

GOLD STANDARD VERIFICATION REPORT

For: CO2balance UK Ltd

REPORT NO.:
GS5329-32-MP6
GS5335-44-MP6
GS5437-41-MP6



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Abbreviations used in this Report

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DR	Document Review
EF	Emission Factor
ERPA	Emission Reduction Purchase Agreement
ER	Emission Reductions
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GWP	Global Warming Potential
GS	Gold Standard
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
kWh	Kilo Watt Hour
MW	Mega Watt
NC	Non-Conformity
NCV	Net Calorific Value
NGO	Non-governmental Organisation
ODA	Official Development Assistance
PDD	Project Design Document
PD	Project Developer
tCO ₂ e	Tonnes of CO ₂ equivalents
UNFCCC	United Nations Framework Convention on Climate Change
BH	Borehole
GS4GG	Gold Standard for the Global Goals
ICS	Improved Cookstove
MWh	MegaWattHour
CH ₄	Methane
MR	Monitoring Report
N ₂ O	Nitrous Oxide
POA	Programme of Activity
SGP	Safeguarding Principles
SDG	Sustainable Development Goal
SC	SustainCERT

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TPDDTE	Technologies and Practices to Displace Decentralised Thermal Energy
C	Consumption
UN	United Nations
VVB	Validation and Verification Body
VER	Verified Emission Reduction
VPA	Voluntary Project Activity

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OBJECTIVE AND CRITERIA

Objective

Gold Standard projects must undergo independent validation/verification of emission reductions and overall compliance with Gold Standard rules as the basis for issuance of Gold Standard Voluntary Emission Reductions (GS VERs).

The objectives of this verification are to determine if the environmental information statement and other reporting information is accurate and conforms with the criteria defined in Gold Standard rules.

This report details the objectives, scope, criteria, methodology and findings of this process and a final opinion.

The Gold Standard requires that the final version of this report is published in the public domain. The client to whom this report is addressed therefore acknowledges that the final version of this report will be published unless SustainCERT (SC) are informed in writing within 1 business day following issuance of the final version to the client.

SCOPE

Related activity	Verification
Project Title (s)	1. GS1247 VPA 91 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5329) 2. GS1247 VPA 92 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5330) 3. GS1247 VPA 93 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5331) 4. GS1247 VPA 94 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5332) 5. GS1247 VPA 95 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5335) 6. GS1247 VPA 96 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5336) 7. GS1247 VPA 97 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5337) 8. GS1247 VPA 98 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5338)

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	9. GS1247 VPA 99 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5339) 10. GS1247 VPA 100 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5340) 11. GS1247 VPA 101 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5341) 12. GS1247 VPA 102 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5342) 13. GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5343) 14. GS1247 VPA 104 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5344) 15. GS1247 VPA 112 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5437) 16. GS1247 VPA 113 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5438) 17. GS1247 VPA 114 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5439) 18. GS1247 VPA 115 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5440) 19. GS1247 VPA 116 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5441)
Project ID (s) (i.e.: GS-ID)	1. GS5329 2. GS5330 3. GS5331 4. GS5332 5. GS5335 6. GS5336 7. GS5337 8. GS5338 9. GS5339 10.GS5340 11.GS5341 12.GS5342 13. GS5343 14. GS5344

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	15. GS5437
	16. GS5438
	17. GS5439
	18. GS5440
	19. GS5441
Project Type	Safe Water Supply – Borehole
PoA Title (if applicable)	Improved Kitchen Regimes Multi-Country PoA
POA ID (if applicable)	GS1247
Responsible Party	CO2balance UK Ltd
Verification programme	Gold Standard Foundation (GSF)

The scope of verification covers the emissions reductions project in that is prepared in accordance with the Monitoring Report of the GS ID (s) listed above.

The responsible party is responsible for the preparation and fair presentation of the environmental information statement in accordance with the criteria.

Only the following GHGs are considered within the scope of the assessment: CO₂, CH₄, N₂O.

TEAM COMPOSITION

Verification Team

Name	Qualification	Coverage of sectoral/technical area	Host country experience	Conducted Site visit / Remote Audit
Nayan Deka	Team Leader (until 18/03/2024)	☒ (Energy)	☒	☒
Muskan Chawla	Team Leader (from 19/03/2024)	☒ (Energy)	☒	☒
Randulph Morales	Trainee TL (GS Microscale) ¹	☒ (Energy)	-	☒

Independent Review team and approver

¹ Randulph Morales was an auditor till 25-Apr-2024. Since 26-Apr-2024 is qualified Trainee Team Leader (GS Microscale).

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Name	Role	Coverage of technical area
Indrapal Parmar	Independent R	☒ (All)
Shivraj Sharma	Approver	☒ (All)

PROJECT INFORMATION

Monitoring Period

Start of Monitoring Period	1. GS5329: 01/01/2022 2. GS5330: 01/01/2022 3. GS5331: 01/01/2022 4. GS5332: 01/01/2022 5. GS5335: 01/01/2022 6. GS5336: 01/01/2022 7. GS5337: 01/01/2022 8. GS5338: 01/01/2022 9. GS5339: 01/01/2022 10. GS5340: 01/01/2022 11. GS5341: 01/01/2022 12. GS5342: 01/01/2022 13. GS5343: 01/01/2022 14. GS5344: 01/01/2022 15. GS5437: 01/01/2022 16. GS5438: 01/01/2022 17. GS5439: 01/01/2022 18. GS5440: 01/01/2022 19. GS5441: 01/01/2022
End of Monitoring period	1. GS5329: 19/12/2022 2. GS5330: 11/01/2023 3. GS5331: 20/01/2023 4. GS5332: 08/02/2023

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	5. GS5335: 21/02/2023
	6. GS5336: 26/04/2023
	7. GS5337: 19/04/2023
	8. GS5338: 26/04/2023
	9. GS5339: 10/02/2023
	10. GS5340: 11/02/2023
	11. GS5341: 26/04/2023
	12. GS5342: 26/04/2023
	13. GS5343: 26/04/2023
	14. GS5344: 26/04/2023
	15. GS5437: 26/04/2023
	16. GS5438: 26/04/2023
	17. GS5439: 26/04/2023
	18. GS5440: 26/04/2023
	19. GS5441: 26/04/2023
Total Emission Reductions SDG 13 - Climate Action	1. GS5329: 4,374 tCO ₂ e
	2. GS5330: 4,505 tCO ₂ e
	3. GS5331: 5,206 tCO ₂ e
	4. GS5332: 3,806 tCO ₂ e
	5. GS5335: 3,538 tCO ₂ e
	6. GS5336: 4,133 tCO ₂ e
	7. GS5337: 5,587 tCO ₂ e
	8. GS5338: 5,745 tCO ₂ e
	9. GS5339: 5,606 tCO ₂ e
	10. GS5340: 5,087 tCO ₂ e
	11. GS5341: 6,591 tCO ₂ e
	12. GS5342: 5,357 tCO ₂ e
	13. GS5343: 6,068 tCO ₂ e

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	14. GS5344: 6,685 tCO ₂ e 15. GS5437: 5,406 tCO ₂ e 16. GS5438: 5,496 tCO ₂ e 17. GS5439: 5,666 tCO ₂ e 18. GS5440: 5,204 tCO ₂ e 19. GS5441: 4,996 tCO ₂ e Total: 99,056 tCO ₂ e
Total SDG 3 Good Health and Well-being	Number of additional persons consuming safe Water: 1. GS5329: 339 persons 2. GS5330: 340 persons 3. GS5331: 395 persons 4. GS5332: 305 persons 5. GS5335: 314 persons 6. GS5336: 305 persons 7. GS5337: 332 persons 8. GS5338: 375 persons 9. GS5339: 358 persons 10. GS5340: 380 persons 11. GS5341: 375 persons 12. GS5342: 327 persons 13. GS5343: 366 persons 14. GS5344: 379 persons 15. GS5437: 325 persons 16. GS5438: 287 persons 17. GS5439: 319 persons 18. GS5440: 311 persons

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	19. GS5441: 353 persons Total: 6,485 persons
Total SDG 5 Gender Equality ²	Reduction in time spent collecting water and fuel: 1. GS5329: -179% 2. GS5330: -179% 3. GS5331: -179% 4. GS5332: -179% 5. GS5335: -179% 6. GS5336: -179% 7. GS5337: -179% 8. GS5338: -179% 9. GS5339: -179% 10. GS5340: -179% 11. GS5341: -179% 12. GS5342: -179% 13. GS5343: -179% 14. GS5344: -179% 15. GS5437: -179% 16. GS5438: -179% 17. GS5439: -179% 18. GS5440: -179% 19. GS5441: -179%

² SDG 5 (Gender Equality): under this MP, the value for time spent collecting water per household has increased the same has been highlighted in E.6 of MR. The increase has been attributed to the higher number of trips recorded for water collection in the project survey. Therefore, as the time spent has increased, SDG 5 will not be claimed for this MP. However, Despite this, the project still meets the minimum requirement of 3 SDG SDGs 3, 6, and 13) set by the GS4GG. It's important to note that SDG 5 does not impact the project's emission reduction computation.



	(AS THE TIME SPENT HAS INCREASED SDG 5 WILL NOT BE CLAIMED UNDER THIS MP)
Total SDG 6 Clean water and sanitation for all	Number of additional persons having access to safe water: 1. GS5329: 3,143 persons 2. GS5330: 3,148 persons 3. GS5331: 3,658 persons 4. GS5332: 2,827 persons 5. GS5335: 2,910 persons 6. GS5336: 2,828 persons 7. GS5337: 3,076 persons 8. GS5338: 3,478 persons 9. GS5339: 3,321 persons 10. GS5340: 3,524 persons 11. GS5341: 3,478 persons 12. GS5342: 3,033 persons 13. GS5343: 3,395 persons 14. GS5344: 3,517 persons 15. GS5437: 3,018 persons 16. GS5438: 2,664 persons 17. GS5439: 2,962 persons 18. GS5440: 2,882 persons 19. GS5441: 3,269 persons Total: 60,131 persons
Date of MR Report	25/04/2024
Version of MR Report	3

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Vintage-wise break-up of emission reductions for monitoring period:

Project GS ID	1. GS5329
	2. GS5330
	3. GS5331
	4. GS5332
	5. GS5335
	6. GS5336
	7. GS5337
	8. GS5338
	9. GS5339
	10. GS5340
	11. GS5341
	12. GS5342
	13. GS5343
	14. GS5344
	15. GS5437
	16. GS5438
	17. GS5439
	18. GS5440
	19. GS5441
Product Totals	1. GS5329: 4,374 tCO ₂ e
	2. GS5330: 4,505 tCO ₂ e
	3. GS5331: 5,206 tCO ₂ e
	4. GS5332: 3,806 tCO ₂ e
	5. GS5335: 3,538 tCO ₂ e
	6. GS5336: 4,133 tCO ₂ e
	7. GS5337: 5,587 tCO ₂ e

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	8. GS5338: 5,745 tCO ₂ e
	9. GS5339: 5,606 tCO ₂ e
	10. GS5340: 5,087 tCO ₂ e
	11. GS5341: 6,591 tCO ₂ e
	12. GS5342: 5,357 tCO ₂ e
	13. GS5343: 6,068 tCO ₂ e
	14. GS5344: 6,685 tCO ₂ e
	15. GS5437: 5,406 tCO ₂ e
	16. GS5438: 5,496 tCO ₂ e
	17. GS5439: 5,666 tCO ₂ e
	18. GS5440: 5,204 tCO ₂ e
	19. GS5441: 4,996 tCO ₂ e
	Total: 99,056 tCO ₂ e
Vintage Break-up	-
01/01/2022 - 19/12/2022	1. GS5329: 4,374 tCO ₂ e
01/01/2022 - 31/12/2022	2. GS5330: 4,354 tCO ₂ e
01/01/2022 - 31/12/2022	3. GS5331: 4,896 tCO ₂ e
01/01/2022 - 31/12/2022	4. GS5332: 3,380 tCO ₂ e
01/01/2022 - 31/12/2022	5. GS5335: 2,963 tCO ₂ e
01/01/2022 - 31/12/2022	6. GS5336: 2,705 tCO ₂ e
01/01/2022 - 31/12/2022	7. GS5337: 4,082 tCO ₂ e
01/01/2022 - 31/12/2022	8. GS5338: 4,111 tCO ₂ e
01/01/2022 - 31/12/2022	9. GS5339: 4,968 tCO ₂ e
01/01/2022 - 31/12/2022	10. GS5340: 4,394 tCO ₂ e
01/01/2022 - 31/12/2022	11. GS5341: 4,668 tCO ₂ e
01/01/2022 - 31/12/2022	12. GS5342: 3,837 tCO ₂ e
01/01/2022 - 31/12/2022	13. GS5343: 4,191 tCO ₂ e
01/01/2022 - 31/12/2022	14. GS5344: 4,740 tCO ₂ e

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01/01/2022 - 31/12/2022	15. GS5437: 3,838 tCO ₂ e
01/01/2022 - 31/12/2022	16. GS5438: 4,024 tCO ₂ e
01/01/2022 - 31/12/2022	17. GS5439: 4,028 tCO ₂ e
01/01/2022 - 31/12/2022	18. GS5440: 3,747 tCO ₂ e
01/01/2022 - 31/12/2022	19. GS5441: 3,325 tCO ₂ e
	Total: 76,625 tCO ₂ e
01/01/2023 - 26/04/2023	1. GS5329: 0 tCO ₂ e
01/01/2023 - 11/01/2023	2. GS5330: 151 tCO ₂ e
01/01/2023 - 20/01/2023	3. GS5331: 310 tCO ₂ e
01/01/2023 - 08/02/2023	4. GS5332: 426 tCO ₂ e
01/01/2023 - 21/02/2023	5. GS5335: 575 tCO ₂ e
01/01/2023 - 26/04/2023	6. GS5336: 1,428 tCO ₂ e
01/01/2023 - 19/04/2023	7. GS5337: 1,505 tCO ₂ e
01/01/2023 - 26/04/2023	8. GS5338: 1,634 tCO ₂ e
01/01/2023 - 10/02/2023	9. GS5339: 638 tCO ₂ e
01/01/2023 - 11/02/2023	10. GS5340: 693 tCO ₂ e
01/01/2023 - 26/04/2023	11. GS5341: 1,923 tCO ₂ e
01/01/2023 - 26/04/2023	12. GS5342: 1,520 tCO ₂ e
01/01/2023 - 26/04/2023	13. GS5343: 1,877 tCO ₂ e
01/01/2023 - 26/09/2023	14. GS5344: 1,945 tCO ₂ e
01/01/2023 - 26/04/2023	15. GS5437: 1,568 tCO ₂ e
01/01/2023 - 26/04/2023	16. GS5438: 1,472 tCO ₂ e
01/01/2023 - 26/04/2023	17. GS5439: 1,638 tCO ₂ e
01/01/2023 - 26/04/2023	18. GS5440: 1,457 tCO ₂ e
01/01/2023 - 26/04/2023	19. GS5441: 1,671 tCO ₂ e
	Total: 22,431 tCO ₂ e

Annual projections

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Annual Average Emission Reductions (SDG 13)	1. GS5329: 10,000 tCO ₂ e 2. GS5330: 10,000 tCO ₂ e 3. GS5331: 10,000 tCO ₂ e 4. GS5332: 10,000 tCO ₂ e 5. GS5335: 10,000 tCO ₂ e 6. GS5336: 10,000 tCO ₂ e 7. GS5337: 10,000 tCO ₂ e 8. GS5338: 10,000 tCO ₂ e 9. GS5339: 10,000 tCO ₂ e 10. GS5340: 10,000 tCO ₂ e 11. GS5341: 10,000 tCO ₂ e 12. GS5342: 10,000 tCO ₂ e 13. GS5343: 10,000 tCO ₂ e 14. GS5344: 10,000 tCO ₂ e 15. GS5437: 10,000 tCO ₂ e 16. GS5438: 10,000 tCO ₂ e 17. GS5439: 10,000 tCO ₂ e 18. GS5440: 10,000 tCO ₂ e 19. GS5441: 10,000 tCO ₂ e
Total SDG 3 Good Health and Well-being	GS5329-32, GS5335-41, GS5437-41: 42,944 additional persons with access to safe water
Total SDG 5 Gender Equality	GS5329-32, GS5335-41, GS5437-41: 42% reduction in time spent collecting water and firewood per household per day.
Total SDG 6 Clean water and sanitation for all	GS5329-32, GS5335-41, GS5437-41: 64,822 additional persons with access to safe water.

VERIFICATION OPINION

Unmodified Opinion



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Modified Opinion (see reasons below)	☐
Adverse Opinion (see reasons below)	☐
Disclaimer of Opinion (see reasons below)	☐

The project representative to whom this report is addressed is responsible for the preparation and fair presentation of GHG and other environmental reporting information in accordance with Gold Standard rules.

SustainCERT is responsible for expressing this verification opinion on the GHG and other environmental reporting information based on the evidence gathering procedures documented in this report. The verification was planned and carried out in accordance with ISO 14064-3 (Specification with guidance for the verification and validation of greenhouse gas statements) to provide a reasonable level of assurance that the information is accurate.

Reason for Modified Opinion (if applicable)	N/A
Reason for Adverse Opinion (if applicable)	N/A
Reason for Disclaimer (not issuing) of Opinion (if applicable)	N/A

Conclusion:

Considering the following information and the one provided in this report:

Project related activity	Verification
Type of validation/verification	Third-party verification
Project Title (s)	1. GS1247 VPA 91 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5329) 2. GS1247 VPA 92 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5330) 3. GS1247 VPA 93 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5331)

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4. GS1247 VPA 94 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5332)
5. GS1247 VPA 95 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5335)
6. GS1247 VPA 96 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5336)
7. GS1247 VPA 97 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5337)
8. GS1247 VPA 98 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5338)
9. GS1247 VPA 99 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5339)
10. GS1247 VPA 100 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5340)
11. GS1247 VPA 101 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5341)
12. GS1247 VPA 102 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5342)
13. GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5343)
14. GS1247 VPA 104 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5344)
15. GS1247 VPA 112 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5437)
16. GS1247 VPA 113 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5438)
17. GS1247 VPA 114 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5439)
18. GS1247 VPA 115 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5440)

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	19. GS1247 VPA 116 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5441)
Responsible Party	CO2balance UK Ltd
Type of environmental Information statement	Historical in nature
Start of Monitoring Period	1. GS5329: 01/01/2022 2. GS5330: 01/01/2022 3. GS5331: 01/01/2022 4. GS5332: 01/01/2022 5. GS5335: 01/01/2022 6. GS5336: 01/01/2022 7. GS5337: 01/01/2022 8. GS5338: 01/01/2022 9. GS5339: 01/01/2022 10. GS5340: 01/01/2022 11. GS5341: 01/01/2022 12. GS5342: 01/01/2022 13. GS5343: 01/01/2022 14. GS5344: 01/01/2022 15. GS5437: 01/01/2022 16. GS5438: 01/01/2022 17. GS5439: 01/01/2022 18. GS5440: 01/01/2022 19. GS5441: 01/01/2022
End of Monitoring period	1. GS5329: 19/12/2022 2. GS5330: 11/01/2023 3. GS5331: 20/01/2023 4. GS5332: 08/02/2023 5. GS5335: 21/02/2023 6. GS5336: 26/04/2023

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	7. GS5337: 19/04/2023
	8. GS5338: 26/04/2023
	9. GS5339: 10/02/2023
	10. GS5340: 11/02/2023
	11. GS5341: 26/04/2023
	12. GS5342: 26/04/2023
	13. GS5343: 26/04/2023
	14. GS5344: 26/04/2023
	15. GS5437: 26/04/2023
	16. GS5438: 26/04/2023
	17. GS5439: 26/04/2023
	18. GS5440: 26/04/2023
	19. GS5441: 26/04/2023
Date of MR Report	25/04/2023
Version of MR Report	3

Verification period is equal to the monitoring start and end dates mentioned above.

SustainCERT (SC) concludes that:

The GHG emission reductions are calculated without material misstatements for the aforementioned monitoring period and has been prepared in accordance with the verification criteria and is a materially correct and fair representation of GHG other reporting information. Our opinion refers to reported project's information on GHG emissions and resulting reductions, which were determined using the valid and certified baseline, monitoring plan and other relevant documents.

Based on the information we have assessed; we can confirm that the implementation of the project resulted in the aforementioned emission reductions during the corresponding monitoring period

Verified GHG emission reductions and removals in the above verification period:

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Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e) ³
01/01/2022 - 19/12/2022	1. GS5329: 5,050	1. GS5329: 0	1. GS5329: 0	1. GS5329: 4,374
01/01/2022 - 31/12/2022	2. GS5330: 5,026	2. GS5330: 0	2. GS5330: 0	2. GS5330: 4,354
01/01/2022 - 31/12/2022	3. GS5331: 5,653	3. GS5331: 0	3. GS5331: 0	3. GS5331: 4,896
01/01/2022 - 31/12/2022	4. GS5332: 3,903	4. GS5332: 0	4. GS5332: 0	4. GS5332: 3,380
01/01/2022 - 31/12/2022	5. GS5335: 3,421	5. GS5335: 0	5. GS5335: 0	5. GS5335: 2,963
01/01/2022 - 31/12/2022	6. GS5336: 3,123	6. GS5336: 0	6. GS5336: 0	6. GS5336: 2,705
01/01/2022 - 31/12/2022	7. GS5337: 4,712	7. GS5337: 0	7. GS5337: 0	7. GS5337: 4,082
01/01/2022 - 31/12/2022	8. GS5338: 4,746	8. GS5338: 0	8. GS5338: 0	8. GS5338: 4,111
01/01/2022 - 31/12/2022	9. GS5339: 5,735	9. GS5339: 0	9. GS5339: 0	9. GS5339: 4,968
01/01/2022 - 31/12/2022	10. GS5340: 5,073	10. GS5340: 0	10. GS5340: 0	10. GS5340: 4,394
01/01/2022 - 31/12/2022	11. GS5341: 5,389	11. GS5341: 0	11. GS5341: 0	11. GS5341: 4,668
01/01/2022 - 31/12/2022	12. GS5342: 4,430	12. GS5342: 0	12. GS5342: 0	12. GS5342: 3,837
01/01/2022 - 31/12/2022	13. GS5343: 4,839	13. GS5343: 0	13. GS5343: 0	13. GS5343: 4,191
01/01/2022 - 31/12/2022	14. GS5344: 5,472	14. GS5344: 0	14. GS5344: 0	14. GS5344: 4,740
01/01/2022 - 31/12/2022	15. GS5437: 4,432	15. GS5437: 0	15. GS5437: 0	15. GS5437: 3,838
01/01/2022 - 31/12/2022	16. GS5438: 4,646	16. GS5438: 0	16. GS5438: 0	16. GS5438: 4,024
01/01/2022 - 31/12/2022	17. GS5439: 4,650	17. GS5439: 0	17. GS5439: 0	17. GS5439: 4,028
01/01/2022 - 31/12/2022	18. GS5440: 4,327	18. GS5440: 0	18. GS5440: 0	18. GS5440: 3,747
01/01/2022 - 31/12/2022	19. GS5441: 3,839	19. GS5441: 0	19. GS5441: 0	19. GS5441: 3,325
N/A – N/A	1. GS5329: 0	1. GS5329: 0	1. GS5329: 0	1. GS5329: 0
01/01/2023 - 11/01/2023	2. GS5330: 175	2. GS5330: 0	2. GS5330: 0	2. GS5330: 151
01/01/2023 - 20/01/2023	3. GS5331: 358	3. GS5331: 0	3. GS5331: 0	3. GS5331: 310
01/01/2023 - 08/02/2023	4. GS5332: 493	4. GS5332: 0	4. GS5332: 0	4. GS5332: 426
01/01/2023 - 21/02/2023	5. GS5335: 665	5. GS5335: 0	5. GS5335: 0	5. GS5335: 575
01/01/2023 - 26/04/2023	6. GS5336: 1,649	6. GS5336: 0	6. GS5336: 0	6. GS5336: 1,428
01/01/2023 - 19/04/2023	7. GS5337: 1,737	7. GS5337: 0	7. GS5337: 0	7. GS5337: 1,505
01/01/2023 - 26/04/2023	8. GS5338: 1,887	8. GS5338: 0	8. GS5338: 0	8. GS5338: 1,634
01/01/2023 - 10/02/2023	9. GS5339: 737	9. GS5339: 0	9. GS5339: 0	9. GS5339: 638
01/01/2023 - 11/02/2023	10. GS5340: 801	10. GS5340: 0	10. GS5340: 0	10. GS5340: 693
01/01/2023 - 26/04/2023	11. GS5341: 2,220	11. GS5341: 0	11. GS5341: 0	11. GS5341: 1,923

^{3 3} Ery = (BEb,y - PEp,y - LEp,y)*(1-Xboil) where the value of Xboil is 0.0385



01/01/2023 - 26/04/2023	12.GS5342: 1,755	12.GS5342: 0	12.GS5342: 0	12.GS5342: 1,520
01/01/2023 - 26/04/2023	13. GS5343: 2,167	13. GS5343: 0	13. GS5343: 0	13. GS5343: 1,877
01/01/2023 - 26/04/2023	14. GS5344: 2,246	14. GS5344: 0	14. GS5344: 0	14. GS5344: 1,945
01/01/2023 - 26/04/2023	15. GS5437: 1,811	15. GS5437: 0	15. GS5437: 0	15. GS5437: 1,568
01/01/2023 - 26/04/2023	16. GS5438: 1,700	16. GS5438: 0	16. GS5438: 0	16. GS5438: 1,472
01/01/2023 - 26/04/2023	17. GS5439: 1,891	17. GS5439: 0	17. GS5439: 0	17. GS5439: 1,638
01/01/2023 - 26/04/2023	18. GS5440: 1,683	18. GS5440: 0	18. GS5440: 0	18. GS5440: 1,457
01/01/2023 - 26/04/2023	19. GS5441: 1,930	19. GS5441: 0	19. GS5441: 0	19. GS5441: 1,671
Total	1. GS5329: 5,050	1. GS5329: 0	1. GS5329: 0	1. GS5329: 4,374
	2. GS5330: 5,201	2. GS5330: 0	2. GS5330: 0	2. GS5330: 4,505
	3. GS5331: 6,011	3. GS5331: 0	3. GS5331: 0	3. GS5331: 5,206
	4. GS5332: 4,395	4. GS5332: 0	4. GS5332: 0	4. GS5332: 3,806
	5. GS5335: 4,086	5. GS5335: 0	5. GS5335: 0	5. GS5335: 3,538
	6. GS5336: 4,772	6. GS5336: 0	6. GS5336: 0	6. GS5336: 4,133
	7. GS5337: 6,450	7. GS5337: 0	7. GS5337: 0	7. GS5337: 5,587
	8. GS5338: 6,633	8. GS5338: 0	8. GS5338: 0	8. GS5338: 5,745
	9. GS5339: 6,473	9. GS5339: 0	9. GS5339: 0	9. GS5339: 5,606
	10.GS5340: 5,874	10.GS5340: 0	10.GS5340: 0	10.GS5340: 5,087
	11.GS5341: 7,609	11.GS5341: 0	11.GS5341: 0	11.GS5341: 6,591
	12.GS5342: 6,184	12.GS5342: 0	12.GS5342: 0	12.GS5342: 5,357
	13. GS5343: 7,006	13. GS5343: 0	13. GS5343: 0	13. GS5343: 6,068
	14. GS5344: 7,717	14. GS5344: 0	14. GS5344: 0	14. GS5344: 6,685
	15. GS5437: 6,242	15. GS5437: 0	15. GS5437: 0	15. GS5437: 5,406
	16. GS5438: 6,346	16. GS5438: 0	16. GS5438: 0	16. GS5438: 5,496
	17. GS5439: 6,541	17. GS5439: 0	17. GS5439: 0	17. GS5439: 5,666
	18. GS5440: 6,010	18. GS5440: 0	18. GS5440: 0	18. GS5440: 5,204
	19. GS5441: 5,769	19. GS5441: 0	19. GS5441: 0	19. GS5441: 4,996

The conclusion is reached based on the following criteria:

The criteria for this verification are defined in the following documents stated in the Monitoring Report (MR)

- GS4GG Principles & Requirements
- GS4GG Stakeholder Consultation Requirements & Guidelines
- GS4GG Safeguarding Principles & Requirements

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- GS4GG GHG-Emissions-Reduction-Sequestration-Product-Requirements
- Design Certified PDD (s) version 1
- 112_V2.0_PAR_Site-Visit-and-Remote-Audit-Requirements

Optional Requirements

- 100-GS4GG-Programme-of-Activity-Requirements
- Applied methodology "Technologies and Practices to Displace Decentralized Thermal Energy Consumption (TPDDTEC) v.1."

Authorised Signatory Name:	Shivraj Sharma, Director – Validation & Verification
Signature	DocuSigned by: <i>Shivraj Sharma</i> 4E3DA74DBE7A462...
Date of this report approval	29/04/2024
Version of this report	01
Office Location	Luxembourg

The verification of the GHG statement was conducted in accordance with ISO 14064-3 and corresponding GHG scheme.

The responsible party is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria.

METHODOLOGY

Desk Review

An initial verification documentary review was conducted by SustainCERT involving

- A review of the data and information presented in the MR to verify their completeness.
- A review of the approved monitoring plan and monitoring methodology
- An evaluation of data management and quality control system used in the generation and reporting of data and information

A Protocol was used to assess each requirement during the execution of assessment activities and is explained below. The completed Protocol is available in section 0 below.

Example Protocol

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The name/section of the reporting template is indicated in the top row					
Type	Ref	Rule	Assessment Question	Findings/Comments	Conc.
V or I This indicates the type of assessment. V = validation/verification I = inclusion (a streamlined validation for VPAs)	Details the section and section number in the reporting template (PDD or MR)	Provides a reference to the GS rule	Question used to determine compliance with the rule, or if the rule is applicable	Used to track clarifications or corrective actions raised when the assessment question does not immediately lead to a conclusion.	Conclusion of each assessment question.

Whenever the assessment question does not immediately lead to a conclusion, clarifications (CLs) and corrective action requests (CARs) are issued as Findings/Comments against the relevant Rule and Assessment Question.

If a Findings is closed, it will result in a conclusion of either OK, a Forward Action Request (FAR) or an Observation (OBS). If a Finding cannot be closed and a requirement cannot be shown to be met, an NC (Non-conformity) is issued.

OK, CARs, CLs, FARs, OBS and NC are further explained below:

- OK - issued when a requirement has been met.
- CAR (Corrective Action Request) - issued if one of the following occurs:
 - There is a risk that emission reductions cannot be monitored or calculated
 - Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions
 - Gold Standard requirements have not been shown to be met
- Clarification request (CL) - issued if information is insufficient or not clear enough to determine whether a requirement has been met
- Forward Action Requests (FARs) – issued to highlight issues related to implementation that require review at the next verification
- Observations (OBS) - issued where there may be a possible future non-conformity against a requirement.
- Non-Conformity (NC) – issued if a requirement has not been met and cannot be met.

To demonstrate transparency, all Findings (along with the relevant Rule and Assessment Question) are transferred to a separate Review Feedback table (shown below) to provide a written record of how they are discussed and how the conclusion was reached. A transcript of the Review Feedback is available as Appendix 1, which also includes a list of the Supporting Document (s) provided and Reviewed.

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Example Review Feedback

Rule	Assessment Question	Findings/Comments	Developer Response
Copied from the Protocol	Copied from the Protocol	Copied from the Protocol, the nature (and number – e.g. CAR 1/CAR 2) of the Finding is included for traceability	The response should include an explanation of what evidence has been provided in response to the Finding

Site Visit

A site visit is chosen on the basis of risk assessment.

It was determined during our Risk Analysis that a site visit was required. A site visit was undertaken by an Objective Observer, in line with Gold Standard rules and following SustainCERT instruction. The Objective Observer was specially selected for their technical expertise, familiarity with the project location, local language and customs.

This visit was carried out on 17/01/2024– 19/01/2024 to do the following:

1. Assess the design/operation of the Project.
2. Interview personnel and stakeholders regarding the Project operation and data collection procedures.
3. Cross check reported information with evidence observed on site.

The site visit took place in locations chosen by the Objective Observer following instruction by SustainCERT on choosing a representative sample. The list of interviewees, locations and topics discussed are recorded in the accompanying Gold Standard Verification Appraisal Report.

A remote call with Project Developer's representative had taken place on the 20/02/2024

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ASSESSMENT PROTOCOL

The Protocol covers the key thematic areas in Gold Standard certification and is tailored to the review type and the mandatory reporting template (MR/PDD). The key thematic areas addressed in the Protocol are:

- GHG emission reductions (known as SDG 13 contributions)
- Other SDG contributions
- Compliance with Safeguarding Principles
- Compliance with Stakeholder Consultation (LSC) requirements

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APPENDIX: 1- CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS

Final Review Findings

Internal Verification Form for GS Micro Scale Projects and Micro VPAs under Gold Standard for the Global Goals

Project Details	
Project/VPA Title (s) and GS ID (s)	GS1247 VPA 91 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5329) GS1247 VPA 92 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5330) GS1247 VPA 93 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5331) GS1247 VPA 94 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5332) GS1247 VPA 95 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5335) GS1247 VPA 96 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5336) GS1247 VPA 97 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5337) GS1247 VPA 98 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5338) GS1247 VPA 99 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5339) GS1247 VPA 100 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5340) GS1247 VPA 101 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5341) GS1247 VPA 102 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5342) GS1247 VPA 103 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5343) GS1247 VPA 104 Improved Kitchen Regimes Multi-Country PoA - Kasungu Boreholes, Malawi (GS5344) GS1247 VPA 112 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5437) GS1247 VPA 113 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5438) GS1247 VPA 114 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5439) GS1247 VPA 115 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5440) GS1247 VPA 116 Improved Kitchen Regimes Multi-Country PoA - Dowa Boreholes, Malawi (GS5441)
PoA Title and GS ID	GS1247 VPA 91-104, 112-116 Improved Kitchen Regimes – Dowa Boreholes, Malawi (GS5329-32, GS5335-44, GS5437-41)
Project Implementation Period. <i>Crediting Period</i>	GS5329: 20/12/2015 – 19/12/2022 (End of Monitoring Period 26/04/2023) GS5330: 12/01/2016 – 11/01/2023 (End of Monitoring Period 26/04/2023) GS5331: 21/01/2016 – 20/01/2023 (End of Monitoring Period 26/04/2023) GS5332: 09/02/2016 - 08/02/2023 (End of Monitoring Period 26/04/2023) GS5335: 22/02/2016 - 21/02/2023 (End of Monitoring Period 26/04/2023) GS5336: 27/04/2016 - 26/04/2023 (End of Monitoring Period 26/04/2023) GS5337: 20/04/2016 - 19/04/2023 (End of Monitoring Period 26/04/2023)

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	GS5338: 19/05/2016 - 18/05/2023
	GS5339: 11/02/2016 - 10/02/2023
	GS5340: 12/02/2016 - 11/02/2023
	GS5341: 10/07/2016 - 09/07/2023
	GS5342: 03/09/2016 - 02/09/2023
	GS5343: 21/09/2016 - 20/09/2023
	GS5344: 27/09/2016 - 26/09/2023
	GS5437: 17/06/2016 - 16/06/2023
	GS5438: 02/07/2016 - 01/07/2023
	GS5439: 04/09/2016 - 03/09/2023
	GS5440: 24/09/2016 - 23/09/2023
	GS5441: 04/10/2016 - 03/10/2023

OO onsite visit and remote audit Information	
Duration of previous Objective Observer onsite visit	Last onsite visit was conducted on January 18-19 January 2018. Following the GS4GG site visit and Remote audit requirement, V2.0 3.1.1 At a minimum, the VVB shall conduct a physical site visit within two years of the project start date; and 3.1.2 Once within every three years after the first physical site visit date. Thus, a site visit is mandatory to be carried out in this verification process.
Duration of Objective Observer onsite visit	17-19 January 2024
Duration of Remote audit call with PD	20-Feb-2024

Review Feedback

Review Feedback Round:	I
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Supporting Document (s) provided and Reviewed	1. Emission Reduction Calculation Excel File (<i>Malawi Phase 2_ER Calcs_v2(5).xlsx</i>) 2. Monitoring Report (<i>GS5329-32_GS5335-44 GS5437-41_P2_MR_MP6_MP1_v6.pdf</i>) 3. Malawi P1_2_5 US 2022_v1.xlsx 4. Water Point Project Survey Template v1.2 - analysed(7) 5. WCFT_Survey_12-09-22 Kasungu & Dowa Compiled_FINAL
Review Feedback Round:	II
Supporting Document (s) provided and Reviewed	1. co2balance_Malawi NRB updated_C4ES(14) 2. CONFIDENTIAL_300420015_SD_Survey_Results_Dowa_and_Kasungu.v3 3. GS5329-32_GS5335-44 GS5437-41_P2_MR_MP6_MP1_v2_CLEAN 4. GS5329-32_GS5335-44 GS5437-41_P2_MR_MP6_MP1_v2_TRACK 5. HH Lists P2+6b - 2022_FINAL 6. Initial RCF 424-105 7. Initial RCF 424-160 8. Malawi P1_2_5 Random Sample 2022 process 9. Malawi Phase 2 CP2 Baseline Survey(12) 10. Malawi Phase 2_ER Calcs_v3 11. P2 FUV Maintenance Samples 12. P2 Sample CTFs 13. PS_2022_scans_checked 14. PS_US Dashboard 15. Q1_23 Deviation_Request_DEV_433 16. Q2_23 Deviation-Request_DEV_490 17. Q4 WATER QUALITY RESULTS DECEMBER 2022 18. US_2022_scans_checked 19. WATER QUALITY REPORT FOR DOWA BHs-AUGUST 2022_ P1_P2 20. WATER QUALITY RESULTS FOR UNITED PURPOSE D-WASH FEBRUARY 2022 21. WATER QUALITY RESULTS-DOWA2_July2022_someP1 22. WATER QUALITY RESULTS-DWASH3

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	23. WATER QUALITY RESULTS-UP KASUNGU final 24. WQT DOWA_KASUNGU REPORT RESAMPLED SAMPLES 25. WQT_P2_Q3_2022 26. WQT_P2_Q4_2022
Review Feedback Round:	III
Supporting Document (s) provided and Reviewed	1. GS5329-32_GS5335-44 GS5437-41_P2_MR_MP6_MP1_v3_CLEAN 2. GS5329-32_GS5335-44 GS5437-41_P2_MR_MP6_MP1_v3_TRACK 3. WCFT_Survey_12_09_22 Kasungu_Dowa Compiled_FINAL_V2 4. Water Point Project Survey Template v2- analysed 5. Malawi Phase 2_ER Calcs_v4 6. Malawi CP2 Revalidation Baseline Survey 7. CONFIDENTIAL_300420015_SD_Survey_Results_Dowa_and_Kasungu.v3(1) 8. Zuka Mseka 9. Pilirani Phiri 10. Martha Folomani 1 11. Lameck Banda 12. Daisi Muwanje 1 13. 434-074 VPA 115 14. 424-164 VPA 102 15. 424-162 VPA 103 16. 424-159 VPA 101 17. 424-145 VPA 113 18. 424-139 VPA 92 19. 424-112 VPA 91 20. 424-087 VPA 96 21. 424-075 VPA 116 22. 424-073 VPA 97 23. 424-064 VPA 94

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	24. 424-054 VPA 100 25. 424-038 VPA 99 26. 424-031 VPA 93 27. 424-030 VPA 114 28. 424-028 VPA 104 29. 424-017 VPA 112 30. 424-014 VPA 95 31. 424-013 VPA 98
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Rule	Assessment Question	Findings/Comments (CAR 01)	Developer Response
	When is the completion date of the monitoring report?	KPIs section of the MR: PD shall update the date and version of the monitoring report to the date after the remote audit has been conducted.	PD has updated date and version of monitoring report.
	Rd 2	PD has updated the MR and proof of changes can be seen by cross-referencing CLEAN and TRACKED version of the MR. Comment closed.	

Rule	Findings/Comments (CAR 02)	Developer Response
	Excel sheet and MR: There is a mismatch of reported Psafe written in the Monitoring Report (MR) and Emission Reduction (ER) file. Please confirm the correct value and apply the changes to the MR in the following sections:	PD has updated MR.

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		Table 1: SDG3, Table 2 – Product Vintages, Section D.2 SDG 3, Section D.3, Section E.2 SDG 3, Section E.4 SDG 3, Section E.5 SDG 3 <table><tr><td></td><td>MR</td><td>ER</td></tr><tr><td>GS5329</td><td>352</td><td>339</td></tr><tr><td>GS5331</td><td>378</td><td>395</td></tr><tr><td>GS5332</td><td>312</td><td>305</td></tr><tr><td>GS5335</td><td>327</td><td>323</td></tr><tr><td>GS5336</td><td>298</td><td>305</td></tr><tr><td>GS5337</td><td>326</td><td>332</td></tr><tr><td>GS5338</td><td>387</td><td>376</td></tr><tr><td>GS5339</td><td>365</td><td>359</td></tr><tr><td>GS5343</td><td>363</td><td>367</td></tr><tr><td>GS5344</td><td>389</td><td>380</td></tr><tr><td>GS5437</td><td>328</td><td>326</td></tr><tr><td>GS5438</td><td>287</td><td>288</td></tr><tr><td>GS5439</td><td>329</td><td>320</td></tr><tr><td>Total</td><td>6558</td><td>6528</td></tr></table>		MR	ER	GS5329	352	339	GS5331	378	395	GS5332	312	305	GS5335	327	323	GS5336	298	305	GS5337	326	332	GS5338	387	376	GS5339	365	359	GS5343	363	367	GS5344	389	380	GS5437	328	326	GS5438	287	288	GS5439	329	320	Total	6558	6528	
	MR	ER																																														
GS5329	352	339																																														
GS5331	378	395																																														
GS5332	312	305																																														
GS5335	327	323																																														
GS5336	298	305																																														
GS5337	326	332																																														
GS5338	387	376																																														
GS5339	365	359																																														
GS5343	363	367																																														
GS5344	389	380																																														
GS5437	328	326																																														
GS5438	287	288																																														
GS5439	329	320																																														
Total	6558	6528																																														
	Rd 2	The MR reflects the correct values from the ER sheet. Comment Closed.																																														

Rule	Assessment Question	Findings/Comments (CAR 03)	Developer Response
	Are product vintages for SDG 6 calculated and reported correctly?	Excel sheet and MR: There is a mismatch of reported Paccess written in the Monitoring Report (MR) and Emission Reduction	PD has updated MR.

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		(ER) file. Please confirm the correct value and apply the changes to the MR in the following sections: Table 1: SDG 6, Table 2 – Product Vintages, Section D.2 SDG 6, Section D.3, Section E.2 SDG 6, Section E.4 SDG 6, Section E.5 SDG 6 <table><tr><th></th><th>MR</th><th>ER</th></tr><tr><td>GS5329</td><td>3260</td><td>3143</td></tr><tr><td>GS5331</td><td>3509</td><td>3665</td></tr><tr><td>GS5332</td><td>2892</td><td>2832</td></tr><tr><td>GS5335</td><td>3037</td><td>2994</td></tr><tr><td>GS5336</td><td>2764</td><td>2833</td></tr><tr><td>GS5337</td><td>3024</td><td>3081</td></tr><tr><td>GS5338</td><td>3587</td><td>3484</td></tr><tr><td>GS5339</td><td>3390</td><td>3327</td></tr><tr><td>GS5343</td><td>3368</td><td>3401</td></tr><tr><td>GS5344</td><td>3606</td><td>3524</td></tr><tr><td>GS5437</td><td>3045</td><td>3024</td></tr><tr><td>GS5438</td><td>2661</td><td>2668</td></tr><tr><td>GS5439</td><td>3056</td><td>2968</td></tr><tr><td>GS5441</td><td>3290</td><td>3275</td></tr><tr><td>Total</td><td>60831</td><td>60561</td></tr></table>		MR	ER	GS5329	3260	3143	GS5331	3509	3665	GS5332	2892	2832	GS5335	3037	2994	GS5336	2764	2833	GS5337	3024	3081	GS5338	3587	3484	GS5339	3390	3327	GS5343	3368	3401	GS5344	3606	3524	GS5437	3045	3024	GS5438	2661	2668	GS5439	3056	2968	GS5441	3290	3275	Total	60831	60561	
	MR	ER																																																	
GS5329	3260	3143																																																	
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GS5332	2892	2832																																																	
GS5335	3037	2994																																																	
GS5336	2764	2833																																																	
GS5337	3024	3081																																																	
GS5338	3587	3484																																																	
GS5339	3390	3327																																																	
GS5343	3368	3401																																																	
GS5344	3606	3524																																																	
GS5437	3045	3024																																																	
GS5438	2661	2668																																																	
GS5439	3056	2968																																																	
GS5441	3290	3275																																																	
Total	60831	60561																																																	
	Rd 2	The MR reflects the correct values from the ER sheet. Comment Closed.																																																	

Rule	Assessment Question	Findings/Comments (CAR 04)	Developer Response
	Formatting error	Table 2 - Product Vintages, Paccess. Fix the format of the text that it can be read easily.	PD has updated.

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	Rd 2	PD has updated the MR and proof of changes can be seen by cross-referencing CLEAN and TRACKED version of the MR. Comment closed.	
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Rule	Assessment Question	Findings/Comments (CAR 05)	Developer Response
	Inconsistency in the values reported	Section D.2. of MR: There is a typographical error in the reported number of persons having access to safe water, Py, between the MR and ER calculation files. Specifically, for GS5337, the value reported in the MR is 4755, whereas it is documented as 3755 in the ER. PD shall make the values consistency.	PD has updated MR.
	Rd 2	The MR reflects the correct values from the ER sheet. Comment Closed.	

Rule	Assessment Question	Findings/Comments (CL 01)	Developer Response
	Which of the following VPAs belong to MP6 and which of the following VPAs belong to MP1?	KPIs: 1. KPI section in the column monitoring report mentions MP6 and MP1, PD shall clarify which VPAs are included in monitoring period 6, and which VPAs are included in monitoring VPA1. 2. According to section A.4 of MR all the VPA seems to be towards the end of crediting period, then PD shall clarify which VPA is falling in MP 1.	PD has updated the MR to remove 'MP1' where appropriate. All VPA's are in MP6.
	Rd 2	1. The Monitoring Report for the set of VPAs previously verified was verified under Monitoring Period 5. Therefore, all VPAs in	

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Rule	Assessment Question	Findings/Comments (CL 01)	Developer Response
		this verification fall under MP6. Comment closed. 2. PD has updated the MR, and VPAs in this verification are under MP6. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 02)	Developer Response
	Does the responsible party own or have the right to claim emission reductions or removal enhancements expressed in the GHG statement?	Section A. PD shall state in the monitoring report if the responsible party i.e., CO2balance UK Ltd owns or has the right to claim emission reductions or removal enhancements expressed in the GHG statement. Also, PD shall clarify if there has been any change in the responsible parties involved in the project since the beginning of the project.	This is stated by the CTFs: CO2balance UK Ltd. PD has shared a sample of CTFs, please refer to "P2 Sample CTFs". PD has added this to section A of the MR.
	Rd 2	A brief explanation for this has been added in Section A of the MR. PD has submitted "P2 Sample CTFs" to verify this claim. The document "P2 Sample CTFs" were cross-referenced to the ER sheet and all CTFs belong to the VPAs in the project. A sample of CTFs for each VPA in this verification has also been submitted by the PD. Comment closed.	PD has provided

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Rule	Assessment Question	Findings/Comments (CL 03)	Developer Response
	PD must submit an annual report for 2022. As per paragraph 5.1.39 of P&R guidelines, an annual report shall be submitted for each monitoring year by the end of the next calendar year for which verification is not completed. If a verification is in progress but not completed, then an Annual Report is still required by the end of the calendar year.	KPI: PD must justify why an annual report for 2022 has not been submitted.	PD has updated the date in line with the latest Annual Report submission (12/12/2023). The document is viewable under the next Performance Review section
	Rd 2	OK. The annual report for the year 2022 has been submitted (12/18/2023). Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 04)	Developer Response
	Does the version of Methodology (ies) applied match the VPA-DD?	KPI and Section D.4 of the MR: The methodology written in the KPI section of MR is TPDDTEC version 1.0, whereas, in some parts of the MR, the methodology stated is version 3.1 (see section D.4). PD shall clarify the inconsistency in the used version of methodology. Also, mention the correct version of methodology that will be used by the project.	PD has updated version number in section D.4 to v1.0, as it correct in validated VPA-DD.
	Rd 2	The correct methodology is version 1.0 as stated in the VPA-DD. Necessary corrections has been made in the MR. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 05)	Developer Response
	Are both original and capped values been reported?	Section D.1 and D.3: Parameter Up,y: The PD should report capped values of contributions achieved, along with the original values in parentheses, in all applicable sections of the MR.	PD has updated MR with the value of 90.09 usage rate. PD would have capped at 95% if usage rate exceeds this.
	Rd 2	The obtained Up,y value during the project survey was 90.09%. This was below the capped value of 95%. Since obtained value was below 95%, a cap was not applied. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 06)	Developer Response
	Is the product vintage for SDG 5 computed and reported correctly?	ER sheet, table 1 and table 2 of the MR: Table 2 displays an inconsistency in the TRy value within the monitoring report. While Table 1 indicates TRy as 61%, Table 2 presents it as 62%. However, in the ER file, the documented TRy value is 61%. PD shall clarify the inconsistency in the values reported.	PD has updated Table 2. The correct value is 61%.
	Rd 2	PD provided a new project survey containing the correct calculation of parameter TRy. Note that households are spending more time collecting water due to the increased number of trips of water collection. However, the amount of time collecting wood fuel reduced. This is illustrated below:	

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Rule	Assessment Question	Findings/Comments (CL 06)				Developer Response
		Time collection per week (minutes)	Baseline	Previous Verification	Current Verification	
		Water	199.41	231.91	1404.87	
		Fuel	385.10	316.77	226.13	
		Total	584.51	548.68	1631.01	
		Comment closed.				

Rule	Assessment Question	Findings/Comments (CL 07)	Developer Response
P&R	Does the project location match the PDD/VPA-dd?	Section A.2 of MR: The PD is required to incorporate GPS-stamped photo features to provide clearer location details for the boreholes.	PD has included.
	Rd 2	The MR has been revised to reflect this information. Objective Observer provided GPS stamped as well as IDs for the boreholes visited. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 08)	Developer Response
	For Other SDGs, do the monitored parameter boxes match the Design Certified PDD/VPA-dd?	Section D.2 of MR: 1. The PD is required to specify the date of the Water Consumption Field Test (WCFT) under	1. PD has added dates and uncapped value. 2. PD has shared WQT Laboratory reports.

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Rule	Assessment Question	Findings/Comments (CL 08)	Developer Response
		the parameter Qp,y. Additionally, please indicate the date of the previous WCFT conducted before this monitoring period. 2. Please submit the Laboratory Test Report for the Parameter "Quality of Treated Water"	
	Rd 2	1. The dates of the WCFT are now reflected in the MR and the excel sheet (WCFT_Survey_12-09-22 Kasungu & Dowa Compiled_FINAL.xlsx) has been submitted by the PD. Comment closed. 2. WQT laboratory reports has been submitted and were cross-referenced to the ER sheet. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 09)	Developer Response
		Section D.3. of MR: PD shall add the values of parameter Np,y in the column "Values obtained this monitoring period". PD shall also update the values written in the VAR.	PD has added Np,y values to section D.3 of the MR. PD has not updated the values in the VAR as the VAR corresponds to the previous MR.
	Rd 2	The parameter Npy is now reflected in the MR. The values in the ER sheet and MR match. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 10)	Developer Response
	For >2 nd MP of Community Service Activities only, have any increases in <u>key</u> parameters ideally in tabular form (e.g. usage, fuel savings) been justified? (noting that numbers of distributed technologies commonly differ from projections in the PDD/VPA-DD and this is beyond PD control)	Section D.3 of MR: There are significant changes or increases in certain project values during the current monitoring period compared to the last. The PD is required to provide explanations for these changes in the following parameters. • Psafe • Paccess • Np,y • Up,y	Psafe, Paccess, Np,y have increased due to the addition of the extra boreholes in the project. Up,y: has only changed from 85.89% to 90.09% PD has explained in MR.
	Rd 2	PD has updated the MR to briefly explain the changes in values for certain parameters during the current monitoring period vs last monitoring period. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 11)	Developer Response
	For any parameters that were sampled, has the following been demonstrated: (a) Description of implemented sampling design; (b) Collected data; (c) Analysis of the collected data; (d) Demonstration that the required	Section D.4. 1. The PD is required to provide all the randomly generated numbers selected from the list of boreholes listed in the Excel sheet. 2. The PD must ensure that for any parameters subjected to sampling, the following aspects are demonstrated: ○ Description of the implemented sampling design ○ Details of the collected data	1) PD has provided random numbers on sheet 'Final Selection' in excel 'Malawi P1_2_5 Random Sample 2022 process'. Please note there are multiple of each random number due to the sampling process of selecting boreholes from different age groups. The sheet 'Final Selection (for UP)' does not have the random numbers as this is the same list as the previous sheet but organized by village for convenience for the partner. 2) The sampling design can be seen in the excel 'Malawi P1_2_5 Random Sample 2022 process'.

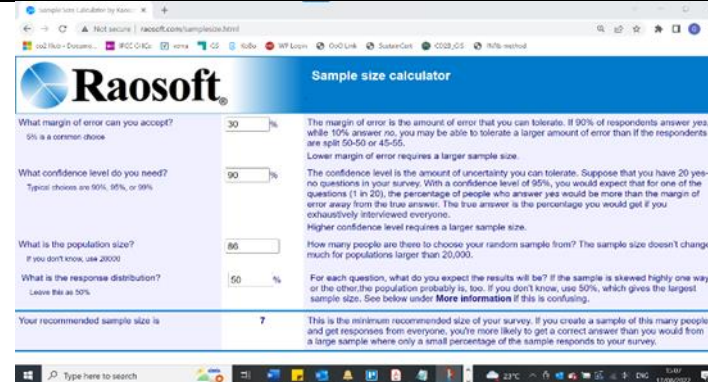
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Rule	Assessment Question	Findings/Comments (CL 11)	Developer Response
	confidence/precision level has been met; Demonstration that the samples were randomly selected and are representative of the population	○ Analysis of the collected data ○ Demonstration of meeting the required confidence/precision level ○ Verification that the samples were randomly selected and are representative of the population. 3. For monitoring parameters where sampling is necessary, the PD is required to demonstrate compliance with the required confidence/precision level as per the methodology. This demonstration should be documented in Section D.4 of the MR.	The description of data collection is set out in Section C of the MR – 'Of the monitoring surveys, the project and usage surveys were collected using remote data collection. The Water Consumption Field Test was conducted on paper. All results are collated in excel spreadsheets and stored in an electronic format. Paper copies of the WCFT are stored in UP's office for this project.' Collected data and accompanying analysis is given in the excels for US, PS and WCFT. As the VPAs are homogeneous, cross sampling of devices was applied, so even though there are not households for each VPA/BH in the samples, those in the sample are representative of the population. The boreholes are first divided into age groups, to ensure a representative sample from each age group of project technology. The boreholes in each age group are assigned a random number and a 90/30 confidence precision is used to select a representative number of boreholes from each age group. See example below.

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Rule	Assessment Question	Findings/Comments (CL 11)	Developer Response
			 The households in these selected boreholes are assigned a random number and around 30 from each age group have been selected for the surveys. As per methodology PD has surveyed more than 100 households for the project and usage survey, in line with the methodology requirement. The CDM calculator has been used to demonstrate that the 90/10 confidence/ precision criterion has been met. Screen shots have been shared.

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Rule	Assessment Question	Findings/Comments (CL 11)	Developer Response																																							
			Sample Size Determination for a Proportion Parameter Survey design: Simple random sampling Calculation method: Precision via confidence interval confidence/precision criterion 90/10 The Instruction for using this calculator Input information in cells coloured in orange Outputs are displayed in cells coloured in green <table><tr><th>Input</th><th>Value</th><th>Notes</th></tr><tr><td>Expected proportion, p</td><td>0.95</td><td>enter on a decimal scale</td></tr><tr><td>Confidence level</td><td>90%</td><td>e.g. for 90% enter 90</td></tr><tr><td>z multiplier</td><td>1.645</td><td>determined by confidence level</td></tr><tr><td>Relative precision</td><td>10%</td><td>e.g. for 10% enter 10</td></tr><tr><td>Population size, N</td><td>47,073</td><td></td></tr><tr><td>Predicted sample size, n</td><td>15</td><td>rounded up to nearest integer</td></tr></table> Note: 1. Requirements for sampling are defined either in the applicable CDM methodology or the "Standard for sampling and surveys for CDM project activities and programme of activities" (sampling standard), with the applicable methodology having precedence. Specific guidance (e.g. the minimum sample size, confidence/precision) in the applicable methodology, if any, shall be followed. (See para. 9 and 10 of the sampling standard (ver. 4.1)) For example, AMS-ILJ. (ver. 6.0) requires that the size of the sample shall be no less than 100. 2. If the sample size calculation returns a value of less than 30 samples, a minimum sample size of 30 shall be chosen when the parameter of interest is a proportion. If the parameter of interest is a numeric mean value (i.e. not a proportion or percentage) the Student's t-distribution shall be used if the resulting sample size is less than 30. (See para. 12 of the sampling standard (ver. 4.1)) 3. It is good practice to employ oversampling at the design stage, not only to compensate for any attrition, outliers or non-response associated with the sample, but also to prevent a situation at the analysis stage where the required reliability is not achieved and additional sampling efforts would be required. (See footnote 10 of the sampling standard (ver. 4.1)) Calculator to check if the precision has been met or not after a sampling survey is conducted <table><tr><th>Input</th><th>Value</th><th>Notes</th></tr><tr><td>Actual sample size</td><td>179</td><td></td></tr><tr><td>Sample proportion</td><td>0.9009</td><td></td></tr><tr><td>Standard error of the proportion</td><td>0.0223</td><td></td></tr><tr><td>Precision associated with a proportion</td><td>0.0367</td><td></td></tr><tr><td>Relative precision</td><td>4.1%</td><td></td></tr></table> Note: If the estimates from the actual samples fail to achieve the target minimum levels of precision (e.g. 10%), measures indicated in para. 16 of the sampling standard (ver. 4.1) shall be followed. confidence and precision has been achieved for the WCFT:	Input	Value	Notes	Expected proportion, p	0.95	enter on a decimal scale	Confidence level	90%	e.g. for 90% enter 90	z multiplier	1.645	determined by confidence level	Relative precision	10%	e.g. for 10% enter 10	Population size, N	47,073		Predicted sample size, n	15	rounded up to nearest integer	Input	Value	Notes	Actual sample size	179		Sample proportion	0.9009		Standard error of the proportion	0.0223		Precision associated with a proportion	0.0367		Relative precision	4.1%	
Input	Value	Notes																																								
Expected proportion, p	0.95	enter on a decimal scale																																								
Confidence level	90%	e.g. for 90% enter 90																																								
z multiplier	1.645	determined by confidence level																																								
Relative precision	10%	e.g. for 10% enter 10																																								
Population size, N	47,073																																									
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Rule	Assessment Question	Findings/Comments (CL 11)	Developer Response																								
			Calculator to check if the precision has been met or not after a sampling survey is conducted <table><tr><th>Input</th><th>Value</th><th>Notes</th></tr><tr><td>Actual sample size</td><td>58</td><td></td></tr><tr><td>Sample mean</td><td>21.6301</td><td></td></tr><tr><td>Sample standard deviation</td><td>5.6776</td><td></td></tr><tr><td>Standard error of the mean</td><td>0.7451</td><td></td></tr><tr><td>t-value</td><td>1.6720</td><td>t-value associated with confidence level</td></tr><tr><td>Abosolute precision</td><td>1.2458</td><td></td></tr><tr><td>Relative precision</td><td>5.8%</td><td></td></tr></table> Note: If the estimates from the actual samples fail to achieve the target minimum levels of precision (e.g. 10%), measures indicated in para. 16 of the sampling standard (ver. 4.1) shall be followed.	Input	Value	Notes	Actual sample size	58		Sample mean	21.6301		Sample standard deviation	5.6776		Standard error of the mean	0.7451		t-value	1.6720	t-value associated with confidence level	Abosolute precision	1.2458		Relative precision	5.8%	
Input	Value	Notes																									
Actual sample size	58																										
Sample mean	21.6301																										
Sample standard deviation	5.6776																										
Standard error of the mean	0.7451																										
t-value	1.6720	t-value associated with confidence level																									
Abosolute precision	1.2458																										
Relative precision	5.8%																										
	Rd 2	1. PD submitted the random sampling sheet detailing the process of how the random sampling process has been performed for the boreholes included in this project. Comment closed. 2. PD reflected the random sampling process accompanying screenshots from the RAO software. Comment closed. 3. Last paragraph: The PD needs to clarify why Phase 1 boreholes are referenced in the MR regarding the Water Quality Tests conducted. Additionally, the PD must confirm and report the correct number of water samples collected from Phase 2 boreholes.	3. PD has updated MR.																								
	Rd 3	3. The PD has updated the MR, referenced the correct project, and reported the number of water samples collected from Phase 2 boreholes, ensuring the samples meet the required confidence and precision. Comment closed.																									

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Rule	Assessment Question	Findings/Comments (CL 12)	Developer Response
P&R	For Other SDGs, Is the baseline calculated correctly to match the PDD/VPA-DD?	The PD shall submit the latest version of the Baseline Survey "Malawi P1 CP2 Baseline Survey – August 2020". The baseline Excel sheet shall be used to verify baseline parameters: Tb,y and Cj	Cj is taken from the CP1 baseline Studies. It is more conservative than the value from "Malawi Phase 2 CP2 Baseline Survey" PD has updated the parameter box Cj in the MR. PD has submitted "Malawi Phase 2 CP2 Baseline Survey" and "CONFIDENTIAL_300420015_SD_Survey_Results_Dowa_and_Kasungu.v3" for reference.
	Rd 2	Tb,y : (See CL 22 point 03). Cj: PD submitted the file: "CONFIDENTIAL_300420015_SD_Survey_Results_Dowa_and_Kasungu.v3" which is the CP1 baseline survey. Value of Cj in the baseline survey matches the VPA-DD and the MR value. Comment closed	While Tb,y is taken from Malawi CP2 Revalidation Baseline Survey as boreholes in these VPAs (referred to as 'Phase 1'), and those under GS5329-32, GS5335-44, GS5437-41 (referred to as 'Phase 2') are homogenous in all respects. Tb,y value for this MP is the same used and verified in the previous Verification Review. For this MP, the project is not claiming SDG 5.
	Rd 3	The value of Tb,y, 584.51, for this project, Malawi Phase 2, GS5329-32, GS5335-44, GS5437-41 was taken from the CP2 Revalidation Baseline Survey of Malawi Phase 1 project. The two phases are homogenous in all respects. Additionally, this value of Tb,y has been used in previous verifications. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 13)	Developer Response
	Provide sample calculations	Section E.1 and E.2 Update the sample calculation of parameters listed below: - Section E.1 SDG 13. $B_{e,y}$ for GS5329. - Section E.2 SDG 6. P_{access} for GS5329. - Section E.2 SDG 13. $B_{p,y}$ and $P_{Ep,y}$ for GS5329 (i.e., update $N_{p,y}$ and NRB)	PD has updated MR.
	Rd 2	PD has updated the MR to reflect the correct calculations for the parameters listed above. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 14)	Developer Response
P&R	Has a like-for-like comparison of ex ante (estimated) and achieved SDG Impacts been provided?	Section E.4 and E.5 - A comparison of ex-ante (estimated) and achieved SDG Impacts has been provided in the monitoring report. However, the original and capped values have not been reported as required by the MR template. - Update values of SDG 3 and SDG 6	1) There were no caps for SDG 13 in this monitoring period as all VPA's are less than the maximum allowed of 10,000.
	Rd 2	- Ex-ante (estimated) and achieved SDG impact were verified using the ER sheet. Values written throughout the MR and ER sheet match. Comment closed. - SDG 3 and SDG 6 of Section E.4 and E.5 have been updated and is now present in the MR. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 15)	Developer Response
P&R	Are all comments from the CIGM reported? Are comments from the CIGM that are not fully addressed declared and an appropriate follow on action stated?	Section G.1: 1. PD shall submit the logbook placed at appropriate locations for accessibility of different project-related stakeholder for their CIGM. 2. The PD is requested to provide photos of all grievance expression process books placed at all boreholes.	1. The in-country partner checks the logbooks when doing follow up visits, and shares sample of photos. 2. PD has shared a sample for practical reasons. These are included in 'P2 FUV Maintenance Samples'.
	Rd 2	Photo evidence of grievance expression from sample boreholes was uploaded by the PD. Sample photos of logbooks and visits were also submitted. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 16)	Developer Response
P&R	Does the project information correlate with the PDD/VPA-dd? (small differences in numbers are ok, a perfect match is not required)?	Section A.1 It is mentioned in the MR that 183 boreholes and additional 103 boreholes are incorporated within these VPAS. PD shall submit the Carbon Waiver for the first and last borehole included in the VPAs under this MP.	PD has submitted '424-160 RCF' and '424-105 RCF'. For a sample of CTF's please refer to CL 02 and 'P2 Sample CTF's'.
	Rd 2	PD submitted 424-160 RCF and 424-105 to substantiate the Carbon Transfer of these boreholes. Comment closed	

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Rule	Assessment Question	Findings/Comments (CL 17)	Developer Response
	How was borehole downtime accounted for the computation of emission reduction?	Section A.1 and B.1: - According to the MR, 75 boreholes were initially drilled or rehabilitated in Kasungu district. Subsequently, seven boreholes were removed from the project as of 01/01/2023. PD shall provide the Borehole IDs of these seven boreholes that were removed from the project. Boreholes removed from the project must be explicitly stated in the MR for transparency. Furthermore, if these boreholes were removed from the project at the start of 01/01/2023, their 2023 emissions reduction/ non-functionality days in the ER must be adjusted to zero. PD shall provide a clarification on these. - In the MR, it was documented that 116 boreholes were originally drilled or rehabilitated in Dowa District. However, due to non-functionality and being irreparable, one borehole had to be removed. PD shall clarify is this single non-functional borehole currently included in the ER calculation sheet. - From the ER sheet, the total number of boreholes rehabilitated are 293. Accounting for non-functional boreholes	- The BH ID's of the 7 removed boreholes are: UNICEF-013 UNICEF-057 UNICEF-048 UNICEF-071 UNICEF-089 UNICEF-092 UNICEF-100 The PTDs reflect the date they are removed from the project and hence stop crediting as 31/01/2023. The MR stated that they were removed from the project from 01/01/2023, but this has been changed to the specific date for clarity . - PD confirms this BH is not included in the ER's The total count of the original boreholes in Dowa in the ER's is 115. - PD has updated ER's. There are 291 boreholes. This is 115 Dowa + 75 Kasungu + 101 new boreholes. There were 7 boreholes removed from 31/01/2023. These are listed above. From 01/02/2024, there are 284 boreholes crediting, as reflected in the PTD's. - Please refer to CL 16 above: PD has submitted '424-160 RCF' and '424-105 RCF'. For a sample of CTF's please refer to CL 02 and 'P2 Sample CTF's'.

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Rule	Assessment Question	Findings/Comments (CL 17)	Developer Response
		from both districts the total number of functional boreholes must be 286 (115 Dowa + 68 Kasungu + 103 new boreholes). PD shall provide the list of non-functional boreholes. 4. PD shall submit the Carbon Waiver for the first and the last borehole included in the VPAs added in 2022.	
	Rd 2	1. The 7 boreholes that were removed are now explicitly available in the ER calculation sheet, signified by an orange highlight. The MR has also been revised to specify the dates when each borehole was removed from the project. Comment closed. 2. The single borehole that is non-functional and irreparable were removed from the ER calculation sheet. The number of boreholes stated in the MR now matches the number of boreholes listed in the ER sheet. Comment closed. 3. A total of 291 boreholes were listed in the ER sheet. Seven boreholes were highlighted in orange to reflect their non-functionality from 2023. The number of boreholes in Dowa and Kasungu district reported in the MR matches the ER sheet. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 17)	Developer Response
		4. PD submitted 424-160 RCF and 424-105 to substantiate the Carbon Transfer of these boreholes. Comment closed	

Rule	Assessment Question	Findings/Comments (CL 18)	Developer Response
	Is there evidence that no repairs/no downtime occurred during the monitoring period?	Section B.1 1. Please submit evidence demonstrating that no repairs or downtime occurred during this monitoring period. In the event of any repairs or maintenance carried out, kindly provide comprehensive details, including dates and corresponding evidence. 2. The PD is required to provide further substantiation in the MR regarding the frequency of operation and maintenance services rendered to ensure the continual use of the implemented boreholes. PD shall also submit the maintenance logs they have performed during this monitoring period. 3. PD shall include the downtime observed for the project technology during the current monitoring period. 4. PD shall substantiate the procedure that is followed on site to make awareness	1. PD has added the downtime to the ER's. See sheets 'NFD', 'WQTs analysis', and 'PTDs'. Please refer to the laboratory WQT results and the PDF 'P2 FUV Maintenance Samples'. 2. PD has added in section B.1. PD has submitted samples 'P2 FUV Maintenance Samples'. 3. PD has added the downtime to the ER's. See sheet 'NFD', 'WQTs analysis', and 'PTDs' 4. Minor repairs are usually funded by the community. Community members may make monthly or annual contributions. For significant maintenance where the borehole has become unfunctional, the spare parts are provided by United Purpose. 5. PD has updated MR with this information.

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		during the time the quality of water in a borehole is not appropriate/or meets laboratory standards. 5. PD shall report in the MR the process of securing or the source of funding whenever repairs for non-functional boreholes are to be made.	
	Rd 2	1. PD has added the downtime of boreholes that were under maintenance during this monitoring period. The ER sheet now contains the tab "NFD", "WQT analysis", and "PTDs", explicitly showing the dates of repairs of boreholes. Comment closed. 2. Ok. Sample maintenance logs match the ER sheet. A brief explanation about maintenance and repair operations has been added in the MR. Comment closed. 3. Ok. A new tab in the ER sheet ("NFD", "WQT", and "PTDs") including downtime observed during the monitoring period has been added file. Comment closed. 4. PD has added the remedial actions they perform/follow on site to make awareness during the time the quality of water in a borehole is not appropriate/or meet laboratory standards. Comment closed.	5. PD has provided CTFs which state that "CO2balance commits to fund the community's water point rehabilitation and any reasonable maintenance on condition that all rights to the carbon emissions saved by the functioning water point are transferred to CO2balance for the length of the project". The revenue from the sales of the carbon credits are used by CO2balance/United Purpose to fund major maintenance.

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		5. PD has added a text in the MR explaining the source of funding whenever repairs are to be made. PD shall provide a contract/document/evidence stating that spare parts are provided/funded by United Purpose for major repairs of borehole non-functionality.	
	Rd 3	5. CTFs were verified to confirm that CO2balane commits to fund the community's water point rehabilitation and any reasonable maintenance. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 19)	Developer Response
DC Reqs	Are any temporary deviations beyond the control of the developer, demonstrably conservative and a declaration exists that they will last no longer than one monitoring period?	Section B.2.1: The MR states that no temporary deviation was made. However, it has been documented that a deviation was approved by GS for these VPAs on 31st May 2023. The PD is required to provide clarification regarding this discrepancy.	Please refer to deviations 'Q1_23 Deviation_Request_DEV_433' and 'Q2_23 Deviation_Request_DEV_490'. PD has updated MR.
	Rd 2	Deviation request was for postponement of all activities in the borehole during Q1 and Q2 of 2023 due to Cyclone Freddie. The Deviation request was approved by GS. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CAR 06)	Developer Response												
	Is the crediting period for each borehole reported correctly?	Section A.1. Ensure consistency in reporting the rehabilitation dates of each borehole following the format 'day/month/year.' In some cases, there is an interchange of day and month. The dates listed in the MR do not match those in the ER. To ensure the accurate crediting of each VPA, the dates in the MR must be rectified. See the example below for clarification: <table><tr><th>Borehole ID</th><th>MR</th><th>ER</th></tr><tr><td>UNICEF-002</td><td>01/02/2016</td><td>02/01/2016</td></tr><tr><td>UNICEF-003</td><td>01/02/2016</td><td>02/01/2016</td></tr><tr><td>UNICEF-004</td><td>01/04/2016</td><td>04/01/2016</td></tr></table> The list of boreholes with interchanged month and day are as follows: VPA91: UNICEF-002, 003, 004, 005, 006, 007. VPA 92: UNICEF-008 VPA 93: UNICEF-025 and 027 VPA 94: UNICEF-026, 028, 064 VPA 95: UNICEF-067	Borehole ID	MR	ER	UNICEF-002	01/02/2016	02/01/2016	UNICEF-003	01/02/2016	02/01/2016	UNICEF-004	01/04/2016	04/01/2016	PD has reviewed all dates and updated ER's and MR.
Borehole ID	MR	ER													
UNICEF-002	01/02/2016	02/01/2016													
UNICEF-003	01/02/2016	02/01/2016													
UNICEF-004	01/04/2016	04/01/2016													

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Rule	Assessment Question	Findings/Comments (CAR 06)	Developer Response
		VPA 97: UNICEF-085, 086 VPA 98: UNICEF-096, 097, 098, 099, 101, and 105 VPA 99: UNICEF-029, 030, 032, 033, 034, 035, and 038 VPA 100: UNICEF-031 VPA 102: UNICEF-130, 132, and 134 VPA 104: UNICEF-179 and 181 VPA 112: UNICEF-106 and 109 VPA 113: UNICEF-107, 108, 112, 117, and 118 VPA 114: UNICEF-131 and 135 VPA 115: UNICEF-180, 184, and 187 VPA 116: UNICEF-182, 183, 185, 186, and 188	
	Rd 2	PD has updated the MR and the ER sheet. The dates match each other. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 20)	Developer Response
	Does the crediting period match the PDD/VPA-dd?	Emission reduction file: 1. The rehabilitation date of all boreholes in 2022 coincides with the start of the crediting period. The crediting period for boreholes installed in 2022 in Section B.2.3	1) The crediting period mentioned in section B.2.3 is the VPA crediting period. Although the boreholes were rehabbed in 2022, they were placed into VPA's with a much older start date. The crediting period has not changed. 2) PD has included the information in the ER's. 3) PD has updated ER's to end the MP on 26/04/2023

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Rule	Assessment Question	Findings/Comments (CL 20)	Developer Response
		must be updated/modified in the MR and/or the ER. 2. Complete all necessary information for the emission reduction file of all boreholes installed in 2022. This information should include the Borehole Name, District, Latitude, Longitude, Pump Model, Mode of Use, and Date of Rehabilitation for each borehole. 3. For GS5344, the Monitoring Period for this verification spans from 01/01/2022 to 26/04/2023. However, the ER claims for this VPA only cover until 21/02/2023. The PD is required to provide clarification on why they have excluded two months from their ER claims, especially considering that the end date of the crediting period for this VPA extends until 26/09/2023.	
	Rd 2	1. The crediting start date of each BH is specified in the ER and reflects the MR. Comment closed. 2. The emission reduction file contains complete information regarding	

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Rule	Assessment Question	Findings/Comments (CL 20)	Developer Response
		each borehole being verified. Comment closed. 3. The PD has updated the end date of the GS5344 to span until 26/04/2023 and this is reflected in the ER. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 21)	Developer Response
	If corrections are present, have these been applied in calculations?	In Section B2.2 and Section D.2, the project usage rate in the MR is capped at 90%. The PD must justify the continued use of the value 90.09% in the ER calculation file despite the capped rate of 90%. Please display the capped value as 90% and enclose the original value (90.09%) in parentheses beside it.	PD has updated MR with the value of 90.09 usage rate. PD would have capped at 95% if usage rate exceeds this.
	Rd 2	The calculated usage rate from the usage survey is 90.09%. This has been applied to all sections of the MR and ER. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 22)	Developer Response
	For SDG 13, do the fixed ex ante values match the Design Certified PDD/VPA-dd	Section D.1.	1) 9.46 is the most up to date IPCC default used as per methodology. MR parameter box has been updated.

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Rule	Assessment Question	Findings/Comments (CL 22)	Developer Response
		The fixed ex-ante parameters mentioned below does not match with the ER and/or registered VPA-DD: 1. The value of the Non-CO2 emission factor, EFb non-co2, in the VPA-DD and MR is recorded as 8.692, whereas in the ER, it is noted as 9.460. The PD is requested to provide the source and justification for the utilization of this updated value. 2. The non-renewability fraction value, fNRB, stated in the MR and VPA-DD is documented as 0.92, whereas the value used in the ER calculation file is reported as 0.94. To address this discrepancy, kindly explain and present the assessment conducted by the independent contractor C4 Ecosolutions. 3. The PD is requested to clarify the methodology used to calculate the value of parameter Tb,y. It is stated in the MR that this parameter is derived from questions 16/17 and 32/33 in the project survey. Please	2) PD has updated ER's with the fNRB of 0.92 as in VPA-DD. PD has shared 'co2balance_Malawi NRB updated_C4ES'. 3) The MR states that Tb,y is Calculated from question 15/16 and 32/33 in the baseline survey.

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Rule	Assessment Question	Findings/Comments (CL 22)	Developer Response
		provide clarification regarding these specific survey questions.	
	Rd 2	1. OK. Calculation of the most up to date EFb,nonCO2 has been added in the MR. Comment closed. 2. Based on the document from the independent contractor C4 Ecosolutions, the fNRB value of 0.92 is applicable for Dowa District, while in Kasungu District, it is 0.98. The Project Developer (PD) opted for the more conservative value of fNRB (0.92), consistent with the VPA-DD, which also specifies this value as 0.92. Comment closed. 3. PD shall explain where the value of Tby (584.51) was obtained. Calculating from "Malawi Phase 2 CP2 Baseline Survey – Report Tab" (Cell F44 + Cell F139) / 7, the value of Tby should be 630.40 4. Upon reviewing the VPA-DD, it's noted that parameters NCVb and NCVp, b for baseline and p for project, exist. Similarly, both EFp,co2 and EFp,non-co2 are present in the VPA-DD but not in the MR. PD should ensure a one-to-one	3. Tby is calculated from questions 15, 16, 32 & 33. The value is now in line for both Phase 1 and Phase 2. 4. PD has added parameter box in the MR for NCVp, EFp,co2 and EFp,non-co2. 5. PD confirms that the correct value for of Xboil is 3.85% as per ERs calcs. 6. The values used for Pb,boil and Tb,y were used in the previous two verifications. These values were discussed with the reviewer at the time and confirmed to be appropriate.

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Rule	Assessment Question	Findings/Comments (CL 22)	Developer Response
		correspondence between the fixed parameters in the VPA-DD and MR. 5. Parameter Xboil: The value of Xboil in the Baseline Study Conducted in August 2020 (CP2 baseline study) is 1.77%, whereas the value of Xboil, from CP1 Baseline study and VPA-DD is 3.85%. PD shall confirm the correct baseline study from which the value of Xboil was obtained. 6. PD shall clarify why "Malawi Phase 2 CP2 Baseline Survey" was used to derive the value of Pb,boil and Tb,y given that the set of VPAs included in this project period is still under CP1. Moreover, these two parameters are not reported in the VPA-DD (i.e., they are reported in the MR but is not found in the VPA-DD). PD is requested the validation report for this crediting period.	
	Rd 3	3. The PD submitted the excel sheet "Malawi CP2 Revalidation Baseline Survey" to show the correct calculation of Tb,y. The value of Tb,y (584.51) used in this verification was also the value used in previous verification. Comment closed.	

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Rule	Assessment Question	Findings/Comments (CL 22)	Developer Response
		- PD has added a parameter box in the MR, ensuring there is one-to-one correspondence of fixed parameter between the VPA-DD and the MR. Comment closed. - The value of Xboil in both the ER and the MR has been updated by the PD. Comment closed. - The value of Pb,boil and Tb,y used in this verification is similar to values used in previous verification. This value has been discussed by previous reviewers and is deemed appropriate. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 23)	Developer Response
	Has verifiable supporting evidence been provided for each high-risk monitoring parameter concerning SDG 13?	Section D.2 - The PD is requested to submit the evidence of monitoring records for the "number of people using each borehole in the project". - The PD is requested to provide clarification on the measures taken to prevent double counting of households surrounding these boreholes.	- PD has shared the HH user lists 'HH Lists P2+6b - 2022_FINAL' - The partner instructs the Water Point Committees (Data collectors) to record Households that use that particular borehole only. If there are 2 or more boreholes in the vicinity and there might be double counting, the HH is recorded under the borehole they use frequently.

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Rule	Assessment Question	Findings/Comments (CL 23)	Developer Response
	Rd 2	1. OK. The PD shared the HH user list ("HH Lists P2 + 6b-2020 FINAL") and the list matches the ER sheet and MR. Comment closed. 2. The HH user list "HH Lists P2 + 6b-2020 FINAL" also checks for duplicates and removes and assigns a specific HH to a specific borehole. Comment closed. 3. PD shall explain how Np,y is capped at 95%. The capping of 95% shall apply to parameter Up,y.	3. Both Np,y and Up,y are capped at 95%. Up,y is related to how the water from the project borehole is used, whereas Np,y is capped based on the functionality cap of 95% for conservativeness. This is related to the down days eg mechanical problems rather than usage.
		3. Both Np,y and Up,y are capped at 95%. The value of Np,y was capped as observed in the 'Total PTDs' tab of the ER calculation sheet. The cap of 95% does not apply to Up,y as the obtained value from the project survey is 90.09%. Comment closed.	

Rule	Assessment Question	Findings/Comments (CL 24)	Developer Response
	For projects applying the Usage Survey Requirements and Guidelines (TPDDTEC/aDALYs/ Methodology for Improved Cook-stoves and Kitchen Regimes/ Black Carbon and Co-	Usage survey The PD is requested to submit example screenshots from the web application displaying the monitoring survey	PD has submitted pdf of the web surveys, 'US_2022_scans_checked' and 'PS_2022_scans_checked' and 'PS_US Dashboard' screenshots.

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Rule	Assessment Question	Findings/Comments (CL 24)	Developer Response
	emitted Species) are usage rates reported for each age group, inclusive of the cap (where required) at each age group?	records, as well as the Dashboard overview encompassing all the surveys.	
	Rd 2	PD submitted pdf screenshots of their web application to display monitoring survey records. Comment closed.	

Rule	Assessment Question	Findings/Comments (CAR 07)	Developer Response
	Is the crediting period for each borehole match the ER calculation sheet?	KPI Section: PD must adjust the monitoring period for each VPA in the KPI section of the MR to align with the "MP Start Date" and "VPA End date" specified in the ER file.	PD has updated MP dates for each VPA.
	Rd 2	PD has updated the KPI section of the MR stating the start and end date of each VPA in this project. Comment closed.	

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APPENDIX: 2 - FORWARD ACTION REQUESTS

No FARs raised for this Monitoring Period.

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