

# VERIFICATION STATEMENT

**VE-UER-042-01** 

Verification of the GHG-Emission Reductions for the project:

"ISO 14064:2 GHG project – G2P Ghelinţa"

For the period: 01/01/2020 to 31/12/2020 Monitoring Period Number: 01

certifying the UER batch

0042 VERI 20151005 2020 045.9119N,026.3255E 000000.007967

according to

ISO14064 Part 2

for intended usage under the EU Fuel Quality Directive and Austrian 'Kraftstoffverordnung' dated 24/June/2020

Version 01, dated 20 May 2021

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### **Abbreviations**

CAR Corrective Action Request
CL Clarification Request

DAkkS Deutsche Akkreditierungstelle (German Accreditation Body)

EU ETS European Union Emissions Trading Scheme

FAR Forward Action Request

GHG Greenhouse Gases
PP Project Participants

ISO International Standard Organisation

PDD Project Design Document

TR Technical Reviewer

UER Upstream Emission Reduction

UNFCCC United Nations Framework Convention on Climate Change



# 1. Scope of the verification

verico SCE, an accredited verification body¹ according to DIN EN ISO 14065 including the validation and verification of GHG assertions based on ISO 14064 Part 1 or Part 2, has been ordered by OMV Downstream GmbH to perform a verification of the first monitoring report for the project: «ISO 14064:2 GHG project – G2P Ghelinţa» in order to confirm compliance of the monitoring report with requirements as set by ISO 14064 Part 2 and Austrian Kraftstoffverordnung(KVO) dated 24 June 2020 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 having regard to Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (Fuel Quality Directive)².

The verification has been carried out for the complete monitoring period from 01/01/2020 to 31/12/2020. This verification activity addresses in particular:

- The implementation and the ongoing operation of the project and monitoring activities in accordance with the validated project design document;
- the amount of emission reductions achieved during the monitoring period;

verico SCE performed all tasks as specified under ISO 14064 Part 3, thus undertaking a systematic, independent and documented process for the evaluation of a greenhouse gas assertion of the above-mentioned project activity against the agreed verification criteria through this verification report. The main objective of this activity is the use of the verification report by the orderer for the creation of UERs. All consecutive steps with regard to the use of this verification report for compliance under the FQD fall under the responsibility of the fuel supplier using UERs and are not part of this engagement.

verico SCE has nominated a verification team fulfilling the internal qualification criteria based on ISO 14064 Part 3, ISO 14065 and ISO 14066. The verification process involved an in-depth review of the submitted set of documentation and records as well as background research regarding applied technologies, country-specific circumstances etc. Following a strategic analysis and the determination of assessment risks, a detailed verification plan has been developed. Due to current circumstances related to the present pandemic, the verification process included online-audits with the project participants.

The verification statement is given at a reasonable level of assurance. When verifying reported data, a 5% materiality threshold has been applied with regard to the total amount of emission reductions and in analogy to the EU ETS scheme, of which the quality requirements are applicable according to the Fuel Quality Directive.

The final verification report itself has undergone an independent technical review, by a further lead verifier fulfilling the internal qualification requirements of verico SCE, and who has not been part of the verification team, for final appraisal of this report.

The verification has been carried out in the period from 11 January 2021 until 05 May 2021.

val-A10e-2014-07-02

DAkkS Accreditation ID D-VS-19003-01-01

With reference to the EU Guidance note, "Guidance note on approaches to quantify, verify, validate, monitor and report upstream emission reductions"



# 2. Project details

Project Title	ISO 14064:2 GHG project G2P Ghelinţa
Brief Description	ISO 14064:2 GHG project G2P Ghelinţa project activity is implemented in Ghelinţa oil and gas field Park 1. At Park 1, the associated gas was burnt at a flare stack, and electricity needed for current operations was bought from the grid. With the G2P Ghelinţa project the associated gas is not flared anymore but used for electricity production.
	The scope of the project was to to exploit the chemical energy of the previously flared gas, in order to obtain electrical energy for Mazarine Energy internal consumption.
	The main components of the Ghelinţa G2P plant are the two Gas engine - electrical generator, each one within an acoustic enclosure, type ECOMAX 11, equipped with a General Electric Jenbacher J416 GS-B01 gas engine, including all necessary auxiliary equipment.
	The G2P plant is continuously operating, in grid mode, and part of the obtained elec-trical energy is "consumed" locally, the difference being injected in the distribution grid operated by the Electrica Transilvania Sud S.A.
Project site(s)	Coordinates of the physical site of the project: Latitude: 45.9119°N Longitude: 26.3255 °E, Sexagesimal coordinates: Latitude – 45°54'41.20" N; Longitude – 26°19'32.10" E.
	G2P Ghelinţa is located in the Mazarine Energy Park 1 Ghelinţa, municipality of Ghelinţa, Covasna County, Romania.
Project Participant(s)	SC OMV Petrom S.A. Member of OMV Group, Upstream Romania Petrom City, Coralilor Street, no. 22, Postal Code 013329, District 1 Bucharest, Romania
Validated PDD incl. Monitoring Plan	"G2P-Ghelinţa_UER-Project-Documentation_FV_2.1" Project documentation & Monitoring plan; Version: 2.1; 29 September 2015
Final version of the Monitoring Report	UER Monitoring Report. For the period: 01/01/2020 – 31/12/2020 Version 2 dated 26 February 2021
Applied methodology	Project specific approach in analogy to AM0009
Certified UERs	7,967 tCO <sub>2e</sub>
UER Batches ID <sup>3</sup>	0042_VERI_20151005_2020_045.9119N,026.3255E_000000.007967

Created by adapting the recommendation in Annex A of the EU guidance note; the first four digits stand for verico's unique project identifier, while "VERI" stands for verico as verifying entity; "end\_of\_batches" provides information on the last day included in the verification process



# 3. Assessment Approach

### a. Contract review

Based on submitted information on the project documentation, its validation report, and an estimation of emission reductions, a confirmation was given to the client on 1 December 2020 that the verification can be performed under an existing framework contract for GHG validations and verifications. The scope of accreditation of verico SCE as accredited validation and verification body covers all relevant scopes (here **CDM scopes 1 and 10**) of this project activity and verico SCE has access to auditors covering the required competences in the sectors related for this activity. The offer complied with the internal requirements of the validation and verification body and was thus released. The cost estimate ensured that the required personnel and time resources were available for processing. The assignment was based on this offer. The client confirmed the independence of the verification team members and verico SCE in writing.

### b. Assessment team

### Lead Auditor:

Luis Robles Olmos Scopes: 1, 3, 7, 10, 13, 14, 15

**Experts:** 

none

The appointment certificates confirming the qualification of the team members are provided under Annex 5 of this report.

# c. Preparation of the Assessment

The verification criteria were agreed between the client and verico SCE prior to the assessment as the verification of the monitoring report to meet the requirements under ISO 14064 Part 2 and those under EU Council Directive 2015/652 of 20th April 2015 and Austrian Kraftstoffverordnung (KVO) dated 24 June 2020

As preparation for the assessment, the project participant has submitted the project documentation and emissions estimations tin advance and with time enough before performing the remote verification session. By reviewing and evaluating these documents a strategic and risk analysis has been performed in order to develop an assessment plan, that has captured and identified all relevant areas of assessment in order to reduce assessment risks and to enable a statement at a reasonable level of assurance that the project complies with the requirement of ISO 14064 Part 2 (ISO 14064-2).

verico SCE has been provided with a Monitoring Report and underlying data records covering the monitoring period. This document serves as the basis for the assessment presented herewith. The reporting period starts on 01st January 2020 and ends on 31st December 2020 (incl.).

The following table presents the areas of concerns, which needed further investigation beyond the document review, the associated risks which might result in non-compliance and the initially selected assessment methods. This list has been prepared before drafting a detailed verification plan.



Area of Concern	Risk	Assessment method
Boundaries / completeness	Relevant gas flows / gas qualities are not considered in input/output balance	Audit: discussion and review
	Risk of misstatements	
Double-counting issues	Exclusive use of ERs for the generation of UERs	Interviews document review
Implementation of monitoring plan	Any binding requirements from validation / registration under the Austrian scheme	Interviews document review
Environmental impacts / legal	Compliance with national legisla-	Interviews
compliance	tion	document review
Baseline emissions	Completeness of the validation report	Audit: discussion and document review
Project emissions	Correctness and completeness	Review of excel files
Calculations	Possible mistakes in excel sheets for ER calculation	Interviews Document review Insight to raw data and records
Quality assurance / quality control	Data quality of baseline and project emissions Risk of data losses by monitoring approach (log-books copied only once per year) Treatment of mavericks corrections	Audit: discussion and review

# d. Specific assessments steps

A specific risk analysis has been conducted when starting the verification process, which concluded that there is low risk not to meet the required level of assurance, when applying appropriate means of verification. Hence, no on-site visit has been conducted for this verification, because

- The existence of travel restrictions due to the Covid-19 pandemic;
- > Proven experience of the team responsible for monitoring and reporting:
- The physical features of the project and its monitoring system are clear;
- Access to raw data, calibration records and maintenance records could be given by online connection;
- By recent photographs incl. information on creation dates and geographical position, evidence on the recent set-up of the monitoring system could be provided;
- All calculations / data processing can be reviewed by checking already known Excel tools;
- All relevant staff members could be audited by video-conference tools;

At the end of the remote audit performed on 14 January 2020 further steps have been discussed with the project participants and their contracted project consultant indicating the need for completing the documentary evidences and the monitoring report. Proofs and new version of the monitoring report were delivered accordingly. The project participants provided all requested proofs (records, databases, documents) as input to the verification process either before or along the web-based remote audit or afterwards on request. After the submission and completion of all required documentation no findings have been observed that required further correction. Annex 4 to this report provides



a list of interviewed persons. The following images resume some impressions of proofs and photographs and videos provided for review:

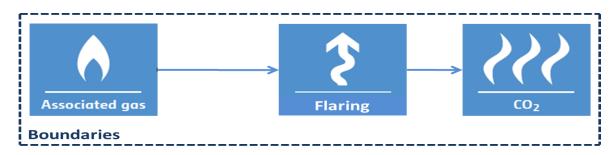


Figure 1: Baseline scenario "flaring of associated gas" with boundaries

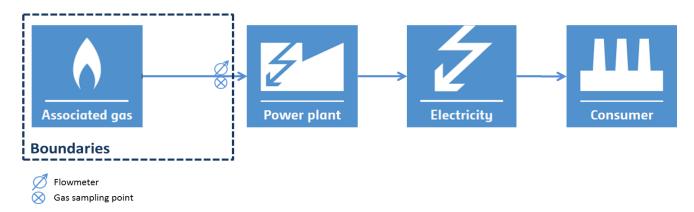


Figure 2: Project scenario with boundaries

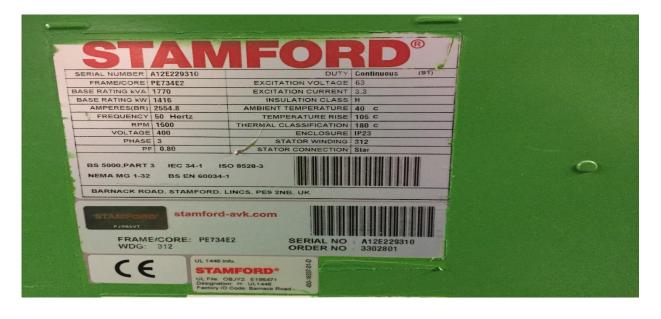


Image 1: Nameplate of electrical generator at G2P Ghelinţa





Image 2: Gas flowmeter DFC-06



Image 3: Gas engine nameplate



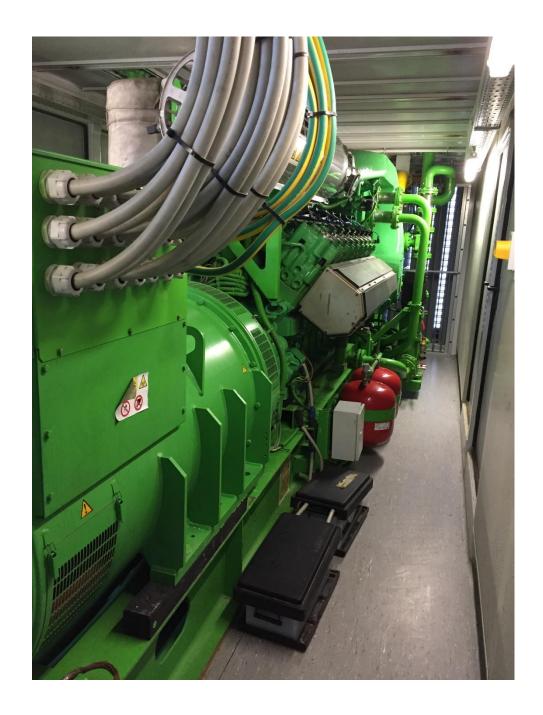


Image 4: Gas engine and electrical generator set group 2





Image 5: G2P Ghelinţa outside overview



Image 6: G2P Ghelinţa gas connection pipes



# e. Specific assessment plans for the facility

Along the verification process, the checklist as referred to under 3.c has been completed with information collected and verified during documents reviews and audits and indicates the details of findings/confirmations. The checklist and the collected information and documents remain as internal verification documentation at verico SCE.

## f. Technical Review

Before the report is approved, an internal review is conducted by a lead auditor (Technical Reviewer) assigned to it by the verification body who was not himself a member of the audit team. The main focus of this process is the assessment of the completeness and traceability of the verification carried out on the basis of the internal and external verification report. If necessary, the verification team will be asked to catch up on missing test steps or to correct or supplement the test report to increase transparency.

This particular review has been conducted by Werner Betzenbichler, who is appointed as Technical Reviewer (TR) of ISO 14064 Part-2 activities und CDM scopes 1 to 13. The TR's appointment certificate is also given under Annex 5.

# 4. Results

# a. Changes compared to previous assessments

According with the information provided and checked during the verification process, no relevant changes to the project design have been implemented during the monitoring period nor from the date of the "PDD\_G2P-Ghelinta\_UER-Project-Documentation\_FV\_2.1.pdf" validation.

As it was checked during the remote audit session, project ownership of G2P Ghelinţa has been transferred from OMV Petrom S.A. -original owner of the facility- to Mazarine Energy Romania S.R.L., a subsidiary of Mazarine Energy B.V. (Mazarine Energy) in October 2016.

Nevertheless, the rights to utilize and the legal title of any emission reduction that result from the operations of the facility G2P Ghelinţa remain with OMV Petrom, as shown in an agreement between Mazarine Energy and OMV Petrom (Agreement Mazarine - OMV Petrom, 20th August 2019)

No Forward Action Request remains opened from the validation process.

# b. General information

All information regarding the involved project proponents, the organisational arrangements, the authorization and technical features have been proven to be correct. All procedures relevant to the project are documented electronically as part of OMV Petrom's management system, and those procedures are followed by Mazarine Energy.

Verification focused on the correct implementation of the project (installations, monitoring equipment and procedures, quality assurance procedures), including the correctness of assumptions and calculations with possible impacts on the monitoring and verification process (e.g. uncertainty analysis).



All monitoring activities are either in accordance with the validated project design document, and all information regarding applied procedures, maintenance and data processing is clearly documented.

The project boundaries are clearly established as per the PDD version 2.1 and the Monitoring Report submitted for validation dated on 25 September 2015.

Only CH<sub>4</sub> emissions and emission reductions are relevant in the context of this project activity.

# c. Legal requirements

The project is in compliance with the host country's legislation. All required licenses are available, and, if necessary, are recently undergoing a renewal process at the responsible local authorities.

It is also evident there are no specific legal requirements to deliver the required service (use of the previously flared gas and obtain electricity for on-site operation) in the manner as done by the project activity. Hence the baseline scenario as claimed for in 2015 is still deemed being applicable. However, confirmation regarding the baseline situation is given by the validation report and is not under the mandate of this verification. Nonetheless, it can be confirmed that the baseline identification process by the project proponents and the according validation are both transparently and suitably presented. There are no legal requirements introduced since validation, which would have changed the conditions for determining the baseline scenario.

# d. Accuracy and Completeness

By reviewing the technical and graphical information related with the project, it can be confirmed that all relevant flows of the gas balance (gas inflow from oil production, gas internal consumption) have been identified correctly and monitored accordingly.

Gas flow is metered at high accuracy, and the reported emission reductions are of equivalent confidence as of Commission Regulations (EU) No 600/2012 and No 2067/2018, which contains general principles for verification and the accreditation of verifiers, and Commission Regulation (EU) No 601/2012 which contains general principles for monitoring and reporting that can be applied to upstream emission reduction projects.

# e. Quality assurance / quality management and risk management

The monitoring system, related procedures and its implementation are in compliance with the requirements set by the underlying regulations and standards. All data which require metering are clearly identified and according arrangements have been made in line with appropriate procedures for data collection and its analysis. All parameters were determined as prescribed in the monitoring plan and associated (inherent) risks have been considered by implementing appropriate maintenance and quality assurance procedures. Reporting procedures reflect the monitoring plan and consolidated data and event logs are stored electronically. Internal procedures and work instructions support the determination of all the parameters listed in the monitoring plan in an effective manner.

Nonetheless, an improvement of the quality assurance and quality management is recommended as an opportunity of improvement (see section 4.i of this Verification Report)



# f. Data gaps

Associated gas flow consumed in G2P Ghelinţa project activity is measured by Flowmeter "DFC 06", ID serial no.: 5489.1.3. The frequency of flowmeter calibration is 4 years according to the equipment manufacturer, due to the fact that as an internal flowmeter it is not subject to national legal metrological control. The latest calibration of the equipment was conducted on 19th August 2020, and the flowmeter was running form 1<sup>st</sup> January 2020 until the last calibration day without the evidence of an active calibration.

A correction factor of 0.995 (according to +/- 0.5% accuracy of flowmeter "DFC 06" technical specification) on the measured gas flow has been introduced for the monitoring period of January -August 2020 with no active calibration.

The use and dimension of this correction factor is deemed appropriate and conservative by the verico SCE verification team, and such accepted.

# g. Assessment of Uncertainties

A project specific uncertainty analysis has been prepared confirming that the monitoring report meets the uncertainty requirements as specified by the EU ETS. The verification process included a check of the analysis and the applied information regarding the uncertainty of the gas flowmeter. It can be confirmed that the analysis is in consistency with available data and that its results meet uncertainties requirements as specified by the EU ETS.

### h. Mistakes and Non-Conformities

The verification team identified one Corrective Action Request and one Clarification Request. Initial issues were mainly related to the need of complete and correct information provided in the initial Monitoring Report version. All findings have been closed before finalising the verification process.

# i. Recommendations for improvements

To increase the internal quality control of data and records, it is recommended to create a procedure and stablish criteria to determine system outliers and threshold of values that should not be considered acceptable.



# 5. Verification decision

verico SCE has undertaken the verification of the GHG emission reduction project: "ISO 14064:2 GHG project – G2P Ghelinţa" implemented by OMV Petrom, Romania, covering the monitoring period from 01 January 2020 to 31 December 2020 based on the requirements of ISO 14064 Part 2 and the EU Fuel Quality Directive and the Council Directive (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements, and Austrian Kraftstoffverordnung(KVO) dated 24 June 2020.

The project will reduce emissions by recovering and utilizing the associated gas from oil field Ghelinţa Park 1, previously flared and now used to obtain electricity for on-site operation.

Through the verification process, the verification team identified one Corrective Action Request and one Clarification Request. All findings have been closed before finalising the verification process.

No further Forward Action Requests was remaining after the final revision and edition of the Monitoring Report. One recommendation of improvement has been created related with new internal procedures.

The verification team is of the opinion that the GHG Assertion of the project: "ISO 14064:2 GHG project – G2P Ghelinţa" is implemented as planned and described in the project design document, and that it is in accordance with the underlying requirements. All monitored data and calculation of emissions or removals have been assessed and it can be confirmed at a reasonable level of assurance, that the data is free from material misstatements. The reported emission reductions are of equivalent confidence as of Commission Regulations (EU) No 600/2012 and No 2067/2018, which contains general principles for verification and the accreditation of verifiers and Commission Regulation (EU) No 601/2012 which contains general principles for monitoring and reporting that can be applied to upstream emission reduction projects.

The verified amount of emission reductions during the monitoring period from 01 January 2020 to 31 December 2020 amounts to:

7,967 t CO<sub>2e</sub>



Therefore, verico SCE hereby certifies at a reasonable level of assurance that the unique UER batch

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is established exclusively on verified emission reductions achieved during the monitoring period corresponding to the year 2020 (01 January 2020 – 31 December 2020) by the GHG project "ISO 14064:2 GHG project – G2P Ghelinţa".

Los Molinos (Madrid), 20 May 2021

Luia Dablas Olmas

Luis Robles Olmos Lead Auditor Langenbach, 20 May 2021

Werner Betzenbichler **Technical Reviewer** 

Released:

Langenbach, 20 May 2021

**Verification body verico SCE** 



# **ANNEX 1: ASSESSMENT PLAN**

# **Strategic and Risk Analysis conclusions:**

Area of concern	Risk	Assessment method	Additional Information requested
Boundaries / completeness	Relevant gas flows / gas qualities are not considered in input/output balance	Audit: discussion and review	-
	Risk of misstatements		
Double-counting issues	Exclusive use of ERs for the generation of UERs	Interviews document review	-
Implementation of monitoring plan	Any binding requirements from validation / registration under the Austrian scheme	Interviews document review	-
Environmental impacts / legal com-	Compliance with national legisla-	Interviews	Information on exchange and maintenance of
pliance	tion	document review	meters
Baseline emissions	Completeness of the validation report	Audit: discussion and document review	-
Project emissions	Correctness and completeness	Review of excel files	-
Calculations	Possible mistakes in excel sheets for ER calculation	Interviews Document review Insight to raw data and records	-
Quality assurance / quality control	Data quality of baseline and project emissions Risk of data losses by monitoring approach (log-books copied only once per year) Treatment of mavericks corrections	Audit: discussion and review	-



# Section 1: Eligibility of the GHG project under the GHG program

The project is expected to be used under the EU Fuel Quality Directive, which is complemented with rules on the eligibility set by «COUNCIL DIRECTIVE (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements». Further assistance is given by the «GUIDANCE NOTE on approaches to quantify, verify, validate, monitor and report upstream emission reductions», which also implicitly contains further requirements to be considered when determining the eligibility of an individual project. While many EU member states simply make reference to these provisions, some other countries have adopted specific implementation rules, which set further requirements. The following table lists the eligibility of the GHG project in the context of generic and specific requirements available at the time of verification.

ID	Requirement	Validated situation	Conclusion
EU-D1	UERs shall only be applied to the upstream emission's part of the average default values for petrol, diesel, CNG or LPG.	As confirmed in original validation report.	OK
EU-D2	UERs originating from any country may be counted as a reduction in greenhouse gas emissions against fuels from any feedstock source supplied by any supplier.	This does not restrict the use of UERs for any eligible project.	OK
EU-D3	UERs shall only be counted if they are associated with projects that have started after 1 January 2011.	As confirmed in original validation report.	OK
EU-D4	UERs shall be estimated and validated in accordance with principles and standards identified in International Standards, and in particular ISO 14064, ISO 14065 and ISO 14066.	The requirements of these standards and regulations have been used in the context of this verification (see following sections)	OK
	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 and Commission Regulation (EU) No 601/2012. 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;		



ID	Requirement	Validated situation	Conclusion
EU-D5	<ul> <li>In order for UERs to be eligible, fuel suppliers shall report:</li> <li>the non-reusable certificate number uniquely identifying the scheme and the claimed greenhouse gas reductions;</li> <li>the non-reusable number uniquely identifying the calculation method and the associated scheme;</li> </ul>	Compliance with the first two bullet point will depend on the member state at which the UERs shall be used. Although recommended by the Commission, most member states have not established a UER registry enabling easy compliance with that requirement.  In the absence of requested solutions, a unique number for the UER batch will be assigned by the verico verification report.	
EU-G1	For emission reductions to be eligible to be claimed as UERs they must be additional to any emissions changes that would have been expected in the most likely counterfactual scenario.	As confirmed in original validation report.	OK
EU-G2	Any particular batch of emission reductions from a given project may only be claimed against FQD GHG emission reduction obligations or other emission reductions targets once. These emission reductions cannot be claimed under the Kyoto Protocol's Clean Development Mechanism or the Joint Implementation. Similarly, upstream emission reductions that have been accounted for third party emission reductions schemes shall not be eligible under the FQD.	According to confirmation by the project proponents the use of the verified emission reductions as UER is the only purpose of this verification activity. However, further claims have to be excluded by contractual arrangements amongst sellers and buyers, if deemed necessary.	OK
EU-G3	The boundary should include all GHG sources and removals and any GHG source, sink, or reservoir that is controlled, related to, or affected by the project (ISO 14064-2 Article 5.3). These are considered 'relevant' sources. Examples of project boundaries can be drawn from CDM methodologies and in the ICCT report on «The Reduction of Upstream Greenhouse Gas Emissions from Flaring and Venting».	As confirmed in original validation report and the underlying PDD / monitoring plan.	OK



SECTION	ON 3. Project plan (Project description)	Verified situation	Conclusion
Genera	I description of the project		
1.1.	Does the GHG Report provide general information of the project?	The UER monitoring report "UER G2P-Ghelinţa_MR20201231_Monitoring report v2_20210226"	ОК
		present general information of the project under chapter 1 of each.	
1.2.	Is there any open issue in the validation / previous verification?	See table section 1 above	ОК
Implem	entation status of the project activity		
1.3.	Is the project location indicated? Confirm geographical coordinates	Project location is included in the verified monitoring report. Geographical coordinates have been checked by internet tools	ОК
1.4.	Are all GHG sources relevant to the project identified? Is any emission source missed? Check the site lay-out and confirm through site tour.	There is only one associated gas in the project; the inlet connection of Ghelinta Park 1 gas flare has been bypassed to deliver an adequate gas flow supply to motogenerators 1 and to of G2P Ghelinta project activity.  Inlet gas flow to G2P Ghelinta facility is properly measured by a high accuracy flowmeter	ОК
1.5.	Confirm conformance with GHG program requirements: baseline and monitoring methodology - Applicability conditions. Please refer to the complete description of the applicability conditions and confirm that the project activity meets all the requirements.	See previous table section 2	OK
1.6.	By means of an on-site visit:  List each technical component and equipment and check design parameters and actual status of installation and / or operation.  Please check to ensure that all physical features of the proposed project are in place and operated according with the GHG program requirements.	<ul> <li>No on-site visit has been conducted for this verification, because</li> <li>The existence of travel restrictions due to the Covid-19 pandemic;</li> <li>Proven experience of the team responsible for monitoring and reporting;</li> <li>The physical features of the project and its monitoring system are clear;</li> </ul>	OK



SECTIO	ON 3. Project plan (Project description)	Verified situation	Conclusion
	In cases where there are a large number of components and equipment items and the check of all of them is not an available option, then a random sampling check shall be performed. Justify here the sample chosen and describe the results.	<ul> <li>Access to raw data, calibration records and maintenance records could be given by online connection;</li> <li>By recent photographs incl. information on creation dates and geographical position, evidence on the recent set-up of the monitoring system could be provided;</li> <li>All calculations / data processing can be reviewed by checking already known Excel tools;</li> <li>All relevant staff members could be audited by video-conference tools;</li> <li>An according risk analysis conducted when starting the verification process, concluded that there was low risk not to meet the required level of assurance, when applying appropriate means of verification.</li> </ul>	
1.7.	Have responsibilities for monitoring been described and specified?	Responsibilities and functions are described with the MR and conform to the actual situation in PETROM and Mazarine Energy	OK
1.8.	Check QA/QC, management systems. Are procedures described and specified? Are they consistently applied?  a. documented instructions, management manual  b. documentation  c. data archiving  d. monitoring report  e. cross-checking  f. energy balance analysis (as relevant)  g. internal audits / verification and management review	Mazarine Energy, project owner during the monitored period, uses a database system for recording and evaluating production data. Quality control system is the same than PETROM -UER owner-, and is based in the four-eyes principle, covering all aspects in a comprehensive manner. It is consistently and effectively applied and encompasses several steps of internal data verification on a daily basis. Approval, marking, rejecting or replacing data is clearly stated	ОК
1.9.	Has a procedure for emergency and abnormal situations been established?	Data gaps and errors are identified and followed by well-established procedures.	OK



SECTIO	ON 3. Project plan (Project description)	Verified situation	Conclusion
1.10.	Has the system for qualification and training been established as relevant for the monitoring and management activities?	There are detailed instructions and enough personnel in place to guarantee the transfer of knowledge and experience to potentially new members being involved in monitoring activities.	ОК
1.11.	Check the environmental report, license, permit and compliance to the local environmental legislation (if relevant).	No relevant changes	ОК
1.12.	Check contribution to sustainable development, in accordance with the GHG program.	n/a	OK
1.13.	Check issues with local stakeholders, claims, complaints, etc.	n/a	ОК



SECTION Quantit	ON 2. fying GHG emissions and/or removals	Verified situation	Conclusion
2.1	Is the project location indicated? Confirm geographical coordinates	As per MR	ОК
2.2	Are all GHG sources relevant to the project identified? Is any emission source missed? Check the site lay-out and confirm through site tour.	As per MR	ОК
2.3	Confirm conformance with GHG program requirements: baseline and monitoring methodology - Applicability conditions. Please refer to the complete description of the applicability conditions and confirm that the project activity meets all the requirements.	As per validated PDD  With change to continuous gas chromatography	ОК
2.4	By means of a a documentation assessment and a remote audit:  List each technical component and equipment and check design parameters and actual status of installation and / or operation.  Please check to ensure that all physical features of the proposed project are in place and operated according with the GHG program requirements.  In cases where there are a large number of components and equipment items and the check of all of them is not an available option, then a random sampling check shall be performed. Justify here the sample chosen and describe the results.	<ul> <li>Two Gas (piston) engine - electrical generator within an acoustic enclosure, type ECOMAX 11, equipped with a General Electric Jenbacher J416 GS-B01 gas engine, including all necessary auxiliary equipment.</li> <li>Measurement devices: electronic gas DF6 Flowmeter "DFC 06", type differential pressure and temperature recorder; tag no.: 1GHE-24-FC-001, ID serial no.: 5489.1.3.; +/- 0.5% accuracy.</li> <li>Gas pipes supply system to the two gas engines</li> <li>No changes from the validated situation in the implementation of the project activity are reported by the project proponents and confirmed with all the documentation provided, including detailed photographs of all the G2P Ghelinta facility.</li> <li>A change in the ownership of G2P Ghelinta has been reported in the verified Monitorig Report. The ownership of UERs generated by G2P Ghelinta still remains in OMV Petrom, as demonstrated by proper documents.</li> </ul>	ОК



SECTION Quanti	ON 2. fying GHG emissions and/or removals	Verified situation	Conclusion
2.5	List any monitoring aspect that is not specified in the criteria, procedure and/or methodology and check its compliance with the GHG program, for example:  • additional monitoring parameters  • monitoring frequency  • calibration frequency.	There are no additional aspects	ОК
2.6	Has the data been generated at the frequency required by the applied criteria, procedure and or methodology?	The frequency of gas flowmeter DFC6 calibration: 4 years according to the equipment manufacturer, as is not subject to national legal metrological control. The latest calibration of the equipment was conducted 19th August 2020 by S.C. Elcost Company S.R.L.  A correction factor of 0.995 (according to +/- 0.5% accuracy of flowmeter "DFC 06" technical specification) on the measured gas flow has been introduced for the monitoring period of Jan-Aug 2020 with no active calibration.	See CAR1  CAR 1 is solved  OK
2.7	Have types of measurement instrumentation used been described and specified?	Completely and transparently  By recent photographs, evidence on the recent set-up of the monitoring system can be proved  The accreditation of the external service provider (gas analysis) has been checked and is in accordance with the requirements (ISO17025).  All devices are under regular maintenance.  Calibration requirements are met and conservative approaches in UER calculations due to deviations in the calibration period	OK



SECTION Quantit	ON 2. fying GHG emissions and/or removals	Verified situation	Conclusion
2.8	Is the accuracy of equipment used for monitoring sufficient and regularly controlled and calibrated according to current good practice?	Electronic gas DF6 Flowmeter "DFC 06", type differential pressure and temperature recorder; tag no.: 1GHE-24-FC-001, ID serial no.: 5489.1.3.; +/- 0.5% accuracy.	ОК
	Check relevance of maintenance and calibration.  Check relevance of laboratory analysis if necessary.	Gas analysis done twice per year by ICPT Campina (Institute for Research and Technology), accredited laboratory by Romania national accreditation body according ISO 17025	
2.9	Check responsibilities and authorities for monitoring and reporting.	Responsibilities, roles and persons in charge of the monitoring and reporting are clearly stablished and displayed in the Monitoring Report	ОК
	Are the monitoring results consistently recorded, reviewed and approved?	Raw values are consistently recorded, review and approved. As an opportunity of improvement it is recommended to create a procedure and stablish criteria to determine system outliers and threshold of values that should not be considered acceptable.	
2.10	Reporting period: Defined?	Yes P2G Ghelinta VER#1: Mon.Period 01/01/2020 – 31/12/2020	OK
2.11	If the GHG program includes the determination of environmental and/or social indicators, have the sustainable development indicators been monitored?	Not relevant	-
2.12	Check monitoring of Environmental and Social indicators (if relevant)	Not relevant	-
	<ul> <li>implementation of measures</li> <li>monitoring equipment</li> <li>quality assurance procedures</li> <li>external data.</li> </ul>		



# **Monitoring Parameters and Calibration Checklist:**

# Complete the following table for each parameter:

Data / Parameter (as in the MP)	<name and="" brief="" description=""></name>	<name and="" brief="" description=""></name>
Value	Fuel consumption (associated gas volumes) (FCy) as Gas volume expressed as Nm³/y	Net Calorific Value NCVrg measured in [GJ/Nm³]
	3,398,458 Nm³ in 2020	4.18 x 10-2 [GJ/Nm³] in 2020
Measuring frequency	Continuously metered, daily readings	Twice per year: summer and winter
		During this monitoring period conducted on 10.08.2020 and 24.11.2020
Reporting frequency	Data are aggregated in a monthly basis	Twice per year
Recording (Manually / electronically /)	Electronically. From an Excel file values are aggregated	Manually. Reports from an external laboratory
QA/QC How are values verified? (Cross-checked, double-checked,)	Double check, "four eyes principle"	External laboratory: ICPT Campina (Institute for Research and Technology), accredited laboratory
Type of Monitoring Equipment and Identification number or Reference.	Flowmeter	Chromatograph
Period of operating time	Continuously	n/a
Instrument type	electronic gas type differential pressure and temperature recorder; +/- 0.5% accuracy.	Chromatography
Manufacturer, model and serial number	Douba Electronics, Model DFC6, tag no.: 1GHE-24-FC-001, ID serial no.: 5489.1.3.	Daniel 700 gas chromatograph and a GasVLE software based on the gas equation of state
Specific location	Project site, in the Energy Database (ME HQ) at motors gas inlet	ICPT Campina
Calibration dates	Last calibration: 19th August 2020. Previous calibration date: no records	As per ICPT accreditation
Company performing the calibration	S.C. Elcost Company S.R.L.	n/a
Required calibration frequency represent good monitoring practices?	Previous calibration date: no records	n/a
Is calibration valid for the whole reporting period?	Only from 19 <sup>th</sup> August 2020	Yes
Maintenance	Not requiered	As per ICPT accreditation
Does the data management (from monitoring equipment to emission reductions calculation) ensure correct transfer of data and reporting of emission reductions?	Yes	As per ICPT accreditation
Key reporting risks	Data quality of baseline and project emissions Risk of data losses by monitoring approach (log-books copied only once per year) Treatment of mavericks corrections	Calculations Possible mistakes in excel sheets for ER calculation



	ON 3. Assessment of data and calculation of mission reductions	Verified situation	Conclusion
3.1.	Have calculations of baseline emissions, project activity emissions and emissions related and/or affected by the GHG project, as appropriate, been carried out in line with the formulae and methods described in the applied criteria, procedure and/or methodology?  Check consistency in the ERs spreadsheet.	As per « UER G2P-Ghelinţa_MR20201231_Att 1_Detailed quantification of emissions_v2.0 »	See CL#1 CL#1 is cleared OK
3.2.	Has the calculation tool been correctly documented? Check its consistency and formulae.  • baseline emissions  • project emissions  • controlled by the PP  • related to the project.  • affected by the project  • emission reductions of the project.	«UER G2P-Ghelinţa_MR20201231_Att 1_Detailed quantification of emis-si-ons_v2.0»  Have been checked completed. No errors have been detected.	OK
3.3.	Is a complete set of data available during the speci- fied monitoring period? If only partial data is availa- ble because activity levels or non-activity parame- ters have not been monitored in accordance with the applied criteria, procedure and/or methodology, conduct an assessment of the potential impacts of these changes.	Data is embedded in the referenced Excel file; also monthly data has been provided and checked.  Raw data has been traced along the remote verification by sharing screen and displaying raw data sets.	ОК
3.4.	Has information provided for quantifying GHG emissions reductions been cross-checked with other sources such as plant log books, inventories, purchase records, laboratory analysis?	Yes	ОК
3.5.	Have appropriate emission factors, IPCC default values, and other reference values been correctly applied?	25 for GWP of methane Density of associated gas Standard conditions	ОК



# **ANNEX 2: FINDING LIST AND NON-CONFORMITIES**

Findings Non-conformities	Correction	Assessment Method for correction	Final Conclusion	Assessment
Section 1, No.1: Information provided by the GHG report  a) Methodology used to calculate upstream emissions reductions are not clearly and enough explained.  b) Information related with Flowmeter "DFC 06" ID serial No. 5498.1.3. is not complete; calibration certificate provided is from 19 august 2020, but the previous calibration certificate nor the date of calibration is provided in the Monitoring Report v1 dated on 08/01/2021.  Corrective Action Request #1	a) A reference to the underlying methodological approach has been included in the Monitoring Report version 2. b) The latest calibration was conducted on 19.08.2020. The calibration before that was longer ago than the 4 years recommended by the manufacturer. In order to compensate for the uncertainty during the period no valid calibration (01/01/2020 to 18/08/2020) an uncertainty compensation of the maximum error of the meter (0.5%) is applied to all measurements for the months January to August 2020. The calculation and the monitoring report have been corrected accordingly.	□ Inspection □ Interview □ Check of docs □ Sample □ calculation □ Comparison □ Other	OK CAR#1 is closed	material non-conformity non-material non-conformity Forward Action Request issue corrected appropriately



Findings Non-conformities	Correction	Assessment Method for correction	Final Conclusion	Assessment
Complete and correct information shall be provided in a new Monitoring Report version				
Section 1, No.1: Information provided by the GHG report  Section 3. Assessment of data and calcu-	A rough calculation has been done and the resulting explanation has been included in the Monitoring Report version 2.	☐ Inspection ☐ Interview ☑ Check of docs ☐ Sample ☐ calculation	OK CL#1 is cleared	□ material non-conformity     □ non-material non-conformity     □ Forward Action Request     ☑ issue corrected appropriately
Iation of GHG emission reductions  Monitoring Report section 5.2. "Calcula-		☐ Comparison☐ Other☐		
tion of project emissions" refers no project emissions as "the mass of fugitive project emissions has been assumed to be below 2% they are not considered"				
Clarification Request #1				
Extended information is required related with the project emissions, including clarification of the criteria, further explanation and evidences.				



# **Annex 3: List of reviewed documents**

# General background information

- /1/ 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 guality of petrol and diesel fuels
- /2/ DIN EN ISO 14064-2:2012; Greenhouse gases Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements
- /3/ EU Guidance note, "Guidance note on approaches to quantify, verify, validate, monitor and report upstream emission reductions"
- /4/ Austrian Kraftstoffverordnung(KVO) dated 24 June 2020

# Project-specific background:

- /5/ Approved baseline methodology AM0009: Recovery and utilization of gas from oil fields that would otherwise be flared or vented --- Version 7.0, UNFCCC, 08 Nov 2013
- /6/ Methodological tool 06 -Tool to calculate project or leakage CO2 emissions from fossil fuel combustion--- Version 03.0, EB96, UNFCCC, 22 Sept 2017
- /7/ CDM methodological tool "Upstream leakage emissions associated with fossil fuel use". --- Version 02.0, EB81, UNFCCC, 28 Nov 2014

# Project-specific documents

- /8/ UER G2P-Ghelinţa\_MR20201231\_Monitoring report v2\_20210226\_clean
- /9/ UER G2P-Ghelinţa\_MR20201231\_Att 1\_Detailed quantification of emissions\_v2.0
- /10/ UER G2P-Ghelinţa\_MR20201231\_Monitoring report v1\_20201223\_final
- /11/ UER G2P-Ghelinţa\_MR20201231\_Monitoring report v1\_20210108\_final
- /12/ UER G2P-Ghelinţa\_MR20201231\_Att 1\_Detailed quantification of emissions\_v1.0
- /13/ PDD\_G2P-Ghelinţa\_UER-Project-Documentation\_FV\_2.1.pdf
- /14/ OMV Projects\_Validation Statement\_G2P Ghelinţa v1.0 signed.pdf
- /15/ OMV Ghelinţa Letter\_20181217.pdf
- /16/ Agreement Mazarine OMV Petrom\_redacted
- /17/ Calibration Report\_Flow Meter DFC-06\_20200819
- /18/ Attachment 3\_Ghelinţa\_Gas Analysis\_Summer\_20200810
- /19/ Attachment 3\_Ghelinţa\_Gas Analysis\_Winter\_20201124
- /20/ Attachment 2\_Monthly Report\_Mazarine\_2020-01
- /21/ Attachment 2\_Monthly Report\_Mazarine\_2020-02
- /22/ Attachment 2\_Monthly Report\_Mazarine\_2020-03
- /23/ Attachment 2\_Monthly Report\_Mazarine\_2020-04
- /24/ Attachment 2\_Monthly Report\_Mazarine\_2020-05
- /25/ Attachment 2\_Monthly Report\_Mazarine\_2020-06
- /26/ Attachment 2\_Monthly Report\_Mazarine\_2020-07
- /27/ Attachment 2\_Monthly Report\_Mazarine\_2020-08
- /28/ Attachment 2\_Monthly Report\_Mazarine\_2020-09
- /29/ Attachment 2\_Monthly Report\_Mazarine\_2020-10/30/ Attachment 2\_Monthly Report\_Mazarine\_2020-11
- /31/ Attachment 2\_Monthly Report\_Mazarine\_2020-12



/32/ Photographic and video documentation of actual G2P facility taken on 9 December 2020

## **Calculation sheets:**

/33/ UER G2P-Ghelinţa\_MR20201231\_Att 1\_Detailed quantification of emissions\_v2.0 /34/ UER G2P-Ghelinţa\_MR20201231\_Att 1\_Detailed quantification of emissions\_v1.0



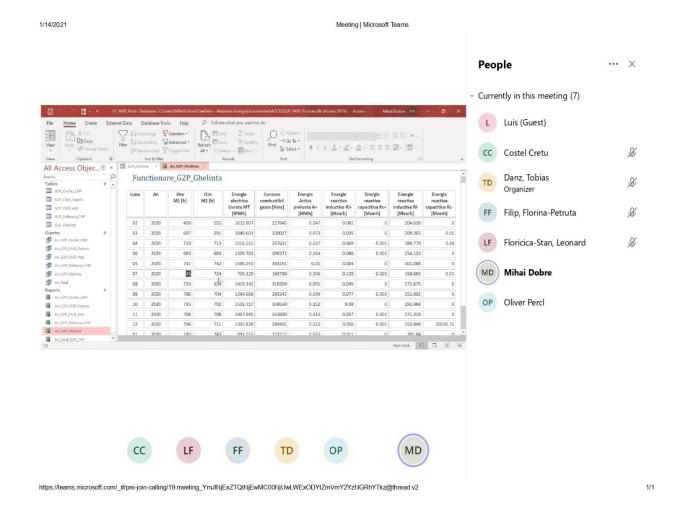
# Annex 4 List of Interviewed Persons Remote Audit 14th January 2021

Participant List:			
General			
Order No.	VE-UER-042		
Client	OMV Downstream GmbH		
Project	GHG project "ISO 14064:2 GHG project – G2P Ghelinţa"		
	1 <sup>st</sup> Verification (monitoring period: 01/01/2020- 31/12/2020)		
Date of Audit	Remote audit, Thursday 14 <sup>th</sup> January 2021		
Name	Function / Company	Signature	
Tobias Danz	OMV Downstream GmbH	Confirmed by screenshot	

Tobias Danz	OMV Downstream GmbH	Confirmed by screenshot
Florina-Petruta Filip	OMV Petrom	Confirmed by screenshot
Leonard Floricica-Stan	OMV Petrom	Confirmed by screenshot
Mihai Dobre	Mazarine Energy	Confirmed by screenshot
Cretu Costel	Mazarine Energy	Confirmed by screenshot
Oliver Percl	Consultant, Energy Changes	Confirmed by screenshot
Luis Robles Olmos	Lead Auditor, verico SCE	Confirmed by screenshot

# Annex 4





# Annex 5



# **Annex 5 Appointment Certificates**





# Ernennungsurkunde

# **Certificate of Appointment**

# **Luis Robles Olmos**

erfüllt die Voraussetzungen der Prüfstelle der **verico** sce und wird ernannt zum fulfills the requirements according to the guidelines of the verification body of **verico** sce and is appointed as

# Lead Auditor / Technical Reviewer

für die folgenden Scopes/Sektoren for the following scopes/sectors

ISO14064-1: 1, 6, 14, 15, 21

ISO14064-2: 1, 3, 7, 10, 13, 14, 15

CLIMA: 1, 3, 4, 7, 13, 15, 17

Die Anforderungen des QM-Handbuches der Prüfstelle von verico SCE sind bindend.

The requirements of the QM-Manual of the verification body of verico SCE are binding.

Diese Ernennung gilt 5 Jahre.

This appointment is valid for 5 years.

Zertifikat Nr. 14064 A16 ISO14064-3

Langenbach, 08.03.2018

Javier Vallejo Drehs

ERTIFIKAT CER

ver-A10e-2013-06-2

Annex B4 - Ernennungsurkunde LRO ISO14064\_3\_SS10.docx Seite 1/1





# Ernennungsurkunde

# Certificate of Appointment

### Werner Betzenbichler

erfüllt die Voraussetzungen der Prüfstelle der verico sce und wird ernannt zum fulfills the requirements according to the guidelines of the verification body of Verico sce and is appointed as

# Auditor / Lead Auditor / Technischer Rezensent

für Verifizierungen nach ISO 14064-3

für die folgenden Scopes/Sektoren for the following scopes/sectors

ISO14064-1: 1, 2, 4, 6, 7, 8 (AVR Scopes), 14, 17, 20

ISO14064-2: 1-13 (CDM Sektoren)

Die Anforderungen des QM-Handbuches der Prüfstelle von verico SCE sind bin-

The requirements of the QM-Manual of the verification body of verico SCE are binding.

Diese Ernennung gilt 5 Jahre. This appointment is valid for 5 years.

Zertifikat Nr. 14064 A9 ISO14064-3

Dr. Kolmetz

Langenbach, 6.7.2018

Annex B4 - Emennungsurkunde Betzenbichler ISO14064\_3 2018 Seite 1/1