

Capacity Building for the Implementation of the EU Emissions Trading Directive in the new EU Member States

Workshop
Budapest, 10th – 12th October 2005

Manuals and Guides

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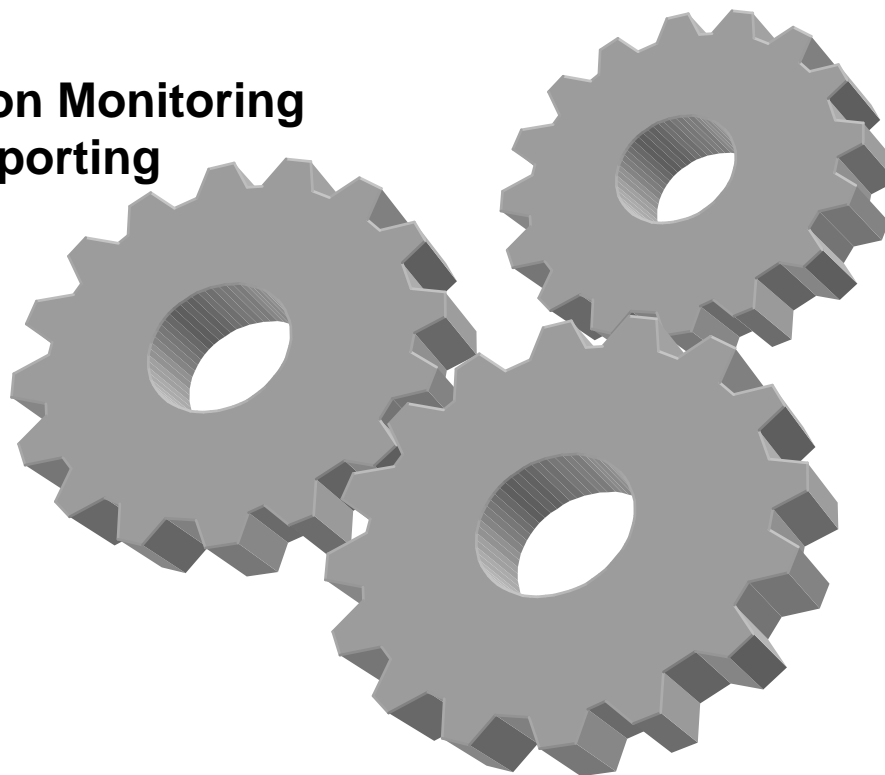
■ Content

1. **Scope of the Manuals**
2. **Definition of Key Terms**
3. **Manual No.1: Guide on Monitoring and Reporting**
4. **Manual No.2: Guide on Verification**
5. **Manual No.3: Guide on Accreditation**
6. **Summary and Conclusion**



■ Interrelationship between Manuals

**Guide on Monitoring
and Reporting**

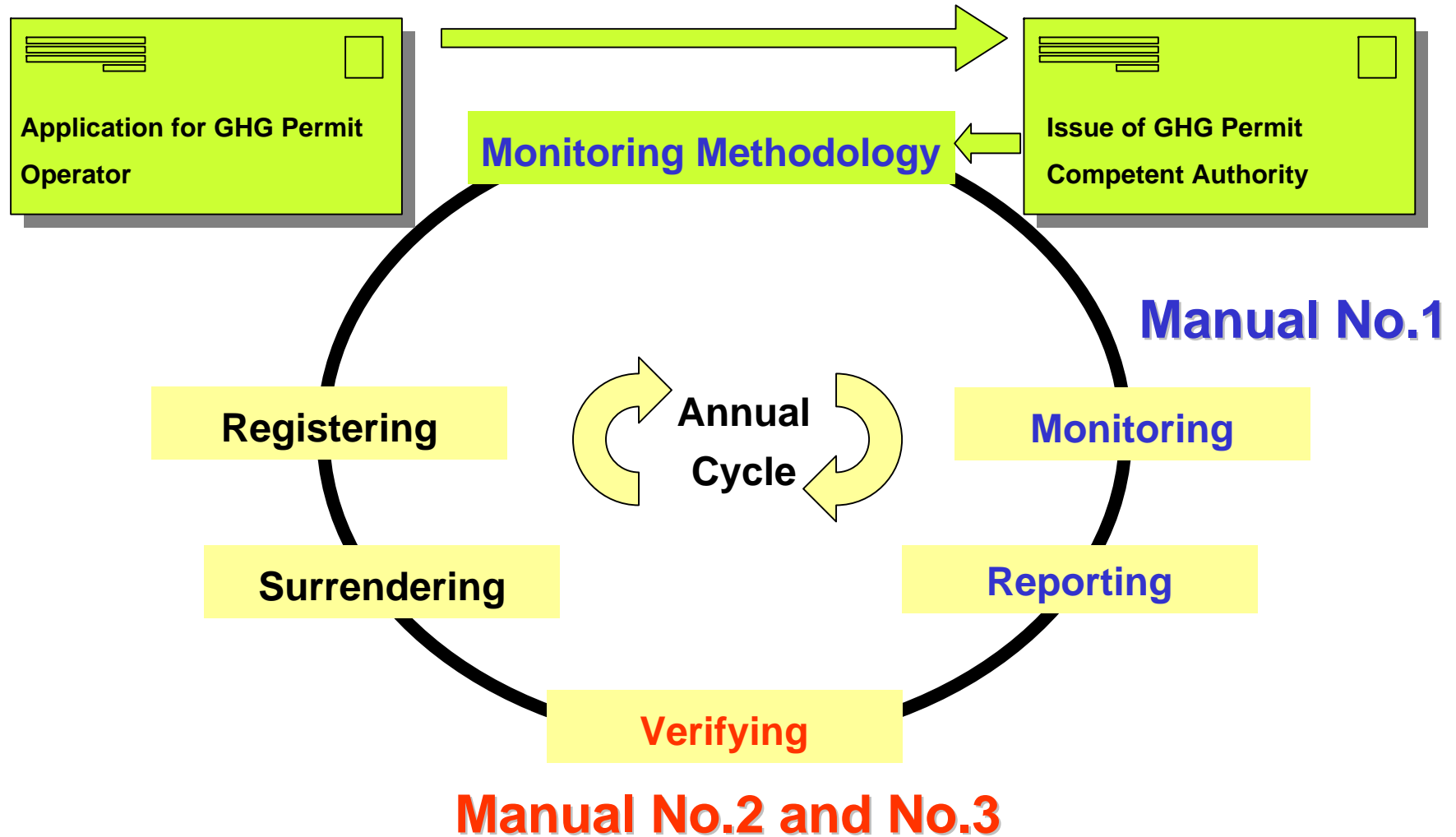


Guide on Accreditation

Guide on Verification



■ Scope of the Manuals



■ GHG Permit

Member States shall ...

... assure that from 1 January 2005 no installation covered by the EU ETS undertakes any activity unless its operator holds a GHG permit (*Article 4*)

Application for GHG Permit shall ...

... include measures planned to monitor and report emissions in accordance with the MRG (*Article 5*)

GHG Permit shall ...

... contain monitoring requirements, specifying monitoring methodology and frequency (*Article 6*)

(1) Theory not practise

(2) Practise differs from MS to MS and within MS

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■ Definitions (1)

LEVEL

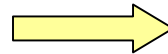
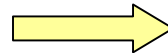
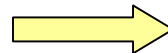
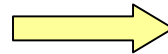
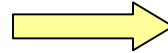
01: **Installation**

02: **Category of Activity**

03: **Activity**

04: **Source**

05: **Streams**



SIMPLE EXAMPLE

Power Plant

Energy Activities

Combustion

Gas Turbine

Natural Gas

Installations

means stationary technical units where one or more activities are carried out

Activities

means the activities listed in Annex I of The ETS Directive

Sources

means separately identifiable points or processes in an installation from which GHG are emitted



■ Definitions (2)

LEVEL		COMPLEX EXAMPLE
01 Installation	→	Integrated Steel Works
02 Category of Activity	→	Energy Activities, <i>Production and Processing of Ferrous Metals</i>
03 Activity	→	Combustion, Coke Oven, <i>Sintering Installation, Installation for the Production of Steel</i>
04 Source	→	Incineration, Flue Gas Cleaning, <i>(N.N.)</i>
05 Streams	→	Coal, Gas Oil, Limestone, <i>(N.N.)</i>

Key Questions:

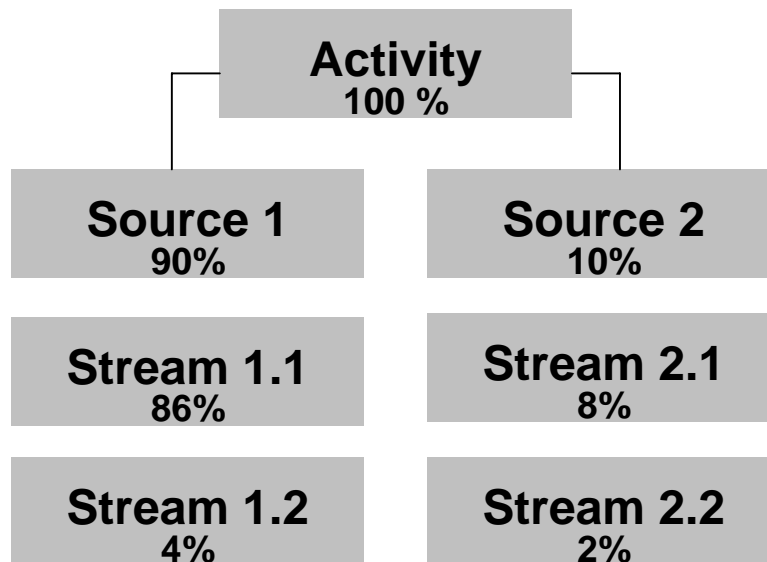
(1) What is a source?

(2) What is a fuel and material stream?

■ Sources versus Streams

Table I of Annex I of the MRG:

Columns A, B and C contain tier values of **major sources!**



**including major streams
of fuels and materials**

... are those, which, if ranked in the order of their decreasing magnitude, cumulatively contribute at least 95% of the total annual emissions of the installation.

(1) Sources 1 and 2 are major sources! ⇒ Table I

(2) Stream 2.2 is a minor stream! ⇒ ???

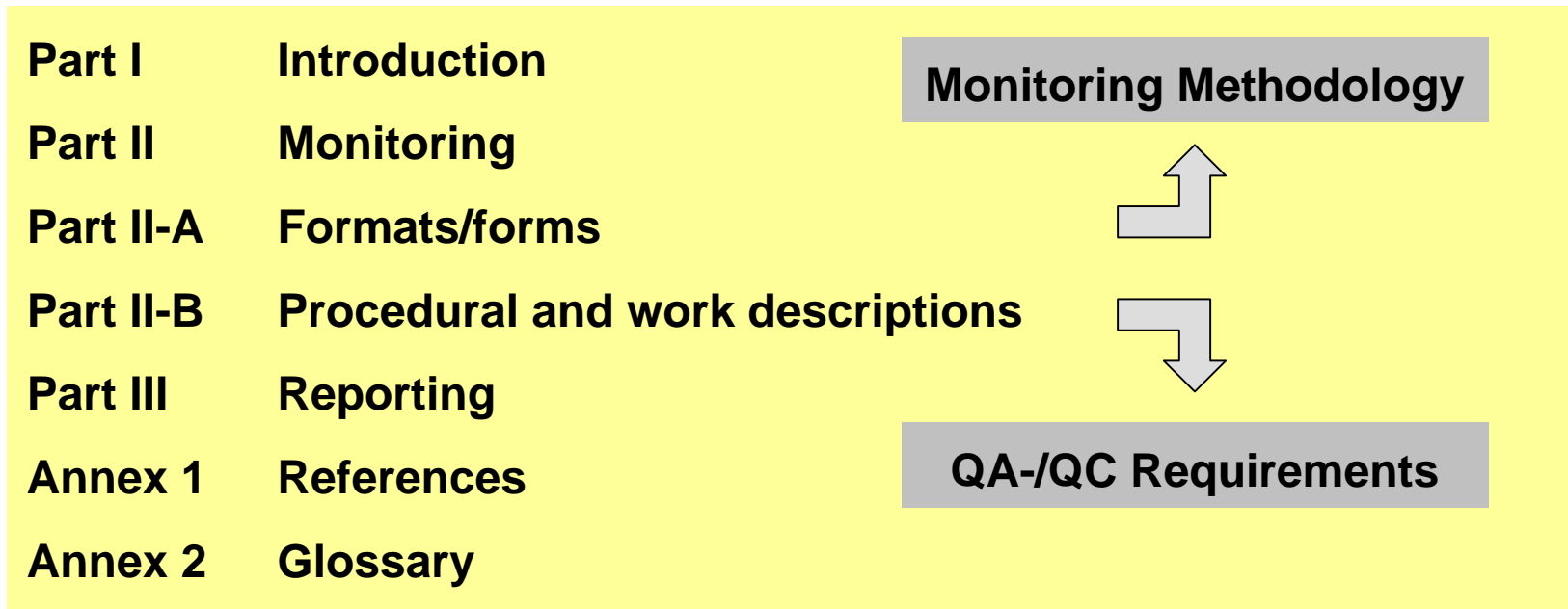


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■ Structure of Manual No.1



Case Study explains formats/forms and QA-/QC measures!

■ Case Study



- Power Station
- 400 MW
- 2 Sources
(combustion; flue gas cleaning),
- 3 Streams (linked to sources)
(Coal, Timber, Limestone)
- 2 Streams (not linked to sources)
 - (FBA Furnace Bottom Ash and
 - PFA Pulverised Fuel Ash)

Not all streams are linked to sources!



■ Formats/forms

Monitoring Methodology

1. Exact definition of the installation and activities
2. Information on responsibilities for M&R
3. List of fuel and material streams
4. List of sources
5. List of tiers
6. Description of the metering devices
7. Description of the sampling of fuel and materials
8. Description of the sources or analytical approaches
9. Description of CEM
10. Description of QA/QC for data management
11. Information on links with EMAS

⇒ PD, WD



■ Procedural and work Descriptions

Quality Assurance, Quality Control and Data Management

1. Identification of greenhouse gas sources
2. Sequence and interaction of monitoring & reporting procedures
3. Responsibilities and competence
4. Methods of calculation or measurement
5. Measuring equipment
6. Reporting and records
7. Internal review
8. Corrective and preventive action



■ Reporting

ETS Directive no special reporting format required

MRG special reporting formats required
(shall be used as basis)

UK Form ETS7 for Annual Monitoring Report
(*Form ETS2 for Monitoring Plan*)

Germany Electronic reporting procedure with integrated
verification report / statement

(1) Member State specific reporting formats and procedures!

(2) No recommendation is given in Guide on Monitoring & Reporting!



■ References

- **DEFRA / SEPA (May 2004)**
Competent Authority Guide to the Commission Decision establishing Guidelines for Monitoring and Reporting in accordance with the EU ETS
- **DEFRA / SEPA (June 2004)**
Example for the Completion of Monitoring and Reporting Plan Template
 - coal fired power station
 - oil fired power station
 - iron and Steel
 - glass
 - gas fired power station
 - small scale combustion
 - cement
 - pulp and paper
- **DEHST (January 2005)**
Monitoringkonzept (in German)
- **DEFRA / SEPA (August 2005)**
EU ETS – Annual Emission Report
Guidance to Operators for the Completion of Form ETS 7

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■ Structure of Manual No.2

Part I	Introduction
Part II	Verification process
Part II-A	Verification requirements based on ETS Directive
Part II-B	Verification requirements based on MRG
Part III	Verification report and verification statement
Annex 1	References
Annex 2	Glossary



■ Verification Requirements (ETS Directive)

Strategic Analysis

- Basis for verification, overview of all the activities and their significance for emissions

Process Analysis

- Site visit and spot-checks to determine the reliability of the reported data and information

Risk Analysis

- Evaluation of the data of each source regarding reliability
- Identification of those sources with a high risk of error
- Consideration any effective risk control methods applied by the operator



■ Verification Requirements (MRG)

1. Understanding of activities
2. Understanding of data management systems
3. Establishing an acceptable material level
4. Analysing the data risks
5. Drawing up a verification plan
6. Carrying out a verification plan
7. Checking the accuracy level
8. Request to provide missing data and/or to revise calculation

■ Verification report and statement

LEGAL REQUIREMENTS

1. Validation report

The verifier shall prepare a report on the validation process stating whether the annual emission report is satisfactory.

(ETS Directive)

2. Verification judgement

At the end of the verification process, the verifier shall make a judgement with respect to whether the emissions report contains any material misstatement.

(MRG)

RECOMMENDATIONS / REQUIREMENTS

- Verification process report

is used for internal independent technical review

(EA-6/03 and ISO/DIS 14064-3)



■ References

- **DEFRA** (*August 2005*)
**EU Emissions Trading Scheme
Guidance on Annual Verification**
- **IETA** (*September 2005*)
Verification Protocol, version 2.0 (2005)
**Verification of Annual Emission Reports of installations engaged
in EU emission trading**



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■ Structure of the Manual No.3

Part I	Introduction
Part II	Guidance for recognition of verification bodies under the EU ETS
Annex 1	Procedures for the accreditation of independent entities
Annex 2	Impartiality and independence
Annex 3	References
Annex 4	Glossary



■ Competency Requirements for Verifier

Verifier

means a competent, independent, accredited **verification body** with responsibility for performing and reporting on the verification process.

- **Verification Body or Verifier** (requirements for organisation)
- **Verification Team** (requirements for group of individuals)
- **Auditor** (requirements for individual)



■ References

- **EA-6/03** (*March 2005*)
Guidance for the Recognition of Verification Bodies under EU ETS Directive
- **ISO 17025** (*May 2005*)
General requirements for the competence of testing and calibration laboratories

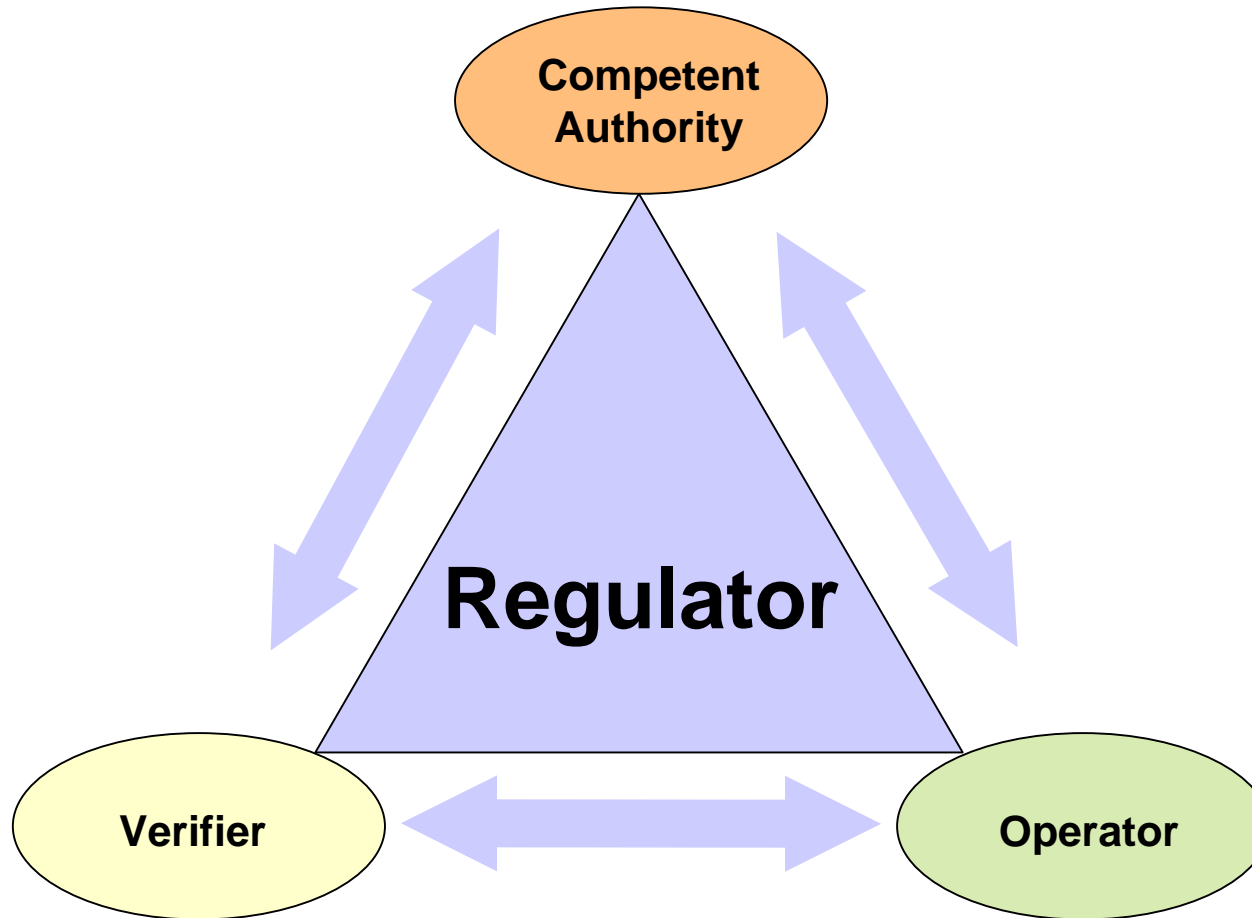


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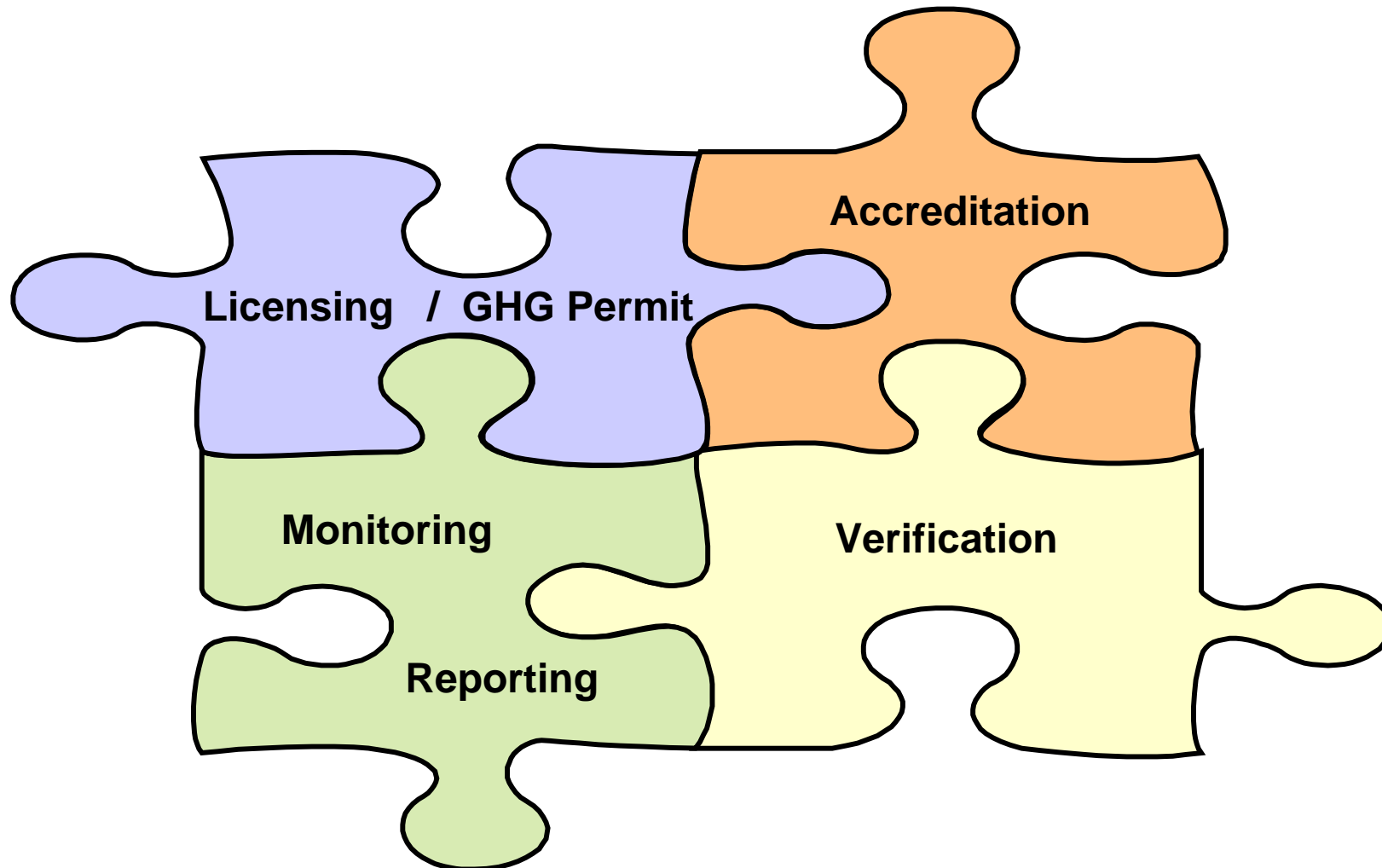
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■ Key Actors



■ Key Processes



■ Selected TÜV Expertise in Emissions Trading

2002 – 2003

Development of draft MRG

2004 – 2006

Support to the Commission's Work related to the implementation, evaluation and further development of the MRG

2005 – 2006

Support to the Commission's Work related to the review of the MRG

2004

Verification of application forms for the allocation of EU allowances

2004 – today

Examination for publicly certified verifier for emissions trading

2004 – today

Validation, verification of CDM-projects (*Designated Operational Entity*)

2004 – today

Pre-Determination of JI-projects (*applied for Independent Entity*)

- **Any Questions? Please contact:**

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