VCS PROJECT REVIEW REPORT

Project ID	1569
Project Name	Karacabey Wind Power Project
Project Proponent	Yalova Rüzgar Enerjisinden Elektrik Üretim Anonim Şirketi
Methodology	*ACM0002: Grid-connected electricity generation from renewable sources, v17.0*
Sectoral Scope(s)	1. Energy (renewable/non-renewable)
Validation/Verification Body (VVB)	RINA Services S.p.A.
Registry	Markit

Assessment Criteria	*VCS Standard, v3.5*
Date of First Issue	13 January 2017
Date of Second Issued	1 February 2017
Date of Final Issue	22 February 2017

Summary:

An accuracy review of the *Karacabey Wind Power Project* registration request has been conducted by VCS in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised 14 assessment findings and 2 minor findings, detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The 14 assessment findings must be addressed to the satisfaction of VCS. The VVB need not address any minor finding(s) during this review. Please note, however, that where VCS finds consistent minor findings by the VVB in future reviews, minor findings shall be escalated to assessment findings.

This findings report may be made publically available. Confidential information may be provided as separate attachments.

1 ASSESSMENT FINDINGS

Finding 1 Section 1.3 of the project description states that "Yalova is the developer and owner of the Project" and that Life İklim ve Enerji Ltd. Şti. Is the "Carbon Consultant". Section 3.1 of the validation report states that "Yalova Ruzgar Enerjisinden Elektrik Uretim Anonim Sirketi is the project owner and Life Iklim ve Enerji Ltd. Sti. is project developer". Considering the above, the roles of the project proponent and the other entity involved in the project is inconsistent between the project description and the validation report. The VVB is requested to address this inconsistency and revise the project and audit documentation as required.
VVB Response: The necessary changes have been made. Now, the validation report is consistent with the VCS-PD.
VCS Response: Section 3.1 of the validation report has been updated to state that Yalova Ruzgar Enerjisinden Elektrik Uretim Anonim Sirketi is the project owner and developer and Life Iklim ve Enerji Ltd. Sti. is the project consultant. This assessment is consistent with the roles described in the Section 1.3 of the project description. Considering the above, this finding is closed and no further action is required.

Finding 2 Section 4.1 and 4.2 of the *VCS Project Description Template, v3.2* requires that the project proponent identify the "Purpose of Data" for each parameter as either "Determination of baseline scenario (AFOLU projects only)", "Calculation of baseline emissions", "Calculation of project emissions" or "Calculation of leakage". The project description does not indicate any of the above-listed purposes for any of the parameters listed. Considering the above, the VVB is requested to address the incorrect designations in the project description and revise the project and audit documentation as required.
VVB Response: Purpose of for each parameter has been identified as "Calculation of baseline emissions" in Section 4.1 and Section 4.2.
VCS Response: Sections 4.1 and 4.2 of the project description have been updated to identify the purpose of each

parameter as “Calculation of baseline emissions”.

This designation is consistent with the instructions of the *VCS Project Description Template, v3.2*. Considering the above, this finding is closed and no further action is required.

Finding 3

Section 1.1 of the project description states that the project is a wind power plant. Section 3.1 of the validation report states that the “project is a large-scale wind power plant”.

Section 3.1 of the validation report also states that “Karacabey Wind Power Project has been implemented as a hydraulic power plant in order to provide electricity to the Turkish National Grid. Due to its technology, it uses water as fuel and provides energy without any GHG emission.”

The VVB’s assessment in Section 3.1 of the validation report appears to erroneously describe the technology implemented by the project as hydroelectric technology. Considering the above, the VVB is requested to clarify the purpose of this language and/or revise the project and audit documentation as required.

VVB Response:

Section 1.1 of the project description has been revised as project is a large-scale wind power plant.

Section 3.1 is also revised as wind power plant and wind technology is discussed.

VCS Response:

Section 3.1 of the validation report has been updated to reference only wind technology.

Considering the above, this finding is closed and no further action is required.

Finding 4

Section 1.8 of project description states that there are "12 wind turbines with unit capacity of 2500 kW". Section 3.1 of validation report states that "The project consists of 12 turbines each having 2.5 kW capacities".

The capacity of each wind turbine is inconsistent between the project description and the validation report. The VVB is requested to address this inconsistency and revise the project and audit documentation as required.

VVB Response:

The correct description is the project activity consists of 12 turbines each having 2.5 MW capacities.

The validation report is revised.
VCS Response: Section 3.1 of the validation report has been updated to state that the project consists of 12 turbines each having 2.5 MW capacities. The turbine capacity is therefore consistent with the capacities represented in the project description. Considering the above, this finding is closed and no further action is required.

Finding 5 Section 3.1 of the *VCS Validation Report Template, v3.3* requires the VVB to "Identify, discuss and justify conclusions regarding...project compliance with applicable laws, statutes and other regulatory frameworks". Section 3.1 of the validation report lists the relevant applicable laws and regulations but does not discuss, or justify conclusions from, the VVB's assessment of the project's compliance with such laws. Considering the above, the VVB is requested to identify, discuss and justify conclusions regarding the project's compliance with applicable laws, statutes and other regulatory frameworks and revise the project and audit documentation as required.
VVB Response: The necessary discussions and justifies are given in Section 3.1 of the validation report.
VCS Response: Section 3.1 of the validation report has been updated to identify, discuss and justify conclusions regarding the project's compliance with applicable laws, statutes and other regulatory frameworks. Considering the above, this finding is closed and no further action is required.

Finding 6 Per the *Program Definitions, v3.6*, "Project Ownership", formerly known as "Right of Use", is defined as "The legal right to control and operate the project activities. Distinct from proof of right". Per the *Program Definitions, v3.6*, "Proof of Right" is defined as "The document(s) demonstrating the entity's right to all and any GHG emission reductions or removals generated by the project or program

during the crediting period or verification period, as the case may be."

Section 1.12.1 of the project description produces documentation claiming to demonstrate ownership and right of use. However, the VVB's assessment of the project proponent's right of use in Section 3.1 of the validation report erroneously describes right of use as the ownership of emission reductions, stating "Right of use: The ownership of the emission reductions will belong to Yalova Ruzgar Enerjisinden Elektrik Uretim Anonim Sirketi as confirmed through the Generation License."

Per the program definitions above, right of use pertains to the legal right to control and operate the project activities, and is distinct from the right to any GHG emission reductions or removals generated by the project. The VVB has therefore not provided a sufficient assessment of the project proponent's right of use and is requested to identify, discuss and justify conclusions regarding the project proponent's legal right to control and operate the project activities and revise the project and audit documentation as required.

VVB Response:

The legal right to control and operate the project activity is also belong to Yalova Ruzgar Enerjisinden Elektrik Uretim Anonim Sirketi. The validation report is now revised.

VCS Response:

Section 3.1 of the validation report has been updated to identify, discuss and justify conclusions regarding right of use, which is described per the *Program Definitions, v3.6.*

Considering the above, this finding is closed and no further action is required.

Finding 7

The validation report contains multiple references to assessing the project against the rules of other GHG programs. It is therefore unclear whether VCS Program rules were correctly assessed during the course of this review. Examples of such references are as follows.

Section 3.2.2 of the validation report states that the "Additionality tool is applicable to the project activity since Gold Standard VER project activities, of whatever scale and type, are required to use either UNFCCC-approved or a Gold Standard approved additionality tool to demonstrate project additionality." This section continues, stating that "RINA hereby confirms that the selected baseline and monitoring methodology has been previously approved by the CDM Executive Board and allowed the use of GS Board..."

Section 3.2.8 of the validation report states that "RINA confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design, and the means of implementation of the monitoring plan are sufficient to ensure the emission reductions achieved by/resulting from the proposed GS project activity can be reported ex post and verified."

The VVB is requested to address the above claims as they pertain to VCS requirements and update

the project documentation as required. The VVB is further requested to clarify whether VCS Program rules were correctly assessed during the course of this review in the VVB response below.
VVB Response: Sorry, due to the habit of hand writing by mistake Gold Standard is written. Now, the validation report is revised and the mistake is fixed.
VCS Response: Section 3.2.2 of the updated validation report still states that "RINA hereby confirms that the selected baseline and monitoring methodology has been previously approved by the CDM Executive Board and allowed the use of GS Board...". Section 3.2.8 of the updated validation report states that "RINA confirms that the monitoring arrangements described in the monitoring plan are feasible within the project design, and the means of implementation of the monitoring plan are sufficient to ensure the emission reductions achieved by/resulting from the proposed GS project activity can be reported ex post and verified." "GS" appears to be a reference to Gold Standard. As such, this finding has not been addressed as represented in the VVB response. The VVB is requested to address the above claims as they pertain to VCS requirements and update the project documentation as required. The VVB is further requested to clarify whether VCS Program rules were correctly assessed during the course of this review in the VVB response below.
VVB Response: The necessary changes are made in the Validation Report.
VCS Response: Section 3.2.2 and 3.2.8 of the validation report have been updated to clarify the false references. Considering the above, this finding is closed and no further action is required.

Finding 8 Section 3.2.5 of the *VCS Validation Report Template, v3.3* requires that the VVB "Describe in detail the steps taken to validate that the procedure for additionality (set out in the methodology or referenced tool) has been followed correctly and precisely." Section 2.5 of the project description describes the project proponent's assessment of additionality, including Sub-step 1a of the *Tool for the demonstration and assessment of additionality, v7.0*. Sub-step 1a requires the project proponent to define alternatives to the project activity. Section 3.2.5 of the validation report does not appear to assess the whether the project proponent produced realistic and credible alternative scenarios per the additionality tool.

Considering the above, the VVB is requested to describe in detail the steps taken to validate that the alternatives provided by the project proponent were produced by correct and precise application of the tool. The VVB must revise the project and audit documentation as necessary.
VVB Response: Section 3.2.5 of the validation report was amended with additional information regarding the assessment of the step-wise approach followed by the PP in order to define credible and realistic alternatives of the proposed project activity.
VCS Response: Section 3.2.5 of the validation report has been updated to describe the steps taken to validate that the alternatives provided by the project proponent were produced by correct and precise application of the tool. Considering the above, this finding is closed and no further action is required.

Finding 9 The pages of the validation report are out of order between pages 15 and 20. The VVB is required to revise the documentation as necessary.
VVB Response: The numbering of the sub-sections between p.15 and p.20 of the validation report has been corrected.
VCS Response: The validation report has been updated to correct the order of the pages. Considering the above, this finding is closed and no further action is required.

Finding 10 Section 5.1.3 of the *VCS Standard v3.5* states that "The validation/verification body shall select samples of data and information to be validated or verified to provide a reasonable level of assurance and to meet the materiality requirements of the specific project." Section 1.3 of the validation report does not state whether the project has been validated to provide a reasonable level of assurance. The VVB is required to address whether a reasonable level of assurance has been achieved and revise the audit documentation as required.

As findings related to the level of assurance have been raised on multiple RINA validation/verifications, pending the close of this review, VCS will submit a root cause analysis to RINA Services to determine and identify the root cause of this finding.
VVB Response: The explanation about level of assurance is now added to the Section 1.3 of the validation report.
VCS Response: Section 1.3 of the validation report has been updated to state that a reasonable level of assurance is defined for the validation of the project activity. This finding is closed. As findings related to the level of assurance have been raised on multiple RINA validation/verifications, pending the close of this review, VCS will submit a root cause analysis to RINA Services to determine and identify the root cause of this finding.

Finding 11 Section 3.2.5.6 of the validation report states that the "total number of Nall is calculated as 0 in the "Common-Practice_Karacabey_14.06.2016.xlsx" common practice calculation spreadsheet which could be confirmed through the Turkish Electrical Energy 10-Year Generation Capacity Projection Report /52/." Section 2.2 of the validation report lists the referenced document as "Turkish Electricity Transmission Company (TEIAS): Turkish Electrical Energy 10-Year Generation Capacity Projection (2014-2023), of December 2013." In discussion with VCS regarding the common practice analysis, the VVB has confirmed that the above-referenced document was not used in the common practice analysis. Rather, a different report was used. The VVB is required to correct the reference in the validation report and revise the project and audit documentation as required.
VVB Response: The reference has already been revised as "Turkish Electricity Transmission Company (TEIAS): Turkish Electrical Energy 10-Year Generation Capacity Projection (2012-2021), of December 2012"
VCS Response: Section 2.2 of the validation report has been updated to reference the report "Turkish Electricity Transmission Company (TEIAS): Turkish Electrical Energy 10-Year Generation Capacity Projection (2012-2021), of December 2012" as being used in the common practice analysis. Considering the above, this finding is closed and no further action is required.

Finding 12

Section 4.5.1 of the CDM *Methodological tool: Tool for the demonstration and assessment of additionality* version 07.0.0 states that "The latest version of the 'Guidelines on common practice' available on the UNFCCC website shall be applied." The current version of the CDM *Methodological tool: Common Practice* is version 03.1, effective 3 June 2015.

Section 2.5 of the project description references "the Guidelines on Common Practice version 02.0".

The VVB is required to address the reference to the abovementioned common practice tool and revise the project and audit documentation as required.

VVB Response:

Section 2.5 of the project description has been revised with the current version of CDM *Methodological tool: Common Practice* is version 03.1.

The latest available version 03.1 of Common Practice is added to reference table and referred in Section 3.2.5.6 of the validation report.

VCS Response:

Section 2.5 of the project description has been updated to reference the latest version of the 'Guidelines on common practice'. Section 3.2.5.6 of the validation report has been updated to include the latest version of the 'Guidelines on common practice' in the reference table.

Considering the above, this finding is closed and no further action is required.

Finding 13

Step 2 of the CDM *Methodological tool: Common Practice* requires the project proponent to identify similar projects that fulfil all of the conditions stated in Step 2, including condition (d), "The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant" and condition (f), "The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity."

Section 2.5 of the project description does not identify any projects that fulfil condition (d) or (f), and states "N.A." for both conditions.

Section 3.2.5.6 of the validation report states that "The applicable geographical area for the proposed project covers the entire host country (Turkey) as the default area specified in the guideline. All plants that deliver the same output, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project are defined as Nall. The total number of Nall is calculated as 0 in the "Common-

Practice_Karacabey_14.06.2016.xlsx" common practice calculation spreadsheet /3/ which could be confirmed through the Turkish Electrical Energy 10-Year Generation Capacity Projection Report /52/." The VVB makes no assessment of the project proponent's "N.A." designations.

The project proponent must adhere to the CDM *Methodological tool: Common Practice* by identifying the conditions in Step 2 of the tool and the projects that fulfil all such conditions. The VVB is required to address the incomplete assessment of the common practice analysis and revise the project and audit documentation as required.

VVB Response:

Section 2.5 has been revised by identifying condition (d) and (f).

The incomplete assessment of common practice analysis is now revised in the validation report.

VCS Response:

Section 2.5 of the project description has been updated to identify conditions (d) and (f) of Step 2 of the CDM *Methodological tool: Common Practice* with respect to the project activity.

Section 3.2.5.6 of the validation report has been updated to address the above selections identified by the project proponent.

Considering the above, this finding is closed and no further action is required.

Finding 14

Step 2 of the CDM *Methodological tool: Common Practice* requires the project proponent to identify similar projects that fulfil all of the conditions stated in Step 2. The following includes the instructions for steps 3-5:

"Step 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number Nall.

Step 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number Ndiff.

Step 5: calculate factor F=1-Ndiff/Nall representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity."

Section 2.5 of the project description appears to apply the steps stated above by the CDM *Methodological tool: Common Practice*.

Section 3.2.5.6 of the validation report's assessment of Step 2 states that "All plants that deliver the same output, within the applicable output range calculated in Step 1, as the proposed project activity

and have started commercial operation before the start date of the project are defined as Nall." Per the tool, N_{all} is not determined in Step 2. The validation report therefore appears to inaccurately describe the steps of the common practice tool in its assessment of additionality.

Section 3.2.5.6 of the validation report's assessment of Step 3 states that "The power plants apply technologies different that the technology applied in the proposed project activity are identified as N_{diff}." Per the tool, this assessment is reserved for Step 4. The validation report therefore appears to omit an assessment of Step 3 of the CDM *Methodological tool: Common Practice*.

Section 3.2.5.6 of the validation report's assessment of Step 4 states that "Factor F = (1 - Ndiff) / Nall representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity. The Nall-Ndif is calculated as 0, which are not greater than 3. Therefore, the project is not common practice." Per the tool, this assessment is reserved for Step 5 of the CDM *Methodological tool: Common Practice*.

Considering the above, the validation report inaccurately describes the steps of the common practice tool in its assessment of additionality. The VVB is required to address the common practice assessment and revise the project and audit documentation as required.

VVB Response:

Section 3.2.5.6 of the validation report is revised step by step.

VCS Response:

Section 3.2.5.6 of the validation report has been updated to accurately reference the steps in the common practice tool in its assessment of additionality.

Considering the above, this finding is closed and no further action is required.

2 MINOR FINDINGS

Finding 1

Table 8 of the project description is missing labels for each column. All tables must clearly identify the information being represented.

This finding need not be addressed during this review. Please note, however, that where VCS finds consistent minor findings in future reviews, minor findings shall be escalated to assessment findings.

Finding 2

Section 5.2.3 of the *VCS Standard, v3.6* requires that projects shall be listed on the VCS project pipeline before the opening meeting between the VVB and project proponent.

Section 2.3 of the validation report discusses the site visit which was conducted on 23 June 2016. This date indicates that validation work began on the project before it was listed on the VCS project pipeline on 23 September 2016.

The VVB is required to follow all requirements of the VCS Standard for future validations, including ensuring projects are listed on the VCS project pipeline prior to beginning validation services.

As minor findings have been raised on previous RINA validations where the pipeline listing requirements described above were not followed, pending the close of this review, VCS will submit a root cause analysis to RINA Services to determine and identify the root cause of this finding.

3 ASSESSMENT CONCLUSION

On 13 January 2017, VCS delivered this project review report to RINA Services S.p.A.

On 31 January 2017, RINA Services S.p.A. provided an updated project review report, project description and validation report in response to the project review report issued by VCS.

On 1 February 2017, VCS informed RINA Services S.p.A. that further responses were required to address Finding 7.

On 22 February 2017, RINA Services S.p.A. provided an updated project review report and validation report in response to Finding 7.

On 22 February 2017, VCS closed all findings based on the updated documentation provided by RINA Services S.p.A. and no further action was required.