

**A Direction given by:**

**The Secretary of State concurrently with the Welsh Ministers to the Environment Agency;**

**The Scottish Ministers to the Scottish Environment Protection Agency; and**

**The Department of the Environment, Northern Ireland to the chief inspector, Northern Ireland**

**under paragraphs 3(2), 3(11) and 6(8) of Schedule 5 to the Greenhouse Gas Emissions Trading Scheme Regulations 2012**

**1. Interpretation**

1.1. In this Direction:

1.1.1. “authority” means any of the Secretary of State, the Welsh Ministers, the Scottish Ministers and the Department of the Environment in Northern Ireland;

1.1.2. “DECC” means the Department of Energy and Climate Change;

1.1.3. “Free Allocation Decision” means Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC;

1.1.4. “MRR” means Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC;

1.1.5. “regulator” means any of the Environment Agency, the Scottish Environment Protection Agency and the chief inspector in Northern Ireland;

1.1.6. “Regulations” means The Greenhouse Gas Emissions Trading Scheme Regulations 2012 ;

1.1.7. “Verification Regulation” means Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC;

1.1.8. references to paragraphs or sub-paragraphs are to paragraphs or sub-paragraphs contained within Schedule 5 of the Regulations.

## 2. Purpose

2.1. This is a Direction to the regulator made under the powers in Section 40 of the Environment Act 1995 and regulation 37 of the Pollution Prevention and Control Regulations (Northern Ireland) 2003.

2.2. The purpose of the Direction is to direct the regulator as to the calculation of targets for excluded installations and to specify the relevant provisions for the purposes of monitoring and reporting emissions from excluded installations pursuant to paragraphs 3(2), 3(11) and 6(8).

2.3. Paragraph 3(2) provides that:

“The authority must exercise powers under section 40 of the Environment Act 1995, or regulation 37 of the Northern Ireland Regulations), to give the regulator directions as to the calculation of the emissions targets included under sub-paragraph (1)(e).”

2.4. Sub paragraph 1(e) specifies that an excluded installation permit must contain “an emissions target for each scheme year prior to 2021”.

2.5. Paragraph 6(8) provides that:

“The authority must exercise powers under section 40 of the Environment Act 1995, or regulation 37 of the Northern Ireland Regulations, to give the regulator directions as to—

(a) the further matters required to be taken into account when considering an application under sub- paragraph (1); and

(b) the calculation or recalculation of emissions targets i under sub-paragraphs (4) or (6).”

2.6. Sub-paragraph (4) provides for the regulator to calculate a new emission target for the year in which the an application was received and for each subsequent year and sub-paragraph (6) provides for the regulator to re-calculate that target where the evidence provided in the application is subsequently found to be incorrect or incomplete.

2.7. Paragraph 3(11) provides that:

“The authority must exercise powers under section 40 of the Environment Act 1995, or regulation 37 of the Northern Ireland Regulations, to give the

regulator directions as to the provisions that are to be specified in accordance with sub-paragraph (10).”

- 2.8. Sub-paragraph (10) specifies that the “relevant provisions” of the Monitoring and Reporting Regulation that an excluded installation operator must comply with are those provisions specified in the permit as relevant.”

**3. Paragraph 3(2): Direction as to the calculation of emissions targets to be included in an excluded installation emissions permit**

- 3.1. The regulator must include emissions targets for each scheme year (2013-2020) in the excluded installation emissions permits for each excluded installation as required under paragraph 3(1)(e) by 1 January 2013, or as soon as practicable thereafter.
- 3.2. The regulator must set installation emission targets according to one of two methodologies:
- 3.2.1. historic emissions, or
  - 3.2.2. EU ETS preliminary level of free allocation.
- 3.3. The methodology applied to calculate emission targets for an individual excluded installation must be one of the methodologies, as chosen by the operator of that installation in the Small Emitter and Hospital Opt-out Scheme application form submitted to DECC in respect of that installation, and published by DECC on 6th December 2012, or as subsequently amended from time to time when such amendment will be published by that Department.

**4. Historic emissions target**

- 4.1. The regulator must set the annual target for 2013 according to the average of that installation’s historical emissions over the period 2008-2010 reduced by 5.22%.
- 4.2. The regulator must set annual targets for 2014 to 2015 such that they decline from the 2013 target at 1.74% per year of the baseline level (average 2008-2010 emissions).

Formula for calculating the historic emission target in each scheme year

$$\text{Target} = \text{Baseline emissions} \times \text{Annual Reduction Factor}$$

### *Baseline emissions*

- 4.3. For installations that began operation before 2008, the baseline must be set at the average of 2008, 2009 and 2010 annual emissions.

$$\text{Baseline emissions} = (E_{2008} + E_{2009} + E_{2010}) / 3$$

- 4.4. For installations that began operation in 2008, the baseline must be set at the average of 2009 and 2010 annual emissions.

$$\text{Baseline emissions} = (E_{2009} + E_{2010}) / 2$$

- 4.5. For installations that began operation in 2009, the baseline must be set at 2010 annual emissions.

- 4.6. For installations that began operation in 2010, the baseline must be set at 2010 emissions pro-rated to estimate emissions from a full year of operation. Or, where there is insufficient 2010 emission data to provide a robust basis for setting targets, the baseline must be 2011 emissions.

- 4.7. For installations that began operation in 2011, the baseline must be set according to 2011 emissions pro-rated to estimate emissions from a full year of operation.

*Annual Reduction Factor values (producing a 5.44% reduction in 2013 and a decline of 1.74% of the baseline thereafter)*

<b>Year</b>	<b>Annual Reduction Factor</b>
2013	0.9478
2014	0.9304
2015	0.913
2016	0.8956
2017	0.8782
2018	0.8608
2019	0.8434
2020	0.826

## **5. EU ETS preliminary level of free allocation target**

- 5.1. The regulator must set installation targets according to the preliminary level of allowances an installation would have been allocated for free under the EU ETS in Phase III, before the application of any cross sectional correction factor. These preliminary allocations must be set at the level specified in the list submitted by the UK in accordance with Article 15(5) of the Free Allocation Decision, as approved by the European Commission.
- 5.2. If approval for the UK's list is not granted by the European Commission before 1 January 2013, the installation target shall be set at the level specified in the list that was submitted to the European Commission on 12th December 2011 in accordance with Article 15(5) of the Free Allocation Decision, as substituted by the modified list submitted in April 2012 following the first stage of the Commission's scrutiny process<sup>(1)</sup>. Once Commission approval has been given for the list the regulator shall vary the excluded installation permit, if necessary, so that the targets in each year 2013 to 2020 reflect the preliminary level of free allocation specified in the final UK list.
- 5.3. However, where there are emissions associated with cross boundary heat flows between installations or where the installation produces electricity then calculation of the target shall not be determined in accordance with the rules in the Free Allocation Decision, but as follows:
  - 5.3.1. For installations with cross boundary heat flows, the historical activity used to determine the target will include activity that was associated with exported heat but exclude activity that was associated with imported heat irrespective of whether the other installation in the heat transfer is an EU ETS participant. In other words, the target will take into account all reportable emissions from the installation.
  - 5.3.2. For installations that produce electricity, the linear reduction factor shall be dis-applied.

## **6. Paragraph 6(8): Direction as to the adjustment of emission targets following an increase in the capacity of an excluded installation**

- 6.1. Where an operator makes an application under paragraph 6(1), the regulator must make any adjustment to emission targets under sub-paragraphs (4) and (6) according to the following rules.
- 6.2. The requirements and timing of an application are set out in paragraphs 6(2) and (3) and include the requirement in paragraph 3 (e) that applications must contain:

---

<sup>(1)</sup> See *Modified UK National Implementation Measures for Phase III of the EU Emissions Trading System*  
<http://www.decc.gov.uk/assets/decc/11/cutting-emissions/eu-ets/5233-modified-uk-national-implementation-measures-for-p.pdf>

“any further matters that the regulator is required to take into account by a direction referred to in sub-paragraph (8).”

6.3. The regulator is so directed that they must take into account the following four variables in determining any increase in annual emission targets:

6.3.1. Maximum output capacity of net increase in capacity

6.3.2. Benchmark relevant to the extension of capacity

6.3.3. Capacity Utilisation Factor

6.3.4. Annual Reduction Factor

6.4. The regulator must require the operator to provide such information in its application form as is required to take those variables into account.

## **7. Calculating the increase in target for each sub-installation at which a capacity increase has taken place**

7.1. In taking into account the above variables, the regulator must calculate the increase in target for each year according to the following formula:

For each sub installation where an extension of capacity has taken place:

$$T_e = B \times O \times CUF \times A \times F$$

### *Terms*

$T_e$  = amount of target increase in year n as a result of the capacity extension to a sub-installation

B = benchmark relevant to the activity at the sub-installation in which the capacity increase took place

O = maximum output capacity of the net increase in capacity at the sub-installation

CUF = capacity utilization factor

A = annual reduction factor for year n

F = first year of capacity extension factor

Benchmark relevant to the activity at the sub-installation in which the capacity increase took place

- 7.2. The benchmarks values used shall be those contained in Annex I and Annex II and Article 10(b)(iii) of the Free Allocation Decision.
- 7.3. The benchmark applied must be the benchmark relevant to the sub-installation at which the increase in capacity has been installed. Determination of sub-installations must be in accordance with Article 6 of the Free Allocation Decision (disregarding application of carbon leakage status).

Maximum output capacity of net increase in capacity at the sub-installation

- 7.4. The maximum output capacity of the capacity extension must be determined by the rated capacity or design capacity of the extension, taking into account any physical restrictions, as if it were operated for a full day (24 hours). However, where a rated or design capacity is not applicable to the sub-installation at which the capacity increase took place, the maximum output capacity must be determined by way of a design report supported by evidence from testing to establish the maximum daily level of production or throughput of the capacity extension.
- 7.5. The net increase in capacity will be determined from a baseline of the installed maximum output capacity at the last time that installation targets were set or increased. Previous reductions in capacity will not be taken into account in the baseline.
- 7.6. To determine the net increase in capacity, evidence of the baseline maximum output capacity will be required if there has been a decrease in capacity since targets were last set. A baseline may also be required if the change involves replacement of some existing equipment.
- 7.7. The net increase in capacity must be expressed in those units defined for the applicable product benchmark, or for heat installations in terajoules of measurable heat, for fuel benchmarks in terajoules of fuel input and for process emissions in tonnes of CO<sub>2</sub>e.
- 7.8. The maximum daily output capacity will be converted into an annual figure by multiplying the maximum output capacity by 365 days.

Capacity Utilisation Factor

- 7.9. The capacity utilisation factor must relate to the reasonable level of expected activity (production or throughput) of the extension of capacity as a proportion of the maximum output capacity.

7.10. This shall take into account ordinary intended normal operation, maintenance, common production cycle, any planned seasonal closures, energy efficient techniques and typical capacity utilisation in the sector concerned compared to sector-specific information.

#### Annual Reduction Factor

7.11. The annual reduction factor shall reduce the increased target amount in each scheme year by 1.74% multiplied by the scheme year. The Environment Agency must use the following annual reduction factors:

<b>Year</b>	<b>Annual Reduction Factor</b>
2013	1.0000
2014	0.9826
2015	0.9652
2016	0.9478
2017	0.9304
2018	0.9130
2019	0.8956
2020	0.8782

#### First year of capacity extension factor

7.12. In the year in which the capacity extension was installed the first year of installation factor must equal the number of days remaining in the scheme year after the date on which the capacity extension was installed and operational divided by 365.

7.13. In all other years the first year of installation factor must equal one.

#### Treatment of cross boundary heat flows

7.14. In accordance with paragraph 6(3)(d), where the installation has cross boundary heat flows, the target increase should be given to the installation generating the heat or emissions, as opposed to the installation consuming the heat.

7.15. Therefore, the capacity used to determine the increase in target should include eligible capacity increases that are associated with exported heat but

exclude any capacity associated with imported heat irrespective of whether the other installation sending or receiving the heat is in the EU ETS.

Calculating the final emission targets for the installation:

7.16. The regulator must calculate the final target due to the installation in each year according to the following formula:

$$T_c = T_n + \sum T_e$$

*Definitions*

$T_c$  = new target for installation in year n of opt out scheme, reflecting the increase in a capacity,

$T_n$  = pre-existing installation target as recorded in the installations excluded installation emission permit for year n of opt out scheme

$T_e$  = the amount of target increase in year n as a result of the capacity extension to a sub installation

$\sum T_e$  = sum of the values for  $T_e$  for year n applying to each sub-installation at which a capacity extension has taken place

7.17. Where the application has been made with respect of a capacity increase at an excluded installation that does not primarily provide services to a hospital and applying this formula produces an emission target of 24,999tCO<sub>2</sub>e then in accordance with paragraph 6(7) the regulator must set the target for that year at 24,999tCO<sub>2</sub>e.

**8. Paragraph 3 (11): Direction as to the relevant monitoring and reporting provisions**

8.1. The regulator is directed that the relevant provisions of the MRR to be specified in excluded installation emission permits installations are all provisions in the MRR with the modifications and exceptions set out in 8.2 to 8.8 below.

Verification

8.2. References in the MRR to 'verified annual emission report' or 'report verified in accordance with Regulation (EU) No 600/2012, to the Commission' should be read as the report of the annual reportable emissions required to be submitted under paragraph 3(8)(b).

- 8.3. References in the MRR to 'verified annual emissions' should be read as the emissions amount reported in the report of the annual reportable emissions required to be submitted under paragraph 3(8)(b).
- 8.4. References in the MRR to the verifier and verification should be read as if referring to the regulator and activities under their risk based auditing programme.
- 8.5. Article 70 of the MRR does not apply.
- 8.6. Where the operator chooses in any scheme year to have their report of the annual reportable emissions verified by a third party verifier the modifications set out in 8.2 to 8.5 above do not apply to that installation in that year. As set out in paragraph 3(8)(b)(i) third party verification must be carried out in accordance with the Verification Regulation.

#### Provisions for installations with low emissions

- 8.7. Article 47(1) to (7) of the MRR shall apply to all excluded installations.

#### Further exemptions

- 8.8. The following provisions of the MRR shall not apply:
  - 8.8.1. Article 47(8); and
  - 8.8.2. Article 69 (with the exception of the first paragraph of sub-paragraph (1)).

### **9. Data**

- 9.1. In calculating baseline emission targets the regulator must only use data which has been verified in accordance with either Article 8 of the Free Allocation Decision or the Monitoring and Reporting Guidelines as established in Commission Decision 2007/589/EC as amended from time to time.
- 9.2. In calculating an adjustment of targets following an eligible increase in capacity the regulator may use unverified data supplied by the operator.
- 9.3. The regulator may only use data supplied by operators in determining eligibility for an adjustment in target and in calculating any target adjustment where the regulator is satisfied that the data is complete, consistent, comparable with previously reported data, transparent, accurate and has integrity.

## **10. Rounding**

10.1. In setting baseline emission targets or adjusting emission targets the regulator must round the target up to the nearest tonne.

## **11. Commencement**

11.1. This Direction comes into force on 1 January 2013, after the coming into force of the Regulations.

Signed by:

A handwritten signature in black ink, appearing to read 'Gregory Barker', with a horizontal line underneath.

**Gregory Barker, Minister of State, on behalf of the Secretary of State for Energy & Climate Change**

A handwritten signature in black ink, appearing to read 'John Griffiths', written in a cursive style.

**John Griffiths AM, Minister for Environment & Sustainable Development**

A handwritten signature in black ink, appearing to read 'Paul Wheelhouse', written in a cursive style.

**Paul Wheelhouse MSP, Minister for Environment & Climate Change**

Alex Attwood

**Alex Attwood, Minister of the Environment, Northern Ireland**