

Terms of reference (ToR) for the procurement of services below the EU threshold



CONFIDENTIAL

Establishment of Project Management Unit in ANERT Keralam to support RE initiatives under RE500

**Project number/
cost centre:**

G-012382-001

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**Tender number
10025330**

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0. List of abbreviations

AG	Commissioning Party
AN	Contractor
AVB	General Terms and Conditions of Contract for Supplying Services and Work
ANERT	Agency for New and Renewable Energy Research and Technology
DISCOM	Distribution Companies
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
KSEB	Keralam state electricity board
MNRE	Ministry of New & Renewable Energy
PMU	Project Management Unit
PMSGY	PM Surya Ghar Yojana
RE	Renewable Energy
ToR	Terms of Reference

1. Context

The project, titled "Achieve India's Renewable Energy Target of 500 GW by 2030," is a flagship initiative aligned with India's ambitious climate and energy goals. It is politically anchored with the Ministry of New and Renewable Energy (MNRE), Government of India, and represents a commitment by the German Federal Ministry for Economic Cooperation and Development (BMZ) following the Indo-German intergovernmental negotiations held on 1st November 2023 in New Delhi.

The project directly contributes to India's Nationally Determined Contribution (NDC) targets for 2030 and the overarching goal of achieving net-zero emissions by 2070. It operates under the newly launched Indo-German Platform for Investments into Renewable Energies, aiming to facilitate strategic collaboration and impactful investments in the sector.

Key components of the project include policy and technical advisory to MNRE on the expansion of wind energy and rooftop solar photovoltaics, as well as the modernization of aging renewable energy infrastructure. It also supports the development of local solar supply chains, promotes digital tools for grid operators, and advises on necessary reforms and grid expansion. Furthermore, the project places a strong emphasis on addressing the shortage of skilled labour in the renewable energy sector by promoting the participation of women, thereby fostering inclusive and sustainable energy transitions in India.

The Agency for New and Renewable Energy Research and Technology (ANERT) is the State Nodal Agency of Kerala responsible for planning, coordination, and implementation of renewable energy (RE) programmes in the State. Kerala has set ambitious renewable energy targets in alignment with national commitments under India's Nationally Determined Contributions (NDCs) and the broader objective of achieving net-zero emissions by 2070.

The State is actively pursuing the expansion of the rooftop solar, decentralized renewable energy systems, utility-scale solar projects, and renewable energy-based electrification initiatives. At the same time, the state has substantial potential for utility-scale solar power project development through floating solar in reservoirs and backwaters, canal-top solar systems, and ground-mounted or large rooftop installations. Preliminary studies undertaken by the World Bank in collaboration with ANERT for select reservoirs, including Kallada, Pothundy, and Karapuzha, indicate the feasibility of such approaches. However, the diversity of site conditions, fragmented ownership patterns (including KSEB, Irrigation Department, and Kerala Water Authority), grid constraints, and environmental sensitivities present significant challenges for large-scale deployment.

With the increasing scale & complexity of renewable energy initiatives in the State, there is a need to strengthen programme-level coordination, technical assessment, monitoring, documentation, and analytical support within ANERT. In addition, a structured, State-wide approach is required to assess and prioritise utility-scale solar opportunities based on technical feasibility, site suitability, and grid considerations. Such support is essential to enable informed decision-making, improve implementation efficiency, and ensure alignment with MNRE guidelines and State policy objectives.

Under the RE500 Programme, it is proposed to establish a Project Management Unit (PMU) to provide technical, analytical, and coordination support to ANERT for effective planning, monitoring, and evaluation of renewable energy initiatives in Keralam. In addition to PMU support, the assignment will also include supporting ANERT in identifying, screening, and prioritising utility-scale solar power opportunities in the state through a comprehensive pre-feasibility study to inform future project development and tendering.

Objective:

The objective of this assignment is-

1. To set up a PMU to provide programme-level project management support to ANERT for effective coordination, monitoring, reporting, and technical oversight of RE initiatives.
2. To facilitate coordination and execution of technical activities on behalf of GIZ, including stakeholder coordination, data collection and analysis, process support, and organisation of workshops and consultations to improve institutional capacity & implementation outcomes.
3. Support effective implementation and monitoring of key schemes such as PM Surya Ghar and other State-led renewable energy programmes.
4. To provide technical advisory and analytical support to ANERT across identified priority areas, including assessment of deployment models, RE initiatives, identification of potential site through pre-feasibility study and preparation of concept notes or preliminary projects.
5. To support ANERT in identifying, screening, and prioritising utility-scale solar power opportunities in Keralam through a comprehensive pre-feasibility study, covering technical, site, and grid-planning considerations, to inform future project development, tendering & DPR structuring for different solar technologies like solar in reservoirs and backwaters, canal-top, ground mounted or large rooftop installations.

Target group and other stakeholders

The primary target group of this assignment is the ANERT, Govt. of Keralam. The PMU will provide direct support to ANERT's management and programme teams responsible for renewable energy planning and implementation.

Key stakeholders include but not limited to, the Distribution Utility (KSEB Limited), State Transmission Utility, relevant State departments, Local Self-Government Institutions (LSGIs), MNRE, training partners, and other agencies involved in renewable energy deployment

2. Task to be performed by the contractor**Scope of work**

The aim of the proposed assignment is to establish and operationalise a PMU partially embedded within ANERT to serve as the central coordinating body, on behalf of the GIZ, for the project management activities. The PMU will include experts (see section 4A) who will be stationed at ANERT office/onsite to conduct the activities under this assignment. The

remaining experts will provide off-site and short-term technical inputs and will be present onsite as and when needed. The PMU will be responsible for effective planning, implementation, monitoring, and evaluation of tasks under this assignment. The Consultant will also provide technical assistance and ensure quality assurance across all outputs and activities.

In addition to the PMU assignment, it is proposed to undertake pre-feasibility study across the state & identify the potential sites for utility-scale solar projects. This will include systematic screening and categorisation of identified sites based on key parameters such as resource potential, physical and environmental constraints, technical suitability, and availability of grid evacuation infrastructure.

2.1 General Terms of Reference

The PMU will:

- Function in an advisory and facilitative capacity.
- Work in close coordination with designated ANERT officials.
- Support programme-level planning, monitoring, reporting, and analytical tasks.
- Maintain structured documentation of activities, outputs, and decisions.
- Ensure alignment with applicable MNRE guidelines and State policies.
- Provide support to other activities supported by GIZ under the RE500 Programme, as may be identified and mutually agreed with ANERT during implementation phase.
- The PMU will not undertake statutory approvals, financial disbursement, or any regulatory decision-making functions.
- Support in site identification, preliminary feasibility assessment, technology suitability analysis considering Keralam-specific geographical and grid conditions, and planning-level inputs for project development in coordination with KSEB and other relevant stakeholders.
- Provide technical advisory support for potential solar project opportunities including ground-mounted, floating, canal-top, and large rooftop installations. & advisory inputs to facilitate preparation of DPR frameworks, tender structuring approaches, and project development strategies, as required by ANERT during inception phase

Key tasks include but are not limited to:

Work Package 1: Project Management Unit (PMU) Support to ANERT

Work Package 2: Design and Technical Advisory Support for Utility-Scale Solar Projects

Work Package 1 (WP1): Project Management Unit (PMU) Support to ANERT

The primary focus is upscaling renewables in Keralam state, and the PMU will function as a technical and coordination support unit, embedded within ANERT.

The comprehensive implementation-level scope of each of the given activities will be jointly discussed and finalized with ANERT during inception phase. The PMU is required to be flexible with changing requirements of ANERT and have onsite presence during the tenure of the contract and work as and when required and will provide technical and analytical support for identified activities under the RE500 Programme.

Initially, the following projects and priority activities are envisaged under this Work Package, as discussed and agreed with ANERT:

Task 1.1 (WP1) Programme level technical Support, monitoring and reporting of RE schemes & initiatives:

- The PMU is required to support ANERT in coordination with DISCOMs, local bodies, empanelled agencies, and other stakeholders to ensure smooth execution & tracking of RE programmes and schemes such as Solarization of public buildings, PM Surya Ghar, solarization of agri pump sets etc., under state and central schemes
- The PMU will assist in developing and maintaining programme-level implementation plans, timelines, and activity trackers, and provide technical support for scheme execution, including inputs on aggregation models where applicable.
- Continuous monitoring of installation progress, vendor performance, and subsidy disbursement processes, including verification, tracking, and reconciliation of financial flows in coordination with MNRE and relevant state agencies.
- Based on programme data and field inputs, the PMU will identify implementation bottlenecks and provide actionable recommendations to improve efficiency and uptake.
- Conduct periodic performance reviews of RE schemes (e.g., PM Surya Ghar), including assessment of implementation progress, scheme uptake, and key performance trends.

Task 1.2 (WP1) Technical Review & Analytical Support

- Provide technical analysis, review & research of implementation approaches, deployment models, and scheme frameworks for renewable energy projects in alignment with MNRE guidelines, standards, and advisory frameworks, and flag observations for consideration by ANERT.
- Assist in technical analysis, research, and documentation, including preparation of:
 - Technical notes and briefs
 - Analytical summaries on implementation models and emerging issues
 - Background material to support decision-making and policy alignment.
- Support development of standardised checklists, formats, and reference templates for tracking installation progress, commissioning status, and programme-level technical parameters.
- Facilitate technical reviews, including compilation of observations and follow-up notes.
- Identify implementation bottlenecks and recommend corrective actions for programme design.

Task 1.3 (WP1) Skill gap analysis and training

- Conduct comprehensive study on skill gap analysis & identify training needs across technical, managerial, and field levels.
- Structure & update the training curriculum & capacity building frameworks.
- Assist in developing placement-oriented mechanism.

Task 1.4 (WP1) MIS, Data Governance & Digital Systems

- Design and operationalise Management Information Systems (MIS) frameworks for programme tracking.

- Standardise data collection, validation, and reporting protocols across stakeholders.
- Develop dashboards and visualisation tools for decision-making.
- Establish data governance practices (data consistency, validation, audit trails).

Task 1.5 (WP1) Analytical study and technical support for decentralized RE solutions

- Research & identify the potential sites for implementation of decentralized RE initiative.
- Conduct site survey, assessment, feasibility analysis & technology options (micro-grids, standalone systems) selection.
- Identify implementation challenges and scalability potential & provide planning & advisory support for the project implementations.

Task 1.6 (WP1) Policy, Regulatory & Financial Analysis Support

- Analyse policy and regulatory frameworks impacting RE deployment & assess financial structures of schemes (subsidy flows, cost structures, CAPEX/RESCO models) in Keralam.
- Identify policy and financial bottlenecks affecting implementation.
- Provide recommendations for improving scheme design and financial viability.

Task 1.7 (WP1) Preparation of Concept Notes and Preliminary Project Reports

- Identify emerging renewable energy opportunities relevant to Keralam.
- Prepare concept notes and preliminary project reports.
- Conduct high-level technical and financial screening.
- Identify potential funding opportunities and alignment pathways.
- Support stakeholder consultations and proposal refinement.

Deliverables under WP1:

Note: All the deliverables are subject to the approval of ANERT officials and GIZ team/Project AV

Deliverables	Description
D1: Programme Implementation, Monitoring and Reporting Framework (Task 1.1)	Framework covering implementation planning, tracking mechanism, monitoring approach and reporting structure for RE schemes
D2: Periodic Programme Monitoring and Performance Reports (Task 1.2)	Regular progress report including subsidy tracing, vendor performance, trends and bottlenecks
D3: MIS, Dashboard and Capacity Building Outputs (Task 1.3 and 1.4)	Operational MIS system with dashboard, data protocols along with skill gap assessment
D4: Technical, Analytical and Policy Advisory Notes (Task 1.5, 1.6, and 1.7)	Technical reviews, analytical briefs, policy and financial analysis, and recommendations to support decision-making and programme improvement.
D5: Handover and Final dissemination Workshop (all the tasks under WP1)	Periodic guiding notes, handover documents, executive summary report, relevant presentations, workshop organisation, workshop logistic and planning

Milestones/partial work under WP1:

Milestone	Deadline from the date of award
1 Submission and Approval of Programme Implementation, Monitoring and Reporting Framework (D1)	Month 2
2 Operationalisation of MIS, Dashboard and Capacity Building Framework (D2)	Month 7
3 Mid-term Programme Monitoring and Advisory Outputs D2 (interim) + D4 (interim)	Month 9
4 Final Programme Monitoring Reports and Advisory Outputs D2 & D4 (final)	Month 14
5 Final Handover and Dissemination Workshop (D5)	Month 18

Work Package 2 (WP2): Design and Technical Advisory Support for Utility-Scale Solar Projects

WP2 focuses on identification, planning, and early-stage development of utility-scale solar projects in Keralam. The consultants will provide technical advisory support for potential solar project opportunities including ground-mounted, floating, canal-top, and large rooftop installations. The support will include site identification, preliminary feasibility assessment, technology suitability analysis considering Keralam-specific geographical and grid conditions, and planning-level inputs for project development in coordination with KSEB and other relevant stakeholders. The PMU will also provide advisory inputs to facilitate preparation of DPR frameworks, tender structuring approaches, and project development strategies, as required by ANERT during inception phase.

The contractor must perform following tasks under this Work Package.

Task 2.1 (WP2): Design and Technical Advisory Support for Utility-Scale Solar Projects

- Identify and assess potential sites for utility-scale solar deployment including ground-mounted, floating solar, canal-top solar, and large rooftop systems in coordination with ANERT/ KSEB/ relevant stakeholder.
- Undertake preliminary technical screening of identified sites considering land availability, water bodies (for floating solar), canal infrastructure, solar resource potential, and proximity to grid infrastructure.
- Assess site-specific constraints including environmental, regulatory, land-use, and infrastructure considerations relevant to Keralam.
- Conduct preliminary feasibility assessments including indicative capacity potential, technology suitability, and cost considerations, business model etc.
- Provide recommendations on appropriate technology configurations for different deployment types.
- Assess grid integration aspects including evacuation feasibility and coordination requirements with KSEB.
- Provide planning-level inputs for project development including indicative project configurations, potential implementation models, and risk considerations.
- Provide advisory inputs for preparation of DPR frameworks, tender structuring approaches, and project development strategies as required by ANERT.

- Prepare analytical notes and technical briefs summarizing site assessments and recommendations.

Deliverables work under WP2:

Deliverables	Description
D6: Utility-Scale Solar Opportunity Assessment Summary report	Brief report including potential sites indicative capacity potential, site constraints, project opportunities and other relevant information/observations
D7: Preliminary Technical Feasibility Notes and assessment report	-Analytical notes for shortlisted sites & preliminary feasibility observations. -Comparative assessment of solar deployment options considering technical feasibility, environmental aspects, and implementation considerations.
D8: Advisory Note on Project Development and Tender Structuring	Planning-level advisory inputs in structuring solar project development approaches including procurement models, tender structuring considerations, and DPR preparation frameworks.
D9: Stakeholder workshop	Organise a stakeholder workshop with ANERT, KSEB, selected developers, and other relevant stakeholders. Gather recommendation and document in advisory note

Milestones/partial work under WP2:

Milestones/process steps/partial services	Deadline from the date of award
Submission of utility-Scale Solar Opportunity Assessment Summary report (D6)	Month 3
Submission of Preliminary Technical Feasibility Notes and assessment report (D7)	Month 5
Advisory Note on Project Development and Tender Structuring (D8)	Month 10
Stakeholder workshop (D9)	Month 12

Note

- Please note that the consultant is responsible for any data/information collection, analysis, contacting and conducting meetings with the organisation to fulfil the needs of this assignment. And upon request of partner and/or GIZ, an onsite presence of consultant at partner premises might be required to carry out project related activities.
- The contractor is responsible for selecting, preparing, training and steering the international and national, short and long-term experts assigned to perform the advisory tasks.
- The contractor provides equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.
- The contractor reports regularly to GIZ in accordance with the current AVB of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

In addition to the reports required by GIZ in accordance with the AVB, the contractor submits the following reports:

- Inception report
- Contributions to reports to GIZ's commissioning party
- Brief quarterly or half-yearly reports on the implementation status of the project

Period of assignment: 16.07.2026 to 15.01.2028.

3. Concept

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation**.

Project management of the contractor (1.6)

(1.6.1) The tenderer is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

(1.6.2) The tenderer is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

(1.6.3) **Consultants backstopping strategy** (incl. CVs of the technical and administrative backstopper(s): Please explain how you intend to mobilise your expertise beyond the specified staff to the assignment as per section 4 (e.g., quality assessment of other staff, consultants' internal knowledge management, access to professional communities or other sources of knowledge or expertise) (up to 2 pages plus CVs of backstoppers)

The tenderer is required to describe its backstopping concept. The following services are part of the standard backstopping package, which (like ancillary personnel costs) must be factored into the fee schedules of the staff listed in the tender in accordance with Section 3.1 of the GIZ AVB:

- Service-delivery control
- Managing adaptations to changing conditions
- Ensuring the flow of information between the tenderer and GIZ
- Assuming personnel responsibility for the contractor's experts
- Process-oriented steering for implementation of the commission
- Securing the administrative conclusion of the project

Other specific requirements

- All the deliverables, project documents, activities, project communication should use Gender-sensitive language, design, and communication instruments. The bidder is encouraged to promote diversity/gender mix in the proposed team

4. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, based on their CVs (see Chapter 7), the range of tasks involved and the required qualifications. The below specified qualifications represent the requirements to reach the maximum number of points.

Notes:

- GIZ promotes gender diversity and gender balanced team proposals by the bidders is encouraged.

Team Leader-

Tasks of Team Leader: The Team Leader will lead the overall implementation and coordination of the PMU established at ANERT. Tasks of Team Leader includes the following, but not limited to:

- Develop the overall methodological and analytical framework for programme management support and utility-scale solar pre-feasibility assessment.
- Lead the overall planning, execution, and monitoring of activities under the assignment
- Oversee the preparation and quality assurance of all analytical reports, implementation guides, concept notes, and preliminary project reports prepared under the assignment.
- Coordinate with stakeholders and presentation of results/outcomes as and when needed.
- Ensure effective coordination and task allocation among experts involved in the assignment and monitor progress against agreed milestones.
- Timely submission of project deliverables, progress reports, and milestone
- Support knowledge management, documentation of key learnings, and dissemination of outputs to relevant stakeholders.
- Organise and coordinate the workshop/meetings, and manage and plan the overall logistics related arrangements to conduct the stakeholder meetings and workshops

Qualifications of the Team Leader

- Education/training (2.1.1): Advanced University degree (Masters) in Engineering, Science, Management, or Energy-related disciplines.
- Language (2.1.2): Business fluency in English C1 level **mandatory**
- General professional experience (2.1.3): At least **7 years of professional experience** in the renewable energy / power sector. Part time experience will not be counted.
- Specific professional experience (2.1.4): To qualify for full marks, the expert should demonstrate **at least 5 years of experience** in the following areas
 - Experience in establishing or supporting Project Management Units (PMUs) or programme management support for RE initiatives or case studies with national/international government agencies, utilities, or DISCOMs.
 - Experience in solar programmes or distributed RE deployment, including familiarity with RE schemes
 - Experience in international/ national solar project development models **such as** CAPEX, RESCO/BOOT, and financial viability considerations.
- Leadership/management experience (2.1.5): **3 years** of management/leadership experience as project team leader or manager in a company.
- Regional experience (2.1.6): 4 years of experience in projects in Asia (region), of which 2 years in projects in India (country). Working in the state of Kerala would be preferred.
- Development cooperation (DC) experience (2.1.7): 2 years of experience working for development cooperation would be preferred

Expert 1- Utility scale solar expert

The utility scale solar expert will be primarily responsible for activity related to utility scale solar PV under WP2 and must contribute to other activities as needed under the overall assignment.

Tasks of Expert 1

The tasks include the following, but not limited to:

- Site identification, screening and technical assessment of sites for utility scale solar activity including different PV installations (ground mounted/floating/canal top/RTPV).
- Analysis of site-specific constraints (technical, environmental, regulatory, infrastructure, land-use etc).
- Estimation of capacity potential, technology options and development configurations along with grid integration aspects, including proximity to substations, evacuation feasibility, and coordination requirements with the utility.
- Prepare preliminary technical feasibility notes and assessment reports for identified project opportunities.
- Conduct comparative assessment of utility-scale solar deployment options, including technical feasibility, implementation considerations, and risk factors.
- Provide inputs on project structuring approaches, including suitable implementation models and development strategies.
- Prepare advisory inputs on tender structuring and DPR frameworks, including key technical parameters, DPR structuring considerations, and risk allocation aspect

Qualifications of Expert 1

- Education/training (2.2.1): Advanced University or equivalent (master's) degree in Electrical Engineering, Renewable Energy Engineering, Energy Systems, Power Systems, or related disciplines.
- Language (2.2.2): Business fluency in English (minimum **C1 level**) is **mandatory**
- General professional experience (2.2.3): Minimum **6 years of professional experience** in the renewable energy / power sector. Part-time experience will not be counted.
- Specific professional experience (2.2.4): To qualify for full marks, the expert should demonstrate **at least 4 years of experience** in the following areas
 - Experience in utility-scale solar project development or advisory, including site identification, preliminary feasibility assessment, and technology selection for ground-mounted, floating, canal-top, or large rooftop solar projects.
 - Demonstrated understanding of project development and implementation frameworks, including grid integration aspects, project structuring approaches, and familiarity with tendering processes, DPR preparation, or procurement models for solar projects.
- Leadership/management experience (2.2.5): Experience in leading or contributing to solar project development assignments or technical advisory roles
- Regional experience (2.2.6): 4 years of experience in projects in Asia (region), of which 2 years in projects in India (country).

Expert 2- Short Term RE Policy and Financial expert (international expert)

The expert is expected to bring international experience and exposure to utility-scale solar project development, including global best practices and approaches.

Tasks of RE & policy finance expert

Tasks include the following, but not limited to:

- Provide international best practices related to RE policy and financial models.
- Develop financial and economic assessment frameworks for comparing RE deployment options under different business models.
- Assess subsidy structures, incentive mechanisms, and funding schemes applicable to rooftop and distributed solar programmes.
- Analyse financial and operational performance aspects of schemes' implementation, including subsidy disbursement mechanisms and cost structures.
- Identify financial and policy-related bottlenecks affecting RE project deployment and programme implementation
- Prepare recommendations on policy, regulatory, and financial interventions to improve uptake of distributed solar and enhance programme effectiveness.
- Lead the preparation of concept notes and preliminary project reports, including high-level policy and financial screening of proposed RE initiatives.
- Develop financial structuring approaches and indicative business models for proposed RE projects.
- Contribute to stakeholder consultations and workshops, particularly on policy, regulatory, and financial aspects of renewable energy deployment

Qualifications of Expert 2

- Education/training (2.3.1): Advanced University degree (Masters) in Economics, Finance, Energy Economics, Public Policy, Management, Engineering, or related disciplines.
- Language (2.3.2): Business fluency in English C1 **mandatory**
- General professional experience (2.3.3): **Minimum 6 years** of professional experience in energy economics renewable energy / power sector. Part time experience will not be counted.
- Specific professional experience (2.3.4): **At least 4 years** of experience in the following areas ;
 - Demonstrated experience in international assignment related to RE policy, regulatory analysis, and financial assessment, including evaluation of RE project deployment models (e.g., CAPEX, RESCO) and understanding of relevant policy frameworks and incentive mechanisms.
 - Demonstrated experience in international assignment related to financial modelling, project structuring for RE infrastructure projects, including identification of funding sources and assessment of financial viability.

Expert 3- RE Programme monitoring and data analytics expert

This expert will be present on-site (ANERT Office) as and when needed during the project implementation and would be responsible for coordinating and communicating with ANERT on behalf of GIZ and supporting PMU team in all the activities.

Tasks of RE Programme monitoring and data analytics expert

The expert will design and operationalise the programme monitoring framework under WP1 tasks, for tracking implementation of RE initiatives, like PM surya ghar in the state. The task of this expert includes the following, but not limited to:

- Collect, compile, and manage programme data from ANERT, DISCOMs, MNRE portals, and other relevant sources.
- Analyse installation progress, consumer adoption trends, vendor performance, and subsidy disbursement data under PM Surya Ghar.
- Develop and maintain data tracking tools, dashboards, and reporting formats for monitoring programme performance.
- Prepare periodic programme monitoring notes and analytical reports highlighting progress trends, key performance indicators, and implementation status.
- Identify data-driven insights and operational bottlenecks, including delays in installation, subsidy processing, and stakeholder coordination.
- Support data validation, reconciliation, and consistency checks across multiple data sources and reporting systems.

Qualifications of Expert 3

- Education/training (2.4.1): University degree in Engineering, Data Science, Economics, Energy Systems, or related disciplines.
- Language (2.4.2): Business fluency in English C1 **mandatory**

- General professional experience (2.4.3): Minimum **3 years of professional** experience in data analysis, programme monitoring, or analytical roles in the energy / infrastructure sector. Part-time experience will not be counted.
- Specific professional experience (2.4.4): To qualify for full marks, the expert should demonstrate at least **3 years of** experience in the following areas:
 - Experience in programme monitoring, data analysis, and performance tracking for RE programmes, including handling large datasets and generating analytical insights.
 - Demonstrated experience in data management, dashboard development, or analytical reporting, including use of tools such as Excel, Power BI, Python, or similar for data analysis and visualisation.
- Regional experience (2.4.6): 3 years of experience in projects in Asia (region), of which 2 years in projects in India (country). Working in the state of Kerala would be preferred.

Expert 4: RE domain expert

The expert will be present on-site (ANERT Office) as and when needed during the project implementation and would be responsible for coordinating and communicating with ANERT on behalf of GIZ and supporting PMU team in all the activities. The expert will support the field level assessment, visits, site survey, workshop and stakeholder consultation etc. under this assignment.

Tasks of RE domain expert, but are not limited to

- Identify and evaluate site-specific conditions and technology options for renewable energy deployment, including sustainability and scalability considerations.
- Perform field-level assessments and data collection for selected locations, where required.
- Provide specialized analytical inputs for renewable energy studies, including solar deployment models, programme performance, and sectoral trends.
- Support data analysis, validation, and interpretation for programme monitoring and analytical studies, as required.
- Contribute to the preparation of technical reports, analytical notes, and study outputs under different work packages.
- Conduct skill gap assessment and tasks related to capacity-building and curriculum updating.

Qualifications of RE domain expert

- Education/training (2.5.1): University degree in Engineering, Renewable Energy, Management, or related disciplines.
- Language (2.5.2): Business fluency in English C1 is mandatory
- General professional experience (2.5.3): **Minimum 3 years** of professional experience in renewable energy / power sector projects, project execution, or policy/financial analysis. Part time experience will not be counted.
- Specific professional experience (2.5.4):
At least 3 years of combined experience in the following areas

- Experience in technical and field level assessments
- Experience in capacity building, skill gap assessment, or training programme design in the energy sector
- Familiarity with national/state renewable energy policies and DISCOM regulations.
- Regional experience (2.5.6): 3 years of experience in projects in Asia (region), of which 2 years in projects in India (country). Working in the state of Kerala would be preferred.

Soft skills of all team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Socio-cultural skills
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking
- Strong communication and presentation skills

5. Costing requirements

Assignment of personnel and travel expenses

Per diem allowances are reimbursed as a lump sum up to the maximum amounts permissible under tax law for each country as set out in the country table in the circular from the German Federal Ministry of Finance on travel expense remuneration (downloadable from the [German Federal Ministry of Finance – tax treatment of travel expenses and allowances for international business travel as of 1 January 2026 \(GERMAN ONLY\)](#)).

Feldfunktion geändert

Accommodation allowances are reimbursed as detailed in the specification of inputs below.

With special justification, additional Accommodation costs up to a reasonable amount can be reimbursed against evidence.

All business travel must be agreed in advance by the officer responsible for the project

Sustainability aspects for travel

GIZ has undertaken an obligation to reduce greenhouse gas emissions (CO₂ emissions) caused by travel. When preparing your tender, please incorporate options for reducing emissions, such as selecting the lowest-emission booking class (economy) and using means of transport, airlines and flight routes with a higher CO₂ efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

CO₂ emissions caused by air travel must be offset. GIZ specifies a budget for this, through which the carbon offsets can be settled against evidence.

There are many different providers in the market for emissions certificates, and they have different climate impact ambitions. The [Development and Climate Alliance \(German only\)](#)

Feldfunktion geändert

has published a [list of standards \(German only\)](#). GIZ recommends using the standards specified there.

Feldfunktion geändert

Specification of inputs

Fee days	Number of experts	Number of days per expert	Total	Comments
Team Leader	1	30	30	
Expert 1: Utility scale solar expert	1	60	60	
Expert 2: Short Term RE policy and financial expert	1	20	20	
Expert 3: RE Programme monitoring and data analysis expert	1	70	70	
Expert 4: RE Domain expert	1	70	70	
Travel expenses (working)	Quantity	Number per expert	Total	Comments
Daily allowance in country of assignment	30	-	660 EUR	Lump sum according to price schedule daily rates
Overnight allowance in country of assignment	30	-	2400 EUR	Against evidence according to price schedule overnight rates
Transport	Quantity	Number per expert	Total	Comments

International return flight	1	-	1500 EUR	Against evidence
Domestic return flights	12	200	2400 EUR	Against evidence
CO ₂ compensation for air travel	1	-	1380 EUR	A fixed budget of total 1380 EUR is earmarked for settling carbon offsets against evidence for international (180 EUR) and domestic (1200 EUR) return flights.
Travel expenses (train, taxi) • car/taxi/etc.	1		1500 EUR	A fixed budget of 1500 EUR is earmarked against evidence for travel within the country of assignment, transfer to/from airport etc.
Other	1		500 EUR	A fixed budget of 500 EUR is earmarked against evidence for visa and others for travel to the country of assignment
Other costs	Number	Price	Total	Comments
Flexible remuneration	1	15000 EUR	15000 EUR	A fixed budget of EUR 15000 is foreseen for flexible remuneration. Please incorporate this budget into the price schedule. against evidence Use of the flexible remuneration item requires prior written approval from GIZ.
Workshops (final dissemination) & stakeholder consultation	2	-	2000 EUR	A budget of total 2000 EUR is earmarked for workshop/stakeholder consultation etc. against evidence . The budget will cover the costs related to hosting the workshop / roundtables / meeting etc., including venue booking, catering, event materials preparation, photography, and other logistical expenses strictly associated with the events. The maximum no. of participants in each event will be 60.

Travel

International and domestic (within India) travel:

International travel is envisaged to India (1 return international flight) and domestic travel within India between Delhi, Kerala, and Duty station of the consultant. Travel budget is allocated under this contract which includes domestic flights and international flight, per-diem, local travel, and accommodation. 12 return domestic flights are envisaged under this activity. The

consultants are required to provide the travel related budget details in their proposal considering accommodation for up to mentioned person days.

The consultant is supposed to propose travel/flight plan in the financial offer. The consultant will also provide the base location of each expert for the travel sector arrangement. All necessary flights and other travel costs (such as transfer costs to the airport and back, taxi costs will be reimbursed accordingly (against evidence). Only these amounts shall be inserted into the price sheet for the financial offer.

Please note that all travel, per-diem allowances, and accommodation costs shall only be reimbursed as against evidence (actual payment will depend on the actual travel costs against proper original receipts, hotel bills, taxi bills, flight, or train tickets and boarding pass.). Before traveling, each travel request will have to be approved by the GIZ officer in charge for implementation of the project and the consultant will follow GIZ travel guidelines.

It must be noted that interns cannot be deployed in the assignment and travel expenses of only those experts will be reimbursed whose CVs are proposed in the offer. Travel budget will only be used and paid when actual travel happens.

Other Costs

Printing, communication, and material cost will be arranged by consultant

Flexible remuneration item

Applicable (please refer to chapter 5 costing requirements).

A fixed budget is foreseen for flexible remuneration. Please incorporate this budget into the price schedule. **against evidence**. Use of the flexible remuneration item requires prior written approval from GIZ.

6. Requirement on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Section 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid must be drawn up in English (language).

The complete bid shall not exceed **20** pages (excluding CVs & other supporting company documents)

The CVs of the personnel proposed in accordance with Section 4 of the ToRs shall be submitted using the EU (<https://europass.cedefop.europa.eu/documents/curriculumvitae>) format. The CVs shall not exceed 4 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long. The CVs must be submitted in English (language) only.

Please calculate your price bid based exactly on the aforementioned costing requirements. In the contract, the consultant has no claim to fully exhaust the days/travel/workshops/ budgets.

The number of days/travel/workshops and the budget amount shall be agreed in the contract as 'up to' amounts. The specifications for pricing are defined in the price schedule.

The financial offer has to contain the daily rate of fees for each expert and the travel cost.

The technical offer must not contain any price information. Technical and financial offers must be submitted as separate PDF documents and signed. Please refer document "bidding condition" for detailed guideline on process of submission.