VERIFICATION REPORT

Mramorak 1&2 Bundled Biogas Power Plants

BCR-RS-493-1-001

VERIFICATION REPORT PROJECT ID	
Project Title	Mramorak 1&2 Bundled Biogas Power Plants
Project ID	BCR-RS-493-1-001
Project holder	Zlatar Mramorak Doo
Project Type	Energy & Waste (Biomass Energy)
Grouped project	No
Version number and date of the Project Document to which this report applies	Ver. 1.5 24/08/2023
Applied methodology (ies)	AMS-III.AO Version 1.0 AMS-I.D. Version 18.0
Project location	*Serbia, Belgrade*
Project starting date	24/06/2020
Quantification period of GHG emissions reductions/removals	24/06/2020 to 23/06/2027
Monitoring period	24/06/2020 to 31/12/2023

Total amount of GHG emission reductions/removals claimed during the monitoring period.	*74,421* tCO_2
Contribution to Sustainable Development Goals	SDG Goal 7 Affordable and Clean Energy SDG Goal 8 Decent Work and Economic Growth SDG Goal 13 Climate Action
Special category, related to co-benefits	N/A
Version and date of issuing	*Version: 02* *Date if issuing:* 09/09/2025
Work carried out by	Mr. Rohit Badaya- Team Leader Ms. Selen Cilasun- V/V Trainee Mr. Dragomir Vasic- Regional Expert Mr. Abdulkadir Bektaş - Agriculture Expert
Approved by	Mr. Sandeep Kanda Technical Reviewer  09/09/2025

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1 Executive summary

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. was appointed by "Zlatar Mramorak Doo" to perform the verification of the BCR project activity titled "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia, Belgrade" through a contract, dated 29/11/23.

In particular;

- the project's baseline and monitoring plan was assessed against "AMS-III.AO Methane recovery through controlled anaerobic digestion, Version 1.0. and AMS-I.D. Grid connected renewable electricity generation, Version 18.0."
- the project's additionality justification was assessed against "Tool 21: Demonstration of additionality of small-scale project activities, Version 13.1.14, Tool 01: Tool for the demonstration and assessment of additionality, Version 7.0.0.15 and Tool 27: Investment Analysis Version 12.0"
- the project's compliance with the requirements of the Host Country's legislation and sustainability criteria.
- CDM Validation and Verification Standard for project activities version 3.0
- CDM Project Standard for Project Activities version 3.0
- BCR Standard Version 3.4

Verification is a requirement for all BCR projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of verified Carbon Credits (VCCs).

The scope of the verification is the independent and objective review of the BCR Monitoring Report Template (MR). The purpose of the verification is its usage during the registration process as part of the BCR project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the verification opinion that goes beyond that purpose.

Re Carbon Ltd. also confirms the following based on the results of the document review for the monitoring period between 24/06/2020 to 31/12/2023:

Year	**GHG emission reductions in the baseline scenario (tCO2e)**	**GHG emission reductions in the project scenario (tCO_{2e})**	**GHG emissions attributable to leakages (tCO_{2e})**	**Estimated Net GHG Reduction (tCO_{2e})**

24/06/2020-31/12/2020	6,102	1,191	0	4,911
01/01/2021-31/12/2021	26,720	3,975	0	22,745
01/01/2022-31/12/2022	27,997	4,558	0	23,438
01/01/2023-31/12/2023	27,937	4,610	0	23,327
Total	88,756	14,334	0	74,421

During the verification 39 Corrective Action Requests, 07 Clarification Requests were raised, all of which were closed out before the issuance of this verification report. No Forward Action Request was raised during the validation to be addressed during the initial verification of the proposed project activity.

In summary, it is Re Carbon Ltd.'s opinion that the project activity "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia, Belgrade", as described in the BCR-MR, version 1.5 dated 20/07/2025 meets all relevant UNFCCC requirements for the CDM, BCR and all relevant host Party criteria and correctly applies the baseline and monitoring methodologies "AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0". Hence, Re Carbon Ltd. requests the issuance of project activity as a BCR project activity.

2 *Objective, scope and verification criteria*

Through a contract, dated 29/11/2023. Re Carbon Ltd. was appointed by "Zlatar Mramorak Doo" to perform the 1st verification of the "Mramorak 1&2 Bundled Biogas Power Plants". The objective of this verification activity was to assess, with objective evidence:

- if the monitoring report *(initial version 1.0)* conforms with the requirements of the monitoring plan of the registered Project Description (PD) and the approved methodology
- if the project activity conforms with the monitoring report and the registered PD, and
- if the data reported in the monitoring report are complete and transparent.

The scope of the verification is the independent and objective review of the monitored GHG reductions. The verification activity is based on the validated and registered PD version 1.5 dated, 24/08/2023.

The project activity and the monitoring report are assessed against the requirements of "*AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0*", subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, all according to the guidance given in the CDM Validation and Verification Standard for Project Activities version 3.0, CDM Project Standard for Project Activities version 3.0, and BCR Standard version 3.4.

The only purpose of the verification and certification is its usage during the issuance process as a part of the BCR project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the verification and certification opinion, which will go beyond that purpose.

3 *Verification process*

3.1 Level of assurance and materiality

Re Carbon Ltd. hereby confirms that the reasonableness of assumptions of this verification report is reasonable, with respect to material errors, omissions and misrepresentations. To guarantee this reasonableness of assumptions all data that is used in the GHG emission reduction calculations have been reviewed without any sampling. Hence the level of assurance of the GHG Project Verification is not less than 95% as per the BCR Standard. And the material discrepancy in the data supporting the GHG Project baseline and the estimate of GHG emission reductions or removals is up to ± 5%;

3.2 Validation and verification activities

3.2.1 Planning

As part of this preliminary assessment, the verification team requested the project holder for sufficient information to determine the purpose and scope of the verification considering the following:

- if the GHG project corresponds to a type of project eligible for the Certification Program (conformity with applicable verification criteria, including the principles and requirements of BCR Standard in the scope of verification),
- if the GHG project applies a methodology eligible under the requirements of the Certification program (The GHG Project baseline is consistent with the methodology applied, as appropriate),
- if the monitoring plan complies with the methodology applied by the GHG project (The quantification of mitigation results against the validated baseline shall follow the provisions of the used methodology, as appropriate),
- if the determination of the baseline considers the considerations provided by the Biocarbon Registry Program and by existing sectoral and national regulations.

The scope of the verification is the independent and objective review of the BCR Monitoring Report Template (MR). The BCR-MR is reviewed against the relevant criteria (see section 2) and decisions by the BCR Organization, including the approved baseline and monitoring methodology. The verification was based on the guidance given in the CDM Validation and Verification Standard for project activities version 3.0, CDM Project Standard for project activities version 3.0, and BCR Standard version 3.4.

The verification team has employed a risk-based approach to assess the completeness and accuracy of the claims and the conservativeness of the assumptions in the BCR-MR. The focus of the verification team is to identify significant risks for the project implementation and the generation of VCCs. The verification is not meant to provide any consulting to the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

The only purpose of the verification is its usage during the registration process as part of the BCR project cycle. Therefore, Re Carbon Ltd. cannot be held liable by

any party for decisions made or not made based on the verification opinion that goes beyond that purpose.

The Verification TL developed a verification assessment plan that describes verification activities and schedules. The verification assessment plan is revised as necessary during the verification.

The verification assessment plan is prepared using "Assessment Planning Form" and addresses the following:

- the scope and objectives;
- identification of the verification team and their roles on the team;
- client/responsible party contact;
- schedule of verification activities;
- level of assurance;
- verification criteria;
- materiality;
- schedule for site visits.

The Verification TL communicated the verification assessment plan to the responsible party and ensured that the relevant responsible party's personnel were notified prior to the beginning of the site visit on 06/02/2024 and 07/02/2024.

The Verification TL informs the client of the names and roles of the team members with sufficient notice for any objection to the appointment of a team member to be made.

As a result of the planning and performance of the verification activities please find below the actual verification timeframe:

The verification timeframe is given in detail in Table 3-5 below:

Table 3-1: Verification Timeframe

Activity	Timeline		Total Days
	From	To	
Desk Review	02-02-24	14-05-24	103
Review of the MR version 01	02-02-24	27-02-24	26
Site Visit	06-02-24	07-02-24	2
Issuance of the Verification Protocol version 01	10-02-24	27-02-24	18
Review of PDs Initial Set of Responses	27-02-24	01-03-24	4
Issuance of the Verification Protocol version 02	20-03-24	04-04-24	16
Review of PDs Second Loop Responses	04-04-24	05-04-24	2
Closing of all the CARs and CLs	30-04-24	08-05-24	9
Issuance of the Verification Report version 01	08-05-24	15-07-24	69
ITR Process	15-07-24	26-08-24	43
Issuance of the Verification Report version 02	18-07-24	17-11-24	123
BCR Review (1st round)	19-03-25	03-04-25	16
Re-submission based on BCR Review (1st round)	04-04-25	09-09-25	159

Information or clarifications provided as a response to a CAR, CL or FAR could also lead to a new request. This can also be seen transparently in the Verification Protocol provided in Annex 1 of this Verification Report.

3.2.2 *Sampling*

No sampling approach is used for this verification process.

3.2.3 *Execution*

The report is based on the assessment of the BCR-MR undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to desk review, follow-up actions (e.g., on-site visit, electronic (telephone or e-mail) interviews) and also the review of the applicable approved methodological and relevant tools, guidance and BCR decisions. Additionally, the cross-checks were performed for information provided in the BCR-MR using information from sources other than the verification sources, the verification team's sectoral or local expertise and, if necessary, independent background investigations. The verification of this BCR project activity includes the following steps:

- Assessment of the conformity of the actual project activity and its operation with the registered PD, dated 24/08/2023 version "1.5".
- A physical site visit was executed on 06/02/2024 and 07/02/2024 in order to assess whether all physical features of the project activity proposed in the registered PD are in place and that the Project proponent(s) operated the project activity in line with the registered PD.
- Assessment of the compliance of the monitoring plan with the monitoring methodology "AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0"
- Assessment of compliance of monitoring with the monitoring plan
- Assessment of data and calculation of greenhouse gas emission reductions
- Issuance of the verification report
- Independent technical review
- Approval of the verification report and request for issuance

During the verification process, a Verification Protocol was used to submit the findings to the Project proponent(s).

In line with Re Carbon Ltd.'s internal terminology and BCR Standard version 3.3, the team reports the non-conformities in the forms of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). When and for which type of non-conformities CARs, CLs and FARs are issued is explained below:

The verification team raises a **CAR** if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in the monitoring and reporting, or if the evidence provided to prove conformity is insufficient.
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impair the estimate of emission reductions.
- Issues identified in a FAR during verification to be verified during verification have not been resolved by the Project proponents.

The verification team raises a **CL** if information is insufficient, not transparent or not clear enough to determine whether the applicable BCR requirements have been met.

The verification team raises a **FAR** during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

According to these principles, a total of 39 CARs, 07 CLs and 00 FARs were issued, all of which are listed in the Verification Protocol.

The appointment process of the verification team considers the technical area(s), sectoral scope(s), and relevant host country experience, required amongst team members for the verification of the emission reductions, achieved by the project activity in the relevant monitoring period for this verification. The relevant BCR verification and previous ITR experiences are also assessed during the selection of the team members and the Independent Technical Reviewer (ITR), respectively. The verification team and ITR were assigned to this verification activity on 10/11/2023, considering all the above factors, and as a result of the contract review process.

3.2.3.1 Onsite inspection

As a part of the verification activities a physical site visit was executed to the project activity's location, details of which can be seen in the Table below:

Site visit details

Date	*06/02/2024 and 07/02/2024*
Location	Serbia, Belgrade

Participant	Company Name	Role in the Organization / Role in the Site Visit
Dragomir Vasic	Re-carbon ltd.	Local expert
Vasilic Kostic	Mramorak Village	Villager
Miroslav Kegevic	Mramorak Village	Villager
İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Carbon Consultant
Nikola Stankovic	Zlatar Mramorak Doo	Manager of Biogas
Dusan Dobrikovic	Zlatar Mramorak Doo	Director of Biogas
Ersöz Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Carbon Consultant
Milan Mitrovic	Zlatar Mramorak Doo	General Manager
Petrov Filip	Zlatar Mramorak Doo	Operator
Zoran Tancic	Beotok	Director
Kristina Petrov Barus	Beotok	Personel
Milos Stanisavliovic	Stari Tamis Farm	Manager of farm
Pavlica Alexandra	Mramorak Village	Headman of Mramorak
Selen Cilasun	Re-carbon ltd.	Trainee Verifier
Rohit Badaya	Re-carbon ltd.	Team Leader (Remote)

Points Verified	*Source of Information*
Implementation and operation of the proposed BCR project activity as per the registered PD	Document review, on-site visit and interviews with the local stakeholders from Mramorak Village
Review of information flows for generating, aggregating, and reporting the monitoring parameters	Document review, on-site visit and interviews with the local stakeholders from Mramorak Village

Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD	Interviews with the local stakeholders from Mramorak Village
Cross-check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources	Document review and on-site visit
Check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD and the selected methodology	Document review, on-site visit and interviews with the local stakeholders from Mramorak Village
Review of calculations and assumptions made in determining the GHG data and emission reductions	Document review
Identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters	Document review and interviews with the local stakeholders from Mramorak Village

3.2.3.2 Interviews

During the verification period, follow-up interviews were performed by the verification team to further analyze the correctness and accurateness of the information provided.

The list of individuals who were interviewed during the verification site visit, executed on 06/02/2024 and 07/02/2024 is given in the Table below.

Reference Number	Means of Interview[1]	Full Name	Title	Organization
Io1	SV	Vasilic Kostic	Villager	Mramorak Village
Io2	SV	Miroslav Kegevic	Villager	Mramorak Village
Io3	SV	İncigül Erdoğan	Carbon Consultant	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Io4	SV	Nikola Stankovic	Manager of Biogas	Zlatar Mramorak Doo
Io5	SV	Dusan Dobrikovic	Director of Biogas	Zlatar Mramorak Doo
Io6	SV	Ersöz Erdoğan	Carbon Consultant	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Io7	SV	Milan Mitrovic	General Manager	Zlatar Mramorak Doo
Io8	SV	Petrov Filip	Operator	Zlatar Mramorak Doo
Io9	SV	Zoran Tancic	Director	Beotok

1 SV: Site visit; T: Telephone; E: E-mail; RA: Remote Assessment

Reference Number	Means of Interview[1]	Full Name	Title	Organization
I10	SV	Kristina Petrov Barus	Personel	Beotok
I11	SV	Milos Stanisavliovic	Manager of farm	Stari Tamis Farm
I12	SV	Pavlica Alexandra	Headman of Mramorak	Mramorak Village

3.2.3.3 Findings

The Verification Protocol is written by the verification team in line with the descriptions above. All CARs, CLs and FARs are listed transparently and clearly.

During the verification period, a Verification Protocol was used to submit the findings to the project participants.

In line with Re Carbon Ltd. internal terminology and BCR Standard version 3.4, the team reports the non-conformities in the forms of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). When and for which type of non-conformities CARs, CLs and FARs are issued are explained below.

The Verification team raises a CAR if one of the following occurs:

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions
- The CDM and/or BCR requirements have not been met
- There is a risk that emission reductions cannot be monitored or calculated.

The Verification team raises a CL if information is insufficient or not clear or not sufficiently transparent to determine whether the applicable CDM and/or BCR requirements have been met.

The Verification team raises a FAR during the verification to highlight issues related to project implementation that require a review during the first verification of the project activity.

According to these principles, a total of 39 CARs, 07 CLs and 00 FARs were raised; all of which are listed in the Verification Protocol.

3.3 Verification team

The appointment process of the verification team considers the technical area(s), sectoral scope(s), and relevant host country experience required amongst team members for the accurate and thorough assessment of the project design. The relevant BCR verification and previous ITR experiences are also assessed during the selection of the team members and the Independent Technical Reviewer (ITR), respectively. The verification team and ITR were assigned to this verification activity on 10/11/2023, taking all the above factors into consideration and as a result of the contract review process.

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Involvement*
Mr. Rohit Badaya	Team Leader	☐	☒	☒	A, DR, RA, R
Ms. Selen Cilasun	Trainee Verifier	☐	☒	☒	A, DR, SV, R
Mr. Dragomir Vasic	Regional Expert	☒	☒	☒	A, DR,SV,R
Mr. Abdulkadir Bektaş	Agriculture Expert	☐	☒	☒	A, DR, R
Mr. Sandeep Kanda	ITR	☐	☒	☒	ITR

* Explanations for the abbreviations used for involvement types are as follows:

A : Administrative

DR : Desk Review

SV : Site Visit

RA : Remote Assessment[2]

R : Reporting

ITR : Independent Technical Review

How the team meets the compliance required for the verification and lists the documentation that supports the competencies of the verification team needed for the BCR Validation and Verification Manual is given in Annex 1.

4 Validation findings

The Validation Protocol is written by the validation team in line with the descriptions above. All CARs, CLs and FARs are listed transparently and clearly.

During the validation period, a Validation Protocol was used to submit the findings to the project participants.

In line with Re Carbon Ltd. internal terminology and BCR Standard version 3.4, the team reports the non-conformities in the forms of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). When and for which type of non-conformities CARs, CLs and FARs are issued are explained below.

The Validation team raises a CAR if one of the following occurs:

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions
- The CDM and/or BCR requirements have not been met
- There is a risk that emission reductions cannot be monitored or calculated.

The Validation team raises a CL if information is insufficient or not clear or not sufficiently transparent to determine whether the applicable CDM and/or BCR requirements have been met.

The Validation team raises a FAR during the validation to highlight issues related to project implementation that require a review during the first verification of the project activity.

According to these principles, a total of 39 CARs, 07 CLs and 00 FARs were raised; all of which are listed in the Validation Protocol.

4.1.1 Methodology deviations

N/A

4.1.2 Changes after project registration

The project holder, Zlatar Mramorak Doo. However, the contact person has been changed to Dušan Dobriković. He is Plant Manager at Bio Gold Energy doo, the declaration from the company has been provided to the Re-carbon Ltd team. In the registered PD, food waste sources were indicated different. However, the project owner is buying the waste food from Eko Maber, Beotok and Eko Smart. These companies source is not project owner's source, therefore it has been corrected. During physical site visit VVB checked and confirmed that Eko Maber, Beotok and Eko Smart are the food waste source for the project. The deviations are described in detail as follows:

Temporary Deviation:

There were no temporary changes from the registered monitoring plan, the applied methodologies, or other BCR regulatory documents during this monitoring period. The design and operation of both Mramorak 1 and Mramorak 2 remained fully in line with the registered project documentation. Therefore, no deviations occurred, and no alternative monitoring arrangements or conservative approaches were required.

Permanent Changes:

- Corrections: There were no permanent changes to the project design, monitoring plan, applied methodologies, or any other BCR regulatory

documents during this monitoring period. Both Mramorak 1 and Mramorak 2 continued operation as originally registered, with no modifications requiring updates to the project documentation.
However, as compared to the registered project PDD, one monitoring parameter is changed to reflect the actual climatic conditions of the project location. Defaultorg,x was defined according tropical wet conditions as per the Tool 04, but this parameter was redefined in the first monitoring period as Boreal/temperature dry. This revision creates a more conservative approach in emission reduction calculations. In the next monitoring periods, this change shall be valid as Defaultorg,x would be taken according to the Boreal/temperature dry.

- Permanent changes to the monitoring plan, BCR program methodologies in use, or other regulatory documents related to BCR program methodologies: There have been no permanent changes to the registered monitoring plan, applied methodologies, or other BCR regulatory documents since the registration of the project activity. Accordingly:
    - No changes were approved by the BCR Technical Committee prior to this monitoring period;
    - No changes were approved by the BCR Technical Committee during this monitoring period;
    - No changes are being submitted with this monitoring report as post-registration changes.

  The project activity has continued as originally registered without any permanent deviations.

- Changes to GHG project design: There have been no changes to the project design of the project activity since its registration. Accordingly:
    - No changes were approved by the Board prior to this monitoring period;
    - No changes were approved by the Board during this monitoring period;
    - No changes are being submitted with this monitoring report as post-registration changes under the issuance track.

  The project design remains exactly as originally registered.
  There is no post registration changes within the project activity.

4.1.3 Other GHG program

CAB (VVB) has checked the I-REC Registry (https://register.evident.global/device-register), the project is not registered to the I-REC Registry, so there is no double counting in the project for this quantification period. A declaration about double counting has been provided by the project owner. Similarly, GS project database (https://registry.goldstandard.org/projects?q=&page=1), VCS (https://registry.verra.org/app/search/VCS/All%20Projects) and GCC project database (https://projects.globalcarboncouncil.com/pages/submitted_projects) were checked for double counting and this project isn't available within GS and GCC projects' databases and any other other GHG program or registry, and therefore no deregistration process or cancellation evidence is applicable. Given that CDM projects are not applicable in Serbia and the project does not appear on domestic REC scheme, I-REC other registries and any mechanisms related to the paris agreement and there is no overlap with any other policies, programs, or mechanisms. It also does not make any Scope 3 emission claims, and all public communications are aligned with the BCR guidance to avoid double claiming risks. The project does not participate in any emission trading program and other GHG Programs including renewable energy certificates (RECs) and this is also confirmed. It could be confirmed that no RECs and other VER carbon credits are being issued for the project at the time of this process. Hence the project activity is not subject to any form of double counting, including double issuance, double claiming, or double use. The project has been implemented in accordance with the latest version of the BCR Avoiding Double Counting Tool, and no conflicts or overlaps there have been.

Furthermore, the project has not yet obtained the Host Country Attestation (letter of authorization or letter of approval). This is because the host country (Serbia) currently does not issue such attestation letters. Once the host country begins issuing these documents, Zlatar Mramorak Doo will proceed with the necessary steps to obtain the attestation in accordance with the requirements of BioCarbon Cert. Until then, the project affirms its exclusive claim to environmental and carbon-related benefits under the BioCarbon Cert Standard, and confirms that no double counting, double claiming, or double issuance will occur.

4.1.4 Grouped projects (if applicable)

Mramorak 1&2 project is a bundled project by bundling two identical biogas power plant systems. Mramorak 1&2 project is not a grouped project as per the definition provided in the BioCarbon Registry Voluntary Carbon Market Standard, Version 2.0, Nov 2022.p.36

5 Verification findings

5.1 Project and monitoring plan implementation

5.1.1 Project activity implementation

Project activity consists of the identical Mramorak 1&2 Biogas Power Plants are also part of a bundled Greenfield project activity that uses anaerobic treatment to reduce greenhouse gas emissions through methane recovery and replace carbon-intensive Serbian EPS grid electricity with renewable biogas energy. Re-carbon team checked and verified this by physically being on-site. Each biogas plant has an installed capacity of 0.999 MW, making the project's total installed capacity 1.998 MW. This information was confirmed with the generation license and crosschecked via generation values. Utilizing the biogas produced by the anaerobic treatment of organic wastes and plant residues, the project generates renewable electricity. Organic wastes include cattle manure, both in liquid and solid form, plant-based organic wastes (starch waste, liquid starch waste, CSL), waste from plants (silage corn and silage barley) and non-hazardous food wastes. Re-carbon team visited these sources. The project runs twenty-four hours a day as full-time. The project's two primary technological components are as follows. These are gas engine units and anaerobic digesters. Organic wastes are anaerobically digested and treated by main digesters and post-digesters; gas engine units generate renewable heat and electricity. The digested effluent from the post-digester units was transformed into an organic fertilizer rich in nutrients, which the project owner uses as fertilizer. The team checked this information during the physical site visit and cross-checked it with technical information documents.

The project activity started operation on 24/06/2020 with Mramorak 1. Mramorak 2 began its operation as planned on 26/03/2021. During the monitoring period (24/06/2020 – 31/12/2023), Mramorak 1 operated continuously, while Mramorak 2 has been operating since its start date. Both plants have been generating electricity from anaerobic digestion of organic waste. No events occurred that significantly impacted GHG emission reductions during the first monitoring period.

Both plants operated with no major disruptions. Routine maintenance was performed, and flare use was minimal, only during occasional digester maintenance. No equipment replacements or major downtime occurred. No events occurred that affected the applicability of the methodology. Operations remained fully in line with the approved methodology.

Carbon credits created by the Mramorak1&2 project are represented and owned by the Zlatar Mramorak Doo.

The project's technical characteristics have not changed since its beginning on June 24, 2020, which also happens to be the start date of the project's first quantification period. As a result, the project has been run smoothly throughout the first monitoring period, which runs from June 24, 2020, to December 31, 2023, without any equipment overhauls or downtime. There were no noteworthy occurrences during the observation period that could have affected the methodology's applicability.

The 74,421 tCO2 emission reductions were accomplished by the project during this monitoring period. Based on the local and technical expertise of the team Re-carbon ltd checked and confirmed.

5.1.2 Monitoring plan implementation and monitoring report

The monitoring plan is in accordance with the approved methodology, AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0, applied by the project activity.

In line with the relevant methodology, the MR reports on all parameters. The amount of biogas generated is measured using flow meters, methane content in the biogas is set as the default value, the volatile solids content of animal manure, the quantity of manure treated measured through weighbridge, number of plant operational days, net quantity of heat based on steam supplied with associated temperature and pressure for enthalpy determination deducting the condensate return and electricity fed into the grid by the project is monitored continuously by redundant metering devices, two of them being the main ones at the substation, which provides the data for the monthly invoicing to EPS Distribucija Doo. Fuel consumption due to the project activity in transporting the manure from farms to the project plant being based on average truck capacity and measured average incremental distance for material transportation. The physical site visit and review of documents confirm that the monitoring has been carried out in accordance with the registered monitoring plan.

The total volumetric flow of biogas to the gas engines and flares from the digestors is measured by TecJet 110 mode flow meters with serial numbers 22184210 (Mramorak 1) and 21813660 (Mramorak 2). Operational hours of the treatment plant are monitored continuously. Gas is analyzed by the Awite gas analyzer, type AwiFLEX Cool+. It measures values of methane, carbon dioxide, oxygen and hydrogen sulfide. The serial number of the gas analyzer is 2774. Desulphurisation has been occured by Awite device, type AwiDesulf 500. It is pumping oxygen inside the Digesters in small amounts 0%-1% in total, keeping alive the colonies of bacteria that are fed by sulfur.

The net electricity is measured continuously by a main meter at the grid interface and recorded monthly. Electricity has been delivered to the Serbian EPS grid system through the sub-station which is 0,1 km away from the project site. There are also power meters at the substation. The serial numbers of these meters are 25 63 21(Mramorak 1) 25 63 23 (Mramorak 2). Electricity generation is measured continuously at the substation. The meters used are in line with the regulatory requirements for electricity meters.

The main meters of accuracy class of 0.5/1.0 having serial numbers 43 267 888 (Mramorak 1) and 44 202 354 (Mramorak 2), Landis+Gyr E650 make for the main meters respectively are used at the project site. Calibrations have been carried out according to the applicable national regulation, called as “Pravilnik o overavanju merila” (“Serbian Rulebook on certification of benchmarks” in English).

All these parameters have been monitored continuously during the current monitoring period. The records of the same could be verified.

The electricity meters have been controlled and maintained by the grid owner. The quantity of net electricity delivered to the grid has been calculated with the EPS Distribucija doo records. All readings and billings are done via EPS Distribucija doo, which is the legal database of the ministry.

A computerized system is available from which daily reports are taken. The data collected daily is saved in the plant manager's computer and backed up. Records were checked during the physical visit followed by a desk review of submitted documents and there were no differences in data.

5.1.2.1 Data and parameters

5.1.2.1.1 Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

All the parameters determined at registration and not monitored during the monitoring period are listed in Section 15.2.1 of MR and found appropriate. The values of all the ex-ante parameters are found inline with the applied methodology and registered PDD.

5.1.2.1.2 Data and parameters monitored

All parameters required by the methodology and BCR Standard are monitored. The parameters were monitored and determined as per the monitoring plan of the BCR PD(version 1.5 dated 24/08/2023) . The amount of biogas captured and gainfully destroyed was based on the monitoring system.

Monitoring parameters include the following:

- f_y: Fraction of methane captured at the SWDS and flared, combusted or used in another manner that prevents the emissions of methane to the atmosphere in year y (fraction). According to the Serbian regulation "Regulation on the disposal of waste in landfills" ("Official Gazette of RS", No. 92/2010), there is no legal obligation to install or operate a landfill gas (LFG) capture or flaring system at municipal solid waste disposal sites.

  Article 6 of the Regulation refers to the use of degassing systems as a possible technical measure to ensure air protection, but it does not mandate their implementation. The wording clearly states that such systems are to be applied "where appropriate" and are not uniformly required across all sites. Although Annex 2 mentions that if landfill gas is collected, it should preferably be used for energy or, alternatively, flared — this applies only in cases where a gas collection system is voluntarily or project-specifically implemented. The regulation does not require LFG collection, nor does it impose flaring as a legal obligation at the national

level.[3] Regulation on the disposal of waste in landfills" ("Official Gazette of RS", No. 92/2010).[4]
Therefore, the assignment of fy = 0 in the baseline scenario is consistent with national legislation and reflects actual conditions at the baseline conditions. Measured records have been provided. Value is "0 (zero)". The value has been checked in the records and confirmed.

- $W_{j,x}$: Amount of solid waste type j disposed or prevented from disposal in the SWDS in the year x (ton/year). Logbook has been provided by PP. Project proponents log book records that show the municipal organic wastes accepted by the Mramorak1&2. Project received one type of solid waste, which is the municipal food waste. Only municipal food waste is considered under this parameter; other waste types are monitored separately.

  VVB checked values and confirmed in below:

Year	*Municipal solid food waste (ton)*
24/06/2020-31/12/2020	*0*
01/01/2021-31/12/2021	*249.22*
01/01/2022-31/12/2022	*3,223.56*
01/01/2023-31/12/2023	*2,378.16*
Total	*5,840.94*

- $N_{LT,y}$: Annual average number of animals of type LT in year y (number). Farm records have been checked and confirmed by VVB in below:

[3] *https://pravno-informacioni-sistem.rs/eli/rep/sgrs/vlada/uredba/2010/92/1 The Pravno-informacioni sistem Republike Srbije is the authorized online archive for Serbian legislation and includes texts from the Službeni glasnik (Official Gazette)*

[4] *s of July 2025, the "Regulation on the disposal of waste in landfills" (Official Gazette of RS, No. 92/2010) remains the most recent and legally binding regulation governing landfill operations in the Republic of Serbia. No amendments, repeals, or consolidated versions have been published since its original adoption. This has been confirmed through the official Electronic Legal Information (ELI) portal of the Republic of Serbia and the Ministry of Environmental Protection's list of current environmental regulations:*
ELI Legal Portal: https://www.pravno-informacioni-sistem.rs/eli/rep/sgrs/vlada/uredba/2010/92/1
Ministry Regulation Index: https://www.ekologija.gov.rs/sites/default/files/inline-files/List_of_regulations.pdf

Year	Ndairy cow	Neon-dairy cow
24/06/2020-31/12/2020	471	336
01/01/2021-31/12/2021	1,528	1,911
01/01/2022-31/12/2022	1,416	1,837
01/01/2023-31/12/2023	1,340	1,763
Total	4,754	5,847

- $MS_{\%BI,j}$: Fraction of manure handled in baseline animal manure management system j (fraction). Project owner disposed all of the manure produced by the cattle farms to the open lagoon at the baseline scenario. During physical site visit VVB checked and confirmed that All the manure produced by the farms are taken to the Mramorak1&2 digesters. Thus, project achieved 100%.

- $Q_{manure,y}$: Quantity of raw waste/manure treated and/or wastewater co-digested in the year y (tonnes). Records have been checked during physical site visit and confirmed value in below:

Year	$Q_{manure,y}$ (ton)
24/06/2020-31/12/2020	0[5]
01/01/2021-31/12/2021	4,493.90
01/01/2022-31/12/2022	7,488.52
01/01/2023-31/12/2023	7,425.85
Total	19,408.27

- $Q_{SWDS,y}$: Quantity of raw waste/manure treated and/or wastewater co-digested in the year y (tonnes). Records have been checked during physical site visit and confirmed value in below:

[5] In 2020, manure waste from the onsite farm, Mramorak farm, were put into the digesters. No manure received from Stari Tamis in 2020.

Year	$Q_{SWDS,y}$
24/06/2020-31/12/2020	*0*
01/01/2021-31/12/2021	*249.22*
01/01/2022-31/12/2022	*3,223.56*
01/01/2023-31/12/2023	*2,378.16*
Total	*5,850,94*

- $Q_{res\ waste,y}$: Quantity of residual waste produced in year y (ton). Records have been checked during physical site visit and confirmed value in below:

Year	$Q_{res\ waste,y}$
24/06/2020-31/12/2020	*2,744.38*
01/01/2021-31/12/2021	*12,414.86*
01/01/2022-31/12/2022	*13,199.06*
01/01/2023-31/12/2023	*12,026.09*
Total	*40,384.39*

- CT_y: Average truck capacity for transportation (tonnes/truck). Records have been checked during physical site visit and confirmed value in below:

18.5 ton/truck for manure
18.5 ton/truck for manure

- $CT_{res\ waste,y}$: Average truck capacity for residual transportation (tonnes/truck). Records have been checked during physical site visit and confirmed that '' 10 ton/truck" is correct.

- DAF_W: Average incremental distance for raw solid waste/manure and/or wastewater transportation (km/truck). Records have been checked during physical site visit and confirmed value in below:

Year	*DAF_{manure}*	*DAF_{food}*
24/06/2020-31/12/2020	*0*	*0*
01/01/2021-31/12/2021	*37.0*	*60.6*
01/01/2022-31/12/2022	*37.0*	*60.6*
01/01/2023-31/12/2023	*37.0*	*60.6*

- $DAF_{res\ waste,y}$: Average distance for residual waste transportation (km/truck). Records have been checked during physical site visit and confirmed that:

  The first monitoring period achieved value: 6.5 km/truck.

- $FC_{i,f}$: Specific consumption of fuel type f in volume or mass units per km for vehicle type i (kg/km) VVB checked and confirmed average consumption of diesel and confirmed that:

  The first monitoring period achieved value: 0.2771 kg/km.

- nd_y: Number of days the central treatment plant was operational in year y (number) Records have been checked and confirmed in value below:

Year	*nd_y*
24/06/2020-31/12/2020	*191*
01/01/2021-31/12/2021	*365*
01/01/2022-31/12/2022	*365*
01/01/2023-31/12/2023	*365*

- $FV_{RG,h}$: Volumetric flow rate of the captured biogas on a dry basis at normal conditions in hour h (m3/hr) Records have been checked and confirmed in value below:

Year	*$FV_{RG,h}$*
24/06/2020-31/12/2020	*503,79*
01/01/2021-31/12/2021	*982,61*
01/01/2022-31/12/2022	*1,004.75*

01/01/2023-31/12/2023	*1,002.12*

- $Fv_{CH4,RG,h}$: Volumetric fraction of methane in the captured biogas on a dry basis in hour h (fraction) Records have been checked and confirmed in value below:

Year	$v_{CH4,RG,h}$
24/06/2020-31/12/2020	*54.36*
01/01/2021-31/12/2021	*55.44*
01/01/2022-31/12/2022	*54.67*
01/01/2023-31/12/2023	*55.41*

- $EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh) The invoices issued by the EPS Distribucija have been checked and confirmed in value below:

Year	*Net electricity generation MWh*
24/06/2020-31/12/2020	*4,146.36*
01/01/2021-31/12/2021	*13,752.31*
01/01/2022-31/12/2022	*15,470.05*
01/01/2023-31/12/2023	*15,822.92*
Total	*49,191.63*

- Average Annual Temperature of Belgrade (°C) Government official published data have been checked and confirmed 13.9 *°C* for 2020, 13.7 *°C* for 2021 and 14.5 *°C* for 2022. There is no governmental data for 2023 however previous years have been used for related dates as 5 *°C.* (https://www.hidmet.gov.rs/data/klimatologija/eng/2020.pdf, Appendix, Chart 1, p.13.

https://www.hidmet.gov.rs/data/klimatologija/eng/2021.pdf, Appendix, Chart 1, p.16.
https://www.hidmet.gov.rs/data/klimatologija/eng/2022.pdf, Appendix Chart 1, p.16.)

- $V_{t,db}$: Volumetric flow of the gaseous stream in time interval t on a dry basis (m^3/hr) (Calculations and data have been checked and confirmed).

Mramorak1: 550 m3/hr
Mramorak2: 550 m3/hr

- $V_{i,t,db}$: Volumetric fraction of greenhouse gas i in the gaseous stream in a time interval t on a dry basis (m^3/m^3) (Records have been checked and confirmed).

Year	*$v_{i,t,db}$ ($v_{CH_4,t,db}$) m^3 / m^3*
24/06/2020-31/12/2020	*0.5436*
01/01/2021-31/12/2021	*0.5544*
01/01/2022-31/12/2022	*0.5467*
01/01/2023-31/12/2023	*0.5541*

- η_{flare}: Flare efficiency in the minute m (%) (Flare units are enclosed type. As per the Tool 06, option A is chosen as flare efficiency, which is confirmed by VVB).

- Number of employees working at the project activity ***:*** *The project owner's employee records and social security records have been checked and VVB confirmed that:*

Year	*Number of employees working at the project activity*
24/06/2020-31/12/2020	*9*
01/01/2021-31/12/2021	*9*
01/01/2022-31/12/2022	*9*

01/01/2023-31/12/2023	9

The amount of electricity fed into the grid by the project was monitored continuously by redundant metering devices, two of them being the main ones at the substation, which provides the data for the monthly invoicing to EPS Distribucija doo. Acknowledging that only two engines are part of the project activity for which emission reductions can be claimed, the apportioning of the net generation was done based on the share of generation from engine 1 and engine 2 as compared to the overall generation. Also, discounting methane from the wastewater treatment plant is conducted.

Furthermore, the amount of fossil fuel use was also monitored in the context of project emissions.

As there are no missing parameters, monitoring is complete. The verification team can confirm that the monitoring has been carried out in accordance with the monitoring plan contained in the BCR PD.

5.1.2.2 Environmental and social effects of the project activities

According to the Environmental Protection Law of Serbia, biogas power plants with an installed capacity of less than 1 MWe are exempted from environmental impact analysis due to their minimal environmental impacts. In the project activity, each biogas plant has an installed capacity of 999 kWe which is less than 1 MWe. Therefore, conducting an environmental impact analysis was not required. However, as per the legal obligations of laws and regulations of Serbia, project complies with all the environmental and waste management regulations to prevent any potential negative impacts. Regarding waste management, the project received the permits with the registration numbers of 12 and 13 from the Kovin Municipal Administration-Department for Urban Planning and Housing Communal Affairs. The relevant permits have been provided by the project owner and found appropriate.

There is a positive effect on the environment because of the prevention of methane emissions to the atmosphere that would happen in the absence of the project activity. As per the legal obligations of laws and regulations of Serbia, the project complies with all the environmental and waste management regulations to prevent any potential negative impacts. project activity developed “a working plan for the waste management of the facility” which provides a detailed plan regarding proper

management of the waste activities. This work plan is of February 2021 and it will be updated every three years as per the requirement of the Permit to reflect the changes in the procedures of waste management at the facility. Since the monitoring period is from 24/06/2020 to 31/12/2023 and within 3 years from the last work plan, hence found Ok and hence also complies with the BCR: No Net Harm Environmental and Social Safeguards tool requirements. Next work plan will be applicable to the next verification period of the project activity. The community supports the initiative in terms of its socioeconomic effects. The project was seen by the local population as having a favorable environmental impact. Six individuals are employed by the project, two of whom are locals, supporting the local economy.

When it comes to the distance between the project site and nearby facilities that could be impacted by the waste management operation of the project, there are none, including sports fields, playgrounds for kids, schools, etc. Therefore, the project's activities have no detrimental effects on the lives of the locals.

In addition, Kovin Municipality works with interested parties to get their perspectives on the project during the permit application process. The project owner published the project on the Kovin Municipality website during the application procedure, and no public comments or suggestions regarding the project activities were received.

Stakeholders are notified during the meeting and further in-person communications that they can always get in touch with the project plant manager in person or over the phone at any time to voice their complaints in the future. Additionally, it was guaranteed that a grievance record notebook would be available for stakeholders to file complaints at the Mramorak village municipality office.

As of right now, interested parties can contact the plant manager via phone or in person, and they can also use the grievance notebook to voice their objections.

In the event that stakeholders offer unfavorable comments, the project manager will get in touch with them and address the matter.

A more comprehensive assessment on environment has been conducted in the Mramorak 1&2 project's BCR Tool regarding Sustainable Development Safeguards.

5.1.2.3 Procedures for the management of GHG reductions or removals and related quality control for monitoring activities

Project emissions of the project activity are estimated as per the AMS-III.AO and AMS-I.D methodologies and applicable tools as per these methodologies as provided to estimate project emission reductions correctly, the project owner has a robust data management system where it archives applicable parameters that are used in project emission calculations.

5.1.2.4 Description of the methods defined for the periodic calculation of GHG reductions or removals and leakage

Project emissions of the project activity are estimated as per the AMS-III.AO and AMS-I.D methodologies and applicable tools as per these methodologies. To estimate project emission reductions correctly, project owner has an robust data management system where it archives applicable parameters which are used in project emission calculations. Please see Section 16.1 to see the parameters required for project emission calculations, which are monitoring parameters at the same time. Monitoring parameters are already monitored in a conservative and provable way as per the AMS-III.AO and AMS-I.D.

5.1.2.5 Assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals

The accountant's office is the natural identity that already archives some of the monitoring parameters as part of its business. The average number of animals for dairy and non-dairy cows, and value, electricity generation and consumption data, and fuel consumption by the trucks are archived at the accountant's office. The volumetric flow rate of the captured biogas and the volumetric fraction of methane in the captured biogas are monitored and recorded by the Biogas Plant Department. At the Gas Station department, power meters installed within the gas engine units will produce auxiliary data that will be used for cross-checking the electricity generation by the project activity. Power meters at the grid substation are not monitored by the project owner. These meters are controlled by the EPS Distribucija doo, which is the government company buying the electricity from the project owner. All calibration and control of these power meters at the grid substation are under the control of the EPS Distribucija doo.

5.1.2.6 Procedures related whit the assessment of the project contribution whit the Sustainable Development Goals (SDGs)

Regarding the United Nations Sustainable Development Goals (SDGs), the Mramorak 1&2 project achieves the following SDGs:

SDG 7 Affordable and Clean Energy / SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix / SDG 7.2.1 Renewable energy share in the total final energy consumption:

The project's contribution to SDG 7 is monitored through continuous measurement of electricity generation from renewable sources. Electricity output from the gas engine units is measured by calibrated Landis+Gyr E650 meters installed at the project site and substations. The net electricity supplied to the Serbian EPS grid is cross-checked with the monthly invoices issued by EPS Distribucija Doo. Internal power meters provide additional data for verification. All readings are recorded and archived by the Gas Station and Accountant Office departments as part of regular operational processes.

CAB (VVB) checked and confirmed that project activity generates renewable energy, about 15,500 MWh annually, by capturing biogas from cattle manure, non-hazardous food wastes, plant wastes (starch waste, liquid starch wastes, CSL) and agricultural plant residues (slage corn and slage barley) via anaerobic digestion and supplies it to the fossil fuel dominated Serbian EPS grid system. In this way, the project contributes to the SDG 7.2. target and the relevant indicator is SDG 7.2.1.

SDG Goal 8 Decent Work and Economic Growth /SDG 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value / 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities

The number of employees working at the Mramorak 1&2 project activity is directly monitored to assess the project's contribution to SDG 8.5 on full and productive employment. This parameter is measured annually and validated using the project owner's employee records and official social security documentation.

During the first monitoring period (24/06/2020 – 31/12/2023), the project consistently employed 9 people each year, exceeding the baseline estimate of 6 employees. Employment data is recorded and archived as part of the company's routine administrative and HR processes, ensuring transparency and traceability for third-party verification.

CAB (VVB) checked and confirmed that the project created job opportunities during both the construction and operation phases. During operation, the project employs 9 people and 2 of them are from local villages.

SDG Goal 13 Climate Action/ SDG 13.2 Integrate climate change measures into national policies, strategies and planning / SDG 13.2.2 Total greenhouse gas emissions per year:

GHG emission reductions are calculated based on the volume and methane content of captured biogas. These parameters are measured by TecJet 110 flow meters and the AwiFLEX Cool+ gas analyzer. Data is monitored continuously by the Biogas Plant department and recorded for estimation of avoided methane emissions. Monitoring complies with AMS-III.AO and AMS-I.D. methodologies, and calculations are validated by the carbon consultant. Monitoring equipment is maintained and calibrated according to Serbian regulations to ensure data accuracy.

CAB (VVB) checked and confirmed that the project will naturally play an important role in global climate change mitigation activities by preventing emissions of methane that would otherwise be released to the atmosphere in the baseline conditions. The project annually achieves 21,667 tCO2 emission reduction. In this way, it contributes to SDG 13 goals of the UN.

The assessment of project contribution with the sustainable developmemt goals have been checked with the BioCarbon SDG Tool and found appropriate.

5.1.2.7 Procedures associated with the monitoring of co-benefits of the special category, as applicable

N/A

5.2 *Quantification of GHG emission reductions and removals*

5.2.1 Baseline or reference scenario

CAB(VVB) checked and confirmed calculations below:

$$\mathbf{BE_{Mramorak1\&2,y} = BE_{SWDS,y} + BE_{manure,y} + BE_{elect,y}}$$

In this formula, baseline emission as per the AMS-III.AO is indicated as "$BE_{SWDS,y}$ + $BE_{manure,y}$". Baseline emission that comes from AMS-I.D is indicated as $BE_{elect,y}$.

Following parts of this section provides how this formula is derived from AMS-III.AO and AMS-I.D.

Baseline emission calculations are provided in the associated excel file (Mramorak1&2_ER_CalculationsRev.xls).

As per the AMS-III.AO methodology, baseline emission is as follows:

$$BE_y = BE_{SWDS,y} + BE_{ww,y} + BE_{manure,y} - MD_{reg,y} \times GWP_{CH_4}$$

(Eq. 1)

Where,

$BE_{SWDS,y}$	Where applicable, yearly methane generation potential of the solid waste anaerobically digested by the project activity during the year x from the beginning of the project activity (x=1) up to the year y estimated as per the latest version of the "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site" (tCO_2e). The tool may be used with the factor "f=0.0" assuming that no biogas is captured, flared or used. With the definition of year x as the base year since the project activity started diverting wastes from the SWDS/landfill site. x runs from the first year of the crediting period (x=1) to the year for which emissions are calculated (x=y). Where applicable, baseline emission determination of digested waste that would otherwise have been disposed in stockpiles shall follow relevant procedures in AMS-III.E
$BE_{ww,y}$	Where applicable, baseline emissions from the wastewater co-digested, calculated as per the procedures of AMS-III.H
$BE_{manure,y}$	Where applicable, baseline emissions from the manure co-digested by the project activities, calculated as per the relevant procedures of AMS-III.D

$MD_{reg,y}$	Amount of methane that would have to be captured and combusted in the year y to comply with the prevailing regulations (ton)
GWP_{CH4}	GWP for CH4

In Republic of Serbia, as per the laws, there is no regulation or legal enforcement to capture methane from manure treatment plants, wastewater treatment plants or SWDSs. Therefore $MD_{reg,y}$ is taken as zero in calculations.

GWP for CH4 is taken as 28 as per the IPCC Fifth Assessment Report.[6]

Project activity claims carbon emission reduction for manure ($BE_{manure,y}$) and municipal solid waste ($BE_{SWDS,y}$)

Hence the formula is simplified as;

$$\mathbf{BE_y = BE_{SWDS,y} + BE_{manure,y}}$$

Baseline Emission for Municipal Solid Waste ($BE_{SWDS,y}$)

AMS-III.AO ver. 1.0. refers to the ""Emissions from solid waste disposal site" Version 8.0." for food waste baseline emission reductions. Project activity only uses organic municipal solid waste and they are wet based. Therefore equation 15 of the Tool 04 is used.

$$BE_{CH4,SWDS,y} = \varphi_y \times (1 - f_y) \times GWP_{CH4} \times \sum_{x=1}^{y} Default_{org,x} \times W_{org,x}$$

[6] https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf.

$BE_{CH4,SWDS,y}$	Baseline, project or leakage methane emissions occurring in year y generated from waste disposal at a SWDS during a time period ending in year y (t CO2e/yr)
x	Years in the time period in which waste is disposed at the SWDS, extending from the first year in the time period (x = 1) to year y (x = y)
y	Year of the crediting period for which methane emissions are calculated (y is a consecutive period of 12 months)
φ_y	Model correction factor to account for model uncertainties for year y
$W_{j,x}$	Amount of solid waste type j disposed or prevented from disposal in the SWDS in the year x (t)
f_y	Fraction of methane captured at the SWDS and flared, combusted or used in another manner that prevents the emissions of methane to the atmosphere in year y
GWP_{CH4}	Global Warming Potential of methane
$Default_{org,x}$	The value of $Default_{org,x}$ depends on the climate zone (Boreal/ temperature dry). These values were derived by an analysis of registered CDM projects with verified waste compositions, and the $Default_{org,x}$ values are selected to ensure conservativeness of the resulting baseline emissions (using 95% confidence and 10% precision)

Baseline Emission for Manure ($BE_{manure,y}$)

AMS-III.AO refers to the latest version of the AMS-III.D methodology.

AMS-III.D Methane recovery in animal manure management systems, Version 21.0.[7]

The baseline scenario is the situation where, in the absence of the project activity, animal manure is left to decay anaerobically within the project boundary and methane is emitted to the atmosphere. Baseline emissions (BEy) are calculated by using one of the following two options:

To calculate baseline emission by manure, Option a is chosen.

$BE_{manure,y} = GWP_{CH4} \times D_{CH4} \times UF_b \Sigma(MCF_j \times B_{o,LT} \times N_{LT,y} \times VS_{LT,y} \times MS_{\%Bl,j})$

Where,

$BE_{manure,y}$ (BE_v)	Baseline emissions in year y (t CO2e)
GWP_{CH4}	Global Warming Potential (GWP) of CH4 applicable to the crediting period (t CO2e/t CH4)
D_{CH4}	CH4 density (0.00067 t/m3 at room temperature (20 ºC) and 1 atm pressure)
LT	Index for all types of livestock
j	Index for animal manure management system
UF_b	Model correction factor to account for model uncertainties (0.94)
MCF_j	Annual methane conversion factor (MCF) for the baseline animal manure management system j

[7] https://cdm.unfccc.int/UserManagement/FileStorage/1AWXEKHVTYF423LCN56Z9GIMQOS8JR .

$B_{o,LT}$	Maximum methane producing potential of the volatile solid generated for animal type LT (m^3 CH_4/kg-dm)
$N_{LT,y}$	Annual average number of animals of type LT in year y (numbers)
$VS_{LT,y}$	Volatile solids production/excretion per animal of livestock LT in year y (on a dry matter weight basis, kg-dm/animal/year)
$MS_{\%Bl,j}$	Fraction of manure handled in baseline animal manure management system j

Annual temperature in the site where the anaerobic manure treatment facilities in the baseline existed, is 11.4°C[8], which is higher than 5°C.

AMS-I.D. Baseline emission from renewable energy part of the project activity

$$BE_{elect,y}=EG_{pj,y} \times EF_{grid,y}$$

Where:

$BE_{elect,y}$	Baseline emissions in year y (tCO_2)
$EG_{pj,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$EF_{grid,y}$	Combined margin CO2 emission factor for grid connected power generation in year *y* calculated using the latest version of the

[8] https://www.hidmet.gov.rs/data/klimatologija/eng/2021.pdf. P.2. Measured in 2021.

"Tool to calculate the emission factor for an electricity system" (tCO2/MWh)

In the absence of the project activity, same amount of electricity would be used from the grid. CEF_{grid} should be calculated according to Tool 07 *"Tool to calculate the emission factor for an electricity system"*. Version 07.0 is the latest revision of the tool.

Estimation of CEFgrid Emission Factor for Serbian grid system

Tool 07 was used to determine the CO_2 emission factor for the displacement of electricity generated by power plants in an electricity system, by calculating the "combined margin" emission factor (CM) of the electricity system.

As per the calculations as indicated in the validated Mramorak1&2 Biogas Power Plants BCR PDD, BCR-RS-493-1-001,

$EF_{grid,CM,y}$ = 1.078674742 tCO2/MWh

In the validated Mramorak1&2 Biogas Power Plants BCR PDD, BCR-RS-493-1-001, The grid emission factor (CEF_{grid}) was fixed ex-ante and will not be updated ex-post.

In summary, the assessment team confirms the following:

- The complete dataset is available for the first monitoring period. No data was found missing due to activity levels or all the parameters were monitored as per the registered monitoring plan, this should be identified;

- The information presented in the monitoring report has been verified against independent sources, such as plant logbooks, inventories, purchase records

- All the assumptions applied in the emission or removal calculations have been properly justified and found correct.

5.2.2 Conservative approach and uncertainty management

The project holder, is in charge of carrying out the monitoring plan. The director will see to it that the monitoring parameters are appropriately tracked, documented, and archived. The accountant office is a natural entity that, as part of its operations, already archives some of the monitoring parameters. The accountant's office archives the average number of dairy and non-dairy cows, the value of the ndy, data on power generation and consumption, and fuel use by the vehicles. The Biogas Plant department keeps track of and records the volumetric flow rate of the collected biogas as well as the volumetric fraction of methane in the captured biogas.

Power meters built into the gas engine units at the Gas Station department will generate supplemental data that will be utilized to double-check the amount of electricity generated by the project activities. The project owner does not keep an eye on the power meters at the grid substation. The government-owned business that purchases power from the project owner is called EPS Distribucija doo, and it is in charge of these meters. The EPS Distribucija doo is in charge of all calibration and control of these power meters at the grid substation.

Estimating the project activity's emission reductions is the responsibility of the carbon consultant.

Throughout the study, all data for each monitoring parameter—both ex-post and ex-ante—will be saved and maintained for longer than five years.

For power meters are calibrated every 12 years in accordance with this rule. Please refer to the regulation's line "for direct and semi-indirect connection," number 29. The power meters installed at the substation in accordance with the regulations are the ones that are calibrated every 12 years. As per the regulations, power meters placed in the codigesters at the project activity are exempt from calibration equipment requirements (see to regulation number 28). Furthermore, the power meters at the substation run by EPS Distribucija Doo are not yet calibrated because the project began on June 24, 2020. On June 24, 2030, the first calibration will be used. Power meters installed by the manufacturer business are technically a part of the cogeneration and are located in the gas engine units. The contract with EPS Distribucija Doo, the electricity distribution company that operates the electricity meters at the grid substation, has been submitted to VVB. In addition, the company Zlatar doo has provided a letter which assures and states that the calibration of the meters at the grid substation is the responsibility of EPS Distribucija Doo.

Besides project's emission reduction calculations are based on CDM methodologies, AMS-III.AO and AMS-I.D. According to methodologies, calculations based on a conservative approach.

CAB (VVB) confirms that, the information given above is correct and in line with regulations.

5.2.3 Leakage and non- permanence

According to AMS-III.AO, "Leakage effects are to be considered (LEy) if the project technology is the equipment transferred from another activity or if the existing equipment is transferred to another activity."Nothing from another activity was transferred to this project activity; everything was built from scratch. Leakage emission is therefore taken to be zero. LEy is equal to zero "The methodology is applicable to a programme of activities, no additional leakage estimations are necessary other than that indicated under the leakage section above," according to AMS-I.D. Section 7.

Since the project activity does not employ biomass and makes no claims for the reduction of CO_2 emissions from plant residues, leakage is calculated based on zero according to AMS-I.D.

As an additional note, although the project uses biodegradable organic waste (e.g. manure and food waste), these are classified under the CDM Glossary as biomass residues and biodegradable fractions of industrial and municipal wastes. The project does not divert biomass from other productive or energy uses, nor does it claim emission reductions from plant residue management.

All feedstocks (e.g., manure from farms and organic waste from municipal sources) are considered waste and would otherwise be disposed of in an uncontrolled manner (e.g., landfilling), leading to methane emissions. Since these materials are not subject to competitive use or market displacement, no leakage is considered to arise under the definitions of AMS-I.D and general CDM leakage guidance.

5.2.4 Mitigation result

Quantification of emission reductions of the project activity is calculated as per the AMS-III.AO and AMS-I.D. For the waste handling and disposal component of the project activity, AMS-III.AO is used. The project also claims carbon emission reductions due to the replacement of the electricity from the Serbian EPS grid system with renewable electricity produced by the project activity. For renewable components, AMS-I.D. is used AMS-III.AO Version 1.0: As per the applied methodology:

"The emission reductions achieved by the project activity will be determined ex post through direct measurement of the amount of biogas fueled, flared or gainfully used. It is possible that the project activity involves biomass treatment with higher methane conversion factor (MCF) than the MCF for the biomass which otherwise would have been left to decay in the baseline situation. Therefore the emission reductions achieved by the project activity is limited to the ex post calculated baseline emissions minus project and leakage emissions using the actual monitored data for the project activity (e.g. Qy, and fossil fuels/electricity used). The emission reductions achieved in any year are the lowest value of the following:"

$$ER_{y,ex\ post} = min\left[\begin{array}{l}(BE_{y,ex\ post} - PE_{y,ex\ post} - LE_{y,ex\ post}),(MD_y - PE_{y,power,ex\ post} - \\ PE_{y,transp,ex\ post} - PE_{y,res\ waste,ex\ post} - PE_{y,phy\ leakage,ex\ post} - LE_{y,ex\ post})\end{array}\right] \quad (4)$$

Where,

$ER_{y,\ ex\ post}$	Emission reductions achieved by the project activity based on monitored values for year y (tCO2e)
$BE_{y,\ ex\ post}$	Baseline emissions calculated using equation (1) using ex post monitored values (e.g. Qy) (tCO2e)
$PE_{y,\ ex\ post}$	Project emissions calculated using equation (2) using ex post monitored values (e.g. Qy, transport distances, the amount of electricity/fossil fuels used, emissions from anaerobic storage). This calculation shall include project emissions from physical leakage (tCO2e)

$LE_{y, ex\ post}$	Leakage emissions calculated using ex post monitored values (tCO2e)
MD_y	Methane captured and destroyed or used gainfully by the project activity in year y (tCO2e)
$PE_{y,transp, ex\ post}$	Emissions from incremental transportation based on monitored values in the year y (tCO2e)
$PE_{y,power,ex\ post}$	Emissions from the use of fossil fuel or electricity for the operation of the installed facilities based on monitored values in the year y (tCO2e)
$PE_{y,\ res\ waste,\ ex\ post}$	Methane emissions from the anaerobic decay/treatment of the residual waste/products based on monitored values in the year y (tCO2e)
$LE_{y, leakage, ex\ post}$	Methane emissions from physical leakages of the anaerobic digester based on monitored values in year y (tCO2e)

AMS-I.D: As per the applied methodology: $\mathbf{ER_y = BE_y - PE_y - LE_y}$

where:

ERy = Emission reductions in year y (t CO_2)

BEy = Baseline Emissions in year y (t CO_2)

PEy = Project emissions in year y (t CO_2)

LEy = Leakage emissions in year y (t CO_2)

Based on the above equations, the mitigation results have been calculated. CAB (VVB) confirmed that calculations are in line with methodologies.

	Estimated GHG emission reductions or removals (tCO2e)	*Acutal Net GHG emission reductions or removals (tCO2e)*

Emission reductions / removals (tCO_2)	*75,664*	*74,421*

There are a number of factors that contribute to differences between ex-ante estimation and monitored impacts. These include net electricity generation, the amount of food waste received, the number of animals, the average distance that the trucks travelled to carry manure, food waste and digestate, and so on. The values of these parameters for a specific year can either increase or decrease the comparison value (%). The total effect was found to be -1.67%, which can be stated as a very low difference.

Additionally, "$Default_{org,x}$" value in registered PDD changed to values according to the Boreal/temperature dry which is the most conservative approach to define the climatic condition of the project location. This also reduced the carbon credits during the first monitoring periood as compared to the baseline emissions.

Quantification of emission reductions of the project activity is calculated as per the" AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0". Project also claims carbon emission reductions due to the replacement of the electricity from the "Serbia" EPS grid system with renewable electricity produced by the project activity.

CAB (VVB) confirmed that calculations are in line with methodologies

5.2.4.1 GHG baseline emissions

CAB(VVB) checked and confirmed calculations below:

$$\mathbf{BE_{Mramorak1\&2,y} = BE_{SWDS,y} + BE_{manure,y} + BE_{elect,y}}$$

In this formula, baseline emission as per the AMS-III.AO is indicated as "$BE_{SWDS,y}$ + $BE_{manure,y}$". Baseline emission that comes from AMS-I.D is indicated as $BE_{elect,y}$. Following parts of this section provides how this formula is derived from AMS-III.AO and AMS-I.D.

Baseline emission calculations are provided in the associated excel file (Mramorak1&2_ER_CalculationsRev.xls).

As per the AMS-III.AO methodology, baseline emission is as follows:

$BE_y = BE_{SWDS,y} + BE_{ww,y} + BE_{manure,y} - MD_{reg,y} \times GWP_{CH4}$ (Eq. 1)

Where,

$BE_{SWDS,y}$	Where applicable, yearly methane generation potential of the solid waste anaerobically digested by the project activity during the year x from the beginning of the project activity (x=1) up to the year y estimated as per the latest version of the "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site" (tCO_2e). The tool may be used with the factor "f=0.0" assuming that no biogas is captured, flared or used. With the definition of year x as the base year since the project activity started diverting wastes from the SWDS/landfill site. x runs from the first year of the crediting period (x=1) to the year for which emissions are calculated (x=y). Where applicable, baseline emission determination of digested waste that would otherwise have been disposed in stockpiles shall follow relevant procedures in AMS-III.E
$BE_{ww,y}$	Where applicable, baseline emissions from the wastewater co-digested, calculated as per the procedures of AMS-III.H
$BE_{manure,y}$	Where applicable, baseline emissions from the manure co-digested by the project activities, calculated as per the relevant procedures of AMS-III.D
$MD_{reg,y}$	Amount of methane that would have to be captured and combusted in the year y to comply with the prevailing regulations (ton)
GWP_{CH4}	GWP for CH_4

In Republic of Serbia, as per the laws, there is no regulation or legal enforcement to capture methane from manure treatment plants, wastewater treatment plants or SWDSs. Therefore $MD_{reg,y}$ is taken as zero in calculations.

GWP for CH_4 is taken as 28 as per the IPCC Fifth Assessment Report.[9]

Project activity claims carbon emission reduction for manure ($BE_{manure,y}$) and municipal solid waste ($BE_{SWDS,y}$)

Hence the formula is simplified as;

$$\mathbf{BE_y = BE_{SWDS,y} + BE_{manure,y}}$$

Baseline Emission for Municipal Solid Waste ($BE_{SWDS,y}$)

AMS-III.AO ver. 1.0. refers to the ""Emissions from solid waste disposal site" Version 8.0." for food waste baseline emission reductions. Project activity only uses organic municipal solid waste and they are wet based. Therefore equation 15 of the Tool 04 is used.

$$BE_{CH4,SWDS,y} = \varphi_y \times (1 - f_y) \times GWP_{CH4} \times \sum_{x=1}^{y} Default_{org,x} \times W_{org,x}$$

$BE_{CH4,SWDS,y}$	Baseline, project or leakage methane emissions occurring in year y generated from waste disposal at a SWDS during a time period ending in year y (t CO2e/yr)
x	Years in the time period in which waste is disposed at the SWDS, extending from the first year in the time period (x = 1) to year y (x = y)
y	Year of the crediting period for which methane emissions are calculated (y is a consecutive period of 12 months)
φ_y	Model correction factor to account for model uncertainties for year y

[9] https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf.

$W_{j,x}$	Amount of solid waste type j disposed or prevented from disposal in the SWDS in the year x (t)
f_y	Fraction of methane captured at the SWDS and flared, combusted or used in another manner that prevents the emissions of methane to the atmosphere in year y
GWP_{CH4}	Global Warming Potential of methane
$Default_{org,x}$	The value of $Default_{org,x}$ depends on the climate zone (Boreal/ temperature dry). These values were derived by an analysis of registered CDM projects with verified waste compositions, and the $Default_{org,x}$ values are selected to ensure conservativeness of the resulting baseline emissions (using 95% confidence and 10% precision)

Baseline Emission for Manure ($BE_{manure,y}$)

AMS-III.AO refers to the latest version of the AMS-III.D methodology.

AMS-III.D Methane recovery in animal manure management systems, Version 21.0.[10]

The baseline scenario is the situation where, in the absence of the project activity, animal manure is left to decay anaerobically within the project boundary and methane is emitted to the atmosphere. Baseline emissions (BEy) are calculated by using one of the following two options:

To calculate baseline emission by manure, Option a is chosen.

$$BE_{manure,y} = GWP_{CH4} \times D_{CH4} \times UF_b \Sigma(MCF_j \times B_{o,LT} \times N_{LT,y} \times VS_{LT,y} \times MS_{\%Bl,j})$$

10 https://cdm.unfccc.int/UserManagement/FileStorage/1AWXEKHVTYF423LCN56Z9GIMQOS8JR .

Where,

$BE_{manure,y}$ (BE_v)	Baseline emissions in year y (t CO2e)
GWP_{CH4}	Global Warming Potential (GWP) of CH4 applicable to the crediting period (t CO2e/t CH4)
D_{CH4}	CH4 density (0.00067 t/m3 at room temperature (20 ºC) and 1 atm pressure)
LT	Index for all types of livestock
j	Index for animal manure management system
UF_b	Model correction factor to account for model uncertainties (0.94)
MCF_j	Annual methane conversion factor (MCF) for the baseline animal manure management system j
$B_{o,LT}$	Maximum methane producing potential of the volatile solid generated for animal type LT (m^3 CH_4/kg-dm)
$N_{LT,y}$	Annual average number of animals of type LT in year y (numbers)
$VS_{LT,y}$	Volatile solids production/excretion per animal of livestock LT in year y (on a dry matter weight basis, kg-dm/animal/year)
$MS_{\%Bl,j}$	Fraction of manure handled in baseline animal manure management system j

Annual temperature in the site where the anaerobic manure treatment facilities in the baseline existed, is 11.4°C[11], which is higher than 5°C.

AMS-I.D. Baseline emission from renewable energy part of the project activity

$$BE_{elect,y}=EG_{pj,y} \times EF_{grid,y}$$

Where:

$BE_{elect,y}$	Baseline emissions in year y (tCO_2)
$EG_{pj,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh)
$EF_{grid,y}$	Combined margin CO2 emission factor for grid connected power generation in year *y* calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO2/MWh)

In the absence of the project activity, same amount of electricity would be used from the grid. CEF_{grid} should be calculated according to Tool 07 *"Tool to calculate the emission factor for an electricity system"*. Version 07.0 is the latest revision of the tool.

Estimation of CEFgrid Emission Factor for Serbian grid system

Tool 07 was used to determine the CO_2 emission factor for the displacement of electricity generated by power plants in an electricity system, by calculating the "combined margin" emission factor (CM) of the electricity system.

As per the calculations as indicated in the validated Mramorak1&2 Biogas Power Plants BCR PDD, BCR-RS-493-1-001,

[11] https://www.hidmet.gov.rs/data/klimatologija/eng/2021.pdf. P.2. Measured in 2021.

$EF_{grid,CM,y}$ = 1.078674742 tCO_2/MWh

In the validated Mramorak1&2 Biogas Power Plants BCR PDD, BCR-RS-493-1-001, The grid emission factor (CEF_{grid}) was fixed ex-ante and will not be updated ex-post.

In summary, the assessment team confirms the following:

- The complete dataset is available for the first monitoring period. No data was found missing due to activity levels or all the parameters were monitored as per the registered monitoring plan, this should be identified;

- The information presented in the monitoring report has been verified against independent sources, such as plant logbooks, inventories, purchase records

- All the assumptions applied in the emission or removal calculations have been properly justified and found correct.

5.2.4.2 GHG project emissions

Project emissions of the project activity are estimated as per the AMS-III.AO and AMS-I.D methodologies and applicable tools as per these methodologies. To estimate project emission reductions correctly, project owner has an robust data management system where it archives applicable parameters which are used in project emission calculations.

Project emissions of the project activity are estimated as per the AMS-III.AO and AMS-I.D methodologies and applicable tools as per these methodologies as provided below.

To estimate project emission reductions correctly, project owner has an robust data management system where it archives applicable parameters which are used in project emission calculations. Please see Section 16.1 to see the parameters required for project emission calculations, which are monitoring parameters at the same time. Monitoring parameters are already monitored in a conservative and provable way as per the AMS-III.AO and AMS-I.D.

As per the AMS-III.AO projects emission of the project activity is as follows:

$$PE_y = PE_{transp,y} + PE_{power,y} + PE_{res\ waste,y} + PE_{phy\ leakage,y} + PE_{flaring,y}$$

Where,

PE_y	Project activity emissions in the year y (tCO_2e)
$PE_{transp,y}$	Emissions from incremental transportation in the year y (tCO_2e)
$PE_{power,y}$	Emissions from electricity or fossil fuel consumption in the year y (tCO_2e)
$PE_{res\ waste,y}$	In case residual wastes are subjected to anaerobic storage, or disposed in a landfill: methane emissions from storage/disposal/treatment of waste (tCO_2e)
$PE_{phy\ leakage,y}$	Methane emissions from physical leakages of the anaerobic digester in year y (tCO_2e)
$PE_{flaring,y}$	Methane emissions due to incomplete flaring in year y as per the "Tool to determine project emissions from flaring gases containing methane" (tCO_2e)

$PE_{transp,y}$ Emissions

Project emissions due to incremental transport distances ($PE_{transp,y}$) are calculated based on the incremental distances between:

(i) The collection points of biomass and/or manure and the digestion site as compared to the baseline solid waste disposal site or manure treatment site;
(ii) (ii) When applicable, the collection points of wastewater and treatment site as compared to baseline wastewater treatment site;
(iii) (iii) Treatment sites and the sites for soil application, landfilling and further treatment of the residual waste.

$$PE_{transp,y} = (Q_y/CT_y) \times DAF_w \times EF_{CO2,transport} + (Q_{res\ waste,y} / CT_{res\ waste,y}) \times DAF_{res\ waste,y} \times EF_{CO2,transport}$$

where,

Q_y	Quantity of raw waste/manure treated and/or wastewater co-digested in the year y (tons)
CT_y	Average truck capacity for transportation (tons/truck)
DAF_w	Average incremental distance for raw solid waste/manure and/or wastewater transportation (km/truck)
$EF_{CO2,transport}$	CO2 emission factor from fuel use due to transportation (kgCO2/km, IPCC default values or local values may be used)
$Q_{res\ waste,y}$	Quantity of residual waste produced in year y (tons)
$CT_{res\ waste,y}$	Average truck capacity for residual waste transportation (tons/truck)
$DAF_{res\ waste,y}$	Average distance for residual waste transportation (km/truck)

$PE_{power,y}$ Emissions

AMS-III.AO Version 1.0 states that

"if recovered biogas is used to power auxiliary equipment of the project it should be taken into account accordingly, using zero as its emission factor." [12]

Within the project activity recovered biogas is used to power auxiliary equipment. Therefore;

$$\mathbf{PE_{power,y} = 0}$$

[12] *The sentence "recovered biogas is used to power auxiliary equipment" refers exclusively to the internal consumption of the gas engine unit itself (e.g. cooling, control panels). All other auxiliary equipment (such as mixers, agitators, and pumps) is powered by grid electricity, which is accounted for under AMS-I.D methodology and included in the emission reduction calculations (see "AMS-I.D & III.D – BE" sheet in the ER spreadsheet).*

$PE_{res\ waste,y}$ Emissions

As per the AMS-III.AO, "methane emissions from anaerobic storage and/or disposal in a landfill of the residual waste from the digestion ($PE_{res\ waste,y}$) are calculated as per the latest version of the "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site"."

Within the project activity, residual wastes from the digesters are stored in open lagoon, and from there they are spread to the farm field as bio-fertilizer. Hence there is no anaerobic storage into a disposal site, therefore project emission from residual waste is accepted as zero.

$$PE_{res\ waste,y} = 0$$

$PE_{phy\ leakage,y}$ Emissions

As per the AMS-III.AO,

"Methane emissions due to physical leakages from the digester and recovery system ($PE_{phy\ leakage,\ y}$) shall be estimated using a default factor of 0.05 m^3 biogas leaked/m^3 biogas, y) shall be estimated using a default factor of 0.05 m^3 biogas leaked/m^3 biogas produced. For ex ante estimation the expected biogas production of the digester may be used, for ex post calculations the effectively recovered biogas amount shall be used for the calculation." Leakage calculations are provided in the associated excel file.

$PE_{flaring,y}$ Emissions

AMS-III.AO Ver. 1.0 refers to the "Tool to determine project emissions from flaring gases containing methane" for project flaring emission reduction. The latest version of this tool is "Tool 06: Project emissions from flaring" [13], version 04.0. According to the Tool 06, following steps applied to calculate project flaring emission.

[13] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-06-v4.0.pdf.

a) STEP 1: Determination of the methane mass flow of the residual gas;
b) STEP 2: Determination of the flare efficiency;
c) STEP 3: Calculation of project emissions from flaring.

STEP 1: Determination of the methane mass flow of the residual gas;

STEP 1 refers to the „Tool 08: Tool to determine the mass flow of a greenhouse gas in a gaseous stream, Version 03.0"[14] for the determination of the methane mass flow.

As per the Tool 08, methane mass flow ($F_{CH4,t}$) is calculated by using the following formula:

$$F_{i,t} = V_{t,db} \text{ x } \nu_{i,t,db} \text{ x } \rho_{i,t}$$[15]

where,

$F_{i,t}$	Mass flow of greenhouse gas i in the gaseous stream in time interval t (kg gas/h). The same value ($F_{CH_4,RG,y}$) stated in the $PE_{flare,y}$ equation
$V_{t,db}$	Volumetric flow of the gaseous stream in time interval t on a dry basis (m^3 dry gas/h)
$\nu_{i,t,db}$ ($\nu_{CH_4,t,db}$)	Volumetric fraction of greenhouse gas i in the gaseous stream in a time interval t on a dry basis (m^3 gas i/m^3 dry gas), i: CH_4
$\rho_{i,t}$	Density of greenhouse gas i in the gaseous stream in time interval t (kg gas i/m^3 gas i),

$\rho_{i,t}$ value is taken as 0.716 kg/m3[16]

[14] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-08-v3.0.pdf.
[15] Tool 08, p.8 and EB102_repan06_Tool06.xls, Step 1 (b) sheet.
[16] EB102_repan06_Tool06.xls, "Constants Used in Equations" sheet. https://cdm.unfccc.int/methodologies/PAmethodologies/EB102_repan06_Tool06.xlsx

The formula is also present in the Tool 06 excel sheet, EB102_repan06_Tool06.xls[17].

As per the Tool 08, $V_{t,db}$ and $v_{i,t,db}$ are the monitoring parameters.

STEP 2: Determination of the flare efficiency;

Mramorak 1&2 plants flare units are enclosed type. As per the Tool 06, to determine the flare efficiency, "Option A: Apply a default value for flare efficiency" option is chosen. As per this option A, flare efficiency is accepted as 0%.

Project emissions from flaring, as per the Tool 06, are calculated by using the following formula:[18]

$$PE_{flare,y} = GWP_{CH4} \times \sum_{m=1}^{525600} F_{CH4,RG,m} \times (1 - \eta_{flare,m}) \times 10^{-3}$$

Where,

$PE_{flare,y}$	Project emissions from flaring of the residual gas in year y (tCO2e)
GWP_{CH4}	Global warming potential of methane valid for the commitment period (tCO2e/tCH4)
$F_{CH4,RG,y}$ ($F_{CH4,t}$)[19]	Mass flow of methane in the residual gas in the minute m (kg);
$\eta_{flare,m}$	Flare efficiency in the minute m

[17] https://cdm.unfccc.int/methodologies/PAmethodologies/EB102_repan06_Tool06.xlsx
[18] Tool 06, p.13.
[19] $F_{CH4,t}$ is not a monitoring parameter as per the Tool 08.

As a note, in the project activity, there is no flaring within the normal operation of the project. Flaring chamber is available, but it is only used in case of digesters goes through maintenance. Since it is only used for emergency purposes, for simplification and to be on the conservative side, $F_{CH_{4,,y}}$ is accepted as the maximum combustion capacity of the flare chamber.

Hence, project emission of the project activity as per AMS-III.AO:

$$\mathbf{PE_y = PE_{transp,} + PE_{phy\ leakage,y} + PE_{flaring,y}}$$

For the project activity, there are no other sources of project emissions that will require the use of "Tool 03: Tool to calculate project or leakage CO2 emissions from fossil fuel combustion". Project activity's only source of CO2 emission from fossil fuel combustion is transportation which is already calculated by the $PE_{transp,y}$ equation.

As per the AMS-I.D projects emission of the project activity is as follows:

AMS-I.D. states that "For most renewable energy project activities, PEy = 0." Therefore, project emission that comes from renewable energy generation component of the project activity is taken as zero

Hence;

Mramorak1&2 project emissions as per AMS-III.AO and AMS-I.D:

$$\mathbf{PE_y = PE_{transp,} + PE_{phy\ leakage,y} + PE_{flaring,y}}$$

Project emission calculations are provided in the associated excel file (Mramorak1&2_ER_Calculations.xls).

5.2.4.3 GHG leakage

According to AMS-III.AO, "Leakage effects are to be considered (LEy) if the project technology is the equipment transferred from another activity or if the existing equipment is transferred to another activity."Nothing from another activity was transferred to this project activity; everything was built from scratch. Leakage emission is therefore taken to be zero. LEy is equal to zero "The methodology is applicable to a programme of activities, no additional leakage estimations are necessary other than that indicated under the leakage section above," according to AMS-I.D. Section 7.

Since the project activity does not employ biomass and makes no claims for the reduction of CO_2 emissions from plant residues, leakage is calculated based on zero according to AMS-I.D.

As an additional note, although the project uses biodegradable organic waste (e.g. manure and food waste), these are classified under the CDM Glossary as biomass residues and biodegradable fractions of industrial and municipal wastes. The project does not divert biomass from other productive or energy uses, nor does it claim emission reductions from plant residue management.

All feedstocks (e.g., manure from farms and organic waste from municipal sources) are considered waste and would otherwise be disposed of in an uncontrolled manner (e.g., landfilling), leading to methane emissions. Since these materials are not subject to competitive use or market displacement, no leakage is considered to arise under the definitions of AMS-I.D and general CDM leakage guidance.

5.2.4.4 Ex-ante vs Ex-post Comparison of GHG emission reductions/removals

Comparison of actual emission reductions with estimates is given below table:

	Estimated GHG emission reductions or removals (tCO2e)	*Acutal Net GHG emission reductions or removals (tCO2e)*
Emission reductions / removals (tCO2)	*75,664*	*74,421*

There are a number of factors that contribute to differences between ex-ante estimation and monitored impacts. These include net electricity generation, the amount of food waste received, the number of animals, the average distance that the trucks travelled to carry manure, food waste and digestate, and so on. The values of these parameters for a specific year can either increase or decrease the comparison value (%). The total effect was found to be -1.67%, which can be stated as a very low difference.

Additionally, "Default$_{org,x}$" value in registered PDD changed to values according to the Boreal/temperature dry which is the most conservative approach to define the climatic condition of the project location. This also reduced the carbon credits during the first monitoring periood as compared to the baseline emissions.

Quantification of emission reductions of the project activity is calculated as per the" AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0". Project also claims carbon emission reductions due to the replacement of the electricity from the "Serbia" EPS grid system with renewable electricity produced by the project activity.

CAB (VVB) confirmed that calculations are in line with methodologies

5.3 Sustainable development safeguards (SDSs)

According to the Environmental Protection Law of Serbia, biogas power plants with an installed capacity of less than 1 MWe are exempted from environmental impact analysis due to their minimal environmental impacts. In the project activity, each biogas plant has an installed capacity of 999 kWe which is less than 1 MWe. Therefore, conducting an environmental impact analysis was not required. However, as per the legal obligations of laws and regulations of Serbia, the project complies with all the environmental and waste management regulations to prevent any potential negative impacts. Regarding the waste management, the project received the permits with the registration numbers of 12 and 13 from the Kovin Municipal Administration-Department for Urban Planning and Housing Communal Affairs. The relevant permits have been provided by the project owner.

A more comprehensive assessment on environment has been conducted in the Mramorak 1&2 project's BCR Tool regarding Sustainable Development Safeguards.

5.4 Project contribution whit the Sustainable Development Goals (SDGs)

Regarding the United Nations Sustainable Development Goals (SDGs), the Mramorak 1&2 project achieves the following SDGs:

SDG 7 Affordable and Clean Energy / SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix / SDG 7.2.1 Renewable energy share in the total final energy consumption:

The project's contribution to SDG 7 is monitored through continuous measurement of electricity generation from renewable sources. Electricity output from the gas engine units is measured by calibrated Landis+Gyr E650 meters installed at the project site and substations. The net electricity supplied to the Serbian EPS grid is cross-checked with the monthly invoices issued by EPS Distribucija Doo. Internal power meters provide additional data for verification. All readings are recorded and archived by the Gas Station and Accountant Office departments as part of regular operational processes.

CAB (VVB) checked and confirmed that project activity generates renewable energy, about 15,500 MWh annually, by capturing biogas from cattle manure, non-hazardous food wastes, plant wastes (starch waste, liquid starch wastes, CSL) and agricultural plant residues (slage corn and slage barley) via anaerobic digestion and

supplies it to the fossil fuel dominated Serbian EPS grid system. Through this way, project contributes to the SDG 7.2. target, and the relevant indicator is SDG 7.2.1.

SDG Goal 8 Decent Work and Economic Growth /SDG 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value / 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities

The number of employees working at the Mramorak 1&2 project activity is directly monitored to assess the project's contribution to SDG 8.5 on full and productive employment. This parameter is measured annually and validated using the project owner's employee records and official social security documentation.

During the first monitoring period (24/06/2020 – 31/12/2023), the project consistently employed 9 people each year, exceeding the baseline estimate of 6 employees. Employment data is recorded and archived as part of the company's routine administrative and HR processes, ensuring transparency and traceability for third-party verification.

CAB (VVB) checked and confirmed that the project created job opportunities during both the construction and operation phases. During operation, the project employs 9 people and 2 of them are from local villages.

SDG Goal 13 Climate Action/ SDG 13.2 Integrate climate change measures into national policies, strategies and planning / SDG 13.2.2 Total greenhouse gas emissions per year:

GHG emission reductions are calculated based on the volume and methane content of captured biogas. These parameters are measured by TecJet 110 flow meters and the AwiFLEX Cool+ gas analyzer. Data is monitored continuously by the Biogas Plant department and recorded for estimation of avoided methane emissions. Monitoring complies with AMS-III.AO and AMS-I.D. methodologies, and calculations are validated by the carbon consultant. Monitoring equipment is maintained and calibrated according to Serbian regulations to ensure data accuracy.

CAB (VVB) checked and confirmed that project will naturally play an important role in global climate change mitigation activities through preventing emissions of methane that would otherwise be released to the atmosphere in the baseline conditions. The project annually achieves 21,667 tCO_2 emission reduction. In this way, it contributes to SDG 13 goals of the UN.

5.5 Climate change adaptation

The project in line with BCR Standard, especially section 10.8. As CAB Re-carbon checked and confirmed the information given below.

The project owner carried out actions related to adaptation to climate change and shows that these result from the Greenhouse Gas Project activities, in addition to having solid and clear criteria showing its contribution to climate change mitigation, thus proving this. they are:

(a) One or more measures recommended in National Climate Change Policies taking into account the strategic line and/or focusing on the issues specified in the legislation of the country where the project is implemented;

(b) improve conditions for the conservation of biodiversity and ecosystem services in areas of impact outside the project boundaries; namely natural cover in environmentally important areas, biological corridors, water management in watersheds and others;

(c) activities that create sustainable and low-carbon, productive environments to apply;

(d) restoration processes in areas of particular environmental importance to suggest;

(e) designing adaptation strategies based on the ecosystem approach and to apply;

(f) local support of institutions and/or communities to make informed decisions to anticipate adverse impacts from climate change strengthening their capacities (recognition of vulnerability conditions); as well as taking advantage of opportunities from anticipated or proven changes.

5.6 Co-benefits (if applicable)

N/A

5.7 REDD+ safeguards (if applicable)

N/A

5.8 Double counting avoidance

The double counting assessment is performed as explained in "5.1.3 Other GHG program". It is also in the line with the avoiding of BCR double counting tool version 2.0.

5.9 Compliance with Laws, Statutes and Other Regulatory Frameworks

Mramorak1&2 project was implemented in accordance with Serbian national laws and regulations. The project received all necessary permissions from the related governmental organizations.

Applicable laws and regulations to the project activity:

1) The Law on Energy (Zakon O Energetici, "Sl. glasnik RS", br. 145/2014, 95/2018 - dr. zakon i 40/2021);[20]
2) Law on Energy Efficiency and Rational Use of Energy (Zakon o Efikasnom Korišćenju Energije, "Sl. glasnik RS", br. 25/2013 i 40/2021 - dr. zakon);[21]
3) Waste management law (Zakon o Upravljanju Otpadom, "Sl. glasnik RS", br. 36/2009 i 88/2010); [22]

[20] https://mre.gov.rs/dokumenta/sektor-za-elektroenergetiku/zakoni.
[21] https://mre.gov.rs/dokumenta/sektor-za-energetsku-efikasnost-i-toplane/zakoni.
[22] Serbian Biogas Association, Legal Frameworks, https://biogas.org.rs/en/legal-framework/, Visited on 13 July 2022.

4) Environmental Protection Law (Zakon O Zaštiti Životne Sredine, "Sl. glasnik RS", br. 135/2004, 36/2009, 36/2009 - dr. zakon, 72/2009 - dr. zakon i 43/2011 - odluka US);[23]
5) Law on Use of Renewable Energy Sources (Zakon o Korišćenju Obnovljivih Izvora Energije.[24]

Based on these laws, project received the following permissions and licenses to establish and operate the Mramorak 1&2 project.

1) **For generating the electricity:** Project received an electricity generation license from the Ministry of Mining and Energy of Serbia. Mramorak 1 received its license on 27/11/2018 with the number of 312-01-01059/2018-06 by the Zlatar Mramorak Doo. Mramorak 2 received its license on 04/12/2018 with the number of 312-01-01058/2018-06 by the BioGold Energy Doo.[25] Both companies are 100% owned by the parent company, Almex doo.[26]

   Electricity generation licenses were revised later. Mramorak 1's revised license is dated as 17/06/2020 with the number of 312-01-00353/2020-06 and Mramorak 2's revised license is dated as 05/03/2021 with the number of 312-01-00021/2021-06.[27]

2) **For the storage and treatment of non-hazardous wastes**: Permit (with registration number 12) was issued to the project owner, "Zlatar", by the Kovin Municipal Administration-Department for Urban Planning and Housing Communal Affairs based on the Law on Waste Management ("Official Gazette of the RS", No. 36/09, 88/10, 14/16 and 95/18 - other laws).

   Evidences are provided in Appendix 501-56/2021-IV for Zlatar doo.

3) **For the storage and treatment of non-hazardous wastes**: permit (with the registration number 13) was issued to the project owner, "Bio Gold

[23] *Serbian Biogas Association, Legal Frameworks, https://biogas.org.rs/en/legal-framework/, Visited on 13 July 2022.*
[24] *https://mre.gov.rs/dokumenta/sektor-za-zelenu-energiju/zakoni.*
[25] *Ministry of Mining and Energy, https://mre.gov.rs/sites/default/files/registri/RegistarPovlasPro12-8-2022.html.*
[26] *These licenses are provided as complementary document to the DOE.*
[27] *These licenses are provided as complementary document to the DOE.*

Energy doo", by the Kovin Municipal Administration-Department for Urban Planning and Housing Communal Affairs based on the Law on Waste Management ("Official Gazette of the RS", No. 36/09, 88/10, 14/16 and 95/18 - other laws). Permit number is 13. The validity of the permit was 10 years from 02.11.2021 to 02.11.2031. After 10 years, it will be renewed.

CAB (VVB) confirmed that the project complies with the relevant regulations.

5.10 Carbon ownership and rights

The holder of project acitivity is Zlatar Mramorak Doo. Carbon consultant company of the project activity is "Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti". Carbon ownership of the project activity is belonged to the project owner, which is the Zlatar Mramorak Doo. BioGold Energy Doo has transferred its carbon credit-related rights to the Zlatar Mramorak Doo by the agreement dated as 05/04/2023. As a note, both BioGold Energy and Zlatar Mramorak Doo companies are belonged to the same parent company, Zlatar Doo.

There are no new agreements within the project activity.

5.11 Risk management

Since the beginning of its operation, project activity has run well. The project poses no danger with regard to the input of organic waste. The project owner owns the farms that supply manure for the project's activities. Since non-hazardous food waste is produced in large quantities in Belgrade, it is easy to identify food waste from eateries, retail establishments, etc. Furthermore, the project owner has no trouble moving food waste from the sources to the project site. Other sources are produced by the project owner's commercial operations, such as starch waste and silage barley and maize. Thus, there is no problem with the waste input to the biogas plants continuing. The project's performance risk is considerably low in terms of managerial and regulatory aspects. There is no regulatory barrier in Serbia to operate biodigesters. There is no problem regarding waste receivement, given that except food waste all the ones are generated by the project owner. Biodigester plants are operated as per the Waste Management Law of Serbia and received all the necessary permits for waste management from the Kovin Municipality.

5.12 Stakeholder engagement and consultation

Local stakeholders were invited to provide feedback on the "Mramorak 1&2 Bundled Biogas Power Plant" project during a stakeholder consultation meeting dated 22/08/2022. Participants were invited to the conference 10 days in advance by public notice invites posted in easily accessible and frequent areas. One of the announcements was put on the municipality building's official public notice board. The other one was displayed on the village bulletin board where everyone passes. The meeting was also announced by the local radio.

Moreover, during the on-site visits dated 06/02/2024 and 07/02/2024, the mukhtar of Mramorak village confirmed that all the questions that were asked at the stakeholder consultation meeting were answered adequately. Moreover, the local stakeholders were informed about the project activity.

5.12.1 Public Consultation

There had not been any complaint raised by the interviewed local stakeholders during the on-site visit as detailed in Sections 2.3 and 2.4 of the report. The local stakeholders as stated in Table 2-2 above were interviewed about the following issues and there had not been any complaints by the interviewed local stakeholders during the on-site visit:

• Flies and odor problems due to the project activity

• Any harm to animals and agricultural lands

• Sufficiency of local employment (The interviewed local stakeholders were pleased about the provided local employment opportunities by the PP)

• Waste and leachate management practices implemented by PP

It was also concluded that the grievance mechanism is in place and this was also confirmed by the interviewed local stakeholders during the on-site visit.

6 Internal quality control

As a final step of verification, the final documentation including the verification report and annexes must undergo internal quality control by Re Carbon Ltd. This quality control is also referred to as the "Independent Technical Review" process.

The Independent Technical Review is performed by another Team Leader of RE-Carbon Ltd. who was not involved in the verification activities of this specific project activity. When the appointed Team Leader finalizes the Verification Report, the report is sent to the (for this project specifically appointed) Independent Technical Reviewer who reviews not only the verification report itself but also all supporting documents such as the emission factor calculations, additionality justifications, relevant excel sheets, etc.

Further CLs and CARs may be raised by the Independent Technical Reviewer during this review, in order to cover all the points that may need further clarification.

After all CLs and CARs are closed, the verification report is again reviewed and finally approved by the Team Leader, ITR and the Certification Manager, and the registration request is submitted to the Project Developer along with the relevant documents.

7 Verification opinion

Re Carbon Ltd. performed the verification of the "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia", between 24/06/2020 and 31/12/2023The GHG Statement is the responsibility of the "Project Proponent". The verification was performed based on Verification criteria for projects set out in BCR Standard Version 3.4, and Host Party criteria, as well as per criteria given to provide for consistent project operations, monitoring and reporting.

The verification was performed by a verification team consisting of "Rohit Badaya as a Team Leader, Selen Cilasun as a trainee verifier, Dragomir Vasic as a Regional Expert, Abdulkadir Bektaş as an Agricultural Expert and Sandeep Kanda as a ITR." and the project activity was checked against the applicable rules and regulations of CDM including CDM Validation and Verification Standard for project activities version 3.0, CDM Project Standard for project activities version 3.0 and BCR Standard Version 3.4 "

Re Carbon Ltd. hereby confirms that the proposed project activity "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia", applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. Verification of the GHG statement was conducted in accordance with ISO 14064-3; AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0", subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other related rules, all according to the guidance given in the CDM Validation and Verification Standard for Project Activities version 3.0, CDM Project Standard for Project Activities version 3.0, and BCR Standard version 3.4.

As a result, the verification team assigned by Re Carbon Ltd. concludes that the proposed Project Activity "Mramorak 1&2 Bundled Biogas Power Plants" in Serbia, as described in the BCR-PD (1.5 dated 24/08/2023)

- meets all relevant Host Country criteria;
- meets all relevant requirements of the BCR project activities [including BCR Standard version 3.4 and CDM rules/requirements;
- applies correctly the baseline and monitoring methodology "AMS-III.AO Version 1.0 and AMS-I.D. Version 18.0";
- its additionality is sufficiently justified in the PD;
- is likely to achieve estimated emission reductions;

The verified GHG emission reductions over the entire quantification period of the proposed project:

Year	**GHG emission reductions in the baseline scenario (tCO2e)**	**GHG emission reductions in the project scenario (tCO_{2e})**	**GHG emissions attributable to leakages (tCO_{2e})**	**Estimated Net GHG Reduction (tCO_{2e})**
24/06/2020-31/12/2020	6,102	1,191	0	4,911
01/01/2021-31/12/2021	26,720	3,975	0	22,745
01/01/2022-31/12/2022	27,997	4,558	0	23,438
01/01/2023-31/12/2023	27,937	4,610	0	23,327

Total	88,756	14,334	0	74,421

Therefore, Re Carbon Ltd. requests the registration of the proposed project activity as a BCR project activity.

8 *Verification statement*

Verification statement upon achievement of the validation or verification, which complies with the following:

Carbon ownership of the project activity is belonged to the project owner, which is the Zlatar Mramorak Doo. Bio Gold Energy Doo has transferred its carbon credit related rights to the Zlatar Mramorak Doo by the agreement dated as 05/04/2023.

Re Carbon Ltd. hereby confirms that the reasonableness of assumptions of this verification report is reasonable, with respect to material errors, omissions and misrepresentations. To guarantee this reasonableness of assumptions all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. was appointed by "Zlatar Mramorak Doo" to perform the verification of the BCR project activity titled "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia", through a contract, dated 29/11/2023. The objective of this verification activity is to have an independent third party for the assessment of the project design and to ensure a thorough assessment of the proposed project activity against the applicable BCR and CDM requirements. The scope of the verification is the independent and objective review of the BCR Project Document Template (PD). The purpose of the verification is its usage during the registration process as part of the BCR project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the verification opinion that goes beyond that purpose.

Re Carbon Ltd. hereby confirms that the proposed project activity "Mramorak 1&2 Bundled Biogas Power Plants" in "Serbia", applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. Verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019. The total emission

reductions from the project are estimated to be on the average 74,421 tCO2e per year over the selected 7-year crediting period.

Verification Team's conclusion on the project's contribution to sustainable development objectives are:

- SDG 7: During the first monitoring period, the project generated 49,191.63 MWh net electricity and supplied it to the Serbian EPS grid system
- SDG 8: During the first monitoring period, project has continued to employ at least 9 people at the project facility
- SDG13: During the first monitoring period, the project activity achieved 74,421 tCO2 emission reductions.

Re-carbon ltd. as a CAB confirms the information which is given above.



Rohit BADAYA	Sandeep Kanda	Ms. Esin Tunalı
BCR verification Team Leader	ITR	CMD
	09/09/2025	

9 *Facts discovered after verification*

N/A

Annex 1. Competence of team members and technical reviewers

Mr. Rohit Badaya holds a Master's degree in "Nanotechnology" and a Bachelor's degree in "Pulp and Paper Engineering" from the Indian Institute of Technology Roorkee (IIT Roorkee). He is also an Energy Auditor, certified by the Bureau of Energy Efficiency, Ministry of Power, Govt. of India. Rohit has more than 14 years of work experience in the area of Climate Change (CDM, GS, VCS, GCC) and has worked for various DOEs/VVBs in the capacity of Team Leader, Validator/Verifier, Technical Expert, ITR, Manager (Technical & Certification) and Quality Manager. Within the context of CDM/GS/VCS/GCC, Rohit has a record of accomplishment of more than 200 projects as a Team Leader, Validator, Verifier, Technical Expert and Technical Reviewer. He is well versed with various local regulations related to CDM/GS/VCS/ GCC projects, located in countries in Asia, Africa, Middle East, Asia Pacific as well as in Türkiye. With re-carbon, Rohit is a free-lance Team Leader, ITR and an expert in Project-Level Group 1 - GHG Project Types: Renewable Energy Production & Energy Efficiency Improvements // Project-Level Group 5 - GHG Project Types: Methane collection & destruction as well as Livestock and other anaerobic digester operations // Project-Level Group 6 - GHG Project Types: Capture & destruction of Landfill gas & Capture & use of Landfill gas & Avoidance of methane production in wastewater treatment. Rohit is also a Regional Expert for Bhutan, Brazil, Cambodia, Chile, Democratic Republic of Congo, Egypt, El Salvador, Ethiopia, The Gambia, India, Indonesia, Iran, Kenya, Madagascar, Malawi, Mauritius, Mexico, Morocco, Myanmar, Nepal, Nicaragua, Nigeria, Papua New Guinea (PNG), Republic of Madagascar, Senegal, South Africa, Sri Lanka, Thailand, Türkiye, Uganda, Vietnam and Zambia.

Dr. Abdulkadir Bektaş holds an Associate Professor degree in "Energy Systems Engineering" and is a UNFCCC-appointed "Agriculture Expert". With re-carbon, Abdulkadir is a free-lance Agriculture Expert. Abdulkadir is also a Regional Expert for Türkiye, Czechia, Portugal, Australia, Hungary, Denmark, and Ukraine.

Ms. Selen Cilasun holds a B.Sc. and a M.Sc. Degree in "Bioengineering". With re-carbon, Selen is an internal Team Leader, a Technical Expert for Project-Level Group 1 - GHG Project Type: Renewable Energy Production and a Regional Expert for Türkiye. Selen is also a Trainee for Project-Level Group 5 - GHG Project Types: Methane collection & destruction as well as Livestock and other anaerobic digester operations // Project-Level Group 6 - GHG Project Types: Capture & destruction of Landfill gas & Capture & use of Landfill gas & Avoidance of methane production in wastewater treatment.

Mr. Sandeep Kanda holds a Bachelor's degree in "Mechanical Engineering", a Master's degree in "Energy Systems Engineering" from the Indian Institute of Technology/Bombay and a Post Graduate Diploma in "Industrial Safety & Environmental Management" from the National Institute of Industrial Engineering in India. He has over 20 years of professional experience working in the area of energy and environmental management, capacity building, climate change adaptation and mitigation activities, sustainability, auditing and product development. Sandeep has been involved in various capacities in the development and impact assessment of more than 500 climate change mitigation projects and programmatic activities worldwide, covering a range of sectoral scopes, such as Energy industries (renewable-/non-renewable), Energy distribution, Energy demand, Manufacturing industries, Chemical industries, Transport, Metal production, Waste handling & disposal and Agriculture. With re-carbon, Sandeep is a free-lance Team Leader, ITR and a Project-Level Group 1, 5 and 6 Expert. Sandeep is also a Regional Expert for China, India, Indonesia, Mexico, Nepal, Philippines, Tanzania, Thailand, Türkiye and Vietnam.

Mr. Dragomir Vasić holds a M.Sc. degree in "Electrical Engineering" from the University of Novi Sad. With re-carbon, Dragomir is a free-lance Regional Expert for Bosnia and Herzegovina, Croatia, Kosovo, Montenegro, North Macedonia, Serbia and Slovenia.

CERTIFICATE OF APPOINTMENT

re-carbon
quality in carbon auditing

Within the scope and in strict accordance to the appointments indicated below, the bearer may:

- Participate in assessments conducted by re-carbon Ltd.
- Take the appointed positions within and outside of an assessment team
- Bring specific expertise to assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated. There is no defined validity period for this Certificate. However, The Certificate may be updated, suspended or cancelled at any time, as a result of performance assessments and/or other reasons as defined above.

This Certificate of Appointment is given to

Mr. Rohit Badaya

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:

This Appointment Certificate is granted on the date of **27.03.2024** by

Christian Johannes
(General Manager)

Gold Standard
Climate Security & Sustainable Development

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
1	Energy Efficiency Improvements	3.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Methane Collection & destruction	13.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Livestock & other anaerobic digester operations	13.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
6	Capture & use of landfill gas	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
6	Avoidance of methane production in wastewater treatment	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
		SDS Criteria:	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021

Verified Carbon Standard
A VERRA STANDARD

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
1	Energy Efficiency Improvements	3.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Methane Collection & destruction	13.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Livestock & other anaerobic digester operations	13.2	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
6	Capture & use of landfill gas	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
6	Avoidance of methane production in wastewater treatment	13.1	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021
		SDS Criteria:	25.10.2021	25.10.2021	25.10.2021	25.10.2021	25.10.2021

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Certified Carbon Standard

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2					25.10.2021
1	Energy Efficiency Improvements	3.1					25.10.2021
5	Methane Collection & destruction	13.2					
5	Livestock & other anaerobic digester operations	13.2					25.10.2021
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1					25.10.2021
6	Capture & use of landfill gas	13.1					25.10.2021
6	Avoidance of methane production in wastewater treatment	13.1					25.10.2021
		SDS Criteria:					25.10.2021

ICR International Carbon Registry

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
1	Energy Efficiency Improvements	3.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Methane Collection & destruction	13.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Livestock & other anaerobic digester operations	13.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
6	Capture & use of landfill gas	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
6	Avoidance of methane production in wastewater treatment	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
		SDS Criteria:	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023

BioCarbon Registry

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
1	Energy Efficiency Improvements	3.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Methane Collection & destruction	13.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Livestock & other anaerobic digester operations	13.2	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
6	Capture & use of landfill gas	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
6	Avoidance of methane production in wastewater treatment	13.1	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023
		SDS Criteria:	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
1	Energy Efficiency Improvements	3.1	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Methane Collection & destruction	13.2	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Livestock & other anaerobic digester operations	13.2	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
6	Capture & use of landfill gas	13.1	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
6	Avoidance of methane production in wastewater treatment	13.1	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
		SDS Criteria:	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
			Trainee	Trainee	Trainee	Trainee	Trainee
			Trainee	Trainee	Trainee	Trainee	Trainee
			Trainee	Trainee	Trainee	Trainee	Trainee

COUNTRY EXPERTISE: Egypt, India, Indonesia, Iran, Kenya, Malawi, Senegal, Thailand, Türkiye, Uganda for all above listed GHGRSs

F-C-044 / 27.03.2024 - 02

CERTIFICATE OF APPOINTMENT

re-carbon
quality in carbon auditing

Within the scope and in strict accordance to the appointments indicated below, the bearer may:

- Participate in assessments conducted by re-carbon Ltd.
- Take the appointed positions within and outside of an assessment team
- Bring specific expertise to assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated. There is no defined validity period for this Certificate. However, The Certificate may be updated, suspended or cancelled at any time, as a result of performance assessments and/or other reasons as defined above.

This Certificate of Appointment is given to

Ms. Selen Cilasun

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:

This Appointment Certificate is granted on the date of **27.03.2024** by

Christian Johannes
(General Manager)

Gold Standard
Climate Security & Sustainable Development

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT COMI TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	10.01.2023	10.01.2023	10.11.2023		15.10.2022
1	Energy Efficiency Improvements	3.1					
5	Methane Collection & destruction	13.2	Trainee	Trainee	Trainee		Trainee
5	Livestock & other anaerobic digester operations	13.2	Trainee	Trainee	Trainee		Trainee
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	Trainee	Trainee	Trainee		Trainee
6	Capture & use of landfill gas	13.1	Trainee	Trainee	Trainee		Trainee
6	Avoidance of methane production in wastewater treatment	13.1	Trainee	Trainee	Trainee		Trainee
		SDS Criteria:	10.01.2023	10.01.2023	10.11.2023		15.10.2022

Verified Carbon Standard
A VERRA STANDARD

VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
27.02.2023	27.02.2023	10.11.2023		15.10.2022
Trainee	Trainee			Trainee
Trainee	Trainee			Trainee
Trainee	Trainee			Trainee
Trainee	Trainee			Trainee
Trainee	Trainee			Trainee
		SDS Criteria:	27.02.2023	27.02.2023	10.11.2023		15.10.2022

CERCARBONO
Certified Carbon Standard

VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
				15.10.2022
		SDS Criteria:					15.10.2022

ICR International Carbon Registry

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT COMI TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2	27.02.2023	27.02.2023	10.11.2023		15.10.2022
1	Energy Efficiency Improvements	3.1					
5	Methane Collection & destruction	13.2	Trainee	Trainee	Trainee		Trainee
5	Livestock & other anaerobic digester operations	13.2	Trainee	Trainee	Trainee		Trainee
5	Agricultural methane emission reduction	15.1					
5	Agricultural carbon emission reduction	15.1					
6	Capture & destruction of landfill gas	13.1	Trainee	Trainee	Trainee		Trainee
6	Capture & use of landfill gas	13.1	Trainee	Trainee	Trainee		Trainee
6	Avoidance of methane production in wastewater treatment	13.1	Trainee	Trainee	Trainee		Trainee
		SDS Criteria:	27.02.2023	27.02.2023	10.11.2023		15.10.2022

BioCarbon Registry

VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
27.02.2023	27.02.2023	10.11.2024		15.10.2022

VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
27.02.2023	27.02.2023	10.11.2023		15.10.2022
Trainee	Trainee	Trainee		Trainee
Trainee	Trainee	Trainee		Trainee
Trainee	Trainee	Trainee		Trainee
Trainee	Trainee	Trainee		Trainee
Trainee	Trainee	Trainee		Trainee
27.02.2023	27.02.2023	27.02.2023		27.02.2023
15.03.2024	15.03.2024	15.03.2024		15.03.2024
15.03.2024	15.03.2024	15.03.2024		15.03.2024
15.03.2024	15.03.2024	15.03.2024		15.03.2024

COUNTRY EXPERTISE: Türkiye for all above listed GHGRSs

F-C-044 / 27.03.2024 - 02

CERTIFICATE OF APPOINTMENT

re-carbon
quality in carbon auditing

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This Certificate of Appointment is given to

Mr. Dragomir Vasic

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:

This Appointment Certificate is granted on the date of **27.03.2024** by

Christian Johannes
(General Manager)

Gold Standard
Climate Security & Sustainable Development

Verified Carbon Standard
A VERRA STANDARD

CERCARBONO
Certified Carbon Standard

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2															
1	Energy Efficiency Improvements	3.1															
5	Methane Collection & destruction	13.2															
5	Livestock & other anaerobic digester operations	13.2															
5	Agricultural methane emission reduction	15.1															
5	Agricultural carbon emission reduction	15.1															
6	Capture & destruction of landfill gas	13.1															
6	Capture & use of landfill gas	13.1															
6	Avoidance of methane production in wastewater treatment	13.1															
		SDS Criteria:															

ICR International Carbon Registry

BioCarbon Registry

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2															
1	Energy Efficiency Improvements	3.1															
5	Methane Collection & destruction	13.2															
5	Livestock & other anaerobic digester operations	13.2															
5	Agricultural methane emission reduction	15.1															
5	Agricultural carbon emission reduction	15.1															
6	Capture & destruction of landfill gas	13.1															
6	Capture & use of landfill gas	13.1															
6	Avoidance of methane production in wastewater treatment	13.1															
		SDS Criteria:															

F4					
31					
SERBIA					

COUNTRY EXPERTISE: Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro, Serbia, Slovenia for all above listed GHGRSs

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CERTIFICATE OF APPOINTMENT

re-carbon
quality in carbon auditing

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This Certificate of Appointment is given to

Dr. Abdulkadir Bektaş

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:

This Appointment Certificate is granted on the date of **27.03.2024** by

Christian Johannes
(General Manager)

Gold Standard
Climate Security & Sustainable Development

Verified Carbon Standard
A VERRA STANDARD

CERCARBONO
Certified Carbon Standard

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2															
1	Energy Efficiency Improvements	3.1															
5	Methane Collection & destruction	13.2															
5	Livestock & other anaerobic digester operations	13.2															
5	Agricultural methane emission reduction	15.1					01.08.2022					01.08.2022					01.08.2022
5	Agricultural carbon emission reduction	15.1					01.08.2022					01.08.2022					01.08.2022
6	Capture & destruction of landfill gas	13.1															
6	Capture & use of landfill gas	13.1															
6	Avoidance of methane production in wastewater treatment	13.1															
		SDS Criteria:					01.08.2022					01.08.2022					01.08.2022

ICR International Carbon Registry

BioCarbon Registry

GCC

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	EQUIVALENT CDM TECHNICAL AREA EXPERTISE (reference only)	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
1	Renewable Energy Production	1.2															
1	Energy Efficiency Improvements	3.1															
5	Methane Collection & destruction	13.2															
5	Livestock & other anaerobic digester operations	13.2															
5	Agricultural methane emission reduction	15.1					01.08.2022					01.08.2022					01.08.2022
5	Agricultural carbon emission reduction	15.1					01.08.2022					01.08.2022					01.08.2022
6	Capture & destruction of landfill gas	13.1															
6	Capture & use of landfill gas	13.1															
6	Avoidance of methane production in wastewater treatment	13.1															
		SDS Criteria:					01.08.2022					01.08.2022					01.08.2022

COUNTRY EXPERTISE: Australia, Czechia, Denmark, Hungary, Portugal, Türkiye for all above listed GHGRSs

F-C-044 / 27.03.2024 - 02

CERTIFICATE OF APPOINTMENT

re-carbon® quality in carbon auditing

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- Bring specific expertise to assessments

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This Certificate of Appointment is given to

Mr. Sandeep Kanda

as a confirmation of compliance with re-carbon's internal qualification requirements for the following positions:

This Appointment Certificate is granted on the date of **27.03.2024** by

Christian Johannes
(General Manager)

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	*EQUIVALENT CDM TECHNICAL AREA EXPERTISE* reference only	Gold Standard VERIFIER	Gold Standard VALIDATOR	Gold Standard TEAM LEADER	Gold Standard ITR	Gold Standard EXPERT	Verified Carbon Standard VERIFIER	Verified Carbon Standard VALIDATOR	Verified Carbon Standard TEAM LEADER	Verified Carbon Standard ITR	Verified Carbon Standard EXPERT	CERCARBONO VERIFIER	CERCARBONO VALIDATOR	CERCARBONO TEAM LEADER	CERCARBONO ITR	CERCARBONO EXPERT
1	Renewable Energy Production	*1.2*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
1	Energy Efficiency Improvements	*3.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
5	Methane Collection & destruction	*13.2*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
5	Livestock & other anaerobic digester operations	*13.2*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
5	Agricultural methane emission reduction	*15.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
5	Agricultural carbon emission reduction	*15.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
6	Capture & destruction of landfill gas	*13.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
6	Capture & use of landfill gas	*13.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
6	Avoidance of methane production in wastewater treatment	*13.1*	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					
		SDS Criteria:	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022	08.02.2022					

PROJECT LEVEL GROUP	GHG PROJECT TYPE EXPERTISE	*EQUIVALENT CDM TECHNICAL AREA EXPERTISE* reference only	International Carbon Registry VERIFIER	ICR VALIDATOR	ICR TEAM LEADER	ICR ITR	ICR EXPERT	BioCarbon Registry VERIFIER	BioCarbon VALIDATOR	BioCarbon TEAM LEADER	BioCarbon ITR	BioCarbon EXPERT	GCC VERIFIER	GCC VALIDATOR	GCC TEAM LEADER	GCC ITR	GCC EXPERT
1	Renewable Energy Production	*1.2*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
1	Energy Efficiency Improvements	*3.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Methane Collection & destruction	*13.2*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Livestock & other anaerobic digester operations	*13.2*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Agricultural methane emission reduction	*15.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
5	Agricultural carbon emission reduction	*15.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
6	Capture & destruction of landfill gas	*13.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
6	Capture & use of landfill gas	*13.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
6	Avoidance of methane production in wastewater treatment	*13.1*	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
		SDS Criteria:	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	02.02.2023	07.07.2022	07.07.2022	07.07.2022	07.07.2022	07.07.2022
		F4											Tranee	Trainee	Trainee	Trainee	Tranee
		SI											Trainee	Trainee	Trainee	Trainee	Trainee
		DOIBJA											Trainee	Trainee	Trainee	Trainee	Trainee

COUNTRY EXPERTISE: China, India, Indonesia, Mexico, Philippines, Tanzania, Thailand, Türkiye, Vietnam for all above listed GHGRSs

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Annex 2. Clarification requests, corrective action requests and forward action requests

Finding ID	*1*	***Type of finding***	***Corrective action***	***Date*** *27/02/2024*
Section No.				
Cover page				
Description of finding				
MR version is not latest version.				
Project holder response (01/03/2024)				
MR template ver 1.1 is used in the project MR report. Hence the MR report is revised accordingly				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
Review-1: *Ok, closed (Version has been corrected).*				

Finding ID	*2*	***Type of finding***	***Corrective action***	***Date***

				27/02/2024
Section No.				
1				
Description of finding				
The version 1.4 (dated 24/06/2023) has been available on the bio carbon website.				
Project holder response (01/03/2024)				
On the cover page, the PDD of the project activity is indicated in terms of version and dd/mm/yyyy. After the ReCarbon validation, BCR also sent comments to the project owner, therefore the PDD was revised from version 1.4 to version 1.5. The latest version of the PDD is version 1.5, dated 24/08/2023. *PP.Response: Final_BCR-PD_937 Mramorak Biogas_v1.5_24-08-2023.pdf is provided.*				
Documentation provided by the project holder				
PD				
CAB assessment (04/04/2024)				
Review-1: *PDD is version 1.5, dated 24/08/2022 is not provided.* *Review-2:* *OK, closed.*				

Finding ID	*3*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				
Description of finding				
Quantification Period is not "MM/DD/YYYY to MM/DD/YYYY" format.				
Project holder response (01/03/2024)				
Quantification period on the cover page is corrected as per given date format (06/24/2020 to 06/23/2027)				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
OK, closed (Formats are corrected).				

Finding ID	*4*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				

Description of finding
a)During the site visit food waste sources defined differently. However, it is not matched with MR. *b)Distances of food waste sources are missing.* *c)Annual electricity generation seems incorrect in Section 1. It is not matched with Excel Sheet.* *d)Supporting documents are missing for Section 1 of the MR.* *e)Footnote-2 does not work.* *f)Section 1 of MR, "Consequently, the project results in 23,601 tCO2 emission reduction annually, and 161,587 tCO2 emission reduction for the first crediting period". However 23,601 tCO2 does not match with the registered PDD.*
Project holder response (01/03/2024)
a) MR report is revised as inncluding the wastes sources as the food waste subcontractors location from where the food wastes come to the project activity. Eko Maber, Eko Smart and Beotak subcontractor locations are the sources of the food wastes. *b) Distances of food wastes are indicated in the MR,Section 1.4, Section 2 and Section 15.2.2 DAFfood parameter. Emission reduction excel sheet is revised accordingly.* *c) Section 1, annual electricitry generation 15.500 MWh, is taken from the PDD to indicate the baseline estimated electricity generation. This confusion is clarified in Section by rewriting the sentence. Achieved electricity generation is indicated in Section 1, which is 49,191.63 MWh (for the first monitoring period).* *d) Supporting documents for Section 1 are provided, such as licenses, environmental permits, etc.* *e) At the time of writing the PDD, the link was working (Ministry of Mining and Energy, https://mre.gov.rs/sites/default/files/registri/RegistarPovlasPro12-8-2022.html.). But since electricity generation license proof documents are provided, this link not required. The link was provided as an extra information. Please see the "01_ElectricityGenerationLicenses" folder.*

f) The sentence is revised, the value of 23,601 is corrected as 23,083 tCO2. *PP. response: The distances are measured by the Google Earth Pro program. The distance can be seen by doing the following steps:* *1) Right click on the red line that shows the road to the project site from the food supplier,* *2) Click on the properties* *3) Click on the measurements tab* *4) please select the km* *5) then the distance can be seen.*
Documentation provided by the project holder
MR, ER Excel Sheet, Supporting documents
CAB assessment (04/04/2024)
Review-1: a) *References are missing about distance.* b) *Please see a.* c) *Ok, closed (revised).* d) *OK, closed (supporting documents are provided).* e) *OK, closed.* f) *OK, closed (revised).* *Review-2:* *a,b)OK, closed.*

Finding ID	*5*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***

Section No.				
1				
Description of finding				
a) Coordinate references are missing in Section 1.4. of MR. *b) Food waste sources information are missing in Section 1.4. of MR.* *c) Distance between waste areas and farm didn't mentioned with detail in MR*				
Project holder response (01/03/2024)				
a) Coordinates are provided for the waste food soures in Section 1.4, and google earth picture is added showing the waste food sources. In line with that, relevant kmz file is provided. BCR_Mramorak_KMZ_28022024. *b) Food waste source information is indicated in Section 1.4.* *c) Food waste source distances from the project site is indicated in MR.* *PP response: The following sentence is added as a foonote to Section 1.4.: " Food waste source companies' addresses are indicated in the contracts made between the project owner and the food suppliers (Beotok doo, Eko Maber doo and Eko Smart doo). Hence the coordinates given in this table are reflects the address of the companies. Please see the kmz file of the project activity."* *The indicated contracts are already provided to the DoE.*				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				

Review-1: *a) Ok, closed* *b) Ok, closed (Food waste sources are added).* *c) Ok, closed (Added in Section 1.4 13th page).*

Finding ID	*6*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				
Description of finding				
Flare information is missing in Section 1.5.				
Project holder response (01/03/2024)				
As per the MR version 1.1 template, the content moved from Section 1 to Section 1.5, and flare information is indicated in Section. Following sentence is added to the Section 1.5: "The project activity has a flare chamber, which is only used in case of digesters goes through maintenance." *Flare information is also given in Section 1.5, Table 1 and process flow diagram figure.*				
Documentation provided by the project holder				
MR				

CAB assessment (04/04/2024)
Review-1: *OK, closed (Flare information added).*

Finding ID	*7*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				
Description of finding				
CAR-7 *Supporting documents are missing for ER Calculation Excel Sheet. Therefore GHG emission reductions couldn't be confirmed.*				
Project holder response (01/03/2024)				
Supporting documents are provided.				
Documentation provided by the project holder				
Supporting documents				
CAB assessment (04/04/2024)				
OK, Closed				

Finding ID	*8*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				
Description of finding				
CAR-8 *Brief description of the installed technology and equipment have not been provided under Section 1.5 of the MR.*				
Project holder response (01/03/2024)				
Section 1.5 is revised and applied technology is indicated.				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
Review-1: *Ok, closed (applied technology has been explained).*				

Finding ID	*9*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***

Section No.				
1				
Description of finding				
CAR-9 *History table is missing (including construction, commissioning, continued operation periods, etc) in Section 1.5 of MR.*				
Project holder response (01/03/2024)				
PP: response: History table is indicated.				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
Ok, closed (History table has been added).				

Finding ID	*10*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
2				

Description of finding
Applicability conditions for tools and methodologies are missing.
Project holder response (01/03/2024)
Applicability conditions of tools and methodologies are indicated in Section 2.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
OK, closed (Applicability conditions are indicated.)

Finding ID	*11*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
2				
Description of finding				
A signed declaration from the project owner is required stating whether the project is registered under any other greenhouse gas program or whether registration is requested.				
Project holder response (01/03/2024)				
Letter is provided, Letters_NoGHGprogram_NoAid.pdf				

Documentation provided by the project holder
Declaration
CAB assessment (04/04/2024)
Review-1: *Ok, closed (Declaration has been provided).*

Finding ID	*12*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
4				
Description of finding				
CAR-12 *a)Suppoting/evidence documents are missing for SDG Goals.* *b)For SDG 8, number of employee differently mentioned during the site visit. There is inconsistency between MR.*				
Project holder response (01/03/2024)				
a) SDG 7, electricity generation proof documents are provided. SDG 8, employment records of Zlatar compoany is provided, oyt which 9 people is working at the project activity, remaining works at the farm.				

b) Number of employment is corrected in the MR as 9, as it is stated by the project owner during the first monitoring period site visit.
Documentation provided by the project holder
Letter
CAB assessment (04/04/2024)
Review-1: *a)Ok, closed (Proofs are provided)* *b) Ok, closed (corrected).*

Finding ID	*13*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
5.				
Description of finding				
CAR-13 *No official document has been sent regarding which company is the parent company and which company is the subsidiary company.*				
Project holder response (01/03/2024)				
The sentence in section is revised "BioGold Energy Doo is owned by the Zlatar Maramorak Doo company, which is owned by the Almex Doo.". Proof documents are provided under the folder of "02_ProjectOwnership_CreditRights"				

Documentation provided by the project holder
SDG Tool, MR
CAB assessment (04/04/2024)
Review-1: *Ok, closed (Proof has been provided)*

Finding ID	*14*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
7				
Description of finding				
CAR-14 *The agreement mentioned in Section 7 is not provided to VVB.*				
Project holder response (01/03/2024)				
The agreement is provided, BioGold_to_ZlatarMramorakDoo_CarboCreditRights.pdf under the folder of "02_ProjectOwnership_CreditRights"				
Documentation provided by the project holder				
MR, Supporting documents, ER Calculation Excel				

CAB assessment (04/04/2024)
Review-1: *Ok, closed (Proofs are provided)*

Finding ID	*15*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
8				
Description of finding				
"BCR Tool. (NNH) ." is not used. No Net Harm Environmental and Social Safeguards				
Project holder response (01/03/2024)				
Section 8 is revised, added few paragraphs by taking into consideration requirements of the BCR tool No Net Harm Environmental and Social Safeguards.				
Documentation provided by the project holder				
MR, Supporting documents				
CAB assessment (04/04/2024)				
Review-1: *OK, closed (BCR Tool (NNH) has been used).*				

Finding ID	*16*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
9				
Description of finding				
CAR-16 *Number of local employees seems incorrect based on the discussion during site visit.*				
Project holder response (01/03/2024)				
Number of working people is corrected as 9 in the MR report.				
Documentation provided by the project holder				
MR, records				
CAB assessment (04/04/2024)				
Review-1: *OK, closed (Number of local employees corrected).*				

Finding ID	*17*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***

Section No.
9
Description of finding
"BCR Tool. No Net Harm Environmental and Social Safeguards (NNH)[28]" is not used
Project holder response (01/03/2024)
Section 9 is revised, and a paragraph is added to reflect the requirement of the BCR tool No Net Harm Environmental and Social Safeguards.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *OK, closed (BCR Tool (NNH) has been used).*

Finding ID	*18*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
1				

[28] Available in https://biocarbonstandard.com/en/no-net-harm/

Description of finding
CAR-18 *Separate start dates of Mramorak 1 and Mramorak Power plant are missing.*
Project holder response (01/03/2024)
MR Section 1 is revised, and separate start dates of Mramorak 1 and Mramorak 2 are indicated.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *OK, closed (added on page 17).*

Finding ID	*19*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
16				
Description of finding				
CAR-19 *The following statement is available in the MR.* *All these ex-post parameters given in Section 16.1 are already measured and recorded on a routine base within the organizational process of the project owner.*				

However it is not clearly indicated whether this Section 16.1 is from the PDD.
Project holder response (01/03/2024)
This sentence is revised as "As it is stated in the project activity PDD report Version 1.5, all these ex-post parameters given in Section 16.1 are already measured and recorded on a routine base within the organizational process of the project owner." *PP response: Section 16.1 is corrected as 15.2. In Section 15.2.2, parameters to be monitored, parameters collection way and frequency are indicayed in each table. For example, number of cows per year, $N_{LT,y,}$ is indicated in Section 15.2.2 as "Counting the number of cattle at the farms (Mramorak and Stari Tamis farms) is part of the business of the project owner. Project proponent has daily records of animal stocks." Another example is $W_{j,x,}$Section 15.2.2 indicates the Project proponents log book records that show the municipal organic wastes accepted by the Mramorak1&2. And data collection frequency is indicated as continuesly.* *Hence, only the following sentence is indicated in Section 15.2.2.: "Monitoring of these ex-post parameters regarding the monitoring frequency and source of data etc., are indicated in the tables in Section 15.2."*
Documentation provided by the project holder
MR, ER Calcualtion Excel Sheet, Supporting documents
CAB assessment (04/04/2024)
Review-1: *Still, it is not clear. What the routine is and its frequency are missing.* *Review-2:* *Ok, Closed.*

Finding ID	*20*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***

Section No.
7
Description of finding
CAR-20 *During the site visit, it was mentioned that the control authority of some monitoring equipment does not belong to the project owner, but belongs to the manufacturer companies. Information about the equipment mentioned in this section and which company has control authority is missing. Supporting documents should also be provided.*
Project holder response (01/03/2024)
The gas engine unit is maintaned by the AB Engine. The maintanence contract is provided under the folder of "12_ProjectMaintenanceContracts". *Power meters at the subtation are maintaned by the EPS Distribucija doo, as per the Serbian energy market system, there is no specific document that shows that these power meters are maintained by the EPS Distribucija doo, it is just the way business working in Serbia.* *PP.response: There is no relevant/applicable regulation or law in Serbia regarding the gas engine.*
Documentation provided by the project holder
MR, records
CAB assessment (04/04/2024)
Review-1: *Engine contract is suitable. However, refence of Serbian law is missing, if there is.*   *Review-2:*

OK, closed.

Finding ID	*21*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
15.				
Description of finding				
CAR-21 *Supporting documents are missing for section 15.*				
Project holder response (01/03/2024)				
Supporting documents are provided in the folders, including 08_Calibration, 10_Mramorak_TechnicalSpecs_others, 11-2-EmploymentRecords2020-2023. "MramorakMR_RawData" folder is already provided in the first submission of the documents to ReCarbon. This folder contains hardocopy electricity generation data too, other data is in excel format. For those excel format data, sample proof documents are provided in the folder "09_GHG_ER_supporting_documents". Missing Decemeber electricity generation data is provided in this round too within the folder of "09_GHG_ER_supporting_documents				
Documentation provided by the project holder				
Supporting documents				
CAB assessment (04/04/2024)				
Review-1:				

OK, closed (supporting documents have been provided).

Finding ID	*22*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
Indicate the section number of the verification report to which each CL, CAR or FAR corresponds.				
Description of finding				
CAR-22 *During the site visit, it was mentioned that the control authority of some monitoring equipment does not belong to the project owner, but belongs to the manufacturer companies. Information about the equipment mentioned in this section and which company has control authority is missing. Supporting documents should also be provided.*				
Project holder response (01/03/2024)				
The gas engine unit is maintaned by the AB Engine. The maintanence contract is provided under the folder of "12_ProjectMaintenanceContracts". *Power meters at the subtation are maintaned by the EPS Distribucija doo, as per the Serbian energy market system, there is no specific document that shows that these power meters are maintained by the EPS Distribucija doo, it is just the way business working in Serbia.* *PP.response: There is no relevant/applicable regulation or law in Serbia regarding the gas engine.*				
Documentation provided by the project holder				
-				

CAB assessment (04/04/2024)
Review-1: *Please see Review-1 of CAR-18* *Review-2:* *OK, Closed.*

Finding ID	*23*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
16				
Description of finding				
CAR-23 *Supporting documents are missing.*				
Project holder response (01/03/2024)				
Supporting documents of GHG calculation are provided.				
Documentation provided by the project holder				
Supporting documents				
CAB assessment (04/04/2024)				
Review-1: *OK, closed (supporting documents have been provided).*				

Finding ID	*24*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
16				
Description of finding				
CAR-24 a) *Link is not opening for source of data of parameter FCi,m,y and Egmy.* b) *Link is not opening for source of data of parameter EGmy.*				
Project holder response (01/03/2024)				
a) *Links are revised for Fci,m,y* *Links are revised for EGm,y.*				
Documentation provided by the project holder				
ER Calculation Excel Sheet, MR				
CAB assessment (04/04/2024)				
Review-1: a) *OK, closed (Links are working).* b) *OK, closed (Links are working).*				

Finding ID	*25*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
16				
Description of finding				
CAR-25 a) *The value of 0.05 is provided in the MR, while the value of 0.15 has been written for parameter LF_{AD} in the ER sheet (E20 of tab "parameters" spreadsheet).* *The value of 74.1 tCO_2e/TJ is available in the MR monitoring parameter section, while the value has been written as 74100 in Cell E 30 of tab 'parameters" sheet. So mismatch in the value of parameter $EFco_2$ is observed at two places.*				
Project holder response (01/03/2024)				
a) The value of 0.15 is corrected as 0.05 in ER excel sheet, parameters sheet. In PE calculations, 0.05 is already used, hence there is no change in ER calculations. *b) In the excel sheet, parameter sheet, the value is corrected as 74.1.* *In the MR report, an explanation is indicated regarding 74100 $kgCO_2/TJ$ conversion to 74.1 tCO_2/Tj.*				
Documentation provided by the project holder				
ER Calculation Excel Sheet, MR				
CAB assessment (04/04/2024)				
Review-1: a) *OK, closed (Value has been corrected).*				

b) *OK, closed (Value has been corrected).*

Finding ID	*26*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
16				
Description of finding				
CAR-26 *Unit "%" has been written for parameter $\nu_{i,t,db}$ ($\nu_{CH_4,t,db}$) in cell D41 of tab "parameters" in ER sheet.*				
Project holder response (01/03/2024)				
The "%" in ER excel sheet is corrected as m3/m3. Also in the MR report, the monitoring values are correctected as 0.5436, 0.5544 etc to reflect the m3/m3, not the % value. *In any case, the ER calculations are not changed.*				
Documentation provided by the project holder				
ER Calculation Excel Sheet, MR				
CAB assessment (04/04/2024)				
Review-1: *Ok, closed.*				

Finding ID	*27*	*Type of finding*	*Corrective action*	*Date* *27/02/2024*
Section No.				
16				
Description of finding				
CAR-27 a) *Value has been mismatch for parameter DAFw in mentoring report with ER sheet tab ""AMS III AO -TOOL 4-BE".* b) *This value has been written 223.70 in cell G52 of tab "AMS III AO -TOOL 4-BE " in ER sheet. This Value is in round up because actual value is 223.698258566728 as per the Excelsheet. Similarly it shold be check all the other vintage values for this parameter in the MR.* c) *Description missing for the monitoring parameter table of the parameter "$EG_{pj,y"}$. in the MR.* d) *The total value (15,822,92) do not match for the parameter $EG_{pj,y}$. with the ERs Excelsheet. Similarly the Sum value (49,191.63) in the MR does not match with the value in the ERs Excelsheet.* e) *For the parameter ($EG_{pj,y}$), the monitoring frequency is provided as ""Continuous measurement, but recorded monthly" in the registered PDD, however the same is not indicated in the MR.* f) *For the parameter ($v_{i,t,db\ (vCH4,t,db)}$), the value of 15% has been written for parameter $v_{i,t,db\ (vCH4,t,db)}$ in cell E41 of tab "parameters" in ER sheet, however the values (54.36, 55.44, 54.67, 55.41) in the MR.* *For the parameter ($v_{i,t,db\ (vCH4,t,db)}$), the unit is provided as "m^3/ m^3" in the MR monitoring parameter table, however the same is % in the ERs Excelsheet.*				

Project holder response (01/03/2024)
a) Food waste sources are revised as Beotak, Eko Maber and Eko Smart, and hence distances are revised. According the ER excel sheet is revised and MR report is revised. *b) the km values was not relevant with the tool 04 calculation, therefore they are deleted from the AMS III AO -TOOL 4-BE. In general conservative approach was done in the MR and excel, such as food distances are 30.3 from Eko Smart and Eko Maber, but 22.6 km from Beotak, and this 22.6 km is accepted as 30.3 km to be convservative and for simplication of the calculation.* *c) Description is indicated for the EGpj,y".* *d) 15,822,92 is corrected as 15,822.92. The comma type is corrected as dot.* *e) Monitoring frequency for EGpj,y" is indicated as "Continuous measurement, but recorded monthly" in Section 15.2.2.* *f) The excel sheet reflects the 0.55 in m3/m3 unit. The same is indicated in MR too.* *g) In both MR and excel sheet, the unit is corrected and indicated as m3/m3.* *PP. response:* *a) Section 1.4 the following sentence is added: "In the PDD, food sources were indicated the original source of the food wastes such as hotels, shopping malls and restaurants etc. However, the project owner is buying the waste food from Eko Maber, Beotak and Eko Smart. If the project owner does not buy these food wastes from these three companies, Eko Maber, Beotak and Eko Smart would dispose the waste food to the solid waste disposal sites. Therefore, for the project activity, taking the Eko Maber, Beotak and Eko Smart as the source location of the food waste best reflects the actual situation. Therefore, such a change is reflected in this MR report. Hence, as the actual location of the food waste, Eko Maber, Beotak and Eko Smart location is used where the food waste comes to the project site."* *f) In the monitoring period, actual values are used, please see the AMS-III.AO-PE tab in the ER excel sheet.* *For clarification, Parameters tab, cell E41, explanation is revised to indicated the actual values.*
Documentation provided by the project holder

ER Calculation Excel Sheet, MR
CAB assessment (04/04/2024)
a) The MR also lacks an explanation as to why this revision was made. *b)Ok, closed.* *c) Ok, closed (Description is correct).* *d) Ok, closed (Explanation is reasonable and typo corrected).* *e) OK, closed (corrected).* *f) Why the actual value achieved during the monitoring period not used for the emission reduction calculations during this monitoring period?* *g)OK, closed (corrected).* *Review-2:* a) *OK, closed.* *f) OK, closed.*

Finding ID	*28*	***Type of finding***	***Corrective action***	***Date*** ***27/02/2024***
Section No.				
15				
Description of finding				
Frequency not correct for parameter $EG_{pj,y.}$				
Project holder response (01/03/2024)				

Section 15.2.2 is revised, the frequency is indicated as "Continuous measurement, but recorded monthly." Which is consistent with the PDD.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *Ok, closed (correctly explained and revised).*

Finding ID	*29*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
The MR should cite the dates following a consistent format.				
Project holder response (23/07/2024)				
Date format is corrected throughout the MR, couple dates were written as DD.MM.YYYY, they are corrected as DD/MM/YYYY. Please see the track change version for the corrections applied.				
Documentation provided by the project holder				
Revised MR				

CAB assessment (30/07/2024)
Ok, Closed (Format has been revised).

Finding ID	*30*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
The computation of project emissions especially with the split reporting of Mramorak 1 and Mramorak 2 is to be checked and corrected and also the 2021 methane leakage emissions in particular too. *The emission reduction sheet and MR does not present the application of para 19(a) of the methodology AMS-III.AO.*				
Project holder response (23/07/2024)				
As indicated in Section 16.3, leakage is estimated as zero due to that project activity is a Greenfield one. *Section 16.4 is revised as* $$EM_y = (BE_{SWDS,y} + BE_{manure,y} + BE_{elect,y}) - (PE_{transp,} + PE_{phy\ leakage,y} - PE_{flare,y}) - LEy$$ *LEy is indicated in the formula.* *Other than this LEy value, there is a leakage that is estimated within the content of Project Emissions as per AMS-III.AO which is already included in the calculations.* *As per the ITR comment, excel sheet and MR report are revised and correction applied.*				

Documentation provided by the project holder
MR
CAB assessment (02/09/2024)
The demonstration for para 19(a) of AMS-III.AO is not indicated.
Project holder response (25/09/2024)
Mramorak ER excel file is revised to include the requirements of AMS-II.AO paragraph 19. Please see the calculations in AMS-I.D & III.D-BE sheet, below the row 36. Minimum value of emission reduction for each year is taken into account in net GHG emission reductions.
CAB assessment (15/11/2024)
OK, closed (It has been indicated).

Finding ID	*31*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
The project emission calculation from leakage of methane is to be corrected and correspondingly the ER numbers are to be updated.				
Project holder response (23/07/2024)				
Project emission calculations are corrected as per the ITR comment, accordingly, excel and MR report are revised.				

Documentation provided by the project holder
Excel and MR
CAB assessment (30/07/2024)
Ok, Closed (Corrected).

Finding ID	*32*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
a) *The labelling of figure 1 to figure 4 are to be checked and corrected in the MR as they appear to be misleading.* b) *The baseline emissions fom food waste sources are included, however the underlying baseline has not been fully defined and established*				
Project holder response (23/07/2024)				
a) *Section 1.5, it is indicated that "Mramorak 1&2 Biogas Power Plants (hereafter project and/or Mramorak 1&2 project) is a bundled Greenfield project activity, comprising two identical biogas power plants, implementing anaerobic treatment process to organic wastes to reduce Greenhouse"* *Hence, Labelling of Figure 1 through Figure 4, even including Figure 5 is consistent with the description.* *Regarding giving numbering at the end of the labeling sentence (-1, -2, -3, -4) is given due to that figures represent the same project and location but at different resolution. Figure 1 is very low resolution, and figure 2 better resolution. Because of such a reason numbering indicated at the end of the labeling sentence.* b) *Baseline condition for food waste is indicated in Section 1.5.*				
Documentation provided by the project holder				
MR				

CAB assessment (30/07/2024)
Ok, Closed.

Finding ID	*33*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
Section 1.4, page 12 of the MR does not present the distance of the food waste source locations 'Eko Maber doo, Eko Smart doo and Beotok doo.'. Also, the adjoining figure 6 also does not cite food waste source distance.				
Project holder response (23/07/2024)				
The distances were already given in Section 1.4. *"Mramorak 1&2 Biogas Power Plants (hereafter project and/or Mramorak 1&2 project) is a bundled Greenfield project activity, comprising two identical biogas power plants, implementing anaerobic treatment process to organic wastes to reduce Greenhouse."* *Figure 6 is revised, indicating the distances.*				
Documentation provided by the project holder				
MR				
CAB assessment (30/07/2024)				
Ok, Closed (revised).				

Finding ID	*34*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
Section 2 in the MR need not present the methodology and tools applicability conditions again in the section.				
Project holder response (23/07/2024)				
Applicability conditions of the methodologies and the tools are removed from the Section 2.				
Documentation provided by the project holder				
MR				
CAB assessment (30/07/2024)				
OK, closed (Unnecessary information removed).				

Finding ID	*35*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				

Description of finding
The line diagram showing the relevant monitoring points is not presented in section 15.1 of the MR.
Project holder response (24/07/2024)
Figure 16 is inserted, indicating the monitoring points.
Documentation provided by the project holder
MR, photos
CAB assessment (30/07/2024)
OK, closed (They have been indicated).

Finding ID	*36*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
Clarification is missing about the value of 'Quantity of residual waste produced in year y' being higher than other parameters including the manure and co-digested food waste quantities. Further, the comma and decimal notation seem incorrect for total manure value too. *The volumetric flow rates are to be checked and corrected for the two units and especially for 2021 wherein the unit has not been considered operational for entire 365 days and rather only for 281 days*				
Project holder response (24/07/2024)				
Excel sheet and MR report is revised. ITR commented corrections are applied to emission reduction calculations excel sheet and MR report is revised accordingly regarding the emission reduction values.				

Documentation provided by the project holder
Revised Excel Sheet and MR
CAB assessment (20/08/2024)
OK, closed (Correction has been made).

Finding ID	*37*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
The Section 16 in the MR should also present the application of para 19(a) of AMS-III.AO apart from citing the equation therein. The section does not present the computed values.				
Project holder response (24/07/2024)				
Section 16 is revised, the net GHG emission reduction formula is revised as including LEy.				
Documentation provided by the project holder				
Revised MR				
CAB assessment (20/08/2024)				
OK, closed (Correction has been made).				

Finding ID	*38*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
a) *The baseline emissions from food waste as computed in the ER sheet tab 'AMS-III.AO-Tool4-BE' are to be checked and corrected as to how they are represented and used in the tab 'Mramorak_ERstCO2'.* b) *The project emission calculations from leakage of methane is to be checked and corrected for 2021 in particular.* c) *The application of para 19(a) of the methodology AMS-III.AO is not evident in the ER sheet.* d) *The correct use of Mramorak 1 and Mramorak 2 data for project emission calculations and in particular for 2021 is to be checked for the underlyign days.*				
Project holder response (24/07/2024)				
a) *ER excel sheet is revised as per the comment.* b) *ER excel sheet is revised as per the comment.* c) *LEy is inserted into the equation,Section 16.* d) *ER excel sheet is revised as per the comment.*				
Documentation provided by the project holder				
Revised ER Excel Sheet				
CAB assessment (20/08/2024)				
a) *OK, closed (It has been corrected).* b) *OK, closed (It has been revised)* c) *OK, Closed (Added)* d) *The consideration of operational days is not clar from the response.*				
Project holder response (25/09/2024)				
d) *"Stari Tamis farm manure is used in Mramorak 1 plant from the start of 1 January 2021 to 26 March 2021 when the Mramorak 2 entered into operation. This time length refers to 84 days (01/01/2021-26/03/2021). For that reason, 84 days added to Mramorak 1 plant." This explanation is inserted to the excel file as comment, AMS-I.D & III.D-BE sheet, G column, row 5.*				

CAB assessment (15/11/2024)
OK, closed (Supporting documents have been provided).

Finding ID	*39*	***Type of finding***	***Corrective action***	***Date*** ***22/07/2024***
Section No.				
ITR				
Description of finding				
The calibration related information is not presented fully and only brief statemetn on electricity meters calibration.				
Project holder response (23/10/2024)				
Contract with EPS Distribucija Doo, the electricity transmission company operating the power meters at the grid substation is provided. And addition to that, Zlatar doo company provided a letter that assures and states the calibration of the metering devices at the grid subststion are under the responsibility of the EPS Distribucija Doo.				
Documentation provided by the project holder				
Conract with the EPS Distribucija Doo, and a letter from the Zlatar doo.				
CAB assessment (15/11/2024)				
OK, closed (Explanied).				

Finding ID	*1*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***

Section No.
Cover page
Description of finding
Title on the Cover page has "3" before the project name. It seems as typo error.
Project holder response (01/03/2024)
Typo error is corrected.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *OK, closed.*

Finding ID	*2*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***
Section No.				
Cover page.				
Description of finding				

Website is missing in the contact row.
Project holder response (01/03/2024)
Zlatar doo, the project owner, does not have a website.
Documentation provided by the project holder
-
CAB assessment (04/04/2024)
Review-1: *OK, closed (Explanation is reasonable).*

Finding ID	*3*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***
Section No.				
1				
Description of finding				
Information about group project or not is missing in Section 1.1. of MR.				
Project holder response (01/03/2024)				
Section 1.1. is revised. The following sentence is added: "Mramorak 1&2 project is a bundled project by bundling two identical biogas power plant systems. It is not a grouped project as per the definition provided in the BioCarbon Registry Voluntary Carbon Market Standard, Version 2.0, Nov 2022.p.36."				

Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *OK, closed (Explanation is reasonable and MR has been revised.).*

Finding ID	*4*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***
Section No.				
2				
Description of finding				
Footnote 9 does not work.				
Project holder response (01/03/2024)				
Link is revised for AMS-III.D.				
Documentation provided by the project holder				
-				
CAB assessment (04/04/2024)				

Review-1: *OK, closed (Explanation is reasonable).*

Finding ID	*5*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***
Section No.				
2				
Description of finding				
Footnote 17,18,21 and 22 is not opening.				
Project holder response (01/03/2024)				
Links are revised which are related to the Serbian energy and environmental laws and regulations				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
Review-1: *OK, closed.*				

Finding ID	***6***	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***
Section No.				
15				
Description of finding				
CL-6 *Information related to the assessment of environmental effects of the project activities is missing.*				
Project holder response (01/03/2024)				
Section 15.1 is revised as per the comment.				
Documentation provided by the project holder				
MR				
CAB assessment (04/04/2024)				
Review-1: *OK, closed (MR has been revised).*				

Finding ID	*7*	***Type of finding***	***Clarification***	***Date*** ***27/02/2024***

Section No.
2
Description of finding
CL-7 *Footnote 49 is not opening.*
Project holder response (01/03/2024)
Link is revised for AMS-III-D.
Documentation provided by the project holder
MR
CAB assessment (04/04/2024)
Review-1: *OK, closed.*

Annex 3. Documentation review

Document Title / Version	*Author*	*Organization*	*Document provider (if applicable)*
Monitoring Report v1.0, 23/01/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.0, 23/01/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Training Emplyoee records	IEASBIOGAS	IEASBIOGAS	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Training certificate	SUMA	SUMA	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Animal Counts-daily reports	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Electricity Consumption	EPS Distribucija Doo. monthly invoices.	EPS Distribucija Doo. monthly invoices.	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Electricity production	EPS Distribucija Doo. monthly invoices.	EPS Distribucija Doo. monthly invoices.	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Flow meter reports	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Methane measurements	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Solid digestate reports	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Annual Reports for Temperature in Serbia	Republic Hydrometeorological Service of Serbia	Republic Hydrometeorological Service of Serbia	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Transportation Vehicles	Beotok- Ekosmart- Maber	Beotok- Ekosmart- Maber	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Waste and manure quantities report	Beotok- Ekosmart- Maber	Beotok- Ekosmart- Maber	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Electricity Generation License	Republic of Serbia	Republic of Serbia	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Revised Electricity Generation License	Republic of Serbia	Republic of Serbia	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Generation License of Mramorak 1 (unrevised one) - *27/11/2018*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Generation License of Mramorak 2 (unrevised one) - *17/06/2020*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Generation License of Mramorak 1 (revised one) - *04/12/2018*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Generation License of Mramorak 2 (revised one) - *05/03/2021*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Proof of Project Owner Document - *26/10/2021*	*Project Owner*	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Signed and Sealed Letter by BioGold Energy Doo. about the Project Owner - *06/05/2024*	*BioGold Energy Doo*	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Law of Serbia on Livestock Management	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
waste management permit from Kovin Municipal Administration- Department to the Project Owner (Zlatar Mramorak Doo.) - *23/07/2021*	*Kovin Municipal Administration*	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
The waste management permit from Kovin Municipal Administration- Department to BioGold Energy Doo.	*Kovin Municipal Administration*	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

- *02/11/2021*			
Monitoring Report v1.1, 01/03/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.1, 01/03/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
KMZ Coordinates for power plant	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Technical Documents of Monitoring Equipment (Flow Meter, Electricity Meters, Gas Analyser)	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Technical Documents of the Installed Technology (Desulphurization unit, Separator, Gas Engines, Anaerobic Digester)	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
KMZ file of the Project Activity	*Project owner and Kilittaşı Engineering*	-	Kilittaşı Mühendislik

			Müşavirlik İnşaat Tic. Ltd. Şti
ODA Declaration	Zlatar Mramorak Doo	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
The photographic evidences of the Grievance Book	Zlatar Mramorak Doo	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
The photographic evidences of the Electricity Meters	Zlatar Mramorak Doo	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Construction Agreements - *12/12/2018 (Mramorak 1)* *01/07/2019 (Mramorak 2)*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Social Security Records of the Employees	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
The photographic evidences of the name plates of the Monitoring Equipment	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Energy Sector Development	*Republic of Serbia*	-	Kilittaşı Mühendislik

Strategy of the Republic of Serbia for the Period by 2025 with Projections by 2030 - *2016*			Müşavirlik İnşaat Tic. Ltd. Şti
Received license to be implemented from the Electrodistribution company of Republic of Serbia for Mramorak 1 and Mramorak 2 (Investment Decision Date) - *26/07/2018*	*Republic of Serbia*	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Environmental Impact Assessment Report (Mramorak 1) - *20/10/2021*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Environmental Impact Assessment Report (Mramorak 2) - *01/07/2021*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Calibration Documents of Gas Analyzer - *21/05/2019* *10/01/2020* *05-06/08/2021*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Calibration Documents of Flow Meters - *18/07/2019* *10/04/2020*	-	-	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Waste disposal records	*Beotok*	*Beotok*	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Declaration about there is no double counting	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
BCR-PD *v1.5* *24/08/2023*	*İncigül Polat Erdoğan*	*Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.*	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Monitoring Report v1.2, 05/04/2024	İncigül Erdoğan	Kilittaşı Mühendislik	Kilittaşı Mühendislik

		Müşavirlik İnşaat Tic. Ltd. Şti	Müşavirlik İnşaat Tic. Ltd. Şti
Monitoring Report v1.5, 20/07/2025	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.2, 05/04/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
SDG Tool	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.3, 25/09/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.4, 23/10/2024	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
ER Calculation Excel Sheet v1.6, 07/07/2025	İncigül Erdoğan	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti
Contract with EPS Distribucija	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Declaration about calibration of meters	Zlatar Mramorak Doo	Zlatar Mramorak Doo	Kilittaşı Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti

Annex 4. Abbreviations

Abbreviations	Full texts
VCCs	Approved Carbon Credits
CAR	Corrective Action Request
CDM	Clean Development mechanism
CL	Clarification request
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DR	Document Review
EF	Emission Factor
ER	Emission Reductions
FAR	Forward Action Request
GCC	Global Carbon Council
GHG	Green House Gases
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
kWh	Kilo Watt Hour
MW	Mega Watt

MWh	*Mega Watt Hour*
PD	*Project Document*
PVR	*Project Verification Reports*
SV	*Site Visit*
tCO2e	*Tonnes of CO2 equivalents*
VB	*Verification Body*
CAB	*Conformity Assessment Body*

NOTE: This format shall be completed following the instructions included. However, it is important to highlight that these instructions are complementary to the BCR STANDARD, and the BioCarbon Validation & Verification Manual, in which more information on each section can be found