

VCS Methodology Element Second Assessment Report

for

The Verified Carbon Standard (VCS)



Prepared by Bureau Veritas Certification Holding SAS

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	Module	
	Tool	
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Prepared By	Bureau Veritas Certification Holding SAS
Contact	1565 MacArthur Blvd., Costa Mesa, CA 92626 www.us.bureauveritas.com
Approved By	Flavio Gomes
Work Carried Out By	David Church

Summary:

Bureau Veritas Certification Holding SAS (Bureau Veritas) was retained by VCS to conduct the second assessment under the VCS double-approval process for the proposed Methodology Element, “Transport Energy Efficiency from Lightweight Pallets”. This proposed methodology establishes procedures for monitoring and measuring GHG emissions reductions from the use of lightweight pallets to transport goods.

The applicable VCS sectoral scopes are 03 – Energy Demand, and 07 – Transport.

The second assessment of the methodology requires the use of an approved independent 3rd party to review the Methodology Element and assess its conformance to relevant VCS rules and procedures. The second assessment is part of the VCS double-approval process to independently and separately validate the methodology and provide assurance to stakeholders of the quality of the Methodology Element.

Criteria for the second assessment were the VCS Standard, v3.2 and the VCS Methodology Approval Process, v3.3, and guidance from the VCS Program Guide, v3.2. Bureau Veritas relied on its professional judgement for the review of the methodology and in reaching our final conclusions. Finally, we compared our results and findings to those of the first assessment.

During the second assessment of the proposed Methodology Element we received comments from the VCS qualified expert. These comments included several clarification and corrective actions requests. Axios Mobile Assets adequately addressed all requests by the Expert and their responses are included in Section 4 below.

Bureau Veritas concludes that the proposed Methodology Element, “Transport Energy Efficiency from Lightweight Pallets”, as described in the Methodology Element, Version 1.9, dated September 18, 2012, satisfies all relevant VCS requirements for a Methodology Element.

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	Objective	4
1.2	Scope and Criteria	4
1.3	Summary Description of the Methodology Element.....	4
2	ASSESSMENT APPROACH	5
2.1	Method and Criteria.....	5
2.2	Document Review	5
2.3	Interviews	6
2.4	Use of VCS-Approved Expert	6
2.5	Resolution of any Material Discrepancy.....	6
2.6	Internal Quality Controls.....	6
3	ASSESSMENT FINDINGS	6
3.1	Applicability Conditions	6
3.2	Project Boundary.....	6
3.3	Procedure for Determining the Baseline Scenario.....	7
3.4	Procedure for Demonstrating Additionality	7
3.5	Baseline Emissions	7
3.6	Project Emissions.....	8
3.7	Leakage.....	8
3.8	Quantification of Net GHG Emissions Reductions and/or Removals	8
3.9	Monitoring.....	8
3.10	Data and Parameters	9
3.11	Use of Tools/Modules	9
3.12	Adherence to the Project Principles of the VCS Program.	9
3.13	Relationship to Approved or Pending Methodologies	9
3.14	Stakeholder Comments.....	10
4	RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS	10
5	ASSESSMENT CONCLUSION.....	18
6	REPORT RECONCILIATION.....	18
7	EVIDENCE OF FULFILMENT OF VVB ELIGIBILITY REQUIREMENTS.....	18
8	SIGNATURES.....	19

1 INTRODUCTION

This report is submitted to the VCS as a deliverable for the second assessment of the VCS double-approval process for the proposed Methodology Element, "Transport Energy Efficiency from Lightweight Pallets". This Methodology Element establishes procedures for monitoring and measuring GHG emission reductions from the use of lightweight pallets to transport goods.

In this report we describe the process used to conduct the second assessment of the proposed methodology. Axios Mobile Assets provided Bureau Veritas with version 1.5, dated April 17, 2012, of the proposed Methodology Element, and serves as the basis for our conclusions.

1.1 Objective

The purpose of the second assessment in the double-approval process is to independently verify conformance of the Methodology Element with VCS rules and requirements.

1.2 Scope and Criteria

As a proposed Methodology Element, it is subject to the methodology double approval process, using the VCS Methodology Approval Process, v3.3 dated February 1, 2012 as the criteria. Additionally, we relied on the VCS Standard: VCS Version 2, 1 Feb 2012, the VCS Program Guide Version 3.2, 1 Feb 2012, and the requirements of ISO 14064-2 and 14064-3. Bureau Veritas conducted the assessment at a level to ensure a reasonable level of assurance.

1.3 Summary Description of the Methodology Element

Pallets are flat, portable structures that support goods during handling, transportation and storage. This methodology outlines procedures to estimate the avoided net greenhouse gas (GHG) emissions resulting from project activities involving the use of pallets that are lighter in weight than their conventional alternatives for freight transport. Typical GHG reduction projects with lightweight pallets involve:

- a) Replacing an existing fleet of conventional wood pallets with lightweight pallets, or
- b) Setting up a new fleet using lightweight pallets.

In both cases, the baseline would be the same fleet of conventional pallets. Projects achieve GHG emission reductions through reducing the total weight of goods transported, hence reducing fuel consumption and associated GHG emissions.

This methodology provides guidance to select the baseline from amongst plausible scenarios and provides methods to transparently estimate the baseline GHG emissions. Project emissions are quantified by monitoring the fuel consumption by captive truck fleets transporting freight using lightweight pallets.

2 ASSESSMENT APPROACH

2.1 Method and Criteria

Bureau Veritas has established internal procedures for the conduct of Methodology Element assessments. Under these procedures we:

- Engaged with Axios Mobile Assets and VCS to ensure our understanding of the scope of the project and determine preliminary costs. We discussed the project with to ensure we could cover the sectoral scopes involved and meet the general timing and expectations for the project. We also engaged with VCS to ensure Bureau Veritas was acceptable to conduct the second assessment.
- Conducted an investigation for the actual or potential conflict of interest with the project. Through our database records we determined that we have no actual or potential conflict of interest with Axios Mobile Assets or with First Environment for this project.
- Developed a proposal for VCS to perform the second assessment. This proposal outlined our planned activities and the assessment team used to complete the second assessment. In addition we submitted a cost proposal to Axios Mobile Assets.
- Received documents related to the assessment from Axios Mobil Assets. We conducted an initial review of the documentation to ensure we had the necessary information to complete the second assessment.
- Initiated contracts with VCS and Axios Mobile Assets for the second assessment process. Both contracts were signed and processed internally by Bureau Veritas.
- Developed the validation plan outlining our anticipated process and outputs.
- Reviewed the Methodology Element and the first assessment report. A formal review included a detailed review of the methodology and supporting documentation. Output from this review is included in this report.
- Conducted necessary interviews with Axios Mobile Assets to validate information in the Methodology Element.
- Received and evaluated clarification and corrective action requests from VCS and their qualified expert. Axios Mobile Assets responded to the requests from the expert and revised the proposed Methodology Element accordingly.
- Developed the second assessment report using the VCS template.

2.2 Document Review

We conducted a desktop review of the relevant documentation, including the proposed methodology, referenced similar methodologies, and the first assessment report. We reviewed the findings and

corrective actions identified in the first assessment report. We reviewed the clarification and corrective action requests submitted by the VCS qualified expert.

2.3 Interviews

Several telephone interviews were conducted with John Psihos from Axios Mobile Assets and Duncan Noble from PE International & Five Winds Strategic Consulting during the second assessment.

2.4 Use of VCS-Approved Expert

VCS identified and engaged a qualified expert to review and comment on the proposed Methodology Element during the second assessment phase. The expert submitted comments and requests for corrective actions and clarifications which are included in Section 4 of this report.

2.5 Resolution of any Material Discrepancy

No issues of material discrepancy were identified during the second assessment process. Axios Mobile Assets originally submitted version 1.5 of the proposed Methodology Element to Bureau Veritas. We requested and received version 1.6. The final version of the proposed Methodology Element is version 1.9.

2.6 Internal Quality Controls

Bureau Veritas is an accredited validation/verification body by the American National Standards Institute (ANSI) and, as such, has internal quality control procedures that satisfy ISO 14065 and the ANSI GHG program for the validation/verification of GHG emissions and removals. Bureau Veritas is also approved under the UN CDM and JI programs for GHG validation/verification and has an internationally recognized validation program. Our internal technical review process ensures that a senior Bureau Veritas validator/verifier conducts the review and provides feedback and support to the Lead Assessor. All identified issues are addressed and resolved prior to issuance of the final report.

3 ASSESSMENT FINDINGS

3.1 Applicability Conditions

The proposed Methodology Element clearly identifies criteria by which to assess the eligibility of pallet switch projects. The criteria identified provide a clear basis for determining the proposed Methodology Element's applicability to potential project activities. Bureau Veritas agrees that the applicability requirements given in the proposed Methodology Element are appropriate, adequate, and consistent with the VCS Standard.

3.2 Project Boundary

The project boundary is defined as encompassing truck fleets and the places they go while carrying lightweight pallets as part of their cargo and consuming fossil fuel. The proposed Methodology Element properly identifies the relevant sources of baseline and project emissions. For simplification, CH₄ and

N₂O emissions are excluded from the baseline and project boundary. The production of raw materials used to manufacture conventional pallets and the manufacturing of conventional pallets are not included in the baseline boundary. The production of raw materials used to manufacture lightweight pallets and manufacturing of lightweight pallets are not included in the project boundary.

Bureau Veritas agrees that the proposed Methodology Element provided sufficient criteria to establish the project boundary and that all relevant emission sources and GHGs are included.

3.3 Procedure for Determining the Baseline Scenario

The proposed Methodology Element relies on the most recent version of the CDM “Combined tool to identify the baseline scenario and demonstrate additionality” to determine and assess the baseline scenario. Baseline alternatives are identified and evaluated in accordance with the Combined Additionality Tool. All realistic and credible alternatives to using lightweight pallets have been considered. These include:

- Wood pallets, and
- Petroleum-based plastic pallets.

A Barriers Analysis is used to assess which alternatives can be excluded from consideration. Investment Analysis is used for the remaining alternatives to determine the baseline scenario. The proposed Methodology Element details additional guidance relative to the Investment Analysis.

Bureau Veritas agrees this approach is appropriate and adequate.

3.4 Procedure for Demonstrating Additionality

The proposed Methodology Element requires the use of the CDM “combined tool to identify the baseline scenario and demonstrate additionality” to demonstrate additionality.

Bureau Veritas agrees the use of the Combined Additionality Tool to be an acceptable approach consistent with the VCS Standard.

3.5 Baseline Emissions

The proposed Methodology Element provides procedures and equations for the calculation of baseline emissions. Specifically, baseline emissions are equivalent to the metric tonnes of carbon dioxide emitted to the atmosphere from fossil fuel combustion in the absence of the project activity. Baseline emissions are quantified using either a calculated Project Emission Factor or Default Emission Factor. The alternative quantification methodology, using a Default Emission Factor, may only be used if project specific fuel consumption or freight weight data are not available. An annual Project Emission Factor is calculated by dividing the total emissions from all fuels consumed in project vehicles by the annual aggregate weight distance of all freight transported by project vehicles. A baseline weight distance is calculated based on the total distance traveled by project vehicles, the total weight of project freight (including project pallets), the number of project pallets transported, and the incremental decrease in weight due to the pallet switch. The calculated baseline weight distance is then multiplied with the Project or Default Emission Factor to quantify baseline emissions.

Bureau Veritas agrees the formulae and quantification methods in the Baseline Scenario are reasonable and concluded that the approach to calculate baseline emissions is appropriate, adequate, and consistent with the VCS Standard.

3.6 Project Emissions

Project emissions are quantified by multiplying the total quantity of fuel consumed by the fleet by the appropriate CO₂ emission factor. If fuel consumption data are not available, the proposed Methodology Element provides an alternative procedure to quantify project emissions. A default CO₂ emission factor per metric tonne/kilometer is multiplied by the aggregate products of distance traveled and total weight transported over all vehicles. All formulas and quantification methods were reviewed for accuracy and appropriateness.

Bureau Veritas agrees the approach in the proposed Methodology Element to calculate project emissions is reasonable, appropriate and adequate.

3.7 Leakage

The proposed Methodology Element properly identifies sources of leakage. Positive leakage from baseline sources for the production of raw materials used to manufacture conventional pallets and the manufacture of these pallets are excluded from the proposed Methodology Element and this is considered a conservative approach.

Emissions from the manufacture of lightweight pallets are included. All formulae and quantification methods were reviewed for accuracy and appropriateness.

Bureau Veritas agrees that the proposed Methodology Element's approach to calculate leakage emissions is appropriate, adequate, and conservative.

3.8 Quantification of Net GHG Emissions Reductions and/or Removals

Emission reductions are calculated as the Baseline emissions minus the Project emissions minus calculated Leakage. Baseline and project emissions are aggregated across all vehicles carrying lightweight pallets in the given year.

Bureau Veritas agrees that this approach to calculate emission reductions is appropriate and adequate.

3.9 Monitoring

A monitoring plan is described that includes all data and parameters required to quantify emissions. This plan includes the criteria and procedures for obtaining, recording, compiling and analyzing data, parameters and other information important for quantifying and reporting GHG emissions relevant for the project and baseline scenario. It specifies that all equipment used to monitor data such as freight plus pallet weights shall be calibrated in accordance with current good practices and relevant industry standards. The proposed Methodology Element specifies that records shall be archived electronically and maintained for at least two years after the end of the last crediting period, consistent with VCS requirements.

Bureau Veritas agrees that the monitoring approach is appropriate and adequate to obtain the necessary data for emission reductions quantification.

3.10 Data and Parameters

The proposed Methodology Element describes all data and parameters required for emission reductions quantification and classifies them as either available at validation (not monitored) or monitored. The descriptions include source of data, measurement procedures, monitoring frequencies, default values where appropriate, and other comments necessary for project implementation or validation/verification. A description of QA/QC procedures includes the following and is considered appropriate:

- Data Gathering, Input and Handling Measures
- Data Documentation
- Calculations

Bureau Veritas agrees that the data and parameters included in the proposed methodology and the associated requirements for measurement and monitoring are reasonable and adequate to ensure accuracy and completeness in the calculation of baseline and project data.

3.11 Use of Tools/Modules

The proposed Methodology Element appropriately relies on the following CDM tools or elements in order to quantify emissions:

- “Combined tool to identify the baseline scenario and demonstrate additionality”, Version 02.2, and additional guidance in Section 6 -Procedure for Determining the Baseline Scenario, and
- Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion (section 9.2 Data and Parameters Monitored, including: “Source of data”, “Description of measurement methods and procedures to be applied”, “QA/QC procedures to be applied”).

3.12 Adherence to the Project Principles of the VCS Program

The proposed Methodology Element was developed in accordance with the requirements of VCS and adequately addresses the principles of relevance, completeness, consistency, accuracy, transparency, and conservativeness.

3.13 Relationship to Approved or Pending Methodologies

The proposed Methodology Element is based on the elements of several approved CDM methodologies. These include:

- AMS-III.AA. “Transportation Energy Efficiency Activities using Retrofit Technologies” (Section 4)
- AMS-III.S. “Introduction of Low Emission Vehicles/Technologies to Commercial Vehicle Fleets” (Sections 4 and 8)
- ACM0017 “Production of Biodiesel for Use as Fuel” (Sections 6, 8.3, and 9.2)
- AM0090 “Modal Shift in Transportation of Cargo from Road Transportation to Water or Rail Transportation” (Sections 6 and 8)

These Methodology Elements provided the basis for developing the proposed Methodology Element. None were considered adequate or acceptable in fully describing the Project or Baseline activities in the

proposed Methodology Element. Axios provided justification for why none of these methodologies were considered for revision.

3.14 Stakeholder Comments

The 30 day public stakeholder comment period was conducted from August 12 – September 13, 2011. No stakeholder comments were submitted for the proposed Methodology Element.

4 RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

1sr Round Clarification Request	Summary of Response	Assessment Conclusion
<p><i>Section 3: Definitions.</i> The definition of “captive fleet” is unclear. What is the intent of “clearly defined boundaries”? What is the intent of “typically”? Can the fleet be owned or managed by multiple parties?</p>	<p>The term “Captive fleet” is used extensively by CDM, including in CDM methodologies ACM0017 and AM0047-02; but is not defined in those methodologies.</p> <p>The intent of “clearly defined boundaries” is to clearly define which vehicles are included in the fleet, to enable monitoring.</p> <p>The intent of “typically...” is to make the definition clearer.</p> <p>Yes, multiple parties are possible as long as the monitoring requirements can be satisfied; “typical” does not mean exclusive</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p> <p>Terms defined in the ME are commonly used in approved MEs.</p>
<p><i>Section 3: Definitions.</i> Why does the definition of “conventional pallet” use a United States-centric statistic? Does the market for wood pallets in the United States represent global trends?</p>	<p>Yes, the market for wood pallets in the United States is representative of global trends.</p> <p>The methodology has been revised to include a global statistic.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>
<p><i>Section 4: Applicability Conditions.</i> What is the intent of “typical” ie “Typical project activities include.” Are there other eligible project activities?</p>	<p>To give greater clarity on typical projects.</p> <p>We do not anticipate any other eligible project activities.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>

<p><i>Section 4: Applicability Conditions.</i> If the project may take place in any geographic region, how does the methodology address projects that cross national borders?</p>	<p>Criteria for the selection and justification of data and parameters used that might vary by country (e.g., emission factors) include geographic specificity.</p> <p>The methodology has been revised to make this explicit in Section 4.</p>	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>
<p><i>Section 4: Applicability Conditions.</i> If a vehicle in the project activity operates on an alternate route – for example, due to road construction, weather events, or the addition of a customer – would the entire project become ineligible?</p>	<p>If this occurs, the assumption is that it would also occur for baseline; as the same reasons to select an alternate route would also apply to the baseline.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>
<p><i>Section 4: Applicability Conditions.</i> Does ISO 8611-2 provide a non-subjective definition of a pallet’s “technical performance”? Is ISO 8611-2 globally applicable?</p>	<p>Yes, ISO 8611-2 provides non-subjective performance requirements.</p> <p>All ISO Standards, including ISO 8611-2, can be used globally; typically they are adopted by the applicable national standards body.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>
<p><i>Section 4: Applicability Conditions.</i> What are the characteristics of applicable project activity vehicles? Is the methodology applicable to rail, water or air transport? Can the sizes and/or efficiencies of the vehicles change in the baseline and project scenarios?</p>	<p>Methodology is only applicable to truck fleets per Applicability Conditions: “This methodology applies to project activities that reduce GHG emissions from the transportation of freight on truck fleets...”</p> <p>It would be impossible to justify selecting a baseline that used different size and/or efficiencies of vehicles from the project.</p>	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>
<p><i>Section 4: Applicability Conditions.</i> How does the methodology address changes in freight transported? Can the fleet transport a different amount of freight in the project scenario than in the baseline scenario?</p>	<p>Loads of freight that are transported on pallets are limited by the volume of the truck and stacking limits, rather than the ultimate load capacity of the truck. Hence no additional freight weight will be able to be transported using light weight pallets.</p> <p>The methodology has been changed to make this explicit, by adding changes to truck freight capacity to</p>	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>

	the list of not applicable scenarios.	
<i>Section 5: Project Boundary.</i> Why does the methodology not include the loading and unloading of trucks as a relevant GHG emission source?	<p>The difference between project and baseline for this source would be insignificant.</p> <p>The methodology has been revised to make this explicit.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>
<i>Section 5: Project Boundary.</i> Why does the methodology not include the transportation of pallets (when returning pallets to the pallet provider)?	<p>All trips where the weight carried is constant are included in the project boundary. There is nothing in the project boundary that excludes return trips. Hence, return trips can be included if all requirements, including monitoring requirements, are met.</p> <p>The methodology has been revised to make this explicit.</p>	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>
<i>Section 6: Procedure for Determining Baseline Scenario.</i> Is the intent of the methodology to consider baseline scenarios for other modes of transporting freight (eg, rail)?	No. Modal shifts are explicitly ruled out in the applicability conditions.	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>
<i>Section 6: Procedure for Determining Baseline Scenario.</i> Why should costs associated with monitoring be included in the investment analysis if the analysis objective is to determine the baseline scenario without project registration?	The methodology has been revised to delete this guidance.	<p>Submitted 8/22/2012</p> <p>Response is acceptable.</p>
<i>Section 6: Procedure for Determining Baseline Scenario.</i> How should the baseline scenario be determined for project activities that introduce new fleets?	<p>Our understanding is that this comment was intended to demonstrate how “new fleets” could be misinterpreted to mean new truck fleets.</p> <p>Since “new fleets” has been revised to “new fleets of pallets”, this comment no longer applies.</p>	<p>Submitted 8/20/2012</p> <p>Response is acceptable.</p>
<i>Section 8: Quantification of GHG Emission Reductions and Removals.</i> Why is the replacement of an existing fleet of conventional pallets <i>partially</i> with light weight pallets an applicability condition if	<p>No partial substitution is allowed at the trip level in section 8 (clarification added to methodology).</p> <p>Partial substitution at the pallet fleet</p>	<p>8/22/2012</p> <p>Response is acceptable.</p>

<p>no partial substitution is allowed?</p>	<p>level is allowed in section 4.</p>	
<p><i>Section 8: Quantification of GHG Emission Reductions and Removals.</i></p> <p>Would trips with conventional baseline pallets be excluded from the baseline emission quantification?</p> <p>Additional clarification via email from VCS 13-August-2012:</p> <p>Comments on PEF Calculation:</p> <p>Regarding that issue that ‘no partial substitution’ is allowed, if this simply means that trips where some baseline pallets are still used cannot be included in the sum, then there is an inconsistency in the equation and the calculation will not be accurate. More specifically, the numerator (fuel consumption) will include all trips, but the denominator (weight x distance) will only include trips where there is a complete substitution. This would lead to an over-estimation of the PEF, which could potentially lead to an over-estimation of baseline emissions since PEF is used to determine baseline emissions and therefore is not conservative.</p>	<p>Methodology has been revised to ensure that only fuel consumption related to eligible trips is included in the calculation of project emissions.</p>	<p>8/22/2012</p> <p>Response is acceptable.</p>
<p><i>Section 8: Quantification of GHG Emission Reductions and Removals.</i></p> <p>Why does the methodology not calculate emissions based on the net caloric value of the fuel?</p>	<p>Since the net caloric value of the fuel is not monitored, we do not see any advantage is doing this.</p> <p>Emission factors per unit volume assume a default net caloric value per unit volume. This does not typically change over time. If it does change, the emission factor per unit volume from recognized sources that is monitored would also change.</p>	<p>8/20/2012</p> <p>Response is acceptable.</p>
<p><i>Section 8: Quantification of GHG Emission Reductions and Removals.</i></p> <p>Should the leakage emissions associated with manufacturing light weight pallets be calculated per pallet, or for all project</p>	<p>Methodology has been revised (equation 8) to show the calculation per pallet, and then multiplied by the number of pallets consumed per year</p>	<p>8/20/2012</p> <p>Response is acceptable.</p>

activity pallets?	by the project.	
<p><i>Section 9: Monitoring.</i> How should the chosen DEF(y) consider variations in fuel types? Would different types or sizes of vehicles apply unique DEF(y)? Would DEF(y) consider pallet weight in the emission factor?</p>	<p>Each fuel type has a unique DEF. For most anticipated projects, only one fuel type will apply. To keep the methodology as general as possible, the possibility of different fuel types has been included by using DEF (j,y). Criteria for selection of DEF include technology specificity, which covers fuel type.</p> <p>Different size and technologies of vehicles would use unique DEF if CH₄ or N₂O emissions were being quantified. Since only CO₂ is being quantified, different types of sizes of vehicles would use the same DEF, as long as they used the same fuel.</p> <p>DEF is in units of emissions per unit of weight distance; this applies to all weight transported, including pallets</p>	<p>8/20/2012</p> <p>Response is acceptable.</p>
<p><i>Section 9: Monitoring.</i> What are the methods of tracking N(i,k,y)? If all project activity pallets must have an EDI/ASN information system, why is this not included as an applicability condition?</p>	<p>EDI/ASN information system is not a characteristic of the pallet. Unique ID for each pallet is tracked to allow number of pallets to be calculated.</p> <p>The methodology has been revised to include an applicability condition that all pallets must have a unique ID to facilitate monitoring.</p>	<p>8/20/2012</p> <p>Response is acceptable.</p>

2 nd Round Clarification Requests	Summary of Response	Assessment Conclusion
<p><i>Section 4: Applicability Conditions</i></p> <p>If partial substitutions are not allowed on the trip level (as per Section 8.1), why is the partial replacement of pallets a permissible project activity?</p>	<p>Partial replacement of a fleet of pallets (e.g., replacing x% of the pallets used by a project proponent) is a separate issue than not allowing partial substitutions at the trip level.</p> <p>Only the portion of the pallet fleet that is replaced would be included the project.</p> <p>The reference to partial substitution has been removed as part of response to comment #3</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 4: Applicability Conditions</i></p> <p>Why are the parameters of emission factors included in the applicability conditions? Geographic specificity is included as a QA/QC procedure in Section 9, so why would the applicability conditions need to address data/parameters that vary by country?</p>	<p>This was included in response to a previous VCS comment that questioned how the methodology takes into account changes due to geography.</p> <p>It has been removed from the Applicability Conditions section.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 4: Applicability Conditions</i></p> <p>The applicability section is not intended to address “typical” project activities but instead must state the specific conditions that projects must follow. Remove “Typical project activities include:” and replace it with more specific language.</p>	<p>“Typical project ...” removed.</p> <p>Replaced with “Emission reductions claimed under this methodology are only related to increased fuel efficiency due to the use of light weight pallets.”</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 4: Applicability Conditions</i></p> <p>Remove the geographic condition that vehicles in the project activity shall operate on the same routes as those in the baseline scenario. This would exclude any vehicles that operate on routes not specifically mentioned as part of the baseline scenario.</p>	<p>Removed.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 4: Applicability Conditions</i></p> <p>Remove any subsections where no restrictions apply.</p>	<p>Removed the following subsections:</p> <p>Geographic Location</p> <p>Pallet Production Technology and</p>	<p>9/23/12</p> <p>Response is</p>

	<p>Composition</p> <p>Pallet Weight Reduction</p>	<p>acceptable</p>
<p><i>Section 4: Applicability Conditions</i></p> <p>Modify the applicability conditions (particularly related to fleet, truck and fuel characteristics, as well as the list of non-applicable scenarios) to state that emission reductions claimed under this methodology are only related to increased fuel efficiency due to the implementation of light weight pallets, or similar phrasing as appropriate (see VM0013 for guidance).</p>	<p>Added “Emission reductions claimed under this methodology are only related to increased fuel efficiency due to the use of light weight pallets” to first paragraph of Applicability Conditions.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 5: Project Boundary</i></p> <p>What gases will be included due to emissions from return trips? What is the justification/explanation for these emissions? Why is this source not included in the source table.</p>	<p>The source table includes “Vehicles consuming fossil fuels”.</p> <p>This source is the same for outgoing and return trips.</p> <p>Clarification added to methodology</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 8.2: Project Emissions</i></p> <p>Why are emissions from return trips not quantified as project emissions?</p>	<p>They are. See response to comment #8.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 8.3: Leakage</i></p> <p>Are emissions from producing light weight pallets’ raw materials and from manufacturing light weight pallets significantly greater than the average emissions from producing the raw materials for conventional pallets and manufacturing conventional pallets? If not, why would projects need to include these emission sources as leakage? Alternatively, would it be appropriate that projects demonstrate whether light-weight pallets have lower lifecycle emissions than pallets used by conventional trucking fleets (see VM0019 for guidance)? If so, such a requirement would be included within the applicability conditions.</p>	<p>Yes, emissions from producing raw materials and manufacturing light weight pallets are significantly greater than they are for conventional wood pallets. However, this emission increase is more than offset by emission reductions during use.</p> <p>This was included to be conservative. In addition, it was not considered realistic for project proponents to quantify emissions from manufacturing of conventional pallets. By including leakage, projects will demonstrate that light weight pallets have lower lifecycle emissions than conventional pallets.</p>	<p>9/23/12</p> <p>Response is acceptable</p>

<p><i>Section 9: Monitoring</i></p> <p>What data unit/parameter would represent a “return trip”? How would this return trip be measured?</p>	<p>See response to comment #8. There is no difference between monitoring outgoing and return trips, except that the freight weight parameter would be zero.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p><i>Section 9: Monitoring</i></p> <p>Acronyms should be defined or spelled out. Replace LCI with “Life Cycle Inventory”</p>	<p>LCI is spelled out.</p>	<p>9/23/12</p> <p>Response is acceptable</p>
<p>Corrective Action Request</p>	<p>Summary of Response</p>	<p>Assessment Conclusion</p>
<p>The metric system of measurement (SI) must be used throughout the methodology element.</p>	<p>Methodology revised to use SI units.</p>	<p>8/20/12</p> <p>Response is acceptable.</p>

5. ASSESSMENT CONCLUSION

The second methodology element assessment under the VCS double-approval process was conducted by Bureau Veritas in August 2012. Assessment criteria were the VCS Standard: VCS Version 3; the VCS Methodology Approval Process, Version 3.3; and the VCS Program Guide, Version 3.2.

Based on our assessment and the satisfactory responses to clarification and corrective action requests, Bureau Veritas concludes that the proposed Methodology Element, "Transport Energy Efficiency from Lightweight Pallets," version 1.9, dated September 18, 2012, complies with VCS requirements for the development of Methodology Elements under Sectoral Scopes 3 – Energy Demand, and 7 – Transport.

Our conclusion is based on the evidence and documentation supplied by Axios Mobile Assets to facilitate the assessment. Bureau Veritas does not guarantee the accuracy and completeness of this information.

6 REPORT RECONCILIATION

No sections of this report required reconciliation with first assessment report. However, there are changes in the proposed Methodology Element that necessitate a review by the first methodology assessment team. The current version is 1.9, dated September 18, 2012.

7 EVIDENCE OF FULFILMENT OF VVB ELIGIBILITY REQUIREMENTS

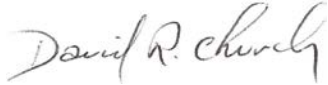
Bureau Veritas holds the following approvals or accreditations to conduct 3rd party GHG validation/verification activities:

- > Accredited Verification Body with the California Air Resources Board (CARB),
- > American National Standards Institute (ANSI) - Accredited for GHG emissions validation/verification under ISO 14064-3 and ISO 14065, #0747,
- > Approved Verification Body for The Climate Registry (TCR),
- > Validation/Verification of GHG project activities under the United Nations Framework Convention on Climate Change Clean Development Mechanism (UNFCCC CDM),
- > Determination and Verification of GHG project activities under the United Nations Framework Convention on Climate Change Joint Implementation (UNFCCC JI) procedures ,
- > Verification under the European Union Emissions Trading Scheme (EU ETS) and the EU Aviation program,
- > Recognized verification partner with the Carbon Disclosure Project.

We have conducted numerous successful GHG validation projects worldwide for UN CDM and VCS. In addition we have participated as the first or second methodology element assessor on numerous VCS projects.

8 SIGNATURES

Signed for and on behalf of Bureau Veritas
October 9, 2012



David R. Church
Lead Verifier/Director of Climate Change Services
Bureau Veritas North America



Flavio Gomes
Global GHG Program Manager
Bureau Veritas Certification Holding SAS