

**Answers to Frequently Asked Questions
on
Commission Decision 2004/156/EC of 29 January 2004 establishing
guidelines for the monitoring and reporting of greenhouse gas
emissions pursuant to Directive 2003/87/EC**

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1. What is the legal status of the MRG?	1
2. What is the purpose and scope of the “monitoring methodology”?	2
3. Are there differences in how Member States approach monitoring in the permitting process?	2
4. What if an installation is unable to monitor emissions in full compliance with the monitoring methodology determined in accordance with the MRG from 1 January 2005?	2
5. How does the “tier system” work?	2
6. What is the objective of the “tier system”?	2
7. How is the principle of cost-effectiveness implemented?	3
8. Into which size class falls an installation with mixed activities?	3
9. What if an operator cannot meet the lowest tier requirements?	3
10. What if the lab doing fuel analyses is not accredited against ISO 17025?	3
11. May an operator change the monitoring methodology?	3
12. Are the activity specific methodologies compatible with the accepted industry approaches?	3
13. The Guidelines use the terms “accuracy” and “uncertainty” – what is the difference?	4
14. Does an operator have to calculate the overall uncertainty of his emission level?	4
15. What is meant by the “permissible uncertainty” of the metering process in Annexes II-XI?	4
16. When can I apply continuous emissions monitoring systems (CEMS)?	4
17. Is there an obligation to monitor the fuel consumption of each source on a site?	4
18. How to account for the varying moisture content of certain solid fuels?	4
19. How do the tier requirements apply to the determination of stocks of fuels stored on-site?	4
20. How accurately do I have to monitor the amount of biomass combusted in an installation?	5
21. Are car tyres biomass?	5
22. For how long do I have to store raw data and supporting material?	5
23. How should a verifier deal with uncertainty and materiality?	5
24. Can an accredited verifier from one Member State verify emissions reports in other Member States?	5

Introduction

This document aims to answer a number of frequently asked questions concerning the interpretation and application of Commission Decision 2004/156/EC of 29 January 2004, establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC (referred to as the MRG). The answers do not constitute a legally binding opinion of the Commission.

1. What is the legal status of the MRG?

The MRG are set out in Commission Decision 2004/156/EC, adopted pursuant to Article 14 of the Emissions Trading Directive and were published in the Official Journal (OJ L59 of 26 February 2004). The Commission Decision containing the MRG is addressed to the Member States. Member States must ensure that the provisions of the monitoring guidelines are applied in the monitoring and annual reporting of greenhouse gas emissions of each of the installations covered by the EU greenhouse gas emission allowance trading scheme (referred to as the EU ETS). The MRG thus provide the legally binding rules for the monitoring and reporting of greenhouse gas emissions within the EU-ETS. Member States must choose the appropriate modalities to ensure that these rules are applied by the operators of installations covered under the EU ETS. Member States are not allowed to give derogations to the application of the MRG unless such derogations are explicitly provided for in the MRG.

2. What is the purpose and scope of the “monitoring methodology”?

The MRG define “monitoring methodology” as “the methodology used for the determination of emissions, including the choice between calculation or measurement and the choice of tiers;”. The monitoring methodology (often also referred to as “monitoring plan” or “monitoring protocol”) specifies how an operator of an installation will carry out the monitoring and reporting of CO₂-emissions for that specific installation. The approval of the monitoring methodology is part of the permit granting process. After approval by the competent authority, it becomes part of the permit (Article 6(2)(c) of the EU-ETS Directive). The detailed contents of an installation’s “monitoring methodology” are specified in section 4.2 of Annex I of the MRG. Once approved, the installation has to implement and execute the monitoring of its CO₂ emissions in accordance with the “monitoring methodology”. It provides the main reference for the verifier to assess whether an operator is meeting his monitoring obligations.

3. Are there differences in how Member States approach monitoring in the permitting process?

Most Member States have decided to agree the installation-specific “monitoring methodology” between the competent authority and operator as part of the permit granting procedure for each installation. Other Member States use “general binding rules”, setting out the monitoring and reporting obligations a company needs to apply, to define part of the monitoring methodology. Such “general binding rules” must however be anchored in the permit and the combination of the permit and the general binding rules must constitute the monitoring methodology containing the elements specified in section 4.2 of Annex I of the MRG.

4. What if an installation is unable to monitor emissions in full compliance with the monitoring methodology determined in accordance with the MRG from 1 January 2005?

Operators of installations under the EU ETS must hold a GHG emissions permit to operate from 1 January 2005. Member States must ensure that the GHG emissions permit sets out the monitoring methodology in accordance with the MRG. Member State are not allowed to give derogations to the application of the MRG unless explicitly provided for in the MRG. If the emissions of an installation are not monitored in full compliance with this monitoring methodology, the operator of that installation is exposed to compliance sanctions determined pursuant to Article 16(1) of the EU ETS Directive. In addition, the verifier must reject the installation’s emissions report if he considers deviations to be material. The non or late submission of the emissions report in turn leads to the blocking of the transfer of allowances from that installation and any further sanctions determined pursuant to Article 16(1) of the EU ETS Directive.

5. How does the “tier system” work?

The tier system (section 4.2.2.1.4 of Annex I) provides a set of building blocks to determine the appropriate monitoring methodology for each installation. The tier system defines a hierarchy of different ambition levels for activity data, emission factors and oxidation or conversion factors. The higher the number of the tier chosen, the higher the level of specificity and accuracy. The operator must, in principle, apply the highest tier level, unless he can demonstrate to the competent authority that this is technically not feasible or would lead to unreasonably high costs.

6. What is the objective of the “tier system”?

The tier system (section 4.2.2.1.4 of Annex I) forms the backbone of greenhouse gas emissions monitoring of installations covered under the EU ETS. It balances the need for flexibility to accommodate different sectors and technologies with the need for a level playing

field for operators across the EU. It furthermore provides a transparent way to improve the quality of the monitoring system over time to reach the required tier level.

7. How is the principle of cost-effectiveness implemented?

The principle of cost-effectiveness aims to balance additional resources expended with the respective benefits achieved. The MRG in section 4.2.2.1.4 of Annex I accordingly allow for differentiation regarding the required accuracy in the monitoring of major and minor sources. Table 1 in Annex I sets minimum requirements for cost-effective monitoring for different activities, sizes of installations and fuel types that Member States should apply in permitting the installations. Minor sources which emit 2.5 ktonnes or less per year or that contribute 5 % or less to an installation's annual emissions can be monitored using lower tiers. The same applies to streams of pure biomass. Minor sources that emit 0.5 ktonnes or less per year or that contribute less than 1 % of total annual emissions of an installation can be monitored using a no-tier estimation method.

8. Into which size class falls an installation with mixed activities?

The size thresholds in section 4.2.2.1.4 and Table 1 of Annex I of the MRG refer to the total annual greenhouse gas emissions of the installation as identified in the installation's greenhouse gas emissions permit. The size classification and tier requirements apply to all the activities carried at that installation.

9. What if an operator cannot meet the lowest tier requirements?

The MRG only allow emissions from "de minimis" sources to be estimated using a no-tier approach. "De minimis" sources are a combination of sources that emit 0.5 ktonnes or less per year or that contribute less than 1 % of total annual emissions of an installation. Further derogations from the tier requirements are not acceptable.

10. What if the lab doing fuel analyses is not accredited against ISO 17025?

Without checks by an accredited lab, the monitoring methodology does not meet the full set of criteria given in section 10 of Annex I for this tier. The competent authority could require an operator to use another laboratory that is accredited or could allow the application of the next lowest tier in the monitoring methodology until the accreditation has been granted and the competent authority has approved the change to the monitoring methodology.

11. May an operator change the monitoring methodology?

Yes. If the accuracy of the methodology is improved and the competent authority has approved the change, such changes are desirable and in line with the principle of "improvement of performance" set out in section 3 of Annex I of the MRG. Details on the conditions of changes of methodologies can be found e.g. in sections 4.2 and 4.2.2.1.4 of Annex I of the MRG. The operator may temporarily use lower tiers in cases of temporary down-times of equipment. He must however provide proof of the necessity of a change in tiers and details of the interim monitoring methodology to the competent authority. The operator also has to take all necessary action to allow the prompt restoration of the original tier.

12. Are the activity specific methodologies compatible with the accepted industry approaches?

Yes. Where available in 2003, core methodologies were taken from accepted industry protocols such as the GHG Protocols of WBCSD/WRI or the API Compendium for refineries. Because of the inherent differences between voluntary and mandatory monitoring schemes, a number of modifications were necessary.

13. The Guidelines use the terms “accuracy” and “uncertainty” – what is the difference?

In daily use the words accuracy and uncertainty are sometimes interchanged but the difference between them is significant: Accuracy is a qualitative concept. It can be high or low but should not be used quantitatively. It belongs to the set of seven principles defined in section 3 of Annex I of the MRG. Uncertainty on the other hand is quantitative concept, which is elaborated in section 4.3 of Annex I of the MRG.

14. Does an operator have to calculate the overall uncertainty of his emission level?

The calculation of overall uncertainty is useful to understand the quantitative impacts of different sources of uncertainty and usually requires only moderate resources. The EU-MRG however only require that the operator demonstrates that the accuracy of his calculation or measurement of the annual emission value is better than what is prescribed by the applicable tier level. This can usually be done on the basis of conservative estimates rather than through a full uncertainty calculation. There is no need to calculate an overall uncertainty of the annual emission value (paragraph 4 of section 4.3.1 of Annex I). Tables 2 and 3 in Annex I are purely informative.

15. What is meant by the “permissible uncertainty” of the metering process in Annexes II-XI?

Sections 4.3 and 4.3.1 (fourth paragraph) of Annex I state that the “permissible uncertainty” of the metering process refers to the 95% confidence interval around the true value for the annual amount e.g. of the activity data like the mass of fuel consumed over a year.

16. When can I apply continuous emissions monitoring systems (CEMS)?

Operators who wish to use continuous emissions monitoring systems (CEMS) need to seek approval of their competent authority when submitting their monitoring methodologies as part of the permitting process (sections 4.3.2, 4.2. and 4.2.1 and of Annex I). To obtain this permission they need to demonstrate that the achieved accuracy is higher than the accuracy from calculation. In parallel to measuring the emissions, the operator must also calculate the emissions.

17. Is there an obligation to monitor the fuel consumption of each source on a site?

No, unless sources are covered by separate greenhouse gas emission permits. The consumption of each fuel type can be monitored for the whole site or installations under the same permit. This monitoring can also be done by the fuel suppliers before the shipment of fuels rather than by the operator on site.

18. How to account for the varying moisture content of certain solid fuels?

The method to determine net calorific value corrects for the moisture content of fuels. Section 10.1 of Annex I states that the net calorific value must be representative for the batch of fuel combusted. This means that the moisture content of fuels must always be considered in a way which ensures consistency with the conditions for which the emission factor and the amount of fuel was derived. Wherever possible the amount of fuel, its calorific value and carbon content should therefore be determined at the same time. This can also be done by the fuel supplier rather than by the operator.

19. How do the tier requirements apply to the determination of stocks of fuels stored on-site?

The MRG refer to the uncertainty of the overall amount of fuel consumed in the installation over the course of the year. The uncertainty thresholds given in Annex II do not apply to the stock taking itself but to the determination of combusted amounts of fuel including the stock

correction. Depending on the size of the stock, the stock taking can often have a significantly higher uncertainty without contravening the requirements of high tier levels. The operator will need to show this by means of an error propagation calculation.

20. How accurately do I have to monitor the amount of biomass combusted in an installation?

If it is pure biomass, low tier methodologies can be applied. However, the activity data, i.e. the volume or mass of the fuel, needs to be measured. The calculation of biomass emissions from energy output is not acceptable. Details on how to determine the biomass fraction of a fuel can be found in section 10.4 of Annex I.

21. Are car tyres biomass?

No. Like other mixed fuels such as domestic waste, car tyres commonly contain varying contents of biomass which have to be established according to the provisions of section 10.4 of Annex I.

22. For how long do I have to store raw data and supporting material?

In accordance with section 6 of Annex I this type of information must be stored for at least 10 years from the date of submission of the annual emissions report to which it has contributed.

23. How should a verifier deal with uncertainty and materiality?

Section 4.3 and 7.4 of Annex I of the MRG give guidance on how a verifier should deal with uncertainty and materiality. These terms refer to two fundamentally different issues.

Uncertainty: The uncertainties implicitly approved by the competent authority via the tiers specified in the monitoring methodology are not to be assessed by the verifier as potential material misstatements.

Materiality: The MRG define “Materiality” as “the professional judgment of the verifier as to whether an individual or aggregation of omissions, misrepresentations or errors that affects the information reported for an installation will reasonably influence the intended users' decisions. As a broad guide, a verifier will tend to class a misstatement in the total emissions figure as being material if it leads to aggregate omissions, misrepresentations or errors in the total emissions figure being greater than five percent”. The level of materiality has to be established by the verifier on a case-by-case basis. Depending on the circumstances, a level of misstatement above 1% of annual emissions of an installation could qualify as material.

24. Can an accredited verifier from one Member State verify emissions reports in other Member States?

There are no harmonised criteria for accreditation of verifiers and accreditation requirements differ between Member States. A verifier should therefore comply with the national accreditation requirements, subject to the requirement not to restrict the free movement of services pursuant to Article 49 to 55 of the EC Treaty.