## **Periodic Verification Report**

# 1. Periodic Verification of the Rožmitál District Heating Project Czech Republic

Report No. 565309-3

January 10<sup>th</sup> , 2005





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Summary:	1

The Prototype Carbon Fund of The World Bank has commissioned the cerification body "Climate and Energy" of TÜV Industrie Service GmbH TÜV SÜD Group (TÜV SÜD) to verify a series of Joint Implementation (JI) projects in the Czech Republic. This report summarizes the findings of the first periodic verification of the district heating (DH) project in Rožmitál pod Třemšinem.

In our opinion, GHG emissions for the project as reported in the Annual Emissions Reduction Report – Updated version by CEA: Decin District Heating Project / Rožmitál District Heating Project, performed by EuroEnergy, Spol. s.r.o and SEVEn, o.p.s., dated Dec. 16th , 2004, prepared on the basis of PCF Monitoring Plan, are correctly stated.

The project avoided 1.821 tonnes CO<sub>2</sub>-equiv GHG emissions in the period of Jan. 1<sup>st</sup>, 2003 to March 31st, 2004.

All issues indicated as "Forward Action Request" in chapter 3 of the initial verification report 565309-1 have to be submitted as indispensable information to the verification team of the next Periodic Verification. According to those findings the operator is responsible to implement an appropriate management and operation system until next periodic verification. All issues should receive a special focus during the following verification.

Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project's GHG emission reductions for the period.

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Annex 1: Periodic Verification Checklist



#### **Abbreviations**

CAR Corrective Action Requests
CEA Czech Energy Agency

DH District Heating

DNV Det Norske Veritas Certification Ltd.

ERUs Emission Reduction Units FAR Forward Action Requests

IETA International Emission Trading Association

JI Joint Implementation

KP Kyoto Protocol MP Monitoring Plan

PCF Prototype Carbon Fund

PVC Periodic Verification Checklist

TÜV SÜD TÜV Industrie Service GmbH TÜV SÜD Group UNFCCC UN Framework Convention on Climate Change

VVM Validation and Verification Manual

#### Key parameter

#### **Default factors**

Capacity gas boiler 2,51 MW Emission factor natural gas 0,20 t  $CO_2$ /MWh Emission factor coal 0,39 t  $CO_2$ /MWh Conversion factor MWh – GJ 3,6 GJ/MWh Efficiency coal boiler baseline 80,0 % Efficiency gas boiler baseline 86,0 %

Load reduction project compared to baseline 844/12 GJ/month

#### Variable factors

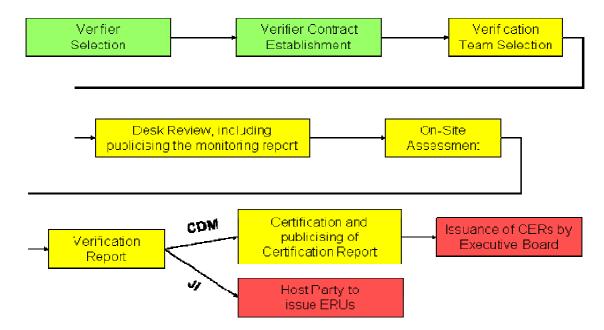
Heat sales to consumers (by account) [GJ]
Heat of combustion (by account) [kWh/m³]
Energy content natural gas (net, by account) [GJ/1000 m3]

Amount of gas consumption [Tm³]



#### 1 INTRODUCTION

The main steps in successful project verification are shown in this flow diagram. The different layers may be seen as representing the verification preparations, the verification itself and at last the results of the verification process. The box colour represents the party responsible for the activity (Green for the project proponent, yellow for the validator, red for other parties).



The Prototype Carbon Fund of The World Bank has commissioned the cerification body "Climate and Energy" of TÜV Industrie Service GmbH TÜV SÜD Group (TÜV SÜD) to verify a series of Joint Implementation (JI) projects in the Czech Republic. The order includes the initial and first periodic verification. This report summarizes the findings of the first periodic verification of the district heating (DH) project in Rožmitál pod Třemšinem (Rožmitál).

It is based on Periodic Verification Report Template Version 3.0, December 2003 of the Validation and Verification Manual (VVM) published by International Emission Trading Association (IETA). Following that manual the verification shall consider both quantitative and qualitative information on emission reductions.

Quantitative data comprises the monitoring reports submitted to the verifier by the project entity. Qualitative data comprises information on internal management controls, calculation procedures, and procedures for transfer, frequency of emissions reports, review and internal audit of calculations/data transfers

The audit conclusion is based on the interaction of four key verification principles:

- 1. Compliance with monitoring plan
- 2. Materiality / Accuracy
- 3. Coverage
- 4. Quality of evidence



The Rožmitál project is part of the PCF's Czech Umbrella Project. One of the objectives of the Prototype Carbon Fund (PCF) Czech Umbrella Project is to develop easily replicable approaches to baseline setting and monitoring plans in order to reduce project preparation and validation costs. Therefore, if appropriate, only one common baseline methodology is to be applied to all projects. The projects under each category will also apply a common approach to the monitoring plan. For the Rožmitál project, the standardised baseline has not been used, but a project specific baseline was used, because the project design document was submitted for validation prior to the finalisation of the general baseline and MP.

#### 1.1 Objective

The Prototype Carbon Fund of The World Bank has commissioned an independent first periodic verification by TÜV SÜD of Rožmitál district heating project. All PCF projects must undergo periodic audits and verification of emission reductions. This is a JI requirement and the basis for setting aside Assigned Amount Units (one to one for emission reductions prior to 2008) and issuance of Emission Reduction Units (ERUs) and for their value in the market place.

Verification is conducted at annual or longer intervals as appropriate for the project. The verifier has reviewed the GHG data collected to date for the period between **2003-01-01** and **2004-03-31**.

The purpose of periodic audits and verification is to confirm that:

- the project has achieved the ERs claim for the verification period in compliance with the methodology laid down in this Monitoring Plan (MP).
- the claimed ERs are real and additional to any that would have occurred in the baseline scenario as interpreted and developed in the Rožmitál baseline study and this MP.
- the operation of the project continues to be in compliance with all Kyoto Protocol, PCF and Czech requirements and modalities for JI projects.
- the project maintains a high quality monitoring systems consistent with the MP.

The verification team was expected to

- familiarize themselves with the project and project circumstances,
- introduce the project staff to the audit and verification process,
- confirm reported data regarding correctness, consistency and in compliance with validated monitoring plan,
- check whether assumptions that have an impact on the monitoring and verification processes and its outcomes are still reasonable, in particular baseline assumptions,
- review and audit relevant monitoring records and reports,
- verify that the required measurements and observations have been made for all recordable indicators in this MP,
- check whether the MP methodology has been applied correctly and consistently
- check whether achieved ERs have been computed correctly using the provided spreadsheets, and, if necessary, recalculate achieved ERs,
- verify that all relevant MP and baseline assumptions are still valid,
- verify that the management and monitoring system, including data handling, record keeping and reporting, is in place and remains adequate,



- consult with the operator on the continued adequacy of the monitoring system and approve any modifications that need to be made to ensure a high quality monitoring operation,
- undertake any other activities required by this MP, by the Kyoto Protocol requirements and modalities for JI, by the appropriate Czech authorities or by professional auditing and verification standards and practice, and

#### 1.2 Scope

The initial verification scope is defined as an independent and objective check of real emission reductions that have been generated due to the project and against the validated baseline. As far as applicable the information in these documents is reviewed against Kyoto Protocol requirements, UN Framework Convention on Climate Change (UNFCCC) rules and associated interpretations. The team has employed a risk-based approach in the periodic verification, focusing on the identification of significant risks of monitored and used data that result in generation of verifiable Emission Reduction Units (ERUs).

For the project, Article 6 of the Kyoto Protocol as well as UNFCCC decisions in the Marrakech accords on the Kyoto mechanisms are of importance.

Ascertained findings indicated as corrective action requests (CAR) or forward action requests (FAR) in this report are the result of the verification process. Resultant improvements are not understood as consulting services, they are part of that verification. The verification is based on the common accepted Validation and Verification Manual, version 3.0.

#### 1.3 Description of the Project Activity

The project is located in Rožmitál pod Třemšinem, post code 26242, Czech Republic. Rozmital is a small town in Central Bohemia in the Czech Republic with about 5,000 inhabitants.

The project proposes to install 3 new gas-fired boilers to supply current district heating loads, 36 new flats and the school. It is expected that this system will also supply additional future flats and buildings if it is completed as formerly planned.

At the time of the initial verification the project status includes the installation of three gas boilers (Viessmann,  $2x\ 895\ kW_{th}$ ,  $1x\ 720\ kW_{th}$ ), the refurbishing of the old pipelines, the construction of new connection pipelines to the school and to 18 new flats and the complete reconstruction of the old boilers. The verification team ascertained that buildings, which had been connected already before, have been heightened by one additional level.

The emission reduction is caused by the new gas boilers. The baseline is presented by coal boilers, which were placed in the central boiler house and at the school. New connected customers and the improvement of the DH system have no influence on the emission reduction.

Involved main project participants and their representatives:

Mr. Josef Vondrásek (Major)	Municipality of Rozmital	Owner and operator of DH system
Mr. Vayrynen	Prototyp Carbon Fund (PCF)	Project developer and buyer of ERUs
Ms. Kulhava	Czech Energy Agency (CEA)	Local project coordinator



#### 2 METHODOLOGY

Starting the periodic verification the verifier's first task has been to familiarize with the project and maybe new circumstances. Based on the received documents chapter 5 a checklist, the periodic verification checklist (PVC) has been prepared according to the VVM.

The PVC serves the following purposes:

- it organizes details of the audit procedure and clarifies the requirements the project is expected to meet; and
- it documents how a particular requirement has been validated and the result of the verification.

A special focus was given to:

- Expectations for GHG data management system/controls
- Identification of potential reporting risk, including
  - o the calculation methods,
  - o raw data collection and sources of supporting documentation,
  - o reports/databases/information systems from which data is obtained.
  - manual transfer of data/manual calculations,
  - o unclear origins of data,
  - o accuracy due to technological limitations,
  - lack of appropriate data protection measures? For example, protected calculation cells in spreadsheets and/or password restrictions.
- Identification, assessment and testing of management controls, including
  - Understanding of responsibilities and roles
  - o Reporting, reviewing and formal management approval of data;
  - o Procedures for ensuring data completeness, conformance with reporting guidelines, maintenance of data trails etc.
  - Controls to ensure the arithmetical accuracy of the GHG data generated and accounting records e.g. internal audits, and checking/ review procedures:
  - Controls over the computer information systems;
  - Review processes for identification and understanding of key process parameters and implementation of calibration maintenance regimes
  - Comparing and analysing the GHG data with previous periods, targets and benchmarks.
- Areas of residual risks, including
  - Areas of potential reporting risks where there are no adequate management controls to mitigate potential reporting risks
  - Areas where data accuracy, completeness and consistency could be improved are highlighted.



After the document review the audit team conducted

- on-site inspections,
- interviews with operational personnel, mentioned in chapter 2.3,
- an interview with responsible of Rožmitál and
- interviews with CEA

The findings are the essential part of this verification report, which is based on the verification Protocols of the VVM (Annex 1).

The PVC consists of three tables:

- Table 1: Data Management System/Controls
- Table 2: GHG calculation procedures and management control testing
- Table 3: Detailed audit testing of residual risk areas and random testing

The verification team distinguishes between two different types of findings identified during the verification process.

A "Corrective Action Request" (CAR) in the verification context would be where:

- are clear deviations concerning the operation of the project as defined by the PDD
- Requirements set by the objectives of the VPs have not been met; or
- There is a risk that the project would not be able to deliver high quality ERUs

Before awarding a positive verification opinion it is necessary to resolve all findings indicated with a CAR.

The verification team has also used the term "Forward Action Request" (FAR), whenever

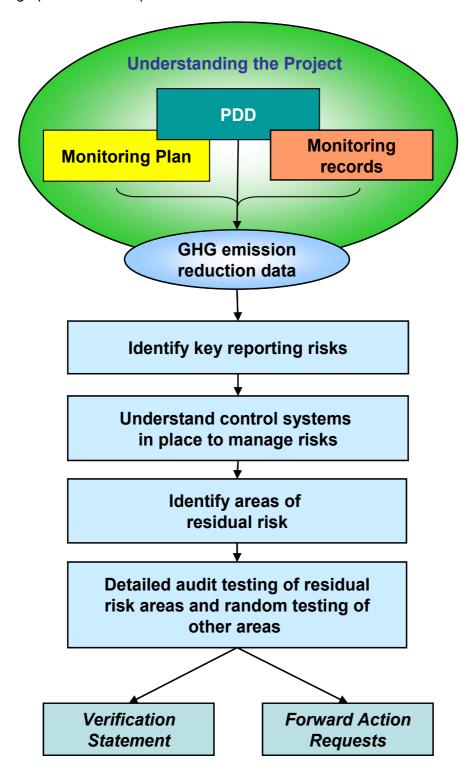
- the actual project monitoring and reporting practices requires attention and /or adjustment for the next consecutive verification period, or
- an adjustment of the MP is recommended.

In the context of FARs no risks have been identified, which may endanger the delivery of high quality ERUs, but it is a hint that there could be deviations from standard procedures as defined by the MVP. As a consequence such aspects should receive a special focus during the next consecutive verification.

All FARs have to be reported to the verification team of the next Periodic Verification, which have to take into account all such findings.



#### The graph indicates steps of verification



The periodic verification was performed as a desk review of the project documents including baseline study, monitoring plan, validation report, emission reduction report and further documentations. The results of the validation were documented by Det Norske



Veritas (DNV) in the report No. 2002-1314, revision 02. The validation report indicates no remaining issues.

The verification team consisted of the following personnel:

Werner Betzenbichler	TÜV SÜD, Munich, Germany	Project Manager, Team Leader, GHG Auditor
Klaus Nürnberger	TÜV SÜD, Munich, Germany	GHG Auditor
Markus Knödlseder	TÜV SÜD, Munich, Germany	GHG Lead Auditor
Josef Konradl	ZREU, Regensburg, Germany	Technical expert

#### **Duration of verification**

Preparations: From 18-11-2004 to 10-01-2005
On-site verification: At CEA on 22-11-2004 and at Rožmitál on 23-11-2004

Emission reduction Reporting period: From 01-01-2003 to 31-03-2004

#### 2.1 Review of Documentation and Site Visits

The periodic verification was performed as a desk review of the project documents including baseline study, monitoring plan, validation report, emission reduction report and further documentations. The results of the validation were documented by Det Norske Veritas Certification Ltd. (DNV) in the report No. 2002-1314, revision 02. The validation report indicates no remaining issues.

Site visits included an audit in Praha with responsible from CEA and consultants, relevant offices of municipality of Rožmitál, new boiler house and new connected customers like school and gymnasium.

#### 2.2 Assessment

The assessment is based on information and documents that are listed in chapter 5. For a scrutinized verification the team used information from interviewed person as well as liable evidences.



#### 3 VERIFICATION FINDINGS

As a final conclusion of this verification the verification team identified one main FAR:

FAR#1:

Like mentioned in initial verification report no. 565309-1, the project has no written and documented operational and management system. Neither the project developer nor the owner of the DH have such kind of system.

The project participants shall bear care that an appropriate system will be established.

## 3.1 Remaining Issues, CARs, FARs from Previous Validation or Verification

#### 3.1.1 Discussion

The validation indicated no open issues. As the initial verification is conducted with first periodic verification in parallel, it is obvious that addressed findings are still open.

#### 3.2 Project Implementation

#### 3.2.1 Discussion

The scrutiny of a proper implementation of a project is a key issue of an initial verification, in order to have a climate change project ready for successful operation. Physical components are installed and already in operation. Measurement equipments are in place, calibrated and sealed.

The size of installed boilers is smaller than planed. That however has no significant influences to the project success, because emission reductions are caused by sold heat and consumed gas. Those parameters are not affected by the boiler size.

The project boundaries have not been changed in principle. The verification team identified during the audit that new additional flats are built on the top of some already existing and DH-supplied buildings. That situation is not clearly covered by the baseline study. Given that those flats are on top of old buildings which had been connected to the old DH system before and that the new boilers are smaller than the old one anyway, that issue do not influence the baseline significantly. Those flats will be handled like old buildings.

Other identified findings regarding project implementation are addressed in detail below.

Identified findings regarding project implementation are related to missing instructions and documentations. See initial verification report no. 565309-1.

#### 3.3 Reporting of Findings

#### 3.3.1 Discussion

Municipality of Rožmitál submitted its report to CEA, who concluded the report and submitted it to the verifier. The original report follows the monitoring plan and a comparison of original and submitted report indicates no difference.

Just a comparison of submitted report with invoiced data results in the following finding.



#### 3.3.2 Finding

The team identified different figures of invoiced gas consumption CAR#1 and reported data. That difference is due to different time of meter-reading.

#### Response by the project participants:

A new monitoring report has been submitted on 16<sup>th</sup> December 2004, which is now clearly indicating that all calculations are based on metered data only.

#### 3.3.3 Conclusion

The report is transparent and reproducible. The CAR is hence resolved.

#### 3.4 Completeness of Monitoring

#### 3.4.1 Discussion

Apart from the finding mentioned above in CAR#1 the monitoring is complete.

#### 3.5 Accuracy of Emission Reduction Calculations

#### 3.5.1 Discussion

The operator got an Excel spreadsheet for calculating the emission reduction. The spreadsheet has been checked by the verification team regarding correct formulas and content. As a result of that check the verification team identified no misstatement in accuracy.

#### 3.6 Quality of Evidence to Determine Emission Reductions

#### 3.6.1 Discussion

Produced heat is recorded by calibrated and sealed meters. The gas consumption as mentioned in the report is close to the invoiced amounts, but it is based on manual reading.

A new monitoring report has been submitted on 16<sup>th</sup> December 2004, which is now clearly indicating that all calculations are based on metered data only.

An additional parameter which can influence the amount of generated emission reductions is the number of old buildings that had already been connected to the old boilers. The old DH system is shown on map. The verifier feels confident with that type of evidence.

### 3.7 Management System and Quality Assurance

#### 3.7.1 Discussion

In order to ensure a successful operation of a project and the credibility and verifiability of the ERUs achieved, the project must have a well defined management and operational system. It shall include the management system for monitoring and reporting, i.e. organisa-



tional structure, responsibilities, competencies, non-conformance handling, internal audits and management review.

#### 3.7.2 Finding

Like mentioned in the initial verification report no. 565309-1 a management and quality assurance system for the purpose of GHG reduction determination and reporting is not in place.

FAR#1

The operator shall bear care that an appropiate system will be implemented.

#### 3.7.3 Conclusion

In Rožmitál a simple system for heat production and purchase is in place. It is based on the knowledge of employees. However, a written system focussing on GHG reporting should be implemented.



#### 4 VERIFICATION STATEMENT

The Prototype Carbon Fund of The World Bank has commissioned the cerification body "Climate and Energy" of TÜV Industrie Service GmbH TÜV SÜD Group (TÜV SÜD) to verify one of series of Joint Implementation (JI) projects in the Czech Republic. This report summarizes the findings of the first periodic verification of the district heating (DH) project in Rožmitál pod Třemšinem (Rožmitál).

Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project's GHG emission reductions for the period January 1<sup>st</sup> 2003 to March 31<sup>st</sup> 2004.

In our opinion, Rožmitáls GHG emissions for the project as reported in *Annual Emissions* Reduction Report – Updated version by CEA: Decin District Heating Project / Rožmitál District Heating Project, performed by EuroEnergy, Spol. s.r.o and SEVEn, o.p.s. on Dec 16th, 2004, prepared on the basis of PCF Monitoring Plan, are fairly stated.

The project has avoided 1.821 tonnes CO<sub>2</sub>-equiv GHG emissions in the period of January 1<sup>st</sup> 2003 to March 31<sup>st</sup> 2004.

The operator is responsible to implement such system until next periodic verification. All issues indicated as "Forward Action Request" in chapter 3 of initial verification report 565309-1 and of this report have to be submitted as indispensable information to the verification team of the next Periodic Verification. Such issues should receive a special focus during the following verification.

Munich, 2005-01-10

Michael Rumberg
Deputy head of certification body Climate and Energy

Markus Knödlseder Lead Auditor



#### **5 REFERENCES**

#### Category 1 Documents:

List documents provided by the Client that relate directly to the GHG components of the project. These have been used as direct sources of evidence for the initial verification conclusions.

- 1. Czech District Heating Projects Proposed Standard Baseline Final Report, published by PCF and performed by Power System Engineering Inc. on Dec. 9<sup>th</sup>, 2002
- 2. Rožmitál District Heating Project Baseline Study Final Report, published by PCF and performed by Power System Engineering Inc. on Dec. 16<sup>th</sup> , 2002
- 3. The Prototype Carbon Fund monitoring Plan (MP) Rožmitál District Heating Project, published by PCF on May. 14<sup>th</sup>, 2002
- Determination Report: Determination of a Sector Baseline and Monitoring Plan for Joint Implementation projects in the Czech District Heating Sector, report-# 2002-1305, rev. 02, performed by DNV on Nov. 16<sup>th</sup>, 2002
- Determination Report: Determination/validation of the Rožmitál District Heating Project Czech Republic, report-# 2002-1314, rev. 02, performed by DNV on Jan. 16<sup>th</sup>, 2003
- 6. Official licence for energy production of Mesto Rožmitál pod Tremsinem, licence-# 310100449
- 7. Official licence for energy supply of Mesto Rožmitál pod Tremsinem, licence-# 320100448
- 8. Technical scheme about installed boilers in heat distribution, Schéma zapojení, specifikace zarízení, specifikace obehových cerpadel, legenda, Sk 02-04-4422, performed by Thermoprojekt / Pilsen
- 9. Technical map about heat distribution, Celková Situace, Sk 02-01-4366, performed by Thermoprojekt / Pilsen
- 10. Original emission reduction report to CEA: covering monitoring period Jan. 1<sup>st</sup> 2003 to Mar. 31<sup>st</sup> 2004, prepared by municipality Rožmitál pod Tremsinem on Nov. 8<sup>th</sup> 2004
- 11. Annual Emissions Reduction Report: Decin District Heating Project / Rožmitál District Heating Project, performed by EuroEnergy, Spol. s.r.o and SEVEn, o.p.s. on July 31<sup>st</sup>, 2004
- 12. Annual Emissions Reduction Report Updated version by CEA: Decin District Heating Project / Rožmitál District Heating Project, performed by EuroEnergy, Spol. s.r.o and SEVEn, o.p.s. on Dec 16<sup>th</sup>, 2004

#### Persons interviewed:

List persons interviewed during the initial verification, or persons contributed with other information that are not included in the documents listed above.

13. Ms. Kulhavá
 14. Mr. Fiala
 15. Mr. Pisko
 Czech Energy Agency
 EuroEnergy, Spol. s.r.o



16. Ms. Szomoláyiova SEVEn, o.p.s.

17. Mr. Vondrásek major of municipality Rožmitál pod Tremsinem

18. Ms. Kolarova responsible for invoicing at municipality

Rožmitál pod Tremsinem

19. Mr. Fous manager of DH system Rožmitál pod Tremsinem

#### **Table 1: Data Management System/Controls**

The project operator's data management system/controls are assessed to identify reporting risks and to assess the data management system's/control's ability to mitigate reporting risks. The GHG data management system/controls are assessed against the expectations detailed in the table. A score is assigned as follows:

- > Full all best-practice expectations are implemented.
- > Partial a proportion of the best practice expectations is implemented
- Limited this should be given if little or none of the system component is in place.

Expectations for GHG data management system/controls		Verifiers Comments (including Forward Action Requests)	
1. Defined organisational structure, responsibilities and competencies			
1.1. Position and roles	Partial	Positions and roles are implemented. Involved persons fulfil their tasks, but not main focus on GHG data management. All necessary data is also important for invoicing.	
		FAR#1-1: An operational and management system shall include all position and roles in the GHG data management process.	
1.2. Responsibilities	Partial	Responsibilities are clear, but not documented.	
		FAR#1-2: An operational and management system shall include all positions and roles in the GHG data management process.	

Expecta	tions for GHG data management system/controls	Score	Verifiers Comments (including Forward Action Requests)
1.3.	Competencies needed	Partial	All involved persons are aware of GHG determination. Additional, personnel was trained, but it is not documented. Hence, it is not clear which person was trained on which subject.
			FAR#1-3: The responsible person shall bear care about a proper documentation of personnel training.
2. Con	nformance with monitoring plan		
2.1.	Reporting procedures	Full	The reporting procedures follow the workbook, being given by the monitoring plan.
2.2.	Necessary Changes	Full	No significant changes are identified.
			For determination of gas consumption the verification team discussed to use invoiced amounts instead of own metered one.
			The project owner decided to report only own metered values.
3. App	olication of GHG determination methods		
3.1.	Methods used	Partial	The monitoring plan indicates needed data and the correct calculation method. Detailed descriptions, however, are not in place.
			FAR#1-4: The responsible person shall include a proper documentation regarding the used method. In case that personnel will change and to ensure that data will be determined in an equal high quality.
3.2.	Information/process flow	Partial	The verification team feels confident with implemented process flow. Nevertheless, a flow diagram could be useful.
3.3.	Data transfer	Partial	The data transfer is based on manual typing and "copy and paste".
			The operator and the verification team discussed to establish automatic procedures, where applicable.

Expecta	ations for GHG data management system/controls	Score	Verifiers Comments (including Forward Action Requests)
3.4.	Data trails	Full	The raw data are recorded and printed out. Hence, all data are physical available.
4. Ide	ntification and maintenance of key process parameters		
4.1.	Identification of key parameters	Full	Needed key parameters are essential for invoicing of heat, controlling the facility efficiency and economic reasons.
4.2.	Calibration/maintenance	Full	As all installations are refurbished completely the maintenance is sufficient. All relevant meters are calibrated and sealed.
5. GH	G Calculations		
5.1.	Use of estimates and default data	Full	Key parameters of project emissions are measured. Used default data are validated by DNV.
5.2.	Guidance on checks and reviews	Limited	Involved staff knows about specific parameters and their normal conditions. A second person checks relevant data regularly, also.
			FAR#1-5 A guidance on checks and reviews regarding to relevant data of GHG reporting is not documented. The operator shall establish such guidance, where applicable.
5.3.	Internal verification	Limited	See chapter 5.2
5.4.	Internal validation	Limited	See chapter 5.2
5.5.	Data protection measures	Full	The key parameters come from invoices, computer stored data are for cross checks. Additional spreadsheets are printed out. Against the background that only three persons are involved, the verification team feels confident with data protection.

Expectations for GHG data management system/controls	Score	Verifiers Comments (including Forward Action Requests)
5.6. IT systems	Full	The IT system is based on standard PC and MS-office solutions. Hence the verification team feels confident about its use.

Table 2: GHG calculation procedures and management control testing

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks		
Reported data is measured monthly. Invoices are issued for gas consumption and sold heat. A potential risk has been identified as data could be adjusted ex-post at the end of the year. In that situation it can be necessary to change relevant data ex-post.	Neither the project owner (municipality of Rozmital) nor the project developer have an operational and management procedure, which addresses the ex-post adjustment of invoices data and its handling with respect to the emission reduction report.  The operator and the project developer shall ensure that relevant data will be adjusted ex-post, if it is needed.	<ol> <li>Gas consumption measured by the owner and invoiced gas consumption are deviating, because time of meter reading is different.</li> <li>Like mentioned in the report of initial verification, neither project owner nor project developer have an eligible management system.</li> </ol>		

Table 3: Detailed audit testing of residual risk areas and random testing

Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
1. Gas consumption measured by the owner and invoiced gas consumption are derivate, because time of reading is different also.	The verification team compared invoiced gas consumption with reported data. The reported data is from own meter-reading.	CAR#1: It is in the duty of the verification team to confirm correct and consistent data, only. Therefore the responsible person should correct the reported data or shall convince the verification team of the correctness of reported data.
		Response by the project participants:

Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
		A new monitoring report has been submitted on 16 <sup>th</sup> December 2004, which is now clearly indicating that all calculations are based on metered data only.
2. Like mentioned in the report of initial verification, neither project owner nor project developer have an eligible management system.	Audited staff could not submit an appropriate management system.	FAR#1: The project owner and the project developer shall establish an operational and management system to ensure that high valuable and verifiable ERUs will be generated over the whole project life time.