

Lessons Learnt From Monitoring Under the EU-ETS: The Monitoring and Reporting Guidelines

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Overview

- Background
- MRV Process in the EU-ETS
- Key Issues for MRG Review Process
- Conclusions



Background



Development of the EU-MRG

- Art. 14 of the Directive requires Commission to adopt guidelines for monitoring and reporting
- Annex IV of the Directive sets out general requirements for monitoring & reporting
- ⇒ Development of draft by Ecofys, TÜV Rheinland, KPMG & FIELD between Nov 2002-Oct 2003
- ⇒ Several review steps involving Commission, Member States and industry associations in 2003
- ⇒Accepted by MS on 24 Nov 2003
- ⇒ Adopted by the EU-Commission 29 January 2004
- ⇒ Published in the EU Official Journal in the official EU languages on 26 February 2004



The Context of EU GHG-Monitoring

IPCC - National Reporting Requirements

Verification

EU-ETS Directive

EU-ETS CO₂ Monitoring Reporting

National Allocation Plans

National Registries



Objectives of the EU-MRG

Main objective:

Balance environmental integrity & cost-effectiveness

Further objectives:

- Uniform EU-wide requirements (Level Playing Field)
- Transparent monitoring and reporting procedures
- Flexibility for > 10,000 installations from different sectors, with differents technologies, having different sizes and ages
- Consistency with WBCSD/WRI GHG Protocol and other existing protocols – to the extent possible
- Consistency with national reporting under UNFCCC using IPCC Guidelines – to the extent possible



Approach: Structure

Structure of MRG:

- Formal Decision
- Annex I: General guidelines
- Annexes II-VI: Sector Specific Guidelines

Structure provides for

- Open structure: simple inclusion of additional activities (additional Annexes) and inclusion of non-CO₂-Gases in existing annexes
- Easy handling by operators guidance and regulation are combined in one activity specific document



The Tier Approach (I)

- Concept: Introduction of flexibility for monitoring for different types, sizes and ages of installations
- Allows for transparency and comparability
- Basic concept from IPCC Inventory Guidelines
- Acknowledges that 2005 monitoring will not be uniform – but provides a reference and target
- Provides a structured and transparent approach to characterize & improve monitoring methodologies
- Target: highest tiers if technically feasible at reasonable cost

Guidance on choice of tiers: Table 1

TABLE 1

Column A: total annual emissions < 50 ktonnes

Column B: 50 ktonnes < total annual emissions ≤ 500 ktonnes

Column C: total annual emissions > 500 ktonnes

	Activity data			Net calorific value			Emission factor			Composition data			
Annex/Activity	A	В	С	A	В	С	A	В	C	٨	В	C	
IE Combustion													
Combustion (gaseous, liquid)	2a/2b	3a/3b	4a/4b	2	2	3	2a/2b	2a/2b	3	n.a.	n.a.	n.a.	
Combustion (solid)	1	2a/2b	3a/3b	2	3	3	2a/2b	3	3	n.a.	n.a.	n.a.	
Flares	2	3	3	n.a.	n.a.	n.a.	1	2	2	n.a.	n.a.	n.a.	
Scrubbing													
carbonate	1	1	1	n.a.	n.a.	n.a.	1	1	1	n.a.	n.a.	n.a.	
							_						



The Tier Approach (II)

- Building blocks for configuration of a monitoringsystem for activity data, net calorific values, emission factor etc.
- Flexibility for smaller fuel or material streams: minor sources, de-minimis sources, biomass
- Guidance on choice of tiers: minimum requirements for three installation size categories in table 1 of Annex I

CO₂-emissions = activity data * emission factor * conversion factor

Tier 1 Tier 2 Tier 3 Tier 1 Tier 2 Tier 3 Tier 1 Tier 2



Other Key Elements

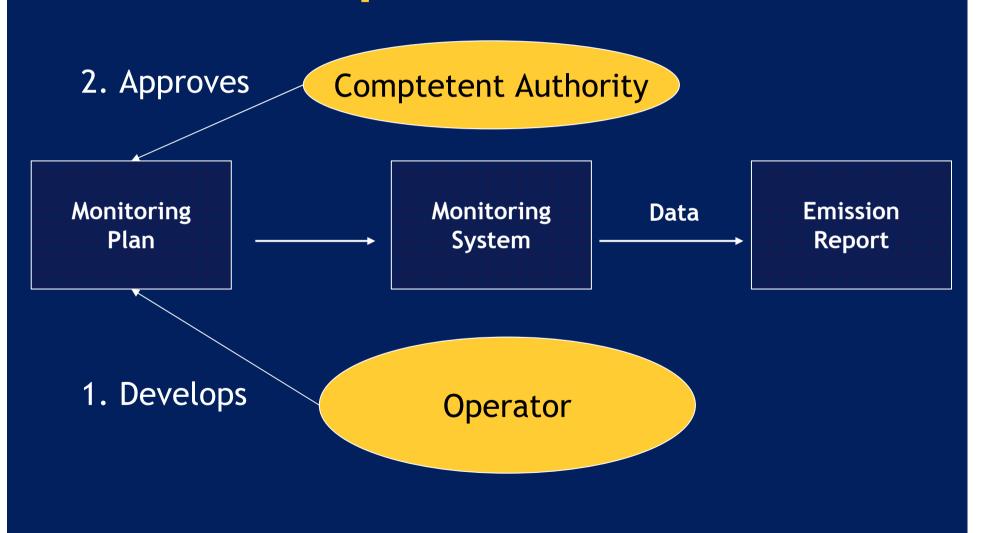
- Continous emissions monitoring: Allowed if lower uncertainty than with calculation is provided
- Uncertainty: Determination of overall uncertainty not required, only determination of uncertainty of activity data for single fuel and material stream
- Mass balance approach for the calculation of complex installations like integrated steel plants or refineries: input-output calculation
- Biomass: Specific definition designed for requirements of MRG + exemplary positive list
- Development of specific values (EF, OF, NCV..) in higher tiers: Analyses by EN ISO 17025 accredited laboratories



Monitoring, Reporting and Verification in the EU-ETS

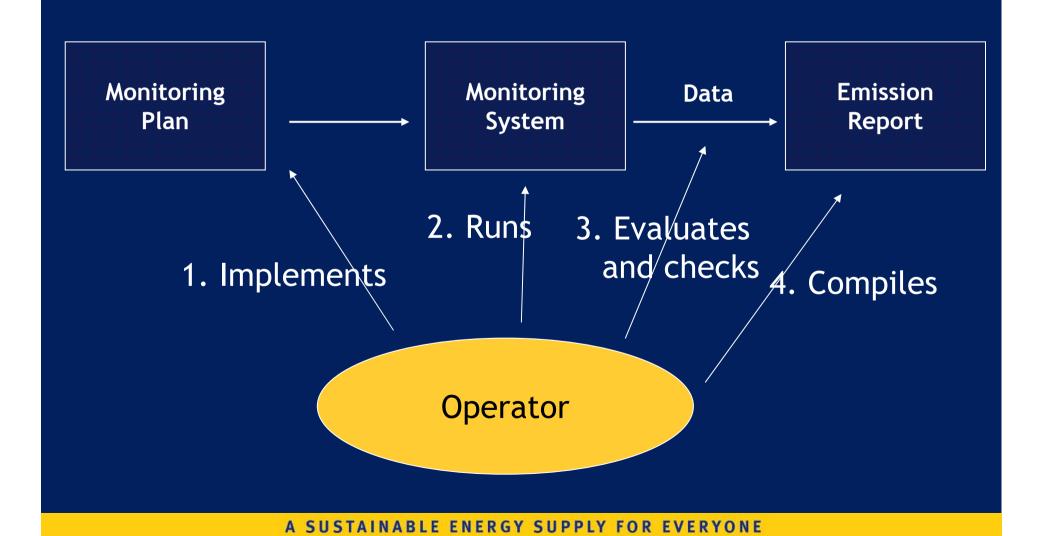


EU-MRV: Step 1



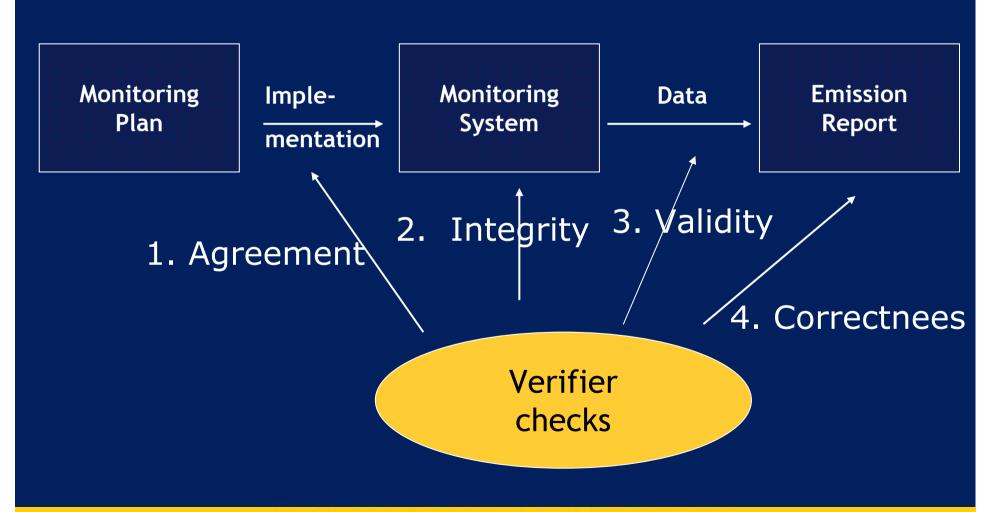


MRV - EU-MRV: Step 2





MRV - EU-MRV: Step 3





MRV - EU-MRV: Step 4

Verifier

2. Approves

Emission Report 3. Accepts
/ Rejects

Comptetent Authority

1. Generates

Operator



EU-MRV: Key Elements

- Operator developes "monitoring plan" according to EU-MRG
- "Monitoring plan" to be approved by competent authority for each installation
- Operator implements & runs "monitoring system"
- Verifier checks implemention and emission report
- Competent authority has final decision on emission data
- ⇒ Strong Role for competent authorities
- ⇒ Strong Role for third party verifiers
- ⇒ Flexibility to develop national best practices



Key Issues for MRG Review



MRG Review (I)

- ET-Directive Review clause in the EU-MRG:
 - "The Commission will review this Annex and Annexes II—XI by 31 December 2006, taking into account experience with the application" (Annex I, 1)
- MRG review to be in line with review of ET-Directive and development of NAP II
- Potential changes for the second trading phase to be in place well ahead 1 January 2008



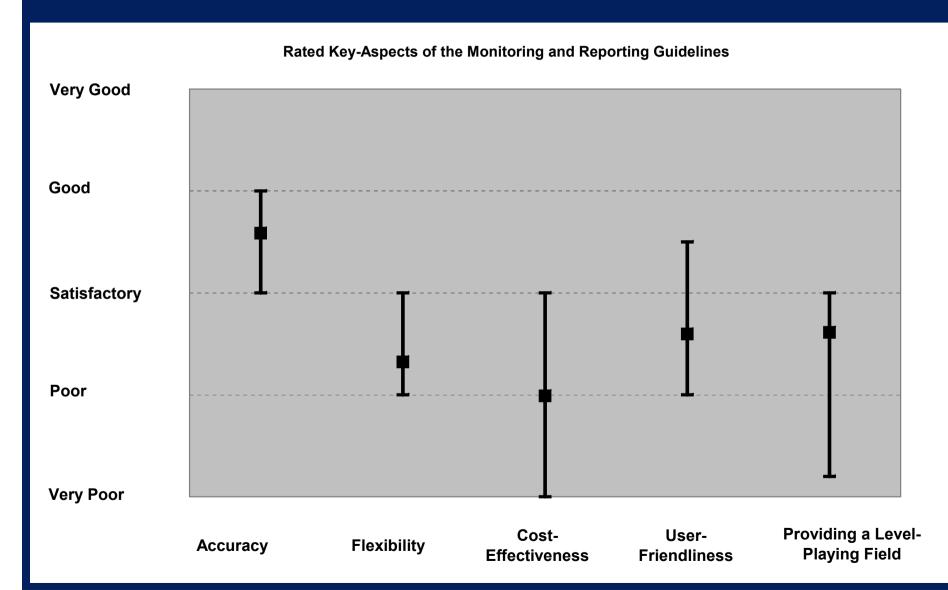
MRG Review (II)

The Process

- Stakeholder consultation based on questionnaires, position papers and a stakeholder day
- Informal discussions with Member States in WG3 of the Climate Change Committee in summer/fall 2005
- Bilateral discussions with industry stakeholders in November and December 2005
- Official consultation phase in January April 2006
- Target for adoption: April / May 2006
- Facilitation of Commission work by Ecofys in cooperation with PwC and TÜV Rheinland

Stakeholder Consultation







Stakeholder Day in Cologne on May 12th, 2005

- Over 130

 participants
 from industry
 and national
 authorities
- Specific sessions on cross-cutting and sectoral level issues











Issues f. Consideration in Review (I)

- Improve cost-effectiveness:
 - Better operationalise cost-effectiveness
 - Widen the scope for minor sources and no-tier
 - Lighter monitoring requirements for pure biomass use and small installations
 - Introduce intermediate tier layers e.g. "lighter" requirements regarding EN ISO 17025
 - Better consideration of exististing commercial reporting practices
 - Simplify tier structure & remove selected higher tiers
 - Only standard factors for commercial fuels



Issues f. Consideration in Review (II)

- > Improve cost-Effectiveness:
 - Reconsider presumption of highest tier as starting point
- Provide more flexibility for large installation: consider overall uncertainty of emissions
- ➤ Reconsider "transferred CO₂"
- Review and amend selected activity specific annexes
- > Provide further guidance on verification



EU-MRG: The Road Ahead...

- ➤ Improve cost-effectiveness and flexibility of monitoring and maintain accuracy & credibility
- > Achieve "full" consistency with national reporting
- Maintain "basic" consistency with other ghg reporting and verification schemes
- > Review and amend activity specific annexes
- Prepare MRG for inclusion of other gases and activities



Conclusions



Conclusions

- Learn from national best practices in implementing MRV
- Solve problems and close loopholes identified in 2004 and 2005
- Improve the cost-effectiveness of monitoring
- Reduce the burden of participation for small installations
- Align the verification process with the specific monitoring and reporting procedures of the EU-ETS
- Develop means to facilitate a user-friendly implementation of legal text



Thank you for your attention!

Further information:

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