



DEVIATION REQUEST FORM

PUBLICATION DATE **14.1.2021**

Version **4.0**

A. To be completed by Gold Standard

1| Decision

1.1 | Date – 01/02/2022

1.2 | Decision

The Secretariat has reviewed the changes proposed to the registered CDM methodology [AMS.III.BA - Recovery and recycling of materials from E-waste, Version 3.0](#). Principally, the proposed concept seems eligible under GS4GG. However, managing proposed revisions to a methodology are outside the purview of the [Deviation Approval Procedure](#). Hence, the PD must submit a methodology approval request to Gold Standard in line with the [Impact Quantification Methodology Approval Procedure](#) along with submission of the following information, to take this proposal forward:

1. Concrete evidence (published literature or third-party studies) to support the revisions to the methodology and
2. Detailed approach to calculate emission reduction

1.3 | Is this decision applicable to other project activities under similar circumstances?

No

B. To be completed by the Project Developer/Coordinating and Managing Entity and/or VVB requesting deviation (Submit deviation request form in Microsoft Word format)

2| Background information

Deviation Reference Number	DEV_222	
Date of decision	01/02/2022	
Precedent (YES/NO)	No	
Precedent details	N/A	
Date of submission	29/11/2021	
Project/PoA/VPA	Project	ID - GSXXXX
	<input type="checkbox"/> PoA	ID - GSXXXX
	<input type="checkbox"/> VPA	ID - GSXXXX
Project/PoA/VPA title		
Location of project/PoA/VPA	Host country(ies)	
Scale of the project/PoA/VPA	<input type="checkbox"/> Microscale <input type="checkbox"/> Small scale <input type="checkbox"/> Large scale	
Gold Standard Impact Registry link of the project/PoA/VPA		
Status of the project/PoA/VPA	<input type="checkbox"/> New <input type="checkbox"/> Listed <input type="checkbox"/> Certified design <input type="checkbox"/> Certified project	
Title/subject of deviation		
Specify applicable rule/requirements/methodology and version number		
Specify the monitoring period for which the request is valid (if applicable)	Start date	End date
Submitted by	Contact person name: Vyacheslav Nechaev	
	Email ID: nechaev@tiarcenter.com	
	Organisation: TIARCENTER LLC	
	Project participant: Yes <input type="checkbox"/> NO <input type="checkbox"/>	
Validation and Verification body (VVB opinion shall be included, where required by the applicable rules/requirements or request is submitted by the VVB).	Yes <input type="checkbox"/> NO <input type="checkbox"/> If yes; VVB name: Auditor name:	

3| Deviation detail

3.1 | Description of the deviation:

**Guidance* Use the space below to describe the deviation and substantiate the reason for requesting deviation from applicable rules/requirements. Please include all relevant information in support of the request. You are requested to follow the principles for requesting deviations, given in the [Deviation Approval Procedure/ Design Change Requirements](#).*

3.1.1 | Deviation detail (to be completed by Project developer):

This methodology comprises collection and recycling activities of E-waste performed in dedicated facilities with the aim of recovering materials such as ferrous metals, nonferrous metals, plastics. E-waste contains rare and precious metals that require specific technologies to extract and refine them. These materials are recovered and processed into secondary materials, thus displacing the production of virgin materials, thereby resulting in energy savings and greenhouse gas emission reduction. The purpose of the deviation is so the methodology accounts for the metals: zinc and manganese as these are the metals found in the batteries which require recycling.

3.1.2 | VVB opinion (to be completed by VVB, if applicable):

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3.2 | Assessment of the deviation:

**Guidance* Use the space below to describe how the deviation complies with the requirements, and, where applicable, the accuracy, completeness and conservativeness is ensured. Please include all relevant information in support of the request.*

3.2.1 | Deviation assessment (to be completed by Project developer):

Applicability of methodology

- The methodology is still applicable under the following conditions:
 - o (a) The recycling facility includes E-waste sorting and processing of at least the nonferrous metals fraction of the waste. Other common materials (ferrous metals, aluminium, plastics, glass) can be processed at the facility after sorting or be shipped to third party processors: **The**

- dedicated facilities are able to process E-waste as well as non-ferrous metals (zinc) and ferrous metals (manganese)**
- (b) It is possible to measure and record the final output of the recycling facility, i.e. the weight of materials leaving the recycling facility: **We know the weight of the battery to be 16g therefore we can calculate the output of the recycling facility depending on how many tons of batteries recycled per year. Furthermore, we know the weight of an assembled AA alkaline battery to be around 23g with zinc making up 3.68g of the battery and manganese making up 8.51g of the assembled battery and so total recycled output can be calculated accordingly.**
 - (c) It is possible to measure and record the amount of fuel and electricity consumed by the recycling activities performed at the facility: **we know that an AA alkaline battery consumes 0.965MJ of energy (approx. one unit in eco audit in the CES EduPack) while extracting the material. The electricity and fuel consumption may be allocated to each mass unit of recycled material i ($EC_{i,y}$, $FC_{i,y}$) by market prices, i.e. apportioning the electricity and fuel consumption in proportion to the market prices of metals, plastics, glass, etc. recycled at the facility. The market prices may be either monitored ex post or be determined once for the crediting period. This rule can be applied only if transparent and reliable information on market prices is available. Furthermore, we know that the recycling of one battery prevents the emission of 100g of CO₂eq.**
 - (d) The output material(s) shall be sold directly to a manufacturing facility, or to a chain of intermediary processors, or retailers that are able to transfer the recycled materials to a final identifiable manufacturing facility: **In this case, the recycled materials will be sent for use in various industries.**
 - (e) The emission reductions under this methodology will accrue to any one of the following: **The emission reductions will accrue to the recycling facility.**

Compliance with the monitoring plan and the applied methodology

- The monitoring process will remain the same and will apply to the recycling of zinc and manganese as well as the aforementioned metals.

3.2.2 | VVB opinion (to be completed by VVB, if applicable):

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3.3 | Impact of the deviation:

**Guidance* Use the space below to describe the impact of the deviation on project design, safeguarding principles assessment, SDG assessment, emissions reductions, monitoring frequency, data quality, potential risk or any other relevant aspect of the project. Please substantiate the impact assessment with relevant and verifiable data/information.*

3.3.1 | Impact assessment (to be completed by Project developer):

Sustainable development criteria

- SDG contributions will be quantified based on the amount of CO₂eq emissions will be prevented with each recycled battery.
- This methodology contributes to SDG 13 as its purpose is to reduce emissions by reusing materials rather than using new virgin materials.
- The deviation also contributes to SDG as if batteries are thrown in the landfill rather than being recycled, they would be burned in waste incinerators. This would lead to toxins from the chemicals used in the batteries being released into the air, soil, groundwater and surface water which would harm the animals and humans consuming them; resulting in diseases such as liver and kidney damage which may develop into cancer due to prolonged exposure to the chemicals.

Safeguarding assessment

Human rights: No. The protection of or impact on human rights is not relevant here as the activities carried out do not concern human rights.

Gender Equality and Women's Rights: No. Gender equality and the empowerment of women is not concern to this project and its activities.

Community Health, Safety and Working Conditions: Potentially. The project concerns recycling factories and the handling of materials in which case the safety of workers and the conditions they work in may arise.

Cultural Heritage, Indigenous Peoples, Displacement and Resettlement: No. The project does not concern cultural heritage or indigenous peoples and, therefore, this principle does not apply.

Corruption: No. The project does not concern corruption of any kind so this principle is not relevant.

Economic Impacts: Potentially. The project is considerate of the economic situation in which it is developed and considers the financial incentive of the activities set out in the methodology. The project will also demonstrate a consideration of potential risks to the local economy and how these have been taken into account in project design, implementation, operation and after the project.

Climate and Energy: Yes. The purpose of the project is to reduce greenhouse gas emissions and will not affect the availability and reliability of energy supply to other users.

Water: Yes. The project intends to reduce the amount of pollutants and toxins, which have adverse effects on animal and human health, being released into the water.

Environment, ecology and land use: Yes. The project serves to reduce prevent environmental impacts. The project will also ensure pollution prevention and prevention of the release of pollutants to air, water and land.

3.3.2 | VVB opinion (to be completed by VVB, if applicable):

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3.4 | Documents:

**Guidance* List of documents provided (note that once a decision has been made by Gold Standard, this deviation form along with supporting documents will be made public on the Gold Standard website. If any of the supporting documents are confidential, please indicate here to ensure they are omitted.)*

Life Cycle Analysis of AA Alkaline Batteries:

https://docviewer.yandex.ru/view/1130000055740675/?page=1&*=DIvY8Y2fvPXgccuv%2FV%2F5Zubd8jV7InVybcI6InhLW1haWw6Ly8xNzc2MTA3MTAzMDQ0MjM5NTYvMS40IiwidGI0bGUiOiJMaWZIX0N5Y2xlX0FuYWx5c2lzX29mX0FBX0Fsa2FsaW5lX0JhdHRlcmlscy5wZGYiLCJub2lmcmFtZSI6ZmFsc2UsInVpZCI6IjExMzAwMDAwNTU3NDA2NzUiLCJ0cyI6MTYzNzU3MjY0MTQ3MCwieXUiOiI5MTUwOTA2NDgxNjE2NTA5MzcyIn0%3D

Recovery and recycling of materials from E-waste Version 2.0:

<https://cdm.unfccc.int/methodologies/DB/PVHQ5T7VGCTO07EUHFU517J4HNW21Q>