



## TERMS of REFERENCE (TOR)

**For the provision of services related to the development of a “Baseline assessment, and strategy and action plan on efficient cooking technologies and fuels in São Tomé and Príncipe”**

**UNIDO Project Title:**  
**“Building institutional capacity for a renewable energy and energy efficiency investment programme for São Tomé and Príncipe” (ID 200158)**

**Date:** 6 June 2023

### 1. General Background Information

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The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability. The mission of UNIDO, as described in the *Lima Declaration* adopted at the fifteenth session of the UNIDO General Conference in 2013 as well as the *Abu Dhabi Declaration* adopted at the eighteenth session of UNIDO General Conference in 2019, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States. The relevance of ISID as an integrated approach to all three pillars of sustainable development is recognized by the 2030 Agenda for Sustainable Development and the related Sustainable Development Goals (SDGs), which will frame United Nations and country efforts towards sustainable development. UNIDO’s mandate is fully recognized in SDG-9, which calls to “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”. The relevance of ISID, however, applies in greater or lesser extent to all SDGs. Accordingly, the Organization’s programmatic focus is structured in four strategic priorities: Creating shared prosperity; Advancing economic competitiveness; Safeguarding the environment; and Strengthening knowledge and institutions.

Sao Tomé and Príncipe (STP) comprises a total area of 1,001 km<sup>2</sup>, including islands and islets (the two largest islands São Tomé with 859 km<sup>2</sup> and Príncipe with 142 km<sup>2</sup>, including the adjacent islets). As a Small Island Developing State, STP faces specific challenges in relation to its size, remoteness from large markets, dependence on a small number of economic sectors, direct investment and remittances inflow, lack of resources, and a significant trade deficit. Moreover, key sectors of the economy are highly vulnerable to natural, climate, and external economic shocks.

The United Nations Industrial Development Organization (UNIDO) in partnership with the General Directorate for Natural Resources and Energy (DGRNE) of the Ministry of Infrastructure and Natural Resources (MIRNA, former MOPIRNA) and the National Designated Authority (NDA) at the Ministry of Planning, Finance and Blue Economy (MPFEA) are implementing the GCF readiness project “Building institutional capacity for a renewable energy and energy efficiency investment programme for São Tomé and Príncipe”. It is being executed in close coordination with the ongoing GEF funded UNIDO project “Strategic program to promote renewable energy and energy efficiency investments in the electricity sector of São Tomé and Príncipe”. It is also linked with the regional activities of the Central African Centre for Renewable Energy and Energy Efficiency (CEREEAC), which was recently established by UNIDO and the Economic Community of Central African States (ECCAS) in Angola, Luanda.

The project contributes to the nation’s Vision 2030 “São Tomé e Príncipe 2030: the country we need to build”, which aims to transform the country into a climate-resilient and vibrant island hub for blue economy business, financial services and tourism, benefitting from the growing regional market of the ECCAS. The success of the vision highly depends on a power sector reform and a transformational shift of the entire energy system from a nearly complete fossil fuel import dependency to renewable energy and energy efficiency.

The energy efficiency activities focus particularly on modalities to reduce non-technical grid losses, energy efficiency standards for appliances and transport, as well as efficient cooking. The latter is a tremendous challenge for the social and economic development of particularly low-income families in rural areas. In Sao Tomé and Príncipe, the majority does not have access to sustainable cooking services and relies significantly on traditional biomass (firewood) and charcoal. Therefore, the National Renewable Energy Action Plan (NREAP) and the National Energy Efficiency Action Plan (NEEAP) include a transformational vision towards clean cooking appliances with less impact on household health and the environment.

The goal is to replace traditional stoves with efficient high-efficiency stoves, and promote the use of liquid fuels for cooking (LPG primarily), and to a lesser extent, the inclusion of the use of electricity and solar cookstoves. The goal of 100% access to energy-efficient cooking by 2030 complements the goal of 100% access to electricity services by 2030, thus ensuring universal energy access by 2030 for all Sao Tomeans. However, so far the cooking sector does not receive sufficient attention and there is hardly international support for this transformation. Therefore, in this context, UNIDO is seeking consulting support to undertake a baseline assessment, a clean cooking strategy and, a project concept for implementation.

To learn more about UNIDO go to [www.unido.org](http://www.unido.org), to learn more about the project “**Building institutional capacity for a renewable energy and energy efficiency investment programme for São Tomé and Príncipe**” visit the link: <https://open.unido.org/projects/ST/projects/200158>

## **2. Specific issues addressed by the assignment**

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### ***Biomass use for cooking in the Sub-Saharan regional context***

Despite the well-documented benefits of access to clean cookstoves, around three billion of the world’s population still use polluting and inefficient cooking solutions. About 2.6 billion people, or 1 in 3 globally, lack access to safe, clean cooking fuels and technologies. The inefficient use of solid fuels has significant impacts on health, socioeconomic development, gender equality, education, and climate. Most of the Sub-Saharan African countries are heavily reliant on unclean cooking fuels due to facing multifaceted difficulties in overcoming such monotonic cooking fuel dependency. However, considering the environmental and human health hazards associated with the combustion of dirty cooking fuels, it has become imperative for these nations to identify factors that can enable them to transition from the use of unclean to cleaner cooking fuels.

Besides, the predicted energy efficiency thresholds are observed to vary across the Sub-Saharan nations belonging to different income groups and levels of clean cooking fuel and technology access for the respective population. However, in all cases, the estimated energy efficiency threshold levels are witnessed to be greater than the mean level of energy use efficiency of these countries. Moreover, results also certify that economic growth, environmental pollution, financial globalization, financial development, and women empowerment are some of the other major drivers of clean cooking fuel transition across Sub-Saharan Africa. However, the impacts of these macroeconomic variables are observed to be relatively larger for the comparatively richer and less unclean cooking fuel-dependent nations. Considering that women, elders and children are the most impacted of lacking access to clean cooking solutions since they are the ones who stay more time at home.

Dependence on these fuels has many adverse impacts on people's health. Wood combustion is an incomplete process and releases gases whose toxicity, especially the inhalation of wood smoke in enclosed and poorly ventilated rooms causes chronic obstructive pulmonary disease (COPD), as well

as other diseases such as cancer, tuberculosis, heart disease, weight loss and resulting eye disease in newborns. Additionally, charcoal production poses a significant and growing risk to forests and biodiversity. To ensure forest conservation and protect the health of the population, sub-Saharan African countries require broad access to sustainable sources and technologies for using firewood, charcoal, and other biomass fuels. It is estimated that about 85% of the population of sub-Saharan Africa depends on wood and charcoal for cooking. Even in the most optimistic scenario, a large percentage of the region's population will continue to rely on fuel wood and especially charcoal in upcoming years.

In their aspirations for socioeconomic growth, several governments in sub-Saharan Africa aspire to make "modern" cooking technologies accessible to their populations. However, this energy transition requires time, resources, and significant cultural changes. Accordingly, governments and policymakers must consider the potential negative impact that a sudden shift to high technology has on society. For example, promoting the use of gas stoves without ensuring a reliable and affordable supply of cooking gas while banning the use of charcoal can lead to disastrous consequences for both society and the government implementing the policy.

Social and economic factors must be carefully evaluated during the transition to modern technologies, gradually building acceptance and improving economic conditions to make these technologies affordable. Therefore, in the short to medium term, energy sources such as charcoal, briquettes and palettes from wastes already widely used by a significant percentage of the urban population, can provide an intermediate solution to the energy transition.

Solid biomasses, such as firewood, agricultural residues, and animal dung, are still the preferred choice of fuel for cooking and heating purposes among the SSA nations, as it is easily accessible and less expensive than cleaner forms of fuel. Such unclean cooking fuel dependency is particularly more severe for rural households since more than 85% of these households rely on solid biomasses for meeting their energy demand.

The clean and improved cooking sector in SSA has evolved considerably but continues to have massive scope for improvement. A very small percentage of Africans use "clean" cookstoves that run on modern forms of fuels or technologies such as liquefied petroleum gas (LPG) and electric stoves as the primary cooking appliances. Many households continue using biomass-burning stoves as a secondary form of cooking technology due to the phenomenon of fuel 'stacking', which refers to the simultaneous usage of multiple fuels and technologies. This assessment is also valid for the Economic Community of Central African States (ECCAS)

### ***Use of traditional biomass for cooking in Sao Tomé and Príncipe***

In Sao Tomé and Príncipe, the majority of the population does not have access to sustainable cooking services and relies significantly on traditional biomass (firewood) and charcoal. It is estimated that about 72% of the population uses solid fuels for cooking, with firewood used by 45.6% of households, followed by charcoal (26.5%) and oil (25.5%), with liquefied petroleum gas (LPG) used by only 1.5%. In addition to firewood, charcoal is also used for cooking and is produced locally. It is estimated that almost 75% of the wood consumed in the country is mostly illegally and irrationally exploited without any regulation or inspection. Detailed information about the consumption of wood, firewood and charcoal is available in Table 1.

The switch to more efficient clean cooking appliances will contribute to the reduction of deforestation associated with the collection of firewood for cooking and charcoal production and, therefore, the plan will contribute to better conservation and management of forest resources. Furthermore, reusing organic waste for energy generation will bring additional environmental benefits. This could reduce the impact of waste burning and the discharge of wastewater and agro-industrial effluents into the sea.

**Table 1: Total firewood and charcoal consumption (in tons of wood).**

Years	Total Inhabitants	Inhabitants using firewood and/or charcoal	Domestic consumption of firewood and/or charcoal	Biomass consumption in bakeries (wood, firewood, charcoal)	Total consumption (wood, firewood and charcoal)
2012	178 739	102 954	71 347	4 785	76 132
2013	182 328	105 021	72 780	4 881	77 661
2014	186 024	107 150	74 255	4 980	79 235

Source: Third Communication on Climate Change prepared in 2019, in São Tomé and Príncipe, National Statistics Institute and FAO.

Currently, in STP the following types of traditional biomass stoves are dominant:

- **Three-stone stove** consists of a pot balanced on three stones over an open fire. The pot sits on the flames and the fuel rests on the ground. Generally, this stove uses firewood and has a low combustion temperature; its fire is exposed to cold wind, causing the heat to be lost to the ambient air. In São Tomé, another form of traditional stove consisting of a simple metal grid placed over an open fire is also classified under this category.
- **Traditional stove** typically uses conventional material to insulate the fire, and the pot rests above the flames. It is also produced locally using available, low-cost materials and fuels, reflecting cultural practices.

Introducing and promoting the use of more efficient burning stoves is a viable alternative for households using three-stoned or traditional stoves, particularly those in rural areas, whose income does not allow for the use of clean fuel stoves (LPG). The uses and promotion of these modern energy cooking services (MECs) appliances hold the potential for rapid adoption. The clean cooking value chain is also an interesting market segment in terms of generating primary and secondary jobs as well as revenues for local businesses. Currently, the following more efficient alternatives are under consideration:

- **Improved cookstove (ICS)** insulates the fire more effectively, and the fuel rests on a shelf so that it reaches higher temperatures. In STP, only basic charcoal-improved cookstoves are found.
- **Kerosene stove**, whose use is widespread in STP, tends to have higher performance than a traditional stove but lower than a clean fuel stove.
- **Clean fuel stove** uses clean and efficient fuels, such as liquefied petroleum gas (LPG), electricity, or biogas. Only LPG stoves are found in STP.

### **3. Objectives, scope and deliverables of the assignment**

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The main objective of the contracted UNIDO assignment is to provide DGRNE with first basic guidance on how to incentivise the uptake of clean cooking product and service markets in STP. This requires a proper analysis of technology alternatives and a clear plan on how to incentivise consumers and suppliers to switch towards more efficient and cleaner alternatives, simultaneously generating local jobs and revenues. Therefore, the contractor will provide the following services:

1. *Develop a baseline report and evaluate feasible and affordable technology options by considering also local added value creation in terms of jobs and revenues;*
2. *Develop a clean cooking strategy and action plan outlining various demand- and supply-side options to facilitate the uptake of clean cooking markets;*

3. *Develop a short project concept note for a potential clean cooking project to be proposed to international partners for funding;*
4. *Execute a training on best practices of clean cooking appliances and business models and present the deliverables of the assignment in a webinar organized by UNIDO;*

The main objective of this assignment is to develop a baseline assessment on clean cooking technologies to serve as a policy tool to incentivize action and the creation of a national market, supported by a strategy and action plan on clean cooking. Primary and secondary information shall come from the application of mixed-method approaches, including consultations with national stakeholders and energy users to ensure the needs of the STP population are taken into account. The work will be complemented by the development of a concept note and capacity-building activities through the conduction of a training and webinar. The latter to be organized by UNIDO in coordination with the GNSEC network. The assignment may also build the basis for a regional approach to be facilitated by UNIDO through the newly created CEREEAC in Luanda, Angola.

Specifically, the contractor will perform the following activities and provide the respective deliverables:

**3.1. *First Phase: Develop a baseline report and evaluate feasible and affordable local technology options by considering also local added value creation in terms of jobs and revenues of local production***

Subactivities:

- Define a mixed method approach to gather key information and data on cooking habits, technologies, materials utilized in the scope country
- Conduct fieldwork research to understand the energy use in the cooking sector, including evaluating cooking fuel against clean cooking technologies and by analysing available studies and data and the use of local materials to improved stoves;
- Gather quantitative and qualitative information linked to cooking policies and habits, mainstreaming gender and youth dimensions;
- Quantify the health impacts of stove-stacking, relying on harmonized data collection capturing the fuels and technologies used in the home for cooking and identify health risks from specific fuels and technologies;
- Evaluate access to technological solutions like low-emission advanced combustion biomass cookstoves, mainstreaming gender and youth dimensions and ensuring affordability;
- Develop a baseline assessment that provides a clear status quo of the cooking sector and habits in the country, including disaggregated data.

**3.2. *Second Phase: Develop a clean cooking strategy and action plan outlining various demand- and supply-side options to facilitate the uptake of clean cooking markets.***

Subactivities:

- With the data and the information collected in the previous phase, the team is to develop a clean cooking strategy and action plan to spur market development on clean cooking solutions by conducting the following:
- Identify the gaps in national policies to spur market development of clean cooking solutions;
- Review international experiences, especially from Sub-Saharan countries, in transitioning to clean cooking solutions;
- Understand and identify the local needs and habits in terms of cooking to analyse and define the incorporation or spread of clean cookstoves (including clean fuels), outlining the demand and supply side;
- Map national/regional (public or private) organizations and technical vocational education and training institutes (TVETs) and other capacity-building training centres fostering the adoption of clean cooking that could become key partners of a national clean cooking initiative;

- Define social, environmental and economic benefits of clean cooking access to help policymakers to identify the far-reaching impacts of clean cooking investment;
- Analyse how the UNIDO’s work on the Council on Ethanol Clean Cooking (CECC) or other well-known initiatives in this field could serve as a benchmark for technical advice and operational national teams (e.g. DGRNE, MIRNA);
- Define policy guidelines to complement the NREAP and NEEAP with their respective package of strategies to uptake the clean cooking market;
- Define the action plan by triangulating inputs gathered from previous subactivities to complement the policy guidelines and the strategy on clean cooking, ensuring the vision of potential partnerships;
- Identify the most immediate channel to mobilize resources to support the national action plan and a new project proposal on clean cooking.

**3.3. Third phase: Develop a short project concept note for a potential clean cooking project to be proposed to international partners for funding.**

Subactivities:

- Structure a new concept proposal in agreement with the UNIDO Headquarters team and the PMU at the national level DGRNE/MIRNA/NDA.
- Develop a short concept note proposal that includes; e.g.; background information, components, activities, logical framework, implementation scheme, tentative budget.

**4. Detailed tasks, deliverables and time-line**

All produced end-products need to be provided by the contractor fully edited, designed (incl. graphs) and ready to be developed in Portuguese. The concept note will be the only deliverable to be provided in English. All the documents are subject to rounds of quality reviews and feedback loops, which might take some time and cause longer delays. The documents will be reviewed by UNIDO, DGRNE/MIRNA/NDA and a technical committee comprising local and international experts.

The assignment is of cross-sectoral nature and will require coordination with national stakeholders responsible for energy, environment, health and other concerned sectors in STP. The list of direct beneficiaries includes DGRNE, the NDA, the General Regulatory Authority (AGER), the Sao Tomean Ministries Agriculture and Forestry, Health, gender groups and the Autonomous Region of Principe (RAP). The detailed deliverables of the assignment are explained below:

Tasks/Activities	Deliverables	Tentative schedule	Location
<p><b>1. Inception meeting and work plan validation</b></p> <p>The contractor will provide an inception report, incl. detailed work-time diagram, applied methodology, list of key literature, stakeholders, schedule of consultations, indicative tables of content for the baseline study. The inception report and commencement of the assignment requires approval by UNIDO, DGRNE and NDA. At least two online inception meetings will be required.</p>	<p>Inception report Max. 5 A4 pages in Portuguese incl. detailed activity plan, time schedule, list of key literature, applied methodologies, schedule of stakeholder consultations, indicative tables of content of assessment reports in Portuguese;</p>	<p>At one month of the contract signature (5 working days)</p>	<p>Virtual</p>

<p><b>2. Develop a baseline report on Clean Cooking</b></p> <p>The contractor shall develop a baseline assessment for clean cooking at the urban, rural, and industrial levels. The document shall contain the status quo analysis on the current use of traditional biomass (e.g. firewood, charcoal) and other fuels used for cooking with a respective health impact. Furthermore, it will integrate an initial identification of potential clean cookstove solutions through consultations and an extensive review of the literature and analysis of successful case studies (to identify possible clean stoves or fuel options or other initiatives already undertaken and to be adopted by the country).</p> <p>The baseline assessment shall be supported by a comprehensive data collection exercise to gather qualitative and quantitative information, ensuring at least 40% and 30% of women and youth participation, respectively. Similarly, it shall consider consultations with relevant national and international stakeholders working on clean cooking.</p> <p>Prior report development, the contractor is encouraged to present and propose a report structure to the DGRNE and UNIDO HQ coordination teams.</p>	<p>One (1) Max. 30 A4 pages baseline assessment report provided, fully edited and designed, ready to be published in Portuguese.</p> <p>Set of data in xls. or/and csv format provided for integration in the STP energy information system.</p>	<p>At three months of the contract signature (20 working days)</p>	<p>Home based and in São Tomé and Príncipe</p>
<p><b>3. Develop a clean cooking strategy and action plan</b></p> <p>Based on the baseline assessment insights, the clean cooking strategy and action plan shall integrate: (i) definition of the potential demand and supply options; (ii) policy guidelines to complement the national energy plans (NREAP and NEEAP), integrating environmental, economic, and social benefits, mainstreaming gender and youth dimensions; (iii) map of potential and key stakeholders to mobilize funds and contribute to the market development by defining roles and contributions; (iv) linkages with other international initiatives in the field (e.g. CECC); and (v) main and immediate channels of funding to support the development of the clean cooking market in Sao Tomé and Príncipe.</p> <p>The team shall prepare a concise efficient clean cooking strategy and actional plan that provides recommendations for good implementation of clean cooking pathways in Sao Tomé and Príncipe.</p>	<p>One (1) Max. 15 pages A4 national clean cooking strategy and action plan, provided, fully edited and designed, ready to be published in Portuguese.</p> <p>Set of data in xls. or/and csv format provided for integration in the STP energy information system.</p>	<p>At five months of the contract signature (15 working days)</p>	<p>Home based and in São Tomé and Príncipe</p>

<p>The consultancy team shall organize the technical committee's meetings to present and validate documents. It is also encouraged to include the effective and active participation of at least 40% of women. Hold periodic meetings throughout the consultancy with the coordination and technical committee as needed.</p>			
<p><b>4. Develop a project concept note for a clean cooking project</b></p> <p>Develop a short concept note proposal that includes; e.g.; background information, components, activities, logical framework, implementation scheme, tentative budget. The main information will come from the two previous deliverables.</p>	<p>One (1) max. 5 pages project concept for a clean cooking project in English. All back up information should be attached to the concept note.</p> <p>One PPT presentation on the project to be used for discussions with potential donors</p>	<p>At five months of the contract signature (5 working days)</p>	
<p><b>5. Organise a training on clean cooking and present the results of the assignment in a webinar</b></p> <p>Organizing a one-day physical training workshop in Sao Tome on the production and use of efficient stoves for 30 multi-sectoral experts with at least 40% being women and 30% youth.</p> <p>Present the deliverables of the assignment in a webinar organized by UNIDO on clean cooking market uptake in a joint webinar of the Global Network of Regional Sustainable Energy Centers (participation of at least 40% women and 30% youth envisaged).</p>	<p>One (1) Training Workshop report with all media content provided the UNIDO national and HQ teams and ensure key industry stakeholders are in attendance.</p> <ul style="list-style-type: none"> <li>- Launch calls for trainees, and publish through relevant sources, DGRNE and ALER websites (in Portuguese).</li> <li>- Deliver one (1) training including support material in Portuguese, provide consolidated participant list. Concept note of the training session and agenda.</li> </ul>	<p>At six months of the contract signature (5 working days)</p>	



	<ul style="list-style-type: none"> <li>- Conduct structured Portuguese language training delivered in the field or at other locations.</li> <li>- The training report should contain gender disaggregated data, including an evaluation of training satisfaction by a structured survey. To be provided in Portuguese.</li> </ul> <p>Deliver one (1) webinar including support material in Portuguese, provide consolidated participant list. Concept note of the webinar session and agenda.</p> <ul style="list-style-type: none"> <li>- Conduct structured Portuguese language webinar delivered in the field or at other locations.</li> <li>- The webinar report should contain gender disaggregated data and include, and shall be provided in Portuguese.</li> <li>- The webinar will be organized by UNIDO in coordination with the GNSEC network.</li> </ul>		
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<p><b>6. Stakeholders' consultation</b> Following the draft policy regulations, the contractor will organize the following stakeholders' meeting.</p> <p>a. Validation workshops: of the regulation for clean cooking, for the deliberation validation to the NDA, DGRNE, UNIDO and key Ministries and national institutions with relevant mandates.</p> <p>Travel missions to Sao Tome conducted. (Cost item includes flights, accommodation and working days DSA). Mission to RAP-Principe as advised by MIRNA.</p> <p>In case travel is not possible due to a pandemic or not required, UNIDO and the contractor can earmark the time and resources on other capacity building activities.</p>	<p>One (1) Validation Workshop report including media deliverables captured during the workshop, a press release on the MIRNA or Transport Ministry's websites. Workshop and training sessions could be conducted in the same field visit.</p> <p>One (1) Mission report including mission agenda, mission objective, and achievement list of the stakeholders met (in Portuguese)</p>	<p>At six months of the contract signature (5 working days)</p>	
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## 5. Deliverables and Time Distribution

The activities under this contract shall be completed within a period of six (6) months from the effectiveness of the contract. Due to the COVID-19 crisis, UNIDO and the contractor will adapt the time schedule as required (inception phase). It is a requirement that the contractor employs local expert(s) working from STP (local consulting fees apply) to ensure quality data and local buy-in. The proposed plan for implementation of activities and deliverables:

Deliverables	Months						Payment Schedule
	1	2	3	4	5	6	
<b>Deliverable 1</b> – Inception report							20%
<b>Deliverable 2</b> – Baseline report							40%
<b>Derivable 3</b> – Clean cooking strategy and action plan							30%
<b>Deliverable 4</b> - Short project concept note							
<b>Deliverable 5</b> – Training, webinar, and stakeholder consultation report							10%

This document will be provided by the contractor fully edited, designed (incl. graphs) and ready to be published in Portuguese; an executive summary and key findings shall be provided in Portuguese and English. In addition, the contractor will be required to deliver the following:

- Item **High-resolution photographs (min. 3 MB, at least 20)** – that illustrate the undertaken activities. The consultants will cede all appertaining rights to unlimited use of the respective pictures to UNIDO and the Government of São Tomé and Príncipe.
- Item **All used raw files and calculation sheets** in editable form (e.g. xls). All files need to be handed over and become property of MIRNA and UNIDO. Collected data will be distributed through the national energy information system.

## **6. Coordination and Reporting**

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### Project coordination and communication

The contractor will report to the UNIDO Project Manager and his Team in Headquarters (Vienna) and the National Project Coordinator and his team at MIRNA/DGRNE/NDA in São Tomé and Príncipe. Moreover, the contractor will coordinate closely with other international partners or similar interventions by World Bank, and UNIDO as needed. All draft and final deliverables are subject to approval by UNIDO and MIRNA/DGRNE/NDA. The contractor will coordinate on a day-to-day basis closely with the local UNIDO team at MIRNA. It is the overall responsibility of the contractor to collect reliable quality data through its local team. Moreover, the contractor will coordinate with the UNIDO contracted consultants assigned to develop the NREAP, NEEAP and MEPS. Relevant subject information will be shared openly.

### Coordination with local and international stakeholders

All relevant documents developed by the contractor undergo a review and quality assurance by the established national Technical Committee (TC) on Energy comprising relevant national and international stakeholders and partners. The contractor will present relevant deliverables to the TC as requested. By this opportunity, the contractor will strengthen the expertise of the TC to guarantee the participation of industry experts, professional associations, government, trade union, and other stakeholders. The assignment requires close cooperation and coordination with the national key stakeholders working in the clean and efficient cooking sector of STP, particularly MIRNA, DGRNE, NDA and Forestry Authorities as well as international partners, particularly FAO and UNDP. The contractor shall facilitate the participation of STP in international alliances related to clean cooking.

### Coordination with relevant projects

The contractor will closely coordinate with any existing or previous clean cooking interventions or solutions done within the country. The contractor will also closely coordinate with the evolving MECs activities of local NGOs and entities particularly those addressing the production of local clean cook stoves or training and awareness raising on consistent use of traditional cooking. Additionally, the contractor will coordinate with the UNIDO National Project Team and is encouraged to liaise with relevant stakeholders in Cape Verde on clean cooking best practices or regional Lusophone stakeholders to encourage “SIDS-SIDS- Lusophone best practices.

## **7. Available Budget**

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The available all-inclusive budget for this assignment is **USD 28,900** (twenty-eight thousand nine hundred US Dollars), including **USD 2,900** (two thousand nine hundred USD Dollars) to cover the costs of DGRNE regarding the organization of logistics of meetings and technical committees.

## 8. Qualification, Evaluation and Language criteria

Received technical bids need to comply with and will be evaluated according to the following criteria:

MINIMUM QUALIFICATION REQUIREMENTS		VALUE	SCORE
1	NGOs, energy centers or registered entities/companies with seven (7) years of experience in the area of international renewable energy and clean and efficient cooking consulting; (please provide a copy of the <u>Certificate of Incorporation of company</u> ).	Yes	qualify
		No	does not qualify
2	Immediate availability of the contractor; ability to implement the assignment despite the COVID-19 travel restrictions; to ensure proper data collection and the employment of at least one local expert in STP is a requirement.	Yes	qualify
		No	does not qualify
3	<p>Financial Strength of the company. Please provide the completed and signed UNIDO Financial Statement Form.</p> <p><b>Profitability</b> Profit Margin Ratio or Return on Assets Ratio should be preferably positive.</p> <p><b>Solvency</b> A solvency ratio should be preferably more than one (1).</p> <p>In case of negative profit margin ratio or solvency, UNIDO may request additional documents and/or adapt payment terms and conditions.</p> <p><b>Turnover</b> The average annual turnover for the past three (3) years (or for the period of time the bidder has been in business, if it has not yet reached three (3) years) should be at least 1 time more than anticipated value of the contract.</p>	Yes	qualify
		No	does not qualify
4	Completed and signed Statement of Confirmation (Annex 1 to the TOR).	Yes	qualify
		No	does not qualify
5	Completeness of the technical and separate financial offer (e.g. CVs, track record, legal and financial documents, all-in price incl. all taxes);	Yes	qualify
		No	does not qualify
<b>CRITERIA FOR THE QUALITY ASSESSMENT OF TECHNICAL OFFERS</b>		<b>VALUE</b>	<b>SCORE</b>

1	<p>Quality and coherence of the overall technical offer, proposed methodology and efficiency of the proposed execution modality and team set-up; technical offers shall reflect the analytical capacity of the project team and avoid just a repetition of the text in the TOR); the technical offers shall demonstrate the ability of the team conduct training and hold multi-stakeholders dialogue in Portuguese;</p> <p>The proposed project team includes international specialists and at least one local STP expert. The team shall have a proven track record and relevant experience related to:</p> <ul style="list-style-type: none"> <li>▪ <i>Develop a baseline report and evaluate feasible and affordable local technology options by considering also local added value creation in terms of jobs and revenues of local production;</i></li> <li>▪ <i>Develop a clean cooking strategy and action plan outlining various demand- and supply-side options to facilitate the uptake of clean cooking markets.</i></li> <li>▪ <i>Develop a short project concept note for a potential clean cooking project to be proposed to international partners for funding.</i></li> <li>▪ <i>Execute a training on best practices of clean cooking appliances and business models and present the deliverables of the assignment in a webinar organized by UNIDO.</i></li> </ul> <p>Full proficiency in <b>Portuguese</b>; at least one team member shall have working knowledge of English.</p> <p>The Team Leader holds at least a master’s degree in engineering and demonstrates at least five (5) years of consulting experience in clean cooking, biofuels or/and renewable energies. The work-time diagram reflects the substantial involvement of the Team Leader.</p> <p>The expert will convene a team of specialists, which demonstrates a proven track record and relevant experience with projects, policies and modalities related to a) clean cooking, and MECS b) Efficient cooking fuels, including biofuels, firewood, priquetting and palletting for home systems and industrial prosumers; the employment of local expert with coordination and planning experience in STP is required;</p>	good	30%
		regular	15%
		poor	0%
2	<p>More than five (5) years of accumulated work experience of the project team and quality track-record of assignments in the area of clean and efficient cooking particularly issues related to technological advances on modernized efficient cooking services (stoves or fuels) is an advantage. Project team and quality track-record of assignments regarding the planning of programmes, training, awareness raising on clean cooking is an asset;</p>	good	30%
		regular	15%
		poor	0%

	Demonstrated three (3) years of work experience and provided track record of the proposed project team (not only the company/organisation) in Lusophone Africa is a requirement for the team. The employment of at least <u>one domestic expert in line with local consultancy rates</u> is a requirement; <b>sufficient working days for local consultants should be included in the work-time diagram.</b>		
3	Provided track-record of more than four (4) high-quality technical studies, assessments, publications and documents of the project team in modern energy cooking services, biofuels, gasification, or renewable energy sector.	good	20%
		regular	10%
		poor	0%
4	More than three (3) years of accumulated work experience of the project team in other Lusophone countries in Sub Sahara Africa for the coordination of SIDs-SIDs knowledge exchange; well-established contacts to the main players of the clean cooking or bio-fuels in STP is a strong advantage (e.g. DGRNE, Ministries of Forestry, Agriculture, etc.);	good	20%
		regular	10%
		poor	0%
<b>MAXIMUM SCORE</b>			<b>100%</b>

In accordance with UNIDO procurement rules the technically acceptable bid with the most competitive (**all-inclusive**) price will be awarded. Only technical proposals with a quality score of 70 or more, while a minimum score for each technical evaluation criterion is no less than the respective regular point (10 or 15 depending on items), will qualify for the commercial evaluation. UNIDO reserves the right to request additional information from bidders if necessary.

Bidders should note that only technically compliant offers/proposals should be further considered for commercial evaluation.

The bidder should submit a financial offer in US Dollars, in the format shown under the Annex (breakdown of the financial proposal). Bidders must have an account in US Dollars or EUR in which they provide their financial offer, or they should provide a note that the financial offer in EUR is for reference purposes only and the payment will be expected in US Dollars.

The financial offer should contain all costs involved to perform the required services specified in these Terms of Reference, including but not limited to;

- Experts fee
- Training materials, if applicable
- Travel costs (what is included), detailed, how many people, etc.
- Miscellaneous etc.

## 9. Application Procedure

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Interested and qualified bidders shall submit their written proposals in Portuguese:

- Technical proposal (including proposed approach and methodology, work and activity plan, detailed CVs of experts, copies of university degrees, certifications, licenses as well as a proven

track record of implemented assignments); the proposal shall refer to best practice examples of similar grid stability and commercial losses reduction regulation processes;

- Separate financial proposal in USD including all costs and taxes (includes a detailed work-time-expert-diagram indicating daily rates for individual team members); offers without clearly stating the all-in price will be rejected;
- Documents demonstrating the quality of the track-record of the project team with regard to areas such as RE & EE policies, legislation on commercial losses, solar mini-grids, and other legal energy frameworks;

Bidders are requested to submit their proposals by registering on the UNIDO e-procurement portal (<https://procurement.unido.org/>). In case of difficulties, submissions could exceptional be sent to UNIDO Help Desk at [procurement@unido.org](mailto:procurement@unido.org) or [ene-procurement@unido.org](mailto:ene-procurement@unido.org)

## 10. Further information

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- GCF-UNIDO Concept Note: <https://open.unido.org/projects/ST/projects/200158>
- GEF-UNIDO CEO Endorsement Document: <https://open.unido.org/projects/ST/projects/150124>
- GEF/GCF Project Website: <https://dgrne.org>
- NREAP, <https://www.gn-sec.net/content/national-renewable-energy-action-plan-sao-tome-e-principe>
- NEEAP, <https://www.gn-sec.net/content/national-energy-efficiency-action-plan-sao-tome-e-principe>
- São Tomé and Príncipe Renewable Energy and Energy Efficiency Status Report [UNIDO- ALER](#)
- World Bank ESMAP: [STP Power Sector Recovery Project](#)
- UNIDO Energy Policy and Data Gap Analysis (2021) for São Tomé and Príncipe
- World Bank, [Energy Access Diagnostic Report Based on the Multi-Tier Framework 2019](#)
- [www.unido.org](http://www.unido.org) and [www.gn-sec.net](http://www.gn-sec.net)
- Reference of the UNIDOs Bioethanol Clean Cooking work: <https://www.unido.org/news/expert-group-meeting-clean-cooking-potential-bioethanol-industries-high-impact-countries-23-25-june-2021-concludes-call-action>

**Note to suppliers:** A **circular economy** is an economic system that tackles global environmental challenges like climate change, biodiversity loss, waste, and pollution. It is a framework of four principles, driven by design: eliminate waste and pollution, keep products and materials in use, regenerate natural ecosystems and use of renewable energy.

**Bidders are encouraged** to display the products' circularity and sustainability compliance with the Economic, Social and Governance principles under the UN Compact (<https://www.unglobalcompact.org/take-action/leadership/integrate-sustainability/roadmap/supply-chain>).

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