of Base Year Throughput	Apparent performance improvement at 110% of Base Year Throughput
80%	2.00%	-2.00%

Fixed Energy Effect (Facilities with Novem Targets)

Facilities that use the Novem method currently experience a similar mathematical error in performance measurement as they use SECs. The error is however more complex and depends on the change in throughput for each of the products.

Currently when there is more than one product each will have its own SEC which has to incorporate a proportion of the FEC to satisfy the rule that SEC1 x Production1 + SEC2 x Production2 +etc = TEC.

When a new Novem product is introduced at a facility an element of fixed energy consumption must be assigned to it. This is to account for the situation where the new product replaces an existing one. If an existing product is no longer produced the fixed energy consumption assigned to it effectively disappears. This assignment of fixed energy consumption has always been a fudge in the use of Novem which can mean it is not possible to satisfy the rule that SEC1 x Production1 + SEC2 x Production2 +etc = TEC. The effect of fixed energy consumption cannot be completely ignored and yet the way it has been handled has not been mathematically robust.

Adapting the Novem method

A method for measuring performance using both FEC and VEC is needed to remove the mathematical error that the current assessment in terms of SEC or TEC causes. This method also needs to be able to handle more complex relationships between energy consumption and throughput that arise when a facility produces products with significantly different VECs.

The Novem method can easily be adapted to use FEC and VECs and in fact the inclusion of FEC will remove the issues caused by assigning fixed energy consumption to SECs.

This adaptation requires the estimation of baseline FEC and the VECs for facilities. These can be determined by slightly modifying the methods established for determining baseline SECs:

- Sub-meter and product run data:

  This can give the true variable energy consumption for a product as it may exclude fixed energy consumed at the facility. Under the current scheme the fixed energy must be apportioned to the products to try to meet the requirement that the SEC1 x Production1 + SEC2 x Production2 +… = TEC.

- A multi-regression analysis of monthly/weekly/ daily TEC against production data.

  This has been used to determine the product SECs, 'automatically' assigning fixed energy to each product. However, it may be adapted to determine and deduct the FEC from the total energy (Y axis intercept) and assess the VEC for each product.

In addition, the FEC may be determined:

- Using meter readings taken during periods when the facility is ready to produce but production lines have not started.
- Using an estimation method not unlike the way ineligible energy is estimated in a 70/30 assessment.
- Using bespoke analysis for more complex facilities that are supported by an energy manager and particularly if they are complying with ISO 50001, for which a key element is monitoring and measuring.

The adaption required to the Novem method to account for FEC and VEC(s) is simply to include the FEC as a 'no production change' product in the Novem reporting template. Figure 6 shows this adaptation with some example data.

The titles in this column has been adjusted to cover VECs

This column has been adapted to account for the FEC

These column remain the same but the data input is based on VECs

	Product	Fixed Energy (No Product)	Product A	Product B	
Base Line Performance (for 1 year)	Was this a product in the base year?	Yes	Yes	Yes	Please select
	Production t0		600.000	400.000	
	$Energy_0$ (Equivalent energy of product in TU base year)	10,000.000	45,000.000	45,000.000	
	VEC_0		75.000	112.500	0.000
TP Target in agreement (for 2 years)	TP Target %	5.000%	5.000%	5.000%	
	Production t0 x2		1,200.000	800.000	0.000
	$Energy_n$	19,000.000	85,500.000	85,500.000	0.000
	VEC_n		71.250	106.875	0.000
Actual TP Performance	Production tN		400.000	400.000	
Target energy at target period throughput	VEC_n*t_N (E)	19,000.000	28,500.000	42,750.000	0.000
Base year energy at target period throughput	VEC_0*t_N (F)	20,000.000	30,000.000	45,000.000	0.000

Figure 7 Adapted Novem Method for measurement performance using FEC and VEC(s).

The adaptation works with one VEC or multiple VECs, however, the FEC (No Product) column and a VEC column will always be needed. This means all facilities would need to use the adapted Novem method at least in its simplest form for FEC and a single VEC. However, a very significant benefit of moving to this approach is that Novem would be the only Target type needed in the new scheme. The method works the same and gives exactly the same results as for a Relative Target type if FEC is zero (FEC 0%) and gives exactly the same results as for an Absolute Target type if FEC is equivalent to the TEC (FEC 100%). If a new product needs to be introduced the existing functionality in the reporting template will work and because it would have a VEC there would be no issue around reapportionment of the FEC. It will always be possible to satisfy the rule FEC+ VEC1 x Production1 + VEC2 x Production2 +etc = TEC.

In the current CCA scheme Novem for multiple products has not been widely used as it has been thought too complex. However, its use has been encouraged and would achieve fairer results for many facilities where the products produced have a range of energy intensity. Various bespoke ‘historical’ throughput accounting methods have been used across several Sectors and it would be much better to replace these with Novem VECs.

The current Novem reporting template can be modified to make its use much simpler. Furthermore, it may be the only reporting template that would be needed, the separate templates for Relative and Absolute Target types would not be needed as these target types would not be needed.

Annex B- Consultation Questions

1. Do you agree with the proposal to allow new entrants to the scheme at any time?
2. Do you agree that new entrants should complete a Target Period before receiving certification for reduced rates of CCL?
3. What are the potential impacts of the proposal that operators should make an annual confirmation to the scheme reporting that their facilities remain compliant with the threshold?
4. Do you agree with the proposal to gather data at a facility level to inform target setting?
5. Do you agree with the proposal that the proposed data gathering exercise be conducted prior to any target setting process?
6. Can you provide suggestions on how to reduce potential administrative costs of this approach?
7. Do you agree that 2022 should be used as the baseline year for the new scheme?
8. If you believe the baseline year should be revisited, which year should be used and why?
9. Do you agree that the primary electricity factor should be updated before each Target Period?
10. What would be the impact of updating the primary electricity factor before each Target Period?
11. Do you agree with the proposal to extend reporting to include providing further evidence of energy efficiency and decarbonisation potential?
12. If so, do you agree that the energy efficiency and decarbonisation reporting should capture potential within the next 6 years on an annual, rolling basis?
13. Do you agree with the proposed methodology for calculating the buy-out price, including a weighted average between the respective electricity and gas CCL discount per tCO_2e?
14. Do you agree that the buy-out price should be reviewed ahead of each new target period to account for the potential continued equalisation of the CCL?
15. Do you agree with the proposal to allow surplus to be carried forward between Target Periods?

16. Do you agree with the proposal to keep the current financial penalties for a new CCA scheme?

17. Beyond the proposals listed above, are there any other reforms / changes you would recommend for this new scheme?

18. Please provide any comments on the timeline set out above.

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