**Terms of Reference (TOR)**

**Conduct Strategic Research on Business Models for Private Sector Involvement into Renewable Energy Technology Transfer**

**Background**

The 'China-Ghana South-South Cooperation on Renewable Energy Technology Transfer' project is a collaboration between the Energy Commission in Ghana, the Ministry of Science and Technology in China together with the UNDP Country Offices in Accra and Beijing. The project will facilitate exchange of expertise and technology between China and Ghana, building on China's unique development experience.

The Danish Government is providing project funding through UNDP China and it forms part of Denmark's support to South-South Cooperation, to enable coherent cooperation between China and countries in Africa, in particular around the promotion of the UN's Sustainable Energy for All (SE4ALL) initiative. The planned support will not transfer hardware per se, but focus on the institutional framework and capacity required to make the local absorption of renewable energy technologies effective.

This project aims to address Ghana's need to increase universal energy access by effectuating off-grid community-based electrification, increasing the share of renewable energy, and promoting the productive uses of energy. The project thus supports broader national socio-economic and environmental objectives, most notably poverty reduction through employment generation and supporting action on climate change mitigation. The project will do so by creating an enabling environment for technology transfer and promote the production of renewable energy technologies in Ghana with a strong focus on private sector development and inclusion.

One output of the project requires the development of business models to support private sector involvement in public-private partnerships in Renewable Energy Technology Transfer (RETT) in Ghana. The project seeks to recruit expects to conduct strategic research on business models to facilitate the involvement of private sector in RETT.

**B. Objectives**

The Energy Commission wishes to engage an Individual Consultant to conduct strategic research on business models to facilitate the development of sustainable businesses in the renewable energy sector. The consultant is expected to understand current development in RE services to develop business models for each of the following technologies:

* Biogas for commercial and agricultural sector
* Solar irrigation for small holder farms
* Conversion of fossil fuel powered Irrigation Schemes to Solar
* Micro-hydro schemes
* Gasifiers

**C. Scope of Work**

The consultant is required to:

* Review existing business models in the Renewable Energy Sector of Ghana and present a report on findings. This should be done through literature review, interviews with key stakeholders and focused group discussions;
* Establish innovative business models that could be introduced for the above listed RE technologies being promoted in Ghana;
* Develop a funding approach and investment plan for ***each*** of the RE technologies;
* Facilitate workshop with stakeholders to validate proposed business models and findings from the technologies;
* Facilitate training workshop with private sector and policy developers to disseminate findings on business model arrangements.

**D. Outputs and Deliverables**

The consultant is expected to deliver the following outputs:

* Inception Report (1-2 weeks after contract award);
* Report on business model review and options for a sustainable business
* Report on funding approach and investment plan for the technologies;
* Report on validation workshop;
* Report on training workshop;
* All reports must be submitted both in soft and hard copy. Each page of the report should be signed by the Individual consultant.

**E. Duration of Assignment**

The duration of this assignment will be six (6) months.

**F. Facilities to be provided**

Energy Commission will provide the following facilities to the consultant:

* Relevant information and reference documents;
* The Commission will provide at least two survey assistants to support the work;
* Provide guidance and support during the exercise.
* Provide comment on the draft report
* Support the organisations of workshop with stakeholders to review and validate proposed business models and findings from sector
* Support the organisations of training workshop with private sector and policy developers to disseminate findings on business model arrangements.

**G. Qualifications and Experience**

The team of consultants should have the following qualifications:

* An advanced degree in Sustainable Energy, Development Studies, Economics or Engineering.
* A minimum of 7 years’ work experience
* An established track record of successfully conducting similar assignments
* Excellent report writing and communication skills
* Presentation and Interpersonal skills

**H. Evaluation Criteria**

The consultant will be evaluated on the following:

|  |  |
| --- | --- |
| **Criteria** | **Weight** |
| **Technical Competence** | ***70***  |
| 1. Understanding the Scope of Work (SoW); comprehensiveness of the methodology/approach; and organization & completeness of the proposals.
 | **50** |
| 1. Educational qualification, years of experience in similar consultancy projects
 | **20** |
| ***Financial (Lower Offer/Offer\*100)*** | ***30*** |
| **Total Score** | ***100*** |

**Note:** Applicant should pass the technical level score first (at least 55 out of 70 points) in order to be proceed to the financial level evaluation.

**I. Payment Milestones and Authority**

The consulting firm shall receive lump sum payment upon certification of the completed tasks satisfactorily, as per the following payment schedule:

| **Installment of Payment/ Period** | **Deliverables or Documents to be Delivered**  | **Percentage of Payment** |
| --- | --- | --- |
| 1st Installment  | Submission of Inception Report | 30 % |
| 2nd Installment  | Submission of report on * business model review and options for a sustainable business model and
* funding approach and investment plan;
 | 30 % |
| 3rd Installment  | Submission of workshop reports | 40 % |