

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

**Workshop  
Warszawa, 26<sup>th</sup> April 2006**

## **Verification & Accreditation**

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# ■ Content

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1. **Manual No.2: Guide on Verification**
2. **Manual No.3: Guide on Accreditation**
3. **Summary and Conclusion**



## ■ Structure of Manual No.2

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



# ■ Verification Requirements (ETS Directive)

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## 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 of any effective risk control methods applied by the operator



# ■ Documents, Procedures, Methods

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## Documents to be reviewed

- **GHG permit (including approved monitoring methodology)**
- **Annual emission report (including applied monitoring methodology)**
- **“Primary” documents (e.g. invoices, data records)**

## Procedures to be investigated

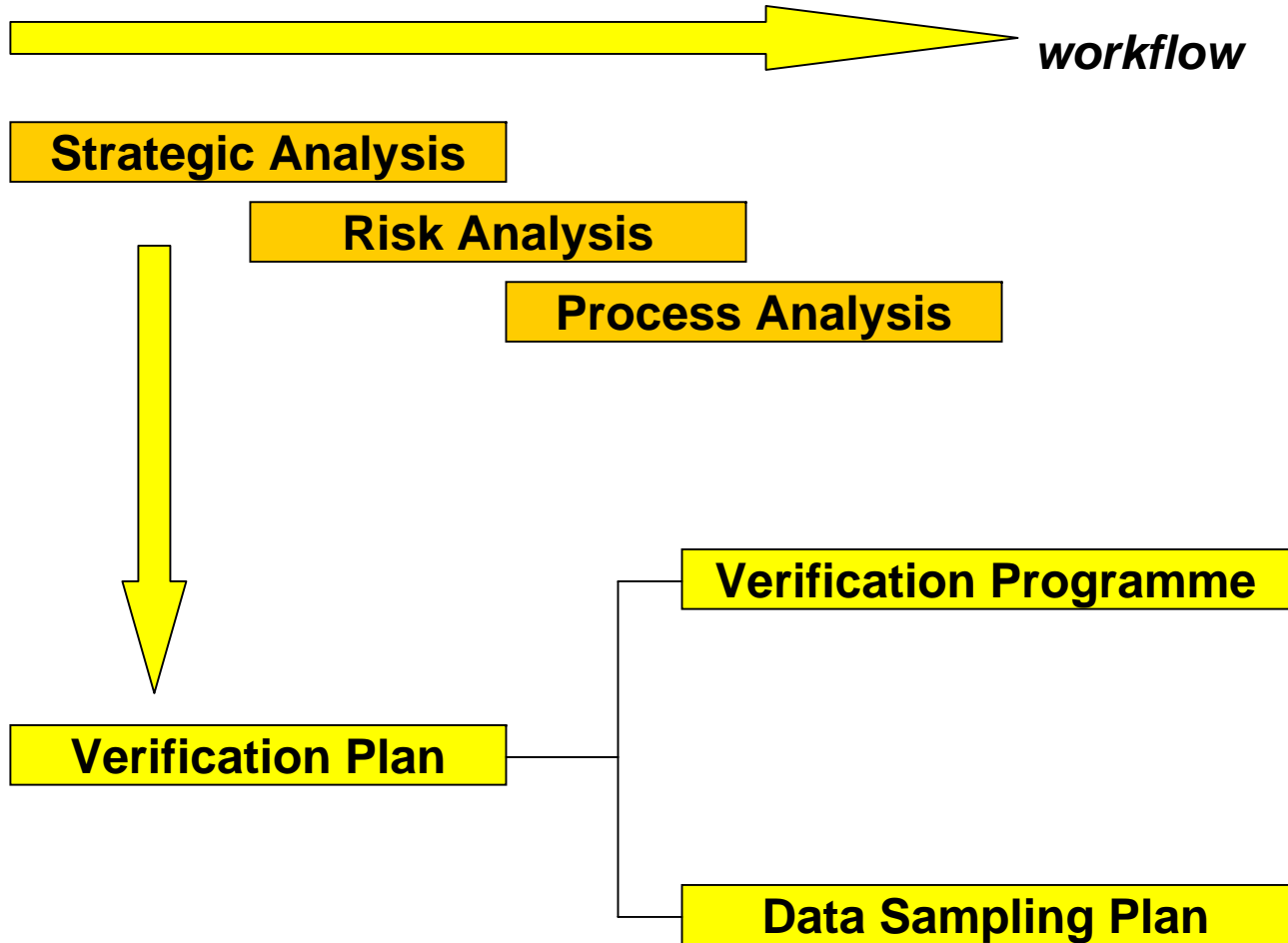
- **Implementation of Monitoring Methodology**
- **Internal QA-/QC-measures**
- **Data management including determination of CO<sub>2</sub> emissions**

## Methods to be applied

- **Document reviews**
- **Interviews**
- **Site visits**



# ■ Verification Process (MRG)



# ■ Strategic Analysis

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## Complexity of the installation

- Categories of activities, activities, sources and streams?
- Calculation or measurement?

## Operational structure, especially data management system

- What kind and how many sampling, analysing metering?
- What kind of data collection, processing and archiving?

## Organizational structure, especially responsibilities

- Who is operator and “CO<sub>2</sub> manager”?
- What kind of responsibilities are delegated and to whom?

## QA-/QC-measures

- Handbook, procedural descriptions, work descriptions?
- Stand alone system or integrated system (QMS, EMS)?



# ■ Risk Analysis

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## Risks relate generally to

- material errors, omissions and misstatements in reported data
- non-conformities with requirements of the GHG permit

## Inherent risk

- probability of a parameter to a misstatement that could be material (due to missing internal control system)

## Internal control risk

- probability that the internal control system does not detect / prevent / correct non conformities



# ■ Inherent Risks, Internal Control Risks

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## **Inherent Risks are generally low at installations with**

- **simple technology, i.e. not too complex**
- **simple and transparent work flow**
- **only few or no differences to previous year**

## **Internal control risk are generally low at installations with**

- **documented and implemented data management system**
- **segregation of duties**
- **integration of monitoring and reporting in existing systems**
- **only few or no changes to previous years**



# ■ Process Analysis

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## Site visit

- site of the installation (compliance audit)
- installation's head office (if data are processed there)
- other locations (e.g. supplier)

## Confirm/check, whether

- monitoring and reporting complies with GHG permit,
- data management is effective,
- QA-/QC-processes are implemented,
- personnel is aware of responsibilities and duties,
- physical meters are in line with and maintenance plan/system,
- no essential changes have occurred,
- abnormal operations are handled clearly (e.g. repairs)



# ■ Verification Requirements (MRG)

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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

Strategic A.

Process A.

Strategic A.

Risk A.

Strategic A.

Process A.

Risk A.

Strategic, Process, Risk A.



# ■ Verification Report and Statement

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## LEGAL REQUIREMENTS

### 1. Validation / verification 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 14064-3)*



# ■ Internal Verification Process Report

## Background documentation

- Information concerning the industry and legislative environment within which the installation operates,
- Information about organisational boundaries of the installation,
- Information about the identification of CO<sub>2</sub>-sources and fuel and material streams,
- Procedures for quantifying CO<sub>2</sub> emissions,
- An annotated process flow diagram, characterising mass and energy flows for CO<sub>2</sub> sources and metering and sampling devices,
- Extracts or copies of important agreements, contracts, etc. with relevance to CO<sub>2</sub> emissions.



# ■ Internal Verification Process Report

## Process documentation

- Evidence of the verification plan including any changes,
- Details of the anticipated and actual verification programme,
- Details of the anticipated and actual data sampling plan,
- Records relating to verification team personnel, including verifier competence and performance evaluation,
- Records of who completed the activities, when they were performed and how these activities contributed to the verification findings and conclusions,
- Results of the risk assessment including evidence of inherent and control risk assessments (materiality level),
- Evidence that the verifier has a clear understanding of the operator's data management and internal control system.



# ■ Verification Judgement or Statement

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## Verified without comments

- no material errors, omissions and misstatements
- monitoring and reporting in accordance with the GHG permit / MRG
- any inconsistencies have been resolved and are no longer an issue

## Verified with comments

- non-conformities with the GHG/MRG permit have been detected, that
  - could be resolved by the operator and/or
  - have not caused material errors, omissions and misstatements

## Not verified

- non-conformities with the GHG permit have been detected, that
  - could not be resolved by the operator and
  - have caused material errors, omissions and misstatements



# ■ References

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- **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**



# ■ Content

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1. **Scope of the Manuals**
2. **Manual No.2: Guide on Verification**
3. **Manual No.3: Guide on Accreditation**
4. **Summary and Conclusion**



# ■ Structure of the Manual No.3

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**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**



# ■ Definition of Verifier in MRG

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## Verifier

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

- **Verification Body or Verifier** (requirements for organisations)
- **Verification Team** (requirements for groups of individuals)
- **Auditor** (requirements for individuals)



# ■ Competency Requirements for Verification Bodies

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## The verification body should

- demonstrate that it has available sufficient qualified personnel,
- have effective procedures for the training and recruitment of competent staff, and monitoring their performance,
- maintain their own competence by ensuring that their knowledge is updated periodically to reflect current best practice in the field,
- ensure that the performance of auditors and reviewers is regularly reviewed, including on-site witnessing of verification activities,
- establish and maintain personnel records, which demonstrate that the personnel are qualified in accordance with the requirements on emissions trading.



# ■ Education and Work Experience of Auditors

## Auditors should - as a minimum -

- a) either hold a science and technology or business qualification from a tertiary institution [minimum 3 years program] or,
  - b) be able to demonstrate completion of work experience and other personal development activities which provide communication, technical and/or business as well as analytical skills necessary to conduct verification and,
- ⇒ have a minimum of four years full time work place experience as a manager, or other professional role involved in
- environmental management auditing and verification of environmental data
  - emissions related management and technology

# ■ Knowledge for Auditors

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## The auditor's knowledge should consist of:

- the applicable national legislation on emissions trading in conjunction with the ETS Directive, the MRG and an installations' typical GHG permit including monitoring methodology,
- differences in interpretation by CA of the coverage of the ETS Directive, e.g. scope of combustion installations, level of assurance, materiality,
- the specific activity or the industrial sector in which the installation is engaged,
- data and information auditing methods including data risk analysis,
- assessing data management and QA/QC systems,
- activities required to identify failures in the CO<sub>2</sub> reporting systems and the assessment of the impact of failures on the emission report.



# ■ Competency Requirements for Verification Teams

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## Each team member should:

- have a knowledge of the national and EU legislation,
- have a knowledge of data auditing,
- have a clear understanding of his individual role,
- be able to communicate effectively,
- have been selected on the basis of knowledge and experience and skills (team as a whole meets the requirements of verification).



# ■ Auditor Training Course (1)

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## EU and national legislation on emission trading

- Knowledge of ETS Directive, Linking Directive and MRG,
- Knowledge of national legislations and related regulations,
- Ability to perform an assessment of conformity with the requirements of the EU and national legislation,
- Awareness of
  - the Kyoto Protocol and relevant international and national commitments under the Kyoto Protocol,
  - the broader role of emissions trading,
  - mechanisms required to make it operational.



# ■ Auditor Training Course (2)

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## Data and information auditing

- knowledge of monitoring and reporting principles, materiality, inaccuracy and uncertainty,
- the roles of quality assurance and quality control,
- sampling in data verification and methods of checking data.

## Performing a verification

- knowledge of the verification process incl. reporting procedures
- the role played by different team members and lead auditor's role and responsibility
- ability to act as a lead auditor and complete a verification
- awareness of third party inspection in the scheme

# ■ References

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- **EA-6/03** (*March 2005*)  
**Guidance for the Recognition of Verification Bodies under EU ETS Directive**
- **IETA and IRCA** (*March 2005*)  
**Certification Criteria for the EU Emissions Trading Scheme  
Greenhouse Gas Auditor Training Course**



# ■ Content

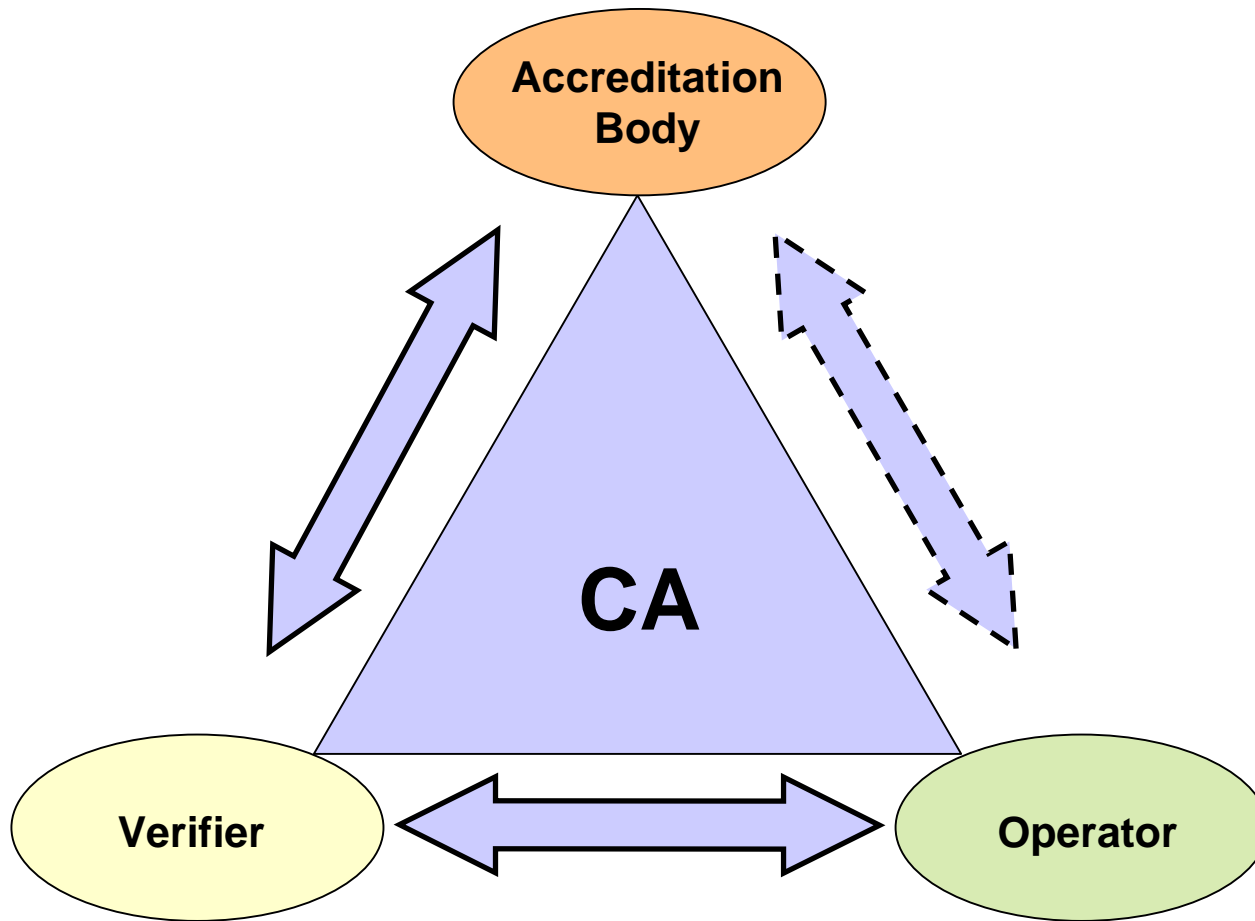
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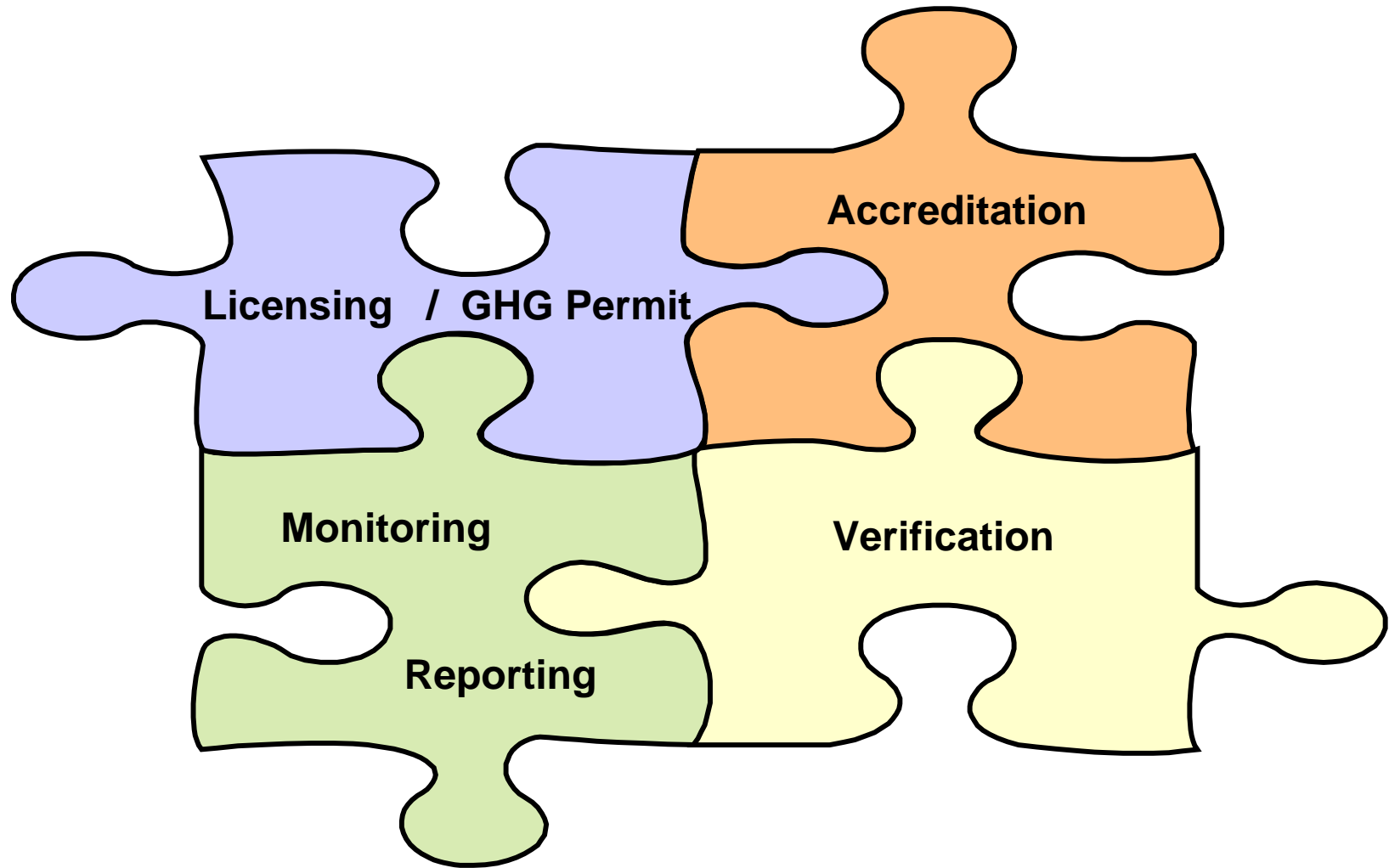
# ■ Key Actors

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# ■ Key Processes

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# ■ Selected TÜV Expertise in Emissions Trading

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**2004**

**Verification of application forms of German operators for the allocation of EU allowances**

**2004 – today**

**Examination for publicly certified verifier for emissions trading**

**2006**

**Verification of annual CO<sub>2</sub>-emission reports in**

- **Cyprus, Germany, Hungary, Latvia, Luxembourg, Poland, Portugal, Slovakia, Spain**

**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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