

Department for Business, Energy & Industrial Strategy

EUROPEAN UNION EMISSIONS TRADING SCHEME (EU-ETS)

Phase IV National Implementation Measures (NIMs) Baseline Data Collection & FAQs

Offshore Oil and Gas Industry Guidance

May 2019

Table of Contents

1.	Abbreviations3			
2.	Background3			
3.	NIMs baseline data collection			
	a) Extraction and export of gas (including condensate)			
	b)	Extraction and export of oil	5	
	c)	Extraction and export of oil and gas	6	
	d)	De minimis quantities	6	
	e) Units of measurement and reference conditions for exported hydrocarbons6			
	f)	Heat benchmark sub-installation	7	
	g)	NIMs baseline data collection template	7	
4.	Monitoring Methodology Plans		8	
	a)	Monitoring Methodology Plan submissions	8	
5.	Verification Report			
6.	Submitting baseline data, supporting MMP and documents			
7.	Frequently Asked Questions			

Document control	Changes	Date
1 ¹	-	March 2019
2	Data presentation for waste heat recovery (final paragraph added to section 3(f)).	May 2019
3	Link to onshore installations guidance; clarification on PPRS data; NIMs baseline data collection template; revised submission deadline; updated FAQ's 8, 9 & 17.	May 2019

¹ Comments were received from Oil and Gas UK and an offshore operator in response to the OPRED industry workshop held in February 2019 and have been incorporated into this guidance.

1. Abbreviations

ALC	Activity Level Change
BEIS	Business, Energy and Industrial Strategy
CHP	Combined heat and power
CL	Carbon Leakage
CLL	Carbon Leakage List
ETSWAP	Emissions Trading Scheme Workflow Automation Project
EU ETS	European Union Emissions Trading Scheme
FAR	Free Allocation Rules
HAL	Historic Activity Level
MP	Monitoring Plan
MMP	Monitoring Methodology Plan
MWth	Megawatt thermal
NACE	European Classification of Economic Activities
NER	Phase III New Entrant Reserve
NIMs	National Implementation Measures
OGA	Oil and Gas Authority
PPRS	Petroleum Production Reporting System
UK	United Kingdom
VR	Verification Report
WHRU	Waste heat recovery unit

2. Background

This guidance note provides information for preparing for Phase IV of the European Union Emissions Trading Scheme (EU ETS). All United Kingdom (UK) operators are requested to prepare and submit an independently verified National Implementation Measures (NIMs) baseline data (2014-2018) submission to apply for a free allocation of allowances for the first allocation period (2021-2025). There will be a second NIMs baseline data collection exercise for the second allocation period in due course. The rules for applying for an allocation have been published and outline the procedures that must be followed to apply for an allocation. The rules have been supported by a series of <u>Commission guidance</u> documents and these should be reviewed to assist with completing the templates.

The NIMs submission template must also be supported by an installation specific Monitoring Methodology Plan (MMP) which provides a basis for monitoring and reporting the data under the Free Allocation Rules (FAR). The submission will require to be supported by specific flow / data diagrams and procedures for each installation. Table 1 below provides an indication of the requirements dependent on the type of operator, and the deadline for submissions.

Type of EU ETS operator	NIMs baseline report	Monitoring methodology plan (MMP)	Verification report with positive opinion	Supporting evidence for MMP	Deadline for submissions
Electricity generator	Sheet A only	No	No	No	30 June 2019
Operators not applying for a free allocation	Sheet A only	No*	No*	No*	30 June 2019
Eligible operators applying for a free allocation of allowances	All sheets**	Yes	Yes	Yes	30 June 2019
Operators who obtained a permit before 30 June 2019 but have not operated in the baseline period	Sheet A	Yes	No	Yes	30 June 2019

Table 1. Types of EU ETS operator and template guidance.

*To note that by opting to not complete these sections an operator is ineligible for free allocation under the EU ETS for 2021-25.

** Sheets B+C have been hidden, as these do not require to be completed

Sectors and sub-sectors deemed exposed to a significant risk of Carbon Leakage (CL) are those that may suffer from a material competitive disadvantage against competitors located in areas outside the EU which do not have similar emission constraints. The Carbon Leakage List (CLL) is established by assessing the risk of carbon leakage of sectors and sub-sectors at <u>NACE-4 level</u> taken from the carbon leakage list.

Due to changes in the revised <u>Carbon Leakage List</u> for Phase IV, the sub-sector associated with the extraction of natural gas represented by the NACE code 0620 is no longer deemed to be exposed to CL. As per the rule set out in Article 10(3) of the FAR, if the heat or fuel benchmark sub-installations applicable to the oil and gas extraction sector serve production processes with different carbon leakage status, these sub-installations must be split according to the carbon leakage status. An illustration of this rule is presented in Section 5.2 of the Guidance Document No.1 on the harmonised free allocation methodology for the EU ETS post 2020 (Example: Carbon Leakage: more than one sub-installation possible per fall-back approach).

Qualifying heat or fuel benchmark sub-installations associated with the oil extraction subsector which is included on the CLL will receive up to 100% of the allowances at the level of the benchmark free of charge. Qualifying heat or fuel benchmark sub-installations associated with the gas extraction sub-sector which is not on the list will receive only 30% of their allowances at the level of the benchmark free of charge, with this proportion decreasing after 2026 to 0% in 2030.

New!

Operators may also wish to consult the onshore guidance and FAQ's, which can be found on <u>SEPA's webpage</u>.

3. NIMs baseline data collection

The NIMs template is bespoke to the UK and specific parts of the template that have been modified can be viewed within tab 'I_MSspecific' of the template. The template can be found <u>here</u> and this version must be used for completing the submission by the 30th June 2019. Within the installation data tab operators are required to enter the installation identifier, and this will be published shortly on the Departments' webpage.

As discussed previously, if the heat or fuel benchmark sub-installations applicable to the oil and gas sub-sectors serve production processes with different carbon leakage status, these sub-installations must be split according to the carbon leakage status. The key challenge is to determine a link between relevant inputs, outputs and emissions qualifying for heat or the fuel benchmark sub-installation on an offshore oil and gas installation and assign the relevant proportions to the extraction of oil sub-sector (CL exposed) or the extraction of gas sub-sector (non-CL exposed).

The approach outlined below is considered to be the least complex solution to determine and assign the relevant qualifying inputs, outputs and emissions under the heat and fuel benchmark sub-installations with production processes that have different carbon leakage status, both for the baseline years (2014-2018) and future years, based upon the exported production quantities. The latter are reported monthly to the Oil and Gas Authority, under the Petroleum Production Reporting System (PPRS) and are fiscally metered and the data is therefore verifiable.

New!

It is important to note that the solution is based on reported export quantities and not reported production quantities. The publicly accessible data in <u>Petroleum Production</u> <u>Reporting System (PPRS)</u> details production values and they should not be used to support the NIMs baseline data collection.

a) Extraction and export of gas (including condensate)

All heat and fuel benchmark sub-installations associated with the extraction of gas (NACE code 0620) are deemed to be no longer exposed to CL. This covers all activity on the installation and includes the flare. Export of gas via a wet or dry gas pipeline must be reported as gas production and assessed under NACE code 0620. However, where condensate is exported as a liquid hydrocarbon e.g. by injection into an oil export pipeline, this will be reported as oil production and should be assessed under NACE code 0610 (see below).

b) Extraction and export of oil

All heat and fuel benchmark sub-installations associated with the extraction of oil (NACE code 0620) are deemed to be exposed to CL. Offshore installations that only export oil are therefore assessed under NACE code 0610. Any associated gas that is produced with the oil can be assessed under the same NACE code when it is used as fuel gas to power the installation, reinjected into the reservoir for disposal or to enhance recovery, or sent to flare. However, if any gas is exported the heat and fuel benchmark sub-installations must be separated as described in section 3(c) below.

c) Extraction and export of oil and gas

All heat and fuel benchmark sub-installations associated with offshore installations that extract and export both oil and gas will serve both production processes and must be split to reflect the different carbon leakage status, e.g. exposed to CL and non-exposed to CL respectively. The exported quantities of oil and gas should be used to apportion the activity data under the heat or fuel benchmark sub-installations. Reported export quantities are subject to fiscal controls and the uncertainty associated with the measurements (if the metering devices are maintained adequately) is reasonably low.

Activity for each heat and fuel sub-installation must be split proportionately between the exported quantities of oil and gas on an annual basis for each year within the baseline (2014-2018) period. For example, in year 'X' 70% of the hydrocarbons exported was oil and 30% was gas, so 70% of the activity qualifying under both the fuel and heat benchmark sub-installations will be attributed to the extraction of oil and 30% will be attributed to the extraction of oil and 30% will be attributed to the extraction of gas (see Figure 1 below). Note the split must be done for both the fuel and heat separately as these are different benchmark sub-installations. Activity from flaring falls under the fuel benchmark sub-installation and should be included within the proportional split.



Figure 1. Illustration showing the split by benchmark sub-installation and carbon leakage status.

d) De minimis quantities

Where the amount of gas or oil exported is <5% of the total exported quantity the *de minimis* rule can be applied and there is no requirement to split the data into exposed CL and non-exposed CL. When applying the *de minimis* rule, evidence will be required to support the application for allocation, based upon the exported hydrocarbon data for each

Phase IV NIMs Baseline Data Collection

year. It should also be noted that the exported quantities will need to be monitored annually to confirm whether the *de minimis* rule still applies.

e) Units of measurement and reference conditions for exported hydrocarbons

The units of measurement to use for the proportionate split must be **mass** reported on a water dry basis at Standard Conditions (15°C and 1.01325 bara). The reference conditions are those required for the Oil and Gas Authority's (OGA's) PPRS, but the units for reporting are cubic metres and an export density figure must therefore also be provided to convert the volume to mass. The offshore installation data for the baseline period should be collated from relevant field data.

f) Heat benchmark sub-installation

Where heat is consumed for an operational process within the installation boundary, the heat benchmark sub-installation applies. The relevant definition of "consumption" within the FAR is "*Measurable heat which is consumed within the installation boundaries for the production of products, for the production of mechanical energy other than used for the production of electricity.*"

Installations that utilise waste heat recovery units (WHRU) installed on qualifying combustion plant, i.e. mechanical drive, are eligible for a free allocation, but to avoid double counting the activity level of the fuel benchmark sub-installation must be corrected for the amount of recovered measurable heat by applying a virtual generation efficiency factor of 90% (see section 3.4 of GD2 and Art. 10(5)(k) of the FAR). Double counting is not relevant for WHRU installed on combustion plant that generates electricity and there is no requirement to apply an efficiency factor.

Excess heat that is not utilised does not attract a free allocation as the heat is not consumed, for example a seawater exchanger used to cool down a heating medium before re-circulation, but the activity must be accounted for and the determination described in the MMP.

Data entry within the NIMs template for operational use of WHRUs should be treated as combined heat and power (CHP) and the Cogeneration tool in sheet 'D_Emissions' is to be completed. See Section D of Guidance Document 3 and section 6.10 Rules on CHP in Guidance Document 5 for further information. The NIMs template has space to enter data for two separate CHPs implying that if there are further qualifying CHPs in operation on the installation a new NIMs template will need to be populated to capture this. Where WHRU are operated within a closed loop over several plant this can be captured as one CHP.

New!

g) Eligibility for free allocation

Operators should complete A.II.1 (row 168 onwards) in worksheet A of the NIMs template to confirm eligibility for free a allocation. Under question (a) "Is the installation an electricity generator pursuant to Article 3(u) of the Directive?" Operators should select "False" irrespective of whether they produce and export electricity to another offshore oil and gas installation.

4. Monitoring Methodology Plans

a) Monitoring Methodology Plan submissions

The monitoring methodology plan (MMP) must be submitted to OPRED by 30 June 2019 if you wish to apply for an allocation of free allowances. It should describe the monitoring approaches used to collect the data between 2014 and 2018 (backward looking) and the monitoring approaches that will be used to collect annual activity data from 2019 onwards (forward looking). In both cases, the data collected should be based on the most accurate available data sources (as per section 4, Annex VII of the FAR).

For some operators the highest achievable accuracy for historical data and the data to be collected from 2019 onwards will be the same so there is no need to differentiate between the two. However, the FAR and the Commission's guidance recognises that this may not be the case for all operators e.g. historical data may have been manually recorded daily via the interrogation of a localised instrument control panel but in future, data will be automatically downloaded via DCS. In such cases, it is necessary to describe within the MMP how data was collected for the period 2014 - 2018 and how it will be collected and monitored for future years. Guidance Documents provide further advice on this (GD4, section 2.2 and GD5 sections 4.7, 5.1 and 5.3).

Approval of the MMP

The situation in 2019 will be different from 'normal' years because there will be insufficient time to review both the baseline data reports and the MMP before the data is submitted to the Commission. In a similar way to Phase III, verifiers will be required to validate the MMP (see section 2.2 of guidance document 4) to ensure that it meets the requirements of the Free Allocation Regulation which focuses upon the backward-looking aspects. There will then be a period between 30 June 2019 and 30 December 2020 when review of the forward-looking aspects of the MMP will be completed and approved. If necessary, the MMP may then need to be updated to improve the forward-looking aspects of the MMP.

5. Verification Report

All NIMs data must be satisfactorily verified prior to submission, and the submission supported by a Verification Report (VR). It is anticipated that the verifier will be required to complete the VR and enter the Historic Activity Level (HAL) values for each subinstallation and the CL status. The verifier would then password protect the VR to ensure data integrity is secure and to prevent amendments after the verification had been completed. There would be no requirement to provide the password for the VR, as no data would be extracted from the template.

6. Submitting baseline data, supporting MMP and documents.

New!

All data must be submitted via ETSWAP by 2359 hrs. on **30th June 2019**. A new NIMs workflow will be available in ETSWAP from Friday 17th May 2019 for submissions.

7. Frequently Asked Questions

1	If relevant, how should the 95% rule (Article 10(3)) be quantified / calculated?	An installation is exempted from splitting the activity related to different CL status if the exported oil or gas is >95%. The de-minimis would be based upon exported production quantities and need to be assessed annually to determine if the rule continues to apply.
2	What is the timing of the next CLL?	The CLL is fixed for the full Phase IV period. It is currently unknown when the list will be revised in preparation for the period after Phase IV.
3	Can an operator present a primary NACE code to the verifier that represents the whole installation where there are multiple activities (i.e. an installation that produces oil and gas) and have this verified?	No. This option was considered, but the Commission confirmed it would not be compliant with the FAR, Article 10(3). The activity must be split proportionately into separate NACE codes for each respective activity and then attributed to the respective carbon leakage status.
4	What is the aim of relating a NACE code to the definition of 'extraction' of oil and gas as there is no product?	The revised free allocation rules apply the NACE Code Revision 2 and operators must split out the respective energy according to the allocated NACE code even though there is no 'product' for the oil and gas sub-sector, and there is no product code (PRODCOM).
5	Is all flaring considered safety flaring?	Yes.
6	How do I account for imported gas which is then partly used for fuel, but any surplus is exported?	Operators should contact OPRED for advice on a case-by-case basis.
7	Will a site visit be required to support the NIMs baseline data collection?	A site visit is not required if the same verification body has also verified the installation's annual emissions report during the baseline period (2014-2018). Where a different verifier has been used, a visit will be required. If there have been multiple verification bodies used during the baseline period, the verifier who verified the latest annual emissions report will determine if a visit is required.
8 (updated)	Can an operator decide / opt not to apply for a free allocation?	Yes, it is optional to apply for a free allocation. Although, the operator would still be required to confirm that they did not intend to make a submission for the relevant installation.
		If an operator chooses not to apply by the deadline (30 June 2019), they will not be eligible for a free allocation for the first allocation period 2021-2025, regardless of any changes being made during that

9 (updated)	Can an operator decide to exclude part or all a sub- installation (e.g. firewater pumps, cranes etc.) if it is considered an unnecessary administrative burden to collate the data to apply for a trivial allocation?	period. Where this occurs, the operator can only apply in 2024 for the second allocation period 2026-2030. Therefore, if there is only small qualifying plant but an allocation would be required to cover larger plant (e.g. a qualifying gas turbine) before the second allocation period, an application should be made now, with the supporting data and MMP, for the small plant. The new Activity Level Change arrangements would then apply to take account of the new gas turbine coming into operation during the first allocation period. All emissions data must be reported for the respective years as appropriate, but it is the operator's choice whether to include them in the activity information in sheet D – attribution of emissions (plus the blue / grey boxes in sheet G). Conservatively underestimating a sub- installation's activity level (including reporting having no such sub-installation at all) is only acceptable if this does not lead to an overestimation of any other sub-installation's attributed emissions. In other words, an operator may choose for convenience to ignore an emission source which makes a minor contribution to overall emissions (thereby losing the opportunity for any free allocation associated with that emission source) but it is essential that no other
10	Is there any leeway on the 30 June deadline for submission to OPRED?	emission source is over-stated as a result. No. The deadline is fixed, and you are advised to engage with your selected verifier early to resolve any problems, and if appropriate, to also engage with OPRED as
11	What if I do not have all the necessary data in time for the deadline?	early as possible. You are advised to engage with your selected verifier and OPRED as early as possible to ensure you meet the deadline, as a positive verification must be received by the deadline.
12	Would OPRED respond to a freedom of information request for NIMs data submitted?	Several sections of the NIMs data are considered to be commercially sensitive, so OPRED would not be obliged to divulge the information. Annual emissions and allocations (totalised) are in public domain for Phase III so we would be obliged to provide this.
13	Difference between MMP and the MP under Phase III	There are some similarities, however there are a number of additional requirements that need to be included within the MMP, which is both backward and forward looking. Where there are similarities you should use previous information where possible.

Phase IV NIMs Baseline Data Collection

14	What if a new installation only started activity in 2015, but the NER under Phase III rules only applied in 2016, when do I start the data collection from?	Data collection will start when the installation first qualifies as an EU ETS installation, i.e. has capacity above the 20MWth threshold. The Phase III NER rules do not apply as the notion of capacity is no longer applicable in Phase IV. The change in activity will be reflected within the new annual activity rules to adjust the free allocation from 2021 onwards.
15	What if my installation started in 2018, when do I start my data collection as 2018 will only be a part year?	The NIMs template and MMP is still required to be submitted, with Tab A only completed. The data will be updated and verified after the first full calendar year of activity, i.e. 2019.
16	What if there is an asset transfer and I don't have access to historic data?	As part of the legal transfer, all the respective data should have been requested and it must be available as data must be held for a minimum of 10 years. Early engagement with the previous owner will be necessary and you should also engage with OPRED as early as possible.
17 (updated)	What do I do if I have data gaps in the baseline information?	Sections 4.4 to 4.6 of Annex VII of the FAR set out the order of preference for data sources used for the quantification of materials, fuels, energy flows and material properties. Methods must be chosen in compliance with the stated hierarchy. When applying the hierarchy of methods to collecting historical data, the information provided as part of the annual emissions reporting in accordance with the MRR under Phase III is considered as "methods in accordance with the MP" and therefore there should not be a data gap associated with these data sources. Guidance Document 5 has a number of sections on data gaps, especially Section 5.6.2.
18	Do verifiers have to be accredited to undertake NIMs baseline verification?	UKAS is the relevant UK Accreditation body for undertaking NIMs baseline verification and operators must ensure the selected verifier is appropriately accredited.

If you have any queries, please contact the Department by email at BST@beis.gov.uk.