Indo-German Energy Programme – ACCESS

PN: 14.2114.8-001.00 **Date: 20.04.2018**

Terms of Reference (ToR) for engaging a firm of consultant to develop an Energy Plan and Energy Action Plan for the state of Assam

1. Background

The Indo-German Energy Programme – Access to Energy in Rural Areas (IGEN-Access) is a bilateral cooperation project carried out by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Indian Ministry of New and Renewable Energy. IGEN – Access aims to improve the sector environment for inclusive rural energy enterprises.

1.1 The areas of activities for IGEN-Access Programme are:

Innovation and Entrepreneurship

This entails working with Rural Energy Enterprises or their networks to enhance their delivery of energy access solutions to rural households. This measure is delivered through training, access to mature and proven technologies, enhancing market intelligence, upgrading logistics and value chains, and business model development. IGEN-Access will facilitate the participation of women as enterprise owners, in particular.

Access to Finance

This activity entails development of financial products such as loans and lease instruments for rural energy enterprises and consumers. Creating awareness among key stakeholders, particularly the private and public financial institutions is a major measure too.

Public support Programmes / schemes

The intervention focuses on developing capacities of government agencies to deliver energy related services and supporting relevant institutions in developing and implementing public sector programmes and providing support in effective implementation of energy access solutions.

1.2 Indicators of the IGEN-ACCESS Programme

Outcome Indicators

OC1: 75% of rural enterprises supported by IGEN-Access directly or indirectly confirm that the business conditions (e.g. business models, training programmes, financing, public support programmes, market intelligence) have improved significantly during the programme period.

OC2: 20 rural energy enterprises- six of which are managed by women-which have been trained by programme partners have developed business plans to address 25,000 Households.

OC3: Two financial instrument tailored to the requirements of rural energy enterprises or households has been introduced on a national or state level to allow 10,000 Households access to energy.

OC4: Four national or state level programmes/ regulations (e.g. standards/guidelines) to support access to energy for which development was assisted by IGEN-Access are adopted.

Output Indicators

(OP)A.1: 40 further rural enterprises (of which 12 are managed by women) received technical training and / or business development services from organisations which were supported by the programme.

(OP)A.2: A renewable energy sector network (e.g. CLEAN) offers three services (e.g. trainings, clean cooking forum, access to finance, and standards) to sustainably strengthen the sector.

(OP)B.1: Two new business models to use renewable energy for improving access to energy are piloted by energy enterprises (e.g. hybrid model, solar cold storage, solar water pumps).

(OP)C.1: Proposals for four financing instruments tailored to the requirements of rural energy enterprises or households have been presented to financial institutions (e.g. banks, cooperatives, enterprises).

(OP)C.2: Representatives of five different organisations providing financial services (e.g. banks, cooperatives, enterprises) who participated in trainings and awareness events on rural energy finance confirm their increased willingness to fund rural energy enterprises or consumer of energy products.

(OP) D.1: Proposals for the design / implementation of financial and technical guidelines for four national (e.g. on cook stoves) or state level energy access programmes/regulations/standards are available.

(OP)D.2: One action plan for clean cooking energy in India was adopted by the inter-ministerial roundtable.

(OP)E.1: Market intelligences (e.g. market barriers, user requirements) of 3 products or services (e.g. solar water pumps, solar cold storages, energy efficient cook stoves) are prepared and available for enterprises of the sector.

The deliverables achieved by the activity under this tender will be evaluated using (OP) A.2 and (OP) A.1.

2. Context

The State of Assam is one of the Seven North East Sister States of India having the most important strategic position and roles in terms of regional development indeed. Located with Bhutan and Bangladesh borders in the north and south of the State respectively, Assam is holding a natural advantage of prosperity through trade and commerce. The State of Assam is in the path of inclusive economic growth and development. Energy is one the main factor inputs for this development in the State. Wider access to modern and clean energy, affordable and reliable energy supply, and sustainable development of the energy sector of the state are the goals to achieve. State being endowed with plenty of natural resources like water, oil, natural gas and fertile land, it is not an impossible task to achieve provided well thought plans are made in advance and implemented rigorously.

3. Rationale of State Energy Planning

Energy is no longer an independent sector in the economy. It is linked to all other sectors of the economy, society and environment in such a way, that planning for energy warrants to investigate the cross sectoral impacts due to changes in the energy sector plan and policy. Figure Energy is not only a factor input to the economic activities but also the consumers of various sectoral outputs of the same economy. Energy sector is also responsible for emitting local and global pollutants in the atmosphere which causes various socio-economic troubles due to health damages. A particular economic activity can be the consumer as well as producer of energy as well. Therefore,

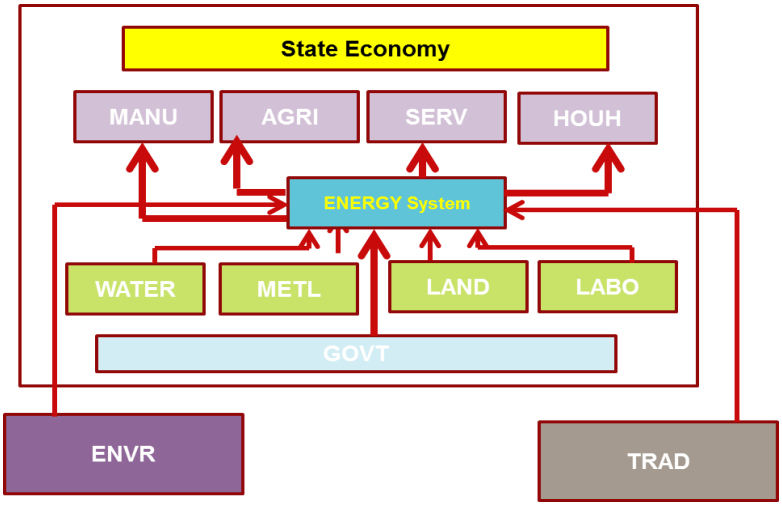

Figure 1: Energy-Economy Linkage

MANU: Manufacturing, AGRI: Agriculture; SERV: Service, HOUH: Household, METL: Metals, LABO: Labour, ENVR: Environment; TRAD: Trade

in the process of developing the State level energy plan and subsequent action plans it is important to follow an integrated approach of assessment.

While doing the integrated analysis for developing the energy plan of the State it is important to understand and consider the backward linkages of each and every activity proposed in the plan. For example, achieving the target of renewable energy generation in the state, it is important to consider both technology availability as well as economic and market preparedness to promote RE further going down into deep of assessment it is important to investigate if the state is adequately prepared to develop local equipment (R&D), procure equipment from outside seamlessly and also adequately funded through investors and having the required regulatory support.

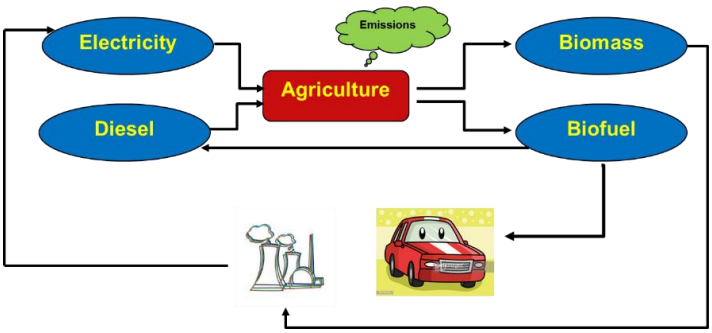

Figure 2: Example of sector link to energy production and consumption

Under this context, the IGEN-ACCESS programme of GIZ has signed a Cooperation Agreement with Department of Power, Government of Assam to develop an Energy Plan followed by an Energy Action plan for the state of Assam.

4. Objective

The objective is to empower Govt. of Assam with technical capacity of developing a state level energy plan with several specific action plans. In this context, Government of Assam in technical cooperation with GIZ will achieve the following objectives:

- An Energy Plan together with several specific action plans is developed for the state;
- An appropriately designed and established Project Management Unit (PMU) capacitated with required skills and knowledge so that the developed Energy Plan become permanent and dynamic activity within the Assam State Energy Planning processes.

5. Progress made so far

The state of Assam with the support from British High Commission (BHC) has developed a state energy calculator in line with India Energy Security Scenario (IESS), 2047. The Assam State Energy Calculator, 2050 is a scenario building tool which generates the energy demand and

supply scenarios for the state up to 2050. ASEC, 2050, has the capability to aggregate both the energy demand and supply choices provided by the user. The use of developed state energy calculator is foreseen in the baselines assessment process. The state energy calculator along with necessary information in the form of data, assumptions etc will be made available by the department of Power, Government of Assam.

6. Scope of Work

The process of developing the State Energy Plan should be distributed in the following Work Packages.

Work Package-I: Context setting and determining the State Vision

The main purpose of this work package is to set the overall goal of the EAP of the State and orientation of the stakeholders in the context of flow of activities and corresponding methodologies.

In the process of context setting the project the activities under this WP should focus on the followings:

- Orientation of the stakeholders and setting the broad goals of the EAP.
- Overall structure of the project
- Methodological concept development and obtaining the consensus from the immediate stakeholders from the Govt. side.
- Overview of the energy modelling tool.
- Framework for institutional engagement

In the context of developing the State Vision and EAP goal setting this WP should focus on the following activities

A focused vision statement will reflect the overall objective of the plan. For example, a concise state vision statement could be “intention of gradual transition from traditional energy fossil fuel to cleaner energy supplies in a manner that secure economic and environmental future”. A vision statement will create an overarching guiding principle of the rest of the activities to be performed.

The defined vision of the state must be endorsed by the appropriate authority at the highest level of the state of Assam.

Outline goals to meet the vision: This step is to determine the goals that will direct the state towards meeting the energy needs and vision.

- **Establishing goals;** the consultant should develop a detailed narrative explaining the rationale for each goal. The narrative for each goal should define the objective, timeline milestones, and baseline.
- **Deliverables D1**

  A report containing the outcomes of WP1 which should include the following
  - Approved EAP goals for the State along with the sectoral objectives.
  - Responsibility mapping between the EAP development team and the beneficiary stakeholders and departments.
  - Approved timeline aligned to overall project time schedule

Work Package-II : Baseline Assessment

The main purpose of this work package would be to assess the existing situation of the State in terms of its energy supply, demand and consumption pattern along with its energy resource availability. This step outlines the critical data sets that will lay the foundation for the state energy plan. Analysis of this information will allow to consider options within realistic parameters and set benchmarks for measuring progress. The main activities under this work package are as follows:

- What other energy-related plans and policies exist at the state level that can be leveraged by the state energy plan? This also includes review of the relevant sections defined in SDGs and SAPCCs of the state of Assam and interlinkages between federal level plans/policies with the state;
- What is the current profile of the state's energy resources, demand and supply and institutional capacity?
- Mapping of inter departmental linkages in terms of energy flow and generating energy flow diagram at base year.
- Develop the database framework for collection of data and processing of data for baseline assessment. Database should be built in an auto update mode which can make the future data updation work easy and less time consuming.

- To conduct discussion sessions with PMU members in order to explain the outcomes

Deliverables D2

A report containing the major outcomes of WP2 which at least should include

- Base year State Energy Balance sheet with demand sector disaggregated to major energy consumers of the state like industry, transport, residential and commercial buildings, agriculture etc.
- Energy systems database of the state.

Work package III: Long term energy scenario assessment

The main activities of this work package are related to development of an energy cost optimization model which will help the state to identify an optimal energy supply mix under various boundary conditions and thereafter generating various policy scenarios. During the course of study if any substantive changes to existing policies or introduction of new policies are made by the government of Assam and if these are considered to have a substantive bearing on the modeling results then these changes should be reflected in the baseline assumptions. The consultant is also expected to propose an approach for validating the data, assumptions etc.

(A) Baseline projection: Baseline projection is the key for all future policy analysis. Therefore, utmost importance should be given to build the long term baseline of the State. The consultant should spend adequate amount of time to build the baseline with intense communication with the State officials from the major beneficiary departments along with the PMU. Clear definition of the baseline should be articulated at the beginning of this exercise. All existing and upcoming government policies which might have bearing on the future energy scenario of the State should ideally be included in the baseline. However, the consultant should be responsible to fix the boundary of the baseline which is approved by the Govt.

(B) Scenario Building: Scenario building exercise should be started only after the baseline is confirmed and validated. The main objectives of the scenario building exercise would be to simulate the State objectives of developing the Energy Action Plan at broad level as well as at the sectoral level. Therefore, developing scenario would require second level of consultation with the beneficiary departments of the Govt. and the PMU in charge.

The consultant should not exclude on the following issues while developing the state energy model

- Demand sector disaggregation should be aligned to sectoral policy assessments
- Inter-state energy commodity relationship and trade
- Energy commodity / Electrical energy exchanges with neighboring countries
- Energy supply and demand balance and grid stability for RE integration
- Resource potential particularly about solar, biomass and hydro
- Resource availability and production projections for coal and petroleum products
- Grid expansion Vs Off grid supply optimization for remote rural communities
- Modernization of the Electrical Power System for the State, power sector reforms
- Energy Efficiency requirements/potentials for industrial, buildings as well as electrical transmission and distribution systems
- Transportation sector energy needs
- Agricultural sector energy needs
- Cooking energy requirements

(C) **Capacity building on long term scenarios**

The activities in this task is to ensure that the PMU team members get adequate exposure and training to understand the modelling activities under this project in order to enable the longer term sustainability of the structured energy action planning process. All major components of Work Package III should be developed with active participation of PMU members. Sets of training sessions should be organized in the beginning, tied with major components and at the end of WP III .

Deliverables D3

D3.1: A detailed report containing the major outcomes of A) Baseline generation

D3.2 : A detailed report on the major outcomes of B) Scenario Building

D3.3: A report on the training /capacity building activities under WP III

D3.4: The actual software based model(s) developed and scenarios generated under WP III

D3.5: Users' manual and adequate documentations for PMU members for using the models developed.

Work Package IV: Developing the Decision Support Tool

The consultant should develop a simple decision support tool which can capture the results of different scenario simulations against preselected indicators. The select indicators should carry the information required to develop the Energy Action Plan. The purpose of the DST would be to identify the incremental effort requirement to achieve the targets set under the EAP goal. DST is therefore, required to capture the fundamental information like baseline scenario, gap between baseline effort and required effort, pathways to follow to achieve the required target and additional effort required to meet the gap. It is highly desirable that a user interface of the model is prepared such that by changing the variables and running the simulations, different results can be visualized by the user, such that not just technical experts, but a broader audience can use the tool especially policy makers. A user guide in this regard needs to be prepared. Adequate capacity building measure need to be taken in order to enable PMU members handling the DST in the future independently.

Deliverables D 4

D 4.1 The developed DST along with the software components

D4.2 A detailed users' manual on the developed DST

D4.3 A report on capacity building measures taken for training PMU members

Work Package V: Development of the Energy Action Plan

(A) Generation of time step wise activities

Here the main focus is to develop time step wise activities to perform in the context of achieving the targets by the given time horizon. The activities will be derived from the results obtained from the integrated modelling analysis which will be in principle the least cost activities identified endogenously by the models. As a matter of fact, the comprehensive list of activities (time step wise) will ensure the least cost energy system of the State which can support to achieve various objectives set under various scenarios of development pathways.

(B) **Developing recommended action to meet each goal**

The consultant will recommend programmatic actions to meet defined goals. Recommendations should include detailed action plans and milestones for

implementation. Each recommended action will outline particular funding mechanisms sources. Recommended programmatic actions should focus on emerging technologies, need for changing the existing regulations, evolving consumer behaviors, possible environmental hazards, transmission challenges, and unpredictable supply, demand, and pricing issues. An analysis of the emissions impacts of the options to meet future energy needs will strengthen the energy planning process.

Deliverables D5: Draft the State Energy Action Plan

The consultant should make a draft State Energy Action Plan document.

General outline for a state energy action plan should include the followings:

- Executive summary
- Scope and purpose
- Current energy profiles, policies and programme
- Future projections and needs
- Vision
- Goals and recommended actions
- Implementation and timeline
- Financing mechanism (sources)
- Challenges and solutions
- Proposed comprehensive EAP Monitoring system
- Summary
- Glossary
- Acknowledgements
- Appendices
- References and resources

Work Package VI: Finalize and adopt the Action Plan

This step focuses on the finalization and adoption of the state energy plan. The consultant is expected to submit the plan to the appropriate authority at the highest level of the state for approval. The consultant will respond to any final questions and defend the plan as needed.

The scope of work has been summarized in the table below along with key indicators and means of verification. Means of verification must be considered as deliverables of the assignment in addition to the specific deliverables mentioned against respective work packages.

Objective	Outputs	Activities	Key indicators	Means of Verification (Deliverables)
An Energy Plan together with action plan is developed for the state of Assam and adopted by the government of Assam	Work Package 1 • Context Setting	• Orientation of the stakeholders and setting the broad goals of the Energy Plan. • Overall structure of the project • Methodological concept development and obtaining the consensus from the immediate stakeholders from the Govt. side. • Overview of the energy modelling tool. • Framework for institutional engagement	• Related stakeholders are sensitized about Energy Plan • Related stakeholders are sensitized about the overall structure of the project, methodological concept, energy modelling tool and framework for institutional engagement.	• A report (max 15 pages) summarizing the context of the project with timeline aligned to overall project time schedule has been developed and accepted by the Govt of Assam and GIZ
	• Determining the state vision	• A focused vision statement has to be defined which will reflect	• Vision of the state has been determined	A report (15 pages max) determining the vision, different goals, sectoral objectives and detailed narrative explaining the

		the overall objective of the plan. • Outlines goals along with the sectoral objectives	• Different goals have been determined in order to meet the vision of the state	rationale for each goal. The narrative of each goal should define the objective, timeline, milestones and baselines. The report has to be accepted by GIZ and government of Assam.
	Work Package II: Baseline Assessment	• Review of the energy related plans, policies, SDGs, SAPCCs at the state level and also interlinkages between federal level plans/policies with the state; • Assessment of the current profile of the state's energy resources, demand and supply and institutional profile • Mapping of inter departmental linkages	• The existing plans/policies has been reviewed • Current energy profile of the state together with institutional profile has been assessed; • Inter-departmental linkages in terms of	• A report containing the followings: • Base year State Energy Balance sheet with demand sector disaggregated to major energy consumers of the state like industry, transport, residential and commercial buildings, agriculture etc. and;

		in terms of energy flow and generating energy flow diagram at base year. • Development of an auto update database framework for collection of data and processing of data for baseline assessment. • To conduct discussion sessions with PMU members in order to explain the outcomes	energy flow has been mapped; • Database framework has been developed in an auto update mode; • The staff of the PMU is coached, trained on the activities and its outcomes	• Energy systems database of the state. • The report has to be accepted by Govt. of Assam and GIZ
	Work Package III: Long Term Energy Scenario assessment	• Baseline generation/projection • Scenario Building	• A long term baseline projection has been established in consultation with the state officials and the PMU • Scenario building exercise have been	• A detailed report containing the major outcomes of Baseline generation • A detailed report on the major outcomes of Scenario Building

		• Capacity building on long term scenario	undertaken together with state officials and the PMU • The staff of the PMU is trained and coached on modelling activities	• A report on the training /capacity building of the PMU staff • The actual software based model(s) developed and scenarios has been generated • Users' manual and adequate documentations for PMU members for using the models developed. • All the above mentioned deliverables of WP III must have acceptance of the Govt. of Assam and GIZ.

	Work Package IV: Developing the Decision Support Tool	• Development of a simple Decision Support Tool (DST) which can capture the results of different scenario simulations against preselected indicators	• A simple to use DST is developed capturing results of different scenarios against preselected indicators.	• The developed DST along with the software components • A detailed users' manual on the developed DST • A report on capacity building measures taken for training PMU members • All the above mentioned deliverables of WP IV must have acceptance of the Govt. of Assam and GIZ.
	Work Package V: Development of the Energy Action Plan	• Generation of time step wise activities	• A comprehensive list of activities (time step wise) with the least cost energy	• A draft State Energy Action Plan document has been developed and

		• Developing recommended action to meet each goal	system of the state has been developed to achieve various objectives set under various scenarios of development pathways • Programmatic actions to meet each defined goals has been developed	accepted by the Govt of Assam and GIZ. • The structure of the draft state energy action plan has been outlined in the section of Deliverables D5
	Work Package VI	• Incorporation of the inputs/suggestions from related stakeholders • Finalization of the energy action plan	• All the inputs from the government officials together with other related stakeholders are incorporated into the draft plan. • Final State Energy Plan is developed	• The Final State Energy plan has been accepted by the appropriate authorities at the highest level of the Government of Assam and GIZ

Work Package VII: Ad-hoc support

Contractor will provide support on ad-hoc short term basis. The purpose of this work package is to enable GIZ to quickly react to requests of the Indian partners. Therefore most requests to the Consultant will be of ad-hoc nature, i.e. the Consultant will have to be able to deliver inputs after short notice. Ad-hoc support is expected from the proposed team of Contractor only, there is no requirement of new, additional experts for ad-hoc support. Around 30 human days must be kept for ad-hoc support in addition to the normal work packages from I till VI.

Support for ad-hoc activities will only be initiated after GIZ's approval. GIZ will also request the Contractor to specify the level of efforts required for such activities and it has to be mutually agreed prior to start of that ad-hoc activity.

7. Stakeholder Engagement

One of the most critical steps in the development of state energy plan is that of stakeholder engagements/consultations, which includes both outreach and feedback mechanisms**.** It is expected that the consultant would organize at least 3 stakeholder consultation workshops during the development of the energy plan. Stakeholders would be in the form of government departments, private sectors, civil societies, sector experts, researchers and academics. The stakeholder workshop should be conducted in a following manner:

- Inception workshop: Discuss the scope of project, brief the participants about the baseline tool and optimization models that will be used etc., discuss data requirements;
- Interim-results workshop: Discuss the result of baseline assessment, initiate discussion on setting up of vision, goals, and recommended action plans;
- Final workshop and way ahead: Present the defined vision, goals and recommended action plan and discuss way forward.

8. Project Management Unit (PMU)

Department of Power, Government of Assam together with GIZ has set up a PMU for an effective coordination among different departments for the development of the Energy Plan and implementation of the same. The PMU is being hosted by the department of Power, Government of Assam. The engaged consultant is expected to capacitate personnel assigned by the state

government while developing the energy plan and action plans including a dedicated training on the use of baseline assessment tool, energy optimization model and decision support tool.

Timeline

The work is expected to be completed within 10 months after award of the contract. The bidders should design their technical and financial bids considering the given timeline.

The estimated number of human days required to complete the assignment is 151 spread over 10 months. An additional 30 human days has been kept for an ad hoc support. However, utilisation of additional 30 human days for ad hoc supports can only be utilised after the approval of GIZ.

9. General Deliverables for the Project Management

The firm of consultants is expected to provide the following deliverables

- Updates (conference call or one to one meeting) on a fortnightly basis on project progress. Since GIZ is supporting the department of Power, Government of Assam in the development of energy plan and action plan, therefore, it is expected of the consultant to also update and attend meetings called by department of Power during the period of assignment;
- Inception report within the first two weeks of the project
- Project monitoring sheet (template to be provided by IGEN-ACCESS) within the first two weeks of the project
- Please refer to the respective description of the specific deliverables under each of the work packages mentioned before in the terms of reference
- Please refer to the above mentioned table where deliverables are defined under means of verification
- All reports and documents as defined in the terms above

10. Programme Steering and Reporting

- The firm of consultant will report to a Technical Expert (to be nominated) from the GIZ - IGEN-Access programme. The firm of consultant is to designate a team lead;

- The firm of consultant will be required to closely work with the established PMU and attend meetings called by Department of Power, Government of Assam apart from regular update meetings with GIZ;
- During the period of assignment, the consultant is expected to report on a fortnightly basis regarding the progress on the assignment. The consultant is expected to develop a Project Monitoring Sheet (PMS) for regular tracking of progress made on the assignment. The format of PMS will be shared with the consultant. GIZ may also require the consultant to prepare short reports/concept notes/discussion papers from time to time.

11. Qualification and Skills requirements

The consultancy/firm needs to demonstrate following ability through adequate references and documents.

- Proven experience of at least 7 years of working on integrated energy optimisation models;
- Proven experience of at least 10 years on the development of energy related programme or policies at international, national level and state level;
- At least 3 reference projects in the development of energy related plan and policies and at least 2 reference projects in the region of Asia in the last three years;
- Proven liaison expertise with government departments especially at states level;
- Proven experience of working with international research institutes on energy issues;
- Demonstrate ability to work in a highly collaborative environment with teams that are subject to time and skill constraints
- Demonstrate ability to manage contracts of this magnitude with reference to financial and administrative functions.

Team: The firm of consultants is expected to provide a team as per the below mentioned qualification and skill requirements.

- 1 senior expert on integrated energy planning and modelling. This senior expert will also act as a team lead.
    - Degree in engineering
    - minimum 10 years of professional experience on energy planning and modelling;
    - minimum of 10 years of management experience (project management)

- Proven experience of developing energy related plan/policies at national or state level
- Regional experience of working in Asia
- Language- English and Hindi
- Excellent report writing and presentation skill

- 1 mid- level expert on integrated energy planning and modelling –
  - Degree in Engineering
  - Post graduate in energy related topics
  - minimum 5 years of experience of working on integrated energy planning and modelling
  - Regional experience of working in India preferably in North East states
  - Language- English, Hindi and preferably Assamese and Bangla

- 1 senior expert on energy market and policy/plan
  - Degree in engineering
  - minimum 10 years of experience on energy policies and plans;
  - Proven experience of developing energy related plan/policies at national or state level
  - Regional experience of working in India
  - Strong communication and inter personal skills including presentation skills
  - Language- English and Hindi
  - Excellent report writing and presentation skills

- 1 senior expert on renewable energy and climate change
  - Degree in engineering or Science
  - Post graduate in energy/climate change related topics
  - minimum 10 years of experience of working on renewable energy and climate change;
  - Strong communication and inter personal skills including presentation skills
  - Regional experience of working in India preferably in North East states
  - Language- English, Hindi and preferably Assamese and Bangla

12. Quality assurance and other requirements

To ensure the quality of the outputs the firm of consultants has to meet the following requirements:

- GIZ honors intellectual copyrights and strictly prohibits any copyright violations and plagiarism;
- The consultant must at all times of the assignment possess the copyrights (licenses in the case of software packages) of the documents, pictures, technical papers etc used in the assignment;
- GIZ will hold the copyrights for all the documents/data collected in the process of assignment as well as the electronic media (photographs, videos etc.).
- Reports or documents pertaining to the project and prepared by the firm of consultants need to be thoroughly verified prior to submission. Sub-quality deliverables would not be accepted;
- It is expected that all documents will undergo a final proof read by the team leader;
- The firm of consultants ensures that GIZ staff is briefed continuously on the progress of the project and informed immediately on any changes whatsoever (e.g. delays, availability of information etc);
- All meetings will be documented by the firm of consultants. The minutes of meetings need to be approved by the staff of GIZ;
- The firm of consultants is not allowed to replace project staff without prior approval by the staff of GIZ;
- All work results and deliverables have to be acceptable to GIZ and department of Power, Government of Assam;
- All the steps of the scope shall be coherent and complimentary in nature and they should not be considered as individual isolated steps;
- The consultant has to maintain the confidentiality of the data. The data and any other classified information collected under this assignment shall not be used by the consultants anywhere and in any manner without GIZ permissions. It is not encouraged that based on the information collected through the assignment any research work is conducted with an intention to publish research papers and/or conduct thesis work in individual capacity;
- It should be noted that availability and accessibility of data or relevant information may be a constraint and in such conditions the consultants should make its best effort to suggest alternatively approaches which will help in completing the assignment. The alternative approaches must be approved by the state government together with GIZ.

13. Structure of the proposal

- The proposal should contain a very brief company profile followed by a detailed approach and methodology to execute the project. The proposal should also contain the project timeline highlighting milestones and deliverables. Please elaborate the roles and responsibilities of the different team members in the proposal;
- The entire proposal including approach and methodology proposed, CVs etc., needs to be in English. The CVs need to be in uniform format with a maximum of three pages; The length of technical proposal should not exceeds 25 pages;
- Backstopping-services need to be specified. Back stoppers have to be listed and need to be available during the contract duration;
- Consideration of local resources should be clearly outlined in the proposal. Local resources could be used for coordination purposes and also for local logistics;
- The consultant is required to outline in their proposal about the use of baseline tools and energy tools (optimisation, scenario development) highlighting the benefits and limitations in the context of the assignment. In order to ensure free access to the optimisation modelling software by the state government after completion of the assignment, it is recommended that consultant should use a software or combination of software which is available free of cost or availed at nominal cost and has been widely used by different government entities worldwide;
- The consultant is expected to be flexible in their approach when it comes to use of energy optimisation model or models depending upon the requirements of the state government;
- The consultant must outline the perceived risks associated with the different tasks under the defined scope of work? How does the agency propose to mitigate these risks? How does the firm of consultants ensures the quality of deliverables (for all processes, indicators and project steps);
- The estimated number of human days required to complete the assignment is 151 spread over 10 months. An additional 30 human days has been kept for an ad hoc support. However, utilisation of additional 30 human days for ad hoc supports can be utilised after the approval of GIZ.

- While the key activities envisaged are discussed below, the consultant is also encouraged to suggest additional activities or even propose alternate approaches, which may help achieve the same end objective.

14. Further requirements

- All communication with media (TV, radio, print and other media) has to be approved by the responsible person of GIZ;
- All reports, slides, presentations and other media and information material need to be submitted to GIZ in soft copy and in hard copy as required;
- Timelines shall be strictly adhered and delay in any of the deliverable shall be reported and aligned with GIZ in advance.

Note

- In order to select a suitable consultant, GIZ may invite shortlisted consultants to present their methodology and approach to a committee which will help GIZ in making final selection.
- It may also be foreseen that GIZ may consider termination of the contract prematurely in case of limited participation/interest from the Government of Assam or due to any other unforeseen events.