



Verified Carbon Standard

A VERRA STANDARD

INDEPENDENT EXPERT REPORT:

Methodology Title	M0333 REVISION TO ACM0002 GRIDCONNECTED ELECTRICITY GENERATION FROM RENEWABLE SOURCES
Version	Final
Sectoral Scope(s)	Energy (renewable/non-renewable)
Document Reviewed	27-Sep-2025
Date of Issue	3-Nov-2025
Expert Assessor	Kate Ellis
Contact	kate@ellis-consulting.ca

1 INTRODUCTION

Verra is managing the development of a major revision to the ACM0002 methodology titled *Revision to ACM0002 Grid-connected Electricity Generation from Renewable Sources (M0333)*. Per section 3.5 of the *Methodology Development and Review Process, v5.0*, this methodology will be subject to independent expert review.

Based on their experience in the fields of renewable energy and global (voluntary) carbon markets, Verra hired Kate Ellis to provide an expert assessment of the proposed methodology. The expert assessor's assessment focused on (in line with the signed contract):

- Assessment of whether the latest draft methodology reflects the most recent scientific knowledge and best practices in the fields of renewable energy and global (voluntary) carbon markets, particularly related to the following aspects:
 - suitability of the proposed geographic expansion in the methodology, considering:
 - it is a departure from Verra's 2019, more restrictive approach (RE was only eligible in LDCs as defined by the UN),
 - the historical growth of (or lack thereof) RE in low, low-middle, and upper middle-income economies as defined by the World Bank, and
 - the larger implications this might have for Verra and the global carbon market landscape.
 - whether the proposed geographic expansion, coupled with potential CCP labelling of this methodology, would help stimulate demand amongst buyers for carbon credits generated by this methodology.
- Whether all stakeholder comments have been appropriately responded to and/or addressed in the latest draft methodology, as applicable.
- Any other aspect(s), not covered above, that the independent expert deems important based on their reading of the latest draft methodology.

2 REVIEW APPROACH & FINDINGS

The independent experts reviewed the draft methodology that was published for the public consultation and provided feedback to Verra. Verra prepares responses to the expert assessor's findings and updates the methodology accordingly. The independent experts review the responses and provide confirmation that the planned updates address the findings. See section 6 for detailed expert review feedback.

3 REVIEW CONCLUSION

Kate Ellis has completed the expert review of the draft *Revision to ACM0002 Grid-connected Electricity Generation from Renewable Sources (M0333)* and confirms that the draft methodology, and proposed updates adhere to the criteria established.

4 EXPERT QUALIFICATIONS

Kate Ellis is an independent consultant with over 17 years of experience in the energy transition sector. She has worked across power and environmental markets, supporting companies in navigating the evolving commodity landscape and the integration of emerging technologies. She holds a B.Sc. from the University of Alberta in Canada

5 SIGNATURE

Signed for and on behalf of:

Name of entity: 2483460 ALBERTA LTD

Signature:



Name of signatory: Kate Ellis

Date: 3-Nov-2025

6 EXPERT FEEDBACK

Section – Description of the Section			
#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
1	“This methodology revision expands the geographic eligibility [...] “	Scope expansion is clear	Noted. Thanks for the observation.
2	“Note – CDM TOOL32 Positive lists of technologies is not eligible under this methodology revision.”	Potentially worth elaborating on rational for excluding CDM Tool 32	<u>Rd 1 response:</u> The reason for excluding this CDM tool is that the positive lists it contains were valid up to 10 March 2025 and it is unlikely that this tool will be updated again in the future (this is based on our discussions with the UNFCCC). A new footnote (footnote#1) has been added to reflect this reason.
		<u>Rd 2 comment:</u> Footnote is acceptable.	<u>Rd 2 response:</u> Thank you for your response.
3	“Reductions” under Mitigation Outcomes	Is this typically just one word? Might be helpful to clarify that the reductions come from displacement of carbon intense grid electricity?	<u>Rd 1 response:</u> This section is filled in line with the instructions in the <u>latest VCS Methodology template</u> and is thus deemed sufficient. As an example of how this section is meant to be completed, please refer to <u>this published methodology (VM0052)</u> . In any case, the parent methodology (<u>ACM0002</u>) does describe how emission reductions occur, i.e., through <i>displacement of electricity that would be provided to the grid by more-GHG-intensive means</i> (Section 1. Introduction).
		<u>Rd 2 comment:</u>	<u>Rd 2 response:</u>

Section – Description of the Section			
#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
		Understood. Response is acceptable.	Thank you for your response.
4	Sources	Section is clear but could be beneficial to add a justification?	<p><u>Rd 1 response:</u></p> <p>This section is filled in line with the instructions in the <u>latest VCS Methodology template</u> which requires this section to <i>indicate key methodologies, modules, tools, guidance, and other documents upon which the proposed methodology is based. Here, only include documents that have informed large parts of the methodology (e.g., if all of the ideas in the methodology have come from a single document).</i></p> <p>An example of how this section is meant to be filled is also provided in the instructions, which the reviewer can peruse for further clarification.</p> <p>Thus, providing justification of including the sources is not deemed necessary.</p>
		<p><u>Rd 2 comment:</u></p> <p>Understood. Response is acceptable.</p>	<p><u>Rd 2 response:</u></p> <p>Thank you for your response.</p>

Section 3 - Definitions			
#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
	n/a	No changes to or additions to ACM0002	Not Applicable.

Section 4 – Applicability Conditions			
#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
1	“For activities involving [...]”	<p>Why are upper-middle income economies the upper threshold? Could consider high income but with stricter additionality requirements?</p>	<p><u>Rd 1 response:</u></p> <p>The main reason for this proposed change of broadening the geographical applicability of this methodology is to deliver renewable energy to hitherto underserved regions globally. The methodology will endeavor to achieve this by promoting the deployment of renewable energy technologies in regions where carbon finance can help bridge the viability gap and stimulate greater market penetration, thereby catalyzing the clean energy transition.</p> <p>Such conditions and related challenges are non-existent in high income countries which have strong, self-supporting economies, generally with high RE penetration rate and where carbon finance is no longer needed for RE deployment (even if there are underserved regions). These countries possess mature energy markets, strong policy frameworks, and sufficient financial mechanisms to support renewable energy without carbon finance, making projects non-additional.</p> <p>Please refer to this Verra article for further justification (which was published along with the draft methodology during stakeholder consultation).</p>
		<p><u>Rd 2 comment:</u></p> <p>Understood. Response is acceptable.</p>	<p><u>Rd 2 response:</u></p> <p>Thank you for your response.</p>
2	Paragraph 2. “For activities involving the integration of [...]”	<p>“Common connection to the grid” could be interpreted a lot of different ways I think. Does it mean “behind the meter”, “shared POI”, “self-supply” etc. Perhaps it is worth explaining further to provide additional clarity.</p>	<p><u>Rd 1 response:</u></p> <p>Here the term phrase “common connection to the grid” means that the renewable energy power plant and the battery energy storage system (BESS) are linked to the same grid interconnection point (shared POI) – i.e., they both feed electricity into (or draw from) the grid through a single grid connection or metering point.</p> <p>A new footnote (footnote#4) has been added to reflect this.</p>

Section 4 – Applicability Conditions

#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
		<p><u>Rd 2 comment:</u> Additional footnote is acceptable.</p>	<p><u>Rd 2 response:</u> Thank you for your response.</p>
3	Paragraph 2. “For activities involving the integration of [...] “	<p>In practice BESS is often a separate venture as it tends to require a different experience or skill set. This requirement may thus be quite limiting. What about including SPVs, partial ownership etc.?</p>	<p>This restriction has been instituted to maintain the “prior consideration” aspect of additionality. More specifically, where both the power plant and the BESS are not part of the same investment decision or existing in the same location, it is hard to demonstrate whether carbon finance was seriously considered during project development and implementation.</p> <p>Also, to a lesser extent, installing the BESS in a location separate to the power plant does not seem to be an effective way of operating an integrated BESS-power plant system (for instance, it would lead to more transmission losses).</p> <p>Additionally, we are currently working on a BESS methodology (CNO157) with a broader scope and wider applicability, which is expected to address the limitations introduced by the stated requirement.</p> <p>Lastly, the rationale (separate venture requiring different experience or skill set) provided by the reviewer is precisely why this restriction has been introduced in the proposed methodology.</p> <p>So, based on the above reasons, we believe that this requirement should be kept in the methodology.</p>
		<p><u>Rd 2 comment:</u> Thanks all. My intention here was to highlight that in some projects an existing renewable facility may be owned by Company A, and then at a later point, Company B “partners” with Company A to co-locate a BESS. In such cases, Company B may directly own the BESS or establish an SPV to jointly own and</p>	<p><u>Rd 2 response:</u> Thanks for clarifying your intention behind this finding.</p> <p>We believe that in this case stringency (enforced by the proposed limitation) takes precedence over applicability (inclusion of different ownership structures/mechanisms). As you know, having a strong additionality argument is a key aspect for the eligibility of RE projects for securing carbon finance and we think the proposed limitation is a first and</p>

Section 4 – Applicability Conditions

#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
		<p>share the economic benefits (or various alternate structures).</p> <p>I have seen projects where the economics of the renewables project deteriorates to the point of seeking out BESS (i.e. in the case of significant congestion). In this case I think there is an argument for carbon finance being a driving factor for BESS? However, do I recognize your point regarding 'prior consideration' and understand the reasoning behind the current approach.</p>	<p>necessary step towards ensuring that. We understand that this comes at a cost of limited applicability which is acceptable to us. So, wherever carbon finance is a driving factor for BESS implementation it must involve a single entity and be part of the same investment decision as the power plant - BESS must be considered an important element and not be an afterthought.</p> <p>Additionally, we did not receive a significant push back from the stakeholders on the proposed limitation (except a couple of comments at most) which emboldens us further to maintain this approach.</p>
		<p><u>Rd 3 comment:</u></p> <p>Understood; clarity appreciate. Response is acceptable.</p>	<p><u>Rd 3 response:</u></p> <p>Thank you for your response.</p>

Section 5 – Project Boundary

#	Paragraph from Draft Methodology	Comment	Developer’s Response and/or Update
	n/a	No changes to or additions to ACM0002	Not Applicable.

Section 6 – Baseline Scenario

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
	n/a	What about specifying “renewable project without BESS”	<u>Rd 1 response:</u> There is no proposed change in the requirements related to renewable projects without BESS. The requirements prescribed in the parent methodology (ACM0002) are in force and must be complied with, as applicable (as indicated in Section 1. Summary Description).
		<u>Rd 2 comment:</u> Response is acceptable.	<u>Rd 2 response:</u> Thank you for your response.

Section 7 - Additionality

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
		Revisions are clear	Noted. Thanks for the observation.

Section 8 – Quantification of Estimated GHG Emission Reductions

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
		Is consideration for round trip efficiency losses included in emissions?	<u>Rd 1 response:</u> The BESS round trip efficiency losses are considered under the following two parameters through consideration of only the net electricity generation delivered to the grid:

Section 8 – Quantification of Estimated GHG Emission Reductions

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
			<ul style="list-style-type: none"> • $EG_{\text{facility},y}$ - Quantity of <u>net electricity generation</u> supplied by the project plant/unit to the grid in year y and • $EG_{\text{PJ_Add},y}$ - Quantity of <u>net electricity generation</u> supplied to the grid in year y by the project plant/unit that has been added under the project activity <p>Here (tacitly), net electricity generation is the actual amount of renewable electricity delivered to the grid by BESS after accounting for the energy used to charge the battery and its efficiency losses.</p> <p>Moreover, these parameters are measured via electricity meters <u>installed at the grid interface</u> for electricity export to grid. Please refer to section 9.2 (monitoring table for these two parameters) of the draft methodology for further details.</p>
		<p><u>Rd 2 comment:</u> Understood. Response is acceptable.</p>	<p><u>Rd 2 response:</u> Thank you for your response.</p>

Section 9 - Monitoring

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
		Revisions are clear	Noted. Thanks for the observation.

Appendix A

#	Paragraph from Draft Methodology	Comment	Developer's Response and/or Update
	n/a	No revisions	Not Applicable.