



# Verified Carbon Standard

## GROUPED COMMERCIAL ELECTRIC VEHICLES PROJECT OF INTELLIGENT LINK



Document Prepared by CTI Certification Co., Ltd

<b>Project Title</b>	<i>Grouped Commercial Electric Vehicles Project of Intelligent Link</i>
<b>Report Title</b>	<i>Joint Validation and 1<sup>st</sup> periodical VCS Verification report for Grouped Commercial Electric Vehicles Project of Intelligent Link</i>
<b>Version</b>	2.0
<b>Report ID</b>	CTISC-NC-CBN-202303010
<b>Verification Period</b>	08-October-2021 to 30-April-2023
<b>Client</b>	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.
<b>Pages</b>	101
<b>Date of Issue</b>	15-December-2023
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## Summary:

- *A description of the project*

The grouped project activity is aim to operate commercial electric vehicles around China. PP has established a smartphone application named Green Intelligent Link for vehicle rental, charging and vehicle maintenance so that to supply environmental transport capacity and smart vehicle networking. The initial project activity instances of the grouped project compromise truck project activity instance and van project activity instance, include a total of 16,246 commercial electric vehicles. As electric vehicles run on electricity which replace the traditional fossil fuel (diesel or gasoline) vehicles, the vehicle emits no exhaust from a tailpipe, which leads to GHG emission reductions per distance driven. The project is expected to achieve 66,067 tCO<sub>2</sub>e of emission reduction annually. The project started operation on 08-October-2021, it was allocated with VCS ID 4335.

- *A description of the validation and verification*

The approved CDM methodologies AMS-III.C. "Emission reductions by electric and hybrid vehicles" (version 16.0) is applied to quantify the GHG removals achieved in this project. The calculation of the GHG emission reductions is carried out in a transparent and conservative manner. This project is being developed in conjunction with the validation and 1<sup>st</sup> periodic of verification.

- *The purpose and scope of validation and verification*

The validation objective is an independent assessment by a Third Party of a proposed project activity against all defined criteria set for the registration under the VCS. In order to confirm that the project activity, as documented, is sound reasonable and meets the identified criteria, the validation involves the assessment of: project conformance to VCS standards/programs, project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology; and likelihood that methods and procedure set out in the project description will generate verifiable GHG data and information when implemented. Validation is a requirement and is seen as necessary to provide assurance to stakeholders of the quality of project and its intended generation of VCU. Validation is part of the VCS project cycle and will finally result in a conclusion by the executing VVB whether a project activity is valid to be submitted for registration to VCS registry.

The objective of the verification is to have an independent review ex post determination by a VVB (Validation and Verification Body) of the monitored GHG emission reductions that have occurred as a result of the implementation of the project activity during a defined monitoring period.

- *The method and criteria used for validation and verification*

Validation and Verification is conducted using CTI Certification Co., Ltd (CTI) procedures in line with the requirements specified in the latest version of the VCS Validation and Verification Manual and applying auditing techniques. The validation/verification team assessed the project activity's compliance against the VCS Standard Version 4.4, the selected CDM methodologies and the joint project description and monitoring report. The project is eligible under Project Scope 7. The validation/verification criteria followed the guidance documents provided by VCS included the following:

VCS Standard Version 4.4, VCS Program Guide Version 4.3 and the applied CDM methodologies AMS-III.C. "Emission reductions by electric and hybrid vehicles" (version 16.0).

- *The number of findings raised during validation and verification*

In the course of the validation and verification, 23 Corrective Action Requests (CARs), 13 Clarification Requests (CLs) were raised and successfully closed. The assessment is included in the report.

- *Any uncertainties associated with the validation and verification*

There are no restrictions of uncertainty for both validation and verification.

- *Summary of the validation and verification conclusions*

Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd. has commissioned the CTI Certification Co., Ltd to carry out the Verified Carbon Standard (VCS) validation joint with 1<sup>st</sup> periodical verification of the project, “Grouped Commercial Electric Vehicles Project of Intelligent Link” (VCS ID 4335) with regard to the relevant requirements of VCS standard Version 4.4. CTI confirms all validation and verification activities including objectives, scope and criteria, level of assurance, project description, monitoring and monitoring report adhere to VCS Standard Version 4.4 and all associated updated as documented in this report, are complete.

CTI concludes that the project activity “Grouped Commercial Electric Vehicles Project of Intelligent Link” in China, as described in the final version of Joint-Project-Description-Monitoring-Report, meets all relevant requirements for VCS validation and verification activity and correctly applied the methodologies AMS-III.C. Version 16.0. Hence CTI is able to provide positive validation opinion as per the requirement of VCS and further certify that the GHG emission reduction from the project during the monitoring period from 08-October-2021 to 30-April-2023 amount to 25,105 tCO<sub>2e</sub> VCU.

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# 1 INTRODUCTION

## 1.1 Objective

Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd. has commissioned the CTI Certification Co., Ltd to carry out the Verified Carbon Standard (VCS) validation joint with 1<sup>st</sup> periodical verification of the project for the monitoring period from 08-October-2021 to 30-April-2023 (both days included).

The objective of validation is an independent assessment by a Third Party of a proposed project activity against all defined criteria set for the registration under the VCS. In order to confirm that the project activity, as documented, is sound reasonable and meets the identified criteria, the validation involves the assessment of: project conformance to VCS standards/programs, project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology; and likelihood that methods a procedures set out in the project description will generate verifiable GHG data and information when implemented. Validation is a requirement and is seen as necessary to provide assurance to stakeholders of the quality of project and its intended generation of VCUs. Validation is part of the VCS project cycle and will finally result in a conclusion by the executing VVB whether a project activity is valid to be submitted for registration to VCS registry.

The objective of verification is to have an independent review ex-post determination by a VVB of the monitored GHG emission reductions that have occurred as a result of the project activity implemented during a defined monitoring period. The evaluation is done against the requirements of the VCS Standard Version 4.4 based on the monitoring report. In order to confirm that the GHG emission reductions sound reasonable and meet the identified criteria, the verification involves the assessment of monitoring plan conformance to VCS rules and applied methodology. Verification is a requirement and is seen as necessary to provide assurance on the generation of VCUs.

## 1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the project design document (PD) to validate that (a) the project design is actual, (b) the baseline scenario is correctly defined as per the applied methodology and relate tools, (c) the project is additional, (d) the monitoring plan can be implemented and is transparent and adequate and (e) all data and information used for ex-ante calculation of emission reductions is of projected and/or hypothetical nature. The Joint-PD-MR is reviewed against the criteria stated in VCS standard Version 4.4/33/ and the approved baseline and monitoring methodology AMS-III.C. version 16.0/21/. The validation was based on the requirements VCS Validation and Verification Manual and VCS Standard Version 4.4 applying auditing techniques. The validation is not meant to provide any consulting towards the project participants. However, stated

requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

The scope of the verification is to verify that: (a) the actual monitoring system and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan; (b) the GHG emission reductions data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reductions data are free from material misstatement; (c) the reported GHG emissions data is sufficiently supported by evidence. Verification shall ensure that the reported GHG emission reductions are complete and accurate in accordance with the applicable VCS criteria in order to be certified. Verification is conducted using CTI procedures in line with the requirements specified in the VCS Program and ISO14064-3 requirements and applying auditing techniques. The verification team assessed and determined that the implementation and operation of the project activity, and steps to report GHG emission reductions comply with the VCS rules. The verification involved a document review of relevant documentation and interview with the project participants. Verification is not meant to provide any consultancy towards the project participants; however, stated request for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

### 1.3 Reasonableness of Assumptions and Level of Assurance

Based on the validated assumptions, limitations, and methods used during the validation (see section 3.4.6 for ex ante ER calculation result), the project is expected to generate average GHG emission removal of 66,067 tCO<sub>2</sub>e per year, and it is confirmed that outcome of future activities will be achieved as the assumptions and limitations are reasonable.

All GHG sinks, sources and GHG emissions equal to or greater than 5% of the total GHG assertions are considered. The project is expected to generate average of 66,067 VCU per year, and therefore can be considered as a project per the VCS rules, in regards to its scale, subject to a 5% materiality threshold.

The assessment was conducted to provide a reasonable level of assurance of compliance against the defined audit criteria and materiality threshold within the audit scope. Based on the audit findings the validation and verification statement reasonably assure that the GHG assertion is materially correct and is a fair representation of the GHG data and information.

### 1.4 Summary Description of the Project

The project is implemented by Zhejiang Green Intelligent Link Co., Ltd. and it aims to operate commercial electric vehicles around China. PP has established a smartphone application named Green Intelligent Link for vehicle rental, charging and vehicle maintenance so that to supply environmental transport capacity and smart vehicle networking. The initial project activity instances of the grouped project comprise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan), include a total of 16,246 commercial electric vehicles.

The smart vehicle networking is achieved by Telematics-BOX (T-BOX) equipped in project vehicles, Intelligent Link Control Platform and smartphone application. Traveling mileage, operation status, location, state of charge and other information of project vehicles can be transferred from T-BOX to

Intelligent Link Control Platform, where information are managed, and smartphone application, and manipulation codes can be transferred form smartphone application to T-BOX to control project vehicle. So the Intelligent Link Control Platform has all of the information of each rented vehicle, which the database can be used as the basis for GHG emission reductions calculation.

As electric vehicles run on electricity which replace the traditional fossil fuel (diesel or gasoline) vehicles, the vehicle emits no exhaust from a tailpipe, which leads to GHG emission reductions per distance driven. The project is expected to achieve 66,067 tCO<sub>2e</sub> of emission reduction annually.

The baseline scenario is operation of the comparable fossil fuel vehicles that would have been used to provide the same transportation service.

In the monitoring period from 08-October-2021 to 30-April-2023, the total verified carbon units (VCUs) achieved in the monitoring period are 25,105 tCO<sub>2e</sub>, which has been verified by on-site inspection, and checking the related documentations, interview with the project implementer.

The project activity generates GHG emission reductions by switch from fossil fuels to electricity. Thus the project generates GHG emission reductions and produces financial, social and environmental benefits. The project has resulted in the local sustainable development as described in Section 1.17 of the Joint Joint-PD-MR/1/.

## 2 VALIDATION AND VERIFICATION PROCESS

### 2.1 Method and Criteria

A project specific validation and verification plan was developed to guide the validation and verification auditing process to ensure efficiency and effectiveness.

The purpose of the validation and verification is to present a risk assessment for determining the nature and extent of validation and verification procedures necessary to ensure the risk of auditing error is reduced to a reasonable level. According to the ISO14064-3, the criteria are the policy, procedure or requirement used as reference against which evidence is compared. Therefore, validation of the project description and verification of the monitoring plan and the reported project results were measured for compliance against the following criteria:

- VCS Standard, v4.4/33/
- VCS Program Guide, v4.3/32/
- VCS Program Definitions, v4.3/31/
- VCS-Joint-Project-Description-Monitoring-Report-Template-v4.2/26/

The validation and verification process derived from all items in the validation and verification criteria stated above. Field inspection and techniques based on the project parameters, scope and best professional judgement of the validation and verification team in order to meet a reasonable level of assurance. The validation and verification consisted of the following three phase:

- Document review
- On-site assessment
- The resolution of outstanding issues and the issuance of the final joint validation and verification report and certification.

The validation and verification process derived from all items in the validation and verification criteria stated above. Field inspection and techniques based on the project parameters, scope and best professional judgement of the validation and verification team in order to meet a reasonable level of assurance.

There is no sampling approach utilized by PP and VVB during validation and verification.

### 2.2 Document Review

The VCS Joint-PD-MR/1/ of the project and supporting background documents related to the project implementation were reviewed. Documents review was conducted to ensure consistency with and identify any deviation from VCS program requirements. Desk review included an examination of the project design details, baseline scenario, additionality, ex ante and monitoring data and parameters, and quantification of GHG emission reductions.

Furthermore, the validation and verification team used additional documentation by third parties like host party legislation, technical reports referring to the project design details, baseline scenario, additionality, monitoring or to the basic conditions and technical data.

The references used in the course of this validation and verification are summarized in Appendix 3.

The validation and verification were performed basing on the documents check and site inspection/measurements, refer to the section 3 and 4 of this report for the validation and verification process detail and corresponding documents review.

## 2.3 Interviews

The objective of the interview process was to solicit important information from personnel related to project and relevant to the validation and verification process. Onsite interviews and information discussions were conducted with representatives from project implementer and commercial vehicle manufacturer, drivers, regional operator, charging pile and Project VCS development consultant. The interviews were performed by the validation and verification team on-site and the following is a list of the main interviewees and subject.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Chen	Hao	Zhejiang Green Intelligent Link Co., Ltd./ Director of strategic operations	19-June-2023 ~ 20-June-2023	<ul style="list-style-type: none"> <li>- General aspects of the project</li> <li>- Grouped Plan</li> <li>- Initial instances</li> <li>- Electric vehicle categories</li> <li>- Smart vehicle networking implementation</li> <li>- Database of platform</li> <li>- Baseline scenario</li> <li>- Additionality</li> <li>- Data monitoring and recording</li> <li>- Electricity charge</li> <li>- Vehicle management system</li> <li>- Quality management system</li> <li>- Involved personnel and responsibilities</li> <li>- Training and practice of the operational personnel</li> <li>- Implementation of the monitoring plan</li> <li>- Monitoring data management</li> <li>- Data uncertainty and residual risks</li> <li>- Procedural aspects of the verification</li> <li>- Environmental aspects</li> <li>- Local Stakeholder consultation process</li> <li>- Project ownership</li> </ul>	Yu Jia  Wang Jun
2.	Yu	Liangfang	Zhejiang Green Intelligent Link Co., Ltd./ Minister of Business development			
3.	Pan	Yongjian	Zhejiang Geely new energy	19-June-2023	<ul style="list-style-type: none"> <li>- Baseline Scenario</li> <li>- Project ownership</li> </ul>	

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
			Commercial Vehicle Group Co., Ltd./Staff		<ul style="list-style-type: none"> <li>- Purchase of commercial electric vehicles</li> <li>- Technical parameters of the commercial electric vehicles</li> </ul>	
4.	Zhou	Zhiguo	Regional operator /Manager	19-June-2023	<ul style="list-style-type: none"> <li>- Baseline scenario</li> <li>- Use method of the commercial electric vehicles</li> <li>- Using of the platform</li> <li>- Training</li> <li>- Transportation route and distance</li> <li>- Electricity charge capacity</li> <li>- Electricity charge record</li> <li>- Project ownership</li> <li>- Local stakeholder communication</li> <li>- Stakeholder comments</li> </ul>	
5.	Shan	Zhe	Driver			
6.	Shen	Jianzhong	Driver			
7	Pan	Jifei	Driver			
8.	Zhang	Naipeng	Driver			
9.	Zu	Jian	Driver			
10.	Yang	Shihao	Representative of charging pile company			19-June-2023
11.	Yang	Pengcheng				
12.	Liu	Lili	Search Co2 (Shanghai) Environmental Science &	19-June-2023 ~	<ul style="list-style-type: none"> <li>- Monitoring period</li> <li>- Project activity starting date</li> <li>- Assumptions</li> </ul>	

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
13.	Zhang	Wan	Technology Co. Ltd./Project Manager	20-June-2023	- Monitoring plan and implementation - Monitoring measurements - Editorial issues of the VCS Joint-PD-MR	

## 2.4 Site Visits

The validation and verification site inspection was conducted on 19~20-June-2023. A ground inspection of the project was conducted during the site visit and the validation and verification team interviewed project implementer representative and operation staffs.

During the site inspection, the project was inspected and documents evidence were checked, details as following table,

Duration of on-site inspection: 19-June-2023~20-June-2023				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting Interview with PP Representative, and Consultant	Office in Zhejiang Green Intelligent Link Co., Ltd. in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China	19-June-2023	Yu Jia Wang Jun
2	On-site inspection Interview with project proponents Investigate the operation situation of electric commercial vehicle	Project areas in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China	19-June-2023 ~ 20-June-2023	
3	Documents check	Office in Zhejiang Green Intelligent Link Co., Ltd. in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China	20-June-2023	
4	Finding Summary	Office in Zhejiang Green Intelligent Link Co., Ltd. in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China	20-June-2023	
5	Close Meeting	Office in Zhejiang Green Intelligent Link Co., Ltd. in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China	20-June-2023	

## 2.5 Resolution of Findings

Material discrepancies identified in the course of the validation and verification are addressed either as CARs, CLs or FARs.

A Corrective Action Request (CAR) is established where:

The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

The VCS Standard Version 4.4 requirements have not been met;

There is a risk that the emission reductions cannot be monitored or calculated.

A Clarification Request (CL) will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A Forward Action Request (FAR) will be issued when certain issues related to project implementation should be reviewed during the next verification.

A detailed list of the CARs CLs and FAR raised and discussed in the course of this validation and verification is included in Appendix 4 of this report.

In the course of the validation 23 Corrective Action Requests (CARs), 13 Clarification Requests (CLs) were raised and successfully closed. The assessment is included in the report.

### 2.5.1 Forward Action Requests

This is the joint validation and 1<sup>st</sup> VCS verification, thus there is no FAR raised previously.

## 3 VALIDATION FINDINGS

### 3.1 Project Details

- Project type, technologies and measures implemented, and eligibility of the project

Type:

Through the onsite visit, interviewing the project owner and reviewing the project design/4/, it was confirmed that the grouped project aims to operate commercial electric vehicles around China. PP has established a smartphone application named Green Intelligent Link for vehicle rental, charging and vehicle maintenance so that to supply environmental transport capacity and smart vehicle networking. The initial project activity instances of the grouped project comprise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan), include a total of 16,246 commercial electric vehicles. Therefore, it was confirmed that the sectoral scope is as below,

Scope 7: Transport

which have been confirmed as per the VCS sectoral scope and UNFCCC Standard “Applicability of sectoral scopes version 01.0”/28/ due to the project applied CDM approved methodology. It was confirmed that the project is a grouped project.

Technologies and measures implemented:

The information and descriptions reported in section 1.1 of the Joint-PD-MR/1/ have been checked.

Grouped Commercial Electric Vehicles Project of Intelligent Link (hereinafter referred to as the Project) aims to operate commercial electric vehicles around China. PP has established an Intelligent Link Control Platform and smartphone application named Green Intelligent Link for vehicle rental, charging and vehicle maintenance so that to supply environmental transport capacity and smart vehicle networking and to provide rental services by commercial electric vehicles in the whole China /4/.

The grouped project has been designed by PP as the whole project vehicles are estimated to be added up to 80,000 in 2024 and 150,000 in 2025 all around the project area /4/. And it is estimated that in the crediting period from 2026 to 2031, no more project vehicles will be added into the project.

The initial project activity instances of the grouped project comprise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan), include a total of 16,246 commercial electric vehicles which is confirmed by on-site checking the data from the Intelligent Link Control Platform/8/. Project vehicles are owned by project proponent confirmed by checking the vehicles purchase contract/10/ while rented by individuals or companies to carry goods for logistical distribution in urban confirmed by checking the renting contract with individuals and companies/11/.

The smart vehicle networking is achieved by Telematics-BOX (T-BOX) equipped in project vehicles, Intelligent Link Control Platform and smartphone application. Traveling mileage, operation status, location, state of charge and other information of project vehicles can be transferred from T-BOX to Intelligent Link

Control Platform, where information are managed, and smartphone application, and manipulation codes can be transferred from smartphone application to T-BOX to control project vehicle which is confirmed by on-site checking the data from the Intelligent Link Control Platform/8/.

So the Intelligent Link Control Platform has all of the information of each rented vehicle, which the database can be used as the basis for GHG emission reductions calculation.

Via checking the Joint-PD-MR/1/, PP didn't operate fossil fuel vehicles before, so it is confirmed that the project did not involve the fuel switch. The baseline scenario is operation of the comparable fossil fuel vehicles that would have been used to provide the same transportation service which has been assessed in the section 3.4.4 of this report.

The project activity generates GHG emission reductions through replace the traditional fossil fuel (diesel or gasoline) vehicles, the vehicle emits no exhaust from a tailpipe, which leads to GHG emission reductions per distance driven, thus the project can produce financial, social and environmental benefits.

The expected total emission reduction of the initial instances of the grouped project in the fixed 10-year crediting period (from 08-October-2021 to 07-October-2031) is 660,669 tCO<sub>2e</sub>, and the annual emission reduction is estimated to be 66,067 tCO<sub>2e</sub>.

In conclusion, it is verified that the summary description of the project in section 1.1 is in line with the Joint-PD-MR template requirements and all the information has been provided and verified as correct.

#### Eligibility of the project:

The PP has described and justified how the project is eligible under the scope of the VCS Program in Joint-PD-MR as per the section 2.1.1 of VCS standard Version 4.4. The assessment is provided as below,

1. The project activity generates GHG emission reductions including Carbon Dioxide (CO<sub>2</sub>) which belong to the seven Kyoto Protocol greenhouse gases.
2. "The scope of the VCS Program excludes projects that can reasonably be assumed to have generated GHG emissions primarily for the purpose of their subsequent reduction, removal or destruction." Via checking the Joint-PD-MR of the project/1/, it is verified that the project additionality is verified as actual, thus there is no assumption of having generated GHG emissions primarily for the purpose of their subsequent reduction, removal or destruction for this project.
3. The VCS Program also excludes the project activities under the circumstances indicated in Table 1 of section 2.1.1 of VCS standard Version 4.4/33/, via checking all the excluded project activities in the table, it is verified that this project type is not excluded by the scope of VCS program.

PP has also described and justified how the project is eligible under the scope of the VCS Program in Joint-PD-MR as per the section 3.1 of VCS Standard Version 4.4/33/. The assessment is provided as below,

1. Via checking the Joint-PD-MR and on-site inspection of the project, CTI confirmed that the project meets all applicable rules and requirements as set out under the VCS Program which has been demonstrated in the whole report, thus the project activities adhere to section 3.1.1 of the VCS Standard.

2. The project applies the CDM approved methodology AMS-III.C. version 16.0/21/ which is an eligible VCS methodology along with tool or modules, hence the project activities adhere to section 3.1.2 of the VCS Standard.
3. The project applies the CDM approved methodology AMS-III.C. version 16.0/21/ which are verified as the latest version available by checking the UNFCCC website, hence the project activities adhere to section 3.1.3 of the VCS Standard.
4. The project complies with all relevant local, regional and national laws, statutes and regulatory frameworks in China which has been assessed in detail as below, hence the project activities adhere to section 3.1.4 of the VCS Standard.
5. Section 3.1.5 of the VCS Standard is not applicable as no model needs to be chosen by the project proponent as per the applied methodology AMS-III.C. version 16.0/21/.
6. The project proponent applies the CDM approved methodology AMS-III.C. version 16.0/21/ for baseline scenario analysis and additionality demonstration which has been assessed in section 3.4.4 and 3.4.5 of this report, the project use IPCC's default factor to ascertain GHG emission data, hence section 3.1.6 of the VCS Standard is not applicable.
7. Section 3.1.7 of the VCS Standard is not applicable as the project is developed under VCS program by using CDM methodology AMS-III.C.: Emission reductions by electric and hybrid vehicles version 16.0 which is allowed by VCS program.
8. There is capacity limit from the Small-scale methodology AMS-III.C. version 16.0/21/ which has been applied by the project. The grouped project shall meet the limits set out in the methodology, the capacity limit refers to emission reductions being less than or equal to 60 ktCO<sub>2</sub> equivalent annually. According to VCS Standard, version 4.4, section 3.6.9, no project activity instance of grouped project shall exceed such limit. Hence section 3.1.8 of the VCS Standard is not applicable.
9. Section 3.1.9 of the VCS Standard is applicable as PP will apply new VCS program rules in the project according to the effective dates set out in appendix 3 document history of the new VCS standard and other VCS program rules.

In conclusion, the project is eligible to the scope of the VCS Program.

- Project design, including eligibility criteria for grouped projects

The project has been designed as a grouped project and is structured to allow the expansion of multiple project activities after project validation.

Via checking the project program/4/, it is confirmed that the PP designed this project as a grouped project with the expansion of the project activity instances by renting more commercial electric vehicles for logistical distribution in urban in the geographic area of the grouped project lies in the whole China except Hong Kong, Macao and Taiwan.

Via on-site checking the data from the Intelligent Link Control Platform/8/, it is confirmed that the initial project activity instances are operated in the project geographic area except Qinghai province, Tibet Autonomous Region and Xinjiang Uygur Autonomous Region.

And the future project activity instances will be developed in the whole project geographic area.

### Eligibility criteria of the grouped project

Via checking the project program/4/, it is confirmed that there is one type of the project activity in one geographic area, so there is one kind of baseline scenario and one demonstration of additionality.

As per the section 3.6.16 of the VCS Standard 4.4, a set of eligibility criteria shall ensure that new project activity instances:

- 1) Meet the applicability conditions set out in the methodology applied to the project.
- 2) Use the technologies or measures specified in the project description.
- 3) Apply the technologies or measures in the same manner as specified in the project description.
- 4) Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area.
- 5) Have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area. For example, the new project activity instances have financial, technical and/or other parameters (such as the size/scale of the instances) consistent with the initial instances, or face the same investment, technological and/or other barriers as the initial instances.

So based on above request, PP has identified one set of eligibility criteria for the inclusion of new project activity instances which has been assessed as below,

- Meet the applicability conditions set out in AMS-III.C. version 16.0 applied to the project.
- Use the technologies or measures specified in the project description, specifically, the smart vehicle networking system consist of Telematics-BOX (T-BOX) equipped in project commercial electrical vehicles, Intelligent Link Control Platform and smartphone application.
- Apply the technologies or measures in the same manner specified in the project description, specifically, traveling mileage, operation status, location, state of charge and other information of project commercial electrical vehicles are transferred from T-BOX to Intelligent Link Control Platform and managed.
- Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area. Specifically, before new project activity instances introduced, vehicles used for logistics transportation are still commonly fossil fuel vehicles.
- The new project activity instances shall face the same financial barrier as the initial instances demonstrated in section 3.5 of the Joint-PD-MR.

Furthermore, as per the section 3.6.17 of the VCS Standard 4.4, Grouped projects provide for the inclusion of new project activity instances subsequent to the initial validation of the project. New project activity instances shall,

- 1) Occur within one of the designated geographic areas specified in the project description. In this grouped project, new project activity instance shall occur within China except Hong Kong, Macao and Taiwan, which is specified in section 1.12.
- 2) Conform with at least one complete set of eligibility criteria for the inclusion of new project activity instances. Partial conformance with multiple sets of eligibility criteria is insufficient. In this grouped project, new project activity instances shall conform with one set of eligibility criteria in section 1.4.

3) Be included in the monitoring report with sufficient technical, financial, geographic, and other relevant information to demonstrate conformance with the applicable set of eligibility criteria and enable evidence gathering by the validation/verification body. In this grouped project, new project activity instances shall be included in the monitoring report with annual operation vehicles and distances of project vehicles monitored by the Intelligent Link Control Platform.

4) Be included in an updated project description, with updated project location information (as set out in Section 3.11), which shall be validated at the time of verification against the applicable set of eligibility criteria. In this grouped project, once the new project activity instances be included, the project description shall be updated, including project location information, and shall be validated at the time of verification against the applicable set of eligibility criteria.

5) Have evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity instance (i.e., the date upon which the project activity instance began reducing or removing GHG emissions). In this grouped project, the project proponent shall provide project vehicles inventory to claim project ownership from the respective start date of each project activity instance.

6) Have a start date that is the same as or later than the grouped project start date. In this grouped project, project vehicles in new project activity instances are operated the same as or later than the grouped project start date, so the start date of new project activity instances are the same as or later than the grouped project start date.

7) Be eligible for crediting from the start date of the project activity instance through to the end of the project crediting period (only). In this grouped project, new project activity instances are eligible for crediting from the start date of the project activity instance through to the end of the project crediting period, that is 07-October-2031.

8) Only eligible for crediting from the start of the verification period in which they were added to the grouped project. In this grouped project, new project activity instances shall conform the complete set of eligibility criteria in section 1.4 and is eligible for crediting from the start of the verification period in which they were added to the grouped project.

9) Not be or have been enrolled in another VCS project. In this grouped project, new project activity instances shall not be or have been enrolled in another VCS project.

10) Adhere to the clustering and capacity limit requirements for multiple project activity instances set out in VCS Standard version 4.4 section 3.6.8 – 3.6.9. In this grouped project, the annual emission reductions of new project activity instances shall less than or equal to 60 ktCO<sub>2e</sub>.

Hence, in conclusion, the set of eligibility criteria ensure the new project activity instances and eligibility of inclusion of New Project Activity Instances (process for expansion of grouped projects) have been established by PP and the eligibility criteria are verified meet the requirements of G1.14 of CCB standard and all relevant requirements of section 3.6.16 and 3.6.17 of the VCS Standard 4.4.

- Project proponent and other entities involved in the project

The project proponent (Zhejiang Green Intelligent Link Co., Ltd.) and the contact information reported in section 1.5 of the VCS Joint-PD-MR have been confirmed to be correct through checking the business

license of the company/7/, the Road transport permit/6/ and interviewing with the PP representative through the on-site visit.

The other entities involved in the Project (Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.) and the contact information reported in section 1.6 of the VCS Joint-PD-MR have been confirmed to be correct through checking the business license of the Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd./7/ and interviewing the representative of this company during the on-site visit

- Ownership

The section 1.7 of the Joint-PD-MR has been checked, it is confirmed that the Project Proponent demonstrates that they have the legal right to control and operate project activity.

Via checking the National legal approval to the Road transport permit/6/ for different cities, and the business license of the Zhejiang Green Intelligent Link Co., Ltd./7/, it is verified that the PP has the legal right to control and operate the project activity. Furthermore, by cross checking the vehicles purchase contract/10/, renting contracts signed with individuals and companies/11/, it is verified that the ownership of the vehicles and the project is with Zhejiang Green Intelligent Link Co., Ltd.

Furthermore, during the local stakeholder consultation process before the project (assessed in below section 3.3.2), project proponent has claimed that the ownership of this project belongs to Intelligent Link and all emission reductions/removals are granted to the company, which has no contradiction from the local stakeholders.

Finally, via checking the smartphone application/9/, CTI confirmed that the claim of the ownership of this project and corresponding generated emission reductions/removals has been shown in both Platform and application to all the related parties and end users.

Thus, it is confirmed that the project owner has the ownership of the project and ownership of carbon credits generated from this project.

- Project start date

The project start date is 08-October-2021 which is verified as the date when the 1<sup>st</sup> project vehicle is registered with operation permission and started transportation, that is the date when the project began generating GHG emission reductions or removals.

Via checking the Intelligent Link Control Platform/8/ and interview with PP, it is verified that the start date for initial project activity instances is correct and in line with the concept in VCS standard Version 4.4.

- Project crediting period

For the VCS crediting period, PP has chosen 10 years fixed crediting period from 08-October-2021 to 07-October-2031 which is in line with the concept for crediting period in section 3.9.2 of the VCS standard version 4.4.

- Project scale and estimated GHG emission reductions or removals

The average annual ERs of the initial instances of project are 66,067 tCO<sub>2e</sub>, which is lower than the threshold of large-projects (300,000 tCO<sub>2e</sub> per year). Therefore the project falls in the category of “Project”

as per definition in VCS standard. And the estimated total Estimated GHG Emission Reductions or Removals during the VCS crediting period (08-October-2021 to 07-October-2031) is 660,669 tCO<sub>2e</sub>.

- Project description

Through the onsite visit, interviewing the project developer and reviewing the project description in Joint-PD-MR/1/, it was confirmed that the project aims to operate commercial electric vehicles around China. PP has established a smartphone application named Green Intelligent Link for vehicle rental, charging and vehicle maintenance so that to supply environmental transport capacity and smart vehicle networking.

After registering, individuals and companies can browse different types of project vehicles and lease services, and then book directly or consult further details by phone. After confirming the rental demand with the sales staff, vehicle lessees will sign the rental contract/11/ with project proponent and pay the rent. When picking up the project vehicle, the staff will explain the precautions of vehicles, providing operation training/19/, charging training/19/, and driving skills training/19/, and the later service process. After the completion of the rental contract/11/, lessees shall pay the follow-up rent and maintain project vehicles on time.

While during the operation, each project vehicle is equipped with T-BOX, used for control and track vehicle status, then the data are uploaded to the Intelligent Link Control Platform/8/. The platform also collects information of charging piles, service stations and vehicle bills. Project proponent have access to the platform for all information. Lessees can manage rented project vehicles on APP, charge and maintain project vehicles nearby, where the corresponding information connected to the Intelligent Link Control Platform, this information is verified as correct and actual by site inspection of the Intelligent Link Control Platform/8/ and smartphone application (hereafter “APP”)/9/.

Furthermore, by checking the whole function of the Intelligent Link Control Platform, CTI confirms that the Intelligent Link Control Platform collects all information about project vehicles, including vehicle categories, vehicle numbers, inventory status, vehicle status (in use or not), operation status (normal or not), real-time geographic information, each day mileage and charged electric quantity, etc. Lessees could know on the APP if the rented project vehicles are active, where they are, how long they have driven and residual electric capacity. The platform also collects mainstream charging piles all around the whole China, including charging piles companies, charging station address, business hours, fast charge and slow charge time, price, voltage and power. When the rented project vehicles need to be charged, lessees can find an appropriate charging station nearby, and pay the bill for electricity after full charge on the APP. This is also confirmed by site interview with the representatives from the charging piles companies.

If the rented project vehicles act up, lessees could call the after-sales service number, repair on-site, drive to nearby maintenance station shown on the APP, or use stand-by vehicles provided by project proponent if the maintenance time is more than one day. At the end of the lease, lessees shall return rented project vehicles and pay the rent on the APP. All the information on the platform will be updated according to the operation of lessees, this information is verified as correct and actual by site inspection of the Intelligent Link Control Platform/8/ and smartphone application (hereafter “APP”)/9/.

The initial project activity instances of the grouped project comprise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan), include a total of 16,246 commercial electric vehicles.

The smart vehicle networking is achieved by Telematics-BOX (T-BOX) equipped in project vehicles, Intelligent Link Control Platform and smartphone application. Traveling mileage, operation status, location, state of charge and other information of project vehicles can be transferred from T-BOX to Intelligent Link Control Platform, where information are managed, and smartphone application, and manipulation codes can be transferred from smartphone application to T-BOX to control project vehicle.

Via checking the Joint-PD-MR/1/, PP didn't operate fossil fuel vehicles before, so it is confirmed that the project did not involve the fuel switch. The baseline scenario is operation of the comparable fossil fuel vehicles that would have been used to provide the same transportation service which has been assessed in the section 3.4.4 of this report.

Via site inspection and checking the platform/8/, CTI confirmed that the initial instance has two instances of truck project and van project, and four types of the vehicles including light truck, mini truck, light van, minivan. The factors and parameters of all the vehicle categories including the load capacity, maximum design total mass, maximum speed, battery capacity, depth of discharge, battery cycles, distance travelled per charge, lifetime of battery have been transparently described in the Joint-PD-MR/1/ and verified as correct and actual by site inspection of the nameplates of different vehicles/25/ and checking the vehicles purchase contract/10/ and Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/.

- Project location

The project site is set as regional operation centres in more than 40 core cities across China, supplying services in more than 150 cities, which has formed a national network layout verified by checking the enterprise credit report of Intelligent Link in public website/44/. In addition to Hong Kong, Macao and Taiwan, project vehicles owned by Intelligent Link run in the rest of whole China.

Via checking the project program/4/, it is confirmed that the PP designed this project as a grouped project with the expansion of the project activity instances by renting more commercial electric vehicles for logistical distribution in urban with same baseline scenario and demonstration of same additionality in the geographic area of the grouped project lies in the whole China except Hong Kong, Macao and Taiwan.

Via on-site checking the data from the Intelligent Link Control Platform/8/, it is confirmed that the initial project activity instances are operated in the project geographic area except Qinghai province, Tibet Autonomous Region and Xinjiang Uygur Autonomous Region. The geographical coordinates of initial project activity instances is between 92°20'20" and 135°2'30" east longitude and between 3°31'00" and 53°33'00"north latitude

And the future project activity instances will be developed in the whole project geographic area. The geographical coordinates of the grouped project is between 73°29'59.79" and 135°02'30" east longitude and between 3°31'00" and 53°33'00"north latitude.

Furthermore, via checking the project KML file/5/, CTI verified that the geographic area has been specified using geodetic polygons in the KML file.

- Conditions prior to project initiation

Via checking the Joint-PD-MR/1/, PP didn't operate fossil fuel vehicles before, so it is confirmed that the project did not involve the fuel switch. The baseline scenario is operation of the comparable fossil fuel

vehicles that would have been used to provide the same transportation service which has been assessed in the section 3.4.4 of this report.

Therefore, the project is confirmed not to be implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

- Project compliance with applicable laws, statutes and other regulatory frameworks

The Joint-PD-MR has stated that the project is in line with the national and local laws and regulations. Via searching the laws and regulations as listed in the joint PD&MR and all the related contents, CTI confirmed that the project is in compliance with which has been stated in the joint PD&MR as detail and assessed by CTI as reasonable based on the local expertise of the VVB.

Besides, the Joint-PD-MR has stated that the project is in line with the national and local new energy vehicles policies including The Notice on the Issuance of the New Energy Vehicle Industry Development Plan (2021-2035) (General Office of the State Council [2020] No.39)/45/, The Notice on the Issuance of Zhejiang Province Intelligent Vehicle Innovation and Development Plan (2020-2025) (Zhejiang Development and Reform Commission [2019] No.449)/46/, The Notice on the Issuance of the 14<sup>th</sup> Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development (Zhejiang Development and Reform Commission [2021] No.107)/47/.

Also the New Energy Vehicles of the project is legally approved by Local government by checking the Road transport permit/6/, which means that the project is in line with the national and local laws and regulations based on the local expertise of the VVB.

In conclusion, the project complies with all relevant local, regional and national laws, statutes and regulatory frameworks in China.

- Participation under other GHG programs:

*-Projects registered (or seeking registration) under other GHG program(s)*

The project has neither been registered nor seeking registration under any other GHG programs which has been confirmed via checking the UNFCCC/41/, GS/40/, VCS/42/, China CCER/39/ and other GHG schemes' website. It is verified that the project is seeking registration only in VCS program/42/.

*-Rejection by other GHG programs*

The project has neither been rejected by any other GHG programs which has been confirmed via checking the UNFCCC/41/, GS/40/, VCS/42/, China CCER/39/ and other GHG schemes' website.

- Other forms of credit:

*-Emissions trading programs and other binding limits*

The project proponent is not part of any emission trading program which has been confirmed via checking the UNFCCC/41/, GS/40/, VCS/42/, China CCER/39/ and other GHG schemes' website. The net GHG emission reductions from the project will not be used for compliance with emission trading programs or to meet binding limits on GHG emissions. The project activity has not participated under any other GHG programs which has been confirmed via checking the UNFCCC/41/, GS/40/, VCS/42/, China CCER/39/

and other GHG schemes' website and has been confirmed by checking the Declaration of no double counting and not involved in other GHG scheme/20/.

Besides, based on VVB's local expertise, China has a national emissions trading scheme only cover the high-emission industries, such as eight emission-intensive industries including power generation, petrochemicals, chemicals, building materials, non-ferrous metals, papermaking, steel and aviation that emitted at least 26,000 tons of CO<sub>2e</sub>/year which has been verified in the public website/37/, and it is confirmed that the project activity belongs to agriculture sector is not included the mandatory emission control scheme and there is no emission cap enforced for the project owner by checking the enforced company list in public information/38/. On contrary, the project activity can reduce of GHG in the atmosphere through avoiding methane emissions from anaerobic treatment of swine manure and wastewater. Therefore, it can be concluded that the PP will not be included in the national ETS. Hence, it is confirmed that the emission reductions will not be double counted.

*-Other forms of environmental credit sought or received and eligible to be sought or received*

Via interview with the project owner and based on above assessment, it is confirmed that the project has not created any other form of environmental credit.

*-Issuance of public statement(s) to help prevent Scope 3 emissions double claiming*

Based on the project design, the project activity is operating electric commercial vehicles, owned by the project proponent, not includes manufacturing or selling products. So the project's GHG emission reductions or removals are not in a supply chain, and there are no producer or retailers of the impacted goods or services involved in the project.

*Email notification of the potential risk of Scope 3 emissions double claiming*

N/A

• Sustainable development contributions

Via on-site inspection, checking the evidence provided as below and interview with the project implementer, CTI verified that the project contributes the sustainable development through the following aspects:

1. Number of employees hired to maintain the electric commercial vehicle service (Goal 8 of UN SDG) – verified by interview with PP and checking the Staff List/16/ and labor contract/17/, it is confirmed that 233 job opportunities have been provided during this monitoring period and since project started operation, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable;
2. Amount of fine particulate matter (e.g. PM<sub>2.5</sub>) reduced by the project activity within the project area (Goal 11 of UN SDG) – verified by checking the Fact sheet of PM<sub>2.5</sub>/18/, it is confirmed that 8,783 kg PM<sub>2.5</sub> decreased due to the project operation during this monitoring period and since project started operation, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable;
3. Tonnes of greenhouse gas emissions avoided (Goal 13 of UN SDG) – 25,105 tCO<sub>2e</sub> GHG emission reductions have been achieved during this monitoring period and since project started operation,

which is verified by checking the Emission Reduction Calculation sheet/2/, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable.

- Additional information relevant to the project, including:

-Leakage management for AFOLU projects

N/A

-Commercially sensitive information

No commercially sensitive information has been excluded from the public version of the project description.

Based on above assessment and demonstration, it is concluded that the description in the project description is accurate, complete, and the nature of the project is actual and understandable, and it is confirmed that the project has been implemented as described in the project description via site inspection.

CL 01, CL 02, CL 03, CL 04, CL 05, CL 06 and CAR 01, CAR 02 and CAR 03 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

## 3.2 Participation under Other GHG Programs

The project has neither been registered nor seeking registration under any other GHG programs which has been confirmed via checking the UNFCCC/41/, GS/40/, VCS/42/, China CCER/39/and other GHG schemes' website. It is verified that the project is seeking registration only in VCS program/42/.

## 3.3 Safeguards

### 3.3.1 No Net Harm

The analysis of the potential negative environmental and socio-economic impacts of the project activity is sufficiently described in Joint-PD-MR/1/ and the impacts are verified as actual and reasonable. The assessment is as below,

Environmental impacts - It is considered that the environmental impacts have been comprehensively described in Section 2.1 of Joint-PD-MR/1/ including below,

Disposal of discarded batteries could generate potential environmental risks – Via site interview with PP and representative of the vehicle manufacturer, it is confirmed that PP has to take the responsibility of power battery recycling according to the Interim Measures for the Management of New Energy Vehicle Power Battery Recycling Regulating/48/, so the recycling procedure as per national regulation can solve the battery disposal issue. Furthermore, based on the national policy, as per the request of a automobile product Producer responsibility, PP will replace the vehicle batteries as energy storage devices when they have been out of life in electric vehicles. Then it means that there will be no environmental risks due to disposal of discarded batterie occurred in the project.

Socio-economic impacts - It is considered that the Socio-economic impacts have been comprehensively described in Section 2.1 of Joint-PD-MR/1/ including below,

Potential Socio-Economic risks from using batteries –Via site interview with PP and representative of the vehicle manufacturer, and checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/, it is confirmed that the maintenance and warranty of the power battery has been guaranteed in the Manufacturer specifications which request no fire sources should be close to the power battery, operating and storage temperature of the power battery, etc. to prevent spontaneous combustion of project vehicles resulting public hazards.

Furthermore, the project proponent regularly organises fire prevention training for drivers of electric vehicles which has been confirmed by checking the training records/19/.

In conclusion, there were several potential impacts on environment and socio-economic during the operation of the project which has been demonstrated in the Joint-PD-MR/1/, however the proper measurements and mitigation actions have been carried out by PP to mitigate such impacts and there is no net harm occurred during this monitoring period.

CL 07 was raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.3.2 Local Stakeholder Consultation

Local stakeholder consultation prior the project started construction

A stakeholder survey was carried out by the project developer on 10-August-2021 which was prior to the start date of the construction.

A stakeholder consultation meeting was held on 10-August-2021 by preciously inviting 22 representatives from the identified stakeholders group including all the involved parties like Intelligent Link, commercial vehicle manufacturer, regional operator, driver and charging pile.

And during the meeting, the related survey questionnaire has been distributed to each representative, totally 22 copies of questionnaires were issued to relevant representatives with 22 pieces of reply received. The stakeholders' background information and comments from questionnaires were summarized and recorded in the Joint-PD-MR/1/, Section 2.2.

Via checking the 22 filled questionnaires/14/, it is verified that all respondents knew or heard about the Project. Over 80% stakeholders got college degree or above. As for the opinions about the project development, over 70% stakeholders thought that the project will improve the local employment situation and local environment. 96% of the respondents hold the supportive attitude to the operation of the Project.

The stakeholders selected main obstacle that would to promote the commercial electric vehicles is base installation, while based on the PP's design by checking the Intelligent Link Control Platform/8/ and smartphone application/9/, and by interview with the representatives from charging piles and drivers, it is confirmed that project proponent has cooperated with more charging pile companies and improved charging station. And by interview with the drivers, it is confirmed that finally all other stakeholders accepted this mitigation way.

Finally, it is verified that there is no one thinks that the Project will have a negative impact on the local life, local stakeholders are supportive of the project construction by checking the questionnaires/14/, and thus no need to change the project design based on the stakeholder inputs.

#### Mechanism for on-going communication and consultation

During the implementation stage of this monitoring period, through checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed that PP has provided a series of technical training and lectures to the drivers of local passenger transportation companies and after-sales service system including online-hiring, online car control and online billing services are available on the APP. And all the issues can be raised through the after-sales service system. For all the other stakeholders, PP has the direct line communicate with them, so all the stakeholders can communicate with the project proponent on phone.

Furthermore, via checking the local communication survey records/15/ and interview with the local stakeholders during site visit, it is confirmed that the PP has conducted follow-up interviews and ongoing communication with local stakeholders to collect any comments or inputs to the project implementation in on 12-June-2023 through distribution questionnaires to local stakeholders. Total of 15 questionnaires have been distributed and collected, via checking the filled questionnaires/15/, it is verified that no negative comments were received during this process.

Via interview with the local stakeholders during site visit, it is verified that there were no comments and issues from the local stakeholders during the implementation period through all the on-going communication and consultation mechanism. Hence there is no need to change the project design based on the stakeholder inputs.

Furthermore, via site interview with PP, CTI confirmed that if any comments from stakeholders on the project received during the project operation period, these would be feedback to project proponent leader, then he will contact principle of relative departments to deal with.

CAR 04 and CAR 05 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.3.3 Environmental Impact

In China, according to Chinese law “Environmental Impact Assessment Law of the People’s Republic of China”/43/, CTI confirmed that there is no requirement from any environmental impact assessments to the type of the project. Hence the analysis of the environmental impacts of the project activity is sufficiently described by PP in the Joint-PD-MR/1/. The assessment is as below,

Associated with the interview with PP and stakeholders and by checking the project operation, it is confirmed that there was no adverse effect on the ecology, air, water and solid waste, for the project subject to the implementation of pollution mitigation measures in freight transportation industry according to the requirement of 14<sup>th</sup> Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development/47/, which intends to improve energy-saving and new energy vehicles high-end industrial chain by supporting the transformation and upgrading of fuel-powered vehicles, actively developing new-energy vehicles, and expanding the power battery industry.

Hence, the environmental impact of the project operation has been identified as the heavy metal elements in waste batteries may cause severe damage to water and soil if not properly handled in end-of-life disposal.

Via site interview with PP and representative of the vehicle manufacturer, it is confirmed that PP has taken the responsibility of power battery recycling according to the Interim Measures for the Management of New Energy Vehicle Power Battery Recycling Regulating/48/, disassemble the battery box or battery module without permission is not allowed, so the recycling procedure as per national regulation can solve the battery disposal issue. Furthermore, based on the national policy, as per the request of automobile product Producer responsibility, PP will replace the vehicle batteries as energy storage devices when they have been out of life in electric vehicles. Then it means that there will be no environmental risks due to disposal of discarded batterie occurred in the project.

In conclusion, there was a potential negative impact on environment during the operation period which has been demonstrated in Joint-PD-MR/1/, also the proper measurements will be carried out by project implementer to mitigate such impacts.

And by site inspection of implementation, CTI confirmed that there was no negative impact on environment occurred during this monitoring period.

In conclusion, both positive and negative impacts to the environment from the project has been demonstrated and verified as actual and reasonable and there are no significant negative impacts to the environment were identified.

CL 08 was raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.3.4 Public Comments

The project sought the registration with the VCS Program, according to VCS requirements the Project Description was submitted for public comment period. The project was allocated with VCS ID 4335. The public comment period started on 03-May-2023 and ended on 02-June-2023 (<https://registry.verra.org/app/projectDetail/vcs/4335>).

No comments were received during this period which has been verified by checking the dedicated website as above.

### 3.3.5 AFOLU-Specific Safeguards

N/A

## 3.4 Application of Methodology

### 3.4.1 Title and Reference

The approved consolidated methodologies applied in the project activity are AMS-III.C-“Emission reductions by electric and hybrid vehicles” (version 16.0)/21/.

This methodology also refers to the latest approved version of the following tools:

TOOL 05 “Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation” (version 03.0)/29/;

TOOL 21 “Demonstration of Additionality of Small-scale Project Activities” (version 13.1)/30/;

TOOL 07 “Tool to calculate the emission factor for an electricity system” (version 07.0)/58/;

TOOL 27: “Investment analysis” (Version 13.0)/59/

Reference to the following link for detail information about the methodology and tools:

<https://cdm.unfccc.int/UserManagement/FileStorage/074L1U9KACQDM3RVPZJE0FW8I2NTB>

### 3.4.2 Applicability

Demonstration regarding the applicability of the methodologies, and any tools selected by the project proponent as provided in below table.

Table 3-1 Assessment of Applicability conditions of AMS-III.C (version 16.0).

No.	Applicability conditions	Validation Assessment	Conclusion
1	This methodology applies to project activities introducing new electric and/or hybrid vehicles that displace the use of fossil fuel vehicles in passenger and freight transportation.	The project aims to introduce new electric vehicles that displace the use of fossil fuel vehicles in freight transportation industry which is confirmed by site visit and checking the Intelligent Link Control Platform/8/.	Applicable
2	The methodology is not applicable for project activities that involve a switch from fossil fuels to biofuels in transportation; those project activities shall consider using another Type III methodology (e.g., “AMS-III.T.: Plant oil production and use for transport applications” and “AMS-III.AK.: Biodiesel production and use for transport applications”).	The project aims to introduce new electric vehicles that displace the use of fossil fuel vehicles in freight transportation industry which is not involved in switch from fossil fuels to biofuels in transportation which is confirmed by site visit and checking the Intelligent Link Control Platform/8/.	Applicable
3	In cases where the project vehicles use a replaceable, chargeable battery there must be documented measures in place to ensure that vehicle owners have access to replacement batteries of comparable quality.	Via site interview with PP and representative of the vehicle manufacturer, and checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/ and Quality Assurance Instructions for Replacing Batteries of Intelligent Link/13/, it is confirmed that all vehicle owners have access to replacement batteries of comparable quality.	Applicable
4	The project design document (PDD) shall explain the proposed approach for introducing/distributing the electric/hybrid vehicles, which shall allow for tracking of the project vehicles. It shall also explain how the proposed project activity will:	Via checking the demonstrations in PD, it is confirmed that PP has explained the proposed approach for introducing/distributing the electric/hybrid vehicles, which allow for tracking of the project vehicles.	Applicable

No.	Applicability conditions	Validation Assessment	Conclusion
	<p>(a) Demonstrate that the baseline vehicles being displaced are those consuming fossil fuels. This can be done, for example, through documentation of the market share per fuel type per vehicle category in the project region (e.g., based on representative sample surveys or official data or peer reviewed literature);</p> <p>(b) Ensure compliance with prevailing regulations pertaining to battery use and disposal.</p>	<p>Based on checking the assessment in below 3.4.4, the baseline scenario is confirmed as operation of the comparable fossil fuel vehicles that would have been used to provide the same transportation service, which has been defined as per the market share per fuel type per vehicle category in the project region.</p> <p>Besides, via checking the New Energy Vehicle Waste Power Battery Comprehensive Utilization Industry Standard Conditions/49/ and Comprehensive Utilization of Used Power Batteries for New Energy Vehicles Interim Measures for The Administration of Industry Standard Announcements/50/, it is confirmed that PP has to comply with the national standard for battery use and disposal and by checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/ and Quality Assurance Instructions for Replacing Batteries of Intelligent Link/13/, it is confirmed that specific measures for battery recycling have been taken to ensure that the project electric vehicles are not affected in use and PP has established an after-sales service system to ensure the new energy vehicle is repaired and maintained with related information recorded and verified.</p> <p>And the replaced waste battery pack will be transferred to the recycling service network.</p>	
5	<p>The PDD shall include minimum performance specifications for the batteries to be used such as: depth of discharge, battery cycles, distance travelled per charge, lifetime.</p>	<p>Via site inspection and checking the platform/8/, CTI confirmed that the initial instance has two instances of truck project and van project, and four types of the vehicles including light truck, mini truck, light van, minivan. The factors and parameters of all the vehicle categories including the load capacity, maximum design total mass, maximum speed, battery capacity, depth of discharge, battery cycles, distance travelled per charge, lifetime of battery have been transparently</p>	Applicable

No.	Applicability conditions	Validation Assessment	Conclusion
		described in the section 1.11 of Joint-PD-MR/1/ and verified as correct and actual by site inspection of the nameplates of different vehicles/25/ and checking the vehicles purchase contract/10/ and Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/.	
6	The project proponent shall demonstrate that double counting of emission reductions will not occur e.g. via a contractual agreement with the end-user(s), maintenance of comprehensive inventory of project vehicles or unique identification of the vehicles owned by end-user(s). The steps undertaken to avoid double counting shall be documented in the PDD.	Via checking the National legal approval to the Road transport permit/6/ for different cities, and the business license of the Zhejiang Green Intelligent Link Co., Ltd./7/, it is verified that the PP has the legal right to control and operate the project activity. Furthermore, by cross checking the vehicles purchase contract/10/, renting contracts signed with individuals and companies (end-users)/11/, it is verified that the ownership of the vehicles and the project is with Zhejiang Green Intelligent Link Co., Ltd.  Furthermore, via checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed that the claim of the ownership of this project and corresponding generated emission reductions/removals has been shown in both Platform and application to all the related parties and end users.  Finally, via checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed a comprehensive inventory of project vehicles with unique vehicle identification numbers (VIN) is maintained and made available by the project proponent, and based on the local expertise, it is verified that this number is unique to each vehicle and will be permanent and not changed.  So double counting will be avoided.	Applicable
7	In cases where renewable energy source is used for charging the electric vehicles through a dedicated transmission/distribution line, the methodology should be combined with "AMS-I.F.: Renewable electricity	Via checking the Intelligent Link Control Platform/8/ and smartphone application/9/ and site interview with representatives from charging pile companies, CTI confirmed that project proponent cooperates with charging	Applicable

No.	Applicability conditions	Validation Assessment	Conclusion
	generation for captive use and mini-grid” to claim emission reductions for the amount of electricity supplied from renewable electricity source to the charging station.	pile companies, whose charging station is open for the project vehicles and electricity comes from the grid, so there is no renewable energy used for charging the electric vehicles through a dedicated transmission/distribution line involved.	
8	In cases where this methodology is combined with “AMS-I.F.: Renewable electricity generation for captive use and mini-grid”, the project proponent shall separately demonstrate the additionality of each of the component (i.e. supply of renewable energy to charging station (Type I) and use of electric vehicles (Type III)). Furthermore, while combining the two components applicable requirements on start date and prior clean development mechanism (CDM) consideration shall be met in accordance with the CDM project standard and CDM project cycle procedures.	Not applicable as the project does not combine with the methodology AMS-I.F.	Not involved
9	Types of hybrid/electric vehicles to be introduced include but are not limited to cars, buses, trucks, jeepneys, commuter vans, taxis, motorcycles and tricycles.	Via checking the vehicle information in the Intelligent Link Control Platform/8/, it is confirmed that the initial project activity instances of the grouped project comprise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan).	Applicable
10	Project participants shall demonstrate that the project and baseline vehicles are comparable, using the following means: (a) Project and baseline vehicles belong to the same vehicle category, e.g. motorcycle, bus, taxi, truck, tricycle; (b) Project and baseline vehicle categories have comparable passenger/load capacity and power rating with a variation of no more than 20 per cent (comparing the baseline vehicle with the respective project vehicle of same category).	PP has demonstrated that the project and baseline vehicles are comparable as below, (a) the Project and baseline vehicles belong to the same vehicle category. This project introduces new commercial electric vehicles including 2 categories, truck and van, instead of fossil fuel vehicles. The baseline vehicles are trucks and vans driven by fossil fuel in the logistics transportation. (b) Based on checking the assessment in below 3.4.4, the baseline scenario vehicles have been selected with the comparable passenger/load capacity	Applicable

No.	Applicability conditions	Validation Assessment	Conclusion
		and power rating with a variation of no more than 20 percent with the project vehicle categories.	
11	Measures are limited to those that result in emission reductions of less than or equal to 60 ktCO <sub>2</sub> equivalent annually.	<p>Due to the project is a grouped project, according to section 3.6.9 of VCS Standard version 4.4/33/, where a capacity limit applies to a project activity included in the project, no project activity instance shall exceed such limit. Further, no single cluster of project activity instances shall exceed the capacity limit.</p> <p>So, in this grouped project, no project activity instance exceeds the capacity limit, which refers to limit of emission reductions set in AMS-III.C. version 16.0.</p> <p>Furthermore, based on checking the ER sheet of initial instances/2/, it is confirmed that the expected emission reduction of each instance is less than 60 kt CO<sub>2</sub> equivalent.</p>	Applicable

**Conclusion: Methodology AMS-III.C. (Version 16.0) is applicable to the project activity.**

In addition, the project meets the applicability conditions of the applied tools as follow table,

Tool	Criteria	Validation Assessment	Conclusion
TOOL 05: "Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation" (Version 03.0)	<p>If emissions are calculated for electricity consumption, the tool is only applicable if one out of the following three scenarios applies to the sources of electricity consumption:</p> <p>(a) Scenario A: Electricity consumption from the grid. The electricity is purchased from the grid only, and either no captive power plant(s) is/are installed at the site of electricity consumption or, if any captive power plant exists on site, it is either not operating or it is not physically able to provide electricity to the electricity consumer;</p> <p>(b) Scenario B: Electricity consumption from (an) off-grid fossil fuel fired captive power plant(s). One or more fossil fuel fired captive power plants are installed at the site of the electricity consumer and</p>	<p>Via checking the Intelligent Link Control Platform/8/ and smartphone application/9/ and site interview with representatives from charging pile companies, CTI confirmed that project proponent cooperates with charging pile companies, whose charging station is open for the project vehicles and electricity comes from the grid, hence the project belongs to scenario A.</p>	Applicable

Tool	Criteria	Validation Assessment	Conclusion
	supply the consumer with electricity. The captive power plant(s) is/are not connected to the electricity grid; or (c) Scenario C: Electricity consumption from the grid and (a) fossil fuel fired captive power plant(s). One or more fossil fuel fired captive power plants operate at the site of the electricity consumer. The captive power plant(s) can provide electricity to the electricity consumer. The captive power plant(s) is/are also connected to the electricity grid. Hence, the electricity consumer can be provided with electricity from the captive power plant(s) and the grid.		
	This tool can be referred to in methodologies to provide procedures to monitor amount of electricity generated in the project scenario, only if one out of the following three project scenarios applies to the recipient of the electricity generated: (a) Scenario I: Electricity is supplied to the grid; (b) Scenario II: Electricity is supplied to consumers/electricity consuming facilities; or (c) Scenario III: Electricity is supplied to the grid and consumers/electricity consuming facilities.	No electricity generated in the project scenario.	Not involved
	This tool is not applicable in cases where captive renewable power generation technologies are installed to provide electricity in the project activity, in the baseline scenario or to sources of leakage. The tool only accounts for CO <sub>2</sub> emissions.	Via checking the Intelligent Link Control Platform/8/ and smartphone application/9/ and site interview with representatives from charging pile companies, CTI confirmed that project proponent cooperates with charging pile companies, whose charging station is open for the project vehicles and electricity comes from the grid, so there are no captive renewable power generation technologies installed to provide	Not involved

Tool	Criteria	Validation Assessment	Conclusion
		electricity in the project activity.	
TOOL 21 “Demonstration of Additionality of Small-scale Project Activities (version 13.1)”	The use of the methodological tool “Demonstration of additionality of small-scale project activities” is not mandatory for project participants when proposing new methodologies. Project participants and coordinating/managing entities may propose alternative methods to demonstrate additionality for consideration by the Executive Board.	The project activity uses “Demonstration of additionality of small-scale project activities” for additionality demonstration as per the section 5.2.1 of the applied methodology, thus this tool is applicable.	Applicable
	Project participants and coordinating/managing entities may also apply “TOOL19: Demonstration of additionality of microscale project activities” as applicable.	Expected ER value is beyond the microscale. Hence not applicable to “TOOL19: Demonstration of additionality of microscale project activities”.	Not Applicable
Tool 07 “Tool to calculate the emission factor for an electricity system” version 07.0	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	Via checking the Intelligent Link Control Platform/8/ and by site interview with Representative of charging pile company, CTI confirmed that the commercial electric vehicles involved in the project consume electricity that is provided by the grid. TOOL 05 is used to calculate project emission of electricity consumption, where the combined margin factor for the grid in year y is required to be calculated as per the “Tool to calculate the emission factor for an electricity system”.  Hence the tool is applicable to the project.	Applicable
	Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in	The emission factor for the project electricity system is been calculated for grid power plants only.  Hence the tool is applicable to the project.	Applicable

Tool	Criteria	Validation Assessment	Conclusion
	<p>“Appendix 1: Procedures related to off-grid power generation” should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.</p>		
	<p>In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.</p>	<p>The project is not a CDM project, meanwhile, the project electricity system is in China which is not an Annex I country.</p>	<p>Not involved</p>
	<p>Under this tool, the value applied to the CO<sub>2</sub> emission factor of biofuels is zero.</p>	<p>Not applicable. The project activity does not consume biofuels.</p>	<p>Not involved</p>
<p>TOOL 27: “Investment analysis” (Version 13.0)</p>	<p>This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, the guidelines “Non-binding best practice examples to demonstrate additionality for SSC project activities”, or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.</p>	<p>As per the applied methodology AMS-III.C. version 16.0, PP has selected option 1 (Demonstrate that the project activity would otherwise not be implemented due to the existence of one or more barrier(s) listed in TOOL21. The barrier(s) can be demonstrated for buyers/users and/or charging service providers of the electric vehicles even if the manufacturer or retailer of the electric vehicles is implementing the project) to demonstrate the additionality, hence this tool is used as a reference.</p>	<p>Applicable</p>
	<p>In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are</p>	<p>Not Applicable</p>	<p>Not Applicable</p>

Tool	Criteria	Validation Assessment	Conclusion
	different from those described in this methodological tool, the requirements contained in the methodology shall prevail.		
<b>Conclusion: All the relevant methodological tools are applicable to the project activity.</b>			

CAR 06 was raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.4.3 Project Boundary

Based on AMS-III.C. (version 16.0), the project boundary is comprised of (a) The vehicles of the project; (b) The geographic boundaries where the project activity vehicles are operated; (c) The providers of the charging service to the project activity vehicles, including the charging equipment and stations of the project activities vehicle, electric supply sources (e.g. a grid and/or renewable energy generation source connected by a dedicated line to the charging stations) and other ancillary facilities.

Hence, based on the actual situation of the project, the project boundary includes the electric vehicles and the charging equipment and stations. This is a grouped project and involves the instances in which the electric vehicles running in all over China. The electricity will be supplied from the grid as electric supply sources. It is confirmed via site inspection and checking the project program/4/, Road transport permit/6/, Renting contract/11/ and Intelligent Link Control Platform/8/.

The main GHG emission sources and gases included in the project boundary are determined as per the applied methodology, GHG sources included and excluded from the project boundary is defined as correct and corresponding to the actual status of the project, which determined as:

CO<sub>2</sub> emissions from Fossil fuel combustion of vehicles under baseline scenario displaced by project activities and the project scenario has emissions due to CO<sub>2</sub> Emissions from electricity consumption of electric vehicles. Via on-site inspection and checking the project program/4/ and Intelligent Link Control Platform/8/, it is verified that all the relevant sources have been selected.

It is concluded that the project boundary and selected sources are correctly justified for the project.

CAR 07 was raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.4.4 Baseline Scenario

The Joint-PD-MR applies the baseline scenario given by para. 17 of the AMS-III.C/21/ as below:

The baseline scenario in case of operation of electric vehicles is the operation of the comparable vehicles (the comparability of baseline and project vehicles to be demonstrated as per indicators in paragraph 11 above) that would have been used to provide the same transportation service.

Via site inspection and checking the project program/4/, Road transport permit/6/, Renting contract/11/ and Intelligent Link Control Platform/8/, it is confirmed that the PP didn't operate fossil fuel vehicles before the project, the project is to introduce new commercial electric vehicles in the project area.

Via checking the national public data, CTI confirmed that the new energy vehicles used for logistical distribution in urban accounted for 8% of all new energy vehicles till 2020/51/ and there were 395 million vehicles in China in 2021 with 7.84 million electric vehicles, the market share of electric vehicles is 2.60%/52/. The figure is verified as reasonable by cross-checking the Energy-saving and new energy vehicle Yearbook 2022/23/.

So it is confirmed that the baseline scenario in the case of the operation of electric vehicles is the operation of the comparable vehicles that would have been used to provide the same transportation service.

In addition, the project is a grouped project, based on above assessment in section 3.1, it is confirmed that there is one type of the project activity in one geographic area. And as per the VCS standard, baseline scenario and demonstration of additionality are based upon the initial project activity instances. The initial project activity instances are a total of 16,246 commercial electric vehicles. So this single baseline scenario can be determined for a project activity over the entirety of a geographic area.

Furthermore, based on the requirement of the applied methodology, the project and baseline vehicles should be comparable and demonstrated using the following means:

- (a) Project and baseline vehicles belong to the same vehicle category, e.g. truck;
- (b) Project and baseline vehicle categories have comparable passenger/load capacity and power rating with a variation of no more than 20 per cent (comparing the baseline vehicle with the respective project vehicle of the same category).

For (a), the Project and baseline vehicles belong to the same vehicle category. This project introduces new commercial electric vehicles including 2 categories, truck and van, instead of fossil fuel vehicles. The baseline vehicles are trucks and vans driven by fossil fuel in the logistics transportation.

For (b), via checking the section 1.11 of the Joint-PD-MR, it is confirmed that the load capacity and power rating of project vehicles has been specified, and baseline vehicles are those which have comparable load capacity and rated power, which has been listed as blow table,

Parameters	Truck instance		Van instance	
	Light truck	Mini truck	Light van	Minivan
Load capacity of the Project vehicles (kg)	1,050~1,475	1,170~1,920	1,270~1,365	965~1380
Load capacity of the baseline vehicles (kg)	1,050~1,475	985~2320	1,520~1,495	1,080~1,460
Capacity Varies	0%	17.24%~18.78%	8.7%~16.45%	5.48%~10.65%

The figure of Load capacity of the Project vehicles is verified by checking the Road motor vehicle production enterprises and product information inquiry system/60/, and via checking the GB 20997-2015 Limits of fuel consumption for light-duty commercial vehicles/53/ and GB 30510-2018 Fuel consumption limits for heavy-duty commercial vehicles/54/, it is confirmed that the values of Load capacity of the baseline vehicles above are reasonable and PP has selected the baseline vehicle categories which have the comparable load capacity and rated power with a variation of no more than 20 per cent as the baseline basis for ER calculation which is confirmed in line with the para. 11 (b) of AMS-III.C, v.13.0.

Finally, PP has demonstrated the regulatory surplus of the project, CTI has searched all the related law, statute, or other regulatory framework of electrical vehicle industry in China including The Notice on the

Issuance of the New Energy Vehicle Industry Development Plan (2021-2035) (General Office of the State Council [2020] No.39)/45/, The Notice on the Issuance of Zhejiang Province Intelligent Vehicle Innovation and Development Plan (2020-2025) (Zhejiang Development and Reform Commission [2019] No.449)/46/, The Notice on the Issuance of the 14<sup>th</sup> Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development (Zhejiang Development and Reform Commission [2021] No.107)/47/, it is verified that the project activity is not mandated by any law, statute, or other regulatory framework of China, which is also verified by cross-checking the Energy-saving and new energy vehicle Yearbook 2022/23/.

Hence, the baseline scenario determined in the Joint-PD-MR is verified as correct and in line with applied methodologies/21/ and VCS standard requests for grouped project.

CL 09, CAR 08 and CAR 09 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.4.5 Additionality

The project is a grouped project, based on above assessment in section 3.1, it is confirmed that there is one type of the project activity in one geographic area. And as per the VCS standard, baseline scenario and demonstration of additionality are based upon the initial project activity instances. The initial project activity instances are a total of 16,246 commercial electric vehicles. So the additionality of the initial project activity instances within corresponding operation area can be demonstrated for the entirety of the project geographic area. And there is no factors relevant to the demonstration of additionality require assessment across a given area.

The Joint-PD-MR applies the method of demonstration additionality given by section 5.2.1 of the AMS-III.C/21/. “Demonstrate that the project activity would otherwise not be implemented due to the existence of one or more barrier(s) listed in TOOL21. The barrier(s) can be demonstrated for buyers/users and/or charging service providers of the electric vehicles even if the manufacturer or retailer of the electric vehicles is implementing the project.”

The Tool 21 “Demonstration of additionality of small-scale project activities” version 13.1 has been applied, PP has demonstrated the project activity would not have occurred anyway due to Investment barrier - *a financially more viable alternative to the project activity would have led to higher emissions*.

Via checking the project program/4/ and vehicles purchase contract/10/ and site inspection of Intelligent Link Control Platform/8/ and checking the renting contract with individuals and companies/11/, CTI confirmed that the project activity is to lease new energy commercial vehicles for logistics services. Hence, it is confirmed that the project is categorized as sectoral scope 7 “Transport”.

Via checking the Table 1 of TOOL27 Investment analysis (Version 13.0), it is confirmed that the cost of equity (expected return on equity) of sectoral scope 7 “Transport” project in China is 7.87%. Via checking the NPV calculation sheet/3/, CTI confirmed that the value of 7.87% cost of equity (expected return on equity) has been used for NPV calculation which is confirmed as in line with the tool.

Via checking the National Economic Industry Classification Standard (GB/T 4754-2017)/55/, it is confirmed that the project activity belongs to leasing and business services, and the enterprise is

responsible for its own profits and losses. Via checking the project program/4/ and vehicles purchase contract/10/ and site inspection of Intelligent Link Control Platform/8/ and checking the renting contract with individuals and companies/11/, CTI confirmed that the cost of this project operation includes vehicle purchase, vehicle maintenance, vehicle operation and employee wages, etc. The income of the project operation is only the income of vehicle leasing.

All the input values used for NPV calculation have been listed and assessed as below

Parameter	Input values	Source	VVB Assessment
Number of vehicles leased	Year	Number	Renting contracts, Monitoring data derived from the Intelligent Link Control Platform  Via checking the Intelligent Link Control Platform/8/ which was maintained daily by the technical staff of PP, it is confirmed that each project vehicle is equipped with T-BOX, which can collect and transfer if the project vehicle is operation or not data to the Intelligent Link Control Platform/8/, so the vehicle numbers (from 2021-2023) can be verified by checking the platform. And the data has been cross-checked with the total signed rental contracts/11/, the figure is consistent.  While for the figure from 2024-2031, the value is estimated based on the data of 2023.
	2021	2,145	
	2022	13,466	
	2023-2031	16,246	
Lifetime of battery	72~96 Months	Vehicles purchase contract/10/ Manufacturer specifications /12/	Lifetime of battery have been transparently described and verified as correct and actual by site inspection of the nameplates of different vehicles/25/ and checking the vehicles purchase contract/10/ and Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/.
Purchase price per vehicle	Average 120,000RMB	Vehicles purchase contract/10/	Via checking the Vehicles purchase contract/10/, it is confirmed that the unit price of vehicles for the years 2021-2023 is correct and actual, while for the values of year 2024 to 2031, PP has selected the lowest purchase value from year 2021-2023 for NPV calculation for the whole calculation period which is confirmed as reasonable and conservative.
Vehicle rental management system operating cost	360 RMB per vehicle per year	Financial data of PP	Via checking the Financial data of PP/61/, it is confirmed that the Vehicle rental management system operating cost per vehicle per year was calculated by the total rental management system operating cost for the years 2021-2023 divides the total vehicle number operated which is verified as correct and actual, while for the values of year 2024 to 2031, PP has used the same value for NPV calculation for the whole calculation period which is confirmed as reasonable.

Other operating cost	15,000RMB per vehicle per year	Financial data of PP	Via checking the Financial data of PP/61/, it is confirmed that the other operating cost per vehicle per year was calculated by the total other operating cost for the years 2021-2023 divides the total vehicle number operated which is verified as correct and actual, while for the values of year 2024 to 2031, PP has used the same value for NPV calculation for the whole calculation period which is confirmed as reasonable.
Number of employees	223 persons	Labor contracts	The value is verified by interview with PP and checking the Staff List/16/ and labor contracts/17/, it is confirmed that 233 job opportunities have been provided since the project started, so this value for NPV calculation for the whole calculation period which is confirmed as reasonable.
Salary	Average: 120,000 RMB per person per year	Labor contracts	The value is verified by interview with PP and checking the labor contracts/17/, it is confirmed that the salary for the years 2021-2023 is correct and actual, while for the values of year 2024 to 2031, PP has selected the value from year 2023 for NPV calculation for the whole calculation period which is confirmed as reasonable and conservative due to the wages of employed personnel in China have shown a consistent upward trend in recent years as per the public source/62/.
Rental revenue	Average: 39,700 RMB per vehicle	Renting contracts	Via checking the Renting contracts/11/, it is confirmed that the value for the years 2021-2023 is correct and actual, while for the values of year 2024 to 2031, the rental revenue is conservatively calculated using the average data from the years 2021-2023 which is for NPV calculation for the whole calculation period, thus confirmed as reasonable.
Value-added Tax	13%	VAT tax Regulation	The value is in line with the VAT tax Regulation/63/. In the tax regulation, VAT is 13%. This tax rate is verified as the correct rate based on local expertise from VVB. This VAT is used to calculate the city maintenance and construction tax and the Education surtax.
Income tax rate	25%	Enterprise Income Tax Law	The tax rate is in accordance with the Enterprise Income Tax Law of the People's Republic of China/64/. The applied Income tax Law is effective since 2008 and edited in Dec 2018. But the income tax of 25% is not changed. Hence it is relevant for the purpose of the income tax determination. This rate is widely used by other projects in China.

The city maintenance and construction tax	7% (of VAT)	Law of the People's Republic of China on City Maintenance and Construction Tax (Draft)	The tax rate is mandatory and applicable since 1985. According to Law of the People's Republic of China on City Maintenance and Construction Tax (Draft)/65/, if the project is located in the City, the rate of the tax is 7% of VAT. The project company is located in Hangzhou City, thus the tax rate of 7% is correct and reasonable. This rate is widely used by other projects in China.
Education surtax rate	3% (of VAT)	Provisional provisions on the collection of additional education fees	The tax rate is mandatory and applicable since 1986. According to "Provisional provisions on the collection of additional education fees"/66/, the rate of the tax is 3% of VAT. This rate is widely used by other projects in China.

Based on above assessment to the input values for NPV calculation, it is verified that in the absence of carbon revenue, the NPV of the project activities in the 10-year crediting period is -18,535.57 million yuan (based on the discount rate is cost of equity of 7.87% which is confirmed in line with the investment analysis tool version 13.0), the calculation process has been elaborated in the NPV calculation sheet/3/ which has been verified by CTI as reasonable and correct based on the above assessment to each input values.

### **Sensitivity analysis**

The sensitivity analysis was demonstrated through two manners:

1. Varying  $\pm 10\%$  of 3 critical parameters (vehicle purchase price, other operating cost and rental revenue). The selection is checked as in line with the requirements in Investment analysis (version 13.0) of "Only variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues should be subjected to reasonable variation", the vehicle purchase price, other operating cost and rental revenue is checked as constitutes more than 20% of total project costs and revenues.
2. Threshold analysis by varying the above 3 critical parameters to make the NPV is equal to 0.  
For vehicle purchase price, if the price decreases by 9.73% per year, the NPV will exceed 0. As per the assessment above for this parameter, via checking the Vehicles purchase contract/10/, it is confirmed that the unit price of vehicles for the years 2021-2023 is correct and actual, while for the values of year 2024 to 2031, PP has selected the lowest purchase value from year 2021-2023 for NPV calculation for the whole calculation period which is confirmed as reasonable and conservative. Thus it means that the purchase unit price of the vehicles is based on the actual purchase contracts, a reduction of 9.73% is impossible.

For other operating cost, if the cost decreases by 13.61%, the NPV will exceed 0. Other operating cost including daily maintenance such as vehicle insurance, parking, inspection, cleaning, lubrication, and adjusting or replacing certain parts, office expenses, etc. As per the assessment above for this parameter, via checking the Financial data of PP/61/, it is confirmed that the other operating cost was calculated by the total other operating cost for the years 2021-2023 which is verified as correct and actual, while for the values of year 2024 to 2031, PP has used the same value for NPV calculation for the whole calculation

period which is confirmed as reasonable. Furthermore, via checking the public information of the operation of electric vehicles/67/, it is verified that the cost is hard to be decreased in future due to operating time of vehicles increases, the frequency of vehicle breakdowns is likely to rise. In addition, as above assessment to salary, the labor cost is increasing, so a reduction of 13.61% is impossible.

For rental revenue, if the revenue increases by 5.68%, the NPV will exceed 0. The rental revenue is determined based on the number of vehicles and their rental prices. Via checking the annual China automobile industry Operation report from year 2017 to 2021/68/, it is confirmed that the number of trucks in the market is increasing, then it may expand the options for renters, who will prioritize vehicles with lower rental costs and new energy logistics vehicles have longer operating times and fewer daily operations compared to traditional fuel vehicles, resulting in lower operational efficiency. And it implies that renters would only prioritize project vehicles if the rental prices are lower than those of traditional fuel vehicles. So an increases of 5.68% is impossible.

#### Comparison with baseline scenario

As above assessment in section 3.4.4, via site inspection and checking the project program/4/, Road transport permit/6/, Renting contract/11/ and Intelligent Link Control Platform/8/, it is confirmed that the PP didn't operate fossil fuel vehicles before the project, the project is to introduce new commercial electric vehicles in the project area.

Hence, there is no actual input values which can be used to calculate the NPV under the baseline scenario. Based on the above sensitivity analysis of the project NPV, it is confirmed that the factors are sensitive for NPV calculation is vehicle purchase unit price and rental cost. The higher the vehicle purchase unit price and the lower the rental cost, the more positive the project NPV; oppositely, the NPV becomes more negative.

For vehicle purchase unit price, via checking the public source/69/, it is confirmed that the purchase price for new energy commercial vehicle tend to be more expensive than traditional fuel commercial vehicles of equivalent specifications even with the exemption from the vehicle purchase tax.

Besides, via checking the public source of traditional fuel vehicles price /70/, it is confirmed that the the purchase price for new energy commercial vehicle is more expensive than traditional fuel commercial vehicles with same capacity.

Furthermore, considering the lifespan of vehicles, electric vehicles typically have a lifespan of 6 to 8 years due to battery lifetime considerations by checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/, and the batteries need replacement and maintenance to continue usage after lifetime ended, while the lifespan of traditional fuel vehicles is generally 12 to 15 years/f66/, longer than the electric vehicles.

Hence the purchase price per traditional fuel vehicle is verified as lower than that of electric vehicles.

For rental costs, via checking the analysis report/67/ and based on the industry background knowledge of VVB, it is confirmed that the traditional fuel commercial vehicles are more attractive to users under equivalent conditions due to factors such as longer range, shorter refuelling times, and fewer restrictions

on charging facilities, compared to electric vehicles, traditional fuel vehicles are currently more suitable for logistics transportation, so the rental revenue for fuel vehicles is likely to be higher.

In conclusion, the financial data of baseline traditional fuel commercial vehicles is more attractive than the project scenario, so it is verified that the project has the investment barrier.

Furthermore, the baseline scenario is identified as using the fossil fuel vehicles, based on checking the public source/24/ and based on the VVB's technical expertise, it is confirmed that fuel vehicles in the baseline scenario have lower prices, lower maintenance costs, and better infrastructure such as gas stations, so using the fossil fuel vehicles for commercial logistics is more economical than the project but will emit more GHGs.

So it is confirmed that the project would not have occurred anyway due to Investment barrier - *a financially more viable alternative to the project activity would have led to higher emissions.*

Therefore, the project is deemed additional in compliance with the applied methodology AMS-III.C/21/ and tool/30/.

CL 10 and CAR 10 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.4.6 Quantification of GHG Emission Reductions and Removals

For validation of the estimated GHG emission reductions in the Joint-PD-MR/1/ and ER calculation sheet/2/, CTI has downloaded from the UNFCCC website the applicable version of the CDM methodologies and all referenced methodological tools/41/.

Via verify the Joint-PD-MR/1/, CTI confirmed the ex-ante calculation of ERs is done as per the applied methodology (AMS-III.C. ver. 16.0) and related methodological tools as listed in section 3.4.1 with follow steps listed below.

The calculation of ERs is done as per the applied methodology (AMS-III.C. ver. 16.0)/21/.

#### Baseline emissions:

The project is a grouped project, the ex-ante baseline emissions are calculated based on initial project activity instances. There is no factor relevant to the determination of the baseline scenario require assessment across a given area.

According to the methodology, PP has selected "Approach 1: Using distance travelled by project vehicles" for baseline emissions calculation, the baseline emissions are calculated based on the unit of service provided by the project vehicles (travelled distance) times the emission factor for the baseline vehicle to provide the same unit of service as per the equation below:

$$BE_y = \sum_i EF_{BL,km,i} \times DD_{i,y} \times N_{i,y} \times 10^{-6} \quad (1)$$

Where:

- $BE_y$  = Total baseline emissions in year y (t CO<sub>2</sub>)
- $EF_{BL,km,i}$  = Emission factor for baseline vehicle category i (g CO<sub>2</sub>/km)
- $DD_{i,y}$  = Annual average distance travelled by project vehicle category i in the year y (km)

$N_{i,y}$  = Number of operational project vehicles in category i in year y

For  $EF_{BL,km,i}$ , as per AMS-III.C., ver. 16.0/21/, the emission factor for baseline vehicle category ( $EF_{BL,km,i}$ ) shall be determined as follows:

$$EF_{BL,km,i} = SFC_i \times NCV_{BL,i} \times EF_{BL,i} \times IR^t \quad (2)$$

Where:

$SFC_i$  = Specific fuel consumption of baseline vehicle category i (g/km)

$NCV_{BL,i}$  = Net calorific value of fossil fuel consumed by baseline vehicle category i (J/g)

$EF_{BL,i}$  = Emission factor of fossil fuel consumed by baseline vehicle category i (g CO<sub>2</sub>/J)

$IR^t$  = Technology improvement factor for baseline vehicle in year t. The improvement rate is applied to each calendar year. The default value of the technology improvement factor for all baseline vehicle categories is 0.99

$T$  = Year counter for the annual improvement (dependent on age of data per vehicle category)

As per the methodology, there are 5 options in AMS-III.C. version 16.0 to determine the specific fuel consumption of baseline vehicle category i (SFC).

Option (1): Sample measurement

Option (2): Top 20 per cent of the comparable vehicles used for public/private transportation

Option (3): Using operational data of the vehicles under baseline operational conditions

Option (4): Using data from a control group of vehicles

Option (5): Existing statistics

The grouped project is operating commercial electric vehicles in the whole China except Hong Kong, Macao and Taiwan, so the baseline vehicles should be all the comparable vehicles operate in the project area.

But in China, based on the local expertise of VVB, it is confirmed that the comparable scale of baseline vehicles is enormous and difficult to collect, so the option 1 and option 2 are not applicable. There is no operation data of the vehicles under baseline operation conditions, so the option 3 is also not applicable. Additionally, there is no specific fuel consumption of a control group or existing statistics been monitored throughout the project crediting period. So, the option 4 is also not applicable.

Then PP can only choose Option (5): Existing statistics – If none of the above options apply due to lack of data, other public available existing statistics could be used as industry default values, such as host country statistics (released by transportation department or other authorities), IPCC or other international data.

Then PP has used the host country statistics data from Limits of fuel consumption for light-duty commercial vehicles/53/ and Fuel consumption limits for heavy-duty commercial vehicles/54/ published by Chinese authorities: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of China which has determined the specific fuel consumption of each baseline vehicle category.

Hence, CTI verified that the data source in line with the request of the applied methodology and the value has been correctly selected.

Refer to below section 3.4.8 for detail assessment of each parameter.

### Project emissions:

The project is a grouped project, the ex-ante project emissions are calculated based on initial project activity instances. And parameter including grid emission factors is assessed across given areas due to there are six regional grids in the project area. The project emissions achieved by initial project activity instances or grouped project need be calculated across given areas.

According to the methodology, PP has selected “Approach 1: Using distance travelled by project vehicles” for project emissions calculation, project emissions include the electricity and fossil fuel consumption associated with the operation of project vehicles and shall be calculated as follows:

$$PE_y = \sum_i EF_{PJ,km,i,y} \times DD_{i,y} \times N_{i,y} \quad (3)$$

Where:

- $PE_y$  = Total project emissions in year y (t CO<sub>2</sub>)
- $EF_{BL,km,i,y}$  = Emission factor per kilometre travelled by the project vehicle type i (t CO<sub>2</sub>/km)
- $DD_{i,y}$  = Annual average distance travelled by project vehicle category i in the year y (km)
- $N_{i,y}$  = Number of operational project vehicles in category i in year y

For  $EF_{BL,km,i,y}$ , as per AMS-III.C., ver. 16.0/21/,

$$EF_{PJ,km,i,y} = \sum_i SEC_{PJ,km,i,y} \times EF_{elect,y} / (1 - TDL_y) \times 10^{-3} + \sum_i SFC_{PJ,km,i,y} \times NCV_{PJ,i} \times EF_{PJ,i} \times 10^{-6} \quad (4)$$

The grouped project is to operate commercial electric vehicles, not include hybrid vehicles, so the  $SFC_{PJ,km,i,y}$ ,  $NCV_{PJ,i}$  and  $EF_{PJ,i}$  don't have to be calculated in formula 4.

Then, for this grouped project, the emission factor of the project vehicles shall be determined as follows:

$$EF_{PJ,km,i,y} = \sum_i SEC_{PJ,km,i,y} \times EF_{elect,y} / (1 - TDL_y) \times 10^{-3} \quad (5)$$

Where:

- $SEC_{PJ,km,i,y}$  = Specific electricity consumption by project vehicle category i per km in year y in urban conditions (kWh/km)
- $EF_{elect,y}$  = CO<sub>2</sub> emission factor of electricity consumed by project vehicle category i in year y (kg CO<sub>2</sub>/kWh)
- $TDL_y$  = Average technical transmission and distribution losses for providing electricity in the year y

Refer to below section 3.4.8 for detail assessment of each parameter.

### Leakage

According to the methodology/21/, no leakage calculation is required,  $LE_y = 0 \text{ tCO}_2\text{e}$

### Emission reductions:

As per the methodology/21/, Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y \quad (6)$$

Where:

- $ER_y$  = Emission reductions in year y (t CO<sub>2</sub>e)
- $BE_y$  = Baseline emissions in year y (t CO<sub>2</sub>e)
- $PE_y$  = Project emissions in year y (t CO<sub>2</sub>e)
- $LE_y$  = Leakage emissions in year y (t CO<sub>2</sub>e)

### Ex ante calculation of ER<sub>y</sub>

#### 1. Ex ante calculation of BE<sub>y</sub>

$$BE_y = \sum_i EF_{BL,km,i} \times DD_{i,y} \times N_{i,y} \times 10^{-6}$$

$$EF_{BL,km,i} = SFC_i \times NCV_{BL,i} \times EF_{BL,i} \times IR^t$$

$$\begin{aligned} \text{Then } BE_y &= \sum_i SFC_i \times NCV_{BL,i} \times EF_{BL,i} \times IR^t \times DD_{i,y} \times N_{i,y} \times 10^{-6} \\ &= 266,357 \text{ tCO}_2\text{e (annual average)} \end{aligned}$$

#### 2. Ex ante calculation of PE<sub>y</sub>

$$PE_y = \sum_i EF_{PJ,km,i,y} \times DD_{i,y} \times N_{i,y}$$

$$EF_{PJ,km,i,y} = \sum_i SEC_{PJ,km,i,y} \times \frac{EF_{elect,y}}{1 - TDL_y} \times 10^{-3}$$

$$\begin{aligned} \text{Then } PE_y &= \sum_i SEC_{PJ,km,i,y} \times \frac{EF_{elect,y}}{1 - TDL_y} \times 10^{-3} \times DD_{i,y} \times N_{i,y} \\ &= 200,290 \text{ tCO}_2\text{e (annual average)} \end{aligned}$$

#### 3. Ex ante calculation of LE<sub>y</sub>

As per the above analysis, the LE<sub>y</sub> is 0 for this project.

#### 4. Ex ante calculation of ER<sub>y</sub>

For ex ante calculation,  $ER_y = BE_y - PE_y - LE_y = 266,357 \text{ tCO}_2\text{e} - 200,290 \text{ tCO}_2\text{e} = \mathbf{66,067 \text{ tCO}_2\text{e (annual average)}}$

Hence, based on the ex-ante calculation as listed in the Joint-PD-MR, the estimated amount of GHG emission reduction of the project is **660,669 tCO<sub>2</sub>e** during the fixed crediting period (10 years) from 08-October-2021 to 07-October-2031, resulting in estimated average annual emission reductions of **66,067 tCO<sub>2</sub>e**.

The ER calculation/2/ has been duly checked. CTI has further checked the Joint-PD-MR against the latest version of the applicable methodology incl. the referenced methodological tools for consistency.

CL 12, CL 13, CAR 12, CAR 13 and CAR 14 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.4.7 Methodology Deviations

There are no any methodology deviations applied to the project.

### 3.4.8 Monitoring Plan

#### 1. Data and parameters available at validation

Please refer to the following tables for assessment of each parameter determined ex-ante:

<b><math>SFC_t</math></b>	<b>Specific fuel consumption of baseline vehicle category i (g/km)</b>													
Title in line with Methodology?	Yes													
Data unit correctly expressed?	g/km													
Appropriate description?	Yes													
Source clearly referenced? (appropriate?)	Yes													
Correct value provided?	Default value from host country statistics data from Limits of fuel consumption for light-duty commercial vehicles/53/ and Fuel consumption limits for heavy-duty commercial vehicles/54/ published by Chinese authorities: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of China which has determined the specific fuel consumption of each baseline vehicle category. Comparable baseline fossil fuel vehicles have been referred.													
Has this value been verified?	Yes - <table border="1" data-bbox="695 1203 1417 1367"> <thead> <tr> <th>Project activity instance</th> <th>Vehicle categories</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Truck project</td> <td>Light truck</td> <td>100.05</td> </tr> <tr> <td>Mini truck</td> <td>65.97</td> </tr> <tr> <td rowspan="2">Van project</td> <td>Light van</td> <td>69.60</td> </tr> <tr> <td>Minivan</td> <td>54.37</td> </tr> </tbody> </table> The baseline fossil fuel vehicles are comparable with project vehicles in capacity and rated power.	Project activity instance	Vehicle categories	Value	Truck project	Light truck	100.05	Mini truck	65.97	Van project	Light van	69.60	Minivan	54.37
Project activity instance	Vehicle categories	Value												
Truck project	Light truck	100.05												
	Mini truck	65.97												
Van project	Light van	69.60												
	Minivan	54.37												
Choice of data correctly justified?	Yes. The value has been verified by checking data source/53/,/54/ against the data source requirement AMS-III.C. version 16.0/21/.													
Measurement method correctly described?	Yes													
Purpose of data?	BE calculation													

<b><math>IR^t</math></b>	<b>Technology improvement factor for baseline vehicle in year t. The improvement rate is applied to each calendar year</b>
Title in line with Methodology?	Yes
Data unit correctly expressed?	N/A
Appropriate description?	Yes

Source clearly referenced? (appropriate?)	The source is AMS-III.C. (Version 16.0)/21/ which is appropriate
Correct value provided?	Yes – 0.99
Has this value been verified?	Yes. It is a default value. The value has been verified against the applied methodology
Choice of data correctly justified?	Yes
Measurement method correctly described?	N/A
Purpose of data?	BE calculation

## 2. Data and Parameters Monitored

The monitoring parameters required by the methodology and applicable tools for the project are summarized in the below table.

<i>DD<sub>i,y</sub></i>	Annual average distance travelled by project vehicle category i in the year y (km)				
Title in line with Methodology?	Yes				
Ex-ante Value	<b>Project activity instances</b>	<b>Truck project activity instance</b>		<b>Van project activity instance</b>	
	Vehicle categories	Light truck	Mini truck	Light van	Minivan
	2021	2,073	435	1,539	796
	2022	17,784	6,563	14,792	17,067
	2023	13,215	9,058	9,739	8,536
	2024-2031	110,000	50,000	120,000	80,000
	The value for 2021 and 2023 are derived from the Intelligent Link Control Platform/8/, while for other year, the values from project program/4/.				
Data unit correctly expressed?	Yes - km				
Appropriate description?	Yes				
Source clearly referenced? (appropriate?)	The ex-ante source is from Intelligent Link Control Platform/8/ and project program provided by PP/4/				
Correct value provided?	Yes				
Has this value been verified?	Yes. The ex-ante value has been verified against the Intelligent Link Control Platform/8/, project program/4/				
Choice of data correctly justified?	Yes				
Measurement method correctly described?	<p>PP has chosen the option (A) “monitoring of all vehicles” as the monitoring method as per the applied methodology. The annual average distance travelled by each of the project vehicle will be provided by the project proponent through monitoring all vehicles as per option A.</p> <p>Each project vehicle is equipped with T-BOX, which can collect and transfer the operation mileage data to the project proponent and gathered in the Intelligent Link Control Platform/8/.</p> <p>The total annual mileage is summed of monthly mileage of each category project vehicles, then is divided by the total annual number of operated project vehicles, then the annual average distance travelled by project vehicle category i in the year y was obtained.</p>				

	And the monitoring equipment is the Intelligent Link Control Platform/8/.
Monitoring frequency correctly described?	Annually
QA/QC procedure correctly described?	Yes The platform will be maintained daily by the technical staff of PP. And the project proponent leader will document the mileage data and storage it.
Purpose of data?	BE <sub>y</sub> calculation

$N_{i,y}$	Number of project vehicle in operation in year y				
Title in line with Methodology?	Yes				
Ex-ante Value	<b>Project activity instances</b>	<b>Truck project activity instance</b>		<b>Van project activity instance</b>	
	Vehicle categories	Light truck	Mini truck	Light van	Minivan
	2021	1,036	46	338	725
	2022	5,289	1,391	2,855	3,931
	2023	5,843	1,691	3,061	5,651
	2024-2031	5,843	1,691	3,061	5,651
	The value for 2021 and 2023 are derived from the Intelligent Link Control Platform/8/, while for other year, the values from project program/4/.				
Data unit correctly expressed?	Number				
Appropriate description?	Yes				
Source clearly referenced? (appropriate?)	The ex-ante source is from Intelligent Link Control Platform/8/ and project program provided by PP/4/				
Correct value provided?	Yes				
Has this value been verified?	Yes. The ex-ante value has been verified against the Intelligent Link Control Platform/8/, project program/4/				
Choice of data correctly justified?	Yes				
Measurement method correctly described?	<p>PP has chosen the option (A) “based on annual sales records or official data on registered project vehicles cross-checked against the results from a representative sample survey vehicles to determine the percentage of vehicles in use as the monitoring method” as per the applied methodology.</p> <p>The Intelligent Link Control Platform can monitor if the project vehicle is operation or not by T-BOX, therefore the number of project vehicle in operation can be obtained by the record in The Intelligent Link Control Platform, which is applicable to option (A).</p> <p>Each project vehicle is equipped with T-BOX, which can collect and transfer the operation status of each vehicle to the project proponent and gathered in the Intelligent Link Control Platform/8/.</p> <p>And the monitoring equipment is the Intelligent Link Control Platform/8/.</p>				
Monitoring frequency correctly described?	Monthly				
QA/QC procedure correctly described?	Yes				

	The platform will be maintained daily by the technical staff of PP. And the project proponent leader will document the operation data and storage it. Data will be cross-checked with the total signed rental contracts/11/.
Purpose of data?	BE <sub>y</sub> and PE <sub>y</sub> calculation

<b>SEC<sub>PJ,km,I,y</sub></b>	<b>Specific electricity consumption by project vehicle category i per km in year y in urban conditions (kWh/km)</b>																																																							
Title in line with Methodology?	Yes																																																							
Ex-ante Value	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="2">Truck instance</th> <th colspan="2">Van instance</th> </tr> <tr> <th>Light truck</th> <th>Mini truck</th> <th>Light van</th> <th>Minivan</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">Value used for ex-ER calculation</td> <td>2021</td> <td>0.3527</td> <td>0.2377</td> <td>0.2485</td> <td>0.1521</td> </tr> <tr> <td>2022</td> <td>0.3265</td> <td>0.2377</td> <td>0.2138</td> <td>0.1602</td> </tr> <tr> <td>2023</td> <td>0.3443</td> <td>0.2609</td> <td>0.2068</td> <td>0.1651</td> </tr> <tr> <td>2024-2031</td> <td>0.3412</td> <td>0.2454</td> <td>0.2230</td> <td>0.1591</td> </tr> </tbody> </table> <p>For year 2021 to 2023, value of each vehicle category are derived from platform data/8/ and for year 2024 to 2031, the ex-ante data are calculated based on the average values from year 2021-2023 which is verified as reasonable.</p>																											Truck instance		Van instance		Light truck	Mini truck	Light van	Minivan	Value used for ex-ER calculation	2021	0.3527	0.2377	0.2485	0.1521	2022	0.3265	0.2377	0.2138	0.1602	2023	0.3443	0.2609	0.2068	0.1651	2024-2031	0.3412	0.2454	0.2230	0.1591
		Truck instance		Van instance																																																				
		Light truck	Mini truck	Light van	Minivan																																																			
Value used for ex-ER calculation	2021	0.3527	0.2377	0.2485	0.1521																																																			
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	2024-2031	0.3412	0.2454	0.2230	0.1591																																																			
Data unit correctly expressed?	N/A																																																							
Appropriate description?	Yes																																																							
Source clearly referenced? (appropriate?)	The ex-ante source is from Intelligent Link Control Platform/8/																																																							
Correct value provided?	Yes																																																							
Has this value been verified?	Yes. The ex-ante value has been verified against the Intelligent Link Control Platform/8/.																																																							
Choice of data correctly justified?	Yes																																																							
Measurement method correctly described?	<p>PP has chosen the option (A) “monitor electricity consumption of all project vehicles” as the monitoring method as per the applied methodology.</p> <p>The Intelligent Link Control Platform can monitor state of charge (SOC) of each vehicle by T-BOX, therefore the electricity consumption per km per project vehicle can be obtained by the record in the Intelligent Link Control Platform, then the electricity consumption per km per project vehicle can be calculated by the platform which is applicable to option (A).</p>																																																							

	<p>Each project vehicle is equipped with T-BOX, which can collect and transfer the state of charge of each vehicle to the project proponent and gathered in the Intelligent Link Control Platform/8/. Then the electricity consumption per km per project vehicle can be calculated by the platform.</p> <p>And the monitoring equipment is the Intelligent Link Control Platform/8/.</p> <p>The electricity consumption per kilometer is calculated by the mileage of each type of project vehicle and the power consumption in the corresponding time period by the platform. The average value was used as the specific electricity consumption of each project vehicles category.</p> <p>The mileage and power consumption data of each vehicle will be exported from the platform. The average value of vehicles' electricity consumption per km is obtained by total power consumption divided by total mileage.</p>
Monitoring frequency correctly described?	Monthly
QA/QC procedure correctly described?	<p>Yes</p> <p>The platform will be maintained daily by the technical staff of PP. And the project proponent leader will document the electricity consumption data and storage it.</p> <p>Cross-checked against vehicle specifications (kWh/km) for urban conditions provided by the manufacturers and use the highest of the two values.</p>
Purpose of data?	PE <sub>y</sub> calculation

<i>EF<sub>elect,y</sub></i>	<b>CO<sub>2</sub> emission factor of electricity consumed by project vehicle category i in year y (kg CO<sub>2</sub>/kWh)</b>	
Title in line with Methodology?	Yes	
Ex-ante Value	<b>National power grids</b>	<i>EF<sub>elect,y</sub></i>
	Northeast China regional power grid	0.6613
	North China regional power grid	0.7119
	East China regional power grid	0.5896
	Central China regional power grid	0.5721
	Southern China regional power grid	0.5089
	Northwest China regional power grid	0.6665
Data unit correctly expressed?	Yes - kg CO <sub>2</sub> /kWh	
Appropriate description?	Yes	
Source clearly referenced? (appropriate?)	The ex-ante source is 2019 annual emission reduction project of China's regional power grid baseline emission factors/35/	
Correct value provided?	Yes	
Has this value been verified?	Yes. The ex-ante value has been verified against the 2019 annual emission reduction project of China's regional power grid baseline emission factors/35/.	
Choice of data correctly justified?	Yes	
Measurement method correctly described?	The geographic area of the project involves six regional power grids in China, in which all instances operated in. According to AMS-III.C. version 16.0, TOOL 05 is used to calculate this parameter.	

	<p>Electricity consumed comes from grid, so the project belongs to scenario A: Electricity consumption from the grid in TOOL 05/29/.</p> <p>Project proponent chose option 1: Electricity consumption from the grid to calculate the parameter.</p> <p>And this has been calculated in the latest Baseline Emission Factors of China's Regional Power Grid/35/.</p> <p>Project vehicles of each instance are operated in different provinces, which are contained in different regional power grid. Therefore, the corresponding emission factors of regional power grid were used for calculation.</p>
Monitoring frequency correctly described?	Annually - The value will be updated according to the latest annual emission reduction project of China's regional power grid baseline emission factors.
QA/QC procedure correctly described?	N/A
Purpose of data?	PE <sub>y</sub> calculation

<b>TDL<sub>y</sub></b>	<b>Average technical transmission and distribution losses for providing electricity in the year y</b>
Title in line with Methodology?	Yes
Ex-ante Value	5.26% for 2021, 4.84% for 2022 and the rest of crediting year
Data unit correctly expressed?	Yes - percentage
Appropriate description?	Yes
Source clearly referenced? (appropriate?)	National Energy Administration released statistics on the country's power industry in 2022 and 2021/36/
Correct value provided?	Yes
Has this value been verified?	<p>Yes.</p> <p>According to the tool/29/, the project proponent selected option 1 "Use annual average value based on the most recent data available within the host country" for determination of the parameter.</p> <p>So based on checking the values from National Energy Administration released statistics on the country's power industry in 2022 and 2021/36/, it is confirmed that the values applied are correct.</p>
Choice of data correctly justified?	Yes
Measurement method correctly described?	National Energy Administration is publishing the rate of technical transmission and distribution losses for providing electricity on annual basis. Therefore, data will be updated on an annual basis based on published data by National Energy Administration or any other relevant literature or source.
Monitoring frequency correctly described?	Annually
QA/QC procedure correctly described?	N/A
Purpose of data?	PE <sub>y</sub> calculation

<b>NCV<sub>BL,I</sub></b>	<b>Net calorific value of fossil fuel consumed by baseline vehicle category I (J/g)</b>
Title in line with Methodology?	Yes
Ex-ante Value	42,500

Data unit correctly expressed?	Yes – J/g
Appropriate description?	Yes
Source clearly referenced? (appropriate?)	Default lower limit value from IPCC 2019 Volume 2 Energy, table 1.2 for gasoline/22/ is confirmed as the conservative default value. Via checking the information on the China automobile energy consumption inquiry website/57/, CTI confirmed that the energy category consumed by fossil fuel vehicles are mainly gasoline.
Correct value provided?	Yes
Has this value been verified?	Yes. Default lower limit value from latest version of IPCC is applied
Choice of data correctly justified?	Yes
Measurement method correctly described?	Default lower limit value from IPCC 2019/22/ and will be updated according to changed value issued by IPCC
Monitoring frequency correctly described?	updated according to changed value issued by IPCC
QA/QC procedure correctly described?	N/A for default value
Purpose of data?	BE <sub>y</sub> calculation

<b><i>EF<sub>BL,i</sub></i></b>	<b>Emission factor of fossil fuel consumed by baseline vehicle category i (g CO<sub>2</sub>/J)</b>
Title in line with Methodology?	Yes
Ex-ante Value	0.0000675
Data unit correctly expressed?	Yes –g CO <sub>2</sub> /J
Appropriate description?	Yes
Source clearly referenced? (appropriate?)	Default lower limit value of gasoline derived from IPCC 2019 Volume 2 Energy, table 1.4/22/ is confirmed as the conservative default value. Via checking the information on the China automobile energy consumption inquiry website/57/, CTI confirmed that the energy category consumed by fossil fuel vehicles are mainly gasoline.
Correct value provided?	Yes
Has this value been verified?	Yes. Default lower limit value from latest version of IPCC is applied
Choice of data correctly justified?	Yes
Measurement method correctly described?	Default lower limit value from IPCC 2019/22/ and will be updated according to changed value issued by IPCC
Monitoring frequency correctly described?	updated according to changed value issued by IPCC
QA/QC procedure correctly described?	N/A for default value
Purpose of data?	BE <sub>y</sub> calculation

### 3. Monitoring plan

The validation team has checked the monitoring plan of the Joint-PD-MR against the applied methodology and methodological tools.

The monitoring plan in the Joint-PD-MR has been designed to comply with the latest applicable version of the monitoring methodology (AMS-III.C. version 16.0) and all the relevant methodological tools.

### **Operational and management structure**

The Joint-PD-MR contains a diagram illustrating the Operation and Management structure of VCS monitoring to be implemented by the PP in order to implement the project activity. The project proponent leader will take the responsibility for the overall monitoring of the project including supervising of project operation and collecting and recording monitoring data, and there will be finance department is responsible for project related financial data, including lease contract, vehicle purchase record, etc, technical department is responsible for vehicle monitoring, maintenance, QA/QC, archiving and management of vehicle operation data. Besides, other departments under the coordination of project leader, cooperate with technical department to complete the monitoring related work. The organizational structure is considered sufficient to fulfil the monitoring requirements of the methodology and to ensure that emission reductions can be verified.

### **Monitoring system**

Data and parameters to be monitored as above tables are confirmed in line with the methodology and tool, also corresponding to the formula used for ER calculation.

For the monitoring system, especially the Intelligent Link Control Platform/8/, via on-site investigation, it is confirmed that the related monitoring system have been normally operated. Refer to above assessment to monitoring plan to each monitoring parameters and below section 4.1 for detail assessment of the actual monitoring system to each monitoring parameter which used in this monitoring period.

### **Data Management**

PP are responsible for data management. Technical department is responsible for vehicle monitoring, maintenance, QA/QC, archiving and management of vehicle operation data, and all monitoring data are recorded in the Intelligent Link Control Platform/8/.

All documents including monitoring plan, preparation documents, monitoring documents, project boundary monitoring, project activity monitoring, etc will be archived.

All the relevant data records will be kept by the Project owner during the crediting period and two years after the end of the crediting period or after the last issuance (whichever occurs later).

### **QA/QC procedure**

Authorities and responsibilities regarding monitoring plan have been described in section 6.3 of the Joint-PD-MR.

The platform of Intelligent Link will be maintained daily by the technical staff. A systematic internal review and correction process will be used to assure/control the quality. The technical staff of Intelligent Link are responsible for vehicle monitoring, maintenance, QA/QC, archiving and management of vehicle operation data once a month and cross check the data with Search Co2.

Error check routines will be established on site and if any unusual data found, technical staff will correct the data before share it with Search Co2. All parties are required to reply any questions raised within 30 days.

### **Emergency Procedure**

PP has taken some measures to avoid the damage or missing data, including training provided to vehicle renters/19/ and if any electric vehicle damage or missing data due to negligence and improper operation occurred, PP would repair on time, and provide maintenance services during leasing, and the corresponding emission reduction will be deducted in the most conservative way.

Based on interview with site personnel and VVB's local and sectoral knowledge, the measurement methods, recording procedures, monitoring system maintenance and QA/QC procedures described in the monitoring plan are feasible in China and can fully meet the requirements of the methodology. No difficulties are anticipated in implementing the operational and management structure nor the monitoring plan as a whole.

CAR 15, CAR 16, CAR 17 and CAR 18 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

### 3.5 Non-Permanence Risk Analysis

N/A

## 4 VERIFICATION FINDINGS

### 4.1 Accuracy of GHG Emission Reduction and Removal Calculations

#### 1. Assessment of Project implementation status during this monitoring period

By means of on-site inspection and documents review, CTI can ensure that during 1<sup>st</sup> monitoring period, the project was implemented in accordance with the Joint-PD-MR/1/.

This verification covers the period from 08-October-2021 to 30-April-2023 (including both days). 25,105 tCO<sub>2e</sub> emission reductions are achieved during this monitoring period.

Via on-site investigation, it is confirmed that during this monitoring period, the project run continuously as per the project descriptions and project program/4/.

For initial instances, 16,246 commercial electric vehicles leased and operated normally within the project area which has been confirmed by checking the Intelligent Link Control Platform/8/ and smartphone application/9/ and cross-check the vehicles purchase contract/10/ and Renting Contracts/11/.

The daily operation mileage and operation status of each vehicle are transferred from the T-BOX equipped in the project vehicles to the Intelligent Link Control Platform/8/ and maintained by the technical department of Intelligent Link.

No events or situations, which may impact the applicability of the applied methodology, occurred during this monitoring period.

On the basis of site visit and the reviewed project documentation it can be confirmed that the realized technology, the platform and APP, as well as the monitoring system, the project has been implemented and operated as applied monitoring methodology and monitoring plan described in the Joint-PD-MR and the monitoring system is fully functional to generate Verified Carbon Units (VCUs) without any double counting for this monitoring period from 08-October-2021 to 30-April-2023.

There are no any methodology deviations relevant.

In conclusion, the verification team was able to confirm that the project implementation is in accordance with the project description contained in the Joint-PD-MR/1/.

CAR 11 was raised and successfully closed. Refer to Appendix 4 for detail assessment.

#### 2. Assessment of Data and parameters available at validation

Via checking the MR, it is confirmed that all the ex ante data and parameters are same to the Joint-PD-MR which is verified as correct. Refer to section 3.4.8 for the detail assessment of ex ante parameters.

#### 3. Assessment of Data and parameters monitored

During the verification all relevant monitoring parameters (as listed in section 3.4.8 of this report) have been verified with regard to the

- (i) appropriateness of the applied measurement / determination method,
- (ii) the correctness of the values applied for ER calculation,

(iii) the accuracy, and applied QA/QC measures.

The monitoring results as well as the verification procedure are described parameter-wise in the below tables,

<b><math>DD_{i,y}</math></b>	<b>Annual average distance travelled by project vehicle category i in the year y (km)</b>					
Title in line with Methodology?	Yes					
Value applied	Project activity instance	Vehicle categories	2021	2022	2023	
	Truck instance	Light truck	2,073	17,784	13,215	
		Mini truck	435	6,563	9,058	
	Van instance	Light van	1,539	14,792	9,739	
		Minivan	796	17,067	8,536	
Data unit correctly expressed?	Yes - km					
Appropriate description?	Yes					
Correct value provided?	Yes					
Source of Data	Yes. The monitoring data derived from the Intelligent Link Control Platform/8/ All the vehicles included in the initial instances have been monitored. Each project vehicle is equipped with T-BOX, which can collect and transfer the operation mileage data to the Intelligent Link Control Platform/8/.					
Measurement equipment	Intelligent Link Control Platform					
Monitoring frequency	Annually					
QA/QC procedure correctly applied?	Yes The platform has been maintained daily by the technical staff of PP. And the project proponent leader documented the mileage data and storage it. The total annual mileage is summed of monthly mileage of each category project vehicles, then is divided by the total annual number of operated project vehicles, then the annual average distance travelled by project vehicle category i in the year y was obtained.					
Purpose of data?	BE <sub>y</sub> calculation					

<b><math>N_{i,y}</math></b>	<b>Number of project vehicle in operation in year y</b>					
Title in line with Methodology?	Yes					
Value applied	Project activity instance	Vehicle categories	2021	2022	2023	
	Truck instance	Light truck	1,036	5,289	5,843	
		Mini truck	46	1,391	1,691	
	Van instance	Light van	338	2,855	3,061	
		Minivan	725	3,931	5,651	
Data unit correctly expressed?	Number					
Appropriate description?	Yes					
Correct value provided?	Yes					
Source of Data	Yes. The monitoring data derived from the Intelligent Link Control Platform/8/ All the vehicles included in the initial instances have been monitored.					

	Each project vehicle is equipped with T-BOX, which can collect and transfer if the project vehicle is operation or not data to the Intelligent Link Control Platform/8/.
Measurement equipment	Intelligent Link Control Platform
Monitoring frequency	Monthly
QA/QC procedure correctly applied?	Yes The platform has been maintained daily by the technical staff of PP. And the project proponent leader documented the mileage data and storage it. Data has been cross-checked with the total signed rental contracts/11/ during this monitoring period, CTI confirmed that the figures of total signed rental contracts is same to the number of project vehicle in operation. So the values in MR is verified as correct and reasonable.
Purpose of data?	BE <sub>y</sub> and PE <sub>y</sub> calculation

<b>SEC<sub>PJ,km,l,y</sub></b>	<b>Specific electricity consumption per km per project vehicle category i in year y</b>																																																			
Title in line with Methodology?	Yes																																																			
Value applied	<table border="1"> <thead> <tr> <th>Project activity instance</th> <th colspan="2">Truck instance</th> <th colspan="2">Van instance</th> </tr> <tr> <th>Vehicle categories</th> <th>Light truck</th> <th>Mini truck</th> <th>Light van</th> <th>Minivan</th> </tr> </thead> <tbody> <tr> <td>Value provided by manufacturers</td> <td>0.2292</td> <td>0.2377</td> <td>0.2068</td> <td>0.1521</td> </tr> <tr> <td rowspan="3">Monitoring Value</td> <td>2021</td> <td>0.3527</td> <td>0.2033</td> <td>0.2485</td> <td>0.1390</td> </tr> <tr> <td>2022</td> <td>0.3265</td> <td>0.2318</td> <td>0.2138</td> <td>0.1602</td> </tr> <tr> <td>2023</td> <td>0.3443</td> <td>0.2609</td> <td>0.2068</td> <td>0.1651</td> </tr> <tr> <td rowspan="3">Value used for ER calculation</td> <td>2021</td> <td>0.3527</td> <td>0.2377</td> <td>0.2485</td> <td>0.1521</td> </tr> <tr> <td>2022</td> <td>0.3265</td> <td>0.2377</td> <td>0.2138</td> <td>0.1602</td> </tr> <tr> <td>2023</td> <td>0.3443</td> <td>0.2609</td> <td>0.2068</td> <td>0.1651</td> </tr> </tbody> </table>					Project activity instance	Truck instance		Van instance		Vehicle categories	Light truck	Mini truck	Light van	Minivan	Value provided by manufacturers	0.2292	0.2377	0.2068	0.1521	Monitoring Value	2021	0.3527	0.2033	0.2485	0.1390	2022	0.3265	0.2318	0.2138	0.1602	2023	0.3443	0.2609	0.2068	0.1651	Value used for ER calculation	2021	0.3527	0.2377	0.2485	0.1521	2022	0.3265	0.2377	0.2138	0.1602	2023	0.3443	0.2609	0.2068	0.1651
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Data unit correctly expressed?	Yes - kWh/km																																																			
Appropriate description?	Yes																																																			
Correct value provided?	Yes																																																			
Source of Data	Yes. The monitoring data derived from the Intelligent Link Control Platform/8/ The electricity consumption of all project vehicles included in the initial instances have been monitored. Each project vehicle is equipped with T-BOX, which can collect and transfer state of charge data of each vehicle to the Intelligent Link Control Platform/8/. Therefore the electricity consumption per km per project vehicle can be obtained by the record in the Intelligent Link Control Platform, then the electricity consumption per km per project vehicle can be calculated by the platform.																																																			

	<p>The electricity consumption per kilometer is calculated by the mileage of each type of project vehicle and the power consumption in the corresponding time period by the platform. The average value was used as the specific electricity consumption of each project vehicles category.</p> <p>The mileage and power consumption data of each vehicle will be exported from the platform. The average value of vehicles' electricity consumption per km is obtained by total power consumption divided by total mileage.</p>
Measurement equipment	Intelligent Link Control Platform
Monitoring frequency	Monthly
QA/QC procedure correctly applied?	<p>Yes</p> <p>The platform has been maintained daily by the technical staff of PP. And the project proponent leader documented the mileage data and storage it.</p> <p>Data has been cross-checked against vehicle specifications (kWh/km) for urban conditions provided by the manufacturers/12/, CTI confirmed that the higher values has been applied in MR for ER calculation which is verified as in line with the applied methodology and conservative.</p>
Purpose of data?	PE <sub>y</sub> calculation

<b><i>EF<sub>elect,y</sub></i></b>	<b>CO<sub>2</sub> emission factor of electricity consumed by project vehicle category i in year y (kg CO<sub>2</sub>/kWh)</b>															
Title in line with Methodology?	Yes															
Value applied	<table border="1"> <thead> <tr> <th><b>National power grids</b></th> <th><b><i>EF<sub>elect,y</sub></i></b></th> </tr> </thead> <tbody> <tr> <td>Northeast China regional power grid</td> <td>0.6613</td> </tr> <tr> <td>North China regional power grid</td> <td>0.7119</td> </tr> <tr> <td>East China regional power grid</td> <td>0.5896</td> </tr> <tr> <td>Central China regional power grid</td> <td>0.5721</td> </tr> <tr> <td>Southern China regional power grid</td> <td>0.5089</td> </tr> <tr> <td>Northwest China regional power grid</td> <td>0.6665</td> </tr> </tbody> </table> <p>During this monitoring period, for the initial instances, Project vehicles of each instance are operated in different provinces, which are contained in different regional power grid. Therefore, the corresponding emission factors of regional power grid were used for calculation.</p>	<b>National power grids</b>	<b><i>EF<sub>elect,y</sub></i></b>	Northeast China regional power grid	0.6613	North China regional power grid	0.7119	East China regional power grid	0.5896	Central China regional power grid	0.5721	Southern China regional power grid	0.5089	Northwest China regional power grid	0.6665	
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Southern China regional power grid	0.5089															
Northwest China regional power grid	0.6665															
Data unit correctly expressed?	Yes - kg CO <sub>2</sub> /kWh															
Appropriate description?	Yes															
Correct value provided?	Yes															
Source of Data	2019 annual emission reduction project of China's regional power grid baseline emission factors/35/ which is the latest available version issued by China DNA															
Measurement equipment	N/A															
Monitoring frequency	Annually - The value will be updated according to the latest annual emission reduction project of China's regional power grid baseline emission factors issued by China DNA															
QA/QC procedure correctly applied?	N/A															
Purpose of data?	PE <sub>y</sub> calculation															

<b><i>TDL<sub>y</sub></i></b>	<b>Average technical transmission and distribution losses for providing electricity in the year y</b>
-------------------------------	---

Title in line with Methodology?	Yes
Value applied	2021: 5.26% 2022: 4.84% 2023: 4.84%
Data unit correctly expressed?	Yes - percentage
Appropriate description?	Yes
Correct value provided?	Yes
Source of Data	National Energy Administration released statistics on the country's power industry in 2022 and 2021/36/ The value for 2023 will be published in the next year, so when calculating the emission reductions from January to April in 2023, the TDL <sub>y</sub> of 2022 was applied.
Measurement equipment	N/A
Monitoring frequency	Annually checking the value issued by National Energy Administration
QA/QC procedure correctly applied?	N/A
Purpose of data?	PE <sub>y</sub> calculation

<b>NCV<sub>BL,i</sub></b>	<b>Net calorific value of fossil fuel consumed by baseline vehicle category i (J/g)</b>
Title in line with Methodology?	Yes
Value applied	42,500
Data unit correctly expressed?	Yes - J/g
Appropriate description?	Yes
Correct value provided?	Yes
Source of Data	Default lower limit value from IPCC 2019 Volume 2 Energy, table 1.2/22/
Measurement equipment	N/A
Monitoring frequency	Updated according to changed value issued by IPCC
QA/QC procedure correctly applied?	N/A
Purpose of data?	PE <sub>y</sub> calculation

<b>EF<sub>BL,i</sub></b>	<b>Emission factor of fossil fuel consumed by baseline vehicle category i (g CO<sub>2</sub>/J)</b>
Title in line with Methodology?	Yes
Value applied	0.0000675
Data unit correctly expressed?	Yes -g CO <sub>2</sub> /J
Appropriate description?	Yes
Correct value provided?	Yes
Source of Data	Default lower limit value from IPCC 2019 Volume 2 Energy, table 1.4/22/
Measurement equipment	N/A
Monitoring frequency	Updated according to changed value issued by IPCC
QA/QC procedure correctly applied?	N/A
Purpose of data?	PE <sub>y</sub> calculation

CAR 19, CAR 20 and CAR 21 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

#### 4. Assessment of GHG emission reductions Quantity

During the verification the calculation of GHG emission reductions has been checked. In detail the following has been verified:

**Baseline Emissions Calculation Assessment:**

The formula used for the determination of baseline emissions is consistent with the Joint-PD-MR and methodologies AMS-III.C. (version 16.0)/21/:

Based on the above assessment of the values of ex-ante determined parameters in section 3.4.8 and assessment of the values of monitored parameters for this monitoring period in section 4.1, the baseline emissions for this monitoring period are calculated as below,

$$BE_y = \sum_i EF_{BL,km,i} \times DD_{i,y} \times N_{i,y} \times 10^{-6}$$

$$EF_{BL,km,i} = SFC_i \times NCV_{BL,i} \times EF_{BL,i} \times IR^t$$

$$\begin{aligned} \text{Then } BE_y &= \sum_i SFC_i \times NCV_{BL,i} \times EF_{BL,i} \times IR^t \times DD_{i,y} \times N_{i,y} \times 10^{-6} \\ &= 84,868 \text{ tCO}_2\text{e} \end{aligned}$$

**Project Emissions Calculation Assessment:**

Based on the above assessment of the values of ex-ante determined parameters and monitored parameters for this monitoring period, the project emissions for this monitoring period are calculated as below,

$$PE_y = \sum_i EF_{PJ,km,i,y} \times DD_{i,y} \times N_{i,y}$$

$$EF_{PJ,km,i,y} = \sum_i SEC_{PJ,km,i,y} \times \frac{EF_{elect,y}}{1 - TDL_y} \times 10^{-3}$$

$$\begin{aligned} \text{Then } PE_y &= \sum_i SEC_{PJ,km,i,y} \times \frac{EF_{elect,y}}{1 - TDL_y} \times 10^{-3} \times DD_{i,y} \times N_{i,y} \\ &= 59,763 \text{ tCO}_2\text{e} \end{aligned}$$

**Leakage Emission Calculation Assessment:**

As per the methodology, leakage (LE<sub>y</sub>) is zero. LE<sub>y</sub> = 0 tCO<sub>2</sub>e

**Emission Reduction Calculation Assessment:**

As per the applied methodology and above assessment, the emission reductions achieved by the project activity are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Therefore, during this monitoring period, the emission reduction is calculated as below tables,

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)
08-October-2021~ 31-December-2021	804	605	0	199
01-January-2022~ 31-December-2022	46,672	32,059	0	14,613
01-January-2023~ 30-April-2023	37,392	27,099	0	10,293

Total	84,868	59,763	0	25,105
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CAR 22 and CAR 23 were raised and successfully closed. Refer to Appendix 4 for detail assessment.

## 4.2 Quality of Evidence to Determine GHG Emission Reductions and Removals

Refer to above sections 3.4.8 and 4.1 for the detail assessment of each monitoring parameter and Appendix 3 for the supporting evidence used to determine the GHG emission reductions.

For each reported data, the evidence is provided and verified as sufficient and quality is appropriate. Also, the cross-checks have been performed on the reported data with different source of evidence. The information flow from data generation and aggregation, to recording, calculation and final transposition into the monitoring report has been assessed by CTI for each parameter and also the calibration have been conducted as per the frequency of monitoring equipment defined in the Joint-PD-MR and national regulation.

Therefore, it is concluded that the evidence provided are verified as sufficient and quality is appropriate and thus the evidence can be used to determine the GHG reductions and removals for this monitoring period.

# 5 VALIDATION AND VERIFICATION CONCLUSION

Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd. has commissioned the CTI to carry out the Verified Carbon Standard (VCS) joint validation and 1<sup>st</sup> periodic verification of the project activity Grouped Commercial Electric Vehicles Project of Intelligent Link (VCS ID 4335), for the monitoring period from 08-October-2021 to 30-April-2023, with regard to the relevant requirements for VCS Standard Version 4.4.

Based on the reviewing the documented evidence and by an on-site assessment, CTI can confirm that:

- the baseline scenario is correctly defined as per the applied methodology and relate tools;
- the project is additional;
- all data and information used for ex-ante calculation of emission reductions is of projected and/or hypothetical nature;
- the monitoring plan in the validated Joint-PD-MR is as per the applied baseline and monitoring methodology.
- the project has been implemented and operated as per the VCS Joint-PD-MR;
- the project complies with the validation and verification criteria for projects set out in VCS Standard Version 4.4;
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS requirement and AMS-III.C. (version 16.0);
- the monitoring is in place as per the applied baseline and monitoring methodology AMS-III.C. (version 16.0);
- the monitoring complies with the monitoring plan in the validated PD;

It is certified that the GHG emission reductions from the project during the monitoring period amount as follows:

Verification period: From 08-October-2021 to 30-April-2023

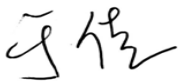
Verified GHG emission reductions and removals in the above verification period by vintage is

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO <sub>2</sub> e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)
08-October-2021~ 31-December-2021	804	605	0	199
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01-January-2023~ 30-April-2023	37,392	27,099	0	10,293
<b>Total</b>	<b>84,868</b>	<b>59,763</b>	<b>0</b>	<b>25,105</b>

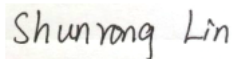
Comparison with ex ante GHG emission reductions and removals is

Year	Ex-ante emissions reductions/removals	Achieved emissions reductions/removals	Percent difference	Justification for the difference
------	---------------------------------------	--	--------------------	----------------------------------

08-October-2021~ 31-December-2021	199	199	0%	There is no difference between the ex-ante estimated value and actual value is due to the project apply the joint validation and verification, so for ex-ante ER estimation, PP has applied the actual monitoring value from platform for calculation.
01-January-2022~ 31-December-2022	14,613	14,613	0%	
01-January-2023~ 30-April-2023	10,293	10,293	0%	
<b>Total</b>	<b>25,105</b>	<b>25,105</b>	<b>0%</b>	



Yu Jia  
 CTI Certification  
 Verification Team Leader  
 15-December-2023



Lin Shunrong  
 CTI Certification  
 Technical Reviewer  
 15-December-2023

# APPENDIX 1: ABBREVIATIONS

Abbreviations	Full texts
AMS	Approved Small-scale Methodology
APP	Application
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CCER	China Certified Emission Reduction
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CH <sub>4</sub>	Methane
CL	Clarification Request
CO <sub>2</sub>	Carbon dioxide
CO <sub>2e</sub>	Carbon dioxide equivalent
DCS	Distributed Control System
DverR	Draft Verification Report
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
NWCPG	Northwest China Power Grid
PA	Project Activity
PDD	Project Design Document
PP	Project Participant
PRC	Post Registration Change
QA/QC	Quality Assurance / Quality Control
SOC	State of Charge
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
XLS	Emission Reduction Calculation Spread Sheet

# APPENDIX 2: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

**Ms. Jia Yu**

Satisfies the requirements of competence management system of CTI Certification, and is hereby appointed as:

Qualification						
Status	GHG Auditor	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date	√	√	√	√	-	-

Scope	Technical Area
SS 1: Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation
	TA 1.2: Energy generation from renewable energy sources
SS 3: Energy demand	TA 3.1: Energy demand
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater
	TA 13.2: Manure

This appointment is valid for 3 years from its date of approval below and is bound by internal requirements of management system of the Certification Body of CTI.

Approved by:

Wu Lin

Wu LIN

Technical Competent Manager

Shenzhen, 25/10/2022

## Ms. Jun WANG

Satisfies the requirements of competence management system of CTI Certification, and is hereby appointed as:

Qualification						
Status	GHG Auditor	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date	-	-	-	-	-	√

Scope	Technical Area
SS 2: Energy distribution	TA 2.1: Electricity distribution
SS 3: Energy demand	TA 3.1: Energy demand
SS 7: Transport	TA 7.1: Transport

This appointment is valid for 3 years from its date of approval below and is bound by internal requirements of management system of the Certification Body of CTI.

Approved by:

*Wu Lin*

Wu LIN

Technical Competent Manager

Shenzhen, 01/01/2021

## Ms. Shunrong LIN

Satisfies the requirements of competence management system of CTI Certification, and is hereby appointed as:

Qualification						
Status	GHG Auditor	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date	√	√	√	√	√	√

Scope	Technical Area
SS 1: Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources
SS 3: Energy demand	TA 3.1: Energy demand
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater
	TA 13.2: Manure
SS 14: Afforestation and reforestation	TA 14.1: Afforestation and reforestation
SS 15: Agriculture	TA 15.1: Agriculture

This appointment is valid for 3 years from its date of approval below and is bound by internal requirements of management system of the Certification Body of CTI.

Approved by: Wu LIN *Wu Lin*

Technical Competent Manager

Shenzhen, 25/10/2022

## Mr. Jian ZHAO

Satisfies the requirements of competence management system of CTI Certification, and is hereby appointed as:

Qualification						
Status	GHG Auditor	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date	-	-	-	-	-	√

Scope	Technical Area
SS 7: Transport	TA 7.1: Transport

This appointment is valid for 3 years from its date of approval below and is bound by internal requirements of management system of the Certification Body of CTI.

Approved by:

*Wu Lin*

Wu LIN

Technical Competent Manager

Shenzhen, 01/07/2022

# APPENDIX 3: DOCUMENTS REVIEWED OR REFERENCED

No	Author	Title	References to the document	Provider
1.	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.	Joint-PD-MR	Monitoring Report of Grouped Commercial Electric Vehicles Project of Intelligent Link <ul style="list-style-type: none"> <li>• Draft Version 01, dated 02-June-2023</li> <li>• Final Version 02, dated 05-September-2023</li> <li>• Final Version 03, dated 11-December-2023</li> </ul>	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.
2.	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.	Emission Reduction Calculation Sheets	Emission Reduction Calculation sheet (related to ex-ante) <ul style="list-style-type: none"> <li>• Draft Version 01, dated 02-June-2023</li> <li>• Final Version 02, dated 29-August-2023</li> <li>• Final Version 03, dated 12-December-2023</li> </ul> Emission Reduction Calculation sheet (related to this monitoring period) <ul style="list-style-type: none"> <li>• Draft Version 01, dated 02-June-2023</li> <li>• Final Version 02, dated 29-August-2023</li> <li>• Final Version 03, dated 11-December-2023</li> </ul>	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.
3.	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.	NPV calculation sheet	NPV calculation sheet of this project for investment barrier analysis <ul style="list-style-type: none"> <li>• Draft Version 01, dated 02-June-2023</li> <li>• Final Version 02, dated 05-September-2023</li> <li>• Final Version 03, dated 15-December-2023</li> </ul>	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.
4.	PP	Project Program	Project Program of the Project	Project Owner
5.	Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.	KML	KML file of the project area	Project Owner
6.	Ministry of Transport of involved cities	Road transport permit	Road transport permit issued to project owner	Project Owner

No	Author	Title	References to the document	Provider
7.	Hangzhou High-tech Industrial Development Zone (Binjiang) Market supervision and Administration Shanghai industrial and commercial bureau	Business License	Business License of Zhejiang Green Intelligent Link Co., Ltd. and Search Co2 (Shanghai) Environmental Science & Technology Co. Ltd.	Project Owner
8.	PP	Intelligent Link Control Platform	On-line Intelligent Link Control Platform created by PP	Project Owner
9.	PP	Smartphone application	Smartphone application user interface	Project Owner
10.	PP and Zhejiang Geely new energy Commercial Vehicle Group Co., Ltd.	Vehicles purchase contract	Vehicles purchase contract signed with vehicle manufacturer	Project Owner
11.	PP and individual driver or regional operation companies	Renting contracts	Renting contract signed with individual driver and companies	Project Owner
12.	Zhejiang Geely new energy Commercial Vehicle Group Co., Ltd.	Manufacturer specifications	Manufacturer specifications of four types of electric vehicles and Battery used in the project	Project Owner
13.	PP	Quality Assurance Instructions	Quality Assurance Instructions for Replacing Batteries of Intelligent Link	Project Owner
14.	Local stakeholders	Local stakeholder consultation records	22 filled questionnaires completed on 10-August-2021	Project Owner
15.	Local stakeholders	Local communication consultation records for this MP	15 filled questionnaires completed on 12-June-2023	Project Owner
16.	PP	Staff List	Staff List of the staffs	Project Owner
17.	Zhejiang Green Intelligent Link Co., Ltd. and employments	Labor contracts	Labor contracts of the staffs	Project Owner
18.	PP	Fact sheet of PM2.5	Fact sheet of PM2.5 calculation	Project Owner
19.	PP	Training records	Training records including operation training, charging training, and driving skills training	VVB
20.	Project Owner	Declaration	Declaration of no double counting and not involved in other GHG scheme dated on 19-May-2023	Project Owner
21.	UNFCCC	Applied methodology	Approved CDM methodology AMS-III.C.: "Emission reductions by electric and hybrid vehicles" (version 16.0)	UNFCCC Website

No	Author	Title	References to the document	Provider
22.	Intergovernmental Panel on Climate Change	IPCC Guidelines	2019 Refinement to 2006 IPCC Guidelines for National Greenhouse Gas Inventories	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>
23.	Ministry of Industry and Information Technology of China	Energy-saving and new energy vehicle Yearbook	Energy-saving and new energy vehicle Yearbook 2022	Public Source
24.	HU Yuhan, JIN Yana ZHANG Shiqiu	Climate, Health Impacts, and Social Costs of Electric Vehicles in China: A Cost-Benefit Analysis	Literature: Acta Scientiarum Naturalium Universitatis Pekinensis, Vol. 57, No. 5 (Sept. 2021)	Public source
25.	On-site Audit Team	Nameplates of different vehicles	Photographs of nameplates of different vehicles taken by validation and verification team during the on-site validation and verification	On-site Audit Team
26.	VERRA	Template	VCS-Joint-Project-Description-Monitoring-Report-Template-v4.2	VERRA
27.	VERRA	Registration and Issuance Process	Registration and Issuance Process version 4.3	VERRA
28.	UNFCCC	Standard	Standard "Applicability of sectoral scopes version 01.0"	UNFCCC
29.	UNFCCC	Methodological tool	Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation" (version 03.0)	UNFCCC
30.	UNFCCC	Methodological tool	Demonstration of Additionality of Small-scale Project Activities (version 13.1)	UNFCCC
31.	VERRA	VCS Program Definitions	VCS Program Definitions, v4.3	VCS website
32.	VERRA	VCS Program Guide	VCS Program Guide, v4.3	VCS website
33.	VERRA	VCS Standard	VCS Standard, v4.4	VCS website
34.	IPCC	IPCC publications	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Website
35.	China DNA	2019 annual emission reduction project of China's regional power grid baseline emission factors	<a href="https://www.mee.gov.cn/ywgz/ydqhbh/wsqtz/202012/WO20201229610353340851.pdf">https://www.mee.gov.cn/ywgz/ydqhbh/wsqtz/202012/WO20201229610353340851.pdf</a>	Website
36.	National Energy Administration	National Energy Administration released statistics on the country's power industry in 2022 and 2021	<a href="http://www.nea.gov.cn/2022-01/26/c_1310441589.htm">http://www.nea.gov.cn/2022-01/26/c_1310441589.htm</a> <a href="http://www.nea.gov.cn/2023-01/18/c_1310691509.htm">http://www.nea.gov.cn/2023-01/18/c_1310691509.htm</a>	Website
37.	Ministry of Ecology and Environment of China	China cap & trade scheme	<a href="http://www.mee.gov.cn/xxgk2018/xxgk/xxgk02/202101/t20210105_816131.html">http://www.mee.gov.cn/xxgk2018/xxgk/xxgk02/202101/t20210105_816131.html</a>	Public Website

No	Author	Title	References to the document	Provider
38.	Ministry of Ecology and Environment of China	Enforced company list	<a href="http://mee.gov.cn/xxgk2018/xxgk/xxgk03/202012/W020201230736907682380.pdf">http://mee.gov.cn/xxgk2018/xxgk/xxgk03/202012/W020201230736907682380.pdf</a>	Public Website
39.	China CER Exchange Info-platform	China CER	<a href="http://cdm.ccchina.org.cn/cce.r.aspx">http://cdm.ccchina.org.cn/cce.r.aspx</a>	Website
40.	GS	Gold Standard	<a href="http://www.goldstandard.org/">http://www.goldstandard.org/</a>	Website
41.	UNFCCC	UNFCCC	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	Website
42.	VCS	VCS	<a href="https://verra.org/project/vcs-program/">https://verra.org/project/vcs-program/</a>	Website
43.	The people's government of China	Chinese law "Environmental Impact Assessment Law of the People's Republic of China"	<a href="http://www.npc.gov.cn/npc/c30834/201901/9692c9d1b559456ab0eda0d2969f1d0d.shtml">http://www.npc.gov.cn/npc/c30834/201901/9692c9d1b559456ab0eda0d2969f1d0d.shtml</a>	Website
44.	National enterprise credit inquiry system	Enterprise credit report of PP	<a href="https://www.qcc.com/">https://www.qcc.com/</a>	Website
45.	General Office of the State Council	Notice on the Issuance of the New Energy Vehicle Industry Development Plan (2021-2035) (General Office of the State Council [2020] No.39)	<a href="https://wap.miit.gov.cn/cms_files/filemanager/1226211233/attach/20224/73d4bf7a9abf4e1994b0fd211986641f.pdf">https://wap.miit.gov.cn/cms_files/filemanager/1226211233/attach/20224/73d4bf7a9abf4e1994b0fd211986641f.pdf</a>	Website
46.	Zhejiang Provincial Development and Reform Commission	Notice on the Issuance of Zhejiang Province Intelligent Vehicle Innovation and Development Plan (2020-2025) (Zhejiang Development and Reform Commission [2019] No.449)	<a href="http://www.china-nengyuan.com/news/china-nengyuan_news_147814.pdf">http://www.china-nengyuan.com/news/china-nengyuan_news_147814.pdf</a>	Website
47.	The people's government of Zhejiang Province	Notice on the Issuance of the 14 <sup>th</sup> Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development (Zhejiang Development and Reform Commission [2021] No.107)	<a href="https://www.zj.gov.cn/art/2021/4/22/art_1229203592_2270218.html">https://www.zj.gov.cn/art/2021/4/22/art_1229203592_2270218.html</a>	Website
48.	Ministry of Industry and Information Technology of China	Interim Measures for the Management of New Energy Vehicle Power Battery Recycling Regulating	<a href="http://www.gov.cn/xinwen/2018-02/26/content_5268875.htm">http://www.gov.cn/xinwen/2018-02/26/content_5268875.htm</a>	Website

No	Author	Title	References to the document	Provider
49.	Ministry of Industry and Information Technology of China	New Energy Vehicle Waste Power Battery Comprehensive Utilization Industry Standard Conditions	<a href="https://wap.miit.gov.cn/cms_files/filemanager/oldfile/miit/n1146295/n1652858/n1652930/n4509607/c5360250/p/5360259.pdf">https://wap.miit.gov.cn/cms_files/filemanager/oldfile/miit/n1146295/n1652858/n1652930/n4509607/c5360250/p/5360259.pdf</a>	Website
50.	Ministry of Industry and Information Technology of China	Comprehensive Utilization of Used Power Batteries for New Energy Vehicles Interim Measures for The Administration of Industry Standard Announcements	<a href="https://wap.miit.gov.cn/cms_files/filemanager/oldfile/miit/n1146295/n1652858/n1652930/n4509607/c5360250/p/5360260.pdf">https://wap.miit.gov.cn/cms_files/filemanager/oldfile/miit/n1146295/n1652858/n1652930/n4509607/c5360250/p/5360260.pdf</a>	Website
51.	Ministry of Transport of China	Comprehensive transport services "14th Five-Year" development plan	<a href="https://view.officeapps.live.com/op/view.aspx?src=http%3A%2F%2Fwww.gov.cn%2Fzhengce%2Fzhengceku%2F2021-11%2F18%2F5651656%2Ffiles%2F5ed9e2cdf80042fdb26535314dc62ffb.doc&amp;wdOrigin=BROWSELINK">https://view.officeapps.live.com/op/view.aspx?src=http%3A%2F%2Fwww.gov.cn%2Fzhengce%2Fzhengceku%2F2021-11%2F18%2F5651656%2Ffiles%2F5ed9e2cdf80042fdb26535314dc62ffb.doc&amp;wdOrigin=BROWSELINK</a>	Website
52.	The people's government of China	Proportion of new energy vehicles	<a href="http://www.gov.cn/xinwen/2022-01/12/content_5667715.htm">http://www.gov.cn/xinwen/2022-01/12/content_5667715.htm</a>	Website
53.	National Standard	GB 20997-2015 Limits of fuel consumption for light-duty commercial vehicles	<a href="http://c.gb688.cn/bzgk/gb/showGb?type=online&amp;hcno=9CA804A15C0D4177BF63C1D3F5B90E4F">http://c.gb688.cn/bzgk/gb/showGb?type=online&amp;hcno=9CA804A15C0D4177BF63C1D3F5B90E4F</a>	Website
54.	National Standard	GB 30510-2018 Fuel consumption limits for heavy-duty commercial vehicles	<a href="http://c.gb688.cn/bzgk/gb/showGb?type=online&amp;hcno=9C036161B1CEAFDA5225B7184A67229B">http://c.gb688.cn/bzgk/gb/showGb?type=online&amp;hcno=9C036161B1CEAFDA5225B7184A67229B</a>	Website
55.	National Standard	GB/T 4754-2017	<a href="https://www.mca.gov.cn/images3/www/file/201711/1509495881341.pdf">https://www.mca.gov.cn/images3/www/file/201711/1509495881341.pdf</a>	Website
56.	Bank of China	2021 corporate loan interest rate	<a href="https://www.gov.cn/xinwen/2022-01/19/content_5669202.htm">https://www.gov.cn/xinwen/2022-01/19/content_5669202.htm</a>	Website
57.	Ministry of Industry and Information Technology of the People's Republic of China	China automobile energy consumption inquiry website	<a href="https://yhgscx.miit.gov.cn/fuel-consumption-web/mainPage">https://yhgscx.miit.gov.cn/fuel-consumption-web/mainPage</a>	Website
58.	UNFCCC	Methodological tool	"Tool to calculate the emission factor for an electricity system" (version 07.0)	UNFCCC
59.	UNFCCC	Methodological tool	"Investment analysis" (Version 13.0)	UNFCCC
60.	Equipment Industry Development Center, Ministry of	Road motor vehicle production enterprises and product	<a href="http://app.miit-eidc.org.cn/miitxxgk/gonggao_xxgk/index.html">http://app.miit-eidc.org.cn/miitxxgk/gonggao_xxgk/index.html</a>	Public website

No	Author	Title	References to the document	Provider
	Industry and Information Technology	information inquiry system		
61.	PP	Financial data of PP	Financial data of PP actually occurred during 2021 to 2023	PP
62.	National Bureau of Statistics of China	Wages of employed personnel in China	<a href="https://data.stats.gov.cn/easyquery.htm?cn=C01">https://data.stats.gov.cn/easyquery.htm?cn=C01</a>	Public website
63.	National Government	VAT	<a href="https://www.gov.cn/zhengce/zhengceku/2019-10/17/content_5441139.htm">https://www.gov.cn/zhengce/zhengceku/2019-10/17/content_5441139.htm</a>	Public website
64.	National Government	Income Tax	<a href="https://www.chinatax.gov.cn/cinatax/n810341/n810825/c101434/c28479830/content.html">https://www.chinatax.gov.cn/cinatax/n810341/n810825/c101434/c28479830/content.html</a>	Public website
65.	National Government	The city maintenance and construction tax	<a href="https://www.chinatax.gov.cn/cinatax/n365/c5155445/content.html">https://www.chinatax.gov.cn/cinatax/n365/c5155445/content.html</a>	Public website
66.	National Government	Education surtax rate	<a href="https://www.gov.cn/zhengce/202203/content_3338045.htm">https://www.gov.cn/zhengce/202203/content_3338045.htm</a>	Public website
67.	Public source	Public information of the operation of electric vehicles	<a href="https://www.sohu.com/a/454921780_120044219">https://www.sohu.com/a/454921780_120044219</a>	Public website
68.	National Statistic Bureau	Annual China automobile industry Operation report from year 2017 to 2021	<a href="http://lwzb.stats.gov.cn/pub/lwzb/gzdt/201804/t20180428_4865.html">http://lwzb.stats.gov.cn/pub/lwzb/gzdt/201804/t20180428_4865.html</a> <a href="http://lwzb.stats.gov.cn/pub/lwzb/gzdt/201905/t20190521_5104.html">http://lwzb.stats.gov.cn/pub/lwzb/gzdt/201905/t20190521_5104.html</a> <a href="http://lwzb.stats.gov.cn/pub/lwzb/gzdt/202005/W020200528770641948487.pdf">http://lwzb.stats.gov.cn/pub/lwzb/gzdt/202005/W020200528770641948487.pdf</a> <a href="http://lwzb.stats.gov.cn/pub/lwzb/tzgg/202107/W020210723348607396983.pdf">http://lwzb.stats.gov.cn/pub/lwzb/tzgg/202107/W020210723348607396983.pdf</a> <a href="http://lwzb.stats.gov.cn/pub/lwzb/tzgg/202205/W020220511403033109667.pdf">http://lwzb.stats.gov.cn/pub/lwzb/tzgg/202205/W020220511403033109667.pdf</a>	Public website
69.	World Resources Institute	Vehicle purchase unit price public source	<a href="https://wri.org.cn/insights/5-keys-zero-emission-logistic-vehicles-promotion">https://wri.org.cn/insights/5-keys-zero-emission-logistic-vehicles-promotion</a>	Public website
70.	Product price of truck	Public source of traditional fuel vehicles price	<a href="https://product.360che.com/">https://product.360che.com/</a>	Public website

# APPENDIX 4: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS

Table 1. Remaining FAR from validation and/or previous verification

<b>FAR ID</b>	N/A	<b>Section no.</b>		<b>Date:</b>
<b>Description of FAR</b>				
<b>Project participant response</b>				<b>Date:</b>
<b>Documentation provided by project participant</b>				
<b>VVB assessment</b>				<b>Date:</b>

Table 2. CL from this verification

<b>CL ID</b>	01	<b>Section no.</b>	1.3	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 1.3, PP does not provide the clarification of how the project is eligible to section 2.1 and 3.1.1-3.1.9 in VCS standard 4.4.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 1.3, which is specified in JPM.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the demonstration of project is eligible to section 2.1 and 3.1.1-3.1.9 in VCS standard 4.4 has been added. Refer to section 3.1 of this report for detail assessment of the eligibility. CL 01 is closed.				

<b>CL ID</b>	02	<b>Section no.</b>	1.4	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 1.4, 1. PP did not provide the region of the initial instance and grouped as per VCS standard section 3.6.10 and 3.6.11. 2. PP did not list the actual eligibility criteria for new project instances to be introduced in project but only copy the sentence from VCS standard, clarification is requested.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 1.4 as follows: 1. The geographic area of the grouped project lies in the whole China except Hong Kong, Macao and Taiwan. Now the initial project activity instances are operated in the project geographic area except Qinghai province, Tibet Autonomous Region and Xinjiang Uygur Autonomous Region. The following project activity instances may be developed in the project geographic area whether initial project activity instances are implemented or not. 2. The eligibility criteria for new project instances to be introduced in project year to grouped projects comprise as follows: <ul style="list-style-type: none"> <li>Meet the applicability conditions set out in AMS-III.C. version 16.0 applied to the project.</li> </ul>				

- Use the technologies or measures specified in the project description, specifically, the smart vehicle networking system consist of Telematics-BOX (T-BOX) equipped in project commercial electric vehicles, Intelligent Link Control Platform and smartphone application.
- Apply the technologies or measures in the same manner specified in the project description, specifically, traveling mileage, operation status, location, state of charge and other information of project commercial electric vehicles are transferred from T-BOX to Intelligent Link Control Platform and managed.
- Are subject to the baseline scenario determined in the project description for the specified project activity and geographic area. Specifically, when the new project activity instances introduced, vehicles used for logistics transportation are still commonly fossil fuel vehicles.
- The new project activity instances shall face the same financial, technical and management barriers as the initial instances in section 3.5.

Grouped projects provide for the inclusion of new project activity instances subsequent to the initial validation of the project. New project activity instances shall:

- 1) Occur within one of the designated geographic areas specified in the project description. In this grouped project, new project activity instance shall occur within China except Hong Kong, Macao and Taiwan, which is specified in section 1.12.
- 2) Conform with at least one complete set of eligibility criteria for the inclusion of new project activity instances. Partial conformance with multiple sets of eligibility criteria is insufficient. In this grouped project, new project activity instances shall conform with one set of eligibility criteria in section 1.4.
- 3) Be included in the monitoring report with sufficient technical, financial, geographic, and other relevant information to demonstrate conformance with the applicable set of eligibility criteria and enable evidence gathering by the validation/verification body. In this grouped project, new project activity instances shall be included in the monitoring report with annual operation vehicles and distances of project vehicles monitored by the Intelligent Link Control Platform.
- 4) Be included in an updated project description, with updated project location information (as set out in VCS Standard version 4.4 Section 3.11), which shall be validated at the time of verification against the applicable set of eligibility criteria. In this grouped project, once the new project activity instances be included, the project description shall be updated, including project location information, and shall be validated at the time of verification against the applicable set of eligibility criteria.
- 5) Have evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity instance (i.e., the date upon which the project activity instance began reducing or removing GHG emissions). In this grouped project, the project proponent shall provide project vehicles inventory to claim project ownership from the respective start date of each project activity instance.
- 6) Have a start date that is the same as or later than the grouped project start date. In this grouped project, project vehicles in new project activity instances are operated the same as or later than the grouped project start date, so the start date of new project activity instances are the same as or later than the grouped project start date.
- 7) Be eligible for crediting from the start date of the project activity instance through to the end of the project crediting period (only). In this grouped project, new project activity instances are eligible for crediting from the start date of the project activity instance through to the end of the project crediting period, that is 07-October-2031.
- 8) Only eligible for crediting from the start of the verification period in which they were added to the grouped project. In this grouped project, new project activity instances shall conform the complete set of eligibility criteria in section 1.4 and is eligible for crediting from the start of the verification period in which they were added to the grouped project.
- 9) Not be or have been enrolled in another VCS project. In this grouped project, new project activity instances shall not be or have been enrolled in another VCS project.

<ul style="list-style-type: none"> <li>Adhere to the clustering and capacity limit requirements for multiple project activity instances set out in VCS Standard version 4.4 section 3.6.8 – 3.6.9. In this project, the annual emission reductions of new project activity instances shall less than or equal to 6 ktCO<sub>2</sub>e.</li> </ul>
<b>Documentation provided by project participant</b>
Joint-PD-MR/1/- V02
<b>VVB assessment</b> <span style="float: right;"><b>Date: 18/08/2023</b></span>
<p>1. The updated Joint-PD-MR has been checked, it is confirmed that the region of the initial instance and grouped have been provided as per requests of VCS standard section 3.6.10 and 3.6.11.</p> <p>2. The updated Joint-PD-MR has been checked, it is confirmed that the eligibility criteria of that new project activity instances and conditions of inclusion of new project activity instances subsequent to the initial validation of the project have been demonstrated accordingly.</p> <p>Refer to section 3.1 of this report for detail assessment of the eligibility criteria and inclusion conditions.</p> <p>CL 02 is closed.</p>

<b>CL ID</b>	03	<b>Section no.</b>	1.7	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 1.7, the project ownership is not clarified clearly as during site visit, it is observed that the driver (end user) drive the project vehicles and PP purchased the project vehicles from manufacture, but how the PP keep the project ownership and ER ownership is not clarified.				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
<p>It has been updated in Section 1.7 as follows:</p> <p>All the project vehicles are purchased from Zhejiang Geely new energy Commercial Vehicle Group Co., Ltd. Project vehicles belong to Intelligent Link, which can be demonstrated by the inventory. Project vehicles will be rented to individuals or companies to transport goods. During the stakeholder meeting before the project, the project proponent claimed that the ownership of this project belongs to Intelligent Link, and all emission reductions/removals are granted to the company, and all the stakeholders had no objection. The same claim about the project and project emission reductions will also be updated in the APP.</p>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /8/ /9/ /6/ /7/ /10/ /11/				
<b>VVB assessment</b>				<b>Date: 18/08/2023</b>
<p>The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added. The section 1.7 of the Joint-PD-MR has been checked, it is confirmed that the Project Proponent demonstrates that they have the legal right to control and operate project activity.</p> <p>Via checking the National legal approval to the Road transport permit/6/ for different cities, and the business license of the Zhejiang Green Intelligent Link Co., Ltd./7/, it is verified that the PP has the legal right to control and operate the project activity. Furthermore, by cross checking the vehicles purchase contract/10/, renting contracts signed with individuals and companies/11/, it is verified that the ownership of the vehicles and the project is with Zhejiang Green Intelligent Link Co., Ltd.</p> <p>Furthermore, during the local stakeholder consultation process before the project (assessed in below section 3.3.2), project proponent has claimed that the ownership of this project belongs to Intelligent Link and all emission reductions/removals are granted to the company, which has no contradiction from the local stakeholders.</p> <p>Finally, via checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed that the claim of the ownership of this project and corresponding generated emission</p>				

reductions/removals has been shown in both Platform and application to all the related parties and end users.  
 Thus, it is confirmed that the project owner has the ownership of the project and ownership of carbon credits generated from this project.  
 CL 03 is closed.

<b>CL ID</b>	04	<b>Section no.</b>	1.11	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 1.11, PP does not clarify the project scenario from manufacture of project vehicles to finally used by drivers and related management by PP, the actual figures and processes are all not clarified.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
<p>It has been updated in Section 1.11 as follows:</p> <p>The grouped project is to operate commercial electric vehicles around China, the initial instances including 16,246 vehicles. Comparing to operating fossil fuel commercial vehicles commonly occurred in China, emissions reductions are achieved. Project vehicles are purchased from vehicle manufacturers and then leased to individuals or companies to transport goods.</p> <p>There is an APP named Green Intelligent Link launched by project proponent for vehicle rental, charging and vehicle maintenance. After registering, individuals and companies can browse different types of project vehicles and lease services, and then book directly or consult further details by phone. After confirming the rental demand with the sales staff, vehicle lessees will sign the rental contract with project proponent and pay the rent. When picking up the project vehicle, the staff will explain the precautions of vehicles, providing operation training, charging training, and driving skills training, and the later service process. After the completion of the rental contract, lessees shall pay the follow-up rent and maintain project vehicles on time.</p> <p>During the operation, each project vehicle is equipped with T-BOX (Telematics BOX), used for control and track vehicle status, then the data will be uploaded to the Intelligent Link Control Platform. The platform also collects information of charging piles, service stations and vehicle bills. Project proponent have access to the platform for all information. Lessees can manage rented project vehicles on APP, charge and maintain project vehicles nearby, where the corresponding information connected to the Intelligent Link Control Platform, as showing in Figure 1 1.</p>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /8/ /9/ /6/ /10/ /11/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added. Refer to section 3.1 of this report for detail assessment of project scenario. CL 04 is closed.				

<b>CL ID</b>	05	<b>Section no.</b>	1.11	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 1.11, 1. PP provided the figure of 1-1, however, the related description provided did not match the figure and it is not clear how the project vehicles hired to each driver and how the PP manage project vehicles and how the driver uses APP to take the project vehicles used. Clarification is requested. 2. PP did not clearly justify the scenario prior to the project start and baseline scenario.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023

It has been updated in Section 1.11 as follows:

1. The original figure 1-1 has been deleted for it is not cooperate to the vehicle rental process. How the project vehicles are rented, managed combined with APP is described as follows:  
Specifically, the Intelligent Link Control Platform collects all information about project vehicles, including vehicle categories, vehicle numbers, inventory status, vehicle status (in use or not), operation status (normal or not), real-time geographic information, each day mileage and charged electric quantity, etc. Lessees could know on the APP if the rented project vehicles are active, where they are, how long they have driven and residual electric capacity. The platform also collects mainstream charging piles all around the whole China, including charging piles companies, charging station address, business hours, fast charge and slow charge time, price, voltage and power, as showing in Figure 1 2. When the rented project vehicles need to be charged, lessees can find an appropriate charging station nearby, and pay the bill for electricity after full charge on the APP. If the rented project vehicles act up, lessees could call the after-sales service number, repair on-site, drive to nearby maintenance station shown on the APP, or use stand-by vehicles provided by project proponent if the maintenance time is more than one day. At the end of the lease, lessees shall return rented project vehicles and pay the rent on the APP. All the information on the platform will be updated according to the operation of lessees.
2. According to AMS-III.C. version 16.0, the baseline of the comparable vehicles (the comparability of baseline and project vehicles to be demonstrated as per indicators in paragraph 11 of AMS-III.C. version 16.0) that would have been used to provide the same transportation service. The project vehicles are commercial vehicles used for logistics transportation. In 2020, the sales of automobiles in China were 25.311 million, where commercial vehicles sold 5.133 million. Meanwhile, in China, the sales of new energy vehicles in 2020 is 1.367 million (both passenger cars and commercial vehicles). So, in China, commercial vehicles used for goods transportation are commonly driven by fossil fuel, so the baseline scenario is to operate fossil fuel vehicles to supply logistics services. And before the operation of the grouped project, the project proponent didn't run fossil fuel vehicles to transport goods. Comparing with operating fossil fuel commercial vehicles commonly occurred in China, commercial electric vehicles operation produces less GHG emissions.

**Documentation provided by project participant**

Joint-PD-MR/1/- V02

/8/

/9/

/6/

/10/

/11/

**VVB assessment**

**Date:** 18/08/2023

1. The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added.
  2. The updated Joint-PD-MR has been checked, it is confirmed that the scenario prior to the project start and baseline scenario has been demonstrated respectively.  
Refer to section 3.1 of this report for detail assessment of project technology and scenario prior to the project start and baseline scenario.
- CL 05 is closed.

CL ID	06	Section no.	1.17	Date	30/06/2023
<b>Description of CL</b>					
In section 1.17, 1. The number of electric commercial vehicles running in the project area in this monitoring period is not correct. 2. PP stated that during this monitoring period, average PM2.5 concentration decreased from 30 µg/m <sup>3</sup> to 29 µg/m <sup>3</sup> , and average PM10 concentration decreased from 54 µg/m <sup>3</sup> to 51µg/m <sup>3</sup> , how to prove the impact was created by project based on both evidence listed in footnote is not clarified clearly. 3. The related evidence to prove the SDG achievement are not listed in the Appendix 1, PP only list					

some description which is not sufficient.	
<b>Project participant response</b>	<b>Date: 01/08/2023</b>
It has been updated in Section 1.17 as follows:	
<ol style="list-style-type: none"> <li>1. The number of electric commercial vehicles running in the project area in this monitoring period has changed to 16,426 according to the on-site result.</li> <li>2. During this monitoring period, 8,783 kg PM2.5 has been reduced, the calculation process is shown in the excel.</li> <li>3. The related evidence to prove the SDG achievement are documented by excel shown in the footnotes.</li> </ol>	
<b>Documentation provided by project participant</b>	
Joint-PD-MR/1/- V02 ER sheet/2/- V02 /16/ /17/ /18/	
<b>VVB assessment</b>	<b>Date: 18/08/2023</b>
The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added. Via on-site inspection, checking the evidence provided as below and interview with the project implementer, CTI verified that the project contributes the sustainable development through the following aspects:	
<ol style="list-style-type: none"> <li>1. Number of employees hired to maintain the electric commercial vehicle service (Goal 8 of UN SDG) – verified by interview with PP and checking the Staff List/16/ and labor contract/17/, it is confirmed that 233 job opportunities have been provided during this monitoring period and since project started operation, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable;</li> <li>2. Amount of fine particulate matter (e.g. PM2.5) reduced by the project activity within the project area (Goal 11 of UN SDG) – verified by checking the Fact sheet of PM2.5/18/, it is confirmed that 8,783 kg PM2.5 decreased due to the project operation during this monitoring period and since project started operation, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable;</li> <li>3. Tonnes of greenhouse gas emissions avoided (Goal 13 of UN SDG) – 25,105 tCO<sub>2e</sub> GHG emission reductions have been achieved during this monitoring period and since project started operation, which is verified by checking the Emission Reduction Calculation sheet/2/, hence the contribution to this SDG has been confirmed and the provisions for monitoring and reporting this goal is verified as reasonable.</li> </ol>	
CL 06 is closed.	

<b>CL ID</b>	07	<b>Section no.</b>	2.1	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 2.1, <ol style="list-style-type: none"> <li>1. The fire risk from using batteries is not identified.</li> <li>2. PP identified an impact of “Potential environmental risks of electric vehicle operation” which is not elaborated with detailed risk and impact.</li> </ol>				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
It has been updated in Section 2.1 as follows:				
<ol style="list-style-type: none"> <li>1. There would appear potential negative impacts in socio-economic aspect from using batteries. Maintenance and warranty of the power battery are detailed in the user service manual, which stated that no fire sources should be close to the power battery, operating and storage temperature of the power battery, etc. to prevent spontaneous combustion of project vehicles resulting public hazards.</li> <li>2. This is not in line with actual situation, thus deleted.</li> </ol>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				

<b>VVB assessment</b>	<b>Date:</b> 18/08/2023
<p>1. The updated Joint-PD-MR has been checked, it is confirmed that the fire risk from using batteries is provided.</p> <p>2. The updated Joint-PD-MR has been checked, it is confirmed that irrelevant information has been deleted accordingly.</p> <p>Refer to section 3.3.1 of this report for detail assessment of potential negative environmental and socio-economic impacts of the project activity.</p> <p>CL 07 is closed.</p>	

<b>CL ID</b>	08	<b>Section no.</b>	2.3	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
<p>In section 2.3,</p> <p>1. Why the environmental impact assessment (EIA) is not required for the project is not clarified based on the local laws and regulations.</p> <p>2. For the environmental impact in recycling period, PP stated “project proponent should conduct environmental performance audit and assessment in a timely manner”, however, the related measurement is not clarified and if any occurred during this monitoring period is not clarified.</p>				

<b>Project participant response</b>	<b>Date:</b> 01/08/2023
<p>It has been updated in Section 2.3 as follows:</p> <p>1. According to the List of Classified Management of Environmental Impact Assessment of Construction Projects issued by Ministry of Ecology and Environment of the People's Republic of China, the grouped project is about commercial electric vehicle operation, which is not included in the list, therefore the grouped project doesn't need apply for an EIA report.</p> <p>2. Battery shell materials, binders, etc. are non-recyclable waste products. End-of-life disposal is a big problem, which can release harmful toxic gases that would cause air pollution. And the heavy metal elements in waste batteries may cause severe damage to water and soil if not properly handled. For these negative environmental impacts, operations have been stipulated in the user service manual that disassemble the battery box or battery module without permission is not allowed. This could avoid environmental pollution caused by random disposal of battery parts. When the capacity of the vehicle power battery cannot be used or scrapped, the project proponent should drive the vehicle to the service network or recycling agency for power battery disassembly and replacement. All the waste power batteries will be processes according to Measures for The Management of Cascade Utilization of Power Batteries for New Energy Vehicles, New Energy Vehicle Waste Power Battery Comprehensive Utilization Industry Standard Conditions and Comprehensive Utilization of Used Power Batteries for New Energy Vehicles Interim Measures for The Administration of Industry Standard Announcements. During this monitoring period, all batteries ensure the normal operation of project vehicles and don't need to be changed or recycled.</p>	

<b>Documentation provided by project participant</b>
Joint-PD-MR/1/- V02 /43/ /48/

<b>VVB assessment</b>	<b>Date:</b>
<p>1. The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added. In China, according to Chinese law “Environmental Impact Assessment Law of the People’s Republic of China”/43/, CTI confirmed that there is no requirement from any environmental impact assessments to the type of the project.</p> <p>2. The updated Joint-PD-MR has been checked, it is confirmed that the measurement has been provided.</p> <p>Via site interview with PP and representative of the vehicle manufacturer, it is confirmed that PP has taken the responsibility of power battery recycling according to the Interim Measures for the Management of New Energy Vehicle Power Battery Recycling Regulating/48/, disassemble the battery box or battery module without permission is not allowed, so the recycling procedure as per national</p>	

regulation can solve the battery disposal issue. Furthermore, based on the national policy, as per the request of automobile product Producer responsibility, PP will replace the vehicle batteries as energy storage devices when they have been out of life in electric vehicles. Then it means that there will be no environmental risks due to disposal of discarded batterie occurred in the project.  
CL 08 is closed.

<b>CL ID</b>	09	<b>Section no.</b>	3.4	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 3.4, the project shall demonstrate regulatory surplus at validation as per the VCS standard, however, related justification is missing.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 3.4 as follows: The project activity is not mandated by any law, statute, or other regulatory framework, or for UNFCCC non-Annex I countries, any systematically enforced law, statute, or other regulatory framework, these can be verified by plans in section 1.14, including The Notice on the Issuance of the New Energy Vehicle Industry Development Plan (2021-2035), The Notice on the Issuance of Zhejiang Province Intelligent Vehicle Innovation and Development Plan (2020-2025), The Notice on the Issuance of the 14th Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /45/ /46/ /47/ /23/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added. PP has demonstrated the regulatory surplus of the project, CTI has searched all the related law, statute, or other regulatory framework of electrical vehicle industry in China including The Notice on the Issuance of the New Energy Vehicle Industry Development Plan (2021-2035) (General Office of the State Council [2020] No.39)/45/, The Notice on the Issuance of Zhejiang Province Intelligent Vehicle Innovation and Development Plan (2020-2025) (Zhejiang Development and Reform Commission [2019] No.449)/46/, The Notice on the Issuance of the 14 <sup>th</sup> Five-year Plan of Zhejiang Province New Energy Vehicle Industry Development (Zhejiang Development and Reform Commission [2021] No.107)/47/, it is verified that the project activity is not mandated by any law, statute, or other regulatory framework of China, which is also verified by cross-checking the Energy-saving and new energy vehicle Yearbook 2022/23/. CL 09 is closed.				

<b>CL ID</b>	10	<b>Section no.</b>	3.5	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 3.5, 1. The technological barrier and investment barrier are not specified respectively. 2. The description of barrier is inconsistent with the actual barrier faced by the project itself and the owner in the project, and the description is not supported by any data or evidence. 3. Investment barriers need to be justified and supported by data and evidence. The benefits and expenditures of the project itself should be described by providing actual data.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 3.5 as follows: 1. As the PP, Intelligent Link faces no technological barriers, barrier due to prevailing practice or other barrier but investment barriers, which is specified below. 2. The barrier has corrected as only investment barrier. Specific analysis of investment barrier is shown in section 3.5 with data. 3. In terms of power battery, research and development of high ratio energy battery, high safety				

<p>battery, long life battery is still needed. In terms of motor system, the key technologies of high efficiency and high-density driving motor system in China still lag behind the international advanced level. In terms of key parts, automotive chips, high-speed bearings, millimetre-wave radar needed for intelligent vehicles, our country also lags behind the international advanced level at present. Those technical weaknesses are all new energy automobile industries are confronting, including Intelligent Link.</p> <p>In China, the market share of new energy vehicles is relatively small, and it is mainly passenger electric vehicles. The project vehicles are commercial vehicles, and there are some problems in production, such as small market space, big investment risk, long period of technology research and development, and slow return on investment, leading to capital reluctance to invest.</p> <p>This project activity is to lease new energy commercial vehicles for logistics services. According to the "National Economic Industry Classification Standard (GB/T 4754-2017) ", the project activity belongs to leasing and business services, and the enterprise is responsible for its own profits and losses. The cost of this project operation includes vehicle purchase, vehicle maintenance, vehicle operation and employee wages, etc. The income of the project operation is only the income of vehicle leasing. According to the 2021 corporate loan interest rate issued by the Bank of China is 4.61%, considering the actual operating costs and benefits, in the absence of carbon revenue, the NPV of the project activities in the 10-year crediting period is -64.45 million yuan, the project's NPV is negative, so there are investment obstacles in this project. Otherwise, compared with project vehicles, fuel vehicles in the baseline scenario have lower prices, lower maintenance costs, and better infrastructure such as gas stations, so they are currently more popular with consumers in the market. Given the investment barriers, if the project is not carried out, the owner will prefer to operate fossil fuel vehicles, which is more economical but will emit more greenhouse gases.</p>	
<b>Documentation provided by project participant</b>	
Joint-PD-MR/1/- V02 /3/	
<b>VVB assessment</b>	<b>Date: 18/08/2023</b>
<p>1. There is no technological barrier identified by PP, so related information has been removed.</p> <p>2. The updated Joint-PD-MR has been checked, it is confirmed that the actual figure and supporting evidence has been added.</p> <p>3. The updated Joint-PD-MR has been checked, it is confirmed that the actual figure and supporting evidence has been added to demonstrate the investment barrier.</p> <p>Refer to section 3.4.5 of this report for detail assessment of the additionality.</p> <p>CL 10 is closed.</p>	

<b>CL ID</b>	11	<b>Section no.</b>	3.5	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
<p>In section 3.5,</p> <ol style="list-style-type: none"> <li>The other barriers are not specified clearly as per the requirement of “<i>without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher</i>” from the tool.</li> <li>It is not clear that why the carbon revenue can overcome the listed barriers and how the PP decide to start the project based on the carbon revenue.</li> </ol>				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
<p>It has been updated in Section 3.5 as follows:</p> <ol style="list-style-type: none"> <li>As the PP, Intelligent Link faces no technological barriers, barrier due to prevailing practice or other barrier but investment barriers.</li> <li>The demonstration is specified in CL 10.</li> </ol>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date: 18/08/2023</b>
1. There is no other barrier identified by PP except the investment barrier, so related information has				

been removed.  
 2. The updated Joint-PD-MR has been checked, it is confirmed that the actual figure and supporting evidence has been added to demonstrate the investment barrier.  
 Refer to section 3.4.5 of this report for detail assessment of the additionality.  
 CL 11 is closed.

<b>CL ID</b>	12	<b>Section no.</b>	5.1	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 5.1, for the BE calculation method, 1. PP did not clarify the BE calculation method is relevant to the initial instance or to the whole group. 2. As per the VCS request to grouped project “Where factors relevant to the determination of the baseline scenario require assessment across a given area, the area shall be, at a minimum, the grouped project geographic area. Examples of such factors include, inter alia, common practice; laws, statutes, regulatory frameworks, or policies relevant to demonstration of regulatory surplus; determination of regional grid emission factors; and historical deforestation and degradation rates”, hence if the grouped project involved in across a given area need to be clarified.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 5.1 as follows: 1. The baseline emissions are calculated based on initial project activity instances. 2. There is no factor relevant to the determination of the baseline scenario require assessment across a given area.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
1. The updated Joint-PD-MR has been checked, it is confirmed that the clarification of baseline emissions are calculated based on initial project activity instances has been provided accordingly. 2. The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added, there is no factor relevant to the determination of the baseline scenario require assessment across a given area. CL 12 is closed.				

<b>CL ID</b>	13	<b>Section no.</b>	5.2	<b>Date :</b> 30/06/2023
<b>Description of CL</b>				
In section 5.2, for PE calculation method, 1. PP did not clarify the PE calculation method is relevant to the initial instance or to the whole group. 2. As per the VCS request to grouped project “Where factors relevant to the determination of the baseline scenario require assessment across a given area, the area shall be, at a minimum, the grouped project geographic area. Examples of such factors include, inter alia, common practice; laws, statutes, regulatory frameworks, or policies relevant to demonstration of regulatory surplus; determination of regional grid emission factors; and historical deforestation and degradation rates”, hence if the grouped project involved in across a given area need to be clarified.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 5.2 as follows: 1. The project emissions are also calculated according to the initial project activity instances. 2. The project emissions are also calculated according to the initial project activity instances. One parameter, that is the grid emission factor is assessed across given areas. The project emissions achieved by initial project activity instances or grouped project need be calculated across given areas.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023

1. The updated Joint-PD-MR has been checked, it is confirmed that the clarification of project emissions are calculated based on initial project activity instances has been provided accordingly.
  2. The updated Joint-PD-MR has been checked, it is confirmed that the clarification has been added, The parameter grid emission factor is assessed across given areas for there are six regional grids in the project area. The project emissions achieved by initial project activity instances or grouped project need be calculated across given areas
- CL 12 is closed.

**Table 3.CAR from this verification**

<b>CAR ID</b>	01	<b>Section no.</b>	1.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 1.1, the detail description of the project scenario and its technology used is missing.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 1.1 as follows: The initial project activity instances of the grouped project compromise truck project activity instance (including two commercial electric vehicle categories, light truck and mini truck) and van project activity instance (including two commercial electric vehicle categories, light van and minivan), include a total of 16,246 commercial electric vehicles. Project vehicles are owned by project proponent while rented by individuals or companies to carry goods. As an electric vehicle runs on electricity instead of fossil fuel (diesel or gasoline), the vehicle emits no exhaust from a tailpipe, which leads to lower GHG emissions per distance driven. The smart vehicle networking is achieved by Telematics-BOX (T-BOX) equipped in project vehicles, Intelligent Link Control Platform and smartphone application. Traveling mileage, operation status, location, state of charge and other information of project vehicles can be transferred from T-BOX to Intelligent Link Control Platform, where information are managed, and smartphone application, and manipulation codes can be transferred form smartphone application to T-BOX to control project vehicles.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /8/ /9/ /6/ /10/ /11/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the detail description of the project scenario and its technology used has been demonstrated respectively. Refer to section 3.1 of this report for detail assessment of project scenario and its technology. CAR 01 is closed.				

<b>CAR ID</b>	02	<b>Section no.</b>	1.8	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 1.8, the project start date is not correctly defined. Revision is requested.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 1.8 as follows: The grouped project start date is determined by the time when the operation permission is ready, which is 08-October-2021 for initial project activity instances. Therefore, the project start date is 08-October-2021.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023

The updated Joint-PD-MR has been checked, it is confirmed that project start date is correctly defined. The project start date is 08-October-2021 which is verified as the date when the 1<sup>st</sup> project vehicle is registered and started transportation, that is the date when the project began generating GHG emission reductions or removals.

Via checking the Intelligent Link Control Platform/8/ and interview with PP, it is verified that the start date for initial project activity instances is correct and in line with the concept in VCS standard Version 4.4.

CAR 02 is closed.

<b>CAR ID</b>	03	<b>Section no.</b>	1.12	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
Due to the project is a grouped project,				
1. As per the section 3.6.10 of VCS standard 4.4, “Grouped projects shall specify one or more clearly defined geographic areas within which project activity instances may be developed, such geographic areas shall be specified using geodetic polygons”, related information is not provided.				
2. As per the section 3.6.22 of VCS standard 4.4, “A delineation of the geographic area(s) within which all project activity instances shall occur. Such area(s) shall be specified by geodetic polygons”, related information is not provided.				
3. As per the section 3.6.22 of VCS standard 4.4, “Project location for grouped projects shall be specified using geodetic polygons to delineate the project’s geographic area or areas provided in a KML file, together with sufficient additional geographic information”, related information is not provided.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 1.12 as follows:				
1. The grouped project has one clearly defined geographic area within which project activity instances may be develop, that is China (except Hong Kong, Macao and Taiwan), and is specified using geodetic polygons in figure 1-5.				
2. A delineation of the geographic area(s) within which all project activity instances shall occur is shown in figure 1-5.				
3. Project location for grouped projects shall be specified using geodetic polygons to delineate the project’s geographic area or areas is provided in a KML file, together with sufficient additional geographic information.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
1. The updated Joint-PD-MR has been checked, it is confirmed that PP has defined the grouped project as per section 3.6.10 of VCS standard 4.4.				
2. The updated Joint-PD-MR has been checked, it is confirmed that PP has defined the grouped project as per section 3.6.22 of VCS standard 4.4.				
3. The updated Joint-PD-MR has been checked, it is confirmed that PP has defined the grouped project as per section 3.6.22 of VCS standard 4.4.				
Refer to section 3.1 of this report for detail assessment of definition of grouped project.				
CAR 03 is closed.				

<b>CAR ID</b>	04	<b>Section no.</b>	2.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
1. The detail information of the stakeholder meeting prior to the project start is missing including invitation process and which stakeholders participated, meeting details etc..				
2. Which local stakeholders have been identified need to be specified clearly.				
3. The stakeholder consultation result showed that “most obstacle that would hinder the project promotion lies in base installation, accounted for 54.55%”, however related solution is not provided and if stakeholders agree with the mitigation is not specified.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023

It has been updated in Section 2.2 as follows:

1. Before the project started, on 10-August-2021, project proponent conducted the stakeholder meeting in the office in Zhejiang Green Intelligent Link Co., Ltd. in Xiaoshan District, Hangzhou City, Zhejiang Province, P.R. China. Participants included Intelligent Link representatives, commercial vehicle representative, regional operator representatives, driver representatives, and charging pile representatives, a total of 22 people, who were all received meeting notice by phone about one week before the meeting. During the ex-ante stakeholder meeting, all representatives were consulted their opinions about the project application, and their background information were also collected.
2. According to the operation of Intelligent Link, commercial electric vehicles are purchased from Zhejiang Geely new energy Commercial Vehicle Group Co., Ltd., and then rented to individuals or companies. Regional operation centres of Intelligent Link were set in core cities in China. And Intelligent Link cooperates with charging pile companies, whose charging piles are available for project vehicles. Therefore, Zhejiang Geely new energy Commercial Vehicle Group Co., Intelligent Link, vehicle drivers, regional operation companies, charging pile companies are identified as stakeholders of the project.
3. The base installation refers to charging stations and charging piles. In order to mitigate the inconvenient of charging, project proponent would cooperate with more charging pile companies and improve charging station. All other stakeholders accepted this mitigation way.

**Documentation provided by project participant**

Joint-PD-MR/1/- V02  
/14/

**VVB assessment**

**Date:** 18/08/2023

1. The updated Joint-PD-MR has been checked, it is confirmed that detail information of the stakeholder meeting prior to the project start is added.
  2. The updated Joint-PD-MR has been checked, it is confirmed that PP has defined the local stakeholders.
  3. The updated Joint-PD-MR has been checked, it is confirmed that mitigation has been provided accordingly.
- Refer to section 3.3.2 of this report for detail assessment of definition of grouped project.  
CAR 04 is closed.

<b>CAR ID</b>	05	<b>Section no.</b>	2.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
<ol style="list-style-type: none"> <li>1. The detail information of the stakeholder consultation process during this monitoring period is missing.</li> <li>2. The mechanism for on-going communication does not covering all the identified stakeholders.</li> <li>3. The mitigation measurement if any input received during the consultation is not completed to all the identified stakeholders.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 2.2 as follows: <ol style="list-style-type: none"> <li>1. During this monitoring period, on 12-June-2023, the project proponent conducted an ex-post stakeholder meeting and a questionnaire survey in the office of Intelligent Link. 3 Intelligent Link staff, 3 regional operators, 8 project vehicle drivers and 1 worker from charging pile company attended. The question and survey result are specified in section 2.2.</li> <li>2. During the project period, any problems occurred will be documented on the Intelligent Link Control Platform or reported by the lessees through after-sales service system. And other stakeholders can communicate with the project proponent on phone.</li> <li>3. Any comments from stakeholders on the project are received during the project operation period would be feedback to project proponent leader, then he will contact principle of relative departments, such as purchasing department to deal with.</li> </ol>				
<b>Documentation provided by project participant</b>				

Joint-PD-MR/1/- V02 /15/	
<b>VVB assessment</b>	<b>Date: 18/08/2023</b>
<ol style="list-style-type: none"> <li>1. The updated Joint-PD-MR has been checked, it is confirmed that detail information of the stakeholder consultation process during this monitoring period is added.</li> <li>2. The updated Joint-PD-MR has been checked, it is confirmed that mechanism for on-going communication has covered all the identified stakeholders.</li> <li>3. The updated Joint-PD-MR has been checked, it is confirmed that mitigation measurement has been provided accordingly.</li> </ol> <p>Refer to section 3.3.2 of this report for detail assessment of definition of grouped project. CAR 05 is closed.</p>	

<b>CAR ID</b>	06	<b>Section no.</b>	3.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
<ol style="list-style-type: none"> <li>1. For justification of the Methodology Applicability Criteria 2, PP does not justify why the project fulfill this based on the actual situation of the project.</li> <li>2. For justification of the Methodology Applicability Criteria 3, PP has to justify which documented measures have been used in place to ensure.</li> <li>3. For justification of the Methodology Applicability Criteria 4, the situation of baseline vehicles being displaced is not clear.</li> <li>4. For justification of the Methodology Applicability Criteria 4, PP stated that “there were 395 million vehicles in China in 2021, and 7.84 million electric vehicles. The market share of electric vehicles is 2.60%”, however the share value including the civil automobile which is not relevant to the project scenario.</li> <li>5. For justification of the Methodology Applicability Criteria 6, the Criteria request “project proponent shall demonstrate that double counting of emission reductions will not occur e.g. via a contractual agreement with the end-user(s), maintenance of comprehensive inventory of project vehicles or unique identification of the vehicles owned by end-user(s)”, however, PP did not justify the project scenario based on the requirement.</li> <li>6. For justification of the Methodology Applicability Criteria 10, PP stated “The truck project and baseline vehicle belong to the same vehicle category, the truck. The van project and baseline vehicle belong to the same vehicle category, the van”, the sentence is not clear, and how the project and baseline vehicle belong to the same vehicle category is not clarified as there is no switch occurred in the project scenario.</li> <li>7. For justification of the Methodology Applicability Criteria 11, due to the project is a grouped project, the Capacity Limits need to be specified based on the section 3.6.9 of VCS standard 4.4.</li> </ol>				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
<p>It has been updated in Section 3.2 as follows:</p> <ol style="list-style-type: none"> <li>1. The project activity is a project introduced new commercial electric vehicles that displace the use of fossil fuel commercial electric vehicles in freight transportation industry, and is not a switch from fossil fuels to biofuels in transportation.</li> <li>2. The project vehicles use replaceable and chargeable batteries. All vehicle owners have access to replacement batteries of comparable quality according to the user service manual and Quality Assurance Instructions for Replacing Batteries of Intelligent Link.</li> <li>3. The baseline vehicles being displaced are those consuming fossil fuels in freight transportation industry, which is not belong to the project proponent.</li> <li>4. In China, the new energy vehicles used for logistical distribution in urban accounted for 8% of all new energy vehicles till 2020, There were 395 million vehicles in China in 2021, and 7.84 million electric vehicles. The market share of electric vehicles is 2.60%. Hence, based on the market data, the baseline vehicles being displaced by the project are those consuming fossil fuel vehicles in the project area.</li> <li>5. Firstly, there announced in the APP of Intelligent Link that the project and emission reductions/removals belong to Intelligent Link, the project vehicles are not allowed to developed as another GHG emission reduction project, and the emission reductions are not allowed to issue</li> </ol>				

<p>in other carbon reduction mechanisms. Secondly, a comprehensive inventory of project vehicles with unique vehicle identification numbers (VIN) is maintained and made available by the project proponent. Each project vehicle is managed in the Intelligent Link Control Platform, and has a unique VIN number. The operation mileage is documented every day and matched to each project vehicle. And emission reductions are calculated according to the number of project vehicles in the inventory. Thus, double counting of emission reductions will not occur.</p> <p>6. The project vehicles are separated into 2 categories, truck and van according to the vehicle structure. The loading part and the cab of truck are independent, while integrated in van. This project introduces new commercial electric vehicles, instead of switch from fossil fuel vehicles to vehicles consuming electricity. The baseline vehicles are trucks and vans driven by fossil fuel in the logistics transportation.</p> <p>7. According to VCS Standard version 4.4, section 3.6.9, where a capacity limit applies to a project activity included in the project, no project activity instance shall exceed such limit. Further, no single cluster of project activity instances shall exceed the capacity limit. In the grouped project, no project activity instance exceeds the capacity limit, which refers to limit of emission reductions set in AMS-III.C. version 16.0.</p>	
<p><b>Documentation provided by project participant</b></p> <p>Joint-PD-MR/1/- V02 /8/ /12/ /13/ /49/ /50/ /6/ /10/ /9/ /7/</p>	
<p><b>VVB assessment</b></p>	<p><b>Date: 18/08/2023</b></p>
<p>1. The updated Joint-PD-MR has been checked, it is confirmed that justification is added. The project aims to introduce new electric vehicles that displace the use of fossil fuel vehicles in freight transportation industry which is not involved in switch from fossil fuels to biofuels in transportation which is confirmed by site visit and checking the Intelligent Link Control Platform/8/.</p> <p>2. The updated Joint-PD-MR has been checked, it is confirmed that justification is added. Via site interview with PP and representative of the vehicle manufacturer, and checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/ and Quality Assurance Instructions for Replacing Batteries of Intelligent Link/13/, it is confirmed that all vehicle owners have access to replacement batteries of comparable quality.</p> <p>3. The updated Joint-PD-MR has been checked, it is confirmed that justification is added. Via checking the demonstrations in PD, it is confirmed that PP has explained the proposed approach for introducing/distributing the electric/hybrid vehicles, which allow for tracking of the project vehicles. Based on checking the assessment in below 3.4.4, the baseline scenario is confirmed as operation of the comparable fossil fuel vehicles that would have been used to provide the same transportation service, which has been defined as per the market share per fuel type per vehicle category in the project region.</p> <p>Besides, via checking the New Energy Vehicle Waste Power Battery Comprehensive Utilization Industry Standard Conditions/49/ and Comprehensive Utilization of Used Power Batteries for New Energy Vehicles Interim Measures for The Administration of Industry Standard Announcements/50/, it is confirmed that PP has to comply with the national standard for battery use and disposal and by checking the Manufacturer specifications of four types of electric vehicles and Battery used in the project/12/ and Quality Assurance Instructions for Replacing Batteries of Intelligent Link/13/, it is confirmed that specific measures for battery recycling have been taken to ensure that the project electric vehicles are not affected in use and PP has established an after-sales service system to ensure the new energy vehicle is repaired and maintained with related information recorded and verified. And the replaced waste battery pack will be transferred to the recycling service network.</p>	

4. The updated Joint-PD-MR has been checked, it is confirmed that justification is added. Refer to above assessment to 3.

5. The updated Joint-PD-MR has been checked, it is confirmed that justification is added.  
 Via checking the National legal approval to the Road transport permit/6/ for different cities, and the business license of the Zhejiang Green Intelligent Link Co., Ltd./7/, it is verified that the PP has the legal right to control and operate the project activity. Furthermore, by cross checking the vehicles purchase contract/10/, renting contracts signed with individuals and companies (end-users)/11/, it is verified that the ownership of the vehicles and the project is with Zhejiang Green Intelligent Link Co., Ltd.  
 Furthermore, via checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed that the claim of the ownership of this project and corresponding generated emission reductions/removals has been shown in both Platform and application to all the related parties and end users.  
 Finally, via checking the Intelligent Link Control Platform/8/ and smartphone application/9/, CTI confirmed a comprehensive inventory of project vehicles with unique vehicle identification numbers (VIN) is maintained and made available by the project proponent, and based on the local expertise, it is verified that this number is unique to each vehicle and will be permanent and not changed.  
 So double counting will be avoided.

6. The updated Joint-PD-MR has been checked, it is confirmed that justification is added.  
 PP has demonstrated that the project and baseline vehicles are comparable as below,  
 (a) the Project and baseline vehicles belong to the same vehicle category. This project introduces new commercial electric vehicles including 2 categories, truck and van, instead of fossil fuel vehicles. The baseline vehicles are trucks and vans driven by fossil fuel in the logistics transportation.  
 (b) Based on checking the assessment in below 3.4.4, the baseline scenario vehicles have been selected with the comparable passenger/load capacity and power rating with a variation of no more than 20 percent with the project vehicle categories.

7. The updated Joint-PD-MR has been checked, it is confirmed that justification is added.  
 Due to the project is a grouped project, according to section 3.6.9 of VCS Standard version 4.4/33/, where a capacity limit applies to a project activity included in the project, no project activity instance shall exceed such limit. Further, no single cluster of project activity instances shall exceed the capacity limit.  
 So, in this grouped project, no project activity instance exceeds the capacity limit, which refers to limit of emission reductions set in AMS-III.C. version 16.0.  
 Furthermore, based on checking the ER sheet of initial instances/2/, it is confirmed that the expected emission reduction of each instance is less than 60 kt CO<sub>2</sub> equivalent.  
 CAR 06 is closed.

<b>CAR ID</b>	07	<b>Section no.</b>	3.3	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 3.3, the figure 3-1 is not related to the project boundary and electric vehicles and the charging equipment and stations, electric supply sources, and all the emission sources need to be reflected in the figure.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 3.3 as follows: The project boundary and electric vehicles and the charging equipment and stations, electric supply sources, and all the emission sources have been reflected in the figure 3-1.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023

The updated Joint-PD-MR has been checked, it is confirmed that diagram of project boundary is updated to be correct.

Based on the actual situation of the project, the project boundary includes the electric vehicles and the charging equipment and stations. This is a grouped project and involves the instances in which the electric vehicles running in all over China. The electricity will be supplied from the grid as electric supply sources. It is confirmed via site inspection and checking the project program/4/, Road transport permit/6/, Renting contract/11/ and Intelligent Link Control Platform/8/.

CAR 07 is closed.

<b>CAR ID</b>	08	<b>Section no.</b>	3.4	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 3.4,				
1. The scenario prior to the project start and baseline scenario need to be specified clearly and respectively.				
2. The load capacity of project vehicles are not provided by different category of the vehicles respectively.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 3.4 as follows:				
1. Before the project, the project proponent didn't operation fossil fuel vehicles. The project is to introduce new commercial electric vehicles in the project area. In China, the new energy vehicles used for logistical distribution in urban accounted for 8% of all new energy vehicles till 2020, There were 395 million vehicles in China in 2021, and 7.84 million electric vehicles. The market share of electric vehicles is 2.60%. Hence, based on the market data, the baseline scenario in the case of the operation of electric vehicles is the operation of the comparable vehicles that would have been used to provide the same transportation service.				
2. The load capacity and rated power of project vehicles are specified in section 1.11, table 1-1.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
1. The updated Joint-PD-MR has been checked, it is confirmed that scenario prior to the project start and baseline scenario has been defined correctly and respectively.				
2. The updated Joint-PD-MR has been checked, it is confirmed that load capacity of project vehicles are provided by different category of the vehicles respectively.				
Refer to section 3.4.4 of this report for detail assessment.				
CAR 08 is closed.				

<b>CAR ID</b>	09	<b>Section no.</b>	3.4	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 3.4, due to the project is a grouped project, below requirements need to be specified				
1. One or more determinations of the baseline for the project activity in accordance with the requirements of the methodology applied to the project.				
2. Determination of baseline scenario and demonstration of additionality are based upon the initial project activity instances.				
3. The baseline scenario for a project activity shall be determined for each designated geographic area, in accordance with the methodology applied to the project. Where a single baseline scenario cannot be determined for a project activity over the entirety of a geographic area, the geographic area shall be redefined or divided such that a single baseline scenario can be determined for the revised geographic area or areas.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 3.4 as follows:				
1. According to the section 3.6 of VCS Standard version 16.0, the baseline scenario of grouped project has some requirements. Firstly, the grouped project has specified one clearly defined geographic area in section 1.12 within which project activity instances may be developed.				

2. Secondly, the baseline scenario and demonstration of additionality are based upon the initial project activity instances. The initial project activity instances are a total of 16,246 commercial electric vehicles.
3. Thirdly, for there is only one geographic area identified in section 1.12, the baseline scenario for a project activity is determined for China except Hong Kong, Macao and Taiwan. This single baseline scenario can be determined for a project activity over the entirety of a geographic area.
<b>Documentation provided by project participant</b>
Joint-PD-MR/1/- V02
<b>VVB assessment</b> <span style="float: right;"><b>Date: 18/08/2023</b></span>
1. The updated Joint-PD-MR has been checked, it is confirmed that grouped project has specified one clearly defined geographic area in section 1.12 within which project activity instances may be developed so single baseline scenario can be determined for a project activity.
2. The updated Joint-PD-MR has been checked, it is confirmed that baseline scenario is based upon the initial project activity instances.
3. The updated Joint-PD-MR has been checked, it is confirmed that grouped project has specified one clearly defined geographic area in section 1.12 within which project activity instances may be developed so single baseline scenario can be determined for a project activity.
Refer to section 3.4.4 of this report for detail assessment.
CAR 09 is closed.

<b>CAR ID</b>	10	<b>Section no.</b>	3.5	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 3.4, due to the project is a grouped project, below requirements need to be specified				
1. One or more demonstrations of additionality for the project activity in accordance with the requirements of the methodology applied to the project.				
2. Determination of baseline scenario and demonstration of additionality are based upon the initial project activity instances.				
3. The additionality of the initial project activity instances shall be demonstrated for each designated geographic area, in accordance with the methodology applied to the project. Where the additionality of the initial project activity instances within a particular geographic area cannot be demonstrated for the entirety of that geographic area, the geographic area shall be redefined or divided such that the additionality of the instances occurring in the revised geographic area or areas can be demonstrated.				
4. Where factors relevant to the demonstration of additionality require assessment across a given area, the area shall be, at a minimum, the grouped project geographic area. Examples of such factors include, inter alia, common practice; laws, statutes, regulatory frameworks, or policies relevant to demonstration of regulatory surplus; determination of regional grid emission factors; and historical deforestation and degradation rates.				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
It has been updated in Section 3.5 as follows:				
1. The only one demonstration of additionality is based upon the initial project activity instances.				
2. The only one demonstration of additionality is based upon the initial project activity instances.				
3. For this grouped project, there is one geographical area which is specified in section 1.12. The area project vehicles would operate is China except Hong Kong, Macao and Taiwan. The additionality of the initial project activity instances within corresponding operation area can be demonstrated for the entirety of the project geographic area.				
4. And there is no factor relevant to the demonstration of additionality require assessment across a given area.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date: 18/08/2023</b>

1. The updated Joint-PD-MR has been checked, it is confirmed that grouped project has specified one clearly defined geographic area in section 1.12 within which project activity instances may be developed so only one demonstration of additionality is based upon the initial project activity instances.

2. The updated Joint-PD-MR has been checked, it is confirmed that demonstration of additionality is based upon the initial project activity instances.

3. The updated Joint-PD-MR has been checked, it is confirmed that grouped project has specified one clearly defined geographic area in section 1.12 within which project activity instances may be developed so only one demonstration of additionality is based upon the initial project activity instances.

4. The updated Joint-PD-MR has been checked, it is confirmed that there is no factor relevant to the demonstration of additionality require assessment across a given area.  
Refer to section 3.4.5 of this report for detail assessment.  
CAR 10 is closed.

<b>CAR ID</b>	11	<b>Section no.</b>	4.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
In section 4.1, the actual operation, management process and numbers of vehicles operated during this monitoring period is not provided.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 4.1 as follows: During this monitoring period, initial project activity instances including 16,246 commercial electric vehicles leased and operated normally within the project area. Project vehicle purchase record and lease contract are saved each time by the finance department of Intelligent Link. The daily operation mileage and status are transferred from the T-BOX equipped in the project vehicles to the Intelligent Link Control Platform and maintained by the technical department of Intelligent Link. Then the operation data has been used to calculate project emission reductions before fully checked the authenticity and accuracy by both project proponent leader and Search CO2. During this monitoring period, there are no events occurred that may impact the GHG emission reductions and monitoring.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /4/ /9/ /11/ /8/ /10/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that description has been added accordingly. By means of on-site inspection and documents review, CTI can ensure that during 1 <sup>st</sup> monitoring period, the project was implemented in accordance with the Joint-PD-MR/1/. This verification covers the period from 08-October-2021 to 30-April-2023 (including both days). 25,105 tCO <sub>2e</sub> emission reductions are achieved during this monitoring period. Via on-site investigation, it is confirmed that during this monitoring period, the project run continuously as per the project descriptions and project program/4/. For initial instances, 16,246 commercial electric vehicles leased and operated normally within the project area which has been confirmed by checking the Intelligent Link Control Platform/8/ and smartphone application/9/ and cross-check the vehicles purchase contract/10/ and Renting Contracts/11/. The daily operation mileage and operation status of each vehicle are transferred from the T-BOX equipped in the project vehicles to the Intelligent Link Control Platform/8/ and maintained by the technical department of Intelligent Link.				

No events or situations, which may impact the applicability of the applied methodology, occurred during this monitoring period.

On the basis of site visit and the reviewed project documentation it can be confirmed that the realized technology, the platform and APP, as well as the monitoring system, the project has been implemented and operated as applied monitoring methodology and monitoring plan described in the Joint-PD-MR and the monitoring system is fully functional to generate Verified Carbon Units (VCUs) without any double counting for this monitoring period from 08-October-2021 to 30-April-2023.

CAR 11 is closed.

<b>CAR ID</b>	12	<b>Section no.</b>	5.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameters SFC <sub>i</sub> , PP stated option 5 from applied methodology has been selected, however, the information of this option is missing and the reason is not provided as per the requirement from applied methodology.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 5.1 as follows: There are 5 options in ACM-III.C. version 16.0 to determine the specific fuel consumption of baseline vehicle category I (SFC). Option (1): Sample measurement Option (2): Top 20 per cent of the comparable vehicles used for public/private transportation Option (3): Using operational data of the vehicles under baseline operational conditions Option (4): Using data from a control group of vehicles Option (5): Existing statistics The grouped project is operating commercial electric vehicles in the whole China except Hong Kong, Macao and Taiwan, so the baseline vehicles should be all the comparable vehicles operate in the project area. The scale of baseline vehicles is enormous and difficult to collect, so the option 1 and option 2 are not applicable. There is no operation data of the vehicles under baseline operation conditions, so the option 3 is also not applicable. Additionally, there is no specific fuel consumption of a control group or existing statistics been monitored throughout the project crediting period. So, the option 4 is also not applicable. The first four options are not applicable due to lack of data, so other public available existing statistics could be used as industry default values, such as host country statistics (released by transportation department or other authorities), IPCC or other international data. The project proponent used Limits of fuel consumption for light-duty commercial vehicles and Fuel consumption limits for heavy-duty commercial vehicles published by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of China to determine the specific fuel consumption of each baseline vehicle category.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /53/ /54/				
<b>VVB assessment</b>				<b>Date:</b>
The updated Joint-PD-MR has been checked, it is confirmed that description has been added accordingly. As per the methodology, there are 5 options in AMS-III.C. version 16.0 to determine the specific fuel consumption of baseline vehicle category i (SFC). Option (1): Sample measurement Option (2): Top 20 per cent of the comparable vehicles used for public/private transportation Option (3): Using operational data of the vehicles under baseline operational conditions Option (4): Using data from a control group of vehicles Option (5): Existing statistics				

The grouped project is operating commercial electric vehicles in the whole China except Hong Kong, Macao and Taiwan, so the baseline vehicles should be all the comparable vehicles operate in the project area.

But in China, based on the local expertise of VVB, it is confirmed that the comparable scale of baseline vehicles is enormous and difficult to collect, so the option 1 and option 2 are not applicable. There is no operation data of the vehicles under baseline operation conditions, so the option 3 is also not applicable. Additionally, there is no specific fuel consumption of a control group or existing statistics been monitored throughout the project crediting period. So, the option 4 is also not applicable.

Then PP can only choose Option (5): Existing statistics – If none of the above options apply due to lack of data, other public available existing statistics could be used as industry default values, such as host country statistics (released by transportation department or other authorities), IPCC or other international data.

Then PP has used the host country statistics data from Limits of fuel consumption for light-duty commercial vehicles/53/ and Fuel consumption limits for heavy-duty commercial vehicles/54/ published by Chinese authorities: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of China which has determined the specific fuel consumption of each baseline vehicle category.

Hence, CTI verified that the data source in line with the request of the applied methodology and the value has been correctly selected.

CAR 12 is closed.

<b>CAR ID</b>	13	<b>Section no.</b>	5.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
How to determine the ex-ante value of each parameter and how to calculate the ex-ante BE value is not provided in section 5.1.				
<b>Project participant response</b>				<b>Date :</b> 01/08/2023
It has been updated in Section 5.1 as follows: The calculation process and result of baseline emission, and sources of each parameter are specified in the excel of ex-ante emission reductions.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that calculation process and result of baseline emission, and sources of each parameter are provided in both Joint-PD-MR and ER sheet. CAR 13 is closed.				

<b>CAR ID</b>	14	<b>Section no.</b>	5.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
How to determine the ex ante value of each parameter and how to calculate the ex ante PE value is not provided in section 5.2.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 5.2 as follows: The calculation process and result of project emission, and sources of each parameter are specified in the excel of ex-ante emission reductions.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that calculation process and result of project emission, and sources of each parameter are provided in both Joint-PD-MR and ER sheet. CAR 14 is closed.				

<b>CAR ID</b>	15	<b>Section no.</b>	6.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter $DD_{i,y}$ , <ol style="list-style-type: none"> <li>1. Source of data is not provided related to the ex ante value determination.</li> <li>2. Value applied are not related to the ex ante value determination for the whole crediting period.</li> <li>3. QA/QC procedures are missing including monitoring equipment maintenance, data management and cross-check etc.</li> <li>4. Calculation method is missing with how to obtain the final value used in the MR from the monitoring data.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 6.2 as follows: <ol style="list-style-type: none"> <li>1. The data of <math>DD_{i,y}</math> comes from project proponent</li> <li>2. The value in the past used data on the platform of Intelligent Link, and an estimated value was applied in the rest crediting years.</li> <li>3. The platform of Intelligent Link will be maintained daily by the technical staff. And the project proponent leader will document the mileage data and storage it. Data will be cross-checked with the data on the project vehicle dashboard.</li> <li>4. Calculated by the monthly operation mileage using excel</li> </ol>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
<ol style="list-style-type: none"> <li>1. The updated Joint-PD-MR has been checked, it is confirmed that ex ante data source is provided.</li> <li>2. The updated Joint-PD-MR has been checked, it is confirmed that the value has been elaborated with different time period.</li> <li>3. The updated Joint-PD-MR has been checked, it is confirmed that QA/QC procedures is added.</li> <li>4. The updated Joint-PD-MR has been checked, it is confirmed that calculation method is added.</li> </ol> Refer to section 3.4.8 of this report for detail assessment of this parameter. CAR 15 is closed.				

<b>CAR ID</b>	16	<b>Section no.</b>	6.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter $N_{i,y}$ , <ol style="list-style-type: none"> <li>1. Source of data is not provided related to the ex-ante value determination.</li> <li>2. How the intelligent control platform monitor if the project vehicle is operation or not is not specified clearly.</li> <li>3. Value applied are not related to the ex-ante value determination for the whole crediting period.</li> <li>4. QA/QC procedures are missing including monitoring equipment maintenance, data management and cross-check etc.</li> <li>5. Calculation method is missing with how to obtain the final value used in the MR from the monitoring data.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b>
It has been updated in Section 6.2 as follows: <ol style="list-style-type: none"> <li>1. Data comes from project proponent</li> <li>2. The Intelligent Link Control Platform can monitor if the project vehicle is operation or not by T-BOX</li> <li>3. The value in the past used data on the platform of Intelligent Link, and an estimated value was applied in the rest crediting years</li> <li>4. The platform of Intelligent Link will be maintained daily by the technical staff. And the project proponent leader will document the mileage data and storage it. Data will be cross-checked with the number of project vehicle in the purchase contracts.</li> <li>5. Calculated by the monthly project vehicle number using excel</li> </ol>				
<b>Documentation provided by project participant</b>				

Joint-PD-MR/1/- V02 ER sheet/2/- V02	
<b>VVB assessment</b>	<b>Date: 18/08/2023</b>
<ol style="list-style-type: none"> <li>1. The updated Joint-PD-MR has been checked, it is confirmed that ex ante data source is provided.</li> <li>2. The updated Joint-PD-MR has been checked, it is confirmed that monitoring method has been elaborated.</li> <li>3. The updated Joint-PD-MR has been checked, it is confirmed that the value has been elaborated with different time period.</li> <li>4. The updated Joint-PD-MR has been checked, it is confirmed that QA/QC procedures is added.</li> <li>5. The updated Joint-PD-MR has been checked, it is confirmed that calculation method is added.</li> </ol> Refer to section 3.4.8 of this report for detail assessment of this parameter. CAR 16 is closed.	

<b>CAR ID</b>	17	<b>Section no.</b>	6.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter $N_{i,y}$ , <ol style="list-style-type: none"> <li>1. Source of data is not provided related to the ex ante value determination.</li> <li>2. Which option has been selected by PP is not specified clearly and which monitoring method will be used is not specified.</li> <li>3. Value applied are not related to the ex ante value determination for the whole crediting period.</li> <li>4. Monitoring equipment information is missing.</li> <li>5. QA/QC procedures are missing including monitoring equipment maintenance, data management and cross-check etc.</li> <li>6. Calculation method is missing with how to obtain the final value used in the MR from the monitoring data.</li> </ol>				
<b>Project participant response</b>				<b>Date: 01/08/2023</b>
It has been updated in Section 6.2 as follows: <ol style="list-style-type: none"> <li>1. Data comes from project proponent</li> <li>2. The project proponent chose option (A) to calculated this parameter. The value of SOC of all project vehicles can be monitored and transferred to the platform of Intelligent Link, then the specific electricity consumption will be calculated.</li> <li>3. The value in the past used data on the platform of Intelligent Link, and applied in the rest crediting years. The value will be updated according to the data collected from the platform of Intelligent Link during the next monitoring period.</li> <li>4. The monitoring equipment is Intelligent Link Control Platform</li> <li>5. The platform of Intelligent Link will be maintained daily by the technical staff. And the project proponent leader will document the mileage data and storage it. Data will be cross-checked with the data on the project vehicle dashboard.</li> <li>6. The electricity consumption per kilometer is calculated by the mileage of each type of project vehicle and the power consumption in the corresponding time period</li> </ol>				
<b>Documentation provided by project participant</b>				

Joint-PD-MR/1/- V02 ER sheet/2/- V02	
<b>VVB assessment</b>	<b>Date: 18/08/2023</b>
<ol style="list-style-type: none"> <li>1. The updated Joint-PD-MR has been checked, it is confirmed that ex ante data source is provided.</li> <li>2. The updated Joint-PD-MR has been checked, it is confirmed that option selected by PP has been elaborated.</li> <li>3. The updated Joint-PD-MR has been checked, it is confirmed that the value has been elaborated with different time period.</li> <li>4. The updated Joint-PD-MR has been checked, it is confirmed that Monitoring equipment information is added.</li> <li>5. The updated Joint-PD-MR has been checked, it is confirmed that QA/QC procedures is added.</li> <li>6. The updated Joint-PD-MR has been checked, it is confirmed that calculation method is added.</li> </ol>	

Refer to section 3.4.8 of this report for detail assessment of this parameter.  
CAR 17 is closed.

<b>CAR ID</b>	18	<b>Section no.</b>	6.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter EF <sub>elect,y</sub> ,				
<ol style="list-style-type: none"> <li>1. PP did not specify which regional power grid is related to the project and if any region across will occur for the initial instance is not specified.</li> <li>2. If any region across will occur for the grouped project is not specified.</li> <li>3. How the value of EF<sub>elect,y</sub> is determined as per tool 05 is not specified.</li> </ol>				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 6.2 as follows:				
<ol style="list-style-type: none"> <li>1. The geographic area of the project involves six regional grids in China, in which all instances operate.</li> <li>2. The grouped project will across the six regional power grids of China</li> <li>3. According to AMS-III.C. version 16.0, TOOL 05 is used to calculate this parameter. Electricity consumed comes from grid, so the project belongs to scenario A: Electricity consumption from the grid in TOOL 05. Project proponent chose option 1: Electricity consumption from the grid to calculate the parameter. And this has been calculated in the latest Baseline Emission Factors of China's Regional Power Grid.</li> </ol>				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02 /35/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
<ol style="list-style-type: none"> <li>1. The updated Joint-PD-MR has been checked, it is confirmed that related information has been provided.</li> <li>2. The updated Joint-PD-MR has been checked, it is confirmed that grouped project will across the six regional power grids of China that has been stated clearly.</li> <li>3. The updated Joint-PD-MR has been checked, it is confirmed that the description is added. The geographic area of the project involves six regional power grids in China, in which all instances operated in. According to AMS-III.C. version 16.0, TOOL 05 is used to calculate this parameter. Electricity consumed comes from grid, so the project belongs to scenario A: Electricity consumption from the grid in TOOL 05/29/. Project proponent chose option 1: Electricity consumption from the grid to calculate the parameter. And this has been calculated in the latest Baseline Emission Factors of China's Regional Power Grid/35/.</li> </ol> Refer to section 3.4.8 of this report for detail assessment of this parameter. CAR 18 is closed.				

<b>CAR ID</b>	19	<b>Section no.</b>	7.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For all the monitoring parameters, the actual monitoring process for each parameter during the 1 <sup>st</sup> monitoring period is not provided.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
All the actual monitoring process for each parameter during the 1 <sup>st</sup> monitoring period has been added, which is specified in section 7.1.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the actual monitoring process for each parameter during the 1 <sup>st</sup> monitoring period is elaborated accordingly. Refer to section 4.1 of this report for detail assessment of this parameter.				

CAR 19 is closed.				
<b>CAR ID</b>	20	<b>Section no.</b>	7.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter $DD_{i,y}$ and $N_{i,y}$ , the values provided in the MR are not correct by site visit checking the related evidence. Revision is requested.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
The value of parameter $DD_{i,y}$ and $N_{i,y}$ has updated by site visit checking the related evidence.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 ER sheet/2/- V02 /8/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the values have been updated as per the data in the Intelligent Link Control Platform/8/. Refer to section 4.1 of this report for detail assessment of these parameters. CAR 20 is closed.				
<b>CAR ID</b>	21	<b>Section no.</b>	7.1	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For parameter $TDL_y$ , 1. the value for 2023 year is missing. 2. Data source of each value is not provided.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 7.1 as follows: 1. The value for 2023 will be published in the next year, so when calculating the emission reductions from January to April in 2023, the $TDL_y$ of 2022 was applied, which is 4.84%. 2. Data source of each value have been provided in the footnotes.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02 /36/				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
1. The updated Joint-PD-MR has been checked, it is confirmed that the value of 2022 has been applied for year 2023 due to figure of 2023 is not available by checking the National Energy Administration/36/. 2. The updated Joint-PD-MR has been checked, it is confirmed that the footnote has been added accordingly with the correct source/36/. Refer to section 4.1 of this report for detail assessment of these parameters. CAR 21 is closed.				
<b>CAR ID</b>	22	<b>Section no.</b>	7.2	<b>Date :</b> 30/06/2023
<b>Description of CAR</b>				
For BE calculation, the parameter $IR^t$ is missing in table 7-1.				
<b>Project participant response</b>				<b>Date:</b> 01/08/2023
It has been updated in Section 7.2 as follows: The parameter $IR^t$ has been added.				
<b>Documentation provided by project participant</b>				
Joint-PD-MR/1/- V02				
<b>VVB assessment</b>				<b>Date:</b> 18/08/2023
The updated Joint-PD-MR has been checked, it is confirmed that the parameter $IR^t$ is added for BE calculation in table 7-1 which is confirmed in line with the applied methodology. CAR 22 is closed.				

<b>CAR ID</b>	23	<b>Section no.</b>	7.2	<b>Date :</b>	30/06/2023
<b>Description of CAR</b>					
For BE calculation, the parameter $EF_{BL,i}$ (g CO <sub>2</sub> /J) is missing in table 7-2.					
<b>Project participant response</b>					<b>Date:</b>
The parameter $EF_{BL,i}$ (g CO <sub>2</sub> /J) has been added in table 7-2.					
<b>Documentation provided by project participant</b>					
Joint-PD-MR/1/- V02					
<b>VVB assessment</b>					<b>Date:</b>
The updated Joint-PD-MR has been checked, it is confirmed that the parameter $EF_{BL,i}$ (g CO <sub>2</sub> /J) is added for BE calculation in table 7-2 which is confirmed in line with the applied methodology. CAR 22 is closed.					

Table 4.FAR from this verification

<b>FAR ID</b>	N/A	<b>Section No.</b>	-	<b>Date:</b>	-
<b>Description of FAR</b>					
<b>Project participant response</b>					<b>Date:</b>
<b>Documentation provided by project participant</b>					
<b>VVB assessment</b>					<b>Date:</b>