

PROJECT REVIEW REPORT

This project review report includes findings raised during Verra’s review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

Project ID	0929
Project Name	ENERGY EFFICIENCY AND SOLID WASTE DIVERSION ACTIVITIES WITHIN THE QUEBEC SUSTAINABLE COMMUNITY
Review Type	Verification
Verification Period	01/01/2020 – 31/12/2021
Program(s)	VCS Program
Project Proponent	Will Solutions Inc. (WILL)
Methodology	VM0018, “Energy Efficiency and Solid Waste Diversion Activities within a Sustainable Community”, Version 1.0
VVB	LGAI Technological Center, S.A. (Applus+ Certification)
Assessment Criteria	VCS Standard, v4.5
Date of First Issue	23 April 2024
Review Conclusion	Closed
Date of Final Issue	22 August 2024

FINDINGS

#	Finding Description	VVB Response	Status
1	Unclear Status of the Project Activity Instances		
	<u>Issue</u> 1. It is unclear whether any new project activity instances (PAIs) are added during this monitoring period. 2. If new instances are added, they are no description nor assessment against the eligibility criteria. Further, if instances have been removed, they are not clearly described in the monitoring report (MR) and assessed in the verification report (VR). 3. Further, it is not clear what occurred to result in: ‘Entity Certi-Conseil has been removed due to no involvement in this monitoring period’. <u>Action item</u> 1. The VVB must ensure the MR is updated to reflect the following: a. Section 3.1: State clearly how many PAIs and client facilities were considered, how many PAIs and client facilities were added as PAIs, and how many PAIs and client facilities were excluded during this monitoring period. Describe clearly what Certi-Conseil’s role was and why it was removed. b. Section 3.3: If instances were added, this section must be updated to demonstrate how each instance meets each eligibility criterion.	Round 1 <u>VVB Response</u> 1. PP has added a table in section 3.1 of the MR to specify the number of client facilities and PAIs considered, excluded, and added for the MP, separated per vintage 2020 and 2021. 2. There are no new instances and new client facilities included in this MP for serialization by the VCS Program. During previous monitoring period 735 PAIs were reported and there are 752 PAIs reported in the current monitoring period. The variation from 752-735=17 PAIs is due to differences in participation by the client facilities. The client facilities with 20 PAIS which participated in MP3 (01/01/2016 to 31/12/2016) and MP4(01/01/2017 to 31/12/2018) but did not participate in MP5(01/01/2019 to 31/12/2019), renewed their participation in MP6 (01/01/2020 to 31/12/2021), and 1 client facility with 3 PAIs stopped its participation to the grouped project. Hence the total PAIs in this monitoring period are: $735 + 20 - 3 = 752$ PAIs The assessment team verified the details of PAIs included /excluded or withdrawn during the current monitoring period as provided in Annexure B-C (confidential) and found to be correct.	Closed

	2. The VVB must update Sections 3.4 and 4.1 of the VR to address the Issues 1 – 3. The VVB must also ensure that the quantification and GHG ERR spreadsheet reflect the correct number of PAIs and client facilities. <u>Program rule(s)</u> VCS Monitoring Report Template v.4.2, Section 3.1 <u>Background</u> The MR mentions 752 active PAIs. However, the previous monitoring period has 735 PAIs. It appears that more PAIs have been added during this monitoring period.	3. The PP has removed Certi-Conseil since they are not involved with the development of the project during this crediting period. Certi-Conseil has always been solely a consultant and advisor to PP. <u>Verra Response</u> As per the revised MP, it is confirmed that no new client facilities nor PAIs have been added during this monitoring period, instead facilities which did not report in previous monitoring periods have been added in this monitoring period and vice versa. The reference to Certi-Conseil in the revised MP has been removed and the PP remains the same as in the PD. The finding is closed and no further action is required.	
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2	Missing kml file		
	<u>Issue</u> There is no updated kml file to reflect the PAIs included in this monitoring period. <u>Action item</u> 1. The VVB must ensure that the project proponent submits an updated kml file as required in the VCS Standard v.4.5, Section 3.11.1(3). <u>Program rule(s)</u> VCS Standard v.4.5, Section 3.11.1(3) <u>Background</u>	Round 1 <u>VVB Response</u> 1. The PP has provided two KML files for MP6, one for 2020 vintage and the other for the 2021 vintage. The KML files demonstrate clearly that no new Client Facilities were added during this MP. <u>Verra Response</u> The kml files have been submitted. The finding is closed and no further action is required.	Closed

	The KML file submitted at crediting period renewal cannot be opened.		
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3	Further information on EF values used and ER calculation		
	<u>Issue</u> 1. The GHG ERR spreadsheet has the following issues: a. Under TAG-Quantif 2020 scope 3 & 13, rows 20 to 22: the client facility number does not match with the corresponding TAGS-CFXXXX. b. The EF values used for the Scope 13 in the ER spreadsheet are not consistent with the ones described under Table 11 Appendix E. For example: TAG-CF707-2020, Row 20, EF for putrescibles and green residues and mixed paper (0.02 as per Appendix E and 3,93 used in PAI806. c. No derived values for key parameters, only raw inputs for entire calendar year. Unclear how VVB was able to assess this. d. The source of the following EFs used are not indicated: i. cardboard and paper reuse (i.e., 3,658640 and 1,785240 tCO₂/metric ton (in PAI601 and PAI302 –for example-) ii. 3,934140 tCO₂/metric ton (in PAI504 and 0512), iii. urban biomass of 1,78524 tCO₂/metric ton (under PAI507 805 and 808) iv. treated soil in PAI 706 and	<u>Round 1</u> <u>VVB Response</u> 1. a) The PP has corrected the CF ID number of CF-0305, CF-0306, and CF-0307 in the tables included in section 5.1 and 5.2 of the MR. The CF ID numbers in ERR spreadsheet, sheet ‘Quantif 2020 scope 3 & 13’, row 20 to 22 with corresponding sheets named ‘CF-XXXX’ are correct. b) The PP has reviewed all scope 13 PAIs and added the missing EFs to the MR Appendix E, table 11. The VVB has also updated the values under section 4.4 of the VR, consistent with the MR. c) The values entered for the calendar year is the result from consolidated data provided by the client facility through evidence documentation such as bills, delivery or weight tickets, etc, Frequency (eg. monthly, bimonthly, weekly, etc.) is confirmed through this evidence documentation, the VVB was given access to the evidence documentation stored on PP’s platform for verification. The assessment team has verified the evidence and found to be in order. d) The PP has reviewed all scope 13 PAIs and added the missing EFs and their sources to the MR Appendix E, table 11. Some waste type ‘names’ are used	Closed

	v. PAI 710: bark residues. 2. Appendix E-2 of the MR does not clearly indicate the values for EF of thermal energy, OX, MCF and k_j. <u>Action item</u> 1. The VVB must ensure that the GHG ERR spreadsheet is updated to address Issue 1. 2. The VVB must ensure that Appendix E-2 (or Section 4.1) of the MR is updated to address Issue 2. 3. The VVB must update Sections 4.4 and 4.5 of the VR to assess the updates made in response to Issues 1 and 2, and clarify how the VVB was able to assess the monitored inputs when they are not reported by the stated frequency in the validated project description. <u>Program Rule(s)</u> VCS Monitoring Report Template v.4.2, Section 3.1 <u>Background</u> For Issue 1(c) and Action Item 3, an example is cell L10 of tab “CF-0101 GSD”, where the input is for a whole year based on “Will’s calculations”, whereas the data/parameter for “Volume or Quantity of Fuel” has a frequency of each delivery or monthly.	synonymously (eg. cardboard and corrugated container, urban biomass and dimensional lumber). 2. The PP has added information on EF of thermal energy, OX, MCF and K_j in the MR, Appendix E-2. <u>Verra Response</u> The following findings are considered closed: 1-a and 2. <u>Issues:</u> 1. As per the submitted documentation, the emission factors used in the monitoring period for sectoral scope 13 PAIs (Appendix D and Section 5.1 of the MR) have been revised, to use the latest version of data sources, which defers from the validated PD for this crediting period. However, no PD deviation is presented. Further, Appendix D and Section 5.1 of the MR does not describe how the emission factors have been sourced, given that the values are not directly presented in this reference (i.e., https://www.epa.gov/warm/versions-waste-reduction-model#15). <u>Actions required:</u> 1. The VVB must clarify why the data/parameters available at validation (Section 5.1 and Appendix D of the MR) are different than those in the validated PD. If there is a PD deviation, a. The VVB must ensure Section 3.2.2 of the MR	
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		is updated. b. The VVB must assess the deviation against Section 3.21 of the <i>VCS Standard, v4.5</i>. 2. The VVB is requested to explain the exact source of the EF factors used for sectoral Scope 13, to enable to cross-reference of factors and derived data/parameters. The finding remains open. Round 2 <u>VVB Response</u> 1. The data/parameters available at validation are different than those in the validated PD, because the project proponent has opted to use default emission factors from the U.S EPA WARM. a. The project proponent has updated section 3.2.2 of the MR with a project deviation according to section 3.21 of the VCS Standard v.4.5. b. The VVB 2. The project proponent has provided an Excel sheet named "ID929-MR6-WARM v15-EF-Cross-Referencing" to enable cross-reference of emission factors from the WARM. The Excel-based WARM tool itself has to be downloaded from the reference previously presented (i.e. https://www.epa.gov/warm/versions-waste-reduction-model#15, then click on "Excel-Based Tool: Version 15 (xls)" to download). Emission factors in the WARM are presented in short ton/MTCO₂e and were therefore converted by PP to metric ton/MTCO₂e. The	
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		conversion is also demonstrated in the Excel sheet.	
		<u>Verra Response</u> The MR has been updated to include a description of the project description deviation, and the VR has been updated with the VVB's assessment. The spreadsheet has been provided to reference the EFs used. This finding is now closed.	

4	Missing calibration information		
	<u>Issue</u> Section 4.5 of the VR states that 'The assessment team has verified the calibration certificates of the monitoring equipment used for emission reduction calculation and found that these meters are calibrated'. However, there is no information on the calibration dates, validity and frequency requirements of each of the instruments used during the monitoring period in all the PAIs. <u>Action item</u> 1. The VVB must ensure that the project proponent includes the information on the calibration dates and frequency requirements of each of the instruments used during the monitoring period in all the PAIs. 2. The VVB must provide further details related to the calibration checked of all the instruments used during this monitoring period and update Section 4.5 of the VR as needed. <u>Program rule(s)</u> VCS Monitoring Report Template v.4.2, Section 4.3	<u>Round 1</u> <u>VVB Response</u> 1. The PP has provided access to the VVB to all client facilities' individual folder and evidence documentation. This includes annual calibration certificates detailing calibration dates and conformity, where applicable. The assessment team was able to verify the calibration certificates of the instruments, confirming that there were no delays in calibration. In addition, the certificates confirmed that no instruments requiring calibration were replaced or found faulty during the monitoring period. It is important to highlight that the calibration of measurement instruments must adhere to the Weights and Measures Regulations by Measurement Canada, a federal governmental entity. Therefore, calibrations are conducted as per the federal law of Canada. Measurement Canada: https://ised-isde.canada.ca/site/measurement-canada/en Weights and Measures Regulations: https://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c. 1605/index.html	Closed

	VCS Verification Report Template v.4.2, Section 4.5	2. Due to the large volume of evidence documentation, it is not possible to provide all information on calibration dates and frequency requirements. The PP has provided in attachment a sample of calibration certificates for VVB assessment. <u>Verra Response</u> <u>Issues:</u> As per the information in the response above, it is not clear whether the VVB verified all the calibration information of the all the instruments used in all the facilities (as per point 1 above) or only a sample (as per point 2). Further, the revised VR refers to the calibration of ‘Weigh Bridge, Weighing Scale and other equipments’, without mentioning which are the other equipments involved in the monitoring activities and the required calibration frequency for each type of device used. <u>Actions required:</u> 1. The VVB is requested to update Section 4.5 of the VR to clarify if 100% of the calibration certificates of all the equipment used in all the facilities has been verified or if such verification has been conducted as per a sampling plan. If the latter, the VVB must justify how a reasonable level of assurance was achieved. 2. The VVB is requested to update Section 4.5 of the VR to indicate which are all the type of devices used in the monitoring plan and their required calibration frequency.	
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		The finding remains open.	
		Round 2	
		<u>VVB Response</u> 1. Section 4.5 of the VR has been updated to clarify that calibration certificates have been verified as per the sampling plan. The VVB has also added a justification of how reasonable assurance was achieved. 2. Section 4.5 of the VR has been updated to indicate all the types of devices used in the monitoring plan and their required calibration frequency.	
		<u>Verra Response</u> Section 4.5 of the VR has been updated to clarify that the VVB verified the project's calibration instruments via sampling. More information has been provided about the device types checked. This finding is now closed.	

5	Incorrect vintage reporting and missing ex-ante and ex-post comparison		
	<u>Issue</u> Section 5.4 of the MR has the following issues: 1. Table 8 does not report the vintages in ranges (E.g., day-month-year to day-month-year). 2. The actual (ex-post) ERRs have not been compared to the ERs estimated (ex-ante) and the justification is insufficient.	Round 1 <u>VVB Response</u> 1. The PP has made modifications to table 8 and vintages are now reported day-month-year to day-month-year. 2. The PP has compared ex-ante and ex-post ERs under section 5.4 of the MR and added the justification for the percentage difference. The VVB also included the comparison of ERRs under section 5 of the verification	Closed

	<u>Action item</u> 3. The VVB must ensure that the project proponent reports the vintages in ranges and compares the ex-ante and ex-post ERs under Section 5.4 of the MR. 4. The VVB must compare the ex-ante and ex-post ERs under Section 5 of the VR. <u>Program rule(s)</u> VCS Monitoring Report Template v.4.2, Section 5.4 VCS Verification Report Template v.4.2, Section 5 <u>Background</u> The ex-ante GHG ERRs should be derived from the estimated ex-ante GHG ERRs reported in the validated project description.	report.	
		<u>Verra Response</u> The vintages and the ex ante / ex post comparison are reported as per the required template in the revised MR. The finding is closed and no further action is required.	

6 Unclear and incomplete assessment on methodology applicability condition and requirement			
	<u>Issue</u> 1. Section 4.1 of the VR states that: "The emission reduction calculation for all PAIs was checked and it was confirmed that all units have GHG reduction which are inferior to 5,000 tCO₂e/year. The lowest average ER recorded during this MP is 32 tCO₂e by SADC- D'Autray-Joliette (group of members) facility (non-zero minimum) to the highest average by SADC- Haut-Saguenay Group of Member at 292,936 tCO₂e in this monitoring period." It remains unclear which is the highest value of tCO₂e/year per unit observed during the monitoring period. 2. Section 4.1 of the VR does not provide an assessment on how methane collection and destruction system efficiency	Round 1	Closed
		<u>VVB Response</u> 1. The lowest and highest value of tCO₂e/year per unit can be assessed by consulting the calculation sheets ("CF-XXXX 2020", "CF-XXXX 2021") provided by PP in 'Annex B-C'. The highest value of tCO₂e/year per unit is 4,040 tCO₂e for 2020 (by CF-0805), and 4,842 tCO₂e for 2021 (by CF-1108). The VVB has reported this information under section 4.1 of the verification report. 2. For the calculation of ERs, PP uses emission factors from the U.S. EPA WARM (version 15, 2020). The ERs for every PAI associated with the sectoral scope 13 were calculated in a conservative approach, assuming that the baseline scenario for landfilling always includes the flaring of landfill gas. The VVB has	

is accounted for in a reasonable manner for P14 and B14 sources and sinks. <u>Action item</u> 1. The VVB must further clarify which is the which is the highest value of tCO2e/year per unit observed during the monitoring period under Section 4.1of the VR and how this was assessed. 2. The VVB must provide more information on how it has verified the referred requirement contained in the methodology. <u>Program rule(s)</u> VCS Verification Report Template v.4.2, Section 4.1 VM0018, v1.0, Sections 4 and 5.1 <u>Background</u> Section 5.1 of VM0018, v1.0 states that “A methane collection and destruction system may be in place at the disposal site. If such a system is active in the landfill or the area of the landfill where this material is being disposed, then its characteristics must be identified and the efficiency (ie, percent of total methane generation that is captured and destroyed) must be accounted for in a reasonable manner”.	provided an assessment under section 4.1 of the VR. <u>Verra Response</u> Section 4.1 of the VR has been updated. Issue 1 is now clarified and closed. However, Issue 2 requites further clarification. This finding remains open. <u>Issue:</u> 1. The VR does not include an assessment on how each EF used in the project activity related to sectoral Scope 13 has been calculated considering the data from the U.S. EPA WARM (version 15, 2020) and the baseline conditions. For example, for CF-0507, an EF of 0.68324tCO2/metric tons of organic waste is used for the organic waste composted and avoided from landfill. Considering that the clarification in para. vi of the VR (Section 4.1) the baseline landfilling always includes flaring of the landfill gas, the VVB must assess how the use of U.S. EPA WARM values are conservative. <u>Action required:</u> 1. The VVB is requested to assess how each of the revised EFs for sectoral Scope 13 are conservative or accurate considering the baseline situation, data used and project situation. Otherwise, the detailed	
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		calculation, values used and sources must be indicated for each of the EF used, including the amount of landfill gas flared in each PAI in the baseline. This information must also be included in the revised MR. The finding remains open. Round 2 <u>VVB Response</u> It is observed that during the current monitoring period, the PP has used default emission factors from the U.S. Environmental Protection Agency Waste Reduction Model (EPA WARM) (version 15). However as per the registered PD, default values of the CDM Tool 04 shall be used, hence this instance is considered as project deviation during the current monitoring period. The assessment team has checked the landfill default emission factors from the EPA WARM and confirmed that the data used are more accurate due to regional specificity and relevance to the Province of Quebec as compared to the default values of the CDM Tool 04. The WARM is developed with North American context in mind, whereas the CDM's Tool 04 is designed for global context. For example, the EPA WARM is tailored to reflect the waste composition and landfill practices prevalent in North America, whereas the CDM Tool 04 is based on broader, global datasets that may not accurately represent Quebec's situation. In addition, the WARM takes into consideration the climatic conditions relevant to North America, whereas the CDM Tool 04 has a wider range of climate conditions which are less specific to Quebec. Selecting emission factors from the WARM ensures that high-quality, and region-specific data representative of North American context are used.	
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		In addition, the WARM allows the customization of results based on landfill gas recovery practices, and anaerobic digestion practices, and provides default values. In line with the requirements as mentioned under the clause 3.21.2 (2) of VCS standard v 4.5, the PP has appropriately described and justified the project deviation under section 3.2.2 of the monitoring report. The assessment team can confirm the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario and the project remains in conformance with the VCS Program rules. The project deviation is assessed under section 3.3 of the VR. <u>Verra Response</u> The VVB has clarified how they assessed each of the revised EFs for sectoral scope 13 calculations. This finding is now closed.	
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7	Insufficient information on sampling size calculation and selection		
	<u>Issue</u> Section 4.3 of the MR states that the sampling approach is in Annexure B-C. However, there is no description and demonstration of how the sampling size was calculated and selected. <u>Action Required</u> 1. The VVB must ensure Section 4.3 (or Appendix B-C) is updated to include more information on how the sampling size was calculated and selected, given the different client facility characteristics in the project.	Round 1 <u>VVB Response</u> 1. The PP has added to section 4.3 of the MR the following information on how the sampling size was calculated and selected. A more detailed procedure regarding calculations for determining the selected sample is available in the Annexure B-C, in worksheet "Sample for Verification". The VVB has described the sampling approach under section 2.1 of the VR.	Closed
		<u>Verra Response</u>	

2. The VVB must update Sections 4.4 and 4.5 of the VR to provide an assessment on the sampling approach the PP selected. <u>Program Rule(s)</u> VCS Verification Report Template, v4.2, Sections 4.4 and 4.5	Section 4.3 of the MR has been updated with more information on how the sampling size was calculated and selected. However, more information is required to close the finding. <u>Issue</u> 1. Section 4.3 of the MR and/or Section 2.1 of the VR does not have sufficient information to demonstrate that the sampling approach meets the sampling guidance in VM0018. <u>Action Required</u> 1. The VVB must ensure Section 4.3 of the MR or Section 2.1 of the VR is updated to include description and justification of how the sampling approach meets the requirements listed in Section 8.3 of VM0018, v1.0. This includes, but is not limited to, information like confidence interval, nonselective ($\geq 20\%$), justification for stratification (or lack of), and treatment of sample defects. 2. The VVB must assess or demonstrate how the approach meets the sampling requirements in Section 2.1 of the VR. <u>Program Rule(s)</u> VM0018, v1.1, Section 8.3 Round 2 VVB Response Section 4.3 of the MR and Section 2.1 of the VR is updated including sufficient information to demonstrate that the	
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		sampling approach meets the sampling guidance in VM0018. During the current monitoring period, we have a total of 752 PAIs, the assessment team has sampled respectively 19 and 21 PAIs for scope 3 and scope 13 respectively. Therefore, the total sample is determined as 40, however the assessment team has checked 77 samples during the audit. It is to be noted that 20 PAIs out of 77 were selected at random. This is 25% selected at random which is aligned with 'at least 20%' mentioned in methodology VM0018. For the project, a non-stratified random sampling approach was applied, as the economic sectors covered do not correspond to homogeneous sub-populations within the project and the PAIs. Instead, PAIs are grouped by sectoral scope, which groups activities by type and covers a variety of economic sectors. In line with the requirements of applied methodology the assessment team has checked if the selected sample size meets the Confidence Interval requirements i.e. 95%. As per the "sampling procedure and tables for inspection by attributes" ANSI/ASQ Z1.4-2008 (https://www.scribd.com/document/454429584/ANSI-Z1-4-2008-pdf) , for a population from 501 to 1200 the representative sample size is G= 32. For the G sample to be compliant with a 95% confidence interval, the acceptable defective rate should be inferior to 3 (column 4.0, table II- A). In the project case, all the PAIs eligibility criteria were conform and acceptable as no defects were identified. Furthermore, the assessment team has increased the audited sample size to 77, reinforcing the confidence interval. Hence the assessment team can confirm that the approach meets the sampling requirements, more specifically the confidence interval, the sample defect, the non-selective ratio and the stratification	
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		justification.	
		<u>Verra Response</u> Section 4.3 of the MR has been updated with more information to demonstrate how the project has met the sampling requirements in Section 8.3 of VM0018. The VVB has confirmed the same. This finding is now closed.	

8	Unclear exclusion of scope 3 GHG ERRs		
	<u>Issue</u> Section 5.4 and Appendix A-2 of the MR state that 421,812 tCO ₂ e of GHG ERRs were excluded from sectoral scope 3. However, it isn't clear how this was determined and whether it was determined per the definitions of Scope 3 per the VCS <i>Program Definitions</i> , v4.4. <u>Action Required</u> 1. The VVB must ensure Section 5 and Appendix A-2 are updated to clarify how the PP determined the 421,812 tCO₂e of GHG ERRs. 2. The VVB must clarify whether the reference to "sectoral scope 3" is from sectoral scope 3 (i.e., energy demand) or scope 3 inventory emissions (i.e., upstream and downstream emissions). <u>Program Rule(s)</u> VCS <i>Program Definitions</i> , v4.4	<u>Round 1</u> <u>VVB Response</u> 1. The PP confirms that 421,812 tCO ₂ e is included in the MP/MR. These ERs represent the portion of ERs under sectoral scope 3 (energy demand). See Annex B-C, worksheet "Total 6th cohort", cells G16 and G20. Vintage 2020: 220,727 tCO ₂ e (sectoral scope 3) Vintage 2021: 201,085 tCO ₂ e (sectoral scope 3) PP has removed the sentence in the MR to avoid confusion. 2. The VVB can confirms that reference to "sectoral scope 3" is from sectoral scope 3 (i.e., energy demand) not for scope 3 inventory emissions (i.e., upstream and downstream emissions). <u>Verra Response</u> The VVB has clarified that sectoral scope 3 refers to sectoral scope 3 emissions and not scope 3 (i.e., supply chain) emissions. There is no double counting of sectoral scope 3 emissions. The clarification is accepted, and the finding is now closed.	Closed