VERIFICATION REPORT

Document Prepared By

TÜV Rheinland Energy GmbH

Accreditation number D-VS-11120-01-00

Project Title	G2P Gornet (Gas to power)
Project Proponent	**OMV Petrom S.A., Upstream Romania,** Asset VII Muntenia Est., Str. Coralilor nr. 22, sector1, Bucureşti ("Petrom City")

Verification period	01.01.2021 – 16.09.2021
Verified UERs	5,469,813,690 $gCO_{2,eq}$
Unique identifier	0936_TUEV_20151216_2021_045.1200N,026.1009E_0009123.0014592

Report Title	Verification of Upstream Emission Reduction for G2P Gornet project for the period 01.01.2021 – 16.09.2021
Report ID	21255971
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Summary:

TÜV Rheinland Energy GmbH was assigned to perform verification of the monitoring period 01.01.2021 – 16.09.2021 for the upstream emission reduction project "G2P Gornet" in accordance with the ISO 14064-2:2019, Austria's "Kraftstoffverordnung" and the Council Directive (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels.

The upstream emission reduction (UER) project activity is implemented in order to reduce GHG emissions related to flaring of associated petroleum gas in Gornet Plant, Romania. The project activity is the construction of a gas to power (G2P) plant to recover and utilize the associated petroleum gas to utilize in order to generate electricity. In the absence of the project activity, the associated petroleum gas was flared; instead now it is transferred to generate electricity.

The verification was performed in 3 main steps, namely

- Desk review – covering all provided documents, i.e. initial monitoring report, PDD, UER calculations, records on gas volumes, records on electricity consumptions, manuals, etc. (listed in section 2.2);
- Verification audit (described in section 2.4) – assessing the correctness of the documents, conducting interviews with the lead partner, stakeholders and the carbon consultant (see Section 2.3), observation of data processing and storage, confirmation of metering devices, plausibility checks;
- Issuance of verification protocol (see APPENDIX I), a list of corrective action requests, clarification requests and forward action requests (see APPENDIX II), and the "Verification Report of the UER Project G2P Gornet" for the verification period from 01.01.2021 until 16.09.2021.

The Verification Body (VB) identified two corrective action requests (CARs) and two clarification requests (CLs), which were all accordingly closed before the issuance of this final Verification Report. The VB issued one forward action request (FAR) in order to be considered in the next verification.

Finally, based on the provided documentation and site inspection, TÜV Rheinland Energy GmbH issues a positive verification opinion on the UER project activity "G2P Gornet", confirming that for the monitoring period from 01.01.2021 to 16.09.2021 upstream emission reductions of **5,469,813,690 gCO_{2e}** are realised from the aforementioned project activity.

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1 Introduction

1.1 Objective

The purpose of the verification is to review the monitoring results and to verify that the monitoring methodology was implemented according to monitoring plan and monitoring data, and to confirm that the reductions in anthropogenic emissions by sources is sufficient, definitive and presented in a concise and transparent manner.

The objective of this verification was to provide qualitative and quantitative evaluation of the upstream emission reductions (UERs), reported for the "G2P Gornet" project for the verification period from 01.01.2021 to 16.09.2021. In particular, monitoring plan, monitoring report and the project's compliance with the UERs quantification methodology are verified in order to confirm that the project has been implemented in accordance with the approved PD and conservative assumptions, as documented.

1.2 Scope and Criteria

TÜV Rheinland Energy GmbH (in the following referred as TÜV Rheinland), an accredited verification body according to DIN EN ISO 14065 and also registered as validation and verification body under the German Emission Authority (DEHSt), performed a verification of the monitoring report for the project: "G2P Gornet" in order to confirm compliance of the monitoring report with requirements of ISO 14064 part 2, Austria's "Kraftstoffverordnung" (KVO) implementing the COUNCIL DIRECTIVE (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels.

The verification comprises a review of the Monitoring Report over the monitoring period from 01.01.2021 to 16.09.2021 in accordance with the ISO 14064-3. The verification is also based on the validated and approved Project Document (PD) v1.1 dated 22.01.2019; in particular considering the sections related to baseline and project emission reductions calculations, parameters to be monitored, monitoring plan and monitoring methodology. In addition, the project participants provided relevant documents and supplementary information to assist the verification process.

The main objective of the verification report is to confirm the amount of the UERs generated from project activity over the monitoring period and following the validated monitoring plan. The report is issued to the project owner and thus, TÜV Rheinland is not responsible for any further use that may be made of this report.

The main steps in the verification process are:

- Verification team: TÜV Rheinland nominated a verification team fulfilling the internal qualification criteria based on ISO 14064 part 3, ISO 14065 and ISO 14066.
- Desk review: The appointed auditors cover the evaluation of all provided documents, i.e. Monitoring Report, validated and approved PD version 1.1 dated 22.01.2019, UER calculation sheets, calibration reports, records, etc.
- On-site assessment: This step confirms that the project has been implemented as described in the PD and that all data and information provided in the monitoring report are correct.
- Issuance of verification protocol and list of CARs, CLs & FARs.
- Issuance of final verification report for the monitoring period in question: gives a conclusion whether the reported data are accurate, complete, consistent, and transparent, with a high level of assurance and free of material error or misstatement.

The verification process also considers the correct application of the approved CDM methodology AM0009/v07.0 "Recovery and utilization of gas from oil fields that would otherwise be flared or vented", the referred methodological tools and guidelines, and the criteria given to provide for consistency in project operations, monitoring and reporting.

The verification considers both quantitative and qualitative information on emission reductions. The verification team is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Level of Assurance

TÜV Rheinland has focused on providing a reasonable level of assurance that the emission reduction calculation methodology is appropriate and correctly applied, as well as that Upstream Emission Reductions have been accurately monitored. Therefore, the verification statement provides a reasonable level of assurance.

1.4 Methodology

The quantification of the achieved emission reductions by the implementation of the proposed project activity is performed based on approved CDM methodology, namely the large-scale methodology AM0009 "Recovery and utilization of gas from oil fields that would otherwise be flared or vented" v07.0.

1.5 Summary Description of the Project

The project activity involves the installation of two G2P units in order to recover and utilize the associated gas for electricity production. In 2015, Phase 1 of the project was implemented by installing the first G2P unit. In 2017, the second G2P unit was installed in order to utilize additional associated gas from a new oil well. Since then, both units have been continuously

operating and part of the electricity generated has been used locally and the surplus transferred to other OMV Petrom locations. The G2P plant have been operated, maintained and monitored by a Contractor (Aggreko) and is not part of the project scenario.

In the absence of the project activity, the associated gas was flared. Hence, the project activity causes a reduction of emissions by avoiding the flaring of this gas, which are claimed as UERs.

The project is located in Romania at Prahova County. The geographical coordinate set of the G2P Gornet plant is:

Latitude: 45.120032 North

Longitude: 26.100950 East

And the geographical coordinate set of the flare stack is:

Latitude: 45.120191 North

Longitude: 26.101827 East

Figure A: Overview on Project Location

The purpose of the project is to use the previously flared gas at Park 98 Gornet within Asset VII and obtained electricity for local operation.

The project boundary of the project activity "G2P Gornet" was defined in the validated and approved project documentation (PD), in accordance with the applied CDM Methodology AM0009 and ISO 14064-2.

The greenhouse gases included in the project boundary are CO_2 emission sources from measured fuel consumption delivered to the G2P units.

1.6 Verification period

The verification period is 01/01/2021 – 16/09/2021.

1.7 Summary Result of the Verification process

TÜV Rheinland came to the conclusion that based on the provided documentation and the on-site audit, GHG assertion was made in accordance with the requirements of ISO 14064-2 and was material correct and fairly represented the GHG emissions data and information without material discrepancies.

Therefore, TÜV Rheinland issues a positive verification opinion on the project "G2P Gornet", confirming that for the monitoring period 01.01.2021 – 16.09.2021, GHG upstream emission reduction of **5,469,813,690 gCO_{2e}** are realised from the aforementioned project activity.

2 Verification Process

As stipulated in Council Directive (EU) 2015/652 Annex I part 1 (3) d ii "the UERs and baseline emissions are to be monitored, reported and verified in accordance with ISO 14064 and providing results of equivalent confidence of Commission Regulation (EU) No 600/2012 (6) and Commission Regulation (EU) No 601/2012 (7). The verification of methods for estimating UERs must be done in accordance with ISO 14064-3 and the organisation verifying this must be accredited in accordance with ISO 14065".

The above mentioned general principles and key requirements of verifiers and the verification process, as indicated in Commission Regulation (EU) No 600/2012, are:

- The process of verifying emission reports shall be an effective and reliable tool in support of quality assurance and quality control procedures (Article 6);
- The verifier must carry out verification in the public interest and with an attitude of professional scepticism of the claims being verified (Article 7);
- The verifier shall conduct substantive testing using analytical procedures, including verifying data and checking the monitoring methodology, and shall conduct site visits (Article 14-21);
- All verification reports shall be independently reviewed (Article 25);
- All verification personnel (Article 35) and independent reviewers (Article 38) shall be competent;
- Verifiers shall be impartial and independent from an operator (Article 42);
- All verifiers shall be accredited for the scope of activities being verified (Article 43-44).

The verification body confirms that the verification process of the project "G2P Gornet" for the monitoring period 01.01.2021 – 16.09.2021 is accomplished in compliance with the above listed principles and key requirements.

2.1 Method and Criteria

The verification of the UER project "G2P Gornet" has been performed in accordance to the internal procedures of TÜV Rheinland for the verification of UER projects, which strictly follow ISO 14046-3.

The criteria of data/information management of the GHG project has been referred to standard ISO 14064-2: 2019. The criteria of applied project for quantifying GHG emission reduction has been referred to CDM-AM 0009 Methodology including related tool methodology as mentioned on section 1.2.

2.2 Document Review

The desk review phase is characterised by the assessment of the monitoring report and emission reduction workbooks substantiated by additional supportive documents, all of which have been provided to the verification body in a digital form. The following table outlines the documents reviewed as part of the verification process:

Nr	Title	Date
1	PDD_G2P-Gornet_v1.1	18/03/2021
2	PDD_G2P-Gornet_Evidence-09_ICPT-17025-Accreditation-until-March 2022 (Laboratory accreditation)	12/04/2021
3	MR_G2P-Gornet_2021_v1	17/05/2022
4	MR_G2P-Gornet_2021_Detailed-Quantification-of-Emissions_v1	17/05/2022
5	G2P Gornet_Calibration 2020 petrom meter (Calibration document for fiscal meter)	17/05/2022
6	rap calibrate cameron p98gornet iulie 2021_Flare (Calibration Scanner 2000)	17/05/2022
7	rap service cameron p98gornet iulie 2021 (Service report Scanner 2000)	17/05/2022
8	24 SCADA Gas Volume Reports	17/05/2022
9	12 Gas Analysis	17/05/2022
10	Ore funct_Iulie G1+G2 Gornet (Evidence of maintenance work during June and July 2021 - Operating and downtime hours of GT1 & GT2)	10/06/2022
11	Set of pictures taken during Audit	22/06/2022
12	Gaze_ Gornet _SC 54 Boldesti Sept.2021 (extract from PIMMS - new gas pipeline real flow on 30.09.2021)	27/06/2022
13	RAPORT Comanda + PV Receptie Montaj Contor (evidence for the completion of the pipeline connection works on 17/09/2021)	27/06/2022
14	MR_G2P-Gornet_2021_v2	27/06/2022
15	MR_G2P-Gornet_2021_Detailed-Quantification-of-Emissions_v2_20220624	27/06/2022

Nr	Title	Date
16	MR_G2P-Gornet_2021_v3_Final	30/06/2022
17	CDM Methodology AM0009/version 7.0	

2.3 Interviews

The interview process was conducted during the on-site audit with responsible staff of OMV Petrom S.A., OMV Downstream GmbH and Energy Changes GmbH. Relevancy of methodology and requirement of standard had been discussed during validation process. Therefore, the discussion was focused on monitoring plan and procedures in order to obtain GHG data and information for the baseline scenario and for the project emissions which is complete, verifiable, without misstatements and misapplications of calculation.

The audit took place on 18th and 19th of May 2022 and was conducted by Ms. Florencia Tamanini in Gornet, Romania.

The following persons participated to the interviews:

Name	Company	Role
Neslihan Kumcu	OMV Downstream	UER Monitoring Responsible
Mihaela Zaiet	OMV Petrom SA	UER Key Focal Point
Oliver Percl	Energy Changes	OMV's consultant
Sava Vasile	OMV Petrom SA	Local operator
Gabriel Vasilescu	Aggreko	Local operator

2.4 On-Site Audit

The objective of the on-site audit is to acquire details on project management and operation, to prove validity and authenticity of delivered supporting documents, and to assess the situation on the ground against the description in the documents. The audit was carried out by means of interviews with the persons indicated in section 2.3, assessment of the presented supportive documentation and personal observations.

During the on-site audit, the production site with the two G2P units, the flare pipeline, the flare stack and all flowmeters implemented as the project activity were visited.

At the end of the audit a preliminary list has been provided to the PP indicating the need for further clarifications or additional proofs (clarification request), as well as identified non-compliances which require the revision of documents and calculations (corrective action request). See also section 2.5.

The evidences (records, database, and documents) that have been checked during the strategic desk analysis, the audit and on punctual request thereafter were clearly presented and are listed in section 2.2.

The following pictures provide some impression of the project activity and measuring system:

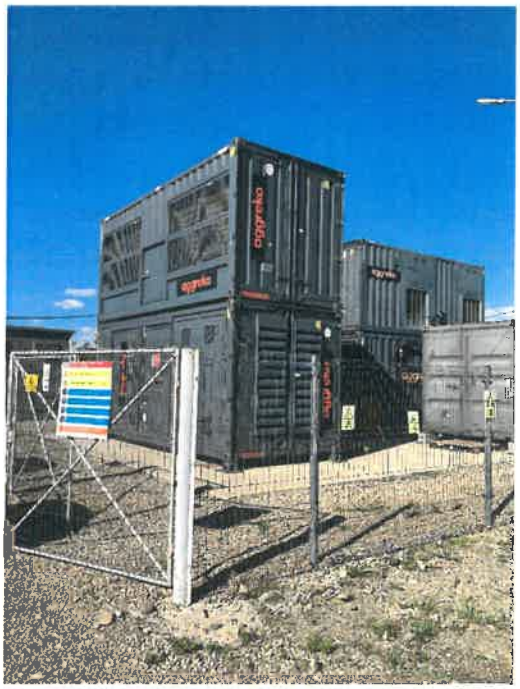

Figure B: The 2 G2P units operated by Aggreko

Figure C: Petrom's flowmeter

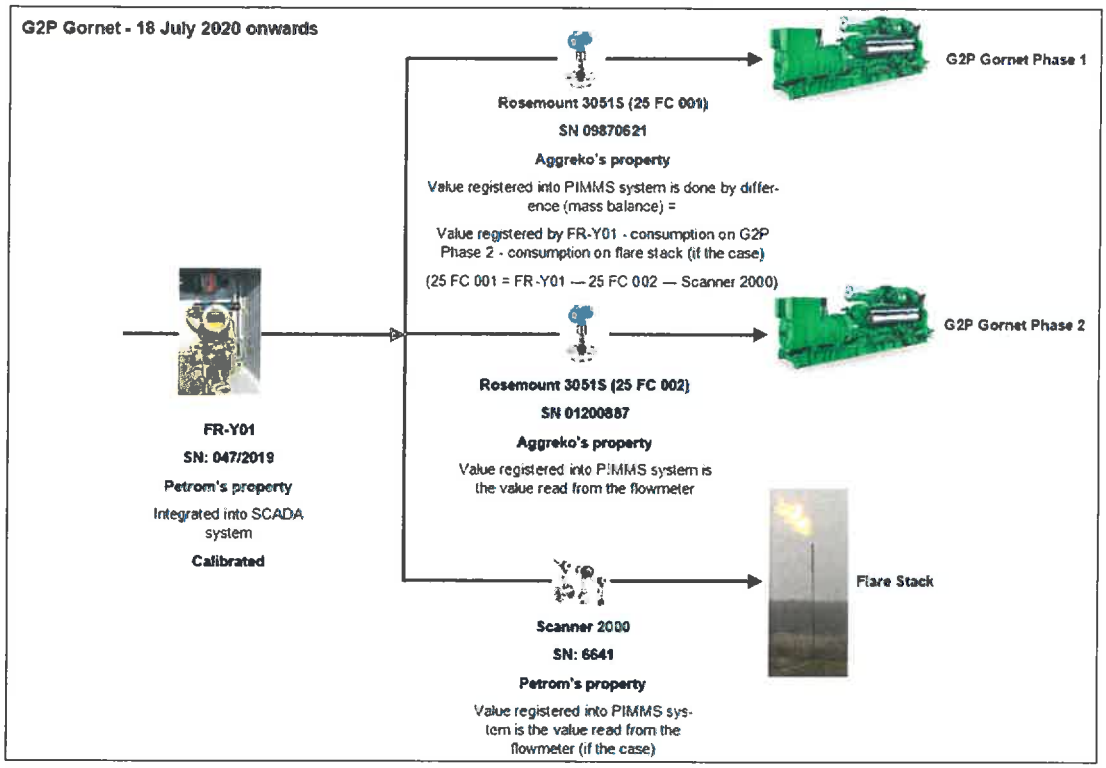

Figure D: Flowmeters array after 18.07.2020 and before 17.09.2021

2.4.1 Summary of Assessment

Eventually, the conducted verification audit of the project activity "G2P Gornet" for the monitoring period 01.01.2021 – 16.09.2021 confirms that the monitoring and reporting of the achieved UERs for the period in question has been carried out in line with the verification principles and criteria postulated by the ISO 14064, and is in accordance with the monitoring plan specified in the approved PD.

2.5 Resolution of Findings

The objective of this phase of the verification is to resolve any outstanding issues which have to be clarified prior to final verifier's conclusions on the project implementation, monitoring practices and achieved emission reductions. In order to ensure transparency a verification protocol (APPENDIX I) is completed for the project activity. The protocol shows in a transparent manner the verification criteria (requirements) as given by the ISO 14064, means of verification and their results against the identified criteria, including the findings.

In addition to and as a complement to the verification protocol, APPENDIX II lists correction action requests (CARs), clarification requests (CLs) and previous forward action requests (FARs) as issued, keeping records of all findings identified in the verification process and how those have been solved. Corrective action requests (CAR) are issued where mistakes have been made

with a direct influence on project result whereas clarification requests (CL) have been made where additional information was needed to fully clarify an issue.

In the course of the verification of the project activity "G2P Gornet" for the monitoring period 01.01.2021 – 16.09.2021, the Verification Body identified and issued two CARs and two CLs; all of them are transparently organised in APPENDIX II.

The verification report is issued upon closing all the above mentioned findings and after an internal review by a Technical Reviewer is conducted, whom is assigned by the verification body, and who was not himself a member of the audit team.

2.6 Forward Action Requests

One Forward Action Request (as instruction for next verification) has been issued and transparently described in APPENDIX II.

The new gas pipeline connected on 17.09.2021 has to be considered in future emission reduction verifications. It might be necessary to re-evaluate the baseline and/or project scenario.

3 Verification Findings

The outcomes of the verification of project activity "G2P Gornet (Gas to power)" for the monitoring period 01.01.2021 – 16.09.2021 performed by TÜV Rheinland Energy GmbH are explicitly discussed in the following sections.

3.1 General information

All information regarding the involved project proponents, the organizational arrangements, the daily practice, the technical features, the calibrations and the relevant procedures have been properly checked and proven to be correct. All information in the final version of the monitoring report and UERs calculations is complete.

Verification focused on the correct implementation of the project and the accurate quantification of resulting upstream emission reductions, including the exact implementation of the validated monitoring plan, correctness of source data and calculations.

The verification team confirms that during the monitoring period from 01.01.2021 to 16.09.2021 the project is accurately implemented as described in the validated PD v1.1 dated 22.01.2019, where the associated gas is processed in 2 gas to power units, i.e. the gas that was previously flared is now being used for power generation.

Furthermore, the verification team attests that the G2P Gornet project was validated in February 2019 as upstream emission reduction (UER) project to comply with the requirements of ISO 14064 Part 2 and Austria's Fuel Ordinance dated 30 Apr 2018 implementing COUNCIL DIRECTIVE (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels.

3.2 Accuracy and completeness

By review of the documentation evidence, monitored data, associated parameters and calculations and conducting an on-site audit, it is considered that the upstream emission reductions for the period 01.01.2021 – 16.09.2021 are calculated correctly and monitored accurately in accordance with the approved CDM methodology AM0009 v07.0.

It was proven that OMV Petrom's high-quality metering system, including secondary metering equipment, is correctly maintained including periodic calibrations and flow calculation tests. Volumes of gas flow are automatically transferred to the PIMMS, and consumption data is cross-checked with data from the SCADA system and then extracted as source data for the project's UER calculations.

Gas samples are correctly extracted from a located gas sampling point and then analysed by accredited laboratory using the appropriate SR EN ISO 17025 standard for the determination of NCV and $EF_{CO2,RG}$ analysis.

No missing or incorrect data has been identified during this monitoring period.

3.3 Quality of Evidence / Quality and risk management

All monitored data and fixed parameters are determined in accordance with AM0009 methodology requirements as described in the PD and Monitoring Report. Risks to monitored data have been considered by implementing oil and gas standard maintenance and quality assurance procedures for measurement systems. All calibrations and tests were completed and valid at the time of verification for all applicable primary and secondary gas flow measurement equipment used during this monitoring period.

3.4 Data gaps, corrections, deviations and uncertainties

During the audit, a new pipeline connection was observed and the local operator explained that from 17.09.2021 the excess associated gas has been transported trough this pipeline to another OMV Petrom facility. Therefore, the project owner revised the monitoring procedures relevant for UER calculations, and proceeded as follows:

- In the period from 01.01.2021 to 31.08.2021 the volume of associated gas is measured as established in the monitoring plan, i.e. using Aggreko Phase 1 & Phase 2 meters as well as OMV Petrom meters FR-Y01 and Scanner 2000. The volume of recovered associated gas is determined as the sum of the gas volume fed into G2P Phase 1 & Phase 2 recorded in PIMMS, minus the flared volumes.
- For the period from 01.09.2021 to 16.09.2021 the daily volumes of associated gas recorded in PIMMS have been used to calculate the total gas consumption corresponding to that period.

It was confirmed that there were no interruptions in the operation before the installation of a new gas pipeline on the 17.09.2021 and that the monitoring period has been limited from 01.01.2021 to 16.09.2021. In the verifiers opinion the approach of limiting the monitoring period to the date prior to the installation of the new pipeline (considered as the date of the deviation), is a sufficient and conservative approach.

3.5 Findings and non conformities

The verification team identified two (2) corrective action requests and two (2) clarification requests. All findings have been closed including review of revisions to the monitoring report and UER calculations, before finalising the verification.

4 Verification conclusion

The Verification Team of TÜV Rheinland Energy GmbH has performed the verification of the project "G2P Gornet" in accordance with ISO 14064, as well as criteria given to provide for consistent project operations, monitoring and reporting.

TÜV Rheinland, therefore issues a positive verification opinion, confirming that upstream emission reductions claimed for the monitoring period 01.01.2021 – 16.09.2021 are verified to be 5,469,813,690 g CO_{2e} (5,469 t CO_{2e}) as indicated below:

Period	Baseline emissions or removals (g CO_2e)	Project emissions or removals (g CO_2e)	Leakage emissions (g CO_2e)	Net GHG emission reductions or removals (g CO_2e)
01.01.2021–16.09.2021	5,469,813,690	----	---	**5,469,813,690**

5 VERIFICATION STATEMENT

OMV Petrom S.A.
Upstream Romania, Asses VII
Str. Coralilor 22, sector 1
Bucureşti ("Petrom City")

07.07.2022

RE: G2P Gornet

Monitoring Period: 01.01.2021 – 16.09.2021

OMV Petrom S.A. has contracted TÜV Rheinland Energy GmbH to review and verify its UER Monitoring Report for the monitoring period from 01.01.2021 to 16.09.2021and all assertions related to the G2P Gornet project against ISO 16064-2 requirements and the EU Directive 2015/652.

The verification of the UER project activity was conducted in accordance of the standard ISO 14064-3 and the approved CDM methodology AM0009 v07.o to a reasonable level of assurance. The monitoring report is approved to comply with the requirements under the ISO 14064-2 standard. The calibration frequency of the OMV Petrom's metering devices is demonstrated to follow the stipulations of the calculation methods and of the monitoring plan. The project information has been verified and the UER Verification Report ID 21255971 version 1.0 "Verification of Upstream Emission Reduction for G2P Gornet Project for the period 01.01.2021 – 16.09.2021", includes all relevant information and evidence acquired during the verification process.

Based on the desk reviews, background investigations, on-site audit and review of all available project documentation, the verification team come to the conclusion that the assertions are made in accordance with the requirements of the ISO 14064-2, the EU Directive 2015/652, Austria's "Kraftstoffverordnung" and the applied CDM methodology. They are materially correct and fairly represent the required parameters without material discrepancies. The Upstream Emission Reductions claimed for the monitoring period from 01.01.2021 – 16.09.2021, are verified to be **5,469,813,690 g $CO_{2,eq}$ (5,469 t CO_{2e}).**

Cologne, 07.07.2022

Florencia Tamanini, TL and Verifier

Norbert Heidelmann, TR

APPENDIX I

Verification Protocol

(based on ISO 14064 Part 2, Austria's Kraftstoffverordnung and the Guidance Note of the Council Directive (EU) 2015/652 on approaches to quantify, verify, validate, monitor and report upstream emission reductions)

DR = Document Review I = Interview FA = Field Assessment www = internet search

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
1. Implementation								
1.1 Have all physical features proposed in the registered PD been implemented at the project site?	x	x	x		Yes, Phase 1 and Phase 2 has been implemented as described in the PD. The physical features, such as the two gas (piston) engines, electrical generator, HMI (Human Interface Machine) assemblies within soundproof walls, equipped with a Cummins OSK60G gas engine and a Jenbacher J420C gas engine, including all necessary auxiliary equipment (gas skid, transformers and a command room), have been verified during FA and interviews with local experts. **CL1: please clarify how the new gas pipeline connection observed during FA will be consider in the project description.**	In September 2021 a new gas pipeline connection was established between the Gornet site and the gas treatment station in Boldesti. This pipe was put into service on 17.09.2021 and therefore, the project owners decided to limit the monitoring period from 01.01.2021 to 16.09.2021. The corrected monitoring report and UER calculations have been submitted (Doc. 15 & 16). The evidence for the completion of the pipeline connection works on 17.09.2021 has also been submitted (Doc. 13). It was positively verified that during the monitoring period 01.01.2021 - 16.09.2021 all physical features proposed in the registered PD have been implemented at the project site. **CL1 is closed.**	CL1	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
1.2 Has the project activity been operated in accordance with the project scenario described in the registered PD and relevant guidance?	x	x	x		Yes. PD - item 2: The aim of the project was to recover previously flared gas and to utilize it as a source to generate electricity with a G2P plant. Project implementation has been validated and described in MR item 2.1 exactly like in PD. During FA, it was positively verified that the G2P plant has been operated in accordance with the project scenario during the monitoring period from 01.01.2021 to 16.09.2021. **CL2: please clarify the reason for recording high volumes of flaring during June 2021.**	During FA, the local personnel has explained that maintenance work took place on one of the G2P motors around June 2021. The PP has submitted the summary of operating hours and downtime hours for the months of June and July 2021 (Doc. 10). It could be verified that there was a significant downtime of Phase 2 facilities due to maintenance work and therefore an increase in flaring volumes. **CL2 is closed.**	CL2	OK
1.3. Does the project activity deviates from the validated documents?	x	x	x		Yes. After validation of the project a new Scanner has been installed to measure the gas flow to the flare stack in addition to the existing RLC meter. Also a new fiscal meter integrated into SCADA system was installed on 25.03.2020 in order to measure the total volume of gas consumption. After 18.07.2020 the gas fuel consumptions are taken from the calibrated meter, registered in PIMMS and shown on the invoices between Aggreko and Petrom (as in the validated monitoring plan). A full description of the current measuring system is included under section 2.2 "Deviations from validated monitoring plan" of the Monitoring	The final monitoring report and UER calculations have been submitted (Doc. 15 & 16). As described in section 2.2 of the MR, during 01.01.2021 and 31.08.2021 the data was collected and handled as in the end of the previous verified monitoring periods (the volumes are recorded by Petrom's calibrated flowmeters). For the period between 1st and 16th September 2021 the daily values as recorded in PIMMS were used. All calculations have been corrected and positively verified. **CAR1 is closed.**	CAR1	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
					Report. During FA, a new gas pipeline connection was identified and discussed with project owners. It was decided to limit the monitoring period for the year 2021 to the period before the deviation, caused by the new gas pipeline connection. **CAR1: please correct the monitoring period in the monitoring report and calculations, as well as the data used for the UERs corresponding to September 2021.**			
1.3.1 If the project activity deviates from the validated documents, what impact the deviations may have on the level of UER?	x	x	x		During FA, it was confirmed that all flowmeters installed after the validation of the project have improved the quality of the recorded data. As stated above, a new gas pipeline connection was established between the project site and a gas treatment station in Boldesti, therefore it was decided to limit the monitoring period. **CAR1 see above.**	**CAR1 is closed as described above.**	CAR1	OK
1.4 If the project activity is implemented on a number of different locations, has the Monitoring report provided the verifiable starting dates for each site?	x	x	x		N/A. Project activity is implemented on one location. Coordinates G2P Gornet: Latitude – 45,120032°N ; Longitude – 26,100950°E Coordinates Flare Stack: Latitude – 45,120191°N , Longitude – 26,101827°E		OK	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
2. Monitoring methodology								
2.1 Is the monitoring plan established in accordance with the monitoring methodology?	x	x	x		Yes, the monitoring plan is established in accordance with the monitoring methodology AM0009 version 07.0.		OK	OK
3. Monitoring plan								
3.1 Is the monitoring established in full compliance with the monitoring plan, contained in the registered PD (or new monitoring plan approved by the applicable standard)?	x	x	x		Yes. PD - item 9 "Monitoring of the UER project" with structure and responsibilities. MR - item 3 "Description of the monitoring system" with extended detail of roles & responsibilities. During FA and interviews with the local operators, it was verified that the monitoring activities are in full compliance with the monitoring plan.		OK	OK
3.2 Are all **baseline emission parameters** monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	x	x	x		Yes. MR - item 5.1: Baseline emissions are calculated in line with CDM approved methodology AM0009 version 07.0. **CAR2: please correct the values according to the monitoring period 01.01.2021 - 16.09.2021.**	The corrected version of the MR and calculation excel sheet have been submitted (Doc. 15 & 16) and the monitoring period 01.01.2021 - 16.09.2021 has been confirmed. **CAR2 is closed.**	CAR2	OK
3.3 Are all **project emission parameters** monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	x	x	x		N/A. No project emissions occur, as the project includes no additional consumption of electricity or fossil fuels.		OK	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
3.4 Are all **leakage emission parameters** monitored and updated in accordance with monitoring plan, monitoring methodology and relevant CDM EB decisions?	x	x	x		N/A. There is no transport of gas by vehicles, so leakage does not to be considered according to AM0009 version 07.0		OK	OK
3.4.1 Was the monitoring equipment for **baseline-, project- and leakage emission parameters** controlled and monitoring results recorded as per approved frequency?	x	x	x		Yes. MR - item 4: "Monitoring Parameters and Data Quality". The frequency of OMV Petrom's flowmeter calibrations is 4 years according to the equipment manufacturer and data feeds directly into PIMMS (production Information Management & Monitoring System). During FA, the monitoring equipment and the results recorded have been verified and proven to be in accordance with the approved frequency.		OK	OK
3.5 Was the monitoring equipment for **baseline-, project- and leakage emission parameters** calibrated in accordance with QA&QC procedures described in the registered monitoring plan?	x	x	x		Yes. MR - item 4: "Monitoring Parameters and Data Quality". The 2 flowmeters from Aggreko were calibrated during commissioning phases. Petrom's Fiscal Meter and Scanner 2000 meter are properly calibrated. The calibration reports and service report have been submitted and proven to be correct (Doc. 5, 6 & 7). All monitoring equipment was positively checked during FA. QC&QC procedures were confirmed through interviews conducted at site.		OK	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
3.6 Were all monitoring parameters available and verifiable through the whole monitoring period?	x	x	x		Yes. No omission of data occurred during monitoring period and all records are saved in PIMMS. The PIMMS system has been positively verified during FA. The data storage recorded in the PIMMS was assessed and confirmed on 07.06.2022 during a second interview with UER Key Focal Point at OMV Petrom.		OK	OK
3.6.1 In case, only partial monitoring data is available and PP(s) provide estimations or assumptions for the rest of data, was it possible to verify those estimations and assumptions?	x				N/A		OK	OK
3.7 Was management and operation system established and operated in accordance with the monitoring plan?	x	x	x		Yes. MR - item 3.3: "Roles & responsibilities for daily operations at the project location". The training topic was discussed during FA with the operators on-site and it was positively verified that there were regular training sessions on-site and well documented. The interviews with the UER Key Focal Point and UER monitoring responsible confirmed that the roles and responsibilities for daily operations are in line with the monitoring plan.		OK	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
4. Parameters								
4.1. Monitored Parameter 1 *Title:* Volume of fuel (recovered gas) consumed in the G2P plants in the monitoring period y *Indication:* **FC_y** *Unit:* Sm3 *Estimated value (ex-ante):* 3,477,549 Sm^3 *Measured value (ex-post):* 2,488,387 Sm^3	x	x	x		Volume measured via AGGREKO's flowmeter (Phase 1 SN 09870621, Phase 2 SN 01200887) and PETROM flowmeter (SN 047/2019). Data from Petrom's flowmeter feeds into PIMMS, is then verified and cross-checked with data from Aggreko, reported on monthly invoices and then transferred for UER calculations. Since the monitoring period has been limited to 16.9.2021, the values from 01.09.2021 to 16.09.201 were extracted from the daily PIMMS records, which were recorded by the calibrated Petrom flowmeter. **CAR2: see above item 3.2.**	**CAR2 is closed as described above.**	CAR2	OK
4.1 Monitored Parameter 2 *Title:* Average net calorific value of the fuel gas in the monitoring period y *Indication:* **$NCV_{RG,y}$** *Unit: TJ/Sm3* *Estimated value (ex-ante):* 3.89 x 10^{-5} TJ/Sm3 *Measured value (ex-post):* 3.87 x 10^{-5} TJ/Sm3	x	x	x		Gas analysis data comes from on-site sampling by an accredited laboratory (Doc. 3) and gas chromatography analysis. The Institute of Research and Technological Design (ICPT) Campina is an ISO 17025 accredited laboratory for the determination of the natural gas composition and calculation of calorific value by gas chromatography. **CAR2: see above in item 3.2.**	**CAR2 is closed as described above.**	CAR2	OK

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
4.1 Monitored Parameter 3 *Title:* Average CO2 emission factor of the fuel gas in the monitoring period y *Indication:* $EF_{CO2,RG,y}$ *Unit:* tCO2/TJ *Estimated value (ex-ante):* 56.95 tCO2/TJ *Measured value (ex-post):* 56.86 tCO2/TJ	x	x	x		Gas analysis data comes from on-site sampling by an accredited laboratory (Doc. 3) and gas chromatography analysis. The Institute of Research and Technological Design (ICPT) Campina is an ISO 17025 accredited laboratory for the determination of the natural gas composition and calculation of calorific value by gas chromatography. **CAR2: see above in item 3.2.**	**CAR2 is closed as described above.**	CAR2	OK
4.1 Monitored Parameter 4 *Title:* Volume of associated gas flared in the monitoring period y *Indication:* $F_{flare,y}$ *Unit:* Sm^3 *Estimated value (ex-ante):* 287,360 Sm^3 *Measured value (ex-post):* 287,360 Sm^3	x	x	x		Gas flow to the flare stack is measured continuously with Scanner 2000. The gas containing methane that remains unburnt is calculated using an assumed conservative flare efficiency for open flare of 75% = 1,025,044 Sm3. It has been demonstrated that even with a delayed ignition at times, project emissions from the unburnt share of the associated gas are still significantly lower than in the baseline scenario and therefore conservative. **CL2: see above in item 1.2.**	**CL2 is closed as described above.**	CL2	OK
5. Calculations								

Checklist question	MoV				TÜV: Findings, comments, references, data sources	PP: Comments	Draft conclusion	Final conclusion
	DR	I	FA	www				
5.1 Have all the calculations related to the baseline emissions been carried out according to the formula and methods described in the registered PD and applied methodology?	x	x	x		Yes. All calculations related to the BE have been carried out according to the formula in line with CDM Methodology AM0009 version 07.0 and it's correctly described in MR section 5.1. **CAR2: see above in item 3.2.**	**CAR2 is closed as described above.**	CAR2	OK
5.2 Have all the calculations related to the project emissions been carried according to the formulae and methods described in the registered PDD and applied methodology?	x				N/A		OK	OK
5.3 Have all the calculations related to the leakage emissions been carried according to the formulae and methods described in the registered PDD and applied methodology?	x				N/A		OK	OK

APPENDIX II

List of correction action requests (CARs) and clarification requests (CLs) and forward action requests (FARs)

CAR/CL/FAR	Observation (CAR/CL)	Reference	Summary of project owner response	TÜV Comment
CL1	Please clarify how the new gas pipeline connection observed during FA will be consider in the project description.	MR_G2P-Gornet_2021_v1	In September 2021 a new gas pipeline connection was established between the Gornet site and the gas treatment station in Boldesti. This pipe was put in function on 17.09.2021 and therefore, the project owners decided to limit the monitoring period from 01.01.2021 to 16.09.2021.	The corrected monitoring report and UER calculations have been submitted (Doc. 15 & 16). The evidence for the completion of the pipeline connection works on 17.09.2021 has also been submitted (Doc. 13). It was positively verified that during the monitoring period 01.01.2021 - 16.09.2021 all physical features proposed in the registered PD have been implemented at the project site. **CL1 is closed.**

CAR/CL/FAR	Observation (CAR/CL)	Reference	Summary of project owner response	TÜV Comment
CL2	Please clarify the reason for recording high volumes of flaring during June 2021.	MR_G2P-Gornet_2021_Detailed-Quantification-of-Emissions_v1	During FA, the local personnel has explained that maintenance work took place on one of the G2P motors around June 2021.	The PP has submitted the summary of operating hours and downtime hours for the months of June and July 2021 (Doc. 10). It could be verified that there was a significant downtime of Phase 2 facilities due to maintenance work and therefore an increase in flared volumes. **CL2 is closed.**
CAR1	Please correct the monitoring period in the monitoring report and calculations, as well as the data used for the UERs corresponding to September 2021.	MR_G2P-Gornet_2021_v1 MR_G2P-Gornet_2021_Detailed-Quantification-of-Emissions_v1	As described in section 2.2 of the MR_v3, during 01.01.2021 and 31.08.2021 the data was collected and handled as in the end of the previous verified monitoring periods (the volumes are recorded by Petrom's calibrated flowmeters). For the period between 1st and 16th September 2021 the daily values as recorded in PIMMS were used.	The final monitoring report and UER calculations have been submitted (Doc. 15 & 16). All calculations have been corrected and positively verified. **CAR1 is closed.**

CAR/CL/FAR	Observation (CAR/CL)	Reference	Summary of project owner response	TÜV Comment
CAR2	Please correct the values according to the monitoring period 01.01.2021 - 16.09.2021.	MR_G2P-Gornet_2021_v1 MR_G2P-Gornet_2021_Detailed-Quantification-of-Emissions_v1	The corrected version of the MR and calculation excel sheet have been submitted and the decision to limit the monitoring period has been applied.	The corrected version of the MR and calculation excel sheet have been submitted (Doc. 15 & 16). The monitoring period from 01.01.2021 to 16.09.2021 has been confirmed and the conservative approach of limiting the monitoring period has been approved. **CAR2 is closed.**
FAR1	The new gas pipeline connected on 17.09.2021 has to be considered in future emission reduction verifications and baseline and/or project scenario might require new evaluation.	N/A	The PO has limited the monitoring period in the monitoring report to the period before the deviation and will evaluate the baseline scenario for future emission reductions.	To be considered in next verification process.

APPENDIX III

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
EU ETS	European Union Emissions Trading System
FAR	Forward Action Request
FQD	Fuel Quality Directive
G2P	Gas to power
GHG	Greenhouse Gas
ISO	International Standard Organisation
PD	Project Document
PIMMS	Production, Information, Management and Monitoring System
PP	Project proponent
UER	Upstream Emission Reductions