



RINA

# VCS GAP ANALYSIS


“Ceyhan 61.7 MW Hydropower Project”  
in  
Turkey

Report N° 2010-DG-03-ME

Revision N° 1.0



# GAP ANALYSIS

<b>Project Title:</b> Ceyhan 61.7 MW Hydropower Project.		<b>Country:</b> Turkey	
<b>Client:</b> SUEN Ltd.		<b>Client contact:</b> Aynur SEZER	
<b>Report No.:</b> 2010-DG-03-ME		<b>Revision:</b> 1.0	<b>Date of this report:</b> 30/03/2012
<b>Approved by (Final Report):</b>   Roberto Cavanna			<b>Date of approval:</b> 03/04/2012


### Methodology

Number:	Version:	Title:	Scale	SS(s):
ACM0002	12.1.0 of 26/11/2010	Consolidated baseline methodology for grid-connected electricity generation from renewable sources.	Large	01

RINA Services S.p.A. (RINA), commissioned by SUEN Ltd., has performed the gap analysis of the project activity "Ceyhan 61.7 MW Hydropower Project." in Turkey, with regard to the relevant requirements for VCS activities.

In conclusion, it is RINA's opinion that the project activity "Ceyhan 61.7 MW Hydropower Project" in Turkey, as described in the VCS-PD subjected for gap analysis, meets the project registration requirements as per para 4 of VCS Normative Document: Project Registration and VCU Issuance Process version 1.2 of 21/01/2010. Furthermore, RINA confirms that the validation opinion described in the validation report (2010DG03ME rev. 1.0 of 04/03/2011) are still valid.

<b>Work carried out by:</b> Rita Valoroso, Wing Yu Tong	<input checked="" type="checkbox"/> No distribution without permission from the Client or organizational unit responsible <input type="checkbox"/> Strictly confidential <input type="checkbox"/> Unrestricted distribution
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<b>Work verified by (Final Report)</b>   Laura Severino	<b>Keywords:</b> Climate Change, Kyoto Protocol, Clean Development Mechanism, Validation
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# GAP ANALYSIS

## 1 INTRODUCTION

RINA Services Spa (RINA) has performed validation of the project activity “Ceyhan 61.7 MW Hydropower Project” in Turkey, on the basis of the VCS 2007.1 criteria and country criteria. The review of the project design document (PDD) version 3 of 02/02/2011 /1/ and the subsequent follow-up interviews have provided RINA with sufficient evidence to determine the fulfillment of the stated criteria.

In accordance with Para 10 of Voluntary Carbon Standard (VCS) Standard Program Guideline 2007.1 of 18/11/2008/4/, a gap analysis is carried out for project activity “Ceyhan 61.7 MW Hydropower Project” in Turkey, with the purpose to verify that the GHG emission reductions or removal approved from the project activity are fully compatible with Voluntary Carbon Unit (VCUs) created under the VCS Program, as the project activity followed the Clean Development Mechanism Project Design Document (CDM-PDD) template at the time of validation/registration.

As per Section (a) of Para 4.1.4 of VCS Normative Document: Project Registration and VCU Issuance Process version 1.2 of 21/01/2010/5/, for projects claiming GHG credits sequentially under the VCS Program and the CDM and where the project description and validation report follow CDM templates and procedures, a further validation shall be completed of Sections 1.5, 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS project description template.

The gap analysis for Sections 1.5, 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS project description template are summarized as follows:

### **1.1 Section 1.5 Project location including geographic and physical information allowing the unique identification and delineation of the specific extent of the project.**

As indicated in the VCS-PD for gap analysis /2/, the project is located on the Ceyhan River, which is about 14 km northwest of Osmaniye City in South Anatolian Region of Turkey. The project geographical coordinates are: Oskan plant 37.224461 North and 36.252436 East; Berkman plant 37.168667 North and 36.233742 East, which is in line with the feasibility study report /7/. While crosschecking the VCS-PD for gap analysis and the validation report version 1.0 of 04/03/2011/6/, it is found that there is a slightly discrepancy for the geographical coordinates of Oskan plant, which the coordinates indicates in the validation report is 37.224463 North and 36.252444 East. A correspondence from the Project Participant (PP) received on 30/03/2012/9/ clarifying that there would be either typing mistakes or mistake in calculation while doing the conversion of the geographical coordinates from degree/minute/second format to degree decimal format and both geographical coordinates as indicated in the validation report version 1.0 of 04/03/2011/6/ and the VCS-PD for gap analysis/2/ are within the Oskan Plant as the plant area is relatively large, the same has been verified by RINA using the tools from Google Map/10/.

### **1.2 Section 1.12 Demonstration to confirm that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction**

As indicated in the VCS-PD for gap analysis /2/, it is indicated that the project activity does not generate greenhouse gases (GHG) emissions. This is deemed reasonable as the proposed project activity is generating electricity using renewable hydro resources, which was confirmed during the physical inspection at the project site at the time of validation /6/.

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### **1.3 Section 1.13 Demonstration that the project has not created another form of environmental credit.**

The project activity does not create another form of environmental credit, which has been confirmed during the validation process /6/.

### **1.4 Section 1.14 Project rejected under other GHG programs**

The project did not participate in any other GHG emission reduction program, which has been confirmed during the validation process /6/.

### **1.5 Section 8.1 Proof of title**

The ownership of the project is evidenced by the energy production license issued by Electricity Market Regulatory Authority (EMRA) to Enova Enerji Uretim A.S. /8/, which has been confirmed during the validation process /6/.

### **1.6 Section 8.2 Project that reduce GHG emissions from activities that participate in an emissions trading programs**

The project did not participate in any other GHG emission reduction program (including an emission trading program), which has been confirmed during the validation process /6/.

## **2 CONCLUSION**

In conclusion, it is RINA's opinion that the project activity "Ceyhan 61.7 MW Hydropower Project" in Turkey, as described in the VCS-PD subjected for gap analysis, meets the project registration requirements as per para 4 of VCS Normative Document: Project Registration and VCU Issuance Process version 1.2 of 21/01/2010.

Furthermore, by cross-checking the VCS Program Guidelines 2007.1/4/, the validated PDD version 3 of 02/02/2011/1/ and the validation report version 1.0 of 04/03/2011/6/, RINA confirms that the validation opinion described in the validation report/5/ are still valid.

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### 3 REFERENCE

/1/	SUEN LTD: CDM-PDD for project activity “Ceyhan 61.7 MW hydropower project.” in Turkey, version 3 of 02/02/2011
/2/	SUEN LTD: VCS-PD (version 2007.1) for gap analysis for project activity “Ceyhan 61.7 MW hydropower project.” in Turkey, submitted on 26/03/2012
/3/	Voluntary Carbon Standard – Voluntary Carbon Standard 2007.1 of 18/11/2008
/4/	Voluntary Carbon Standard – Voluntary Carbon Standard Program Guidelines 2007.1 of 18/11/2008.
/5/	Voluntary Carbon Standard – Voluntary Carbon Standard Program Normative Document Project Registration and VCU Issuance Process, version 1.2 of 21/01/2010.
/6/	RINA Services S.p.A.: Validation Report for “Ceyhan 61.7 MW hydropower project” Report N°: 2010-DG-03-ME, version 1.0 of 04/03/2011.
/7/	Temelsu International Engineering Services Inc. - Feasibility Study Report Berkman & Oskan HEPP – July 2003. TEMELSU International Engineering Services Inc. - Revised feasibility Study Report Berkman & Oskan HEPP – March 2008
/8/	Electricity Market Regulatory Authority (EMRA) – Production license for Ceyhan HEPPs of 21/12/2006
/9/	Email Correspondence of SUEN LTD regarding the Geographical coordinates on 30/03/2012
/10/	Google: Find geographical coordinates using Google Map. ( <a href="http://www.europe-camping-guide.com/get-longitude-latitude-google-maps/">http://www.europe-camping-guide.com/get-longitude-latitude-google-maps/</a> ) Language: English, Retrieved on 30/03/2012

