



Annex 1

PROJECT DOCUMENT

Collaboration between the
ICEIDA/NDF Geothermal Exploration Project and GDC

CAPACITY BUILDING AND TECHNICAL ASSISTANCE FOR GDC

Sub-Project of the ICEIDA/NDF Geothermal Exploration Project

ICE23066-1301

Estimated budget: 1.580.000 USD



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1. INTRODUCTION

Geothermal energy is an indigenous, environmentally attractive and abundant energy source in Kenya. Studies carried out indicate that a potential of about 10,000 MW exists. Being immune to adverse climatic effects, geothermal energy is a good source for base-load power. Kenya's Least Cost Power Development Plan has ranked geothermal power as a cost-effective source for continued electricity development.

Geothermal Development Company (GDC) has been mandated by the Kenyan Government to accelerate the development of its large indigenous geothermal resources. GDC has an elaborate program to realize 810 MW by the year 2016 and 5000 MW by the year 2030. This kind of development calls for extensive capacity building. The Icelandic International Development Agency (ICEIDA) and the Nordic Development Fund (NDF) are implementing a project to support geothermal exploration and capacity building in East Africa. ICEIDA is the Lead Agency in the Geothermal Exploration Project with joint co-financing of NDF. The project is the initial phase of the Geothermal Compact partnership, initiated jointly by Iceland and the World Bank.

The main objective of the Geothermal Exploration Project is to assist countries in East Africa to enhance geothermal knowledge and capacity in order to enable further actions on geothermal utilization in the respective countries. This includes support to the exploratory phase of geothermal development and capacity building in the field of geothermal development and utilization. Support for geothermal development is outlined as a priority area in the Strategy for Iceland's Development Cooperation.

In February 2014 GDC submitted an expression of interest for collaboration under the ICEIDA/NDF Geothermal Exploration Project. The collaboration under this Component of the ICEIDA/NDF Programme will focus on training and capacity building for GDC staff as well as support for technical reviews of surface exploration studies in order to further reduce risk associated with geothermal drilling. This technical review will also contribute to enhanced

capacity of GDC staff in the development of conceptual models and identifying drilling targets.

It may be noted that various activities under this project are also seen to contribute towards the establishment of a African Geothermal Centre of Excellence, including the accreditation of the GDC laboratory and the feasibility study for a geothermal drying pilot project. It is also envisioned that further training of GDC staff will be carried out in relation to the proposed establishment of the AGCE.

The implementation of this Project Document is subject to the Partnership Agreement between The Government of Kenya and ICEIDA for the Geothermal Exploration Project.

2. BACKGROUND - GDC'S PROJECTS BRIEF AND UPDATE

Olkaria I & IV Project

The objective of this project is to construct 280 MW (2 x 140 MW) geothermal power plants in Olkaria I & IV steam field. GDC has drilled 59 wells at Olkaria which has availed 406 MW of steam. The area has been licensed to Kenya Electricity Generation Company Limited (KenGen) for generation. KenGen is currently undertaking commissioning tests for 280 MW plants and full commissioning is expected by December 2014. GDC will sell steam to KenGen, the power generator.

Menengai Geothermal Project

The Menengai geothermal project is located in Nakuru County, about 10 km north of Nakuru town and 180 km from Nairobi. GDC is undertaking drilling operations for generation of 460 MW to be commissioned by 2017. The first phase of 100 MW is at an advanced stage of development with three IPPs awarded contract to generate the power for a period of 25 years. GDC is constructing the steam gathering system for the project scheduled for commissioning in 2015.

Phase I Suswa Geothermal Project

The Suswa geothermal prospect is located south of Olkaria about 100 km from Nairobi. The estimated geothermal potential of the field is estimated at 750 MW_e. GDC plans to develop the prospect in phases after exploration drilling that will commence in 2014/2015 financial year. The prospect will be developed under a PPP arrangement.

Baringo-Silali Project

GDC is undertaking steam field development in the Baringo-Silali Block which comprises Baringo, Korosi, Chepchuk, Paka and Silali prospects. Estimates from surface studies estimate possible power production of 3,000 MW from the area. GDC plans to undertake exploration drilling in the block during 2014/2015 financial year. Financing for the 200 MW phase one project will come from Government of Kenya, GRMF facility (US\$ 4.25 m), KfW (Euro 80 M) and technical assistance on data review from UNEP/ARGeo of US\$ 500,000.

Capacity Building at GDC and Regional Collaboration

GDC has 25 Geophysicists, Geochemists and Geologists who have been trained in UNU-GTP programme in Iceland and at the Geothermal Institute, University of Auckland, and the same have been training staff from the region. The same has had experiential training from experts hired from the UNU-GTP and most recently experts hired under a grant from UNEP for a technical review study of the Silali prospect.

GDC has also carried out the following collaborative work in the region:

- GDC entered into a consortium with Auckland UniServices Ltd to carry out consultancy MT surveys for King Abdul-Aziz University (KAU) in Saudi Arabia.
- GDC entered into a consortium with Auckland UniServices Ltd to carry out geothermal surface exploration works in Karisimbi Geothermal Project in Rwanda.
- GDC did a detailed reconnaissance survey of all the geothermal prospects in Malawi and prepared a proposal for further exploration works

On capacity building, GDC in conjunction with UNU-GTP and KenGen have been facilitating a Short course for Geothermal Resources in which 15 countries from Africa and Middle East

attend. GDC also in 2011 offered hands on training to 12 Scientists and Engineers from Rwanda for 4 weeks in which they were attached to their areas of specialization.

3. AREAS OF COLLABORATION

GDC has an ambitious plan to accelerate geothermal development in Kenya through exploration, steam field and power plant development. The Company targets over 2,000 MW additional by year 2020 and more than 5,000 MW by 2030. Evaluation of geothermal development plans for the eastern Africa region which comprises 13 countries reveal that over 3,000 MW is planned for generation by year 2025. These developments require a large number of well trained and experienced geothermal technologists to facilitate the projects as well as input from international experts in order to assist with technical reviews and confirmation of drilling targets in priority areas.

3.1. Objectives

The **overall objective** of this collaborative project is to assist the Government of Kenya to enhance their geothermal energy development for the social and economic benefit of the country by further enhancing their knowledge of geothermal resources and build capacity for geothermal development in the country.

The **immediate objective** of this project is to contribute to enhanced capacity of GDC in geothermal development and further reduce the risk of planned exploration drilling with technical review studies.

3.2. Outputs and Activities

To achieve these objectives GDC has identified the following as areas of collaboration within the scope of the ICEIDA/NDF programme:

1. Increased capacity for GDC staff.
 - 15 GDC staff attend training internships at geothermal institutions and companies in Iceland
 - 20 GDC staff attend 2 weeks training course in Kenya on Geothermal Project Management, carried out by the UNU-GTP.

2. Feasibility for geothermal drying pilot project established
3. Technical review of the surface exploration studies for the Suswa prospect conducted with revised conceptual model and drilling targets. This includes capacity building for GDC staff during the review process.
4. GDC Chemical Laboratory fully prepared for accreditation in accordance with ISO-17025 standard

As noted above, the cooperation between GDC and the ICEIDA/NDF geothermal exploration project is also expected to entail further elements of capacity building for GDC staff through the establishment of the African Geothermal Centre of Excellence.

4. DESCRIPTION OF THE COMPONENTS

4.1. Capacity Building for GDC staff

GDC needs to build its human capacity through various experiential trainings and exposure. For this purpose, training internships and attachments will be offered in Icelandic geothermal institutions, through the programme, to increase the on-the-job skills for GDC personnel. It is expected that 15 GDC staff will be attached for a period of 1-3 months to these institutions and companies in Iceland over a period of 2-3 years, this number may vary slightly depending on cost for each trainee. GDC will prepare a needs assessment of the relevant disciplines on which these internships shall focus. Under this cooperation, ICEIDA in collaboration with the UNU-GTP will facilitate the achievement of the above programme, subject to the availability of placements and willingness of firms and organizations to host trainees. The overall administration and management of this training component will be handled by UNU-GTP.

This programme will also address the need for improved project management capacity in geothermal projects at GDC. For this purpose a 2 weeks projects management training course will be implementing, organized by the UNU-GTP. It is expected that after this course, and some further preparations, the participants should be able to take an international IPMA test for project management accreditation.

Additionally, 10 experts at the GDC laboratory will receive method specific training in relation to accreditation of the GDC laboratory, under the component described below. Capacity building for GDC experts will also be an integral part of the technical review study for Suswa described in 3.3.

4.2. Direct-Use Pre-Feasibility Study

The East African region has abundant low to medium temperature geothermal resources located within and outside of the rifts which can be directly utilized for agro-processing and industrial use. Direct utilization of geothermal resources in eastern Africa is envisaged to play an important role in socio-economic development of the communities. In this regard, the collaboration between GDC and ICEIDA will focus on pre-feasibility of using geothermal heat for drying agricultural products and development of a demonstration unit.

Direct use of geothermal resources can make a significant contribution to the local economy and is an important factor for community acceptance of geothermal power projects. The value of the produced geothermal energy is thus increased through participation by entities beyond those directly involved in the geothermal power projects. Communities can realize significant economic benefit from the direct use of geothermal fluids for process heat, aquaculture, agriculture, and other uses. GDC is currently working with communities around Menengai and the fields in the Baringo-Silali block to develop concepts for direct use of geothermal energy that fit in with existing businesses (both large and small) in cooperation with USAID.

In this cooperation, the ICEIDA/NDF programme will include input for promoting and creating awareness on direct uses of geothermal energy with a specific focus on drying of agricultural products. This will entail a pre-feasibility study for setting up a demonstration unit for the direct uses as part of the African Geothermal Centre of Excellence, with an African reference.

The pre-feasibility study should include but not be limited to:

- Type of crops that can be dried,
- Energy needs for processing,



- Economic benefits of using geothermal energy compared with other energy sources,
- Propose cascaded utilization for drying of products which require lower temperatures.

4.3. Review of the Conceptual model of Suswa Prospect

Suswa geothermal prospect is located in the southern part of the Kenya rift, about 100 km from Nairobi. GDC carried out detailed surface exploration survey at Suswa which resulted in the development of conceptual models used for siting wells. Under this cooperation, GDC and external experts will review the data and conceptual models so as to confirm or revise the identified exploratory drill sites. The studies involved geology, geophysics (MT/TEM, gravity, seismics), geochemistry, and heat flow. This review process will also entail a capacity building component, where the external experts will involve GDC experts in the respective fields, in all aspects of the review work and conceptual modelling.

This assignment will involve but is not limited to the following tasks;

- a. Review of existing data by external consultants and GDC
- b. Identification of gaps in the data needed for the development of conceptual model
- c. Collection of surface exploration data by GDC under guidance of the consultants to fill in gaps
- d. Interpretation of new and existing data and development of a revised geothermal conceptual model
- e. Identification of up to 4 most feasible drilling targets in the prospect
- f. Presentation of the revised conceptual model in a technical review meeting.

GDC will prepare the Terms of Reference for this work, with input from ICEIDA as required. ICEIDA shall tender this work based on NDF procurement guidelines.

4.4. Chemical Laboratory Accreditation

Under this programme, ICEIDA/NDF support will facilitate the accreditation of GDC chemical laboratories in accordance with ISO-17025 standard. Accreditation of the laboratory will ensure more comprehensive quality management and increases the validity of results from laboratory and external recognition of the results produced. This will strengthen

geothermal exploration results and drilling analysis at GDC. To achieve the certification GDC requires technical assistance in;

1. Development of Quality Manual for laboratory management and data management structures and procedures for chemical analysis and sample collection.
2. Design of laboratory facilities in compliance with the ISO-17025 standard.
3. Method specific training for up to 10 GDC staff and method validation including documentation.
4. Identification and support for specific equipment for laboratory needed for accreditation.

While GDC has already acquired the most critical equipment for laboratory analysis, additional equipment may be required in order to fulfil the accreditation requirements. This will come clear through the preparation of the Quality Manual, but initial discussions between GDC and ICEIDA have already identified some equipment that can be procured for a start, e.g. a cavity ring down mass spectrometer for stable isotopes (CRDS).

Further down the line, it is expected that in relation to the establishment of a Regional Geothermal Centre of Excellence, an accredited laboratory will prove to be an important training facility for experts from different countries, while countries will also benefit from access to accredited geochemical analysis in the region.

4.5. Expected Outcome

At the end of the project it is expected that GDC staff will have improved their capacity in various aspects of geothermal development, through training internships, participation in geothermal studies and geochemical analysis. This improved capacity will contribute to the overall goal of GDC to accelerate geothermal development in Kenya. This project will also contribute directly to geothermal energy production in Kenya, through the technical review of prioritized prospects and revision of conceptual models and drilling targets. It is envisioned that the development of the Suswa area will progress into drilling pipelines subsequent to the technical review of the surface exploration. It is further expected that the feasibility for establishing a geothermal drying facility has been determined in Kenya and

4.6. Cross cutting issues – Gender Equality and Environment

Throughout the implementation of the project gender and environmental concerns will be considered. This includes the incorporation of environmental and social issues related to geothermal development in the development of training components and curriculum. Gender ratio of trainees will be observed and participation of both genders encouraged in all training courses.

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5. BUDGET ESTIMATE - ICEIDA/NDF PROGRAMME BUDGET

Output	2014	2015	2016	Total
1. Capacity Building for GDC staff				
1.1. 15 GDC staff ¹ go through 1-3 months training internships with Icelandic geothermal companies and institutions, organized and administered by the UNU-GTP.		200.000	200.000	400.000
1.2. 20 GDC staff attend 2 weeks training course on Geothermal Project Management, carried out by the UNU-GTP in Kenya.		60.000		60.000
1.3. IPMA project management D certification carried out.		20.000		20.000
2. Direct Use Pre-Feasibility study carried out, with reference to geothermal drying in Kenya		200.000		200.000
3. Revised conceptual model for Suswa				
3.1. Exploration data and interpretation reviewed and conceptual model and drilling targets revised or confirmed by external experts in collaboration with GDC staff.	50.000	250.000		300.000
3.2. Revised model presented in technical review meeting (in collaboration with Argeo and high level panel of experts)		50.000		50.000
4. GDC Chemical Laboratory fully prepared for accreditation in accordance with ISO-17025 standard				
4.1. Quality Manual for laboratory management and data management structures, procedures for chemical analysis and sample collection prepared.	25.000	100.000		125.000
4.2. Future laboratory facilities designed in compliance with the ISO-17025 standard		50.000		50.000
4.3. Up to 10 GDC geochemists and laboratory staff undergoes method specific training and method validation including documentation		75.000	25.000	100.000
4.4. Required equipment for laboratory needed for accreditation procured.		100.000	100.000	200.000
5. Other costs				
5.1. External final programme evaluation			30.000	30.000
5.2. Miscellaneous (consultants input for preparations of ToR, procurement costs, implementation advice, travel and meetings)	15.000	15.000	15.000	45.000
Total	90.000	1.120.000	370.000	1.580.000

¹ It is estimated that 15 people can go through internships on this budget, however as the training is expected to last from 1-3 months as applicable for each trainee, the final number of trainees may vary slightly.

6. IMPLEMENTATION AND MANAGEMENT

GDC is the implementing agency.

Detailed Terms of Reference will be prepared for outputs and activities outlined in this project document, which will define the objective, scope and timeframe for the activities to be undertaken in relation to the respective outputs. Such documents shall be agreed to in writing by both parties prior to implementation of respective activities.

The Government of Kenya and GDC will make the required logistical arrangements and make available the required permits for contractors to carry out the work according to plans.

GDC will ensure that:

- Contractors have access to the necessary documents and data in order to conduct project activities effectively.
- It has qualified staff available to undertake the training and field survey activities.
- Transportation and required logistics are provided and managed effectively in relation to project activities as required.
- Facilitate the import of equipment purchased under the project and its exemption from import duties.

The responsibilities of the parties are further stipulated in the Partnership Agreement.

6.1. Procurement

The procurement of laboratory equipment will be carried out through UNOPS, under an agreement with ICEIDA.

UNU-GTP will be contracted to administer and manage the trainee programme.

ICEIDA will carry out tenders for services under NDF procurement guideline as applicable with input from GDC for the direct use feasibility study under Output 2 and the Suswa technical study under Output 3. For consultancy services under Output 4, ICEIDA procedures apply.

ICEIDA/NDF is responsible for funding project activities and ICEIDA will disburse all funds directly to suppliers of goods and services in accordance with the respective agreements.



6.2. Points of Contact for the Project Management:

For GDC Isaac Kanda Senior Geochemist Mobile: +254 720 936544 Email: ikanda@gdc.co.ke	For ICEIDA Dr. David Bjarnason Programme Manager Tel: +354 5457974 Email: david@iceida.is
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6.3. Reporting, Meetings and Coordination

For both components of the cooperation GDC and ICEIDA shall establish regular communication through the points of contact regarding the progress and implementation of project activities. Bi-annual progress meetings shall be held to discuss the progress of implementation. This may also involve ICEIDA/NDF visit to the project sites.

ICEIDA shall be provided with bi-annual progress reports from GDC for the activities undertaken in this project. In addition, ICEIDA shall receive such other information from GDC regarding the implementation and administration of the Project as ICEIDA shall reasonably request.

GDC and ICEIDA will collectively work together to coordinate the activities of this project with those of other donors and stakeholders working in geothermal development. This includes the World Bank, the ARGeo/UNEP programme as well as the AUC-KfW GRMF programme. Such coordination shall ensure that activities are complementary and not overlapping and enhance synergies between the activities of the different programs.

The implementing agency shall produce and submit to ICEIDA a completion report within 6 months of the completion of the Project.

7. ASSUMPTIONS

The main assumptions to the project are that:

- i. Qualified staff is available for training internships.
- ii. Placements for training internships are available at organizations in Iceland.

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8. COORDINATION WITH OTHER DONORS

GDC will ensure that this programme is carried out in full coordination with activities of other donors and inform ICEIDA accordingly about any overlapping activities. This will ensure effective use of funds and avoidance of duplication. GDC will inform ICEIDA of any donor collaboration meetings for coordination purposes. The ICEIDA/NDF programme is also linked under the Iceland - World Bank Compact for Geothermal Energy, and this project will maintain a dialogue with the World Bank with regards to coordination and potential synergies for activities undertaken. It is also noted that NDF has approved separate funding for GDC for training in geothermal drilling operations with which this project will be coordinated and synergies explored.

9. PROJECT TIMELINES

Project Timelines Summary

Project Component	Start	Finish
1. Capacity building for GDC staff	January 2015	December 2016
2. Direct use feasibility study	November 2014*	September 2015
3. Data review and conceptual modelling of Suswa prospect	October 2014*	April 2015
4. Accreditation of the GDC laboratory	November 2014	June 2016

*Start of procurement process

10. MONITORING AND EVALUATION

Monitoring of project activities will be carried out through bi-annual progress reports from the implementing agencies, progress and final reports from contractors as will be defined in the respective ToRs, and with site visits from ICEIDA.

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In training programs which will be carried out by all participants will be independently evaluated in line with the outcome based curriculum developed for each training activity.

Geothermal exploration reports and conceptual models will be reviewed by external experts, in which case cooperation may be established with the expert review panel of Argeo/UNEP.

An external evaluation of the geothermal support to Kenya will be carried out, supervised by ICEIDA monitoring and evaluation department, 6 months after the completion of the project.

11. CONCLUSION

Through collaboration within the ICEIDA/NDF programme it is expected that GDC staff will have improved their capacity in various aspects of geothermal development, through training internships and participation in geothermal technical studies. The GDC laboratory will be fully accredited with staff trained accordingly. This improved capacity and facilities will contribute to the overall goal of GDC to accelerate geothermal development in Kenya. It is envisioned that the development of the Suswa area will progress into drilling pipelines subsequent to the technical review of the surface exploration. It is further expected that the feasibility for establishing a geothermal drying facility has been determined in Kenya and that this will also provide a model for other countries in the region on the potential for initiating geothermal drying projects.

APPENDIX 1 – LOGICAL FRAMEWORK MATRIX

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions/Risks
Overall Objective (Impact)			
To assist the Government of Kenya to enhance their geothermal energy development for the social and economic benefit of the country by further enhancing their knowledge of geothermal resources and build capacity for geothermal development in the country.	<ul style="list-style-type: none"> MWs of geothermal energy produced in Kenya (10-15 years). Number or regional experts receiving training in Kenya 	<ul style="list-style-type: none"> Installed capacity of geothermal power plants Operational reports from AGCE 	
Immediate Objective (Outcome)			
To contribute to enhanced capacity of GDC in geothermal development and further reduce the risk of planned exploration drilling with technical review studies.	<ul style="list-style-type: none"> Conceptual model and drilling targets reviewed for Suswa with plans for exploration drilling # GDC experts trained Plans for geothermal drying facility are in place as applicable 	<ul style="list-style-type: none"> Exploration review reports Training reports 	<ul style="list-style-type: none"> Qualified staff available for training
Expected Results (Outputs)			
1. Improved capacity of GDC staff			
1.1. Needs and requirements for training attachments defined by GDC and UNU-GTP	<ul style="list-style-type: none"> Needs assessment report 		
1.2. Based on needs assessment from GDC, 15 GDC staff go through 3 months attachments with Icelandic geothermal companies and institutions, organized and administered by the UNU-GTP.	<ul style="list-style-type: none"> Number of Staff participated in the programme Demonstration of skills acquired in projects in Kenya 	<ul style="list-style-type: none"> Needs assessment Training reports Follow up report from trainees 	<ul style="list-style-type: none"> Availability of placements in Iceland
1.3. 20 GDC staff attend 2 weeks training course on Geothermal Project Management, carried out by the UNU-GTP in Kenya.	<ul style="list-style-type: none"> Number of staff in training course Course surveys 	<ul style="list-style-type: none"> Training report 	
1.4. IPMA project management certification	<ul style="list-style-type: none"> IPMA official certification 	<ul style="list-style-type: none"> IPMA certificate 	
2. Feasibility for a geothermal drying pilot project established in Kenya			

2.1. Initial scoping study for use of geothermal in food and agricultural processes carried out to determine the potential focus for a detailed pre-feasibility study	<ul style="list-style-type: none"> • Scoping report • Terms of reference for pre-feasibility study prepared 	<ul style="list-style-type: none"> • Scoping Report and TOR 	
2.2. Pre-feasibility study carried out for a particular pilot project, for geothermal drying, with reference to specific commodity and location.	<ul style="list-style-type: none"> • Pre-feasibility report in place • Plans in place to initiate pilot project if applicable to results of report 	<ul style="list-style-type: none"> • Pre-feasibility Report • Feasibility report for direct use pilot project 	
3. Revised conceptual model and drilling targets for the Suswa geothermal prospect	<ul style="list-style-type: none"> • Suswa enters next pipeline for exploration drilling 		<ul style="list-style-type: none"> • ESIA in place
3.1. Exploration data and interpretation reviewed and conceptual model and drilling targets revised or confirmed by external experts in collaboration with GDC staff.	<ul style="list-style-type: none"> • Conceptual model revised with drilling targets identified 	<ul style="list-style-type: none"> • Technical review report 	<ul style="list-style-type: none"> • Availability of required data
3.2. Revised model presented in technical review meeting (in collaboration with ARGeo and high level panel of experts)	<ul style="list-style-type: none"> • Consensus reached on conceptual model and drilling targets among experts and GDC 	<ul style="list-style-type: none"> • Technical review meeting proceedings 	
4. GDC Chemical Laboratory fully prepared for accreditation in accordance with ISO-17025 standard	<ul style="list-style-type: none"> • Laboratory is accredited in accordance with ISO-17025 standard 	<ul style="list-style-type: none"> • Accreditation certificate 	
4.1. Quality Manual for laboratory management and data management structures, procedures for chemical analysis and sample collection prepared.	<ul style="list-style-type: none"> • Quality manual prepared 	<ul style="list-style-type: none"> • Quality manual 	<ul style="list-style-type: none"> • Availability of qualified ISO consultants in Kenya
4.2. Future laboratory facilities designed in compliance with the ISO-17025 standard	<ul style="list-style-type: none"> • Design document for laboratory facilities 	<ul style="list-style-type: none"> • Design documents 	
4.3. Up to 10 GDC geochemists and laboratory staff undergoes method specific training and method validation including documentation	<ul style="list-style-type: none"> • 10 experts have undergone respective training 	<ul style="list-style-type: none"> • Training and assessment reports 	
4.4. Required equipment for laboratory accreditation procured.	<ul style="list-style-type: none"> • Equipment procured in accordance with needs assessment • Experts capable of operating equipment 	<ul style="list-style-type: none"> • Procurement report • Assessment report of equipment operations 	

APPENDIX 2 - EXPRESSION OF INTEREST FOR COLLABORATION



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Ref:GDC/MD/02/3a/SMS-*jt*

February 6, 2014

Engilbert Guðmundsson
Director General
Icelandic International Development Agency (ICEIDA)
Rauðarárstigur 27, 105 Reykjavik,
ICELAND

Dear Sir

**RE: EXPRESSION OF INTEREST FOR COLLABORATION BETWEEN ICEIDA
AND GDC UNDER THE ICEIDA/NDF PROJECT**

Reference is made to the meetings between representatives from GDC and ICEIDA on December 2, 2013 and subsequent follow up meetings on January 3, 2014 and February 3-5, 2014 on the above subject. We are aware that ICEIDA and NDF are implementing a jointly funded geothermal exploration project which covers activities under surface exploration as well as capacity building and GDC's mandate falls under the scope of ICEIDA/NDF project.

Geothermal Development Company Limited (GDC), a wholly Government of Kenya entity, under oversight of the Ministry of Energy and Petroleum, is mandated to undertake integrated development of geothermal resources through exploration, drilling, and implementation of direct utilization of geothermal resources. As part of this mandate, GDC has commenced geothermal development at Menengai, Baringo-Silali and Suswa prospects.

The purpose of this letter is, therefore, to express our interest to collaborate with ICEIDA in the establishment of the Geothermal Centre of Excellence through Master Plan development for the Centre, Curriculum Development, Laboratory Accreditation, Training internships in Iceland, procurement of Laboratory equipment, Drilling Supervision and project Management and any other eligible support within the scope of the project.

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Such collaboration between GDC and the ICEIDA will be a strategic step in the enhancement of geothermal development in Kenya. Therefore, any support toward this goal will be highly appreciated.

Yours Sincerely,



Dr. Silas M. Simiyu, MBS
MANAGING DIRECTOR & CEO



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