

Documentation for Level 4 and Level 5 methods

This document outlines the documentation requirements (list of information elements that a company should provide) for L4 and L5. For the most part, these have been described theoretically in implementation plans to date, but as companies transition into L4 and L5, UNEP will need a consistent basis to evaluate adherence to the TGD's for the methods. There is some language to this effect in the U&R guidance, but there needs to be some clear set of expectations. Methods also should not just refer to a regulation.

Documentation for Level 4 and Level 5 methods

Reporting at levels 4 and 5 should include companion documentation describing **methods of quantification**¹ applied with sufficient detail to assess whether or not the method conforms to the TGD for the source or the U&R guidance for a source and site level quantification.

Where quantification is conducted in accordance with accepted national or international standards in line with the appropriate level of reporting, relevant referencing of these standards can partially replace documentation. Sufficient detail should be provided so that it is clear how the referenced document was used/applied. (For example, it is not sufficient to reference "U.S. EPA Subpart W" because that provides an anthology of methodologies for a variety of sources). However, UNEP reserves the right to request additional information and explanations related to the content of the standards. Sufficient detail should still be provided so that it is clear how the referenced document was used/applied.

The documentation should be concise and include:

Level 4

Description of the **method of quantification**¹ for deriving Level 4 emissions estimates, including:

- Quantification approach including rationale
- Measurement instrument(s), engineering calculation or quantification model used

¹ **Method of quantification** means a specific logical sequence of operations used for quantification.

- Details of the measurement procedure including sampling, measurement, calculation, and estimation methodologies (including relevant technology limitations, such as detection limit), as relevant to the assessment of whether companies have attained this level of reporting.

Level 5

Documentation as for Level 4 as above, plus:

- Site level methane emissions measurement method, including rationale, justification of selected method and relevant limitations. Site level measurements provided by service/technology provider (data at site level and/or for main equipment).
- Details of sampling, measurement and calculation steps to derive emission rates, as relevant to the assessment of whether companies have attained this level of reporting
- Method for uncertainty estimates of source level and site level quantification. For companies attempting reconciliation to achieve level 5, reporting of uncertainty estimates of source and site level.
- Reconciliation approach of source and site level results, including rationale