Appendix H – Climate Change Levy & GHG Permit

UMBRELLA CLIMATE CHANGE AGREEMENT FOR THE PAPER SECTOR
Agreement dated 14 February 2022

THIS AGREEMENT is made the 14 February 2022

BETWEEN:

(1) the Environment Agency ("the Administrator"); and

(2) the Sector Association set out in Schedule 2 ("the Sector Association").

RECITALS

(A) Section 30 of and Schedule 6 to the Finance Act 2000 ("the Act") make provision for a tax known as the climate change levy ("the Levy"). The Levy is charged on the supply of taxable commodities as defined in paragraph 3 of Schedule 6 to the Act.

(B) Paragraphs 42(1)(ba) and 42(1)(c) of Schedule 6 to the Act provide that the amount payable by way of the Levy shall be discounted from the full rate where the supply is a reduced-rate supply. A reduced-rate supply is a taxable supply supplied to a facility specified in a certificate given by the Administrator to the Commissioners for Her Majesty's Revenue and Customs as a facility which is covered by a climate change agreement for a period specified in the certificate in accordance with paragraphs 42 to 52F of Schedule 6 to the Act.

(C) A climate change agreement is defined in paragraph 46 of Schedule 6 to the Act. It may consist of a combination of agreements that falls within paragraph 48. A combination of agreements falls within paragraph 48 if a number of conditions are satisfied. The first condition is that the combination of agreements is a combination of an umbrella agreement and an agreement that, in relation to the umbrella agreement, is an underlying agreement.

(D) This agreement is an umbrella agreement entered into for the purposes of the reduced rate of Levy. It is not intended to give rise to contractual obligations between the parties.

(E) The Sector Association is a representative as defined in paragraph 47(2) of Schedule 6 to the Act of each facility to which this agreement applies.

(F) The facility or facilities set out in Schedule 4 to this agreement are a facility or facilities to which an agreement applies.

AGREED TERMS

IT IS AGREED as follows:

1. INTERPRETATION

1.1 In this Agreement, unless the context otherwise requires:

"account" means the account in the Register of a sector association or an operator;

"agreement" means, as the context requires, either:

a) this agreement; or

b) an umbrella agreement or an underlying agreement;

“amendments window” means the period from 1 July 2021 to 30 September 2021 where the Administrator can vary underlying agreements in accordance with the amendments provided for in the technical annex;

“base year” for a target period, means:

a) for a target unit which includes a greenfield facility, the 12 month period starting on the date of an underlying agreement which provides for that target period;

b) for a target unit which does not include a greenfield facility, a 12 month period which—

i) ends before the date of an underlying agreement which provides for that target period or before the date an underlying agreement is first varied to provide for that target period; and

ii) is agreed between an operator and the administrator before they enter into the underlying agreement or before the underlying agreement is first varied to provide for that target period;

“buy-out fee” means the fee calculated in accordance with Rule 7;

“certification period” means, any of the following periods:

(a) 1 April 2013 to 30 June 2015;

(b) 1 July 2015 to 30 June 2017;

(c) 1 July 2017 to 30 June 2019;

(d) 1 July 2019 to 30 June 2021;

(e) 1 July 2021 to 30 June 2023; or

(f) 1 July 2023 to 31 March 2025.

“charges” means charges due to the Administrator under the charging scheme;

“charging scheme” means the Climate Change Agreements Charges Scheme 2012 made by the Administrator or any replacement or revision of that charging scheme;

“emissions” means the total emissions in tCO_2 equivalent for a target period;

“facility” means a facility within the meaning of paragraph 50(2) to (6) of Schedule 6 to the Act;

“facility number” means the unique identification number of a facility set out in schedule 4 of this Agreement;

“greenfield facility” means a facility which started to carry out the process by virtue of which it is a facility within the meaning of paragraph 50 of Schedule 6 during the 12 month period ending on the date the operator applies for the facility to be covered by an agreement;

"new entrant period one" means the period from 1 January 2021 to 31 March 2021 where new entrant facilities enter into Climate Change Agreements;

"new entrant period two" means the period from 17th December 2021 to 30 June 2022 where new entrant facilities enter into Climate Change Agreements;

"Novem ratio target" has the meaning set out in the technical annex;

"operator" means a party to an underlying agreement other than the Administrator;

"personal information" means:

a) the address of the registered office of the sector association or operator;

b) the name, address and email address of:

    i) in the case of a sector association, a person who can be contacted in respect of the sector association;

    ii) in the case of an Operator, the responsible person; and

c) the name, address and email address of a person who can be contacted in respect of the facility or each facility covered by an agreement;

"the Register" means the electronic system established and operated by the Administrator for the administration of agreements;

"the Regulations" means the Climate Change Agreements (Administration) Regulations 2012 S.I. 2012/1976, as amended by S.I. 2013/508, S.I. 2016/1189 and S.I. 2020/958;

"Rule or Rules" means the Rules for the Operation of Climate Change Agreements or any of them set out in Schedule 1 to this Agreement as varied from time to time;

"Schedule 6" means Schedule 6 to the Finance Act 2000;

"sector" means the sector consisting of facilities which are covered by the same umbrella agreement;

"sector association" means the party to this agreement other than the Administrator;

"sector commitment" means the commitment set out in Schedule 5 of the umbrella agreement, as varied from time to time;

"surplus" means the amount by which the emissions have fallen below the target for any target period;

"target" (for a target period) means the percentage improvement in energy efficiency or carbon efficiency from the base year (for that target period) applicable to the target unit, set out in Schedule 6 to the underlying agreement, as varied from time to time;

"target period 1" means the target period from 1 January 2013 to 31 December 2014;

"target period 2" means the target period from 1 January 2015 to 31 December 2016;

"target period 3" means the target period from 1 January 2017 to 31 December 2018;

"target period 4" means the target period from 1 January 2019 to 31 December 2020;

"target period 5" means the target period from 1 January 2021 to 31 December 2022;

"target unit" means a facility or group of facilities to which an underlying agreement applies;

"tCO_2 equivalent" means tonnes of carbon dioxide equivalent;

"technical annex" means the technical annex to this Agreement dated 18 December 2020 and published by the Administrator or the Secretary of State available via the Administrator's website;

"throughput" means the measure of production, or factor related to production, used to determine the relationship between the amount of energy used by the target unit and the levels of activity of the target unit, as set out in Schedule 6 to an underlying agreement;

"the Tribunal" means the First-tier Tribunal established under the Tribunal Courts and Enforcement Act 2007[1];

"umbrella agreement" means, as the context requires, either:

a) this agreement; or

b) an agreement that is an umbrella agreement for the purposes of paragraph 48 of Schedule 6 to the Act;

"underlying agreement" means an agreement that is an underlying agreement for the purposes of paragraph 48 or Schedule 6 to the Act.

1.2 Other words and expressions used in this Agreement have the same meaning as they bear in Schedule 6 to the Finance Act 2000 or the Regulations.

2. FACILITIES TO WHICH THIS AGREEMENT APPLIES

2.1 This Agreement applies to the facilities set out in Schedule 4.

2.2 A facility belongs to the sector if it is a facility which undertakes one or more of the activities set out in Schedule 3.

3. SECTOR COMMITMENT

3.1 The sector commitment for the sector to which this Agreement applies is set out in Schedule 5 to this Agreement, as varied from time to time.

3.2 N/A.

[1] Appeals are assigned to the General Regulatory Chamber of the First-tier Tribunal by virtue of article 3(a) of the First-tier Tribunal and Upper Tribunal (Chambers) Order 2010 (S.I. 2010/2655). The Tribunal Procedure (First-tier Tribunal) (General Regulatory Chamber) Rules 2009 (S.I. 2009/1976) sets out procedural rules relating to such appeals.

3.3 The sector commitment and associated targets may be varied to take into consideration target period 5 in accordance with the procedure set out in Rule 12.

4. THE RULES

4.1 Schedule 1 to this Agreement which sets out the Rules for the operation of Climate Change Agreements has effect.

4.2 The Sector Association agrees to comply with the Rules.

5. DURATION AND TERMINATION OF THIS AGREEMENT

5.1 Subject to clause 5.2 below, this Agreement takes effect on 1 April 2013 or, if later, the date on which this Agreement is first activated by the Administrator, and ends on 31 March 2025.

5.2 This Agreement may be terminated before 31 March 2025:

5.2.1 at any time by a notice served on the Administrator by the Sector Association giving at least 20 working days' notice; or

5.2.2 in accordance with the Regulations.

5.3 Any variation to this Agreement made under regulation 14A of the Regulations in respect of target period 5 takes effect on 1 January 2021 or, if later, the date on which the variation is activated by the Administrator.

6. VARIATION OF AGREEMENT

6.1 Subject to clauses 3.2, 3.3, 6.2 and 6.3, this Agreement may be varied at any time if agreed between the Administrator and the Sector Association.

6.2 The facilities to which this Agreement applies may be varied in accordance with Rules 9 and 10.

6.3 Under the power in regulation 14A of the Regulations, this Agreement may be varied by the Administrator to take account of changes in the terms specified by the Regulations from time to time as terms which must be included in Agreements.

7. COLLECTION OF CHARGES

7.1 The parties agree that the Administrator shall not be liable to pay any expenses of the Sector Association in connection with or arising out of the collection of charges under Rule 16, nor to indemnify or remunerate the Sector Association in connection with the collection of charges.

Signed by authority of the Environment Agency:	Signed on behalf of the Sector Association:

Karl Sydney
Operations Manager (Energy Efficiency)

SCHEDULE 1
RULES FOR THE OPERATION OF CLIMATE CHANGE AGREEMENTS

1. OBLIGATIONS OF A SECTOR ASSOCIATION AND OF AN OPERATOR

1.1 An Operator and a Sector Association must:

1.1.1 supply such information to the Administrator as the Administrator may request in connection with an agreement, by the date specified in the request;

1.1.2 notify the Administrator of any changes to its personal information within 20 working days of the change;

1.1.3 co-operate with any person appointed by the Administrator to undertake an independent audit of information provided to the Administrator; and

1.1.4 comply with the provisions of the charging scheme. If a charge remains unpaid after the date on which it is due, it may be recovered by the Administrator as a civil debt.

2. OBLIGATIONS OF A SECTOR ASSOCIATION

2.1 Following the setting of the sector commitment by the Secretary of State or following a variation in respect of a new sector commitment for target period 5 under Rule 12.2, a Sector Association must distribute the sector commitment between each target unit under the umbrella agreement.

3. OBLIGATIONS OF AN OPERATOR

3.1 An Operator must:

3.1.1 notify the Administrator and the Sector Association within 20 working days of the date when the Operator has reason to believe that a facility covered by an underlying agreement may not be eligible for inclusion in the underlying agreement;

3.1.2 notify the Administrator within 20 working days of becoming aware of any structural change or other change set out in the technical annex which may give rise to a variation to the target in accordance with Rule 11;

3.1.3 notify the Administrator within 20 working days of discovering any error in the data provided to the Administrator for the base year;

3.1.4 provide to the Administrator on or before 1 May following the end of a target period such information as has been requested by the Administrator in order to determine whether progress towards meeting the target is, or is likely to be, taken to be satisfactory;

3.1.5 provide any other information requested at any time by the Administrator by the date specified in the request to enable the Administrator to determine that:

(a) the target has been met; or

(b) the Operator is complying with the terms of the underlying agreement;

3.1.6 notify the Administrator within 20 working days of the Operator or a facility in a target unit becoming a firm in difficulty, within the meaning of the European Commission Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (2014/C 249/01);

3.1.7 provide the responsible person with full authority to carry out his or her functions, including authorisation to accept on behalf of the Operator the service of any notice; and

3.1.8 provide a current UK postal address and an operational email address of the responsible person for service of any notice.

3.2 If the Administrator enters into an underlying agreement before a target has been agreed, conditional upon the Operator providing sufficient information within a specified period in order to set the target for the target unit, the Operator must supply any data requested by the Administrator within the period specified by the Administrator on energy use and throughput of the target unit.

4. OPERATION OF THE REGISTER

4.1 Subject to Rules 4.2 and 4.3, to the extent possible, a Sector Association and an Operator must communicate with the Administrator using the Register.

4.2 Until a Sector Association and an Operator have been notified by the Administrator that the Operator is able to operate an account on its own behalf, an Operator must provide all information to the Sector Association to comply with the obligations of an Operator under an underlying agreement. The Sector Association must then operate the Register on behalf of the Operator to provide the information to the Administrator.

4.3 After receiving notification from the Administrator that an Operator is able to operate an account on its own behalf, an Operator must notify the Administrator if it wishes to access its account directly to comply with its obligations under an underlying agreement. If an Operator makes such notification, the Operator must then operate the Register on its own behalf in order to comply with its obligations under an underlying agreement. If an Operator does not make such notification, the Operator must continue to provide all information to the Sector Association to comply with the obligations of an Operator under an underlying agreement and the Sector Association must continue to operate the Register on behalf of the Operator to provide information to the Administrator.

5. CERTIFICATION OF A FACILITY

5.1 The Administrator must certify that a facility is covered by an agreement from the date on which an underlying agreement takes effect to the end of the first certification period. The first certification period in respect of new agreements that take effect on or after 1 January 2021 is provided for in Rule 5A.

5.2 The Administrator must certify that a facility is covered by an agreement for any subsequent certification period other than the certification period in which the underlying agreement is first activated, where it appears to the Administrator that progress made in the immediately preceding certification period, whether under the underlying agreement or under any previous underlying agreement, towards meeting targets set for the target unit is, or is likely to be, satisfactory.

5.3 For the purposes of this Rule, progress made in the immediately preceding certification period towards meeting targets set for the target unit is, or is likely to be satisfactory only where condition 1 and condition 2 are satisfied.

5.4 Condition 1 is that:

5.4.1 the target set for the target unit for the relevant target period is met, in accordance with Rule 6; or

5.4.2 if the target set for the target unit has not been met, the target unit has paid the buy-out fee in accordance with Rule 7.

5.5 Condition 2 is that obligations imposed under or by virtue of regulations made for the purpose of implementing the Greenhouse Gas Emissions Trading Scheme Regulations 2012, as amended from time to time, have been complied with in respect of each facility comprising the target unit.

5.6 If:

5.6.1 a target unit has failed to meet its target in accordance with Rule 6 and the Operator has failed to pay the buy-out fee in accordance with Rule 7;

5.6.2 obligations imposed under or by virtue of regulations made for the purpose of implementing the Greenhouse Gas Emissions Trading Scheme Regulations 2012, as amended from time to time, have not been complied with in respect of any facility in a target unit; or

5.6.3 the underlying agreement or umbrella agreement is terminated in accordance with Regulation 17(3) or Regulation 18,

the Administrator must not certify that the facility or facilities comprising the target unit are covered by an agreement or, where a certificate has been issued, the Administrator must vary the certificate in accordance with paragraph 45 of Schedule 6.

5.7 If:

5.7.1 a facility is not or ceases to be eligible for inclusion in an agreement; or

5.7.2 a facility is excluded from an underlying agreement under Rule 10;

the Administrator must not certify that the facility is covered by an agreement or, where a certificate has been issued, the Administrator must vary the certificate in accordance with paragraph 45 of Schedule 6.

5.8 If the information supplied to the Administrator is insufficient to determine whether:

5.8.1 the target for the target period has been met; or

5.8.2 obligations imposed under or by virtue of regulations made for the purpose of implementing the Greenhouse Gas Emissions Trading Scheme Regulations 2012, as amended from time to time, have been complied with in respect of each facility comprising the target unit;

the Administrator may refuse to certify that the facility or facilities are covered by an agreement or, where a certificate has been issued, the Administrator may vary that certificate in accordance with paragraph 45 of Schedule 6.

5.9 Subject to Rule 5.10, if the Administrator does not certify a facility or varies a certificate that has been issued, the Administrator must serve a decision notice on the Sector Association and the Operator of the facility setting out the reasons for the decision, unless a notice of termination has already been served.

5.10 The Administrator is not required to serve a decision notice where a facility has been certified under this Rule and it is subsequently discovered that the target unit for the relevant target period had not been met because of an error in the information originally supplied to the Administrator provided that:

5.10.1 the Sector Association and the Operator have satisfied the Administrator that the error was unintentional; and

5.10.2 the Operator has paid any buy-out fee in accordance with Rule 7.

6. FIRST CERTIFICATION PERIOD

6.1 This rule applies in respect of any new agreements first activated after the coming into force of SI 2020/958.

6.2 The first certification period that applies to the facilities covered by this Agreement and added during new entrant period one begins on the date on which the Administrator activates the Agreement and ends on 30 June 2021.

6.3 The subsequent certification periods for facilities covered by this Agreement and added during new entrant period one are:

6.3.1 1 July 2021 to 30 June 2023;

6.3.2 1 July 2023 to 31 March 2025.

6.4 The first certification period that applies to the facilities covered by this Agreement and added during new entrant period two begins on the date on which the Administrator activates the Agreement and ends on 30 June 2023.

6.5 The subsequent certification period for facilities covered by this Agreement and added during new entrant period two is:

6.5.1 1 July 2023 to 31 March 2025.

6. MEETING THE TARGET

6.1 A target unit meets its target for the purpose of Rule 5 if it meets or exceeds the percentage improvement in energy efficiency or carbon efficiency from the base year set out in Schedule 6 to the underlying agreement.

6.2 The Administrator must determine whether the target has been met in accordance with the principles, methodologies and procedures set out in the technical annex.

6.3 An Operator must notify the Administrator on or before 31 January in the year following the end of a target period of any circumstances which may give rise to an adjustment to the target for the previous target period, as set out in the technical annex.

6.4 If an Operator makes a notification under Rule 6.3, the Administrator may adjust the previous target in accordance with the principles, methodologies and calculations set out in the technical annex and must serve a notice on the Operator, setting out:

6.4.1 whether or not it had decided to vary the target; and

6.4.2 any revised target (as varied) for the target unit.

7. BUY-OUT MECHANISM

7.1 If the administrator finds that the target unit has failed to meet its targets:

7.1.1 at any time in the period beginning with 1 May in the year following the end of a target period and ending immediately before the first day of the next certification period; or

7.1.2 at any other time,

the obligation to make progress towards meeting targets may instead be satisfied by the payment to the administrator of a fee in accordance with Rule 7.2.

7.2 If Rule 7.1 applies, the administrator must serve a notice on the Operator containing the following information:

7.2.1 that the target unit has failed to meet its target;

7.2.2 the fee to be paid, calculated in accordance with Rule 7.3 or Rule 7.4;

7.2.3 the date by which the fee must be paid, determined in accordance with Rule 7.5 or Rule 7.6;

7.2.4 to whom the fee must be paid;

7.2.5 how the fee is to be paid; and

7.2.6 that failure to pay the fee in accordance with the notice will result in the issue of a variation certificate in accordance with paragraph 45 of Schedule 6.

7.3 If Rule 7.1.1 applies, the amount of the fee is:

$$A \times (W - S)$$

Where:

(a) A is £12 where the finding is of a failure to meet a target for target period 1 or target period 2, £14 where the finding is of a failure to meet a target for target period 3 or target period 4, or £18 where the finding is of a failure to meet a target for target period 5;

(b) W in units of tCO_2 equivalent represents the amount by which the emissions for the target period exceed the target;

(c) S, for target periods 1 to 4, in units of tCO_2 equivalent represents any surplus; and

(d) S, for target period 5, is zero.

7.4 If Rule 7.1.2 applies, the amount of the fee is:

$$A \times W$$

Where:

(a) A is £12 where the finding is of a failure to meet a target for target period 1 or target period 2, £14 where the finding is of a failure to meet a target for target period 3 or target period 4, or £18 where the finding is of a failure to meet a target for target period 5;

(b) W in units of tCO_2 equivalent represents the amount by which the emissions for the target period exceed the target.

7.5 If Rule 7.1.1 applies, the fee must be paid on or before 1 July in the year in which the target unit is found to have failed to meet its targets.

7.6 If Rule 7.1.2 applies, the fee must be paid within 30 working days beginning with the date of the notice.

7.7 Payment of the fee is deemed to have been made when the person to whom the fee must be paid as specified in the notice receives full cleared funds.

7.8 For the purposes of calculating the buy-out fee under this Rule and for calculating the amount of any surplus, the Administrator must calculate the difference between the target for the target period and the actual performance achieved during the target period, where the target and the actual performance achieved are expressed in the same units, and convert any difference between the two into a quantity of carbon dioxide equivalent, expressed in units of tCO_2 equivalent, using the principles, methodologies and calculations set out in the technical annex.

8. SURPLUS

8.1 If a facility is excluded from a target unit, the Operator must determine how any surplus should be distributed between the facilities that have been excluded from the target unit and the facilities remaining in the target unit and must notify the Administrator of the redistribution within 20 working days of the facility being excluded from the target unit.

8.2 If an Operator fails to notify the Administrator of the redistribution in accordance with Rule 8.1 any surplus remains with the facilities remaining in the target unit.

8.3 If facilities join a target unit, any surplus attributable to those joining facilities may be used by the target unit as a whole.

9. VARIATION BY INCLUSION OF ADDITIONAL FACILITIES

9.1 A facility which is not already included in another umbrella agreement is eligible at any time to be considered for inclusion in an umbrella agreement where:

9.1.1 it is a facility within the meaning of paragraph 50 of Schedule 6; and

9.1.2 it is a facility undertaking the activities set out in Schedule 3 to an umbrella agreement.

9.2 A facility which is not already included in another underlying agreement is eligible at any time to be considered for inclusion in an underlying agreement where:

9.2.1 it is a facility within the meaning of paragraph 50 of Schedule 6;

9.2.2 it is a facility undertaking the activities set out in Schedule 3 to an umbrella agreement; and

9.2.3 it has the same operator as the operator of the underlying agreement under which it will be included, as set out in the technical annex.

9.3 A facility which is already included in another underlying agreement is eligible to be considered for inclusion in a different underlying agreement on or before 30 September 2013 where:

9.3.1 it is a facility within the meaning of paragraph 50 of Schedule 6;

9.3.2 it is a facility undertaking the activities set out in Schedule 3 to an umbrella agreement; and

9.3.3 it has the same operator as the operator of the underlying agreement under which it will be included, as set out in the technical annex.

9.4 A facility which is already included in another underlying agreement is eligible to be considered for inclusion in a different underlying agreement on or after 1 October 2013 where:

9.4.1 it is a facility within the meaning of paragraph 50 of Schedule 6;

9.4.2 it is a facility undertaking the activities set out in Schedule 3 to an umbrella agreement;

9.4.3 it has the same operator as the operator of the underlying agreement under which it will be included, as set out in the technical annex; and

9.4.4 there has been a change of operator of the facility, or to allow a new entrant to be grouped into an existing agreement as part of the amendments window in 2021.

9.5 An additional facility cannot be added to an umbrella agreement unless the Administrator has determined that a facility is eligible and makes a variation to the umbrella agreement to add that facility to the scheme during new entrant period one or new entrant period two.

9.6 The Administrator may vary the target of a target unit to take account of the inclusion of additional facilities following the principles, methodologies and calculations set out in the technical annex.

9.7 If a Sector Association wishes to add an additional facility to an umbrella agreement or an Operator wishes to add an additional facility to an underlying agreement in accordance with Rule 9.5, the Sector Association or the Operator must notify the Administrator setting out:

9.7.1 the name of the Operator of the facility;

9.7.2 the address of the facility;

9.7.3 a description of the facility;

9.7.4 such information as will enable the Administrator to reach a decision on establishing eligibility of the facility, as requested by the Administrator; and

9.7.5 such information as will enable the Administrator to determine the revised target for the target unit, as requested by the Administrator.

9.8 If the Administrator receives a notification under Rule 9.7, the Administrator must serve a notice on the Operator, copied to the Sector Association:

9.8.1 consenting to include the additional facility in an umbrella agreement or an underlying agreement and setting out whether or not it has decided to vary the target, and if so, the revised target (as varied) for the target unit;

9.8.2 refusing consent to include the facility in an umbrella agreement or an underlying agreement, giving reasons for the decision; or

9.8.3 requesting such further information as is required in order to establish eligibility of the facility or reach a decision on the target for the facility.

10. VARIATION BY EXCLUSION OF FACILITIES

10.1 If a Sector Association or an Operator wishes to exclude a facility, or part of it, from an umbrella agreement or an underlying agreement, it must notify the Administrator of the proposed exclusion, setting out:

10.1.1 the name of the Operator of the facility;

10.1.2 the facility number, or a description of the part that is to be excluded; and

10.1.3 the reason for the exclusion.

10.2 If:

10.2.1 a Sector Association or an Operator has notified the Administrator that it wishes to exclude a facility under Rule 10.1; or

10.2.2 the Administrator has terminated an agreement so far as it relates to an individual facility under Regulation 17(4),

the Administrator may vary the target to take account of the exclusion or termination following the principles, methodologies and calculations set out in the technical annex, and may request such information from the Sector Association or the Operator as it requires in order to determine the revised target.

10.3 If the Administrator decides to vary or not to vary the target under Rule 10.2, it must serve a notice on the Operator, copied to the Sector Association, setting out whether or not it has decided to vary the target, and if so the revised target (as varied) for the target unit.

11. VARIATION OF TARGETS IN OTHER CIRCUMSTANCES

11.1 The Administrator may vary the target to take account of:

11.1.1 any structural changes or other changes to the target unit which the Operator must notify to the Administrator under Rule 3.1.2;

11.1.2 any errors in the data provided to the Administrator for the base year; or

11.1.3 in respect of a target unit which has a Novem ratio target, the removal of a product produced in the target period which was produced in the base year,

following the principles, methodologies and calculations set out in the technical annex.

11.2 The Administrator may request any information of a Sector Association or an Operator as it requires in order to determine the revised target under Rule 11.1.

11.3 If the Administrator decides to vary or not to vary a target under Rule 11.1, it must serve a notice on the Operator, copied to the Sector Association, setting out:

11.3.1 whether or not it has decided to vary the target; and

11.3.2 any revised target (as varied) for the target unit.

12. ADDITION OF SECTOR COMMITMENT FOR TARGET PERIOD 5

12.1 In accordance with clause 3.3, the Secretary of State may issue a direction to the Administrator that the new sector commitment for target period 5 be added to this Agreement. The Administrator must then serve a variation notice on the Sector Association.

12.2 The variation notice must state:

12.2.1 the agreed variation; and

12.2.2 the date from which the agreed variation will take effect.

12.3 The Sector Association must, within 20 working days of receipt of a variation notice, serve notice on the Administrator setting out the proposed distribution of the new target period 5 sector commitment between each target unit under the umbrella agreement.

12.4 The Administrator must:

12.4.1 agree to the proposed distribution and vary the targets of each target unit accordingly;

12.4.2 request further information in relation to the proposed distribution; or

12.4.3 refuse the proposed distribution and propose an alternative distribution, giving reasons for the decision.

13. RIGHT OF APPEAL

13.1 If the Administrator:

13.1.1 decides not to certify a facility or to vary a certificate which has been issued;

13.1.2 serves a notice imposing a buy-out fee under Rule 7 upon determining that a target unit has failed to meet its target; or

13.1.3 decides to vary or not to vary the target for a target unit,

the Operator may appeal to the Tribunal against the decision.

13.2 In respect of an Operator which enters into an agreement after 1 April 2013, the Operator may appeal to the Tribunal against the target that has been set for the target unit by the Administrator.

13.3 For the purposes of Rule 13.2, the date on which notice of the decision is deemed to have been sent to the Operator is the later of the date the agreement is entered into or the date the Administrator sends notice to the Operator of the target for the target unit.

13.4 The grounds on which an Operator may appeal under Rule 13.1 and 13.2 are:

13.4.1 that the decision was based on an error of fact;

13.4.2 that the decision was wrong in law;

13.4.3 that the decision was unreasonable;

13.4.4 any other reason.

13.5 The bringing of an appeal suspends the effect of the decision pending final determination by the Tribunal of the appeal or its withdrawal.

13.6 On determining an appeal under these Rules the Tribunal must either:

13.6.1 affirm the decision;

13.6.2 quash the decision; or

13.6.3 vary the decision.

14. RECORDS AND INFORMATION

14.1 A Sector Association and an Operator must retain records of all information required to be supplied to the Administrator under these Rules.

14.2 In particular, an Operator must retain:

14.2.1 sufficient records to allow the Administrator to verify whether a target unit has met its target, including sufficient records to allow the accurate verification of throughput and annual consumption of energy of a target unit; and

14.2.2 records of energy saving actions and measures implemented during each target period.

14.3 A Sector Association and an Operator must make all records which it is required to retain under these Rules available for inspection by the Administrator or a person appointed by the Administrator and must provide copies of such records in response to a request by the date specified in the request.

14.4 All records required to be retained under these Rules must be retained throughout the duration of an agreement and for a period of four years following the termination of an agreement.

15. PUBLICATION AND DISCLOSURE OF INFORMATION

15.1 The Administrator must publish such information as required under the Regulations.

15.2 In respect of the disclosure of information other than disclosure of information required to be published under the Regulations, information supplied by a Sector Association or an Operator to the Administrator or the Secretary of State, to any agent of the Administrator or the Secretary of State, or to any person appointed by the Administrator or Secretary of State to carry out an independent audit, may be disclosed without the consent of the Sector Association or Operator, where such disclosure is:

15.2.1 by the Administrator to the Secretary of State, for any purpose connected with the functions of the Secretary of State;

15.2.2 by the Secretary of State to the Administrator, for any purpose connected with the functions of the Administrator;

15.2.3 to a relevant authority, for any purpose connected with the functions of the relevant authority;

15.2.4 to any person appointed by the Administrator or the Secretary of State to carry out an independent audit;

15.2.5 to an adjudicator appointed under these Rules;

15.2.6 to any person appointed by the Administrator or the Secretary of State to act as agent, consultant, adviser or contractor to the Administrator or the Secretary of State, in connection with the functions of the Administrator of the Secretary of State;

15.2.7 necessary for the purpose of or in connection with any legal proceedings, including the obtaining of legal advice;

15.2.8 required to comply with any Act of Parliament or subordinate legislation made under an Act of Parliament, including requests made under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004; or

15.2.9 required to meet any obligation to the European Union.

15.3 A relevant authority referred to in this Rule means:

15.3.1 either House of Parliament including any committee of either or both Houses;

15.3.2 any Government department;

15.3.3 the European Commission;

15.3.4 the Committee on Climate Change;

15.3.5 the Commissioners of Her Majesty's Revenue and Customs;

15.3.6 a person or body prescribed by or appointed under Part I of the Environmental Protection Act 1990 or regulations made under section 2 of the Pollution Prevention and Control Act 1999 or any corresponding legislation for Northern Ireland;

15.3.7 any regulator appointed under section 54 of the Competition Act 1998; or

15.3.8 any other public body, regulatory agency or government advisory body, where in the absolute discretion of the Administrator or the Secretary of State, as appropriate, the Administrator or Secretary of State considers that it would be obliged to disclose such information in response to a request for information under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004, if such a request were made.

16. COLLECTION OF CHARGES

16.1 A Sector Association may request the consent of the Administrator to collect charges due from Operators to the Administrator in respect of facilities under the charging scheme.

16.2 If a Sector Association wishes to collect charges due from an Operator to the Administrator under the charging scheme, the Sector Association may serve a notice in writing on the Administrator by the last working day in February in the calendar year in which the charges fall due.

16.3 A notice served under Rule 16.2 must specify the facilities in respect of which the Sector Association intends to collect charges, being not fewer than 50% of the facilities covered by an umbrella agreement.

16.4 Following receipt of the notice, the Administrator must:

16.4.1 consent to the Sector Association collecting charges; or

16.4.2 refuse consent to the Sector Association collecting charges, giving reasons for the decision.

16.5 If the Administrator consents to the Sector Association collecting charges the Sector Association must:

16.5.1 itemise charges separately in any invoices that it issues in respect of charges;

16.5.2 collect and remit all charges collected to the Administrator without deduction or set off by the last working day in September in each year;

16.5.3 prepare an annual report to the Administrator by the last working day in October in the year in which it has collected charges setting out which Operators it has collected charges from and which Operators have failed to pay charges due to the Sector Association.

16.6 A Sector Association must not actively pursue any outstanding charges after the last working day in September in any year in which they fall due. If a Sector Association receives charges after this date the Sector Association must accept the payment and remit this to the Environment Agency along with information identifying the Operator making the payment.

16.7 If a Sector Association fails to comply with any of its obligations under this Rule the Administrator may serve a notice on the Sector Association that consent to the Sector Association continuing to collect charges is withdrawn at the expiry of 20 working days from the date of the notice.

17. SERVICE OF NOTICES

17.1 Any notice served under these Rules must be in writing and may be served by sending it by post or electronically.

17.2 The address for the service of all notices on the Administrator is:

Postal: Environment Agency
Richard Fairclough House
Knutsford Road, Latchford,
Warrington,
Cheshire, WA4 1HT

Electronic: CCA-operations@environment-agency.gov.uk

17.3 The address for the service of all notices on the Sector Association is the address of the person set out in Schedule 2 to the umbrella agreement.

17.4 The address for the service of all notices on the Operator is the address of the responsible person.

SCHEDULE 2
THE SECTOR ASSOCIATION

The Confederation of Paper Industries
Which represents facilities that belong to the Paper sector.

Whose address for service of all notices under this Agreement is

By post:
1 Rivenhall Road
Swindon
Wiltshire
SN5 7BD

Electronically:
tmc@paper.org.uk

SCHEDULE 3
THE SECTOR

ACTIVITIES UNDERTAKEN BY A FACILITY FALLING WITHIN THE SECTOR

A facility belongs to the paper sector if it is a facility at which the primary activity is the manufacture of paper, pulp or cardboard.

SCHEDULE 4
LIST OF FACILITIES

SCHEDULE 5
THE SECTOR COMMITMENT

Sector Commitment:

Target Period	**Sector Commitment (percentage reduction from base year)**
1 January 2013 to 31 December 2014	3.500%
1 January 2015 to 31 December 2016	4.667%
1 January 2017 to 31 December 2018	5.833%
1 January 2019 to 31 December 2020	7.000%
1 January 2021 to 31 December 2022	2.882%

Greenhouse gas emissions permit

The Greenhouse Gas Emissions Trading Scheme Order 2020 (the Order)

Operator name(s)
Kimberly - Clark Limited

Installation name
Barrow Mill

Site name (if applicable)
Barrow Mill

Installation address
Park Road
Barrow - in - Furness
LA14 4QX
United Kingdom

Permit number
UK-E-IN-11601

Effective date of permit
7 August 2025

Issued by the Environment Agency

INTRODUCTORY NOTE

This introductory note does not form part of the permit.

This greenhouse gas emissions permit (permit) is issued by the Environment Agency. It authorises the regulated activities set out in the permit to be carried out at the installation and includes a number of conditions with which you must comply, including the monitoring and reporting of emissions, the surrender of allowances and notification requirements. If you are a ‘FA installation’ (as defined in the Order), this also includes the free allocation conditions.

Part 1 of this permit contains a description of the installation to which it applies, the regulated activities carried out at the installation and the specified emissions from those activities. Part 2 contains the conditions with which you must comply and Part 3 contains definitions of terms used in this permit.

Your monitoring plan relating to the monitoring of emissions is attached to this permit as Appendix 1. If applicable, your monitoring methodology plan relating to the monitoring of activity levels is attached as Appendix 2.

Talking to us

You can contact us by e-mail on ethelp@environment-agency.gov.uk.
If you contact the regulator about this permit, please quote the permit reference number.

Variations to the permit

You may apply to us to vary your permit and must do so where required by a condition of this permit. We also have powers to vary your permit in certain circumstances set out in the Order.

Surrender of the permit

You must apply to surrender your permit where the installation has ‘ceased operation’, as defined in the Order. The timescales and requirements for this surrender application are set out in the Order. You may also choose to surrender your permit if at any time all regulated activities have ceased to be carried out at the installation.

Transfer of the permit or part of the permit

Before the permit can be wholly or partially transferred to another operator, a joint application to transfer the permit must be made by the transferring operator and the new operator. The procedure and requirements are set out in the Order.

Appeals

You may appeal against the provisions of this permit. The Order contains information about the appeals procedure.

Charges

Following the issue of the permit, annual subsistence fees will be payable. Other fees may also be payable, including for permit transfers, surrenders and revocations.

Regulator's Address

Our contact address is as follows:
Email to: ethelp@environment-agency.gov.uk

Status Log

Permit

Permit number	Date application received	Date further information received	Date permit issued or change made
UK-E-IN-11601	07 August 2025		07 August 2025

Changes to Permit

Notice number	Change Type	Date application received	Date further information received	Date Notice issued	Comment
AEMV11601-P3-4	AEM Variation			19 August 2021	
AEMV11601-P3-6	AEM Variation			28 June 2022	
AEMV11601-1	AEM Variation	04 August 2023		04 August 2023	An administrative amendment has been made to the remove the MMP decision document from the installation account following the migration of data from ETSWAP to METS. This has not resulted in any changes to the permit, and no variation notice has been issued. However a record of a variation has been created in METS, and a consolidated version of the permit has been generated.

End of introductory note

PERMIT

Under the Greenhouse Gas Emissions Trading Scheme Order 2020

Permit Number
UK-E-IN-11601

Consolidated version number
19

The Environment Agency **(the regulator)** in exercise of its powers under the Greenhouse Gas Emissions Trading Scheme Order 2020, authorises:

Kimberly - Clark Limited **(the operator)**

Company Registration Number
00308676

Registered Office Address
Walton Oaks Dorking Road
Tadworth
Surrey
KT20 7NS
England

to carry out regulated activities resulting in greenhouse gas emissions, as described and defined in and subject to the conditions set out in this permit, at:

Installation Name
Barrow Mill

Site Name (if applicable)
Barrow Mill

Installation Address
Park Road
Barrow - in - Furness
LA14 4QX
United Kingdom

National Grid Reference
SD19667272

Signed	Date
	07 August 2025

Iain Weatherall
Authorised to sign on behalf of the Environment Agency

PART 1

Scope of permit and of the installation

1. This permit authorises the regulated activities listed in Table 1 below to be carried out at the installation.

Regulated activities	Specified emissions
Paper or cardboard production	Carbon dioxide

Table 1 Regulated activities carried out at the installation.

2. For the purposes of this permit, the installation is as described in Table 2, as supplemented by any change notified to the regulator in accordance with the permit conditions.

The approximately 30 hectare site is located at Barrow in Furness on the south west coast of the Furness Peninsula about 3.5 km north of the town centre. The eastern part of the site contains the production and converting areas, administration offices, engineering work shops, storage areas and a boiler plant. The installation manufactures up to 400 gross tonnes per day of tissue paper. The boiler plant comprises three main boilers and one backup boiler all gas fired but with the capability to use gasoil. The plant is situated in the south east corner of the site. The total rated thermal input of the boiler plant is 55.8 MWth and they produce steam for use in the process and a small amount for heating. The main boilers modulate combustion relative to site demand and use a common stack for exhaust with the standby boiler having its own 15m stack. Two paper making machines on site are housed in the south end of the main building. Each of the tissue machines uses gas fired dryers in the process. The operation runs on a 24 hour 7 days per week basis with a 4 day Christmas shut.

Table 2 Description of the installation

PART 2

Conditions

1. The operator must monitor the reportable emissions of the installation in accordance with the Monitoring and Reporting Regulation and the monitoring plan (including the written procedures supplementing that plan).
2. The operator must prepare in accordance with the Monitoring and Reporting Regulation a report of the installation's reportable emissions in each scheme year that is verified as satisfactory in accordance with the Verification Regulation and must submit the report (and the verification report) to the regulator on or before 31 March in the following year.
3. The operator must surrender allowances equal to the installation's reportable emissions in a scheme year on or before 30 April in the following year.
4. The operator must modify its monitoring plan in accordance with Articles 14 and 59(4) of the MRR and:
   (a) where the operator proposes to make a significant modification as defined in Article 15(3) or as referred to in Article 66(1) of the MRR, it must apply to the regulator for a variation of its permit at least 14 days before making the modification or, where this is not possible, as soon as reasonably practicable and such application must:
      i. include a description of the change; and
      ii. set out how it affects the information contained in the monitoring plan; or
   (b) where the operator makes a change to its monitoring plan that is not a significant modification, it must notify the regulator on or before 31 December in the year in which the change occurred and such notification must:
      i. include a description of the change;
      ii. set out how it affects the information contained in the monitoring plan; and
      iii. explain how the change is in accordance with the Monitoring and Reporting Regulation.
5. Where the name of the operator changes, the operator must apply to the regulator for a variation of its permit to reflect the change as soon as reasonably practicable following the change.
6. Where the operator does not apply at least the tiers required by or applies a fall-back methodology pursuant to the Monitoring and Reporting Regulation, the operator must submit a report to the regulator in accordance with the requirements specified in Articles 69(1) to (3) of the MRR by the following deadlines (unless an alternative deadline has been approved by the regulator in writing pursuant to Article 69(1) of the MRR and, in which case, that deadline applies), starting in the case of a new operator with 30 June in the year after that in which the permit is granted and for any other operator, 30 June 2021:
   (a) for a category A installation, on or before 30 June every four years
   (b) for a category B installation, on or before 30 June every two years
   (c) for a category C installation, on or before 30 June every year
7. Where a verification report states outstanding non-conformities or recommendations for improvements (or in relation to an installation with low emissions, non-conformities only) as specified in Article 69(4) of the MRR, the operator must submit a report to the regulator in accordance with the requirements of that Article on or before 30 June of the year in which the verification report is issued, unless the operator has, before the relevant 30 June deadline:
   (a) resolved such non-conformities or recommendations; and
   (b) submitted a variation application covering the related modifications in accordance with condition 4(a).

8. The operator must notify the regulator in accordance with the Monitoring and Reporting Regulation at least 14 days before the circumstances referred to in (a) to (d) occur or, where this is not possible, as soon as reasonably practicable:

   (a) where there is a temporary change to its monitoring methodology as specified in Article 23 of the MRR;

   (b) where tier thresholds are exceeded or equipment is found not to conform to requirements which require corrective action as specified in Article 28(1) of the MRR;

   (c) where a piece of measurement equipment is out of operation as specified in Article 45(1) of the MRR; and

   (d) where an installation with low emissions exceeds the relevant threshold as specified in Article 47(8) of the MRR.

9. The operator must keep records of all relevant data and information in accordance with Article 67 of the MRR.

10. Where all regulated activities authorised by the permit have ceased to be carried out at the installation, the operator must notify the regulator within one month of the day on which all regulated activities ceased to be carried out or on or before 31 December in the scheme year in which the cessation occurs, whichever is later (the notification date), of:

    (a) the date of the cessation;

    (b) whether or not the operator intends for one or more of the regulated activities authorised by the permit to resume at the installation;

    (c) where the operator does intend for one or more of the regulated activities authorised by the permit to resume at the installation, each of the following:
    (i) the date by which the operator expects those regulated activities to resume;

    (ii) whether either—

    (aa) the installation is technically capable of resuming those regulated activities without physical changes being made; or

    (bb) the operator intends for the technical capability required for those regulated activities to resume to be restored at the installation,

    but this condition does not apply where the operator has applied to surrender the permit or all regulated activities authorised by the permit have resumed prior to the notification date.

Free allocation conditions

Conditions 11 to 14 apply while the installation is a FA installation and, from 1 January 2026 and in relation to condition 12 only, to an installation which was a FA installation at the date on which the installation ceases operation or at the date a surrender or revocation notice relating to the installation takes effect (even if the installation is not an FA installation after the end of that scheme year):

11. The operator must monitor the activity level of the installation in accordance with the Free Allocation Regulation and the monitoring methodology plan (including the written procedures referred to in Article 8(3) of the FAR).

12. The operator must prepare in accordance with the Activity Level Changes Regulation a report of its activity level of each sub-installation of the installation in each scheme year (or in the 2 scheme years preceding the submission as required by Article 3 of the Activity Level Changes Regulation) that is verified as satisfactory

in accordance with the Verification Regulation and must submit the report (and the verification report) to the regulator on or before 31 March in the following year.

13. The operator must modify its monitoring methodology plan in accordance with Articles 9(2) and 12(3) of the FAR and:

    (a) where an operator proposes to make a significant modification as defined in Article 9(5) of the FAR, it must apply to the regulator for a variation of its permit at least 14 days before making the modification or, where this is not possible, as soon as reasonably practicable and such application must:

        i. include a description of the change; and

        ii. set out how it affects the information contained in the monitoring methodology plan; or

    (b) where an operator makes a change to its monitoring methodology plan that is not a significant modification, it must notify the regulator on or before 31 December in the year in which the change occurred and such notification must:

        i. include a description of the change;

        ii. set out how it affects the information contained in the monitoring methodology plan; and

        iii. explain how the change is in accordance with the Free Allocation Regulation.

14. The operator must keep records of all relevant data and information in accordance with Article 7(3) and 9(6) of the FAR.

PART 3

Definitions

(1) In this permit:

(a) “the Activity Level Changes Regulation” means Commission Implementing Regulation (EU) 2019/1842 of 31 October 2019 as it forms part of domestic law, as amended from time to time;

(b) “allowance” has the meaning given in Article 4 of the Order;

(c) “category A installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(d) “category B installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(e) “category C installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;

(f) “FA installation” has the meaning given in Article 4A of the Order;

(g) “the Free Allocation Regulation” or “FAR” means Commission Delegated Regulation 2019/331 of 19 December 2018 as it forms part of domestic law, as amended from time to time;

(h) “installation” means the installation operated by the operator and as described in Part 1 of this permit, as supplemented by any change notified to the regulator in accordance with the conditions of this permit;

(i) “installation with low emissions” has the meaning given in Article 47(2) of the Monitoring and Reporting Regulation;

(j) “the Monitoring and Reporting Regulation” or “MRR” means Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020) as given effect for the purpose of the UK ETS by Article 24 of the Order subject to the modifications made for that purpose from time to time;

(k) “monitoring plan” means the plan attached as Appendix 1, together with any modifications notified to the regulator under condition 4 and includes the written procedures supplementing that plan;

(l) “monitoring methodology plan” means the plan attached as Appendix 2, together with any modifications notified to the regulator under condition 14 and includes the written procedures supplementing that plan;

(m) “new operator” means the operator of an installation whose permit was granted after 1 January 2021;

(n) “operator” means the holder of this permit;

(o) “the Order” means The Greenhouse Gas Emissions Trading Scheme Order 2020 as amended from time to time;

(p) “regulated activity” has the meaning given in Schedule 2, paragraph 3 to the Order;

(q) “the regulator” means the Environment Agency;

(r) "reportable emissions" means the total emissions of gases specified in Table 1 in Part 1 of this permit (expressed in tonnes of carbon dioxide equivalent) which arise from the regulated activities carried out in the installation;

(s) “scheme year” means a calendar year commencing on 1 January;

(t) “surrender” means the process described in Schedule 5A, paragraph 24(1) to the Order;

(u) “sub-installation” has the same meaning as in the Free Allocation Regulation;

(v) “verification report” has the same meaning as in the Verification Regulation and for the purposes of condition 7 means a report submitted in accordance with condition 2 of this permit;

(w) “the Verification Regulation” means Commission Implementing Regulation (EU) 2018/2067 of 19 December 2018 on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020), as given effect for the purpose of the UK ETS by Article 25 of the Order subject to the modifications made for that purpose from time to time;

Appendix 1 to Greenhouse gas emissions permit number UK-E-IN-11601

Monitoring Plan

List of environmental licenses related to this installation

Type	Number	Issuing authority	Permit holder
EPR permit with variation	EPR/ BJ7611IY	Environment Agency	Kimberly Clark Ltd

Estimated annual emissions (tonnes $CO_{2(e)}$)	45,000
Installation Category	Category A

Source Streams (fuels and/or materials)

Summary of the source streams used in the regulated activities at the installation.

Source Stream Reference	Source Stream Type	Source Stream Description
F1	Combustion: Other gaseous & liquid fuels	Natural Gas
F2	Combustion: Commercial standard fuels	Gas/Diesel Oil
F3	Combustion: Other gaseous & liquid fuels	Acetylene
F4	Combustion: Commercial standard fuels	Liquefied Petroleum Gases

Emission Sources

Summary of emission sources which relate to the regulated activities at the installation.

Emission Source Reference	Emission Source Description
S1	Main Boiler 1
S2	Main Boiler 2
S3	Main Boiler 3
S4	Standby Boiler
S6	PM3 Dryer Hood Exhaust
S8	Stationary engines
S10	Space Heating Equipment
S11	Oxy Acetylene Burning Equipment
S12	LPG Burning Equipment
S13	Temporary diesel-fuelled equipment
S14	TM5 Dryer Hood exhaust

Emission Points

Summary of the emission points which relate to the regulated activities at the installation.

Emission Point Reference	Emission Point Description
EP1	45m stack Main Boiler 1 flue
EP2	45m stack Main Boiler 2 flue
EP3	45m stack Main Boiler 3 flue
EP4	20m stack Standby Boiler
EP6	PM3 Dryer Hood Exhaust
EP8	Diesel Stationary Engines
EP10	Space Heater Exhausts
EP11	Oxy Acetylene Emissions
EP12	Fugitive emissions from LPG fuelled equipment
EP13	Fugitive emissions from temporary diesel-fuelled equipment
EP14	TM5 dryer hood exhaust

Technical details of the regulated activities

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Regulated Activity
F1	S10, S3, S6, S14, S1, S2, S4	EP14,EP10,EP1,EP4,EP6,EP2,EP3	Paper or cardboard production
F2	S3, S13, S1, S2, S8, S4	EP1,EP4,EP2,EP13,EP8,EP3	Paper or cardboard production
F3	S11	EP11	Paper or cardboard production
F4	S3, S12, S1, S2, S4	EP1,EP4,EP2,EP12,EP3	Paper or cardboard production

Measurement Devices

Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
C1	Electronic volume conversion instrument (EVCI)	n/a	n/a	1	Next to meter M1
C2	Electronic volume conversion instrument (EVCI)	n/a	n/a	1	Next to meter M2
M1	Turbine meter	2800 to 56000	ft3/hr	1	Gas Hut G1 in the attached drawing.
M2	Turbine meter	2800 to 56000	ft3/hr	1	Gas Hut G1 in the attached drawing
M3	Ultrasonic meter	0.1 to 100	l/min	20	In standby fuel line outside west wall of Main Boiler

Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
					House
M4	Rotary meter	0 to 100	litres/min	10	On diesel standby fuel bund wall.
P1	Bottle count	0 to 500	kg	N/A	Engineering Stores
P2	Bottle Count	0 to 500	kg	N/A	Engineering Stores

Calculation

Approach Description

Natural gas use is monitored via continual metering using two fiscal gas meters which are owned by NG and used in compliance with UK statutory obligations. The meters are read on a regular basis (at least monthly) and gas use is summed to give the annual activity data. This source stream is in the major category.

Propane gas use is monitored by counting the number of full bottles used using maintenance records. This source is in the de minimis category.

Gasoil usage in the boiler plant is monitored using an ultrasonic meter in the gasoil delivery line. The meter is read on a regular basis (at least monthly) and gasoil use is summed to give the annual activity. Gasoil used in the diesel engines is monitored using a meter on the dispensing pump which is read on a monthly basis. Usage is recorded on signed sheets as and when the diesel engines are topped up. This fuel source is also used for any temporary diesel-fuelled equipment. This source stream is in the de minimis category.

Default calculation factors as listed in National Standard Data are used for these three fuels and applied to the activity data to determine the CO2 by calculation: CO2 = Measured Activity x NCV x Emission Factor x Oxidation Factor.

Acetylene gas use is monitored by counting the number of full bottles used using maintenance records. This source is in the de minimis category. Calculation factor tiers are as per authority guidance.

Competent Authority approved calculation factors are used for this fuel and applied to the activity data to determine the CO2 by calculation: CO2 = Measured Activity x NCV x Emission Factor x Oxidation Factor.

Applied tiers

Source Stream Ref.	Emission Source Refs.	Measurement Device Refs.	Overall uncer-tainty (+/- %)	Activity Data Tier	NCV Tier	Emis-sion Factor Tier	Oxida-tion Factor Tier	Carbon Content Tier	Conver-sion Factor Tier	Bio-mass Fraction Tier	Category
F1	S10, S3, S6, S14, S1, S2, S4	M2, C1, M1, C2	1.5% or less	Tier 4	Tier 2a	Tier 2a	Tier 1	N/A	N/A	N/A	Major
F4	S3, S12, S1, S2, S4	P2	N/A	No tier	Tier 2a	Tier 2a	Tier 1	N/A	N/A	N/A	De-minimis
F3	S11	P1	N/A	No tier	Tier 2a	Tier 2a	Tier 1	N/A	N/A	N/A	De-minimis
F2	S3, S1, S2, S4	M3	N/A	No tier	Tier 2a	Tier 2a	Tier 1	N/A	N/A	N/A	De-minimis
F2	S13, S8	M4	N/A	No tier	Tier 2a	Tier 2a	Tier 1	N/A	N/A	N/A	De-minimis

Reference sources applied

The table below lists, for each parameter, the reference sources to be used for calculation factors.

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
F1	S3, S4, S10, S6, S14, S1, S2	NCV	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F1	S3, S4, S10, S6, S14, S1, S2	EF	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F1	S3, S4, S10,	OxF	Section 2.3 of Annex 2 of the Monitoring and	1

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
	S6, S14, S1, S2		Reporting Regulation	
F4	S3, S4, S12, S1, S2	NCV	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F4	S3, S4, S12, S1, S2	EF	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F4	S3, S4, S12, S1, S2	OxF	Section 2.3 of Annex 2 of the Monitoring and Reporting Regulation	1
F3	S11	NCV	Competent Authority guidance	48.2 GJ/t
F3	S11	EF	Competent Authority guidance	3.38 tCO_2/t
F3	S11	OxF	Section 2.3 of Annex 2 of the Monitoring and Reporting Regulation	1
F2	S3, S4, S1, S2	NCV	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F2	S3, S4, S1, S2	EF	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F2	S3, S4, S1, S2	OxF	Section 2.3 of Annex 2 of the Monitoring and Reporting Regulation	1
F2	S13, S8	NCV	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F2	S13, S8	EF	Data to be taken from the latest National Inventory as submitted to the UNFCCC	N/A
F2	S13, S8	OxF	Section 2.3 of Annex 2 of the Monitoring and Reporting Regulation	1

Analytical approaches to be applied to each source stream

The table below lists, for each source stream, where calculation factors are to be determined by analysis.

Source Stream Refs.	Emission Source Refs.	Parameter	Method of Analysis	Frequency	Laboratory Name	Laboratory ISO17025 Accredited

Management Procedures

Monitoring and Reporting Responsibilities

Responsibilities for monitoring and reporting emissions from the installation are listed below.

Job Title / Post	**Responsibilities**
Plant Director	Ultimate responsibility at site level for all operational matters.
Safety, Environment & Logistics Manager	Responsible to the Plant Director and has management control of the co-ordination, collation and evaluation of all Climate Change/ GHG Emissions monitoring as well as other environmental and safety matters.
Environment Engineer	Responsible at site level for collating, coordinating evaluating and reporting of all Climate Change/ GHG emissions under CCA and UK ETS and oversees the TMC outsource activity.
Site Safety Advisor.	Is the nominated deputy for the Environment Engineer in respect of Climate Change reporting under CCA and UK ETS and oversees the TMC outsource activity.
CPI/TMC Personnel	Responsible for the: • The receipt, processing of the downloaded site data and reporting back to site. • The collation of site data into the draft annual AEM Report for site approval.

Assignment of Responsibilities

Details of the procedure used for managing the assignment of responsibilities for monitoring and reporting within the installation and for managing the competencies of responsible personnel.
This procedure identifies how the monitoring and reporting responsibilities for the roles identified above are assigned and how training and reviews are undertaken.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	PR-27280 This procedure describes the roles and responsibilities relating to Climate Change Reporting. Each individual Role Profile states the competencies required
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Monitoring Plan Appropriateness

Details of the procedure used for regular evaluation of the monitoring plan's appropriateness covering in particular any potential measures for the improvement of the monitoring methodology.

Title of procedure	Environmental Monitoring & Reporting/Internal Auditing
Reference for procedure	PR-27280/ PR- 15711
Diagram reference	
Brief description of procedure	These procedures specify the Permits/license conditions to be reviewed/ audited for

	compliance and potential improvement.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logistics
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Data Flow Activities

Details of the procedures used to manage data flow activities.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR- 27280
Diagram reference	
Brief description of procedure	This procedure describes the actions to be taken to control and monitor energy consumption in the mill and to satisfy the requirements of our Climate Change Agreement , Greenhouse Gas Permit and EPR Permit. It includes actions to be taken in the event of gas meter or corrector failure.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logistics
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	
List of primary data sources	Meter readings are taken monthly on the last working day of the month by the Environment Engineer & Safety Advisor and reported in the Mill Meter Readings spreadsheet. These are checked against previous months readings and against supplier invoices. Natural Gas Meters are on half hour telemetry direct to the supplier. Standby fuel (diesel) is stored in a tank to the south of the boiler house near to the south gate. Boiler usage data is gained from the ultrasonic meter readings and diesel use for stationary engines is gained from a rotary meter on the dispensing pump. Acetylene and LPG is done on a bottle count
Description of the relevant processing steps for each specific data flow activity. Identify each step in the data flow and include the formulas and data used to determine emissions from the primary data. Include details of any relevant electronic data processing and storage systems and other inputs (including manual inputs) and confirm how outputs of data flow activities are recorded	The data (corrector reads) is delivered to our energy supplier on a daily basis. This data is compiled into a monthly invoice which is sent to our shared service centre at Brighton. The invoice downloaded by the Environment Engineer before being passed to the Site Operations Support for review, cost coding and then to Plant Director for approval. Checks / Internal Reviews: Environment Engineer or Safety Advisor, will double check the data in the TMC data base for correct input. The Environment Engineer or Safety Advisor inputs the information from the meter reads to a macro enabled spreadsheet. As the data is input into the spreadsheet it is automatically and manually checked against the previous month to prevent input of incorrect data. In addition the TMC database has an inbuilt calculation procedure that compares previous months against an allowed variation of +/-10% as a 'sense' check. Where there is such a difference a comment is made as to the reason/s for the difference. The site meter reading spreadsheet is also sent by the Environment Engineer or Safety Advisorto the Operations Support on a monthly basis for the purpose of financial accrual and acts as further sense check on the meter reading data. Energy supplier invoices are also obtained by the Environment Engineer or Safety Advisor for cross checking against the relevant site meter reading. Additionally, internal audits of the UK ETS procedures and data reporting are carried out as part of the site ISO14001 internal audit program. Corrective actions are tracked and auctioned through the site Environmental Management System and Management Review process. Audit reports are filed in the site's electronic EMS.

Documents relevant to the recording of data flow activities.

Attachment

Quality Assurance of Information Technology used for Data Flow Activities

Details of the procedures used to ensure quality assurance of information technology used for data flow activities.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	Meter readings are taken from the National Grid Meters, for ETS these numbers are used directly without manipulation and checked against the previous month for validation. The numbers entered into the TMC database are verified by TMC against the expected input for a standard month and any deviation over 10% is flagged.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Review and Validation of Data

Details of the procedures used to ensure regular internal reviews and validation of data.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	The Environment Engineer or Safety Advisor, will double check the data in the TMC data base for correct input. Environment Engineer or Safety Advisor inputs the information from the monnthly meter reads to a macro enabled spreadsheet. As the data is input into the spreadsheet it is manually checked against the previous month to prevent input of incorrect data. In addition to this the TMC database has an in built calculation procedure that compares previous months against an allowed variation of +/-10% as a 'sense' check. Where there is such a difference a comment is made as to the reason/s for the difference. The site meter reading spreadsheet is also sent by the Environment Engineer or Safety Advisor to the Operations Support Dept. on a monthly basis for the purpose of financial accrual and acts as further sense check on the meter reading data. Energy supplier invoices are also obtained by the Environment Engineer or Safety Advisor for approval on a monthly basis, enabling the invoice amount to be cross checked against the relevant site meter reading.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Assessing and Controlling Risks

Details of the procedures used to assess inherent risks and control risks.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR- 27280
Diagram reference	
Brief description of procedure	PR-27280 describes the actions to be taken to control and monitor energy consumption in the mill and to satisfy the requirements of our Climate Change Agreement , Greenhouse Gas Permit and EPR Permit. An FMEA document was developed some time ago and is reviewed annually or if/when major changes take place. This document is linked via PR-27280 Appendix B. The risk of misstatement is minimised by a) Monthly meter readings allow errors to be

	picked up on subsequent readings.This also acts as a check on the correct functioning of the fiscal meter. b) Daily Production Efficiency and Costing reports enable anomalies to be discussed at production meeting or earlier if necessary. c) Data being separately validated by the Operations Support Dept. and the Management Consultant at CPI/TMC. d). The CPI/TMC active reporting programme prevents the inclusion of wrongly transcribed data. e) keeping the gas meter building locked prevents unauthorised access to the gas meters and correctors and avoids disturbance and loss of data. f). Comparison of data against suppliers invoices is made but this is for economic valdation and not primary data management.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logistics
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Quality Assurance of Metering / Measuring Equipment

Details of the procedures used to ensure quality assurance of measuring equipment.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	Natural gas usage data is gained from the fiscal meters located on the site in the gas hut. There are two turbine meters with a stated accuracy of +/- 1%. Meter MPR80589101 measures the natural gas used by the paper machines, MPR 80586600 measures the natural gas used by the boiler plant. Each of the gas meters has a device that corrects for temperature and pressure and the data they measure is relayed to National Grid (the meter owners) via a telemetry device. These meters are identified by a unique serial number and are periodically maintained by the meter owners, National Grid.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Corrections and Corrective Actions

Details of the procedures used to handle corrections and corrective actions.

Title of procedure	Environmental Monitoring & Reporting.
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	If discrepancies or errors are found an investigation must be performed and remedial action must be taken where appropriate. Records must be made of the substance of the discrepancy and of any actions taken. These records must be communicated to the Environment Engineer or Safety Advisor. If a mistake is made in the data submitted to the TMC data base then a ‘howler’ is generated. This is a description of an error that the data base administrators have picked up and which must be acted upon before any further data is entered. The Environment Engineer or Safety Advisor is responsible for monitoring and recording any changes or malfunctions to the site meters (listed above) and for communicating these issues to the Environment Agency. Management of the CCA & UK ETS process is an agenda item at the EHS Steering Committee & Management Review which is a function of the site Environmental Management System (EMS) and as such any actions described in this procedure will be tracked though the EMS.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet

Name of IT system used	
List of EN or other standards applied	

Control of Outsourced Activities

Details of the procedures used to control outsourced processes.

Title of procedure	Environmental Monitoring & Reporting
Reference for procedure	PR-27280
Diagram reference	
Brief description of procedure	The CPI/TMC data collection and reporting work is an outsourced activity and the control of this activity is outlined in the procedure. It should be noted that whilst the draft AEM report is produced and submitted by CPI/TMC, the final submission of the verified AEM report is made by mill personnel. The data flows between KC and CPI/TMC are shown in the form of flow diagrams attached to the procedure.
Post or department responsible for the procedure and for any data generated	Safety, Environment & Logisitcs
Location where records are kept	Site Intranet
Name of IT system used	
List of EN or other standards applied	

Record Keeping and Documentation

Details of the procedures used to manage record keeping and documentation.

Title of procedure	Environmental Monitoring & Reporting/Document Control/Record Control
Reference for procedure	PR- 27280 & PR15710
Diagram reference	
Brief description of procedure	These procedures specify the records which must be kept and for what duration and where the records must be maintained. Records and information relating to CCA & UK ETS monitoring and reporting are maintained on the site intranet in the Environmental Management System.
Post or department responsible for the procedure and for any data generated	Environment Engineer or Safety Advisor
Location where records are kept	Electronic records are maintained on the site intranet and paper records are kept in the SQE offices by the Environment Engineer or Safety Advisor
Name of IT system used	
List of EN or other standards applied	

Environmental Management System

Standard to which the Environmental Management System is certified:	ISO14001

Appendix 2 to Greenhouse gas emissions permit number UK-E-IN-11601

Monitoring methodology plan

Installation description

Installation details

Describe the installation and its main processes	The approximately 30 hectare site is located at Barrow in Furness on the south west coast of the Furness Peninsula about 3.5 km north of the town centre. The eastern part of the site contains the production and converting areas, administration offices, engineering work shops, storage areas and a boiler plant. The installation manufactures up to 400 gross tonnes per day of tissue paper. The boiler plant comprises three main boilers and one backup boiler all gas fired but with the capability to use gasoil. The plant is situated in the south east corner of the site. The total rated thermal input of the boiler plant is 55.8MWTh and they produce steam for use in the process and a small amount for heating. The main boilers modulate combustion relative to site demand and use a common stack for exhaust with the standby boiler having its own 15m stack. The two paper making machines on site are housed in the south end of the main building. Each of the tissue machines uses gas fired dryers in the process. The operation runs on a 24 hour 7 days per week basis with a 10 day Christmas shut. Recovered paper is used to produce some of the site's pulp requirements. There are 2 sub installations on site: 1. Sub installation with product benchmark - Recovered paper pulp (covering the deinking plant that utilises recovered paper) 2. Sub installation with product benchmark - Tissue (covering two tissue machines - TM3 and TM5) Reference to a flow diagram: Flow Diagram NIMsCurrent April 2022
Upload a flow diagram	Flow Diagram NIMsCurrent April 2022.docx

Sub-installations

Sub-installations with product benchmarks

Sub-installation type	Carbon leakage
Recovered paper pulp	Exposed
Tissue	Exposed

Sub-installations with fallback approaches

Sub-installation type	Carbon leakage

Sub-installation with product benchmark: Recovered paper pulp

Sub-installation details

Product benchmark	Recovered paper pulp
Describe the system boundaries of this sub-installation	Recovered Paper Pulp is produced in the De-Inking Plant. The De-Inking Plant processes waste paper to produce recycled fibre as a source to the tissue manufacturing process. Input is waste paper bales, loose waste paper, water, steam and chemicals. Waste paper bales are pulped and bleached to provide a suitable raw material for the tissue manufacturing process.

Annual production levels (activity)

Data sources	**Source 1**
Quantities of products	4.4.(b)

Method used to determine the annual quantity of products	5. (a) based on continual metering at the process where the material is consumed or produced
Description of methodology applied for each data source	Recycled fibre bales come in over the weighbridge and each bale is weighed on the infeed belt. This data is captured within a historian database and also in the site production management system (Plant Applications). The tonnage of virgin fibre bales arriving at the site is measured in a similar manner. Therefore the ratio of recycled to virgin feedstock may be calculated. Paper production on-site is measured according to the methodology noted in the "Tissue" sub-installation detail below and meets 4.4.(b) which is the highest achievable level of the measurement hierarchy. The quantity of dry fibre in the production output must be equal to the quantity of dry fibre in the pulp input and therefore the quantity of pulp input to the process, corrected to 10% moisture, may be easily calculated. The quantity of recovered paper pulp consumed is therefore equivalent to the total pulp input multiplied by the ratio of recovered to virgin fibre input to the mill. Because this calculation is directly derived from the paper production measurement, it also meets 4.4.(b).
Has the hierarchical order been followed	Yes
Description of the methodology used for keeping track of the products produced	Output of the plant and associated processes are captured at key stages throughout the process and also at the input to the next processing stage (Tissue Machine stock systems). This is captured within a historian database and also in the site production management system (Plant Applications). The prodcom code will be checked to verify it is still valid for carbon leakage during the annual UK ETS submission process.

Imported measurable heat flows from non-ETS

Are there any measurable heat flows imported from non-ETS installations or entities?	No

Directly attributable emissions

Attribution of directly attributable emissions	
Are further internal source streams relevant?	No

Is any transferred CO2 imported or exported?	No

Fuel input and relevant emission factor

Is fuel input relevant for this sub-installation?	No

Imported and exported measurable heat

Is any measurable heat imported to or exported from this sub-installation?	Measurable heat imported

Data sources for energy flows	Source 1	Source 2
Measurable heat imported	4.5.(b)	4.5.(f)
Net measurable heat flows	7.2.(a)	7.2.(d)

Description of methodology applied for each data source	Steam is metered / recorded at its input into the process. This is captured within a historian database and also in the site production management system (Plant Applications). Total steam production is known for the site and spilt across the assets. Steam meter SM3 supplies the DIP and this is the steam flow relevant here. The other data source is for condensate return, which is estimated at 50% water @90oC and as such we undertook an enthalply balance to provide the net heat as we do not measure condensate return and have included an unreasonable costs assessment.
Has the hierarchical order been followed	No
Reason for not following the hierarchy	Unreasonable costs
Provide more details on any deviation from the hierarchy	Unreasonable costs justification provided
Description of the methodology for determination of the relevant attributable emission factors	The quantity of boiler fuel associated with the steam produced for this sub-installation is calculated as described in D. I (b) and this equates to a certain quantity of fuel. As emissions are calculated by the formula activity x NCVx EF x OxF we have used the relevant LDZ calculation factors to arrive at an emission factor.
Are there any measurable heat flows imported from sub-installations producing pulp?	No

Waste gas balance

Are there any waste gas activities at this sub-installation?	No, we do not have any waste gas activities at this sub-installation

Sub-installation with product benchmark: Tissue

Sub-installation details

Product benchmark	Tissue
Describe the system boundaries of this sub-installation	The tissue machines process a combination of recylced fibre and virgin fibre pulp to produce facial, bath and wiper products. Other inputs are water, steam and chemicals. This sub installation includes TM3 and TM5. Energy inputs to the sub-installation comprise steam from the boilers (metered through steam meters SM1 and SM2) and natural gas fuel to the hoods (metered through gas meter M1).

Annual production levels (activity)

Data sources	Source 1	Source 2
Quantities of products	4.4.(b)	4.4.(f)

Method used to determine the annual quantity of products	5. (a) based on continual metering at the process where the material is consumed or produced
Description of methodology applied for each data source	Parent reels are automatically weighed off on a set of scales at the end of each tissue machine and the information is transfered into the PIMS system. Please see accompanying calibration certificates. The calibration is performed using the same accuracy parameters as set out in Directive 2014/31/EU and therefore we consider 4.4.(b) has been achieved. Moisture level varies between each machine and product and is measured via a scanner within the PIMS system with an average of 2% across the machines.
Has the hierarchical order been followed	Yes
Description of the methodology used for keeping track of the products produced	Output of the tissue manufacturing assets are captured at key stages throughout the process. This is captured within a historian database and also in the site production management system (Plant Applications). The prodcom code will be checked to verify it is still valid for carbon leakage during the annual UK ETS submission process.

Imported measurable heat flows from non-ETS

Are there any measurable heat flows imported from non-ETS installations or entities?	No

Directly attributable emissions

Attribution of directly attributable emissions	Trivial maintenance source streams are not included. Emissions attributable to this benchmark are those associated with the fuel to the hoods on TM3 and TM4. Emissions are calculated using the formula activity x NCV x EFx OxF. The activity is the fuel metered feeding the hoods M1 MPR 80589101. NCF and EF and OxF are obtained from standard factors relevant to the LDZ. Full details of the configuration of measuring instruments can be found in the phase 3 monitoring plan.
Are further internal source streams relevant?	No

Is any transferred CO2 imported or exported?	No

Fuel input and relevant emission factor

Is fuel input relevant for this sub-installation?	Yes

Data sources for fuel input	Source 1
Fuel input	4.4.(a)
Weighted emission factor	4.6.(a)

Description of methodology applied for each data source	The activity is the natural gas metered into the hoods through meter M1 MPR 80589101. This is recorded in accordance with the approved monitoring plan. The weighted emissions factor is calculated using the following formula: (ADxNCVxEF) / Fuel input.
Has the hierarchical order been followed	Yes

Imported and exported measurable heat

Is any measurable heat imported to or exported from this sub-installation?	Measurable heat imported

Data sources for energy flows	Source 1	Source 2
Measurable heat imported	4.5.(b)	4.5.(f)
Net measurable heat flows	7.2.(a)	7.2.(d)

Description of methodology applied for each data source	Steam is metered / recorded at its input into the process. This is captured within a historian database and also in the site production management system (Plant Applications). The gas : steam ratio (kwhr of gas to a tonne of steam) is recorded on a monthly basis and sense checked based on historic data to check for anomalies. Steam is measured via meters SM1 and SM2 to TM3 and TM5 and SM3 to the DIP. The other data source is for condensate return, which is estimated at 50% water @90oC and as such we undertook an enthalply balance to provide the net heat as we do not measure condensate return and have included an unreasonable costs assessment.
Has the hierarchical order been followed	No
Reason for not following the hierarchy	Unreasonable costs
Provide more details on any deviation from the hierarchy	Unreasonable costs justification provided
Description of the methodology for determination of the relevant attributable emission factors	The quantity of boiler fuel associated with the steam produced for this sub-installation is calculated as described in D. I (b) and this equates to a certain quantity of fuel. Relevant LDZ calculation factors have been used to arrive at an EF.
Are there any measurable heat flows imported from sub-installations producing pulp?	No

Waste gas balance

Are there any waste gas activities at	No, we do not have any waste gas activities at this sub-installation

this sub-installation?	

Methods at installation level

Physical parts of the installation and units which serve more than one sub-installation

Are there any physical parts of the installation or units which serve more than one sub-installation?	Yes
Methods used to assign parts of installations and their emissions to sub-installations	Emissions are attributed in the following manner: Steam from the boilers provides heat which is split between the Tissue and Recovered Paper Pulp sub-installations according to local metering: SM1 & SM2 are on the steam supplies to the tissue machines and SM3 is on the supply to the DIP plant. Emissions from the fuel supplied to the boilers is spilt between the 2 sub installtions at the same ratio (i.e. SM1+SM2 : SM3). The emissions from the fuel to the hoods on TM3 & TM5 is attributed to the Tissue sub-installation. We have a gas meter on the line for the boilers (M2 MPR 80586600) and a separate meter feeding the hoods (M1 MPR 80589101). Competent Authority approved calculation factors are used for this fuel and applied to the activity data to determine the CO2 by calculation: CO2 = Measured Activity x NCV x Emission Factor x Oxidation Factor. Full details can be found in the monitoring plan in the GHG permit.

Physical part of the installation or unit	Sub-installations
Boiler S1	Recovered paper pulp,Tissue
Boiler S2	Recovered paper pulp,Tissue
Boiler S3	Recovered paper pulp,Tissue
Boiler S4	Recovered paper pulp,Tissue

Data gaps and double counting

Methods used for ensuring that data gaps and double counting are avoided	Gas usage is allocated from metered usage at the boiler house based on steam usage within each process and also reconciled against the energy supplier invoice. Environment Engineer and Safety Advisor will double check the data in the TMC data base for correct input. The Environment Engineer (or deputy) inputs the information from the invoices and meter readings to a macro enabled spreadsheet; Energy Bills 20xx.xlsm. This has calculations and formula that compare previous months against an allowed variation of +/-10% as a ‘sense’ check. Where there is such a difference a comment is made as to the reason/s for the difference. Meter readings are also gathered on a monthly basis for use by operations support for the purpose of financial accrual. The Operations Support Dept. uses these readings for comparisons with the invoiced data and they also perform checks on the readings themselves. Within the TMC data base programme there is a built in check whereby if the entered data is not within 10% of the prior month’s entry the software marks the entry as incomplete and the operator must verify the data with an explanation of why the difference exists. Barrow's UK ETS risk assessment demonstrates that the control activities and procedures are commensurate with the risks identified:

Procedures

Assignment of Responsibilities

Name of the procedure	Environmental Monitoring & Reporting

Procedure reference	PR-27280
Diagram reference	N/A
Procedure description	PR-27280 this Procedure describes the roles and responsibilities relating to Climate Change Reporting. Each indivisual role profile states the competencies required.
Department or role responsible for data maintenance	Safety, Environment & Logisitics
Location of records	Site Intranet
IT system used	N/A
List of EN or other standards applied	N/A

Monitoring plan appropriateness

Name of the procedure	Environmental Monitoring & Reporting / Internal Auditing
Procedure reference	PR-27280 / PR 15711
Diagram reference	N/A
Procedure description	These procedures specify the Permits/ licence conditions to be reviewed / audited for compliance and potential improvement.
Department or role responsible for data maintenance	Safety, Environment & Logisitics
Location of records	Site Intranet
IT system used	N/A
List of EN or other standards applied	N/A

Data flow activities

Name of the procedure	Environmental Monitoring & Reporting
Procedure reference	PR-27280
Diagram reference	N/A
Procedure description	This procedure describes the actions to be taken to control and monitor energy consumption in the mill and to satify the requirements of our Climate Change Agreement, Greenhouse gas Permit and EPR permit. It includes actions to be taken in the event of gas meter or corrector failure.
Department or role responsible for data maintenance	Safety, Envrionment & Logisitics
Location of records	Site Intranet
IT system used	N/A
List of EN or other standards applied	N/A

Control activities

Name of the procedure	Environmental Monitoring & Reporting
Procedure reference	PR-27280
Diagram reference	N/A
Procedure description	PR-27280 describes the action to be taken to control and monitor energy consumption in the mill and to satify the requirements of our Climate Change Agreement, Greenhouse gas Permit and EPR permit. An FMEA document was developed some time ago and is reviewed annually or if/ when makor changes take place. This document is linked via PR-27280 Appendix B. The risk of misstatement is minimised by a) monthly meter readings allow errors

	to be picked up on subsequent redings. This also acts as a check on the correct functioning of the fiscal meter. B) Daily production efficiency and costing reports enable anolomolies to be discussed at production meeting or earlier if necessary. C) Data being separately validated by the operatiosn support dept. and the management consultant at CPI/TMC. D) The CPI/TMC active reporting programme prevents the inclusion of wrongly transcribed data. E) Keeping the gas building locked prevents unauthorised access to the gas meters and correctors and avoids disturbance and los of data. F) Comparison of data against suppliers invoices is made but this is for economic validation and not primary data mangement.
Department or role responsible for data maintenance	Safety, Envrionment & Logisitics
Location of records	Site Intranet
IT system used	N/A
List of EN or other standards applied	N/A

Energy flows

Fuel input flows

Data sources	**Source 1**
Fuel input	4.4.(a)
Energy content	4.6.(a)

Description of methodology applied for each data source	Fuel input and energy content are measured and calculated in accordance with the approved monitoring plan UK-E-IN-11601
Has the hierarchical order been followed	Yes

Measurable heat flows of imports, exports, consumption and production

Are measurable heat flows relevant for the installation?	Yes	
Data sources	**Source 1**	**Source 2**
Quantification of measurable heat flows	4.5.(b)	4.5.(f)
Net measurable heat flows	7.2.(a)	7.2.(d)

Description of methodology applied for each data source	Steam is metered at the infeed of the RPP process (meter SM3) and also the tissue machine process (meters SM1 & SM2). This is captured with a historian database and also in the site production management system (Plant Applications). We do not currently meter condensate return and estimates have been used which is estimated at 50% water @90oC and as such we undertook an enthalply balance to provide the net heat. Unreasonsable costs have been included to justify not investing in full condensate return metering.

Has the hierarchical order been followed	No
Reason for not following the hierarchy	Unreasonable costs
Provide more details on any deviation from the hierarchy	Unreasonable costs justification provided

Waste gas flows of imports, exports, consumption and production

Are waste gas flows relevant for the installation?	No

Electricity flows of imports, exports, consumption and production

Is electricity produced within the installation?	No