

Biogenic CEMS Requirements

(Waste ICC Rider)

[Note: this document is intended to be incorporated into the full form Waste ICC Contract once published and, until such time, to be read alongside the other provisions of the 'generic' ICC Contract (as published in parallel with this document) and the other Waste ICC riders (as published in July 2022).]

The draft provisions contained herein do not constitute definitive drafting of the Waste ICC Contract's terms. A number of the provisions and terms which require particular consideration and development have been square bracketed (with footnotes) and other consequential amendments to the 'generic' ICC Contract will be required to reflect the positions set out in this rider. BEIS reserves the right to review and amend these square bracketed provisions, and all other provisions to be set out in the Waste ICC Contract.

This draft rider does not indicate any willingness or agreement on the part of BEIS to enter into, or arrange entry into, the Waste ICC Contract. This rider does not constitute an offer and is not capable of acceptance.]

PART 1

(INTRODUCTION)

Definitions

The following Definitions shall be inserted in Condition 1.1:

"Applicable Emissions Percentage" means, in relation to each FE Calculation Month, the Facility FE Multiplier, unless a Carbon Pricing Phase-In Exemption is in effect on the first day of the relevant FE Calculation Month, in which case the "Applicable Emissions Percentage" for that FE Calculation Month shall be the Exempted Facility FE Multiplier as calculated in accordance with Condition [X];

"Carbon Pricing Phase-In Exemption" means any exemption under the UK Emission Trading Scheme (or any new UK emissions trading scheme) under which the Carbon Reference Price is determined, which is identified by the Waste ICC Contract Counterparty during the Initial CRP Principles Review and which results in fossil CO₂ emissions (or a proportion thereof) being exempt from surrendering obligations¹;

"Carbon Reference Price" has the meaning given to that term in paragraph 1.1 of Annex 6[A] (*Initial Carbon Reference Price Review*);

"Initial CRP Principles Review" has the meaning given to that term in paragraph 1.1 of Annex 6[A] (*Initial Carbon Reference Price Review*);

"Opex FE Adjustment Amount" means an amount (*expressed in pounds (£)*) in respect of a FE Calculation Month calculated by the Waste ICC Contract Counterparty in accordance with Condition [Y] (*Calculation of Opex FE Adjustment Amount*); and

"UK Emission Trading Scheme" has the meaning given to that term in paragraph 1.1 of Annex 6[A] (*Initial Carbon Reference Price Review*).

¹ Note to Reader: minor amendments to the 'Initial Carbon Reference Price Review' rider published by BEIS in July 2022 will be required to clarify that the Carbon Pricing Phase-In Exemption will be determined as part of the Initial CRP Principles Review.

PART 4**(PAYMENT CALCULATIONS)**

The following two Conditions shall be inserted in Part 4 (Payment Calculations)²:

New Condition [X]: Exempted Facility FE Multiplier

The "**Exempted Facility FE Multiplier**" (*expressed as a percentage (%)*) in each FE Calculation Month shall be calculated as follows:

$$EFFEM = FFEM \times EP$$

where:

<i>EFFEM</i>	=	the Exempted Facility FE Multiplier (<i>expressed as a percentage (%)</i>);
<i>FFEM</i>	=	the Facility FE Multiplier in respect of that FE Calculation Month (<i>expressed as a percentage (%)</i>); and
<i>EP</i>	=	the percentage of fossil CO ₂ emissions which are not subject to a Carbon Pricing Phase-In Exemption (<i>expressed as a percentage (%)</i>).

New Condition [Y]: Calculation of Opex FE Adjustment Amount

If an adjustment to the Facility FE Multiplier for a FE Calculation Month is calculated by the Waste ICC Contract Counterparty in accordance with paragraphs 3.1 and 3.2 (*Initial Recalculations*) of Part C of Annex [●] (*Biogenic CEMS Requirements*) and/or paragraphs 4.1 to 4.3 (*Final Recalculations*) of Part C of Annex [●] (*Biogenic CEMS Requirements*):

- (a) the Waste ICC Contract Counterparty shall recalculate the Applicable Emissions Percentage for that FE Calculation Month;
- (b) the difference between the original Applicable Emissions Percentage for that FE Calculation Month and the adjusted Applicable Emissions Percentage for that FE Calculation Month shall be used by the Waste ICC Contract Counterparty to recalculate the Monthly Opex Payment for that FE Calculation Month;
- (c) any adjustment to the Monthly Opex Payment for that FE Calculation Month shall be treated as and shall constitute an Opex FE Adjustment Amount; and
- (d) such Opex FE Adjustment Amount shall be included in the Opex Payment Billing Statement which is next issued by the Waste ICC Contract Counterparty.

² Note to Reader: other minor, consequential amendments will be required to the full form Waste ICC Contract to reflect the content of this rider, including in relation to the Billing provisions.

ANNEX [●]

BIOGENIC CEMS REQUIREMENTS

1. DEFINITIONS: ANNEX [●]

1.1 In this Annex [●] (*Biogenic CEMS Requirements*):

"Biogenic CEMS" means the continuous emissions monitoring system used to sample the percentage of Biogenic CO₂ Emissions in accordance with the Biogenic CEMS Technical Specification;

"Biogenic CEMS Audit Notice" has the meaning given to that term in paragraph 2.2 (*Scope of Biogenic CEMS Audit Right*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Audit Right" has the meaning given to that term in paragraph 2.1 (*Scope of Biogenic CEMS Audit Right*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Breach Notice" has the meaning given to that term in paragraph 2.6 (*Notification of Biogenic CEMS Undertaking breach*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Breach Response Notice" has the meaning given to that term in paragraph 2.7 (*Response to notification of Biogenic CEMS Undertaking breach*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Breach Response Notice Period" has the meaning given to that term in paragraph 2.7 (*Response to notification of Biogenic CEMS Undertaking breach*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Data" means, in relation to each Biogenic CEMS:

- (a) the Biogenic CEMS Report; and
- (b) the Biogenic CEMS Meta-Data,

required to be delivered to the Waste ICC Contract Counterparty in accordance with this Annex [●] (*Biogenic CEMS Requirements*) and the Biogenic CEMS Technical Specification;

"Biogenic CEMS Data Threshold" has the meaning given to that term in the Biogenic CEMS Technical Specification³;

"Biogenic CEMS Fees" means, in respect of each Biogenic CEMS, the following amounts payable by the Emitter to the Waste ICC Contract Counterparty pursuant to paragraph 1.1 (*Payment of Biogenic CEMS Fees*) of Part B (*Payment of Biogenic CEMS Fees*)⁴:

- (a) if a Biogenic CEMS Fees Trigger has occurred on a single occasion within the twelve (12) Month period ending on the last day of the Pre-Implementation Date Month or FE Calculation Month (as applicable) with respect to which the Biogenic CEMS Fees are payable, the sum of [one] thousand pounds sterling (£[1000]);
- (b) if a Biogenic CEMS Fees Trigger has occurred in two (2) different Months within the twelve (12) Month period ending on the last day of the Pre-Implementation Date

³ Note to Reader: while the Biogenic CEMS Technical Specification will set out the specific circumstances in which the Biogenic CEMS Data Threshold will not be satisfied, BEIS' minded-to-position is to require that each Biogenic CO₂ CEMS has [95%] of representative sampling data available for a Month in order for the overall monthly biogenic and fossil figure to be considered representative of the monthly biogenic / fossil split in the CO₂ captured. This percentage will only be measured in periods during which waste is being processed and CO₂ is being produced.

⁴ Note to Reader: the quantum of the Biogenic CEMS Fees remains subject to further consideration by BEIS.

Month or FE Calculation Month (as applicable) with respect to which the Biogenic CEMS Fees are payable, the sum of [two] thousand pounds sterling (£[2000]);

- (c) if a Biogenic CEMS Fees Trigger has occurred in three (3) different Months within the twelve (12) Month period ending on the last day of the Pre-Implementation Date Month or FE Calculation Month (as applicable) with respect to which the Biogenic CEMS Fees are payable, the sum of [four] thousand pounds sterling (£[4000]);
- (d) if a Biogenic CEMS Fees Trigger has occurred in four (4) different Months within the twelve (12) Month period ending on the last day of the Pre-Implementation Date Month or FE Calculation Month (as applicable) with respect to which the Biogenic CEMS Fees are payable, the sum of [six] thousand pounds sterling (£[6000]); and
- (e) if a Biogenic CEMS Fees Trigger has occurred in five (5) or more different Months within the twelve (12) Month period ending on the last day of the Pre-Implementation Date Month or FE Calculation Month (as applicable) with respect to which the Biogenic CEMS Fees are payable, the sum of [eight] thousand pounds sterling (£[8000]);

"Biogenic CEMS Fees Trigger" means, in respect of each Biogenic CEMS, the occurrence of any of the following events during a Pre-Implementation Date Month or FE Calculation Month (as applicable):

- (a) the Waste ICC Contract Counterparty determines that the Biogenic CEMS Data Threshold is not satisfied;
- (b) the Emitter fails to provide the Waste ICC Contract Counterparty with the Biogenic CEMS Data on or before the relevant FE Submission Deadline; and/or
- (c) [the Emitter is in breach of any Biogenic CEMS Undertaking]⁵;

"Biogenic CEMS Information Termination Event" has the meaning given to that term in paragraph 1.5 (*Biogenic CEMS Information Termination Event*) of Part A (*Emitter Undertakings*);

"Biogenic CEMS Meta-Data" means the Biogenic CEMS meta-data and other Supporting Information which the Emitter is required to provide to the Waste ICC Contract Counterparty in accordance with this Annex [●] (*Biogenic CEMS Requirements*) and the Biogenic CEMS Technical Specification⁶;

"Biogenic CEMS Purposes" means enabling and assisting the Waste ICC Contract Counterparty (including by way of audit, check, examination, inspection or stocktake) to:

- (a) calculate the CEMS FE Multiplier and the Facility FE Multiplier; and
- (b) confirm that all Biogenic CEMS Data used for the purposes of calculating the CEMS FE Multiplier and the Facility FE Multiplier is accurate, complete and not misleading,

in order to assess whether the Emitter has complied with the Biogenic CEMS Undertakings, the Biogenic CEMS Technical Specification and this Annex [●] (*Biogenic CEMS Requirements*);

⁵ Note to Reader: the Biogenic CEMS Fees Trigger set out in paragraph (c) remains subject to further consideration by BEIS, pending finalisation of the Biogenic CEMS Technical Specification.

⁶ Note to Reader: this Biogenic Meta-Data will be used by the Waste ICC Contract Counterparty to determine whether the Biogenic CEMS Data Threshold has been satisfied and to ensure access to other relevant information, e.g. on what day and at what time the Biogenic CEMS Data was recorded; evidence that the sample was taken successfully etc. The detail of the Biogenic Meta-Data to be provided by the Emitter will be set out in the Biogenic CEMS Technical Specification.

"Biogenic CEMS Remediation Plan" means a plan developed by the Emitter setting out appropriate milestones and actions to be taken to remedy a breach of a Biogenic CEMS Undertaking which is consistent with its obligations pursuant to this Annex [●] (*Biogenic CEMS Requirements*) and the Biogenic CEMS Technical Specification;

"Biogenic CEMS Report" means the accredited laboratory report relating to a Biogenic CEMS which is to be supplied to the Waste ICC Contract Counterparty on a monthly basis in accordance with paragraph 1.2 (*Provision of Biogenic CEMS Report*) of Part A (*Emitter Undertakings*) and the Biogenic CEMS Technical Specification;

"Biogenic CEMS Technical Specification" means the technical specification set out in Annex [●];

"Biogenic CEMS Undertakings" means any of the Emitter's undertakings set out in paragraph 1.1 (*Undertakings: Biogenic CEMS Obligations*) and paragraphs 1.2 to 1.4 (*Provisions of Biogenic CEMS Reports*) of Part A (*Emitter Undertakings*);

"Biogenic CO₂ Emissions" means the biogenic CO₂ content of the emissions released from the processing of organic materials (or part organic from waste) at the Waste Installation;

"Biogenic CO₂ Emissions Multiplier" means, in respect of a Biogenic CEMS, the percentage of Biogenic CO₂ Emissions (as a proportion of all CO₂ emissions accounted for by that Biogenic CEMS) set out in the relevant Biogenic CEMS Report for that Biogenic CEMS (disregarding any margin of error set out in the Biogenic CEMS Report)⁷;

"CEMS FE Multiplier" has the meaning given to that term in paragraph 1.1 (*Introduction*) of Part C (*Fossil CO₂ Emissions Calculation Methodology*);

"Early Recalculation Notice" has the meaning given to that term in paragraph 5.1 (*Early Recalculation Notice*) of Part C (*Fossil CO₂ Emissions Calculation Methodology*);

"Facility FE Multiplier" has the meaning given to that term in paragraph 1.2 or 1.3 (as applicable) (*Introduction*) of Part C (*Fossil CO₂ Emissions Calculation Methodology*);

"FE Calculation Month" means, on and from the Initial CRP Principles Review Implementation Date, each Month for which the Facility FE Multiplier (including any CEMS FE Multiplier) is required to be calculated except that:

- (a) the first (1st) FE Calculation Month shall commence on the Initial CRP Principles Review Implementation Date and end on the last day of the Month in which the Initial CRP Principles Review Implementation Date occurs; and
- (b) the last FE Calculation Month shall commence on the first day of the last Month of the Opex Payment Period and end on the last day of the Opex Payment Period;

"FE Formula" means the following formula:

$$CFEM = 100\% - BEM$$

where:

CFEM = the CEMS FE Multiplier (expressed as a percentage (%)); and

BEM = the Biogenic CO₂ Emissions Multiplier (expressed as a percentage (%)).

⁷ Note to Reader: BEIS is considering whether to set out in the Biogenic CEMS Technical Specification a limit on the acceptable margin of error.

"FE Submission Deadline" means, in relation to:

- (a) each Pre-Implementation Date Month, the final Business Day of the third (3rd) Month falling after such Pre-Implementation Date Month; and
- (b) each FE Calculation Month, the final Business Day of the third (3rd) Month falling after such FE Calculation Month;

"Final Recalculation" means the recalculation of the Facility FE Multiplier (and any CEMS FE Multiplier) for a Pre-Implementation Date Month or a FE Calculation Month (as applicable) performed by the Waste ICC Contract Counterparty in accordance with paragraphs 4.1 to 4.3 (*Final Recalculations*) of Part C (*Fossil CO₂ Emissions Calculation Methodology*);

"Initial Recalculation" means the recalculation of the Facility FE Multiplier (and any CEMS FE Multiplier) for a Pre-Implementation Date Month or a FE Calculation Month (as applicable) performed by the Waste ICC Contract Counterparty in accordance with paragraphs 3.1 and 3.2 (*Initial Recalculations*) of Part C (*Fossil CO₂ Emissions Calculation Methodology*);

"Longstop FE Submission Deadline" means, in relation to:

- (a) each Pre-Implementation Date Month, the final Business Day of the sixth (6th) Month falling after such Pre-Implementation Date Month; and
- (b) each FE Calculation Month, the final Business Day of the sixth (6th) Month falling after such FE Calculation Month; and

"Pre-Implementation Date Month" means, on and from the Start Date, each Month for which the Facility FE Multiplier (including any CEMS FE Multiplier) is required to be calculated except that:

- (a) the first (1st) Pre-Implementation Date Month shall commence on the Start Date and end on the last day of the Month in which the Start Date occurs; and
- (b) the last Pre-Implementation Date Month shall commence on the first day of the Month in which the Initial CRP Principles Review Implementation Date occurs and end on the date prior to the CRP Principles Review Implementation Date.⁸

⁸ Note to Reader: BEIS is considering how a calculation will be carried out in a Month in which a Pre-Implementation Date Month concludes and a FE Calculation Month commences. This rider may be amended as a result.

Part A

Emitter Undertakings

1. EMITTER'S UNDERTAKINGS

Undertakings: Biogenic CEMS Obligation

- 1.1 With effect from the Start Date, the Emitter undertakes to the Waste ICC Contract Counterparty to:
- (a) at all times comply with the requirements set out in the Biogenic CEMS Technical Specification;
 - (b) ensure that at all times each Biogenic CEMS relating to the Waste Installation:
 - (i) is installed, configured, registered, operated and maintained in accordance with the requirements of the Biogenic CEMS Technical Specification;
 - (ii) is configured exclusively in relation to the Waste Installation and no biogenic CO₂ emissions generated by any other installation are measured through such Biogenic CEMS; and
 - (iii) is operational and capable of measuring accurately the Biogenic CO₂ Emissions from the Waste Installation at the location(s) prescribed in the schematic diagram provided by the Emitter in accordance with paragraph [#](B) of Part B (*Operational Conditions Precedent*) of Annex 1 (*Conditions Precedent*);
 - (c) promptly investigate any fault or issue with a Biogenic CEMS which it becomes aware of or is notified of by the Waste ICC Contract Counterparty, or which it is otherwise required to investigate pursuant to the Biogenic CEMS Technical Specification; and
 - (d) ensure that the Waste ICC Contract Counterparty has full access to all Information from a Biogenic CEMS specified in the Biogenic CEMS Technical Specification⁹.

Provision of Biogenic CEMS Report

- 1.2 With effect from the Start Date, the Emitter shall submit to the Waste ICC Contract Counterparty, in respect of each Pre-Implementation Date Month and each FE Calculation Month, the Biogenic CEMS Data in relation to each Biogenic CEMS no later than the relevant FE Submission Deadline (or procure that the Biogenic CEMS Data in relation to each Biogenic CEMS is submitted)¹⁰.
- 1.3 With effect from the Start Date, the Emitter shall provide the Waste ICC Contract Counterparty with all Information requested by the Waste ICC Contract Counterparty (to the extent not already provided by the Emitter in accordance with paragraph 1.2) to fulfil the Biogenic CEMS Purposes, such Information to be provided as soon as reasonably practicable, and in any event no later than ten (10) Business Days, or such longer period as is specified by the Waste ICC Contract Counterparty, after the Information is requested.
- 1.4 The Emitter shall ensure that all Information provided to the Waste ICC Contract Counterparty pursuant to paragraphs 1.2 and 1.3, including all Biogenic CEMS Data

⁹ Note to Reader: BEIS is consulting with relevant Biogenic CEMS suppliers about what Information could be provided directly to the Waste ICC Contract Counterparty from the Biogenic CEMS and what may have to be provided via the Emitter.

¹⁰ Note to Reader: the Biogenic CEMS Technical Specification (or potentially a separate protocol document) will set out the Waste ICC Contract Counterparty's expectations in relation to the format of each Biogenic CEMS Report, including the approach to be taken where there is more than one Biogenic CEMS (and Biogenic CEMS Report) in respect of a Facility.

submitted to the Waste ICC Contract Counterparty, is true, complete and accurate in all material respects and is not misleading.

Biogenic CEMS Information Termination Event

- 1.5 If any information provided by the Emitter in accordance with this Annex [●] (*Biogenic CEMS Requirements*) and/or the Biogenic CEMS Technical Specification is misleading, or the Emitter fails to provide any information in accordance with this Annex [●] (*Biogenic CEMS Requirements*) and/or the Biogenic CEMS Technical Specification, and the Emitter:
- (a) knew that such information was, or a failure to provide such information would be, misleading;
 - (b) acted recklessly in providing or failing to provide such information; or
 - (c) failed to make all due and careful enquiries when providing such information,
- then a **"Biogenic CEMS Information Termination Event"** will be deemed to have occurred¹¹.

2. ACCESS RIGHTS

Scope of Biogenic CEMS Audit Right

- 2.1 The Emitter shall grant the Waste ICC Contract Counterparty (or, if the Emitter is not the [Registrant]¹² of each Biogenic CEMS, shall procure that the [Registrant] grants) the Waste ICC Contract Counterparty (and any and all persons nominated by the Waste ICC Contract Counterparty and considered by the Waste ICC Contract Counterparty to be suitably qualified) access to:
- (a)
 - (i) each Biogenic CEMS;
 - (ii) the Facility;
 - (iii) any plant, machinery, processing or storage facility associated with the Facility; and
 - (iv) any location at which fuel used or to be used at the Facility is located, owned, occupied or controlled by the Emitter (or the [Registrant] if the Emitter is not the [Registrant] of each Biogenic CEMS) and to which the Emitter (or the [Registrant] if the Emitter is not the [Registrant] of each Biogenic CEMS) can lawfully grant access;
 - (b) the books and records of the Emitter (including any records or documentation pertaining to each Biogenic CEMS including, without limitation, any annual maintenance and/or inspection reports, maintenance log, competency records, instruction manuals and calibration audits); and
 - (c) the directors, officers and employees of the Emitter (who will be instructed to give, as soon as reasonably practicable, all Supporting Information reasonably requested by the Waste ICC Contract Counterparty (and any persons nominated by it in accordance with this paragraph 2.1)),

¹¹ Note to Reader: a 'Biogenic CEMS Information Termination Event' will be included in the list of 'Termination Events' set out in the full form Waste ICC Contract.

¹² Note to Reader: to be confirmed whether there will be a "Registrant" in relation to each Biogenic CEMS.

in each case as the Waste ICC Contract Counterparty considers to be reasonably necessary for the Waste ICC Contract Counterparty to fulfil the Biogenic CEMS Purposes (the **"Biogenic CEMS Audit Right"**).

- 2.2 If the Waste ICC Contract Counterparty intends to exercise the Biogenic CEMS Audit Right it shall give a notice to the Emitter (a **"Biogenic CEMS Audit Notice"**). A Biogenic CEMS Audit Notice shall:
- (a) specify that the Waste ICC Contract Counterparty or any persons nominated by the Waste ICC Contract Counterparty and considered by it to be suitably qualified intends to exercise the Biogenic CEMS Audit Right; and
 - (b) specify the date by which the Emitter must, in accordance with paragraph 2.3, permit the exercise of the Biogenic CEMS Audit Right.
- 2.3 On receipt of a Biogenic CEMS Audit Notice the Emitter shall permit the Waste ICC Contract Counterparty to exercise the Biogenic CEMS Audit Right at such time as the Waste ICC Contract Counterparty may nominate, provided that it is no earlier than one (1) Business Day after the receipt of the Biogenic CEMS Audit Notice.

Failure to comply with Biogenic CEMS Audit Right

- 2.4 If the Emitter fails to comply with its obligation to permit the Waste ICC Contract Counterparty to exercise the Biogenic CEMS Audit Right, the Waste ICC Contract Counterparty may elect to suspend any payment(s) which would otherwise be payable by the Waste ICC Contract Counterparty to the Emitter in any period during which the Emitter is in non-compliance with such obligation, provided that, prior to effecting any such suspension, the Waste ICC Contract Counterparty shall notify the Emitter of:
- (a) its intention to suspend any payment(s); and
 - (b) the date from which it proposes to effect such suspension.
- 2.5 If the Emitter subsequently complies with its obligation to permit the Waste ICC Contract Counterparty to exercise the Biogenic CEMS Audit Right, then the Waste ICC Contract Counterparty shall pay any amounts to the Emitter which would have been payable but for the operation of paragraph 2.4. No Compensatory Interest or Default Interest shall be payable in respect of any amount payable pursuant to this paragraph 2.5.

Notification of Biogenic CEMS Undertaking breach

- 2.6 The Waste ICC Contract Counterparty may at any time submit a notice to the Emitter if it considers that the Emitter is in breach of a Biogenic CEMS Undertaking (a **"Biogenic CEMS Breach Notice"**). A Biogenic CEMS Breach Notice shall:
- (a) specify which Biogenic CEMS Undertaking the Waste ICC Contract Counterparty considers that the Emitter has breached; and
 - (b) be accompanied by such Supporting Information as the Waste ICC Contract Counterparty considers necessary to evidence the breach of the Biogenic CEMS Undertaking.

Response to notification of Biogenic CEMS Undertaking breach

- 2.7 No later than ten (10) Business Days after receipt of a Biogenic CEMS Breach Notice (a **"Biogenic CEMS Breach Response Notice Period"**), the Emitter shall investigate whether it is in breach of the relevant Biogenic CEMS Undertaking and submit a notice to

the Waste ICC Contract Counterparty (a **"Biogenic CEMS Breach Response Notice"**). A Biogenic CEMS Breach Response Notice shall state that either:

- (a) the Emitter accepts that there has been a breach of the Biogenic CEMS Undertaking (and, in such case, the notice shall include confirmation of the date from which the Emitter accepts that there has been a breach of the relevant Biogenic CEMS Undertaking)¹³; or
- (b) the Emitter does not accept that there has been a breach of the Biogenic CEMS Undertaking.

2.8 If:

- (a) the Emitter submits a Biogenic CEMS Breach Response Notice in accordance with paragraph 2.7(a), the provisions of paragraph 2.9 shall apply; or
- (b) the Emitter fails to submit a Biogenic CEMS Breach Response Notice within the Biogenic CEMS Breach Response Notice Period or submits a Biogenic CEMS Breach Response Notice in accordance with paragraph 2.7(b), the Expert Determination Procedure shall apply to determine whether there has been a breach of the Biogenic CEMS Undertaking and if the Expert Determination Procedure determines that:
 - (i) there has not been a breach of the Biogenic CEMS Undertaking, then neither Party shall be required to take any further steps in relation to the Biogenic CEMS Breach Notice; or
 - (ii) there has been a breach of the Biogenic CEMS Undertaking, the provisions of paragraph 2.9 shall apply.

Rectification of Biogenic CEMS Undertaking breach

2.9 If this paragraph 2.9 applies:

- (a) the Emitter shall provide a copy of a Biogenic CEMS Remediation Plan to the Waste ICC Contract Counterparty no later than fifteen (15) Business Days after the later of:
 - (i) the expiry of the Biogenic CEMS Breach Response Notice Period; and
 - (ii) the date on which an Expert makes a determination in accordance with paragraph 2.8(b)(i) or 2.8(b)(ii) (as applicable); and
- (b) as soon as reasonably practicable after the date referred to in paragraph 2.9(a) above and in any event no later than sixty (60) Business Days after the date on which [the Waste ICC Contract Counterparty]¹⁴ has approved the Biogenic CEMS Remediation Plan, the Emitter shall implement the Biogenic CEMS Remediation Plan and remedy the breach of the Biogenic CEMS Undertaking to the satisfaction of [the Waste ICC Contract Counterparty].

¹³ Note to Reader: BEIS' minded-to-position is that a breach of a Biogenic CEMS Undertaking (including non-compliance with the Biogenic CEMS Technical Specification) will result in the FE Multiplier being deemed to be 100%. As the Biogenic CEMS Technical Specification is developed, BEIS will develop the relevant provisions relating to: (a) timings (including whether the deeming provisions shall apply on a retrospective and/or a forward-looking basis depending on the type of non-compliance); (b) the length of time for which any deemed multiplier shall apply (e.g. until the relevant non-compliance is rectified); and (c) in which circumstances a breach should trigger the deeming provisions (depending on the type of non-compliance). Materiality thresholds will also be considered for certain types of non-compliance. Once this review is completed, BEIS will consider which amendments are required to the 'Biogenic CEMS Undertaking' breach process and the Recalculation provisions set out in this rider.

¹⁴ Note to Reader: the role of the Waste ICC Contract Counterparty in the approval of the Biogenic CEMS Remediation Plan is subject to ongoing consideration by BEIS.

Part B

Payment of Biogenic CEMS Fees

1. PAYMENT OF BIOGENIC CEMS FEES

1.1 In respect of any:

- (a) Pre-Implementation Date Month; and
- (b) FE Calculation Month during which one hundred per cent. (100%) of fossil CO₂ emissions are subject to the Carbon Pricing Phase-In Exemption, calculated in accordance with Condition [X] (*Exempted Facility FE Multiplier*) of Part 4 (*Payment Calculations*),

the Emitter shall pay the Biogenic CEMS Fees for each Biogenic CEMS with respect to which a Biogenic CEMS Fees Trigger has occurred.

1.2 Any Biogenic CEMS Fees payable under paragraph 1.1 shall be due and payable by the date which falls ten (10) Business Days after the end of the Pre-Implementation Date Month or the FE Calculation Month (as applicable) during which the relevant Biogenic CEMS Fees Trigger occurred.

1.3 Where more than one (1) Biogenic CEMS Fees Trigger applies to the same Biogenic CEMS during a given Pre-Implementation Date Month or FE Calculation Month (as applicable), only a single Biogenic CEMS Fees Trigger will be deemed to have occurred in respect of that Biogenic CEMS for such Pre-Implementation Date Month or FE Calculation Month for the purposes of calculating the Biogenic CEMS Fees payable under paragraph 1.1¹⁵.

2. SET-OFF OF BIOGENIC CEMS FEES

Without prejudice to the generality of Condition 14 (*Set-off*), the Waste ICC Contract Counterparty may set off any Biogenic CEMS Fees that are due and payable by the Emitter against any amounts that are due and payable to the Emitter under the Waste ICC Contract.

¹⁵ Note to Reader: BEIS is considering how Biogenic CEMS Fees Triggers will apply during a Month in which a Pre-Implementation Date Month concludes and a FE Calculation Month commences. This rider may be amended as a result.

Part C

Fossil CO₂ Emissions Calculation Methodology

1. INTRODUCTION

- 1.1 The "**CEMS FE Multiplier**" shall be the multiplier (*expressed as a percentage (%)*) for the relevant Pre-Implementation Date Month or FE Calculation Month, calculated in respect of a Biogenic CEMS in accordance with paragraphs 2.1 to 5.4.
- 1.2 Where the Emitter is only required to install one (1) Biogenic CEMS in accordance with the Biogenic CEMS Technical Specification, the "**Facility FE Multiplier**" (*expressed as a percentage (%)*) in each Pre-Implementation Date Month or FE Calculation Month shall be equal to the CEMS FE Multiplier in respect of that Pre-Implementation Date Month or FE Calculation Month.
- 1.3 Where the Emitter is required to install more than one (1) Biogenic CEMS in accordance with the Biogenic CEMS Technical Specification, the "**Facility FE Multiplier**" (*expressed as a percentage (%)*) in each Pre-Implementation Date Month or FE Calculation Month shall be calculated as follows¹⁶:

$$FFEM = \frac{\sum_{CEMS=1}^N CO2in_{CEMS} \times CFEM_{CEMS}}{\sum_{CEMS=1}^N CO2in_{CEMS}}$$

where:

$FFEM$	=	the Facility FE Multiplier in respect of that Pre-Implementation Date Month or FE Calculation Month (as applicable) (<i>expressed as a percentage (%)</i>);
$CO2in_{CEMS}$	=	the cumulative Measured CO ₂ Input in respect of that Pre-Implementation Date Month or FE Calculation Month (as applicable) in relation to the relevant Biogenic CEMS (tCO ₂);
$CFEM_{CEMS}$	=	the CEMS FE Multiplier in respect of that Pre-Implementation Date Month or FE Calculation Month (as applicable) calculated in relation to the relevant Biogenic CEMS (CEMS) (<i>expressed as a percentage (%)</i>); and
N	=	the number of Biogenic CEMS installed at the Facility in accordance with the Biogenic CEMS Technical Specification.

2. CALCULATIONS OF THE CEMS FE MULTIPLIER AND FACILITY FE MULTIPLIER

Deemed Facility FE Multiplier and CEMS FE Multiplier: Monthly Opex Payment

- 2.1 The Facility FE Multiplier (and each CEMS FE Multiplier) in each FE Calculation Month for each Monthly Opex Payment shall be:

¹⁶ Note to Reader: the formula has been prepared on the assumption that, where more than one (1) Biogenic CEMS is required in accordance with the Biogenic CEMS Technical Specification, there will be one Industrial Installation Pre-Capture Meter for each Biogenic CEMS. This assumption is subject to the development of the Biogenic CEMS Technical Specification, BEIS' ongoing review of the application of the 'generic' ICC Contract 'Pre-Capture Technical Specification' in the Waste ICC context and technical due diligence.

- (a) if the Initial CRP Principles Review Implementation Date occurs prior to the last day of the fourth (4th) Month after the Start Date:
 - (i) fifty per cent. (50%) for each FE Calculation Month which occurs in any of the first four (4) Months after the Start Date, unless the Waste ICC Contract Counterparty has carried out an Initial Recalculation or a Final Recalculation, in which case sub-paragraph 2.1(a)(ii) shall apply; or
 - (ii) the Facility FE Multiplier (and each CEMS FE Multiplier) for [the most recent Pre-Implementation Date Month or FE Calculation Month in respect of which an Initial Recalculation or a Final Recalculation has been conducted by the Waste ICC Contract Counterparty]¹⁷; and
- (b) if the Initial CRP Principles Review Implementation Date occurs after the last day of the fourth (4th) Month after the Start Date, the Facility FE Multiplier (and each CEMS FE Multiplier) for [the most recent Pre-Implementation Date Month or FE Calculation Month in respect of which an Initial Recalculation or a Final Recalculation has been conducted by the Waste ICC Contract Counterparty].

3. INITIAL RECALCULATIONS

3.1 In respect of any Pre-Implementation Date Month and any FE Calculation Month, the Waste ICC Contract Counterparty shall recalculate the Facility FE Multiplier (and each CEMS FE Multiplier) within [seven] ([7]) Business Days of the earlier of:

- (a) the date on which each Biogenic CEMS required to be installed at the Facility in accordance with the Biogenic CEMS Technical Specification has been subject to any of the following paragraphs:
 - (i) the required Biogenic CEMS Report for that Biogenic CEMS in relation to that Pre-Implementation Date Month or FE Calculation Month (as applicable) is provided or becomes available to the Waste ICC Contract Counterparty in accordance with the requirements of the Biogenic CEMS Technical Specification;
 - (ii) it is determined by the Waste ICC Contract Counterparty that the Biogenic CEMS Data Threshold is not satisfied in respect of that Biogenic CEMS for that Pre-Implementation Date Month or FE Calculation Month (as applicable); or
 - (iii) an Early Recalculation Notice has been provided in respect of that Biogenic CEMS for that Pre-Implementation Date Month or FE Calculation Month (as applicable); or
- (b) the FE Submission Deadline.

3.2 In conducting an Initial Recalculation pursuant to:

- (a) paragraph 3.1(a), the following principles shall apply to the determination of each CEMS FE Multiplier:
 - (i) in respect of each Biogenic CEMS with respect to which a Biogenic CEMS Report is provided in accordance with paragraph 3.1(a)(i), the relevant CEMS FE Multiplier shall be calculated by applying the FE Formula to the Biogenic CO₂ Emissions Multiplier contained in the relevant Biogenic CEMS Report;

¹⁷ Note to Reader: the determination of the 'Deemed Facility FE Multiplier' remains subject to further consideration by BEIS.

- (ii) in respect of each Biogenic CEMS with respect to which paragraph 3.1(a)(ii) applies, the relevant CEMS FE Multiplier shall be one hundred per cent. (100%); and/or
 - (iii) in respect of each Biogenic CEMS which is subject to an Early Recalculation Notice, the relevant CEMS FE Multiplier shall be one hundred per cent. (100%); or
 - (b) paragraph 3.1(b), the Facility FE Multiplier (and each CEMS FE Multiplier) shall be one hundred per cent. (100%).
- 3.3 No Compensatory Interest or Default Interest shall be payable in respect of any Opex FE Adjustment Amount calculated pursuant to any Initial Recalculations.
4. **FINAL RECALCULATIONS**
- 4.1 If an Initial Recalculation was conducted by the Waste ICC Contract Counterparty:
- (a) pursuant to paragraph 3.1(a), no Final Recalculation under this paragraph 4 shall be conducted by the Waste ICC Contract Counterparty; or
 - (b) pursuant to paragraph 3.1(b), the Waste ICC Contract Counterparty shall conduct a Final Recalculation in accordance with paragraphs 4.2 and 4.3.
- 4.2 The Waste ICC Contract Counterparty shall recalculate the Facility FE Multiplier (and each CEMS FE Multiplier) in respect of any Pre-Implementation Date Month and any FE Calculation Month, within [seven] ([7]) Business Days of the earlier of:
- (a) the date on which each Biogenic CEMS required to be installed at the Facility in accordance with the Biogenic CEMS Technical Specification has been subject to any of the following paragraphs:
 - (i) the required Biogenic CEMS Report(s) for that Biogenic CEMS in relation to that Pre-Implementation Date Month or FE Calculation Month (as applicable) is provided or becomes available to the Waste ICC Contract Counterparty in accordance with the requirements of the Biogenic CEMS Technical Specification;
 - (ii) it is determined by the Waste ICC Contract Counterparty that the Biogenic CEMS Data Threshold is not satisfied in respect of that Biogenic CEMS for that Pre-Implementation Date Month or FE Calculation Month (as applicable); and/or
 - (iii) an Early Recalculation Notice has been provided in respect of that Biogenic CEMS for that Pre-Implementation Date Month or FE Calculation Month (as applicable); and
 - (b) the Longstop FE Submission Deadline.
- 4.3 When conducting a Final Recalculation pursuant to paragraph 4.2, the following principles shall apply to the determination of each CEMS FE Multiplier:
- (a) in respect of each Biogenic CEMS with respect to which a Biogenic CEMS Report is provided in accordance with paragraph 4.2(a)(i), each CEMS FE Multiplier shall be calculated by applying the FE Formula to the Biogenic CO₂ Emissions Multiplier contained in the relevant Biogenic CEMS Report;
 - (b) in respect of each Biogenic CEMS with respect to which paragraph 4.2(a)(ii) applies, the relevant CEMS FE Multiplier shall be one hundred per cent. (100%);

- (c) in respect of each Biogenic CEMS which is subject to an Early Recalculation Notice, the relevant CEMS FE Multiplier shall be one hundred per cent. (100%); and
 - (d) in respect of each Biogenic CEMS with respect to which no Biogenic CEMS Report has been provided by the Longstop FE Submission Deadline, the relevant CEMS FE Multiplier shall remain one hundred per cent. (100%). For the avoidance of doubt, if the required Biogenic CEMS Report for such Biogenic CEMS is provided or becomes available to the Waste ICC Contract Counterparty on or after the Longstop FE Submission Deadline, the relevant CEMS FE Multiplier shall remain one hundred per cent. (100%).
- 4.4 No Compensatory Interest or Default Interest shall be payable in respect of any Opex FE Adjustment Amount calculated pursuant to any Final Recalculations.
- 5. **EARLY RECALCULATION NOTICE**
 - 5.1 At any time prior to the Longstop FE Submission Deadline, the Emitter shall promptly notify the Waste ICC Contract Counterparty if it becomes aware that it will not be able to submit the Biogenic CEMS Report for a particular Biogenic CEMS to the Waste ICC Contract Counterparty in respect of a Pre-Implementation Date Month or FE Calculation Month (as applicable) on or before the relevant Longstop FE Submission Deadline (or procure that a Biogenic CEMS Report is submitted) (an "**Early Recalculation Notice**").
 - 5.2 If the Emitter issues an Early Recalculation Notice to the Waste ICC Contract Counterparty, the Emitter shall include in such Early Recalculation Notice details of the missing Biogenic CEMS Report.
 - 5.3 If the Emitter issues an Early Recalculation Notice to the Waste ICC Contract Counterparty:
 - (a) the Biogenic CEMS Report subject to the Early Recalculation Notice will be deemed to have been provided; and
 - (b) the CEMS FE Multiplier for the relevant Biogenic CEMS Report shall be one hundred per cent. (100%),for the purposes of the Initial Recalculations and/or the Final Recalculations.
 - 5.4 Any CEMS FE Multiplier deemed to be one hundred per cent. (100%) pursuant to paragraph 5.3 shall be final and binding on the Parties and may not be subject to any further recalculations pursuant to this Annex [●] (*Biogenic CEMS Requirements*). For the avoidance of doubt, if the required Biogenic CEMS Report for the relevant Biogenic CEMS is later provided or becomes available to the Waste ICC Contract Counterparty, the relevant CEMS FE Multiplier shall remain one hundred per cent. (100%).

6. **RECALCULATIONS: OPEX FE ADJUSTMENT AMOUNT**

When an Initial Recalculation and/or a Final Recalculation is conducted by the Waste ICC Contract Counterparty in respect of any FE Calculation Month, Condition [Y] (*Calculation of Opex FE Adjustment Amount*) shall be applied by the Waste ICC Contract Counterparty for the purposes of determining the appropriate Opex FE Adjustment Amount.

ANNEX 1
CONDITIONS PRECEDENT

Part B
Operational Conditions Precedent

The following additional Operational Condition Precedent shall be inserted in Part B (*Operational Conditions Precedent*) of Annex 1 (*Conditions Precedent*):

[#] BIOGENIC CEMS

Delivery to the Waste ICC Contract Counterparty of the following:

- (A) evidence, in form and content satisfactory to the Waste ICC Contract Counterparty (acting reasonably), that the Emitter is complying in full with the obligations set out in paragraphs 1.1(b) [and 1.1(d)] of Part A (*Emitter Undertakings*) of Annex [●] (*Biogenic CEMS Requirements*); and
- (B) a date and time stamped copy of the schematic diagram, certified as being correct and up to date by a director or company secretary of the Emitter and showing the locations of each Biogenic CEMS associated with assets comprised within the Waste Installation (including details of the type of Biogenic CEMS installed in compliance with the Biogenic CEMS Technical Specification).

ANNEX 2
TESTING REQUIREMENTS¹⁸

¹⁸ Note to Reader: BEIS is considering any amendments to Annex 2 (*Testing Requirements*) of the 'generic' ICC Contract, as published in parallel with this rider, that may be necessary to reflect Biogenic CEMS commissioning requirements. Any amendments will be published in parallel with the Biogenic CEMS Technical Specification.

ANNEX [●]

BIOGENIC CEMS TECHNICAL SPECIFICATION¹⁹

¹⁹ Note to Reader: the Biogenic CEMS Technical Specification will be developed in 2023, and may include matters such as: (i) the technical requirements, standards and accreditations that will apply to the Biogenic CEMS (including where such Biogenic CEMS should be located) and to the accredited laboratories; (ii) the scope of data and information to be recorded and provided by the Emitter; (iii) how the Biogenic CEMS Data Threshold will be determined; and (iv) other technical requirements that may apply to the Emitter, including in relation to data sampling and personnel requirements. BEIS is also considering whether a technical audit will be required.

If a technical audit is required, the Biogenic CEMS Technical Specification will specify: (i) the scope of the technical audit; (ii) the party responsible for conducting the audit; and (iii) the frequency of the audit. BEIS' minded-to position is that an Emitter will be responsible for appointing a technical auditor and that the audit must be conducted annually.