

VALIDATION REPORT

Al Jubail Fertilizer Company (Al Bayroni)

**Efficiency Improvement by Boiler
Rehabilitation in fossil fuel-fired
(Natural Gas) Steam Boiler System**

Date of Issue:		Project Number:	
14/07/2014		CDM.VAL3617	
Project Title:			
Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System			
Organisation:		Client:	
SGS United Kingdom Limited		Al Jubail Fertilizer Company (Al Bayroni)	
Publication of PDD for Stakeholders Consultation			
Commenting Period:		14/12/2013- 12/01/2014 (Both the days included)	
First PDD Version and Date:		Version 1 dated 23/09/2014	
Final PDD Version and Date:		Version 6 dated 08/07/2014	
Summary:			
<p>Al Jubail Fertilizer Company (Al Bayroni) has commissioned SGS to perform the validation of the project “Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System”, in Saudi Arabia using the CDM methodology AM0056, Version 1.</p> <p>The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against CDM Validation and Verification Standard (version 7.0), Kyoto Protocol requirements and UNFCCC rules.</p> <p>The report is based on the assessment of the project design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, follow up actions (e.g. site visit, telephone or e-mail interviews) and also the review of the applicable approved methodology and underlying formulae and calculations.</p> <p>The report and the annexed validation describes a total of 11 findings which include:</p> <ul style="list-style-type: none"> • 09 Corrective Action Requests (CARs); • 02 Clarification Requests (CLs); • 00 Forward Action Requests (FARs); <p>All findings have been closed satisfactorily and the project will be recommended to the CDM Executive Board for registration.</p>			
Subject:		Document Distribution	
CDM Validation			
Validation Team:		<input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit)	
Shivaji Chakraborty – Lead Assessor Sauvik Banerjee – Assessor and Technical Expert (TA 1.1) Tauqeer Malik – Local Assessor			
Technical Review:		<input type="checkbox"/> Limited Distribution	
Date: 16/07/2014 Name: Ravi Kant Soni			
Authorised Signatory:		<input type="checkbox"/> Unrestricted Distribution	
Name: Siddharth Yadav Date: 17/07/2014			
Revision Number:	Date:	Number of Pages:	
0	30/04/2014	86	
1	02/06/2014	82	
2	18/06/2014	82	
3	14/07/2014	87	

Abbreviations

CAR	Corrective action request
CDM	Clean development mechanism
CDM	EB CDM Executive Board
CER	Certified emission reduction
CL	Clarification request
COP/MOP	Conference of parties serving as the meeting of parties to Kyoto Protocol
DOE	Designated operational entity
DNA	Designated National Authority
EB	Executive Board
EF	Emission Factor
FAR	Forward action request
GHG	Greenhouse gas(es)
GWh	Giga Watt Hour
IPCC	Intergovernmental Panel on Climate Change
K	Kelvin
LOA	Letter of Approval
MHI	Mitsubishi Heavy Industries
MoC	Modalities of Communication
MoM	Minutes of Meeting
MTPD	Metric Tonne per day
MT/H	Metric Tonne Per Hour
ODA	Official Development Assistance
OEM	Original Equipment Supplier
PDD	Project Design Document
PSSR	Pre Startup Safety Review
RCER	Royal Commission Environmental Regulations
SHEM	Safety, Health and Environmental Management System
SABIC	Saudi Arabia Basic Industries Corporation
SFC	Specific Fuel Consumption
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Table of Content

1. Validation Opinion	5
2. Introduction.....	6
2.1 Objective.....	6
2.2 Scope.....	6
2.3 GHG Project Description	6
2.4 The Names and Roles of the Validation Team Members.....	6
3. Methodology	7
3.1 Review of CDM-PDD and Additional Documentation.....	7
3.2 Use of the Validation Protocol	7
3.3 Findings	8
3.4 Internal Quality Control	8
4. Validation Findings	9
4.1 Approval.....	9
4.2 Authorization.....	10
4.3 Modalities of Communication and MoC Statement	10
4.4 Project Design Document including Project Description	11
4.5 Applicability of selected methodology to the project activity.....	14
4.6 Project Boundary	17
4.7 Baseline Selection	19
4.8 Application of Baseline Methodology and Calculation of Emission Factors.....	27
4.9 Application of Monitoring Methodology and Monitoring Plan	28
4.10 Environmental Impacts.....	29
4.11 Local Stakeholder Comments	30
5. Comments by Parties, Stakeholders and NGOs.....	31
5.1 Description of how and when the PDD was made publicly available.....	31
5.2 Compilation of all comments received.....	31
5.3 Explanation of how comments have been taken into account	31
6. List of Persons Interviewed	32
7. Document References.....	33

Annexes:

A.1 Annex 1: Local Assessment	35
A.2 Annex 2: Validation Checklist.....	40
A.3 Annex 3: Overview of Findings.....	68
A.4 Annex 4: Team Members Statements of Competency.....	83

1. Validation Opinion

SGS United Kingdom Ltd has been contracted by AL Jubail Fertilizer Company (Al Bayroni) to perform a validation of the project “**Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System**”, in Saudi Arabia.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism Validation and Verification Standard (Version 7.0) and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

Through the rehabilitation of packaged boilers by installing economizers, the PP enhanced the energy efficiency of the packaged boilers by reducing the fuel consumption whilst maintaining the requisite steam quality and production rates. The project activity will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change.

In our opinion, the project meets all relevant UNFCCC, CDM criteria and all relevant host country criteria. The project correctly applies methodology AM0056, version 01. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The total emission reductions from the project are estimated to be **418,310** t of CO₂e over a 10 year crediting period during 01/10/2014 to 30/09/2024, averaging **41,831** t of CO₂e annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given the underlying assumptions do not change.

The project will hence be recommended by SGS for registration with the UNFCCC CDM EB.

Signed on Behalf of the Validation Body by Authorized Signatory

Signature:



Name: Siddharth Yadav

Date: 17/07/2014

2. Introduction

2.1 Objective

AL Jubail Fertilizer Company (Al Bayroni) has commissioned SGS to perform the validation of the project “Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System”, in Saudi Arabia, against the relevant requirements for Clean Development Mechanism (CDM) project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

2.3 GHG Project Description

The purpose of the project activity is to enhance the energy efficiency of existing installed packaged boilers at the Al Bayroni facility of Al Jubail Fertilizer Company, by rehabilitating the individual boilers with economizers and modified superheaters. Economizers and superheaters raise the temperature of the feed water entering the boilers and thus the fossil fuel (Natural Gas) consumption to heat the boiler feed water decreases whilst converting the same to the superheated steam to be used within the facility. As a result, the project will reduce the GHG emissions on account of this heat recovery.

In absence of the project activity, the existing packaged boilers will continue to consume more fossil fuel (natural gas) and thereby lead to more overall GHG emissions than without the proposed CDM project activity.

2.4 The Names and Roles of the Validation Team Members

Assessment Team	Role
Shivaji Chakraborty	Lead Assessor
Sauvik Banerjee	Assessor and Technical Expert (TA 1.1)
Tauqeer Malik	Local Assessor

Technical Review	Role
Ravikant Soni	Technical Reviewer
Tarit Roy	Technical Expert (TA 1.1)

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project design document version 01 dated 23/09/2013 and the subsequent versions dated 02 dated 27/02/2014 and version 03 dated 20/03/2014, version 04 dated 26/05/2014, version 05 dated 16/06/2014 and version 06 dated 08/07/2014 final version^{1/}. The assessment is performed by trained assessors using a validation protocol attached as Annex 2, table 2.

The assessment team on the site visit checked the methodological applicability, baseline, project additionality; PDD related documents and the results are summarized in Annex I: Local Assessment Checklist. Interview was carried out during the site visit which included local staff of Al Bayroni. In addition, the assessment team also interviewed the local stakeholders in the region and it was found that the project inception generated employment amongst the local population. A detailed list of names of the individuals interviewed is included in Section 6 of the report.

3.2 Use of the Validation Protocol

The validation protocol used for the assessment is designed in accordance with the Validation and Verification Standard, Version 7.0. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation (reporting).

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CL) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this project is attached as Annex A.1 to this report

3.3 Findings

As an outcome of the validation process, the team can raise different types of findings

A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR)**. A CAR is issued, where:

- I. The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- II. The CDM requirements have not been met;
- III. There is a risk that emission reductions cannot be monitored or calculated.

The validation process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

A Forward Action Request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

Corrective Action Requests and Clarification Requests are raised in the draft validation protocol and detailed in a separate form (Annex A.3). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

3.4 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team. Findings can be raised at this stage and client must address them within agreed timeline.

4. Validation Findings

4.1 Approval

The Host country for this project is Saudi Arabia. Saudi Arabia ratified the Kyoto protocol on 12th January 2005. The same was checked against the UNFCCC webpage (https://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php) and found consistent.

The copy of Letter of Approval (LoA)^{/2/} issued by the DNA office of Saudi Arabia, National Committee for Clean Development Mechanism, Ministry of Petroleum and Mineral Resources bearing Letter ref No. CDM14—017LOA dated 08/01/2014 was made available by the PP to the assessment team. The same was checked against the UNFCCC webpage (<http://cdm.unfccc.int/DNA/index.html>) and was found to be consistent. The Letter of Approval (LoA)^{/2/} from the Party confirmed that the host party involved has approved the project activity titled as '*Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System*', which complies with the requirement stipulated in the paragraph 40(d) of VVS, version 7.0^{/10/}.

The name of the project activity and the PP in the Letter of Approval^{/2/} issued by the Host Country DNA office^{/3/} was verified against section A.1 and section A.4 of the final version of the PDD^{/2/} and was found to be consistent and hence accepted and also the Letter of Approval (LoA)^{/2/} confirms that:

- (a.) Saudi Arabia has accessed to the Kyoto Protocol on 31st January 2005 and hence the host is a Party to the Kyoto Protocol;
- (b.) The host party Saudi Arabia participates voluntarily in the proposed CDM project activity;
- (c.) The proposed CDM project activity contributes to Sustainable Development in Georgia;
- (d.) The DNA will cooperate with the project participant and the CDM EB to facilitate the CDM process and give assistance, where necessary for the issuance and transfer of CER to the project participant.

The Letter of Approval^{/3/} is unconditional with respect to (a) to (d) mentioned above.

It is further confirmed in accordance with para 40-43 of the VVS, version 7.0^{/10/} that:

- (a) The letter of approval^{/2/} issued by the DNA of Saudi Arabia "National Committee for Clean Development Mechanism, Ministry of Petroleum and Mineral Resources" bearing Letter no. CDM14—017LOA dated 08/01/2014 have been received.
- (b) Confirmation vide email dated 22nd April 2014 has been obtained from the DNA office of Saudi Arabia, Mr. Abdullah Al Sarhan (National committee secretary, Designated National Authority). The DNA office of Saudi Arabia confirmed that the project, bearing the unique title, was considered in the Letter of Approval^{/2/} accorded vide letter CDM14—017LOA dated 08/01/2014. The same was checked against the UNFCCC webpage (<http://cdm.unfccc.int/DNA/index.html>) and was found to be consistent. Based on the communication and confirmation received from the Host Party DNA Office, it was accepted by the assessment team that the DNA approval was correctly done and the approval from Saudi Arabia DNA was found to be consistent and thus accepted. It was confirmed that the letter of approval has been issued by the Designated National Authority (DNA) office of Saudi Arabia and it is valid for the proposed CDM project activity under validation. The email from DNA also confirmed that the LoA has been signed by Assistant Minister for Petroleum Affairs, Chairman of the National Committee for Clean Development Mechanism (CDM DNA) and thus the authority of signing the LoA was found to be authentic and thus accepted. Furthermore, a cross-check as per the requirement of para 41 & 42 of VVS, version 7.0 was done by the assessment team through phone call with the Saudi Arabia DNA (Ph no.0096612819700) and it was confirmed by Abdullah Nasser Al-Sarhan, Secretary General of National Committee for Clean Development Mechanism that the LoA ref CDM14-017LOA dated 08/01/2014 had been issued to Al Jubail Fertilizer Company (Al-Bayroni) and Saudi Basic Industries Corporation (SABIC) The authenticity of the letter of approval^{/2/} was checked and found to be consistent.

It was confirmed that the letter of approval conforms to all the requirement of the paragraphs 40-43 of VVS, version 7.0^{/10/}.

Discussion of CAR/CL:

CAR01 was raised as the PP was requested to provide the LOA from the relevant DNA for the project in line with VVS 7.0 para 39 and Paragraph 37 CDM Modalities and procedures.

In response, the PP provided the Letter of Approval by the Saudi Arabia DNA, with Ref no CDM14-017LOA dated 08/01/2014; which was checked and found to be consistent with the information provided in the PDD and as per the requirements of para 40 of VVS 7.0 and thus accepted. Furthermore, a cross-check as per the requirement of para 42 & 43 of VVS, version 7.0 was done by the assessment team through phone call with the Saudi Arabia DNA (Ph no.0096612819700) and it was confirmed by Abdullah Nasser Al-Sarhan, Secretary General of National Committee for Clean Development Mechanism that the LoA ref CDM14-017LOA dated 08/01/2014 had been issued to Al Jubail Fertilizer Company (Al- Bayroni) and Saudi Basic Industries Corporation (SABIC). The LoA was therefore accepted. Thus, **CAR01** was closed out.

4.2 Authorization

The Host country for this project is Saudi Arabia. Saudi Arabia has been approved by a party to the Kyoto protocol on 31st January 2005 and ratified the Kyoto Protocol on 12th January 2005. The same was checked against the UNFCCC webpage (https://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php) and found to be consistent. The letter of approval^{/2/} conforms to all the requirement of the paragraphs 46-49 of VVS, version 7.0^{/10/} and hence is accepted.

The PPs are listed in tabular form in section A.3 of the final PDD^{/1/}. The LoA^{/2/} from the DNA office of Saudi Arabia approves the participation of Al Jubail Fertilizer Company (Al Bayroni) and Saudi Basic Industries Corporation (SABIC); therefore the PPs are approved by the Party to the Kyoto Protocol. This was found in line with Para 47 of VVS, version 7.0^{/10/}. Also, the project participants listed in tabular form in section A.3 of the PDD^{/1/} are consistent with the contact details provided in Appendix 1 of the PDD^{/1/}. The validation team also confirms that no entities other than those approved as the project participants are included under section A.3 and annex 1 of the PDD^{/1/}.

No Annex I Party has been identified in the latest version of the PDD^{/1/} and therefore no further Letter of Approval was required. It was observed that the CDM EB has agreed that the registration of a CDM project activity can take place without an Annex I Party being involved at the stage of registration although it should be noted that before CERs can be transferred to an Annex 1 Party, a Letter of Approval from the Annex 1 Party will need to be submitted.

The PP also submitted the declaration towards non-involvement of ODA dated 20/01/2014^{/5/}. It was checked and concluded that the project financials will be met through internal accruals hence accepted. The issue of the project finance have been further discussed in details under section 4.3 of this report below.

4.3 Modalities of Communication and MoC Statement

As a mandatory requirement of the UNFCCC CDM EB, the Project Participants requires to submit the modalities of communication (MoC) before submitting a request for registration for the proposed CDM project activity. The Project Participant provided the MoC dated 15/01/2014^{/3/} which was found to be in line with the information regarding the particulars provided in the Appendix 1 of the Project Design Document (PDD)^{/1/} and complete as per the latest template of MoC version 2.1. Hence the MoC has been accepted.

This is in accordance with para 55-59 of VVS, version 7.0^{/10/}.

From the above discussion, it has been concluded that the proposed CDM project activity meets the relevant CDM requirements.

Discussion on CAR/CL:

The PP was requested to provide the MOC, as per the requirements of EB 48 Annex 60. **CL03** was raised in this regard.

In response, the PP Modalities of Communication dated 15/01/2014 was checked and was found to be using the latest template of MoC issue 02.1 and thus accepted. Also the requirements of para 55-59 of VVS version 7.0 has been found to be included in the MoC and thus accepted. Thus, **CL03** was closed out.

The PP was requested to clarify why Appendix 1 did not have the contact details of SABIC, the other listed in Section 1 of the PDD. **CL11** was raised in this regard.

In response, the PP corrected the PDD and Appendix 1 was checked and found to be as per the requirements of Guidelines for completion of PDD template. The information was found to be consistent with the information in both the MoC and the LoA and thus accepted. Thus, **CL11** was closed out.

4.4 Project Design Document including Project Description

Main changes and reason for revision between the final PDD against the first version published for the international stakeholder consultation	
PDD Section no.	Description and reason for changing the information in that section
PDD, version 1 dated 23/09/2013	Webhosted Version
PDD, version 6 dated 08/07/2014	<p>In response to CAR02:</p> <ul style="list-style-type: none"> - The PDD has been completed as per recent applicable template - The contents section in page 2 has been removed. - The page 27, section B.6.4., 10 year total was made consistent. - The page 35, Appendix 6, the header has been corrected. - The description of the project in Section A.1 has now been included in details. - Section A.3 is has been included with further technical description of the individual initiatives. - The metering points in pre and post modification in the project has now been made clear. <p>In response to CAR04:</p> <ul style="list-style-type: none"> - The methodology with correct version number has been included with the detailed reference. - The conformance with each criterion of the methodology has been included particular towards the documentary evidence. <p>In response to CAR05,</p> <ul style="list-style-type: none"> - The project boundary was further substantiated. - The operational lifetime of the equipment have been corrected. <p>In response to CAR06,</p> <ul style="list-style-type: none"> - The baseline scenario (as per the provisions of the methodology, AM0056 and "Combined tool to identify the baseline scenario and demonstrate additionality" version 5.0) has been corrected. - The "Combined tool to identify the baseline scenario and demonstrate additionality" has been correctly used to identify the baseline scenario and have been updated.

Main changes and reason for revision between the final PDD against the first version published for the international stakeholder consultation

	<p>In response to CAR07,</p> <ul style="list-style-type: none"> - The additionality has been further explained. - The prior consideration has been explained in section B.5 of the PDD. <p>In response to CAR09,</p> <ul style="list-style-type: none"> - The frequency of calibration and internal audit was updated The emergency preparedness procedure have been included. <p>In response to CAR10,</p> <ul style="list-style-type: none"> - The sampling have been corrected as 100% data will be monitored.
--	---

The PP had used the Large Scale Project Design Document Form (F-CDM-PDD) version 4.1^{/31/} and the headings/ logo, format/font follows the standard requirements. The corresponding sections of the PDD are correctly filled and followed the Guidelines for completing the F-CDM-PDD, version 4.1, dated 11th April 2012. These are the latest available versions and have been confirmed from the UNFCCC website (https://cdm.unfccc.int/Reference/PDDs_Forms/PDDs/PDD_form05.pdf) and found to be consistent. This was checked and it was found to be appropriate as per para 63 of VVS, version 7.0^{/10/} and hence is accepted by the assessment team.

The project activity is titled “**Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System**”. The title was checked by using the UNFCCC website search function: (<https://cdm.unfccc.int/Projects/Validation/DB/JCR0B72TOJAQ51TZOEL9GAP0E0324X/view.html>); no other project with this title were found, hence the title is accepted by the assessment team as being unique. The Project title was found to be unique and consistently mentioned in the initial web hosted version of the PDD^{/1/} till the final version of the Project Design Document (PDD)^{/1/} hence found satisfactory. It was further cross-checked with the project title mentioned in the LoA^{/2/} as mentioned under section 4.1 above, and found to be consistent. The project design and its objectives have been transparently explained in the final version of the PDD^{/1/} and are consistent with the timeline of the project history.

The proposed project activity is the rehabilitation of individual existing boilers through the installation of economizers and modified superheaters. Economizers and superheaters raise the temperature of the feed water entering the boilers; and thus fossil fuel (Natural Gas) consumption to heat the boiler feed water decreases; and converting the same to the superheated steam to be used within the facility. As a result, the project will reduce the GHG emissions on account of this heat recovery. The total steam production capacity of the 3 boilers is 387.5 MT/H. The proposed project activity will enhance the energy efficiency by utilizing the latent heat of flue gas to convert the wet steam to dry steam. The super heater placed in the path of flue gas coming out of the combustion chamber preheats the steam above its saturation temperature. This reduces the consumption of fossil fuel consumption (natural gas) and thus helps in reducing the GHG emissions.

The technical detail mentioned in sections A.1 and A.3 of the PDD^{/1/} was found to be accurate and complete with respect to the information as verified from the copy of the Feasibility Study report of Fuel conversion for existing MHI boilers dated 15/11/2007 prepared by Mitsubishi Heavy Industries, Ltd^{/19/} as obtained from the PP during the on-site validation. The credential of the consultants was further confirmed against the information available on the public domain <http://www.mhi-global.com/> and was found to be a company is competent and involved in Feasibility study of boilers and thus found to be consistent in terms of provision of the Feasibility Study report.

Furthermore, the consistency of the project description and technical details of the project was also checked during on-site interview with the senior personnel of Al Bayroni., namely Mr. Ku, Te-Tien (Vice President), Mr. Ali Al Anazi (EHSS, Senior Manager) and Mr. L.S.Pandya (Process Engineer Manager); as a part of on-site validation and document review process in the Client's office at Al-Jubail, Saudi Arabia and found appropriate.

The PP had signed the contracts for the projects with the equipment supplier (OEM), Toyo Engineering Corporation on 25/08/2011^{/18/}. This is also considered to be the start date of the CDM project activity. The project technical details were further cross checked against the technical analysis prepared by independent third party Kellogg Brown Roots^{/29/} before the signing of the contract on August 2007 and found to be consistent with regard to the assessment of the proposed projects and thus was found to be acceptable to the assessment team. The credentials of Kellogg Brown Roots as the independent technical analyzer and turnkey solution provider for natural gas based projects was also cross checked against the official company website (<http://www.kbr.com/About/Global-Presence/Middle-East/>).

The information provided in the final version of the PDD^{/1/} provides a clear indication of the project site along with its geographical coordinates. The proposed CDM project activity is located at Al Bayroni, Jubail Industrial city, Eastern Province, Kingdom of Saudi Arabia. The geographical co-ordinates of the project activity location are Latitude 49° 33' 27.98" East and Longitude 27° 3' 54.64" North. The coordinates were cross-checked against Google Map and found to be consistent. The location of the proposed project activity has been physically verified during the validation site visit and the assessment team hereby confirms the location information about the project in the PDD^{/1/} is correct.

As per the initial webhosted PDD^{/1/} and the validation site visit conducted, it was confirmed that the proposed project activity was under implementation as per the schedule provided in the PDD section A.2. The implementation schedule for the project activity and the related risk for project implementation details against the selected crediting period was checked based on interviewing the PP during the validation site visit and found justified.

During the validation site visit of the project, it was discussed with the PP and by virtue of further document evaluation it was understood that the proposed project activity has been implemented in phases. The modifications were carried out in the boilers 2008-U and 2008-UA on 10/05/2013 while the modifications in the third boiler 2052-U was completed on 20/02/2014. This was checked against the Acceptance of PSSR completion form for boiler 2008-U dated 06/05/2013^{/23/}, 2008-UA dated 01/06/2013 and 2052U dated 20/02/2014^{/23/}. The plan as mentioned in Section A.2 of the PDD covers the project planning from procurement to start up and marked the milestone activity of project implementation against actual activity. The starting of the implementation of the project activity and expected completion timeline was cross-checked against the company's project timelines^{/22/} and found consistent. The proposed implementation schedule was further confirmed by interviewing Mr. Ku, Te-Tien (Vice President), Mr. Ali Al Anazi (EHSS, Senior Manager) and Mr. L.S.Pandya (Process Engineer Manager) during the on-site validation, hence accepted.

The project funding for the current activity is not involving any ODA utilization. This was discussed with the PP during the validation site visit. A Declaration dated 20/01/2014 confirming no ODA utilization^{/5/} or public funding involved for the proposed project activity was provided by the project Participant which was considered acceptable.

Discussion of CAR/CL:

The PP was requested to clarify that why the PDD was not found to be in line with Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41.

- Throughout the PDD, the template has been altered from the PDD template on the UN website.
- Page 2, contents page is not part of the template.
- Page 27, Section B.6.4. 10 year total is not consistent as the total comes to 418,310 (41,831*10) as compared to 418,315 as stated in the PDD.
- Page 35, Appendix 6, the header has been altered and it looks like there are post registration changes.

The description of the project in Section A.1 is not clear with regards to implementation of the project and current status of the project is not clear. Also it is not clear from the description of the project the components of the project. Initiatives listed in section A.1 and section A.3 does not match. PP was requested to clarify as per requirement of para 64 of VVS 6.0 (version valid at the time of raising the issue).

Section A.3 is not clear with regards to the technical description of the individual initiatives. The initiatives listed here are inconsistent with the Section A.1 of the PDD.

Fig A.2 is not clear with regards to all the listed initiatives. Also metering points from post and pre modification are not clear. **CAR02** was raised.

In response, the PP corrected the PDD. PDD version 2.0 dated 26/02/2014 was checked by the assessment team.

- The template of the PDD was checked and it was found to be filled in as per the requirements of Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41 and thus accepted.
- The content page was found to be removed from the revised PDD version 2.0 dated 26/02/2014 and it was found to be in line with the PDD template and thus accepted.
- The 10 year total ER value in section B.4 was checked and was found to be corrected in the PDD version 2.0 and thus accepted.
- Header of Appendix 6 was found to be corrected and thus accepted.

Section A.3 was checked in PDD version 2.0, with regards to the technical description of the individual initiatives and it was found to be correct as per the actual scenario checked by the assessment team and thus accepted. The initiatives listed were also found to be consistent with the Section A.1 of the PDD and thus accepted.

Fig A.2 was found clear with regards to all the listed initiatives, also metering points from post and pre modification were found to be included in PDD version 2.0 dated 26/02/2014 and thus accepted. Thus, **CAR02** was closed out.

4.5 Applicability of selected methodology to the project activity

The project falls under type (II): Energy efficiency improvement project activities. The proposed CDM project activity is an energy efficiency project with the total steam production capacity of the 3 boilers being 387.5 MT/H. According to the final version of the PDD, stage I involves implementation of two retrofitted boilers of 129.25 MT/H capacity each, followed by further installation of a third retrofitted boiler with rated capacity of 129.00 MT/H in phase II.

The PP had applied the large scale of the methodology AM0056, version 1^{/11/}. The total energy savings as confirmed by the assessment team is 2391.981 GWh/ year which is more than 60 GWh as specified in the Project Standard, version 7.0 paragraph 89^{/30/}. Hence, the PDD^{/1/} under the section B.1 refers to the approved large scale methodology AM0056, version 1^{/11/} correctly. The following are the applicability criteria for the project to be selected under this methodology:

Table 1: Applicability Criteria

Criteria No.	Criteria as per Methodology AM0056, version 1 ^{/11/}	Project Eligibility	Means of Validation
1	<p><i>This methodology is applicable to project activities that in an existing facility:</i></p> <ul style="list-style-type: none"> • <i>Completely replace one or more boilers with some remaining lifetime; and/or</i> • <i>Implement fitting of additional new equipment to an existing steam generating system (retrofitting); and</i> • <i>Implement optional switch in fossil fuel.</i> 	<p>The project activity is an energy efficiency project. The project activity improves the energy efficiency by installing the economizers to existing steam boilers.</p>	<p>This fact was confirmed during the site visit along with document review of Al Bayroni Project feasibility dated 15/11/2007^{/19/} prepared by Mitsubishi Heavy Industries, Ltd and found consistent. Hence it is applicable under the option (b) of this category.</p> <p>Thus it has been concluded that this applicability criteria of the applied methodology is met.</p>
2	<p><i>The methodology is applicable under the following conditions:</i></p> <ul style="list-style-type: none"> • <i>Steam generation in the project activity is carried out through the use of fossil fuel fired steam boiler(s);</i> • <i>National/local regulations do not require the replacement or retrofit of the existing equipment. The project participants shall demonstrate this through documented evidence (e.g. building code documents). These documents shall be submitted to a DOE at the time of validation;</i> • <i>There are no enforced national/local regulations/standards on minimum efficiency ratings for the boiler(s) included in the project boundary. The project participants shall confirm this through documented evidence (e.g. building code documents, industrial regulations, etc). These documents shall be submitted to a DOE at the time of validation;</i> 	<p>The three boilers, namely 2008-U, 2008-UA, and 2052-U in the project activity generate steam using natural gas which is a fossil fuel.</p> <p>As Albayroni is located inside the industrial city of Jubail, it complies with the location under the control of the Royal commission which are Jubail, Ras Al Khair and Yanbu as specified in the Royal Commission Environmental Regulations act, RCER, 2010^{/32/}.</p> <p>There are no requirements for replacement or retrofit of existing boilers, nor minimum efficiency ratings for boilers prescribed in the RCER 2010^{/32/}.</p> <p>The steam quality (pressure and temperature) remains the same in pre and post modification of the existing boilers.</p>	<p>This fact was confirmed during the site visit along with document review of Al Bayroni Project feasibility dated 15/11/2007^{/19/} prepared by Mitsubishi Heavy Industries, Ltd and found consistent.</p> <p>Thus it has been concluded that this applicability criteria of the applied methodology is met.</p>

Criteria No.	Criteria as per Methodology AM0056, version 1 ^{11/}	Project Eligibility	Means of Validation
	<ul style="list-style-type: none"> <i>National/local regulations/programmes do not constrain the facility from using the fossil fuel being used prior to fuel switching;</i> <i>Steam quality (i.e. pressure and temperature) is the same before and after the start of the implementation of the project activity¹;</i> <i>The existing steam generating system in the facility where the project activity is implemented may consist of more than one boiler;</i> <i>Only one type of fossil fuel is used in all boilers included in the project boundary. If the fossil fuel switch is implemented, it should involve all boilers in the project boundary. Small amounts of other start-up or auxiliary fuels can be used, provided that they do not account for more than 1% of total fuel use²;</i> <i>If the fossil fuel switch is implemented, only those project activities are eligible to use this methodology where both energy efficiency measures and fuel switch are additional.</i> 		

¹ 95 % of the measured values (measured every 15 minutes) of $PRESS_{PJ}$ have to be in the range of $PRESS_{BL,MIN}$ and $PRESS_{BL,MAX}$ and 95 % of the measured values (measured every 15 minutes) of $TEMP_{PJ}$ have to be in the range of $TEMP_{BL,MIN}$ and $TEMP_{BL,MAX}$. (see section II,7 and III for further guidance). Methodology AM0056, version 1.

² Besides the main fuel type used in the boiler system, other fuel types may be used only for start-ups as long as the start-up fuel is a less or equally carbon intensive fuel and the amount of start-up fuel does not exceed 1 % of the main fuel used during one year (i.e. on a NCV basis). This means that a coal-fired boiler may be started with oil or natural gas only, as long as the amount of oil or gas used does not exceed 1 % of the coal used in each year of the operation (on a NCV basis). Methodology AM0056, version 1.

Based on the above discussion, the validation team confirms that the proposed CDM project activity meets all the applicability conditions stipulated in the selected methodology AM0056, version 1^{/11/}.

The project qualifies as a large scale CDM project activity and hence it has appropriately adopted the approved large scale methodology AM0056, version 1^{/11/}.

Thus in accordance with para 81 of project standard, version 7 and para 75 VVS, version 7.0^{/10/} the applicability of the methodology has been validated by the assessment team and found to be appropriate.

Discussion of CAR/CL:

The PP was requested to refer, quote and apply the methodology (and the tools) correctly by comparing it to the latest available tools throughout the PDD as per requirement of VVS version 5.0 para 71. Further, it was not clearly mentioned how the conformance with each criterion has been met in particular towards the documentary evidence. The PP is requested to clarify the same as per VVS version 5.0 para 76.

Also, the PP was requested to clarify why there two sub sheets had the same information in the “Project-Leaks-Reduction sheet”. **CAR04** was raised in this regard.

In response, the PDD version 2.0 dated 26/02/2014 was provided by the PP and the same was checked and the applied methodology and the tools was found to be correctly applied and included in the PDD.

The justification for each criterion of the methodology was found to be included and justified in the PDD version 2.0 dated 26/02/2014 which was further corrected by the PP in the revised PDD, version 6 dated 08/07/2014 with documentary evidences which was found consistent and thus accepted.

The PP correctly removed one sub sheet having the same information in the “Project-Leaks-Reduction sheet” dated 26/05/2014. **CAR04** was thus closed out.

4.6 Project Boundary

The proposed CDM project activity involves the retrofitting of 3 existing steam boilers to enhance the energy efficiency by installing economizers and superheaters, which will help recovering the latent heat of flue gas, and preheat the boiler feed water and thus reduces the consumption of natural gas. The project activity is implemented in two subsequent phases (first, the 2 boiler 2008-U and 2008-UA and secondly the boiler 2052-U). The steam generated from the project activity will be used within the plant facility only. The accuracy of the project description was checked and verified during the validation site visit using objective documentary evidences. Following relevant documents were cross-checked in order to confirm the project boundary:

- Feasibility Study Report by Mitsubishi Heavy Industries, Ltd dated 15/11/2007^{/19/};
- Energy Study for 1270 MTPD ammonia plant by Kellog Brown Roots dated 2007-08^{/29/}.

The spatial boundaries and system boundaries of the project activity were also checked during the validation site and found consistent. This was further cross checked against the PSSR completion forms^{/23/} for the retrofitted boilers and found to be consistent in line with para 88, VVS, version 7.0^{/10/}. Thus, it was confirmed by the assessment team that the physical delineation of the proposed project activity and other relevant project and baseline emission sources covered in the methodology are included within the project boundary for the purpose of calculating project and baseline emissions for the proposed project activity.

The same was found to be in line with para 84 of VVS, version 7.0^{/10/} and hence is accepted.

Emission Details	Source	GHGs involved	Included	Justification/Explanation
Baseline Emission	Fossil Fuel consumption in the boilers	CO ₂	YES	Main source of GHG emissions
		CH ₄	NO	Minor Source, Negligible
		N ₂ O	NO	Minor Source, Negligible
Project Activity	Fossil fuel consumption in the boilers	CO ₂	YES	Main Source of GHG Emission
		CH ₄	NO	Minor Source, Negligible
		N ₂ O	NO	Minor Source, Negligible

The selected sources and gases as indicated above are justified for the project activity, with reference to the applied methodology. It was verified through physical inspection of the project activity site.

The schematic representation of the project boundary included under section B.3 of the final version of the PDD^{/1/} correctly describes the boundary of the project activity.

The exclusion of CH₄ and N₂O in the baseline scenario is appropriate, as there are no associated emissions of the same in the project activity as the project activity uses natural gas as fuel for the steam generation. The project activity involves the steam generation by retrofitting of the boilers. Hence, there are no project emissions associated with this project activity. Hence, the exclusion of CO₂, CH₄ and N₂O in the project scenario is considered appropriate. The same was found to be in line with para 85-86 of VVS, version 7.0^{/10/} and hence is accepted. There are no potential GHG emissions that contribute more than 1% of overall expected average annual emission reductions. This is in line with the requirement of para 89 of VVS 7.0

The operational maintenance and regulation followed by Al Bayroni for the boiler maintenance was checked under the Mechanical Integrity Program by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM)^{/33/}. This was found to be justified as per the requirement of the methodology that the boilers had regular scheduled inspection and maintenance based on which the boilers 2008-U, 2008-AU and 2052-U based on the requirements of the Mechanical Integrity Program by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM)^{/33/} which was checked by the Assessment team during site visit. Further based on the scheduled inspection and maintenance, the following documents were checked by the assessment team:

- Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/05/13 Subject: Remaining life of package boiler 2008-U,
- Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/06/13 Subject: Remaining life of package boiler 2008-UA &
- Internal Memorandum by Inspection Manager to Process Engineering Manager dated 25/02/2014 IOM No. RP&I/INSP/04/14 Subject: Remaining life of package boiler 2052-U^{/16/}

Furthermore, the Boiler Engineer- Muhammand Nasir Abbas and Boiler Manager- Mr. Sanjay E Nehete were interviewed and the period of 15years lifetime was found to be justified as per the requirement of the methodology. The boiler 2008-U had an inspection on lifetime on 03/05/2013 and it was found to have a lifetime of more than 15 years from the date of inspection. The boiler 2008-UA had an inspection on lifetime on 05/05/2013 and it found to have a lifetime of more than 15 years from the date of inspection; The boiler 2052-U had an inspection on lifetime on 21/02/2014 and it was found to have a lifetime of more than 15 years from the date of inspection. For all three boilers, it was found to be within the crediting period of the CDM project and thus accepted.

Discussion of CAR/CL:

The project boundary was not clear in the first PDD presented for validation, with regards to the project boundary as per the requirement of the methodology. PP was requested to clarify this as per the requirement of para 82 of VVS version 6.0^{10/} (valid version at the time of raising the issue).

In addition the PDD was not clear as to what the operational lifetime as per the requirement of the methodology AM0056 version 01. The PP was requested to clarify the same. **CAR05** was raised in this regard.

In response, the PP clarified that the operational maintenance and regulation followed by Al Bayroni for the boiler maintenance was checked under the Mechanical Integrity Program by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM). This was found to be justified as per the requirement of the methodology that the boilers had regular scheduled inspection and maintenance based on which the boilers 2008-U, 2008-AU and 2052-U based on the requirements of the Mechanical Integrity Program by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM) which was checked by the Assessment team during site visit. Furthermore based on the scheduled inspection and maintenance, the documents Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/05/13 Subject: Remaining life of package boiler 2008-U, Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/06/13 Subject: Remaining life of package boiler 2008-UA & Internal Memorandum by Inspection Manager to Process Engineering Manager dated 25/02/2014 IOM No. RP&I/INSP/04/14 Subject: Remaining life of package boiler 2052-U were checked by the assessment team and also the Boiler Engineer- Muhammand Nasir Abbas and Boiler Manager- Mr. Sanjay E Nehete were interviewed and the period of 15years lifetime was found to be justified as per the requirement of the methodology. The boiler 2008-U had an inspection on lifetime on 03/05/2013 and it was found to have a lifetime more than 15 years from the date of inspection. The boiler 2008-UA had an inspection on lifetime on 05/05/2013 and it was found to have a lifetime more than 15 years from the date of inspection. The boiler 2052-U had an inspection on lifetime on 21/02/2014 and it was found to have a lifetime more than 15 years from the date of inspection. For all three boilers, it was found to be within the crediting period of the CDM project and thus accepted.

CAR05 is thus closed out.

4.7 Baseline Selection

The approved large scale methodology AM0056, version 1^{11/} "Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems" has been applied to the proposed project activity considered. The proposed project activity is the rehabilitation of the boilers by installing economizers and superheaters.

The PP correctly identified the baseline of the proposed CDM project activity as per the baseline emissions section in the selected methodology AM0056, version 1^{11/}. As per the methodology, "*Baseline emissions are calculated on the basis of specific fuel consumption (SFC)³ for steam generation under the best possible operating conditions of the baseline steam generation system, the amount of steam generated by the project activity ($P_{PJ,y}$), and the baseline fuel emission factor (EF).*"

The specific fuel consumption has been calculated by the PP using the option-B correctly. The same was checked and confirmed by the assessment team that the PP had considered the lowest possible specific fuel consumption of the individual boilers using the formula:

$$SFC_{i,j} = \text{minimum} \left(\frac{FC_{BL,i,j,x}}{P_{BL,i,j,x}} \right)$$

³ Expressed as fuel consumed per tonne of steam produced (TJ/tSteam).

Where,

$SFC_{i,j}$	Minimum specific fuel consumption within load class 'i' for each boiler 'j' as observed from performance tests (t or m ³ /t Steam)
$FC_{BL,i,j,x}$	Average observed fuel consumption for load x, using repeated performance test for that load, within load class 'i' for each boiler 'j' (t) or (m ³)
$P_{BL,i,j,x}$	Average observed amount of produced steam for load x, using repeated performance test for that load, within load class 'i' for each boiler 'j' (t)

Further, the PP had considered the specific energy consumption following para 3.b.2 of the applied methodology AM0056, version 1^{/11/}.

$$SEC_{i,j} = SFC_{i,j} \cdot NCV_{BL,FF}$$

Where:

$SEC_{i,j}$	Lowest specific energy consumption within load class 'i' for each boiler 'j' (GJ/t)
$SFC_{i,j}$	Lowest possible specific fuel consumption within load class 'i' for each boiler 'j' (t/t or m ³ /t)
$NCV_{BL,FF}$	Net caloric value of fossil fuel used in the baseline boiler (GJ/t) or (GJ/m ³)

Specific energy consumption ($SEC_{SYS,k}$) of each steam generation system's load class 'k' has been estimated by the PP as weighted average of $SEC_{i,j}$, estimated in Step 3.b.2 above. $SEC_{SYS,k}$ is the minimum of weighted average $SEC_{i,j}$ for each combination of individual boiler operation possible for that system load class 'k' correctly.

$$SEC_{SYS,k} = \text{minimum} \left(\text{set of } \sum_{j=1}^J SEC_{ij,j} \cdot S_j \right)$$

The Baseline emissions BE_y (in tCO₂/y) was estimated correctly in line with the applied methodology:

(7)

$$BE_y = 44/12 \cdot EF_{C,FF,BL} \cdot OXID_{FF,BL} \cdot \sum_t \min^m (P_{PJ,i/k,t,y}, CAP \cdot t) \cdot SEC_{i/k}$$

Where:

BE_y	Baseline emissions resulting from steam generation within the capacity of the baseline equipment in the year 'y' (tCO ₂ /yr)
$P_{PJ,i/k,t,y}$	Amount of steam generated during the time period 't' in the year 'y' (tonne)
$SEC_{i/k}$	Specific energy consumption (GJ/t) where 'i' is used as a load class in case of a single boiler installation; and 'k' is used as a load class of a steam generation system in case of a multi-boiler installation. This shall be for the load class in which $P_{PJ,i/k,t,y}$ falls.
$EF_{C,FF,BL}$	Carbon emission factor of baseline fossil fuel (tC/GJ)

$OXID_{FF,BL}$ Oxidation factor of baseline fossil fuel
44/12 Ratio of the molecular weight of CO₂ to the molecular weight of carbon

The PP had considered the latest version of the “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0^{/12/} as per the applied methodology to identify the baseline scenario.

The same has been discussed in details under section 4.7.1 of the validation report.

Discussion of CAR/CL:

The PP was requested to clarify why the PDD had not correctly defined the baseline scenario as per the provisions of the methodology, AM0056^{/11/} and the “*Combined tool to identify the baseline scenario and demonstrate additionality*, version 5.0^{/12/} has been used to identify the baseline scenario..

Furthermore, PP was requested to provide documentary evidences and include references in the PDD for the alternatives identified. Also the tool used was not found to be the latest tool available and thus PP was requested to clarify the baseline identification as per the latest available tool. The PP was requested to clarify this as per para 88 and 113 of VVS 6.0 (valid version at the time of raising the issue). **CAR06** was raised in this regard.

In response, the PP clarified that the operational maintenance and regulation followed by Al Bayroni for the boiler maintenance was checked under the Mechanical Integrity Program by SABIC’s Mechanical Integrity and Reliability Programme under the SABIC’s Safety, Health and Environmental Management System (SHEM)^{/33/}. This was found to be justified as per the requirement of the methodology that the boilers had regular scheduled inspection and maintenance based on which the boilers 2008-U, 2008-AU and 2052-U based on the requirements of the Mechanical Integrity Program government by SABIC’s Mechanical Integrity and Reliability Programme under the SABIC’s Safety, Health and Environmental Management System (SHEM)^{/33/} which was checked by the Assessment team during site visit and found to be consistent with the internal memos for the boilers issued by Inspection Manager and thus accepted. Thus, **CAR06** was closed out as per the requirement of para 90 and para 115 of VVS 7.0.

4.7.1 Additionality of a project activity

The proposed project activity is a large scale project and the additionality of the project activity was demonstrated on the basis of the “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0^{/12/}.

The PP correctly adopted the stepwise approach to identify the baseline scenario and simultaneously demonstrate the additionality.

Step 0: Demonstration whether the proposed project activity is the first-of-its-kind

The PP demonstrated the additionality of the project based on first of its kind approach using the “*Guidelines on additionality of First-Of-Its-Kind Project Activities*”, version 2.0^{/13/}. The PP adopted the step wise approach correctly and has been further validated by the assessment team as discussed below:

1. Applicable geographical area

The PP considered the Jubail industrial city as the applicable geographical area for the proposed project activity. The Jubail industrial city is being considered as geographical distinct from the rest of Saudi Arabia based on the local conditions. The same has been confirmed against the official letter issued by Royal commission in Jubail issued by Dr. Hussein Al-Beshrey, Director, Environmental Protection and Control dated 24/01/2014^{/4/} confirming that Jubail is geographically distinct from the rest of the country. This is because they are specially designed and developed as industrial centres and exclusively managed by the Royal Commission. It further confirms that Al Bayroni is located in Jubail Industrial city under the regulatory enforcement of the Royal Commission. The same was considered justified by the assessment team and hence is accepted.

2. Measure

The PP considered the rehabilitation of the boiler to enhance the energy efficiency by installing the economizers and superheaters without the change of fossil fuel (natural gas). The PP had considered the option 2(b) of the *“Guidelines on Additionality of First-Of-Its-Kind Project Activities”, version 2.0^{13/}* correctly. The same has been validated by the assessment team correctly during the site visit and hence is accepted by the assessment team.

3. Output

The project is the rehabilitation of existing steam boilers using the installation of economizers and superheaters. The project aims to enhance the energy efficiency of the existing boilers to produce superheated steam to be used in the process applications. Hence, the output remains the same in the pre and post project scenarios. The same has been checked by the assessment team during the site visit and hence is accepted.

4. Different Technologies

The proposed CDM project activity delivers the same output (super heated steam) as the pre-project scenario within the applicable geographical area. The proposed project is a large scale project with a capacity of 203 GWh per year with an aim to improve energy efficiency. The same was checked against the rated thermal capacity of the individual boilers during the site visit and further cross checked against the feasibility reports issued by MHI^{19/} and hence is accepted by the assessment team.

The PP had considered the fixed crediting period of 10 years for the CDM project activity and hence is accepted by the assessment team.

Thus the PP has demonstrated the additionality correctly in line with para 106 of VVS, version 7.0^{10/} and hence is accepted by the assessment team. It was further confirmed by the assessment team that the project is a “First-Of-Its-Kind” project in the applicable region.

Discussion of CAR/CL:

The PP was requested to clarify why the PDD had not clearly included information on the additionality, as per steps required mentioned in combined tool to identify the baseline scenario and demonstrate additionality version 5.0. All the assumptions and data used by the project participants are not listed in the PDD^{17/}, including their references and sources. The PP was requested to clarify the same as per the requirement of 117, 124 of VVS 6.0^{10/} (valid version at the time of raising the issue)..

The PP was requested to demonstrate the prior consideration of CDM as per the requirements of para 106-111 of VVS 6.0^{10/} (valid version at the time of raising the issue) in the section B.5 of the PDD.. Title of project in the prior consideration did not match with the PDD webhosted which was requested by the PP to be clarified as per para 105 of VVS version 6.0 (valid version at the time of raising the issue).

PP had not specified the start date of the project activity as per the definition of the project start date EB 70 Annex 7.

PP was requested to clarify why EB 62 Annex 5 has not been referred for this. Also, the PP was requested to clarify the approach of financial additionality as there is no revenue generation from the project. The PP was requested to provide documentary evidences of all assumptions considered for the financial analysis of the project as per requirement of para 6 of EB 62 Annex 5. The PP was further requested to clarify that whether it has informed the DNA office of Saudi Arabia on the prior consideration of the project with relevant supportive evidence. **CAR07** was raised.

In response, the PP documented additionality as per the requirement of version 05.0.0 of the “Combined tool to identify the baseline scenario and demonstrate additionality” and the justification for the project to be first of its kind was found to be justifiable and thus accepted.

The PDD version 2.0 dated 26/02/2014 was checked along with the prior consideration website <http://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html>.

The 1st intimation to UNFCCC was done on 27/11/2011 and the 2nd intimation to UNFCCC was done on 24/04/2013. The start date of the project activity 25/08/2011 was found to be within 6 months of the prior consideration of CDM (see section 4.7.2 below) and thus was found to be accepted.

The date 25/08/2011 was found to be correctly adopted as start date based on the Contract no. EPC-LS-11-AB-010-OOK between TOYO Engineering Corporation and Jubail Fertilizer Company dated 25/08/2011 and was found to be in line with the requirement of EB 70 Annex 7 for definition of Start date of project activity and thus accepted.

The PP correctly demonstrated the additionality via Guidelines on Additionality of First-Of-Its-Kind Project Activities” (version 2.0, EB 69, Annex 7) and thus the issue on applicability of EB 62 Annex 5 for financial additionality was found to be null and void as per the requirements of version 05.0 of the “Combined tool to identify the baseline scenario and demonstrate additionality”. Furthermore, the PP submitted the email evidence sent to the DNA office of Saudi Arabia dated 05/12/2011 on the project implementation and undertaking the project under CDM including prior consideration form. The email was checked and was further cross-checked against the email received from the DNA office of Saudi Arabia and hence was accepted. Thus, **CAR07** was closed out as per the requirement of VVS version 7.0 para 112-117.

4.7.2 Prior Consideration of the Clean Development Mechanism

The start date of the proposed CDM project activity has been mentioned in the PDD^{/2/} as 25/08/2011. The evidence for the start date was submitted by the PP. It was found to be the date of the agreement signed between the PP and the supplier for goods and services for project implementation signed on 25/08/2011. The agreement was checked for the date and was found consistent with that mentioned in the PDD. This has been considered as the start date for the project activity in accordance with para 106 of VVS, version 6^{/10/} (valid version at the time of raising the issue), which defines the start date of a CDM project activity as: “*the earliest date at which either the implementation or construction or real action of a project activity begins*”.

The reported project start date has found to be in line with the definition provided under Glossary of CDM terms, version 7, EB 70 Annex 7, being the earliest date at which the implementation of the project activity begins and the date on which the project participant has committed to expenditures related to the implementation or related to the construction of the project activity. It was thus accepted. This was validated in accordance to paragraph 112 of VVS, version 7.0^{/10/}.

The CDM project chronology and supporting documentary evidence have been reviewed and prior CDM consideration for the proposed project activity has been demonstrated in the following milestone activities as per the guidelines of EB 62 Annex 13. The start date of the proposed CDM project activity is 26/08/2011 which is after the date of 02/08/2008 and hence it is considered as a new project activity as per EB62 Annex13. The project falls under the category of “New Projects”. For new project activities, the PP must inform both the Host party DNA and the UNFCCC, in writing, of the commencement of the project activity and their intention to seek CDM status. Such notification must be made within six months of the project activity start date and shall contain the precise geographical location and a brief description of the proposed project activity, using the standardized form F-CDM-Prior Consideration.

The PP sent emails on 27/11/2011^{/7/} informing the DNA (Saudi Arabia) and the UNFCCC respectively, about the commencement of the project activity and intention to seek CDM status. Please refer table below for means of validation of the evidences

Table: Assessment on CDM Consideration

CDM Project milestone activities	Timeline	Means of validation for Documentary evidences
Start Date of Project Activity		
Signed Contract with Equipment Supplier, Toyo Engineering Corporation	25/08/2011	Agreement between the PP and the EPC contractor dated 25/08/2011 ^{/18/} . The copy of the supply agreement signed between the PP and Toyo Engineering Corporation was checked during the site visit and the context of the start date of the project activity also found consistent based on the interview conducted with the PP during the site visit as listed in Section 6 of this report.
Notification to UNFCCC and MOEF (DNA Saudi Arabia)		
Initial Prior intimation to UNFCCC and DNA	27/11/2011	<p>The email correspondences made to UNFCCC and Host Country DNA by the PP on 27/11/2011^{/8/} for initial intimation of CDM consideration</p> <p>Archived copy of the email communications made to UNFCCC and Host Country DNA by the PP on CDM consideration for the proposed project activity was checked in original during the site visit and found to be consistent as per the requirement of Para 113 of VVS 7.0 and thus accepted.</p> <p>This was found to be consistent with para 113 of VVS 7.0 and within 6 month of start date of the project, hence accepted.</p> <p>Section on UNFCCC website on prior consideration of CDM was cross checked with the project title “Energy Optimization: Al Bayroni Ammonia Plant”.</p> <p>Notification resubmitted by the PP on 20/04/2013 to UNFCCC and DNA^{/8/} with the change of project title which was found to be traceable and consistent as per the notification date mentioned in the PDD.</p>
PDD web hosted for global stakeholder consultation process	14/12/2013-12/01/2014	https://cdm.unfccc.int/Projects/Validation/DB/JCR0B72TOJ AQ51TZOEL9GAP0E0324X/view.html

4.7.3 Identification of alternatives

The proposed project activity has demonstrated the first of its kind and hence is accepted as automatically additional in line with the “Guidelines on Additionality of First-Of-Its-Kind Project Activities”, version 2.0^{/13/} and Step 0 of “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0. The PP had identified correctly all the alternative scenarios to the proposed project activity which can be the baseline scenario. The PP had correctly identified all alternative scenarios that (a) are available to the PP; (b) cannot be implemented in parallel to the proposed project activity, and (c) provide the same output as the proposed CDM project activity.

Step 1: Identification of alternative scenarios

Step 1a: Define alternative scenarios to the proposed CDM project activity

Scenario “S1”: The proposed project activity undertaken without being registered as a CDM project activity

The project is not a common practice as the PP had correctly demonstrated that the project is a “First of its Kind”. The PP considered the most plausible alternative scenario to the CDM project activity, which is the continuation of the existing scenario i.e. the operation of the existing steam fired boilers without modification.. The cross-check was further carried out by interviewing the personnel as listed in the Section 6 of this report on site to check that the installation of economisers and modified superheaters in the steam fired boilers, is not a business as usual practice in the region of Jubail and found to be acceptable. Further, it was checked against the Royal Commission Environmental Regulations (<http://rcjewt.org/regulations/regulationsrcer-2010%20volume%20iii%20penalty%20system%20.pdf>)^{32/} that there is no applicable requirement to upgrade the boilers to enhance the energy efficiency. Hence, the same has not been considered as the alternative by the PP which was found to be correct.

Scenario “S2”: Where applicable, no investment is undertaken by the project participants but third party(ies) undertake(s) investments or actions which provide the same output to users of the project activity

The PP has not considered this alternative as a feasible option. This was checked and confirmed during the site visit that being a fertilizer unit, Al Bayroni runs a risk of reliability of supply and quality of steam which is a fundamental requirement for the process and downstream production. This was confirmed by the technical area expert from the SGS assessment team. Hence, the PP had correctly ruled out the alternative.

Scenario “S3”: Where applicable, the continuation of the current situation, not requiring any investment or expenses to maintain the current situation

The PP has not considered this as a plausible alternative as the continuation of the current situation will require investment or expense related to periodic maintenance to extend the boiler lifetime (15 years lifetime already). Hence, the PP had correctly ruled out the alternative.

Scenario “S4”: Where applicable, the continuation of the current situation with investment

The PP had considered this as a plausible alternative, as the continuation of the current situation will require investment or expense related to periodic maintenance to extend their lifetime (15 years lifetime already). The PP had subscribed to SABIC’s Mechanical Integrity and Reliability Programme under the Safety, Health and Environmental Management System (SHEMS)^{33/}. The robustness of the same was checked and was certified as ISO 9001:2008 and 14001:2008 by a third party Inspection Company and hence found to be effective and reliable. The SHEMS ensures all the process equipments have inspection, preventive maintenance and scheduled shutdown and turn around to ensure longer lifetime of the equipments and hence is accepted by the assessment team. Hence, the PP had correctly selected this as a plausible alternative.

Scenario “S5”: Other plausible and credible alternative scenarios to the project activity scenario, including the common practices in the relevant sector, which deliver the same output, taking into account, where relevant, examples of scenarios identified in the underlying methodology

As stated above, the project activity is not a common practice in the geographical region of Jubail^{14/}, hence the same has not been considered by the PP. Hence, the same has been accepted by the assessment team.

Scenario “S6”: Where applicable, the “proposed project activity undertaken without being registered as a CDM project activity” to be implemented at a later point in time.

As stated above, the project activity is not a common practice ^{/4/} and is a first of its kind ^{/9/} in the geographical region of Jubail, hence the same has not been considered by the PP. Being a capital intensive and lack of technical knowledge, the same is not considered by the PP as an option of a proposed project activity undertaken without being registered as a CDM project activity.

Based on the above assessment it is just concluded that the PP had correctly considered the option S4 as a plausible alternative which was found to be acceptable to the assessment team.

Step 1b: Consistency with mandatory applicable laws and regulations

As stated above, the option S4 selected by the PP is in compliance with mandatory laws and regulation as stated in Royal Commission Environmental Regulations (<http://rcjewt.org/regulations/regulationsrcer-2010%20volume%20iii%20penalty%20system%20.pdf>) ^{/32/}. It was confirmed by the assessment team during the site visit that all the existing boilers are permitted under the Environmental Permit to Operate (EPO) issued to Al Bayroni. Hence, all the boilers complied with the emission source standards prescribed in the RCER ^{/32/}. The same was checked and found to be consistent and hence, the same is accepted by the assessment team.

4.7.4 Investment analysis

The proposed project activity has demonstrated it is a first of its kind and hence is accepted as automatically additional in line with the “Guidelines on Additionality of First-Of-Its-Kind Project Activities”, version 2.0 ^{/13/} and Step 0 of “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0. Therefore no further assessment on investment analysis is required.

4.7.5 Barrier analysis

According to Step 2 of “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0, the PP had carried out the barrier analysis correctly in accordance with “Guidelines for objective demonstration and assessment of barriers” (EB-50, Annex 13 Version 01) ^{/34/}. The PP has demonstrated the barrier as per clause 23c- Other Barriers by demonstrating barrier due to Prevailing Practice.

The assessment team had checked the feasibility of the barrier as mentioned by the PP.

PDD version 05 dated 16/06/2014 section B.4 was checked and the justification for the prevailing practice barrier for the project in the scenario that the project was “First of Its Kind” based on the statement from DNA ^{/9/} was found to be justified. Also the same was verified against the document Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 ^{/4/} for Al Bayroni CDM project which stated that no other project of similar technology is available in the regions of Jubail, Yanbu and Ras Al Khair. Thus the logic of prevailing practice was found justified and accepted.

Thus the outcome of step 2(a) of the “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0 was found to be barrier in the form of prevailing practice in the distinct geographical area under the control of Royal Commission for Jubail, Yanbu and Ras Al Khair. This was found to be justified and thus accepted.

Further, based on the above barrier the PP correctly demonstrated step 2(b) of the “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0 as “*Continuation of the current situation with expenses to maintain current situation*” under the List of alternative scenarios to the project activity that are not prevented by any barrier. There was no non compliance observed against Guidelines for objective demonstration and assessment of barriers (version 01) and the applied methodology AM0056 ver.01 related to demonstration of the Other Barrier as barrier due to prevailing practice. Since the project activity was deemed to face prevailing practice barrier in the geographical region of Jubail, Yanbu and Ras Al Khair hence the continuation of the current situation with expenses to maintain current situation was found to be justified and thus conclusion of step 2(b) was found to be correct and acceptable.

The above assessment was found to be in line with the requirements of para 132-133 of VVS 7.0.

4.7.6 Common practice analysis

The proposed project activity has demonstrated it is a first of its kind and hence is accepted as automatically additional in line with the “Guidelines on Additionality of First-Of-Its-Kind Project Activities”, version 2.0^{13/}. Therefore as per the requirement of “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0 no further assessment on common practice is required and hence is accepted.

Discussion of CAR/CL:

The PP was requested to clarify why the common practice analysis has not been done in the PDD as per the requirements of EB 69 Annex 8 and VVS version 06 para 128 (valid at the time of raising the issue). **CAR08** was raised in this regard.

In response, the PP clarified that the PP had demonstrated the additionality via “Guidelines on Additionality of First-Of-Its-Kind Project Activities” (version 2.0, EB 69, Annex 7) and thus the issue on applicability of EB 69 Annex 8 for common practice analysis was found to be null and void as per the requirements of version 05.0.0 of the “*Combined tool to identify the baseline scenario and demonstrate additionality*”. Thus, **CAR08** was closed out.

4.8 Application of Baseline Methodology and Calculation of Emission Factors

The proposed project activity has demonstrated it is a first of its kind and hence is accepted as automatically additional in line with the “Guidelines on Additionality of First-Of-Its-Kind Project Activities”, version 2.0^{13/} and Step 0 of “*Combined tool to identify the baseline scenario and demonstrate additionality*”, version 5.0 and no further assessment on common practice analysis is required.

The following parameters have been fixed *ex-ante* for the project:

- **CAP**, Maximum long term load (capacity) of the boiler or steam system (tonnes of steam output per hour at full load): The value adopted is 100-120 tons/ hour for each of the three boilers. The same was checked against the third party independent assessment of boiler performance, name plate capacity and historical data and found to be consistently adopted and hence accepted.
- **Boiler load class, i and j**, Boiler load classes in the case of multi-boiler installations. For each boiler ‘j’ load classes ‘i’ are introduced: The value adopted in tons/ hour for each of the three boilers. The same was checked against the boiler load class mentioned under Table B.6.2 of the PDD for multi boilers as per the methodology and found to be consistently adopted and hence accepted.
- **System Load Class “K”**, System load classes (tons/hour): The value adopted for each of the three boilers. The same was checked against the boiler load class mentioned under Table B.6.5 of the PDD for multi boilers as per the methodology and found to be consistently adopted and hence accepted.
- **FC_{BLi}**, Fuel Consumption in each load class (Data available hourly/annually) (M³/h): The value adopted for each of the three boilers in each load class. The same was checked against the boiler load class mentioned under Table B.6.2 of the PDD for multi boilers as per the methodology and found to be consistently adopted and hence accepted.
- **PB_{Li}**, Average Hourly Steam Production in each load class (Tons/annum): The value adopted for each of the three boilers in each load class. The same was checked against the boiler load class for multi boilers mentioned under Table B.6.6 of the PDD as per the methodology and found to be consistently adopted and hence accepted. The values were found to be adopted as per the plant data from 2007-2011 as per the requirement of the methodology and thus accepted.

- **NCV_{FF, BL}**, Net Calorific Value of Fossil Fuel Used (Natural Gas): The value 0.04 GJ/Nm³ of the natural gas used as a fuel in the process is adopted from the analysis report which was checked and was found to be consistent and hence accepted.
- **EFC_{FF, BL}**, Carbon Emission Factor for fuel used in the boiler system: The value 0.056tCO₂e/GJ adopted for carbon emission factor for fuel used in the boiler system was checked against the IPCC default values which was found consistent and hence is accepted.
- **OXIDFF, BL**, Oxidation factor for the fossil fuel used in the baseline boiler: The value 1.0 adopted for oxidation factor for fossil fuel used in the baseline boiler was checked against the IPCC default values which was found consistent and hence is accepted.
- **PRESSBL, MIN**, Lowest measured pressure of the generated steam during determination of the specific energy consumption: The value adopted in bar for lowest measured pressure of the generated steam during determination of the specific energy consumption was checked against the historic log book records which was found consistent and hence is accepted.
- **PRESSBL, MAX**, Highest measured pressure of the generated steam during determination of the specific energy consumption: The value adopted in bar for highest measured pressure of the generated steam during determination of the specific energy consumption was checked against the historic log book records which was found consistent and hence is accepted.
- **TEMP_{BL, MIN}**, Lowest measured temperature of the generated steam during determination of the specific energy consumption: The value adopted in Kelvin (K) for lowest measured temperature of the generated steam during determination of the specific energy consumption was checked against the historic log book records which was found consistent and hence is accepted.
- **TEMP_{BL, MAX}**, Highest measured temperature of the generated steam during determination of the specific energy consumption: The value adopted in Kelvin (K) for highest measured temperature of the generated steam during determination of the specific energy consumption was checked against the historic log book records which was found consistent and hence is accepted.

The value of baseline carbon emission factor was confirmed by the assessment team to be **0.056 tC/ GJ** and is fixed ex-ante and will remain fixed for the entire crediting period. It is based on the most recent data available from the IPCC^{/35/} and hence considered correct and hence accepted.

4.9 Application of Monitoring Methodology and Monitoring Plan

The project activity uses the baseline emission calculation as per the methodology AM0056, version 1^{/11/}. The aim of the proposed project activity is to enhance the energy efficiency by the rehabilitation of the boilers. The project has correctly applied baseline methodology as mentioned in the methodology AM0056, version 1^{/11/}.

The option B: “Multi-boiler installation” has been applied as per the methodology AM0056, version 1^{/11/} has been referred to correctly.

The following parameters will be monitored for the project activity during ex-post scenario:

- **PPJ,i,y (Individual Boilers)**: Generated steam in the year ‘y’ subdivided into load classes in the case of single measured in (Tons/Hour) Tons/Annum. The same is as per the methodology and the recording frequency will be hourly and hence is accepted by the assessment team.
- **PPJ,k,y (System)**: Generated steam in the year ‘y’ subdivided into load classes in the case of Multiboiler installations measured in Tons/Annum. The same is as per the methodology and the recording frequency will be hourly and hence is accepted by the assessment team.

- **PRESS_{BL,MAX}**: Pressure of the generated steam measured in Bar. The same is as per the methodology and the recording frequency will be hourly and hence is accepted by the assessment team.
- **TEMP_{PJ}**: Temperature of the generated steam measured in Kelvin (K). The same is as per the methodology and the recording frequency will be hourly and hence is accepted by the assessment team.

The calculation approach to calculate the emission reduction was checked and was found to be correctly and consistently adopted by the PP in line with the methodology and hence is accepted.

The emission factor calculation procedure has been found in line with the requirement of the methodology latest version of AM0029 version 3.0 in line with page 10 of the methodology AM0056, version 1^{/11/} and hence is accepted. The value adopted for the emission factor **0.056 tC/ GJ** is fixed ex-ante and will be remain fixed for the entire crediting period.

As per applied Methodology AM0056, version 1^{/11/}, leakages shall be calculated as per the procedure described in the latest version of the approved baseline and monitoring methodology AM0029 version 3.0.

Discussion of CAR/CLs:

The frequency of calibration and internal audit was not clear from the description in the PDD section B.7 and B.8. The PP was requested to clarify in this regard as per the requirement of VVS version 6.0 para 72e (version valid at the time of raising the issue). Also emergency preparedness procedures for the boilers and the provision for meter failure had not been covered. **CAR09** was raised in this regard.

In response, the PP provided the corrected PDD. PDD version 2.0 section B.7 was checked and the frequency of calibration, internal audit details as per requirement of para 73 e of VVS version 7.0 was found to be justified and thus accepted. Also emergency preparedness procedures of the boilers was found to be included in the PDD and thus accepted. Thus, **CAR09** was closed out.

The PP was requested to clarify why sampling has been considered in the PDD section B.7.2, as 100% data will be monitored during the project scenario. **CAR10** was raised in this regard.

In response, the PP corrected the PDD. PDD version 2.0 dated 26/02/2014 was checked and was found to have removed the aspects mentioned for sampling. The project has 100% monitoring and data for the equipments and thus there are no requirements of sampling. This was found to be correctly done in the revised PDD version 2.0 dated 26/02/2014 and thus accepted. **CAR10** was thus closed out.

4.10 Environmental Impacts

As per the RCER 2010 (section 1.3.7)^{/32/}, the environmental impacts assessment of any project will only be carried if the production increases by 10%. The proposed CDM project activity is the rehabilitation of existing steam boilers keeping the output of steam constant. Hence, the environmental impact assessment has been excluded correctly and thus accepted. The same was checked by the assessment team against the order issued by the RCER and found to be acceptable..

4.11 Local Stakeholder Comments

The necessary documentary evidence on the mode of communication/ invitation for attending the local stakeholders meeting along with the necessary clearances and approvals received from these stakeholders were checked during the validation site visit and found to be appropriate.

The PP has provided the written communication letters ^{/25/} issued to the local stakeholders identified to the project activity as per the webhosted PDD^{/1/} informing them of the project activity. The following documents have been checked and verified during the validation site visit as well and considered acceptable;

The project activity located at the Jubail Industrial facility was checked during the validation site visit. All the necessary and relevant consents, approvals and permissions ^{/24/, /32/} from concerned authorities on the way to implementation of the project activity could be considered as no objection to such a project activity.

Local newspaper notice published for Invitation of comments/suggestions for the project [/] in the Arab News newspaper dated 08/09/2013^{/25/} and in the Saudi Gazette dated 09/09/2013^{/25/}. No adverse comments received which was checked by the assessment team based on the MoM of the Local Stakeholder Meeting^{/26/}. Stakeholder consultation was held on 30/09/2013 at SABIC Hall, Intercontinental Hotel, Al Jubail.

The MoM for stakeholders' consultation dated 30/09/2013^{/26/} and attendance sheet dated 30/09/2013^{/27/} has been submitted by the PP; the same was checked and cross-checked during the site visit through interview of the local stakeholders and plant personnel during the site visit and was found to be acceptable.

During the meeting, the stakeholders were apprised of the salient features of the project activity and comments were invited on the same.

The copies of the invitation letters issued to the local stakeholders and positive feedback received from the local stakeholders on the project activity was checked and verified during the validation site visit and found satisfactory. The onsite interviews conducted with the local stakeholders was also found satisfactory. Based on the documentary evidence and on-site interviews with local stakeholders and plant personnel conducted during the validation site visit, it is hereby concluded that the local stakeholders' consultation was conducted in a satisfactory manner as per the requirement of VVS version 7.0 para 146.

5. Comments by Parties, Stakeholders and NGOs

In accordance with sub-paragraphs 40 (b) and (c) of the CDM modalities and procedures, the project design document of a proposed CDM project activity shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available. This chapter describes this process for this project.

5.1 Description of how and when the PDD was made publicly available

The Project Design Document for this project was made available on <https://cdm.unfccc.int/Projects/Validation/DB/JCR0B72TOJAQ51TZOEL9GAP0E0324X/view.html> and was open for comments from 14/12/2013 until 12/01/2014. Comments were invited through the UNFCCC CDM homepage.

5.2 Compilation of all comments received

Comment Number	Date Received	Submitter	Comment
Nil	Nil	Nil	Nil

5.3 Explanation of how comments have been taken into account

Not applicable as no comments were received.

6. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
14/01/2014- 16/01/2014	Mr. Ku Te Tien	Vice President	Project description and implementation plan, CDM conceptualization & Start date, Stake Holders consultation process; Project Financing
	Mr. Zaour Yasar Israfilof	Climate Change & CDM Sp, Environmental Affairs	Discussion on PDD. Assessment of Project Boundary (Site)/ Interviews about the project activity and project technology & Project monitoring plan and monitoring parameters. project boundary, assessment of Sustainable Development indicators, project funding, project financing and ER calculations.
	Mr. Ali Al Anazi	EHSS Sr.Manager	
	Mr. L.S. Pandya	Process Engineer Manager	
	Mr. Shaffeullah, Azeez M.	Environment Engineer, Safety & Security	
	Mr. Ahmet Akshad	Royal Commission	Local Stakeholder interviewed
	Mr. Najam Al Syed Hassan	RGME	Local Stakeholder interviewed
	Mr. Owashed Al-Rahidi	Royal Commission	Local Stakeholder interviewed
	Mr. Abdul Mohsin Al-Rahtami	Saudi Kayan	Local Stakeholder interviewed
	Saeed Al Shahrani	Journalist, Al Watan Newspaper	Local Stakeholder interviewed

7. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority):

Name of document
/1/ PDD, version 1 dated 23/09/2013 (Webhosted Version) PDD, version 2 dated 26/02/2014 PDD, version 3 dated 20/03/2014 PDD, version 4 dated 26/05/2014 PDD version 5 dated 16/06/2014 PDD version 6 dated 08/07/2014 (Final Version)
/2/ Letter of Approval issued DNA office of Saudi Arabia dated 08/01/2014 ref no: CDM14—017LOA issued by National Committee for Clean Development Mechanism, Ministry of Petroleum and Mineral Resources.
/3/ Modalities of Communication dated 15/01/2014
/4/ Declaration letter issued by Royal Commission of Jubail & Yanbu, Royal Commission of Jubail, Kingdom of Saudi Arabia dated 24/01/2014 ref no: 7/3/2/08-48269.
/5/ Self declaration on ODA dated 20/01/2014 from Mr. Khalid Abdullah Al-Omar, Senior Manager (Finance and Planning), Albayroni
/6/ Prior Consideration form dated 01/04/2013
/7/ Prior Consideration form dated 27/11/2011
/8/ Email communication on prior consideration of the CDM dated 27/11/2011. Email communication on prior consideration of the CDM dated 20/04/2013.
/9/ Declaration on “First-Of-Its-Kind” project by CDM, DNA office of Saudi Arabia dated 12/03/2014

Refer to document Ref 28 too below.

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

Name of document
/10/ Clean Development Mechanism Validation and Verification Standard Version 7.0 dated 01/06/2014
/11/ Approved methodological Standard: AM0056, version: 1.0 “Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems”
/12/ Combined tool to identify the baseline scenario and demonstrate additionality, version 5.0, EB70, Annex 9.
/13/ Guidelines on the Additionality of First-Of-Its-Kind project activities, version 2.0, EB69, Annex7.
/14/ Guidelines for Objective demonstration and assessment of barriers, EB50, annex 13, version 01.
/15/ Tool to calculate the project or leakage CO2 emissions from fossil fuel combustion, version 2, EB41, annex11.
/16/ Internal Memorandum No RP&I/INSP/05/13 (dated 06/05/2013) issued for the Boiler 2008 – U. Internal Memorandum No RP&I/INSP/06/13 (dated 06/05/2013) issued for the Boiler 2008 – UA. Internal Memorandum No RP&I/INSP/04/14 (dated 25/02/2014) issued for the Boiler 2052 – U.
/17/ Declaration on Technology Status of project activity proposed dated 24/01/2014 by Al Jubail Fertilizer Company (Al Bayroni)

/18/ Signed Contract between Toyo Engineering Corporation and Al Bayroni dated 25/08/2011, contract number: EPC-LS-11-AB-010-00K (Start date of the proposed CDM project activity).
/19/ Feasibility study of fuel conversion for existing MHI boilers ref no: SS07-5476E dated 15/11/2007 prepared by Mitsubishi Heavy Industries, Ltd.
/20/ Al Bayroni Board Resolutions dated 27/11/2011 ref no: 07/2011.
/21/ Burner supply for the primary reformer Callidus Proposal no: B-0805-050008-HT issued by Callidus technologies, LLC.
/22/ Preliminary Project Schedule
/23/ Acceptance of PSSR completion form dated 01/06/2013 for boiler 2008-UA Acceptance of PSSR completion form dated 06/05/2013 for boiler 2008-U Acceptance of PSSR completion form dated 25/02/2014 for boiler 2052-U
/24/ Environmental Assessment, Prequalification and permits General Directorate of Presidency of Meteorology & Environment, Kingdom of Saudi Arabia.
/25/ Newspaper Advertisement on Local Stakeholder consultation process in Arab News dated 08/09/2013 Newspaper Advertisement on Local Stakeholder consultation process in Saudi Gazette dated 09/09/2013 Emails and printed invitation letters to Local Stakeholders dated 09/09/2013
/26/ Minutes of Meeting (MoM) of the Local Stakeholder Meeting dated 30/09/2013
/27/ Attendance list of the local stakeholder meeting dated 30/09/2013
/28/ Emission Reduction Spreadsheet, version 1 Emission Reduction Spreadsheet, version 2 Emission Reduction Spreadsheet, version 3 (Final)
/29/ Feasibility study reports by Kellogg Brown dated 2007-08 on the rehabilitation of the boilers.
/30/ Project Standard, version 6.0 dated 11/04/2014
/31/ Large Scale Project Design Document Form (F-CDM-PDD) version 4.1
/32/ Royal Commission Environmental Regulations act, RCER, 2010 (http://rcjewt.org/regulations/regulationsrcer-2010%20volume%20iii%20penalty%20system%20.pdf)
/33/ SABIC's Safety, Health and Environmental Management System (SHEM)
/34/ "Guideline for objective demonstration and assessment of barriers" (EB-50, Annex 13 Version 01)
/35/ 2006 IPCC Guidelines for National Greenhouse Gas Inventories Web-link: http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf

- oOo -

A.1 Annex 1: Local Assessment

This checklist is designed to provide confirmation of in-country data and information provided in the Project Design Document for **Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System**.

It serves as a “**reality check**” on the project that is completed by the assessment team.

Issue	Findings	Source/Mean of Verification	Further Clarification / Action Required? / Information
Host Country Approval letter ensuring the participation requirements being met by the project activity.	Host Country Approval letter DNA office of Saudi Arabia towards the CDM project activity was not provided by the PP during the document review process of the validation site visit at project site in Saudi Arabia.	Letter of Approval issued DNA office of Saudi Arabia dated 08/01/2014 ref no: CDM14—017LOA issued by National Committee for Clean Development Mechanism, Ministry of Petroleum and Mineral Resources.	Host Country Approval letter ensuring the participation requirements being met by the project activity. CAR#01 raised. Based on provision of the LoA, CAR#01 closed Checked OK.
The appropriate Modalities of Communication for the project activity have to be submitted by the Project participant before submitting a request for registration.	The letter on the Modalities of Communication with the Executive Board and the UNFCCC Secretariat signed by the project participant has been provided by the PP during the document review process of the validation site visit at Saudi Arabia.	The Modalities of Communication dated 15/01/2014 was provided which was found to be consistent with Appendix 1 of the PDD and complete as per the UN requirement hence accepted.	The appropriate Modalities of Communication for the project activity have to be submitted by the Project participant before submitting a request for registration. CL#03. MoC was provided by the PP and CL#03 was closed. Checked OK

Actual situation or planning for the project activity needs to be cross checked. Project's spatial boundaries and the system boundaries	The project activity is a rehabilitation of the boilers in Albayroni facility under the CDM project activity Titled Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System was checked and found in compliance.	The actual situation and planning was checked and verified during the validation site visit at the demarcated project site Jubail, Saudi Arabia. On site interview of PP followed by Onsite physical verification was carried out and found satisfactory.	Actual situation or planning for the project activity needs to be cross checked. Project's spatial boundaries and the system boundaries CAR#05 was raised. CAR#05 closed. Checked OK and closed
The appropriate project ownership and requisite approval/ license required for establishment of the project activity at the mentioned geographical location needs to be checked.	The project participants have the necessary licenses as the project activity is well within the premises of the project boundary indicated.	The documents were provided in original during the validation site visit which was checked and verified and found satisfactory. Internal Memorandum No RP&I/INSP/05/13 (dated 06/05/2013) issued for the Boiler 2008 – U. Internal Memorandum No RP&I/INSP/06/13 (dated 06/05/2013) issued for the Boiler 2008 – UA. Internal Memorandum No RP&I/INSP/04/14 (dated 25/02/2014) issued for the Boiler 2052 – U.	The appropriate project ownership and requisite approval/ license required for establishment of the project activity at the mentioned geographical location needs to be checked. Checked OK
Purchase order along with technical specification.	Project technical description has been reviewed through the signed contract and interviewing the PP and Project contractor. The technical description provided in the PDD is found consistent with the actual scenario.	Review of the following document: Contract signed with Toyo Engineering Corporation and Al Bayroni dated 25/08/2011.	Checked OK.

The initial training and maintenance efforts required for the project activity and the related documentary evidence to be checked.	The operation and maintenance of the boilers are under purview of Electrical and Maintenance team. The issue has been discussed with the authorized personnel found satisfactory and hence considered acceptable	Review of the following document: PSSR completion forms for 3 boilers The initial training and maintenance efforts required for the project activity and the related documentary evidence to be checked	Checked OK.
Debundling.	As per the PDD the project is an independent project and not a debundled component of a larger project activity. During the site visit it was confirmed that it is an independent project and meets the criteria of not being a debundled component of a larger project activity. Hence it is justified and found acceptable.	During the validation site visit it was found that the project is an independent project and not a debundled component of a larger project activity.	Checked OK.
Evidence for No use of ODA has to be submitted for the project.	A Self Declaration towards No ODA involvement has been submitted. The same is considered acceptable.	Review of the following document: - "A Declaration towards No ODA involvement" dated 20/01/2014 Evidence for No use of ODA was submitted for the project.	Checked OK.
It is required to be checked whether the project technology used is likely to be substituted by other or more efficient technologies within the project period.	Letter of undertaking by the DNA office of Saudi Arabia that the project is deemed as First of its kind in the distinct geographical area of Jubail.	Declaration on "First-Of-Its-Kind" project by CDM, DNA office of Saudi Arabia dated 12/03/2014.	Checked OK.
Proof for starting date of the project activity.	Signed contract between PP and OEM dated 25/08/2011	Document Review: Signed Contract between Toyo Engineering Corporation and Al Bayroni dated 25/08/2011, contract number: EPC-LS-11-AB-010-00K (Start date of the proposed CDM project activity) and Site visit and discussion with CDM project team.	Checked OK.

Quality Assurance (QA) and Quality Control (QC) procedures for data monitoring or ISO certificate for the EPC contractor.	ISO certificates have been submitted and are acceptable.	Document Review, Site visit and discussion with the Equipment Supplier: Quality Assurance (QA) and Quality Control (QC) procedures for data monitoring or ISO certificate for the EPC contractor.	Checked OK.
Justify the claim of non requirement of mandatory EIA study for the project activity against objective evidence	The notification by the Ministry of Environment that the project does not fall under the purview of the project requiring mandatory EIA study.	Document Review: Environmental Assessment, Prequalification and permits General Directorate of Presidency of Meteorology & Environment, Kingdom of Saudi Arabia. Justify the claim of non requirement of mandatory EIA study for the project activity against objective evidence	No Issues. Checked OK.
Local stakeholders' comments are required to be verified for any adverse comment. MoM of stakeholder consultation meeting Due account of stakeholder comments received required to be verified. Discussions with the Local Stakeholders	The project activity located Jubail Industrial city, Saudi Arabia checked during the validation site visit. The First solar staffs as local stake holders, stationed at the project site were interviewed regarding the solar power project. Notice for Invitation for comments/suggestions for the CDM power project and no such adverse comments received. Stakeholder consultation held on 30/09/2013. The MoM for stakeholders' consultation dated 30/09/2013 and attendance sheet dated 30/09/2013 has been submitted; the same was checked and cross-checked during the site visit and is acceptable.	Document Review, Site visit and discussion with CDM project team and interviews conducted in Saudi Arabia on the project activity. Local stakeholders' comments are required to be verified for any adverse comment. MoM of stakeholder consultation meeting Due account of stakeholder comments received required to be verified. Discussions with the Local Stakeholders /36/Newspaper Advertisement on Local Stakeholder consultation process in Arab News dated 08/09/2013	Checked OK.

		<p>Newspaper Advertisement on Local Stakeholder consultation process in Saudi Gazette dated 09/09/2013</p> <p>Emails and printed invitation letters to Local Stakeholders dated 09/09/2013</p> <p>Minutes of Meeting (MoM) of the Local Stakeholder Meeting dated 30/09/2013</p> <p>Attendance list of the local stakeholder meeting dated 30/09/2013</p>	
--	--	---	--

A.2 Annex 2: Validation Checklist

Table 1 - Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, Letters of Approval and UNFCCC website)

Requirement	Reference Criteria	SGS Assessment	Conclusion/CARs/CLs
<p>1. All Parties involved have approved the project activity</p> <p>1.1. Has the DNA of each Party involved in the proposed CDM project activity in section A.3 of the PDD provided a written letter of approval which confirms</p> <ul style="list-style-type: none"> a) The country is a Party to the Kyoto Protocol b) Participation is Voluntary c) The Host Party confirming that the proposed CDM project activity contributes to sustainable development of the country Non-Annex 1 Party shall submit a letter of approval d) It refers to the precise proposed CDM project activity title in the PDD being submitted for registration <p>1.2. Whether the LoA is unconditional with respect to (a)-(d) above?</p> <p>1.3. Is the LoA from the project participant or directly from the DNA, indicate the means of validation employed to assess the authenticity with DNA if the team doubt the authentic of LoAs.</p>	<p>Clean Development Mechanism, Validation and Verification Standard, Version 7.0 (from this point forward referenced as VVS) para 39, 40 a-d-43 /51</p> <p>Paragraph 37 CDM Modalities and procedures</p>	<p>By checking the UNFCCC website below it was confirmed that Host Country-Kingdom of Saudi Arabia involved have nominated a DNA http://cdm.unfccc.int/DNA/index.html</p> <p>By checking the UNFCCC website below it was confirmed that Kingdom of Saudi Arabia have ratified the KP http://maindb.unfccc.int/public/country.pl?country=ZM</p> <p>LoA is pending at the time of site visit.</p> <p>The same was checked and the LoA was provided to the assessment team which was checked and found correct. CAR#01 is closed out.</p>	<p>CAR #01 CAR#01 closed out. OK</p>
<p>2. Please state the project participants listed in the PDD and check with which of these project participants does SGS have a contract for the projects validation</p>	<p>Marrakech Accords, CDM Modalities, §40 VVS para 6</p>	<p>It was confirmed through signed PR2, page 2 that SGS has a contract with Al Jubail Fertilizer Company (Al Bayroni) a subsidiary of Saudi Basic Industries Corporation</p>	<p>OK</p>

2.1. If the project participant(s) listed in the PDD published at international stakeholder ⁴ consultation are not included in the PDD submitted with request for registration, a letter should be obtained from the withdrawn project participant(s) confirming its voluntary withdrawal from the proposed project activity.	Para 20 of PCP v7	LOA is pending. LOA was provided and hence CAR#01 is closed out.	CAR#01 CAR#01 closed out. OK
2.2. Confirm while submitting a request for registration – all of the project participants with a contractual relationship are still listed in the PDD.	Para 20 of PCP v7	The project participant is with a contractual relationship as mentioned in the web hosted version of the PDD are still listed in the final version of the PDD consistently.	Y
2.3. Project participants who are listed in the PDD (submitted for global stakeholder consultation) but who do not have a contractual relationship with SGS for the purposes of the validation activity may be removed from the PDD which is submitted for registration	Para 20 of PCP v7	The project participant is with a contractual relationship as mentioned in the web hosted version of the PDD are still listed in the final version of the PDD consistently.	Y
2.4. SGS may restart the validation activity through the new or revised contract with a different set of project participants by; a. Indicating that the first validation contract has been terminated and; b. Republishing the PDD or revised PDD for global stakeholder consultation.	Para 21 of PCP v7 (If applicable)	SGS has validated the project under the same first and initial contractual obligation with an opinion and no revision in contract for the validation assignment or a republishing of the PDD or the revised PDD for global stakeholder consultation is relevant.	Y
2.5. The letter/s of approval are unconditional with respect to 1.1.a) to 1.1.d) above	VVS Para. 40-43	LoA is pending for the project. LOA was provided and hence CAR#01 is closed out.	CAR#01 CAR#01 closed out. OK

⁴ Stakeholders mean the public, including individuals, groups or communities affected, or likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity

<p>3. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily</p>	<p>VVS Para. 52</p> <p>Marrakech Accords, CDM Modalities §29 and §30 Kyoto Protocol Art. 12.2, Marrakech Accords, CDM Modalities §40a</p>	<p>LoA is pending for the project. LOA was provided and hence CAR#01 is closed out.</p>	<p>CAR#01 CAR#01 closed out. OK</p>
<p>4. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for a minimum of 30 days, and the project design document and comments have been made publicly available</p>	<p>VVS Para. 35-37</p> <p>Marrakech Accords, CDM Modalities, §40</p>	<p>The PDD was uploaded for the global stakeholder process. The information towards the same was available from the website: http://cdm.unfccc.int/Projects/Validation/DB/JCR0B72TOJAQ51TZOEL9GAP0E0324X/view.html Starting date and closing date: start date- 14/12/2013 - and the closing date-13/12/2014 Number of comments received: No Comments received.</p>	<p>OK.</p>
<p>5. The project design document is in accordance with the applicable CDM requirements for completing PDDs.</p>	<p>VVS Para. 63-64</p> <p>Marrakech Accords, CDM Modalities, Appendix B, EB Decisions</p>	<p>The PDD is in line with Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41.</p> <ul style="list-style-type: none"> - Throughout the PDD, the template has been altered from the PDD template on the UN website - Page 2, contents page is not part of the template - Page 27, Section B.6.4. 10 year total should be 418,310 (41,831*10) and not 418,315 as stated in the PDD - Page 35, Appendix 6, the header has been altered and it looks like there are post registration changes <p>The same was checked in the revised PDD and found to be corrected, hence CAR#02 is closed out.</p>	<p>CAR #02 CAR#02 is closed out OK</p>

6. Have the project participant been authorized by at least one Party involved in letter of approval	VVS para 46-49	PPs are found to be appropriate in the PDD and LoA is pending. LOA was provided by the PP which was found to be correct and hence CAR#01 is closed out	CAR#01 CAR#01 is closed out OK
7. Has the DNA considered whether the proposed CDM project activity assists the host Party in achieving sustainable development	VVS para 51-53	LOA is pending. CAR#01 is closed out	CAR#01 CAR#01 is closed out OK

Table 2 - PDD (Clean Development Mechanism, Validation and Verification Standard, Version 7.0 (from this point forward referenced as VVS)

Checklist Question	Reference Criteria	MoV*	SGS Assessment	Conclusion/ CARs/CLs
A. General Description of Project Activity				
A.1. Project Title				
A.1.1. Does the used project title clearly enable the reader to identify the unique CDM activity?	VVS Para.65 Guidelines for completing a CDM-PDD (PDD) section A.1	DR	The used project title 'Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System enables the reader to identify the unique CDM activity.	Y
A.1.2. Is there an indication of a revision number and the date of the revision?	VVS Para.65 PDD section A.1	DR	The webhosted PDD was provided with version 1 dated 23/09/2013 as provided in PDD section A.1	Y
A.1.3. Does the PDD clearly indicate the project participant, host party, sectoral scope and selected methodologies correctly as per contract with SGS	PDD template version 4.1 Guidelines for completing a CDM-PDD (PDD) section A.1 Annex 8 EB 66	DR	The 1 st page of the PDD both Al Jubail Fertilizer Company (Al Bayroni) Saudi Basic Industries Corporation (SABIC) as the PP and host party is correctly mentioned as Kingdom of Saudi Arabia. Sectoral Scope is TA 1.1 and selected methodology is AM0056.	

A.2. Description of the Project Activity

A.2.1. Does the proposed CDM project activities in existing facilities or utilizing existing equipments? Does a site inspection carried out by the assessment team?	VVS Para 69 Guidelines for completing a CDM-PDD (PDD) section A.1	DR	The webhosted PDD has adequate details on 'purpose of the project activity' , 'type of technology used' and 'contribution of the project to sustainable development'.	Y
A.2.2. Does the description of the proposed CDM project activity as contained in the PDD sufficiently cover all relevant elements accurately and provide the reader with a clear understanding of the nature of the proposed CDM project activity?	VVS Para.66-69 VVS Para. 66(a) PDD section A.1 see also A3	DR	The description of the project is not clear with regard to implementation of the project and current status of the project is not clear. The same was found to be included correctly in the revised PDD and hence CAR#02 is closed out.	CAR #02 CAR#02 is closed out OK
A.2.3. If the project activity involves the alternation of an existing installation or process, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	VVS Para.66-69 PDD section B.3 see also A.4, A.4.3 and B.3	DR	Checked at site visit and found consistent.	Y
A.2.4. Is all information provided consistent and in compliance with the actual situation or planning?	VVS Para.66-69 PDD section A.1 see also A.3, and B.2	DR	The information provided is consistent with details provided in other sections of the PDD.	Y

A.2.5. Is all information with respect to project description deemed accurate and complete?	VVS Para.66-69 PDD section A.1	DR	The information provided in the PDD enables the reader to have clear understanding of the proposed CDM activity. Hence it can be concluded that all information with respect to project description deemed accurate and complete.	Y
A.3. Location of Project Activity				
A.3.1. Is the Host Party clearly mentioned in the section A.2	PDD section A.2	DR	The host country is clearly mentioned under section A.2.1 of the webhosted PDD.	Y
A.3.2. Is Region/State/Province etc. in A.2.2	PDD section A.2	DR	The region mentioned in the PDD is consistent and accepted	Y
A.3.3. Is City/Town/Community etc. clearly mentioned in section A.2.3.	PDD section A.2	DR	The City/Town/Community etc. is clearly mentioned in section A.2.3. of the webhosted PDD, version 1 dated 19/11/2012	Y
A.3.4. Is Physical/Geographical location provided in A.2.4.	PDD section A.2	DR	Coordinates provided in the PDD are correctly mentioned.	Y
A.3.5. Has the MoC been completed as per the latest Procedures for MoC between the project participants and the Executive Board?	VVS para 54-58	DR/S V	The MOC was not provided during the initial desk review. The same would have to be checked during the site visit. The MOC was filled up correctly and provided by the PP and hence CAR#03 is closed out	CAR #03 raised CAR#03 is closed out OK
A.4. Technologies and/or measures				
A.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	PDD section A.3	DR	Adequate information on project site with latitude & longitude and nearest approaches is provided in section A.4 of the PDD. The proposed CDM project activity is a new green field project and does not involve any alteration of existing installations or process.	Y

A.4.2. Are the latitude and longitude of the site indicated (decimal points)	PDD section A.3 Guidelines for completing a CDM-PDD (PDD) section A.3	DR	There are no issues in this regard.	Y
A.4.3. Does the proposed CDM project activity involve the alteration of existing installations or process?	VVS Para.66-69 PDD section A.3 Guidelines for completing a CDM-PDD (PDD) section A.3	DR/ SV	The proposed CDM project activity is installation of power plant.	Y
A.4.4. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	VVS Para.66-69 PDD section A.3 Guidelines for completing a CDM-PDD (PDD) section A.3	DR/S V	The project ownership details of the PP for the implementation of the project at the site needs to be checked and obtained during site visit	Y
A.4.5. Is the category(ies) of the project activity correctly identified?	VVS Para.66-69 PDD section A.3	DR	The category of the project activity and the applied methodology are correctly identified in the PDD.	Y
A.4.6. Is all information provided in compliance with actual situation or planning as available by the project participants?	VVS Para.66-69 PDD section A.3 Guidelines for completing a CDM-PDD (PDD)	Site Visit	To be checked during site visit. Checked and found consistent	Y
A.4.7. Are the projected emission reductions in consistency with the ex-ante estimation in Section B.6.4?	VVS Para.66-69 PDD section A.4.3	DR	The projected emission reductions are consistent with the ex-ante estimation in Section B.6.4. The same would have to be checked against the excel spread sheet during the validation site visit.	Y

A.5. Parties and Project participants

A.5.1. Are the parties and project participants correctly mentioned in the A.4 of the PDD	VVS Para.66-69 PDD section A.4	DR	The 1 st page of the PDD both Al Jubail Fertilizer Company (Al Bayroni) Saudi Basic Industries Corporation (SABIC) as the PP and host party is correctly mentioned as Kingdom of Saudi Arabia	Y
---	-----------------------------------	----	--	---

A.6. Public Funding

A.6.1. Does the information on public funding provided conform to the actual situation or planning as presented by the project participants?	PDD section A.5	DR / Site Visit (LAC)	The section A.4.5 of the PDD indicates, "There is no public funding for the proposed project activity". The same was discussed and checked against proper documentary evidence during the on-site validation.	LAC. OK
A.6.2. Is all information provided consistent with details provided by further chapters of the PDD (in particular annex 2)?	PDD section A.5	DR	The information provided in section A.4. is consistent with details provided in Appendix 2	Ok
A.6.3. In case of public funding from Annex I Parties is it confirmed that such funding does not result in a diversion of official development assistance	PDD section A.5	DR	No public funding from Annex I Parties is involved in the project activity.	Ok

A.7. Debundling

A.7.1. If the project is a debundled component of a larger project, does the larger project fall within the limits for small-scale CDM project activities	VVS Para. 162-163	DR	The project is not a debundled component of the larger project	OK
---	-------------------	----	--	----

B. Baseline and Monitoring Methodology					
B.1. Reference of methodology and Project activity eligibility					
B.1.1. Is the baseline and monitoring methodology a valid version approved by the CDM EB?	VVS Para.71 PDD section B.1	DR	The applied baseline methodology AM0056, version 1.0 was found to be the latest methodology and applied in the webhosted PDD which has been approved by the CDM Methodology Panel.	Y	
B.1.2. Is there any specific guidance (including the Tools) provided by EB and has these guidance been applied? If yes, is this correctly applied	VVS Para.72 PDD section B (B.2)	DR	The PP is requested to refer , quote and apply the methodology (and the tools) correctly by comparing it to the latest available tools throughout the PDD as per requirement of VVS para 71. The same was included correctly in the revised PDD and hence CAR#02 is closed out.	CAR#02 CAR#02 is closed out OK	
B.2. Choice and Applicability of methodology					
B.2.1. Is the selected approved methodology applicable to the project activity in the PDD?	VVS Para.78 PDD section B (B.2)	DR	The approved methodology was found to be applicable to the project activity. However, it was not clearly mentioned how the conformance with each criterion has been met in particular towards the documentary evidence. The PP is requested to clarify the same.	CAR#04 is raised CAR#04 is closed out OK	
B.2.2. Is the discussion in the PDD in conformance with all applicability criteria of the applied methodology?	VVS Para75-78 PDD section B (B.2)	DR	Pending closure of CAR#04. CAR#04 is closed out.	CAR#04 is raised CAR#04 is closed out OK	

B.2.3. Is there any GHG emissions occurring within the project boundary as a result of the implementation of the proposed project which are expected to contribute more than 1% of the overall expected average annual ERs, which are not addressed by the applied methodology.	VVS Para 89	DR/S V/I	There is no potential GHG emissions that contribute more than 1% of overall expected average annual emission reductions.	Y
B.2.4. Does the methodology allows project participants to choose whether a source or gas is to be included within the project boundary? If yes, has it been determined whether the project participants have justified that choice. Is the justification provided by the project participants reasonable, based on an assessment of supporting documented evidence provided by the project participants and corroborated by observations if required	VVS para 85,	DR	The PP has correctly chosen a source or gas is to be included within the project boundary which was found justified reasonable.	Y
B.2.5. Is the applicability of the selected methodology satisfied?	VVS Para.78	DR	The applied baseline methodology AM0056 version 1.0 was found to be the latest methodology and applied in the webhosted PDD which has been approved by the CDM Methodology Panel.	Y

B.3. Project Boundary

B.3.1. Does the project boundary include the physical delineation of the proposed CDM project activity?	VVS Para.85-87 PDD section B.3 also see section A.1 and A.3	DR/S V	The project boundary is not clear with regard to the project boundary as per the requirement of the methodology. CAR#05 is closed out	CAR#05 CAR#05 is closed out OK
B.3.2. Are all emission sources and gases related to the baseline scenario, project scenario and leakage clearly identified and described in a complete and transparent manner?	VVS Para.84 PDD section B.3	DR	All emission sources and gases related to the baseline scenario, project scenario and leakage clearly identified and described in a complete and transparent manner	Y
B.3.3. In case of grid connected electricity projects: Is the relevant grid correctly identified in accordance with the latest version of tool to calculate emission factor of electricity system (wherever applicable) and the underlying methodology?	VVS Para.85-87 PDD section B.3	DR	There is no grid connectivity for the project.	Y
B.3.4. Are the project's geographical boundaries and the project's system boundaries (components and facilities used to mitigate GHGs) clearly defined?	VVS Para.85-87 PDD section B.3 also see section A.1 and A.3	DR	All sources and GHGs required by the methodology have been included within the project boundary. CAR#05 is closed out	CAR#05 CAR#05 is closed out OK

B.4. Identification of the Baseline Scenario

B.4.1. Does the PDD discuss the identification of the most likely baseline scenario? Does the PDD follow the steps to determine the baseline scenario required by the methodology/tool and has the application of the tools as per methodology been consulted, if the Tool(s) are required by the methodology?	VVS Para..92 PDD Section B.4	DR	The PDD has correctly defined the baseline scenario as per the provisions of the methodology, AM0056 and version 5.0 of Combined tool to identify the baseline scenario and demonstrate additionality” has been used to identify the baseline scenario”, however, PP has to provide documentary evidences and include references in the PDD for the alternatives identified. Also the tool used is not the latest tool available and thus PP is requested to clarify the baseline identification as per the latest available tool. The same was included correctly in the revised PDD and hence CAR#06 is closed out	CAR #06 CAR#06 is closed out OK
B.4.2. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario, including “relevant national and/or sectoral policies and circumstances?”	VVS Para.92-97 PDD Section B.4	DR	Version 05 of Combined tool to identify the baseline scenario and demonstrate additionality” have been used. Please clarify. The same has been corrected in the revised PDD and hence CAR#06 is closed out.	CAR #06 CAR#06 is closed out OK
B.4.3. Are all potential realistic and credible alternative scenarios listed in the methodology are considered in identification of the most reasonable baseline scenario? Are all scenarios are reasonable in the context of the proposed CDM project and no reasonable alternative scenario has been excluded?	VVS Para.92-97 PDD Section B.4	DR	Pending CAR #06. CAR#06 is closed out.	CAR#6 CAR#06 is closed out OK

B.4.4. Is the choice of the baseline compatible with the available data?	VVS Para.92-97 PDD Section B.4	DR	Pending CAR #06. CAR#06 is closed out.	CAR#6 CAR#06 is closed out OK
B.5. Additionality				
B.5.1. Does the PDD clearly demonstrate the additionality using the approach as specified in the methodology and by following all the required steps?	VVS Para 107-109 EB 54 report, annex 15	DR	The PDD has not clearly demonstrated the additionality as per steps required mentioned in Combined tool to identify the baseline scenario and demonstrate additionality version 5.0. The same has been demonstrated correctly in the revised PDD and hence CAR#07 is closed out	CAR#07 CAR#07 is closed out OK
B.5.2. In case of using the additionality tool: Is the 'Additionality Tool' used in the PDD latest version? If an earlier version has been used, do the changes impact the discussion in the PDD? Are all steps followed in a transparent manner?	PDD Section B.1/B.4/B.5	DR	The PP is requested to clarify that why the recent version of the 'Combined tool to identify the baseline scenario and demonstrate additionality, version 5.0 was not used to demonstrate additionality. The same has now been corrected by the PP in the revised PDD.	CAR#07raised CAR#07 is closed out OK
B.5.3. Has all information been backed up with references, sources and certification? Is the data presented credible and reliable with complete transparency to all available data and documentation?	VVS Para.107 PDD Section B	DR	All the assumptions and data used by the project participants are not listed in the PDD, including their references and sources. The PP is requested the clarify the same . The same has now been corrected by the PP in the revised PDD.	CAR#07raised CAR#07 is closed out OK

B.5.4. Is the discussion on additionality and the evidence provided consistent with the starting date of the project? If the project activity start date is prior to the validation is it discussed how the CDM was taken into account in the decision to go ahead with the project activity	VVS Para.113 PDD Section B.5	DR	PP has not specified the start date of the project activity as per the definition of project start date EB 70 Annex 7. The same has now been corrected by the PP in the revised PDD.	CAR#07raised CAR#07 is closed out OK
B.5.5. Is the project activity a new project activity or existing project activity? How is the early consideration demonstrated?	VVS Para.113 PDD Section B.5	DR	Title of project in the prior consideration does not match with the PDD webhosted. Please clarify. The same has been corrected by the PP in the revised PDD and hence CL#08 is closed out	CL#8 CL#08 is closed out OK
B.5.6. For an existing project activity with a start date before 2 August 2008, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, is the real documented evidence for an assessment of real and continuing actions available for validation and is this evidence authentic?	VVS Para 112-113	DR	The project does not fall under the category of existing project.	OK

B.5.7. Are all credible and plausible alternatives correctly identified? Do the identified baseline scenarios include technologies and practices that include outputs or services comparable with the proposed CDM project activity? Do they also abide by the same applicable laws and legislations?	VVS Para. 121-122 PDD Section A.3/B.5	DR	The discussion on additionality is not consistent with the identification of all plausible and credible baseline scenarios.	CAR #6 CAR#06 is closed out OK
B.5.8. If an investment analysis has been used, has it been demonstrated that the proposed project activity is not the most economically or financially attractive alternative, or is not economically or financially feasible, without the revenue from the sale of CERs.	VVS Para. 125-129 PDD Section B.5	DR	The PP has opted for barrier analysis and no financial analysis has been done	CAR #6 CAR#06 is closed out OK
B.5.9. Is the investment analysis carried out in accordance with specific guidance from EB?	VVS Para. 129	DR	The PP has opted for barrier analysis and no financial analysis has been done	CAR #6 CAR#06 is closed out OK
B.5.10. Is the investment analysis complete and accurate? (Important)	VVS Para. 125-129 PDD Section B.5	DR	The PP has opted for barrier analysis and no financial analysis has been done	CAR #6 CAR#06 is closed out OK

B.5.11. Does the investment analysis rely on the values from Feasibility Study Reports (FSR) that approved by national authorities for proposed CDM project activity?	VVS Para. 125-129 PDD Section B.5	DR	The PP has opted for barrier analysis and no financial analysis has been done	CAR #6 CAR#06 is closed out OK
B.5.12. If a benchmark is used, is it ensured that it is selected in accordance with the requirements of the tool /methodology and it represents standard returns in the market (not linked to the subjective profitability expectation or risk profile of a particular project developer).	VVS Para.128 PDD Section B.5	DR	The PP has opted for barrier analysis and no financial analysis has been done	CAR #6 CAR#06 is closed out OK
B.5.13. If a barrier analysis has been used, has it been shown that the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity but would not have prevented the implementation of at least one of the alternatives?	VVS Para. 132-133 PDD Section B.5 EB50, Annex 13	DR	It was hereby confirmed by the assessment team that the project activity would not: (a) Prevent the implementation of this type of proposed CDM project activity; (b) Prevent the implementation of at least one of the alternatives. Barrier analysis has been correctly done by the PP	OK
B.5.14. Is the discussion on additionality consistent with the identification of all plausible and credible baseline scenarios?	VVS Para. 132-133 PDD Section B.5	DR	The discussion on additionality consistent with the identification of all plausible and credible baseline scenarios	OK

B.5.15. Has the barriers correctly identified and they prevent the implementation of the project activity but not the implementation of at least one of the possible alternatives.	VVS Para. 132-133 PDD Section B.5 EB50, Annex 13	DR	the barriers correctly identified and they prevent the implementation of the project activity but not the implementation of at least one of the possible alternatives.	OK
B.5.16. If a barrier analysis has been used have the 'guidelines for objective demonstration and assessment of barriers' been followed? Have all applicable steps been considered and substantiated with objective evidence?	VVS Para. 132-133 PDD Section B.5 EB50, Annex 13	DR	Combined Tool for the demonstration and assessment of additionality has not been used stepwise. PP revised the documents and based on that CAR#06 closed out.	CAR #6 CAR#06 is closed out OK
B.5.17. Do the identified baseline scenarios include technologies and practices that include outputs or services comparable with the proposed CDM project activity? Do they also abide by the same applicable laws and legislations?	VVS Para. 132 PDD Section A.3/B.5	DR	Yes, baseline scenarios include technologies and practices that include outputs or services comparable with the proposed CDM project activity.	OK
B.5.18. Is the proposed project type is justified as first-of-its kind?	VVS Para. 135 PDD Section A.3/B.5 EB 69 Annex 07	DR	The proposed project type is first-of-its kind, hence the PP has demonstrated the common practice analysis	OK
B.5.19. Is the project activity not common practice?	VVS Para. 7.1 135 PDD Section B.5 EB 69 Annex 8	DR	Common practice analysis has not been done as per the requirements of EB 70 Annex 5. PP has to clarify in this regard. The same has been corrected by the PP in the revised PDD and hence CAR#08 is closed out	CAR #08. CAR#08 is closed out OK

B.5.20. What are the key distinctions between the project activity and any similar projects that are widely used as common practice?	VVS Para. 136 PDD Section B.5 EB 69 Annex 8	DR	Pending CAR #07. CAR#07 is closed out	OK CAR #7 CAR#07 is closed out OK
B.5.21. Is the proposed project activity additional?	PDD Section B.5	DR	From the above assessments under Section B.5, it is clear that the project activity is additional.	OK
B.6. Algorithms and/or formulae used to determine emission reductions				
B.6.1. Are the steps and equations applied to calculate baseline emissions in compliance with the requirements of selected baseline and monitoring methodology?	VVS 102, 103	DR	The steps and equations applied to calculate baseline emissions in compliance with the requirements of selected baseline and monitoring methodology	OK
B.6.2. Are the steps and equations applied to calculate project emissions in compliance with the requirements of selected baseline and monitoring methodology?	VVS 102, 103	DR	The steps and equations applied to calculate project emissions in compliance with the requirements of selected baseline and monitoring methodology	OK
B.6.3. Are the steps and equations applied to calculate leakages in compliance with the requirements of selected baseline and monitoring methodology?	VVS 102, 103	DR	The steps and equations applied to calculate leakage is in compliance with the requirements of selected baseline and monitoring methodology	OK

B.6.4. Are the steps and equations applied to calculate emission reductions in compliance with the requirements of selected baseline and monitoring methodology?	VVS 102, 103	DR	The steps and equations applied to calculate emission reductions is in compliance with the requirements of selected baseline and monitoring methodology	OK
B.6.5. Where there is an option between different equations or parameters, has the methodological choices for the project been explained, have they been properly justified and are they correct?	VVS 97,98,99a	DR	The steps and equations applied to calculate emission reductions is in compliance with the requirements of selected baseline and monitoring methodology	OK
B.6.6. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	PDD Sections B.5-C	DR	All the uncertainties in the GHG emissions estimates are properly addressed in the PDD	OK
B.6.7. Are the ex-ante fixed data provided in compliance with the methodology and/or relevant tools (if applicable)?	VVS 102, 103 PDD Section B.6.3B.6.4	DR	the ex-ante fixed data provided in compliance with the methodology and/or relevant tools	OK
B.6.8. Is all the data derived from official data sources or replicable records and have these been correctly quoted?	VVS Para. 102,103 PDD Section B.6.3/B.6.4	DR	All the data derived from official data sources or replicable records and have these been correctly quoted	OK
B.6.9. Is the vintage of the baseline data correct?	PDD Section B.6.3/B.6.4	DR	Yes, the vintage of the baseline data is correct	OK
B.6.10. Is all the data appropriate and correctly applied to the CDM project activity?	VVS Para. 103 PDD Section B.6.3/B.6.4	DR	All the data are appropriate and correctly applied to the CDM project activity	OK

B.6.11. Are data and parameters that are not being monitored and remained fixed throughout the crediting period appropriately assessed, correct, and will they result in conservative estimates?	VVS Para. 103 PDD Section B.6.3/B.6.4	DR	All the data and parameters that are not being monitored and remained fixed throughout the crediting period have been appropriately assessed. The estimated parameters set out in the PDD are considered reasonable.	OK
B.6.12. Are the ex-post monitored data estimated appropriated for calculation of ex-ante emission reductions?	VVS 103 PDD Section B.6.3B.6.4	DR	Yes, the ex-post monitored data estimated appropriated for calculation of ex-ante emission reductions	OK
B.6.13. Is sampling approach used for any parameters?	EB74 Annex 6 v4.1	DR	No sampling approach has been used.	OK
B.6.14. Are all the steps taken and equations applied to calculate project emissions, baseline emissions and leakage and emission reductions correct and appropriate?	VVS 102-103	DR	All the steps taken and equations applied to calculate project emissions, baseline emissions and leakage and emission reductions correct and appropriate	OK

<p>B.6.15. Where applicable, the plant load factor shall be defined ex-ante in the CDM-PDD according to one of the following three options:</p> <p>(a) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;</p> <p>(b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company)</p>	<p>EB 48 Annex 11</p>	<p>DR</p>	<p>confirmed during the site visit</p>	<p>OK</p>
<p>B.7. Monitoring methodology and Monitoring Plan</p>				
<p>B.7.1. Does the monitoring methodology provide a consistent approach in the context of all parameters to be monitored and further information provided by the PDD?</p> <p>Are all parameters and data that are available at validation consistent with the approved methodology. Has this data been interpreted and applied correctly?</p>	<p>VVS Para. 139 PDD Section B.7-B.8 see also Annex 4</p>	<p>DR</p>	<p>It is not clear from the PDD with regard to how many meters will be installed as there are two units of power generation as per the project plan. Meter accuracy class is not clear and also the frequency of calibration and internal audit is not clear from the description in the PDD section B.7 and B.8. PP has to clarify in this regard as per the requirement of VVS para 72e.</p> <p>The details have now been included in the revised PDD and hence CAR#09 is closed out</p>	<p>CAR-09 CAR#09 is closed out OK</p>

B.7.2.	Is the monitoring plan compliant with the approved monitoring methodology and/or relevant tools (if applicable)?	VVSPara. 139 PDD Section B.7	DR	The monitoring plan is compliant with the approved monitoring methodology and/or relevant tools	OK
B.7.3.	Is the implementation of monitoring plan feasible and verifiable.	VVS Para. 139 PDD Section B.7	DR	The implementation of monitoring plan was checked and found feasible and verifiable	OK
B.7.4.	Is it ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission reductions?	VVS Para. 139	DR	It is ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission reductions.	OK
B.7.5.	Is the proposed monitoring plan compliance with the methodology/tools and feasible for implementation?	VVS Para.139	DR	The proposed monitoring plan compliance with the methodology/tools and feasible for implementation	OK
B.7.6.	Does the information contained in Annex 4 in consistency with the information in Section B.7 of PDD?	PDD Annex 4	DR	The information contained in Annex 4 in consistency with the information in Section B.7 of PDD	OK
B.7.7.	Does the monitoring plan in the PDD comply with the approved methodology provided for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?	VVS Para. 139 PDD Section B.7- B.7.2	DR	The monitoring plan in the PDD comply with the approved methodology provided for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period	OK

B.7.8. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied?	PDD Section B.7-B.7.2/B.6.2	DR	The choices of project GHG indicators reasonable and in conformance with the requirements set by the approved methodology applied	OK
B.7.9. Will it be possible to determine the specified project GHG indicators?	PDD Section B.6.2-B.8	DR	Yes, it is possible to determine the specified project GHG indicators	OK
B.7.10. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	PDD Section B.6.2-B.7.1	DR	The information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan	OK
B.7.11. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	PDD Section B.5-B.7.2	DR	The monitoring approach is in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy	OK
B.7.12. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	PDD Section B.6.2-B.7.1	DR	All formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology	OK

B.8. Operational and Management Structure

B.8.1.	Is the authority and responsibility of project management clearly described?	PDD Section B.7	DR	The authority and responsibility of project management is clearly described	OK
B.8.2.	Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	PDD Section B.8	DR	The authority and responsibility for registration, monitoring, measurement and reporting clearly described	OK
B.8.3.	Are procedures identified for training of monitoring personnel?	PDD Section B.7	DR	The procedures are identified for training of monitoring personnel	OK

B.9. Baseline Information

B.9.1.	Is the information contained in Annex 3 consistent with the Section B.4, B.5 and B.6?	PDD Annex 3	DR	The information contained in Appendix 3 is consistent with the Section B.4, B.5 and B.6	OK
B.9.2.	Is there any indication of a date when determining the baseline?	PDD Section B.8/Annex 3	DR	Aspect has been checked and found consistent	OK
B.9.3.	Is this consistent with the time line of the PDD history?	PDD Section B.8	DR	This is consistent with the PDD history	OK
B.9.4.	Is all data required provided in a complete manner by annex 3 of the PDD?	PDD Annex 3	DR	All the data required is provided in a complete manner by appendix 3 of the PDD	OK

B.9.5.	What is the documented crediting period of the project? Is this inline with available data?		DR	The PDD indicates, starting date as 25/08/2011. PP has to provide the basis of the same.	OK
B.9.6.	In cases where the methodology specifies, has the ' <i>Tool to determine the remaining lifetime of equipment</i> ' been correctly applied?	EB 50 Annex 15	DR	Not applicable.	Ok
B.9.7.	In cases where the ' <i>Tool to determine the remaining lifetime of equipment</i> ' has been used the project participants may use one of the following options to determine the remaining lifetime of the equipment: i. Use manufacturer's information on the technical lifetime of equipment and compare to the date of first commissioning; ii. Obtain an expert evaluation; iii. Use default values.	EB 50 Annex 15	DR	Not applicable.	Ok
B.10. Sampling					
B.10.1.	Is there any indication of a Sampling?	PDD Section B.7.2/Annex 3 EB74 Annex 6 v4.1	DR	There is no sampling involved	OK

B.10.2. Is the sampling consistent with the requirement of the methodology ?	Also see revision history of the PDD Standard for sampling and surveys for CDM project activities and programme of activities EB74 Annex 6 v4.1	DR	There is no sampling involved	OK
B.10.3. Is all data required provided in a complete manner by annex 5 of the PDD?	PDD Annex 5 EB 69 Annex 4&5 and EB 67 Annex 6 EB74 Annex 6 v4.1	DR	All the data is required to provide in a complete manner by Appendix 5 of the PDD	OK
C. Duration of the Project / Crediting Period				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	PDD Section C.1.1/C.1.2	DR	It is not clear what is the project start date and operational lifetime. The PP is requested to clarify the same. The same has now been included in details in the revised PDD and hence CAR10 is closed out.	CAR10 CAR10 is closed out OK
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	Section C.2/C.2.1/C.2.2	DR	The crediting period is fixed for 10 years	OK
C.1.3. Does the project's operational lifetime exceed the crediting period	PDD Section C.1.2/C.2.1.1/C.2.1.2	DR	Pending closure of CAR10. CAR10 is closed out.	CAR #10 CAR#10 is closed out. OK

C.1.4. Does the start date indicate whether this is a new project activity or a pre-existing project activity?	PDD Section C.1.1/C.2.1.1	DR	The start date of the project activity makes it eligible to fall under “new project” activity, but pending closure of CAR 04. The same has now been corrected by the PP and hence CAR 04 is closed out	CAR#04 CAR#04 is closed out. OK
D. Environmental Impacts				
D.1.1. Does the project comply with environmental legislation in the host country?	VVS Para. 141-143 PDD section D	DR	The project complies with environmental legislation in Saudi Arabia. Same has to be checked during site visit. However documentary evidence for the same has not been provided in the PDD. The same was provided by the PP during site visit which was checked and was found to be correct. CAR11 is closed out.	CAR#11 CAR#11 is closed out. OK
D.1.2. Has an analysis of the environmental impacts of the project activity been sufficiently described?	VVS Para. 141-143 PDD section D	DR	The environmental impacts of the project activity have been sufficiently described	OK
D.1.3. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	VVS Para. 141-143 PDD section D	DR	There is no other host country involved	OK
D.1.4. Will the project create any adverse environmental effects?	VVS Para. 141-143 PDD section D	DR	No, adverse effect is being created by the project	OK
D.1.5. Are trans-boundary environmental impacts considered in the analysis?	VVS Para. 141-143 PDD section D	DR	All trans-boundary environmental impacts considered in the analysis	OK
D.1.6. Have identified environmental impacts been addressed in the project design?	VVS Para. 141-143 PDD section D	DR	No, adverse effect is being created by the project	OK

E. Stakeholder Comments					
E.1.1.	Have local stakeholders been invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC web	VVS Para. 146 PDD Section E.1	DR	PP has done the local stakeholder consultation correctly.	OK
E.1.2.	Have appropriate media been used to invite comments by local stakeholders?	VVS Para. 146 PDD Section E.1	DR	Please refer section E.1.1 above.	Ok
E.1.3.	Is the undertaken stakeholder process described in a complete and transparent manner?	VVS Para. 146 PDD Section E.1	DR	Please refer section E.1.1 above.	Ok
E.1.4.	Is a summary of the stakeholder comments received provided?	VVS Para. 146 PDD Section E.2	DR	Please refer section E.1.1 above.	Ok
E.1.5.	Has due account been taken of any stakeholder comments received?	VVS Para. 146 PDD Section E.3	DR	Please refer section E.1.1 above.	Ok
E.1.6.	How the team validate the adequacy of stakeholder consultation?	VVS Para. 146	DR	Please refer section E.1.1 above.	Ok

A.3 Annex 3: Overview of Findings

	CARs	CLs	FARs
Total Number raised	09	02	00

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CAR	Number:	01	Reference:	Section 1
Lead Assessor Comment:					
The PP is requested to provide the LoA from DNA for the project in line with VVS 6.0 para 38 and Para-graph 37 CDM Modalities and procedures.					
Project Participant Response:				Date: 28/02/2014	
The Letter of Approval was issued by National Committee for Clean Development Mechanism, Kingdom of Saudi Arabia (Saudi DNA) on 8 th January, 2014.					
Documentation Provided by Project Participant:					
Please see attached pdf file titled “Saudi DNA Approval for Al Bayroni CDM project”					
Information Verified by Lead Assessor:					
Letter of Approval by Saudi DNA Ref no. CDM14-017LOA dated 08 th January 2014					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 18/03/2014	
The Letter of Approval by Saudi DNA Ref no CDM14-017LOA dated 08/01/2014 was checked and found to be consistent and as per the requirements of para 38 of VVS 6.0 and thus accepted. Further a cross check as per the requirement of para 40 & 41 of VVS was done by the assessment team though phone call with the Saudi Arabia DNA (Ph no.0096612819700) and the LoA was confirmed by Abdulllah Nasser Al-Sarhan, Secretary General of National Committee for Clean Development Mechanism that the CDM14-017LOA dated 08/01/2014 has been issued to Al Jubail Fertilizer Company (Al- Bayroni) and Saudi Basic Industries Corporation (SABIC) and thus the LoA was accepted.					
Acceptance and Close out by Lead Assessor: Closed				Date: 18/03/2014	

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CAR	Number:	02	Reference:	Section 1 (5)
Lead Assessor Comment:					
The PDD is not in line with Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41.					
<ul style="list-style-type: none">- Throughout the PDD, the template has been altered from the PDD template on the UN website- Page 2, contents page is not part of the template- Page 27, Section B.6.4. 10 year total is not consistent as the total comes to 418,310 (41,831*10) as compared to 418,315 as stated in the PDD- Page 35, Appendix 6, the header has been altered and it looks like there are post registration changes, Please clarify					
The description of the project in Section A.1 is not clear with regard to implementation of the project and current status of the project is not clear. Also it is not clear from the description of the project the components of the project. Initiatives listed in section A.1 and section A.3 does not match. Please clarify as per requirement of para 64 of VVS 6.0					
Section A.3 is not clear with regard to the technical description of the individual initiatives. The initiatives listed here are inconsistent with the Section A.1 of the PDD.					
Fig A.2 is not clear with regard to all the listed initiatives, Also metering points from post and pre modification are not clear.					
Project Participant Response:				Date: 28/02/2014	
PDD version 2.0 dated 26/02/2014 has been rewritten in line with Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41.					

Documentation Provided by Project Participant:	
Please see attached PDD version 2 dated 26/02/2014.	
<ul style="list-style-type: none"> The template has been correct throughout the PDD version 2. Content from page 2 removed. 10 year total in section B4 was corrected. Heading of Appendix 6 corrected. Description of Section A1 was expanded and Figure A2 changed to clearly outline project components in the diagram. Metering points from post and pre modification are outlined in details in section B 7 (Monitoring Plan). 	
Information Verified by Lead Assessor:	
PDD version 2.0 dated 26/02/2014	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/03/2014
<p>PDD version 2.0 dated 26/02/2014 was checked by the assessment team.</p> <ul style="list-style-type: none"> The template of the PDD was checked and it was found to be filled up as per the requirement of Guidelines for Completing the Project Design Document (CDM-PDD)', version 07, Annex 12, EB 41 and thus accepted. Content page was found to be removed from revised PDD version 2.0 dated 26/02/2014 and it was found to be in line with the PDD template and thus accepted The 10year total ER value in section B.4 was checked and was found to be corrected in PDD version 2.0 and thus accepted. Header of Appendix 6 was found to be corrected and thus accepted <p>Section A.1 was checked with regard to the project description and implementation status of the project. PP is requested to provide exact date in DD/MM/YYYY format for the project timelines in Section A.1 (page 3) and thus CAR #02 remains open</p> <p>Section A.3 was checked in PDD version 2.0 with regard to the technical description of the individual initiatives was found to be correct as per the actual scenario checked by the assessment team and thus accepted. The initiatives listed here were found to be consistent with the Section A.1 of the PDD and thus accepted.</p> <p>Fig A.2 was found clear with regard to all the listed initiatives, Also metering points from post and pre modification was found to be included in PDD version 2.0 dated 26/02/2014 and thus accepted.</p>	
Acceptance and Close out by Lead Assessor: Open	Date: 18/03/2014
Project Participant Response:	Date: 20/03/2014
Exact dates in DD/MM/YYYY format for the project timeline in Section A.1 (page 3) are provided.	
Documentation Provided by Project Participant:	
Please see attached PDD version 3 (section A.1)	
Information Verified by Lead Assessor:	
PDD version 03 dated 20/03/2014	

Reasoning for not Acceptance or Acceptance and Close Out:	Date: 31/03/2014
<p>PDD version 03 dated 20/03/2014 Section A.1 was checked and the dates were found to be correctly incorporated in DD/MM/YYYY format which was consistent with the documentary evidences provided for each milestone and thus accepted.</p> <p>Please clarify the following inconsistency in the PDD version 05 dated :</p> <p>Throughout the PDD, the methodology is mentioned but the version is not provided.</p> <p>Page 6, section A.4 PDD template text remains please clarify</p> <p>Page 6, section A.5 & Appendix 2: refers to an attached declaration dated 20/01/2014 but this declaration is not attached/provided in the PDD</p> <p>Page 8. Section B.3: why does this section start so low down the page?</p> <p>Page 12: refers to a an attached statement dated 24/01/2014 but this is not attached/provided in the PDD</p> <p>Table B.6.5: some cells in the table are highlighted. Is this intentional?</p> <p>Page 32, section B.6.4: why does the table end 2023? According to section C of the PDD, the CP is to start 01/10/2014. Therefore the end date would be 30/09/2024. Please clarify</p> <p>Page 33-34, text alignment does not match the alignment of the rest of the PDD</p> <p>Page 43: please clarify why there is a underlined header at the top of the page. This is not part of the PDD template</p> <p>Page 45: part of the Appendix 5 header is not in bold</p> <p>PDD history of the document table has been removed. This is part of the PDD and should not be removed</p> <p>Please clarify the following aspects in the ER sheet.</p> <p>“Cover” tab:</p> <p>Cell D10Annual ER figure is different to the figure in the PDD</p> <p>Row 16: Tab doesn't exist in the spreadsheet and the link does not work</p> <p>“System load classes & emissions” tab:</p> <p>Cell M3: please confirm the meth quoted (AM0029) is correct</p> <p>Row 8: please confirm this is required/correct</p> <p>“2008U” tab:</p> <p>Cell D156: please clarify what this figure is</p> <p>“2008UA” tab:</p> <p>Cell F87: please clarify what this figure is</p> <p>“Boiler steam summary”:</p> <p>Is row 7 required, considering that the header of the table states the information is for 2007-2011</p> <p>“Emission Calculation” tab:</p> <p>Cell D16: please confirm the meth quoted (AM0029) is correct</p> <p>Cell C40 has an internal note from the client which should be removed</p> <p>“Sheet 2” tab:</p> <p>Please clarify this tab to indicate the information provided</p> <p>PP is requested to remove any internal comment in the ER sheet.</p>	
Acceptance and Close out by Lead Assessor: Open	Date: 08/07/2014

Project Participant Response:	Date: 08/07/2014
<p>The version of methodology has been specified throughout the PDD Page 6, section A.4 has been updated. Page 6, section A.5 & Appendix 2: Declaration has been attached in Appendix 2 of PDD version 6. Page 12: "First of its kind" statements (from Saudi DNA and RC) have been attached to this document. Section B.3. has been moved up in the page. The highlight of cells in table B.6.5 have been removed. In regards to page 32, table B.6.4, please note that the years indicated are not calendar but rather fiscal. The table has been updated to be more precise. So for example year 2014 refers to the period 1.10.2014 to 30.09.2015. Text on pages 33 and 34 have been realigned with the rest of PDD. Notes for pages 43 and 45 have been corrected. History of the document has been reinstated.</p> <p><u>In the ER spreadsheet</u></p> <ul style="list-style-type: none"> "Cover" tab: <p>Cell D10Annual ER figure: The actual figure in cell D10 Annual ER is 41831.51. In the previous version of the file the figure was rounded up (41832) while in PDD we have indicated 41831 to be conservative in our approach. The figure in excel spreadsheet has been rounded down. Row 16: removed.</p> <ul style="list-style-type: none"> "System load classes & emissions" tab: <p>Cell M3: This is correct as AM0029 refers to the IPCC emission factor used (0.056TC/GJ). Row 8 was deleted</p> <ul style="list-style-type: none"> "2008U" tab: <p>Cell D156: This figure in this cell was generated when we were analysing the operating trend for the boiler. From this figure and calculations in the same tab, it is evident that 100-120 tons/hour is the most representative operating load class. The relevant note to explain the meaning of this cell was made in the tab just below the cell.</p> <ul style="list-style-type: none"> "2008UA" tab: <p>Cell F87: This was error which was rectified.</p> <ul style="list-style-type: none"> "Boiler steam summary": <p>Row 7 deleted as it was not required.</p> <ul style="list-style-type: none"> "Emission Calculation" tab: <p>Cell D16: This is correct as AM0029 refers to the IPCC emission factor used. The internal note of Cell C40 has been removed</p> <ul style="list-style-type: none"> "Sheet 2" tab: the tab has been removed. <p>All internal comments in the ER sheet have been removed.</p>	
Documentation Provided by Project Participant:	
Please see PDD version 6 dated 08/07/2014 and the Project Leaks Reduction spreadsheet (version 3).	
Information Verified by Lead Assessor:	
<p>PDD version 06 dated 08/07/2014 Project Leaks Reduction spreadsheet (version 3) dated 08/07/2014 Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project. (PP has not mentioned this document in the box above but has provided the document earlier during response to CAR #06) Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia(PP has not mentioned this document in the box above but has provided the document earlier during response to CAR #06)</p>	

Reasoning for not Acceptance or Acceptance and Close Out:	Date: 14/07/2014
<p>PDD version 06 dated 08/07/2014 was checked and the methodology version for AM0056 version 01.0 was found to be consistently mentioned and thus accepted.</p> <p>Section A.4 has been corrected which was checked and found to be consistent and thus accepted.</p> <p>Section A.5 and Appendix 2 was checked and the declaration for the no use of ODA was found to be inserted in the document. This was checked and found to be acceptable.</p> <p>Section B.3 was checked and found to be corrected and as per the PDD template so accepted.</p> <p>Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project. And Technology Status of project activity proposed by AL-Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia were provided by PP as submission with the PDD and would be part of the submission to UNFCCC and thus accepted.</p> <p>Table B.6.5 was checked and the cells were found to be corrected with no highlighting and thus accepted.</p> <p>Section B.6.4 was checked and the ex-ante estimation years were found to be in line with the start date of the crediting period according to section C and thus accepted.</p> <p>Page 33-34 page alignments were found to be corrected and thus accepted.</p> <p>Page 43 the underline was found to be removed from the header at the top of the page and made as per the PDD template and thus accepted.</p> <p>Appendix 5 header was found to be corrected and thus accepted. PP has corrected the history page of the PDD template and it was found to be correct and thus accepted.</p> <p>Cover tab: Cell D10 has been rounded down and corrected to match the figure in PDD and thus accepted.</p> <p>Row 16 tab has been removed and found to be consistent.</p> <p>"System load classes & emissions" tab:</p> <p>Reference to AM0029 found correct and referring to IPCC emission factor used and thus accepted. Row 8 was found to be deleted and thus accepted.</p> <p>"2008U" tab:</p> <p>Cell D156: explanation was found to be correct and in line with the requirement of methodology and thus accepted.</p> <p>"2008UA" tab:</p> <p>Cell F87: Error was found to be rectified and thus accepted</p> <p>"Boiler steam summary":</p> <p>Row 7 was found to be deleted as it was not require and hence accepted..</p> <p>"Emission Calculation" tab:</p> <p>Cell D16: Correction was found to be correct and thus accepted.</p> <p>The internal note of Cell C40 has been removed and thus accepted. "Sheet 2" tab: the tab has been removed and was found to be internal calculation of PP and thus accepted.</p>	
Acceptance and Close out by Lead Assessor: Closed	Date: 14/07/2014

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CL	Number:	03	Reference:	A.3.5
Lead Assessor Comment:					
The MOC was not provided during the initial desk review. PP is requested to provide MOC as per the requirements of EB 48 Annex 60					
Project Participant Response:				Date: 28/02/2014	
Modalities of Communication has been prepared and duly signed.					
Documentation Provided by Project Participant:					
Please see attached pdf file titled "Modalities of Communication".					
Information Verified by Lead Assessor:					
Modalities of Communication dated 15/01/2014					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 08/07/2014	
Modalities of Communication dated 15/01/2014 was checked and was found to be in the latest template of MoC issue 02.1 and thus accepted. PP has to clarify with regard to the MOC the following inconsistencies: <ul style="list-style-type: none">- Page 1 & Page 5: Address for Al Bayroni is different to the address in the PDD- Page 2 & Page 5: 1st contact for Al Bayroni not appearing in the PDD- Page 2 & Page 5: 2nd contact: phone number differs from the PDD- Pages 3 & 5: Phone and fax number for 1st contact for SABIC differs from the PDD- Pages 3 & 5: 2nd contact for SABIC does not appear in the PDD					
Acceptance and Close out by Lead Assessor: Open				Date: 08/07/2014	
Project Participant Response:				Date: 08/07/2014	
All corrections in addresses have been made. 1 st Contact for Albayroni and 2 nd Contact for SABIC have been added to PDD.					
Documentation Provided by Project Participant:					
Please see Appendix 1 (Contact information for project participants) in PDD version 6.					
Information Verified by Lead Assessor:					
PDD version 06 dated 08/07/2014					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 14/07/2014	
Appendix 1 of the PDD version 06 dated 08/07/2014 was checked and found to be matching with the details provided in the MoC document dated 15/01/2014 and thus accepted.					
Acceptance and Close out by Lead Assessor: Closed				Date: 14/07/2014	

Date:	16/01/2014	Raised by:	Assessment Team
Type:	CAR	Number:	04
		Reference:	B.1.2, B.2.1
Lead Assessor Comment:			
<p>The PP is requested to refer, quote and apply the methodology (and the tools) correctly by comparing it to the latest available tools throughout the PDD as per requirement of VVS para 71</p> <p>The approved methodology was found to be applicable to the project activity. However, it was not clearly mentioned how the conformance with each criterion has been met in particular towards the documentary evidence. The PP is requested to clarify the same as per VVS para 76</p>			
Project Participant Response:		Date: 28/02/2014	
<p>The following methodology and tools along with guidelines were used in PDD version 2:</p> <ul style="list-style-type: none"> AM0056 / Version 01 "Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems". The version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality" has been used to identify and describe the baseline scenario, The "Guidelines on Additionality of First-Of-Its-Kind Project Activities" (version 2.0, EB 69, Annex 7), <p>The "Guidelines for objective demonstration and assessment of barriers" (EB-50, Annex 13 Version 01).</p>			
Documentation Provided by Project Participant:			
<p>Please see the following sections in PDD version 2:</p> <ul style="list-style-type: none"> AM0056 – throughout PDD version 2. The version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality" – in Section B4. The "Guidelines on Additionality of First-Of-Its-Kind Project Activities" – in Section B4. The "Guidelines for objective demonstration and assessment of barriers" – in Section B4. 			
Information Verified by Lead Assessor:			
PDD version 2.0 dated 26/02/2014.			
Reasoning for not Acceptance or Acceptance and Close Out:		Date: 26/05/2014	
<p>PDD version 2.0 dated 26/02/2014 was checked the applied methodology and the tools was found to be correctly applied and included in the PDD and thus accepted.</p> <p>The justification for each criterion of the methodology was not found to be included. Please ensure if all the points are covered under applicability criteria discussed in section B.2 of PDD.</p> <p>Also in the Project-Leaks-Reduction sheet dated 23/11/2013, there are 2 sub sheets (sheet 1 and 2) having same information. Please clarify.</p>			
Acceptance and Close out by Lead Assessor: Open		Date: 26/05/2014	
Project Participant Response:		Date: 26/05/2014	
<p>Justification for all criterions for methodology is included as per methodology requirements.</p> <p>In the Project-Leaks-Reduction sheet sub sheet 1 was a unintentional duplication of sub sheet 2. Sub sheet 1 was removed.</p>			
Documentation Provided by Project Participant:			
<p>Please refer to section B.2 of PDD version 4.</p> <p>Please refer to Project-Leaks-Reduction sheet dated 26/05/2014.</p>			
Information Verified by Lead Assessor:			
<p>Revised PDD, version 4 dated 26/05/2014</p> <p>Project-Leaks-Reduction sheet dated 26/05/2014</p>			
Reasoning for not Acceptance or Acceptance and Close Out:		Date: 02/06/2014	
<p>The revised PDD, version 4 was checked and was now found to include all the criteria of the methodology and its justification correctly. The same was cross-checked during the site visit and found consistent and hence is accepted.</p> <p>The sheet 2 was found to be removed in the Project-Leaks-Reduction sheet dated 26/05/2014 correctly and hence is accepted. CAR04 is closed out.</p>			
Acceptance and Close out by Lead Assessor: Closed		Date: 02/06/2014	

Date:	16/01/2014	Raised by:	Assessment Team
Type:	CAR	Number:	05
		Reference:	B.3.1
Lead Assessor Comment:			
<p>The project boundary is not clear with regard to the project boundary as per the requirement of the methodology. PP is requested to clarify this as per the requirement of para 82 of VVS version 5.0. It is not clear what is the operational lifetime as per the requirement of the methodology AM 00056 version 01. The PP is requested to clarify the same.</p>			
Project Participant Response:		Date: 28/02/2014	
<p>The project boundary was outlined in details as per the requirement of para 82 of VVS version 5.0. The operational life time of boilers is indefinite due to very strict adherence to regular maintenance practice as stipulated by Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM).</p>			
Documentation Provided by Project Participant:			
<p>Please see Section B3 in PDD version 2. Please see attached 1) BSI QMS ISO 9001:2008 Certificate and 2) DNV Responsible Care: 14001:2008 and DNV ISO 14001:2008 Certificate</p>			
Information Verified by Lead Assessor:			
<p>1) PDD version 2.0 dated 26/02/2014 2) BSI QMS ISO 9001:2008 Certificate 3) DNV Responsible Care: 14001:2008 and DNV ISO 14001:2008 Certificate</p>			
Reasoning for not Acceptance or Acceptance and Close Out:		Date: 18/03/2014	
<p>The project boundary as per the requirement of para 82 of VVS 6.0 was found to be updated in the PDD version 2.0 dated 26/02/2014 and thus accepted. The same was also found to be as per the requirement of methodology AM00056 version 01</p> <p>The justification for the operational lifetime of boiler was checked as per the requirement of Procedure for estimating the remaining lifetime of the equipment included in the project boundary under the provisions of AM00056 version 01 and was not found to be justified as per the requirement of para (b)</p> <p>PP is requested to clarify in the PDD with regard to the remaining lifetime of equipment included in project boundary as per the requirement of para (b) of AM00056 version 01:</p> <p><i>"b) The practices of the responsible company regarding replacement schedules may be evaluated and documented (e.g. based on historical replacement records for similar equipment)</i></p> <p><i>The time of replacement of the existing equipment in the absence of the project activity should be chosen in a conservative manner, i.e., the earliest point in time should be chosen in cases where only a time frame can be estimated. The determination of this date shall be made on a case-by-case basis, for each piece of equipment that is being replaced. If more than one boiler is replaced, then the shortest lifetime of the replaced boilers shall be considered as the lifetime of the existing steam generation system."</i></p> <p><i>CAR#05 remains open.</i></p>			
Acceptance and Close out by Lead Assessor: Open		Date: 18/03/2014	
Project Participant Response:		Date: 20/03/2014	
<p>The justification for the indicated operational lifetime of boilers has been provided in PDD version 3, section B3. Please note that justification is supported by Memos attached. Also as advised earlier AlBeyroni is strictly adhering to regular maintenance practice as stipulated by Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM).</p>			
Documentation Provided by Project Participant:			
<p>Please refer to Section B3 in PDD version 3. Also attached are 3 separate Memos concerning operational lifetime of 3 boilers.</p>			

Information Verified by Lead Assessor:	
<p>PDD version 03 dated 20/03/2014</p> <p>Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/05/13 Subject: Remaining life of package boiler 2008-U</p> <p>Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/06/13 Subject: Remaining life of package boiler 2008-UA</p> <p>Internal Memorandum by Inspection Manager to Process Engineering Manager dated 25/02/2014 IOM No. RP&I/INSP/04/14 Subject: Remaining life of package boiler 2052-U</p> <p>SABIC's Mechanical Integrity and Reliability Programme</p> <p>BSI QMS ISO 9001:2008 Certificate no. FM 28406</p> <p>DNV Responsible Care: 14001:2008 Certificate no. 111297-2012-AE-ARE-ANAB dated 14/02/2012</p> <p>DNV ISO 14001:2008 Certificate no. 111297-2012-AE-ARE-ANAB dated 14/02/2012</p> <p>Safety, Health and Environmental Management System (SHEM) OHS 569317</p>	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 31/03/2014
<p>The operational maintenance and regulation followed by Al Bayroni for the boiler maintenance was checked under the Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM). This was found to be justified as per the requirement of the methodology that the boilers had regular scheduled inspection and maintenance based on which the boilers 2008-U, 2008-AU and 2052-U based on the requirements of the Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM) which was checked by the Assessment team during site visit. Further based on the scheduled inspection and maintenance, the documents Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/05/13 Subject: Remaining life of package boiler 2008-U, Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/06/13 Subject: Remaining life of package boiler 2008-UA & Internal Memorandum by Inspection Manager to Process Engineering Manager dated 25/02/2014 IOM No. RP&I/INSP/04/14 Subject: Remaining life of package boiler 2052-U were checked by the assessment team and also the Boiler Engineer- Muhammand Nasir Abbas and Boiler Manager- Sanjay E Nehete were interviewed and the period of 15years lifetime was found to be justified as per the requirement of the methodology. The boiler 2008-U had an inspection on lifetime of boiler on 03/05/2013 and was having a lifetime more than 15years from the date of inspection which was found to be within the crediting period of the CDM project and thus accepted. The boiler 2008-UA had an inspection on lifetime of boiler on 05/05/2013 and was having a lifetime more than 15years from the date of inspection which was found to be within the crediting period of the CDM project and thus accepted. The boiler 2052-U had an inspection on lifetime of boiler on 21/02/2014 and was having a lifetime more than 15years from the date of inspection which was found to be within the crediting period of the CDM project and thus accepted.</p>	
Acceptance and Close out by Lead Assessor: Closed	Date: 31/03/2014

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CAR	Number:	06	Reference:	B.4.1
Lead Assessor Comment:					
The PDD has not correctly defined the baseline scenario as per the provisions of the methodology, AM0056 and version 4.0 of Combined tool to identify the baseline scenario and demonstrate additionality” has been used to identify the baseline scenario”, however, PP has to provide documentary evidences and include references in the PDD for the alternatives identified. Also the tool used is not the latest tool available and thus PP is requested to clarify the baseline identification as per the latest available tool. PP has to clarify this as per para 88 and 113 of VVS 6.0					
Project Participant Response:				Date: 28/02/2014	
The baseline scenario has been redefined as per the provisions of the methodology AM0056. The version 05.0.0 of the “Combined tool to identify the baseline scenario and demonstrate additionality” has been used to identify and describe the baseline scenario. Documentary evidences are provided as attachments.					

Documentation Provided by Project Participant:	
Please see section B4 of the PDD attached. Please see two statements attached: 1. issued by the Saudi Authorities (the Royal Commission for Jubail and Yanbu) 2. issued by Saudi DNA (National Committee for Clean Development Mechanism)	
Information Verified by Lead Assessor:	
PDD version 2.0 dated 26/02/2014 Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project. Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia. (PP has not provided this document with the submissions on 28/02/2014 and later submitted to assessment team vide email on 16/03/2014)	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/03/2014
PP has correctly used the latest tool for Combined tool to identify the baseline scenario and demonstrate additionality stepwise. The documents Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project and Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia were checked and found to be authentic and was thus accepted. It is however unclear from the justification provided by the PP under baseline scenario S4 and S6, how the boiler has a lifetime of 15years as per the requirement of Procedure for estimating the remaining lifetime of the equipment included in the project boundary under the provisions of AM00056 version 01 and was not found to be justified as per the requirement of para (b). PP has to justify in the PDD the lifetime of the boiler consistently throughout the PDD. CAR #06 remains open	
Acceptance and Close out by Lead Assessor: Open	Date: 18/03/2014
Project Participant Response:	Date: 20/03/2014
The justification for the indicated operational lifetime of boilers has been provided in PDD version 3, section B3. Please note that justification is supported by Memos attached.	
Documentation Provided by Project Participant:	
Please refer to Section B3 in PDD version 3. Also attached are 3 separate Memos concerning operational lifetime of 3 boilers.	
Information Verified by Lead Assessor:	
PDD version 03 dated 20/03/2014 Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/05/13 Subject: Remaining life of package boiler 2008-U Internal Memorandum by Inspection Manager to Process Engineering Manager dated 06/05/2013 IOM No. RP&I/INSP/06/13 Subject: Remaining life of package boiler 2008-UA Internal Memorandum by Inspection Manager to Process Engineering Manager dated 25/02/2014 IOM No. RP&I/INSP/04/14 Subject: Remaining life of package boiler 2052-U	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 31/03/2014
The operational maintenance and regulation followed by Al Bayroni for the boiler maintenance was checked under the Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM). This was found to be justified as per the requirement of the methodology that the boilers had regular scheduled inspection and maintenance based on which the boilers 2008-U, 2008-AU and 2052-U based on the requirements of the Mechanical Integrity Program government by SABIC's Mechanical Integrity and Reliability Programme under the SABIC's Safety, Health and Environmental Management System (SHEM) which was checked by the Assessment team during site visit and found to be consistent with the internal memos for the boilers issued by Inspection Manager and thus accepted.	
Acceptance and Close out by Lead Assessor: Closed	Date: 31/03/2014

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CAR	Number:	07	Reference:	B.5.1
Lead Assessor Comment:					
<p>The PDD has not clearly demonstrated the additionality as per steps required mentioned in Combined tool to identify the baseline scenario and demonstrate additionality version 5.0. All the assumptions and data used by the project participants are not listed in the PDD, including their references and sources. The PP is requested the clarify the same as per the requirement of 117, 124 of VVS 6.0.</p> <p>PP has not demonstrated the prior consideration of CDM as per the requirements of para 106-111 of VVS 6.0 in the section B.5 of the PDD. Please clarify. Title of project in the prior consideration does not match with the PDD webhosted. Please clarify as per para 105 of VVS version 5.0</p> <p>PP has not specified the start date of the project activity as per the definition of project start date EB 70 Annex 7.</p> <p>PP has to clarify why EB 62 Annex 5 has not been referred for this. Also PP has to clarify the approach financial additionality as there is no revenue generation from the project. PP has to provide documentary evidences of all assumptions considered for the financial analysis of the project as per requirement of para 6 of EB 62 Annex 5.</p>					
Project Participant Response:			Date: 28/02/2014		
<p>The version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality" has been used to demonstrate additionality. References and sources are references and documentation attached.</p> <p><u>Prior Consideration:</u> Please note that the project proponent (Al Bayroni) has submitted the Prior Consideration Note to UNFCCC in November 2011. The original title of the project mentioned in this form was: "Energy Optimization of Packaged Boilers at Fertilizer Production". In 2012 the title of the project was then renamed as "Efficiency Improvement by Boiler Rehabilitation in fossil fuel-fired (Natural Gas) Steam Boiler System". The second Prior Consideration Form (as a notification of progress) was submitted to UNFCCC in November 2013. Please note that the name of project proponent (Al Bayroni), description, authorized representative and exact location of the project in both forms are exactly the same which proves that this is the same project.</p> <p>The start date of the project activity is 25/08/2011. The contract with supplier of goods and services for project implementation was signed on this data and therefore it is considered as a start date of the project activity.</p> <p>Please note that financial additionality is not required anymore since PP demonstrated "first of its kind" status of the project in accordance with version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality".</p>					
Documentation Provided by Project Participant:					
<p><u>Additionality:</u> Please refer to Section B4 in PDD version 2</p> <p><u>Prior Consideration:</u> Please see attached:</p> <ol style="list-style-type: none"> 1. First Prior Consideration Form submitted in November 2011 2. Second Prior Consideration Form submitted in November 2013 <p><u>"First of its kind" status:</u> Please refer to Section B4 in PDD version 2 and statement issued by Saudi DNA.</p>					
Information Verified by Lead Assessor:					
<p>PDD version 2.0 dated 26/02/2014</p> <p>First Prior Consideration Form submitted in November 2011</p> <p>Second Prior Consideration Form submitted in November 2013</p> <p>Contract no. EPC-LS-11-AB-010-OOK between TOYO Engineering Corporation and Jubail Fertilizer Company dated 25/08/2011</p>					

Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/03/2014
<p>PP has demonstrated additionality as per the requirement of version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality" and the justification for the project to be first of its kind was found to be justifiable and thus accepted.</p> <p>PDD version 2.0 dated 26/02/2014 was checked along with the prior consideration website http://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html.</p> <p>The initial intimation to UNFCCC was found to be done on 27/11/2011 which was found to be consistent with the email provided by the PP dated 27/11/2011. However, PP is requested to provide the exact date of the notification clearly in the PDD in DD/MM/YYYY format.</p> <p>The 2nd intimation was found on the UNFCCC website on 24/04/2013 however, the PP has mentioned it to be November 2013. PP is requested to clarify with supportive email evidence of prior consideration to UNFCCC. Also, PP has to clarify in PDD stepwise as per para 106-111 of VVS 6.0 the dates in DD/MM/YYYY and the entire chronology for the prior consideration.</p> <p>Start date of the project activity 25/08/2011 was found to be within 6months of the prior consideration of CDM and thus was found to be accepted. The date 25/08/2011 was found to be correctly adopted as start date based on the Contract no. EPC-LS-11-AB-010-OOK between TOYO Engineering Corporation and Jubail Fertilizer Company dated 25/08/2011 and was found to be in line with the requirement of EB 70 Annex 7 for definition of Start date of project activity and thus accepted.</p> <p>PP has correctly demonstrated the additionality via Guidelines on Additionality of First-Of-Its-Kind Project Activities" (version 2.0, EB 69, Annex 7) and thus the issue on applicability of EB 62 Annex 5 for financial additionality was found to be null and void as per the requirements of version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality"</p> <p>CAR#07 remains open.</p>	
Acceptance and Close out by Lead Assessor:	Date: 18/03/2014
Project Participant Response:	Date: 20/03/2014
<p>The exact dates of submission of the initial Prior Consideration Form as well as the second Prior Consideration Form are now identified in DD/MM/YYYY format in PDD.</p> <p>Please note that the second Prior Consideration Form was submitted to UNFCCC on 20/04/2013. The November 2013 date previously advised was misstated. The entire chronology for the prior consideration was outlined in PDD.</p>	
Documentation Provided by Project Participant:	
Please refer to Section B5 in PDD version 3. Supportive email evidence for the first and second Prior Consideration Form submission to UNFCCC are attached.	
Information Verified by Lead Assessor:	
<p>PDD version 03 dated 20/03/2014</p> <p>Prior consideration emails to UNFCCC dated 27/11/2011</p> <p>Prior consideration emails to UNFCCC dated 20/04/2013</p>	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 26/05/2014
<p>Prior consideration email to UNFCCC was found to be sent on 27/11/2011 which was found to be within 180 days of the project start date of 25/08/2011.</p> <p>It is not clear if PP has informed host Party DNA about project implementation in line with prior consideration guidelines. PP has to clarify in this regard as per the requirement of VVS 6.0 para 107</p>	
Acceptance and Close out by Lead Assessor: Open	Date: 26/05/2014
Project Participant Response:	Date: 26/05/2014
The Project Participant had officially submitted Prior Consideration Form to Saudi DNA on 05/12/2011. Please see email.	
Documentation Provided by Project Participant:	
Please refer to email attached (titled as "FW SABIC CDM Projects Update") addressed to Mr. Sarhan, Secretary of Saudi DNA sent on 05/12/2011. Prior Consideration Form for the project is attached to the email among other forms.	
Information Verified by Lead Assessor:	
Email dated 05/12/2011 to the DNA office of Saudi Arabia by Al Bayroni.	

Reasoning for not Acceptance or Acceptance and Close Out:	Date: 02/06/2014
<p>The email dated 05/12/2011 to the DNA office of Saudi Arabia informing host Party DNA about project implementation in line with prior consideration guidelines by the PP correctly. The same was cross-checked against the email received from the DNA office of Saudi Arabia and hence was accepted.</p> <p>PP has to clarify how identified barriers related to access to capital and lack of technical expertise appropriately in line with the EB 50 Annex 13, especially Guideline 1, 2 & 4. Furthermore it is also not clarified sufficiently from the PDD that how the identified barriers which are not applicable for alternative Scenario #4 is applicable for the project scenario.</p>	
Acceptance and Close out by Lead Assessor: Open	Date: 16/06/2014
Project Participant Response:	Date: 16/06/2014
<p>Please note that the barrier analysis was performed in accordance with paragraph 23c of the version 05.0.0 of the "Combined tool to identify the baseline scenario and demonstrate additionality" (EB70 Annex 9). In accordance with paragraph 23c (other barriers) the prevailing practice is identified as a barrier. The proposed project activity is the only such project in the distinct geographical area. There are no similar projects (both CDM and non CDM) implemented, being implemented or considered for implementation in applicable geographical area as confirmed by the Saudi Authorities (please refer to "first-of-its-kind statement issued by Saudi DNA).</p>	
Documentation Provided by Project Participant:	
Please refer to Section B4 in PDD version 5.	
Information Verified by Lead Assessor:	
<p>Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project.</p> <p>Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia</p> <p>PDD version 05 dated 16/06/2014</p>	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/06/2014
<p>PDD version 05 dated 16/06/2014 section B.4 was checked and the justification for the prevailing practice barrier for the project in the scenario that the project was First of Its Kind based on the statement from DNA Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia was found to be justified. Also the same was verified against the document Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project which stated that no other project of similar technology is available in the regions of Jubail, Yanbu and Ras Al Khair. Thus the logic of prevailing practice was found justified and accepted. CAR#07 closed.</p>	
Acceptance and Close out by Lead Assessor: Closed	Date: 18/06/2014

Date:	16/01/2014	Raised by:	Assessment Team		
Type:	CAR	Number:	08	Reference:	B.5.19
Lead Assessor Comment:					
Common practice analysis has not been done as per the requirements of EB 69 Annex 8 and VVS para 128. PP has to clarify in this regard.					
Project Participant Response:				Date: 28/02/2014	
Common practice analysis is not required for this project since it is “first of its kind as was demonstrated using version 05.0.0 of the “Combined tool to identify the baseline scenario and demonstrate additionality”.					
Documentation Provided by Project Participant:					
“First of its kind” status Please refer to Section B4 in PDD version 2.					
Information Verified by Lead Assessor:					
PDD version 2.0 dated 26/02/2014 Declaration issued by Royal Commission for Jubail, Yanbu and Ras Al Khair dated 24/01/2014, Ref no. 7/3/2/08-48269 for Al Bayroni CDM project. Technology Status of project activity proposed by AL- Bayroni dated 12/03/2014 Ref. no. CDM-14-ADM107 by National Committee for Clean Development Mechanism, DNA, Saudi Arabia. (PP has not provided this document with the submissions on 28/02/2014 and later submitted to assessment team vide email on 16/03/2014)					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 18/03/2014	
PP has correctly demonstrated the additionality via Guidelines on Additionality of First-Of-Its-Kind Project Activities” (version 2.0, EB 69, Annex 7) and thus the issue on applicability of EB 69 Annex 8 for common practice analysis was found to be null and void as per the requirements of version 05.0.0 of the “Combined tool to identify the baseline scenario and demonstrate additionality”					
Acceptance and Close out by Lead Assessor: Closed				Date: 18/03/2014	

Date:	16/01/2014		Raised by:	Assessment Team		
Type:	CAR	Number:	09	Reference:	B.6.7.1	
Lead Assessor Comment:						
It is not clear from the PDD with the frequency of calibration and internal audit is not clear from the description in the PDD section B.7 and B.8. PP has to clarify in this regard as per the requirement of VVS para 72e. Also emergency preparedness for the boilers and the provision for meter failure have not been covered.						
Project Participant Response:				Date: 28/02/2014		
Frequency of calibration, monitoring points and internal audit practices are described in PDD version 2.						
Documentation Provided by Project Participant:						
Please refer to Section B7 in PDD version 2.						
Information Verified by Lead Assessor:						
PDD version 2.0 dated 26/02/2014						
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 18/03/2014		
PDD version 2.0 section B.7 was checked and the frequency of calibration, internal audit details as per requirement of para 72 e of VVS was found to be justified and thus accepted. Also emergency preparedness of the boilers was found to be included in the PDD and thus accepted.						
Acceptance and Close out by Lead Assessor: Closed				Date: 18/03/2014		

Date:	16/01/2014		Raised by:	Assessment Team		
Type:	CAR	Number:	10		Reference:	B.7.2
Lead Assessor Comment:						
It is not clear from the PDD why sampling has been considered by the PP in the PDD section B.7.2, as 100% data will be monitored during the project scenario. Please clarify						
Project Participant Response:				Date: 28/02/2014		
Sampling is not required as 100% data will be monitored. The section does not apply.						
Documentation Provided by Project Participant:						
PDD version 2.0 dated 26/02/2014						
Information Verified by Lead Assessor:						
PDD version 2.0 dated 26/02/2014						
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 18/03/2014		
PDD version 2.0 dated 26/02/2014 was checked and was found to have removed the aspects mentioned for sampling. The project has 100% monitoring and data for the equipments and thus there are no requirements of sampling. This was found to be correctly done in the revised PDD version 2.0 dated 26/02/2014 and thus accepted.						
Acceptance and Close out by Lead Assessor: Closed				Date: 18/03/2014		

Date:	16/01/2014		Raised by:	Assessment Team		
Type:	CL	Number:	11	Reference:	Appendix 1	
Lead Assessor Comment:						
Appendix 1 does not have the contact details of SABIC which is also a PP listed in Section 1 of the PDD. Please clarify						
Project Participant Response:				Date: 28/02/2014		
SABIC's contact details have been provided in the line with PDD Section 1 and Modalities of Communication.						
Documentation Provided by Project Participant:						
Please see Annex 1 of PDD attached.						
Information Verified by Lead Assessor:						
PDD version 2.0 dated 26/02/2014						
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 18/03/2014		
Appendix 1 was checked and found to be as per the requirements of Guidelines for completion of PDD template. The information was found to be in line with the MoC and the details as provided in the LoA and thus accepted.						
Acceptance and Close out by Lead Assessor: Closed				Date: 18/03/2014		

A.4 Annex 4: Team Members Statements of Competency

Name: Shivaji
Chakraborty

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	x

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s):	
TA 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar	
TA 1.2 Energy generation from renewable energy sources	
2. Energy Distribution	x
Technical Area(s): TA 2.1 Electricity distribution	
TA 2.2 Heat distribution	
3. Energy Demand	x
Technical Area(s): TA 3.1 Energy Demand	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 19/09/2012

Statement of Competence

Name: **Sauvik Banerjee**

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: **Siddharth Yadav** Date: **02/08/2013**

Statement of Competence

Name: **Tauqeer Ahmed**

Status

- Lead Assessor		- Expert	
- Assessor		- Financial Expert	
- Local Assessor	Kingdom of Saudi Arabia	- Technical Reviewer	

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	
Technical Area(s):	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: **Siddharth Yadav** Date: **13/12/2013**

Statement of Competence

Name: Ravi Kant Soni

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	x

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 12/10/2012

Statement of Competence

Name: **Tarit Roy**

Status

- Lead Assessor	<input type="checkbox"/>	- Expert	<input checked="" type="checkbox"/>
- Assessor	<input type="checkbox"/>	- Financial Expert	<input type="checkbox"/>
- Local Assessor	<input type="checkbox"/>	- Technical Reviewer	<input type="checkbox"/>

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	<input checked="" type="checkbox"/>
Technical Area(s): <i>TA 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar</i>	
2. Energy Distribution	<input type="checkbox"/>
Technical Area(s):	
3. Energy Demand	<input type="checkbox"/>
Technical Area(s):	
4. Manufacturing	<input checked="" type="checkbox"/>
Technical Area(s): <i>TA4.3 Iron and steel, TA4.n Fuel Switch and ASU</i>	
5. Chemical Industry	<input type="checkbox"/>
Technical Area(s):	
6. Construction	<input type="checkbox"/>
Technical Area(s):	
7. Transport	<input type="checkbox"/>
Technical Area(s):	
8. Mining/Mineral Production	<input type="checkbox"/>
Technical Area(s):	
9. Metal Production	<input type="checkbox"/>
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	<input type="checkbox"/>
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	<input type="checkbox"/>
Technical Area(s):	
12. Solvent Use	<input type="checkbox"/>
Technical Area(s):	
13. Waste Handling and Disposal	<input type="checkbox"/>
Technical Area(s):	
14. Afforestation and Reforestation	<input type="checkbox"/>
Technical Area(s):	
15. Agriculture	<input type="checkbox"/>
Technical Area(s):	

Approved Member of Staff by: **Siddharth Yadav** Date: **22/03/2013**