CONSULTANCY SERVICES FOR THE DEVELOPMENT OF A NATIONAL CLEAN COOKING TRANSITION STRATEGY AND IMPLEMENTATION PLAN FOR THE KINGDOM OF ESWATINI

1. BACKGROUND

The Kingdom of Eswatini is a small, landlocked country in Southern Africa with a population of approximately 1.2 million people. Despite significant progress in electricity access — with an electrification rate reaching approximately 88% as of 2024 (according to an assessment done by the Ministry of Natural Resources and Energy together with the Central Statistics Office with 97% Urban access and 79% Rural access as at 31st March 2024) the country faces a persistent and deeply entrenched clean cooking deficit. According to the 2017 household data, approximately 48% of households rely on firewood as their primary cooking fuel, while only about 6.5% use liquefied petroleum gas (LPG). Although electricity access has expanded significantly in recent years, access to clean cooking technologies has not kept pace, and many households continue to depend on traditional biomass for cooking.

There is a pronounced urban-rural disparity. More than 96% of households using firewood are located in rural areas, where biomass remains the dominant cooking fuel. This reliance disproportionately affects women and girls, who are primarily responsible for fuel collection and cooking, increasing their time burden, exposure to household air pollution, and other health and safety risks.

In addition to households, a significant number of institutions, including schools, hospitals, correctional facilities and small and medium enterprises, rely on traditional biomass for cooking and heating.

Neighbourhood Care Points and other community-based feeding facilities shall also be treated as priority institutional users because of the scale, regularity and social importance of their cooking demand.

Reliance on traditional biomass contributes to:

- Deforestation and environmental degradation;
- Household air pollution and associated health risks;
- Time poverty and reduced productivity, particularly among women and girls due to unequal unpaid care responsibilities;
- Greenhouse gas emissions; and
- Exposure to volatile fuel and energy costs, with a risk that vulnerable users revert to unsafe cooking practices.

Transitioning to clean cooking solutions is therefore a national priority. Relevant solutions include LPG, electricity, biogas, ethanol, improved biomass cookstoves and other modern energy technologies. However, uptake remains constrained by affordability, infrastructure

gaps, limited awareness, safety concerns, regulatory and institutional weaknesses, and underdeveloped markets.

Women are primary users and key decision-influencers for cooking energy. The Strategy shall address gender-differentiated barriers relating to information, affordability, safety, intra-household decision-making and access to economic opportunities, and shall support women's participation in clean cooking markets and employment.

Rising and volatile energy prices, particularly electricity tariffs and LPG prices, present an additional challenge to sustained adoption. The Strategy shall therefore assess the affordability and resilience of different clean cooking options under alternative energy price scenarios.

The Government intends to develop a comprehensive, evidence-based and implementable National Clean Cooking Transition Strategy and Implementation Plan to provide a coordinated roadmap for scaling up access across all regions, income groups and user categories. The findings will also inform the National Energy Compact under Mission 300.

2. AIM OF THE ASSIGNMENT

The overall objective is to develop a National Clean Cooking Transition Strategy and Implementation Plan that establishes a clear policy, regulatory, financial, institutional and market-development framework to:

- Increase access to safe, affordable, reliable and cost-resilient clean cooking solutions, while ensuring equitable access and benefits for women and men, including female-headed households;
- Reduce reliance on traditional biomass and unsafe cooking practices;
- Strengthen safety standards, quality assurance and regulatory oversight;
- Promote sustainable private-sector participation through appropriate commercial, public-private partnership, blended-finance and market-development models;
- Improve public health, environmental sustainability, energy security and socio-economic development; and
- Provide a long-term roadmap for transitioning households, institutions and commercial users through coordinated policy, investment and market interventions.

3. SPECIFIC OBJECTIVES

The Consultant shall:

1. Conduct a comprehensive assessment of the current clean cooking landscape, including fuels, technologies, markets, institutions and regulatory frameworks.
2. Identify barriers to clean cooking uptake and propose targeted interventions.
3. Recommend realistic transition pathways across household, institutional and commercial user categories.
4. Propose financing and investment mechanisms to scale adoption.

5. Develop a phased implementation roadmap with measurable targets and monitoring indicators.
6. Integrate environmental, gender, youth, climate and social inclusion considerations.
7. Conduct a gender and social inclusion diagnostic covering affordability, safety, time use, agency, decision-making and market participation.
8. Define gender-responsive targets and sex-disaggregated indicators within the monitoring and evaluation framework.
9. Assess the impact of electricity tariffs and other fuel-price volatility on adoption and sustained use.
10. Assess clean cooking needs and transition pathways for schools, health facilities, correctional services, Neighbourhood Care Points, SMEs and other institutional or commercial users.
11. Promote and institutionalise private-sector engagement through commercial partnerships, PPPs where appropriate, and other sustainable delivery models.
12. Develop investment scenarios and quantify the funding required to achieve national clean cooking targets.
13. Assess the potential for climate and carbon finance to support the implementation and long-term sustainability of priority clean cooking interventions, including the technical, institutional, regulatory and commercial requirements for participation in high-integrity carbon markets

4. SCOPE OF WORK

The Consultant shall undertake the following tasks:

4.1 Situational, Institutional and Market Analysis

- Conduct a baseline assessment of current cooking practices, fuel-use patterns, fuel stacking and technology adoption in urban, peri-urban and rural areas.
- Quantify household, institutional and commercial cooking demand and identify growth trends for modern cooking technologies.
- Map key actors, including government agencies, regulators, private firms, financiers, development partners, civil society organisations and community structures.
- Assess institutional roles, coordination arrangements and capacity using stakeholder mapping and power-interest analysis.
- Map the full clean cooking ecosystem, including production or manufacturing, importation, distribution, retail, after-sales services, maintenance and end-of-life management.
- Undertake market sizing and segmentation for priority fuels and technologies.
- Review pricing structures, taxation, subsidies and cost components affecting affordability.
- Benchmark Eswatini against relevant SADC and international good practices.
- Analyse historical and projected changes in electricity tariffs, LPG prices and alternative fuel costs, and their implications for affordability and fuel stacking.
- Map gender roles and constraints across the value chain, including barriers faced by women entrepreneurs and workers.

4.2 Policy, Legal, Regulatory and Institutional Review

- Review the legal, policy and institutional framework governing clean cooking, including the roles of the Ministry of Natural Resources and Energy, ESERA, ENPC and other relevant bodies.
- Assess licensing, tariffs, subsidies, standards, consumer protection, environmental requirements and carbon-finance frameworks.
- Assess regulatory enforcement capacity, institutional coordination and policy risks affecting private investment.
- Identify gaps and recommend reforms to improve safety, competition, quality assurance, transparency and market confidence.
- Clarify institutional mandates, accountability and coordination mechanisms for implementation.
- Recommend measures to incentivise private-sector participation without presuming that every intervention should be structured as a formal PPP.
- Assess alignment with national gender commitments and recommend reforms that strengthen women's access, safety, consumer protection and market participation.

4.3 Infrastructure and Supply Chain Assessment

- Assess infrastructure, distribution systems, last-mile delivery and logistics for relevant fuels and technologies.
- Assess the technical, operational and economic feasibility of electric cooking as a clean cooking transition pathway, including electricity network capacity and reliability, distribution system constraints, tariff structures, affordability, peak demand implications, utility revenue and system cost impacts, and opportunities for demand-side management and productive load growth.
- Assess the availability, sourcing, production capacity, import dependence and supply security of relevant fuels, feedstocks, equipment and technologies.
- Assess infrastructure requirements for large-scale and institutional cooking, including bulk LPG, electric commercial kitchens and appropriate biomass or biogas systems.
- Map existing clean cooking enterprises, identify supply-chain bottlenecks and determine commercially viable investment opportunities.
- Identify infrastructure expansion and investment needs.
- Evaluate equipment standards, safety mechanisms, certification and quality-control systems.
- Recommend improvements in logistics, safety, maintenance, after-sales service and market oversight.
- Assess gender-differentiated accessibility and safety of supply chains, including distance, transport burden and security at points of sale.

4.4 Demand, Consumer and Supply Analysis

- Conduct detailed household and institutional demand assessments covering energy needs, consumption patterns, stove types, affordability, willingness to pay, consumer preferences

and operational requirements. The assessment shall analyse upfront technology costs, recurring fuel and electricity expenditure, affordability relative to household and institutional budgets, financing requirements, and the extent and drivers of fuel stacking and reversion following adoption of clean cooking solutions. Disaggregate findings by geography, income, sex, age and relevant vulnerability categories.

- Map available clean cooking technologies and fuels, market penetration, quality standards, distribution channels and pricing.
- Assess the suitability of different technologies for households, schools, health facilities, correctional services, Neighbourhood Care Points and commercial entities.
- Assess how electricity tariffs and other fuel prices influence consumer choices, fuel stacking and the risk of reverting to traditional biomass.
- Assess consumer perceptions, cultural preferences, cooking practices and behavioural barriers.
- Analyse intra-household decision-making, time use, sustained-use drivers and the distribution of benefits and costs.
- Identify priority market segments and user-centred adoption pathways.

4.5 Financing and Investment Framework

- Develop sustainable financing models for households, institutions, enterprises and infrastructure.
- Explore blended finance, results-based financing, carbon finance, guarantees, concessional finance and PPP opportunities where appropriate.
- Assess targeted subsidies, tariff-support mechanisms and cross-subsidisation options for vulnerable users.
- Identify climate-finance and development-partner opportunities.
- Assess cost competitiveness under alternative energy-price scenarios.
- Undertake financial and economic appraisal of priority interventions, including capital and operating costs, cost-benefit analysis, NPV, IRR, affordability, risk allocation and investor-return requirements, where applicable.
- Develop risk-return profiles for commercially viable private investment opportunities without overstating the suitability of PPPs.
- Estimate investment requirements to achieve national targets and prepare a financing roadmap.
- Propose targeted mechanisms for low-income and female-headed households and instruments to support women-led clean cooking enterprises.

4.6 Environmental, Health, Climate and Social Considerations

- Quantify environmental benefits, including reduced deforestation, emissions and climate impacts.
- Assess public health benefits from reduced household air pollution.
- Assess differentiated health, safety and time-poverty impacts on women, children and institutional cooks.

- Assess socio-economic impacts, including job creation, local enterprise development and risks to vulnerable users.
- Evaluate alignment with Eswatini's Nationally Determined Contribution and identify opportunities to position priority investments for climate finance.
- Assess behavioural factors, taste, cooking traditions and willingness to adopt improved technologies.
- Propose gender-responsive, socially inclusive and occupational-health mitigation measures.

4.7 Strategy Formulation and Implementation Plan

The Strategy and Implementation Plan shall include:

- A clear vision and strategic objectives;
- An operational governance and institutional coordination framework defining the lead institution, institutional mandates, roles and responsibilities, accountability arrangements, coordination and reporting mechanisms, stakeholder engagement processes, and mechanisms for private sector and development partner participation.
- Prioritised interventions mapped to strategic pillars, responsible institutions, partners, timelines and resource requirements;
- Transition pathways across multiple clean cooking solutions;
- A dedicated institutional clean cooking strategy covering schools, hospitals, correctional services, Neighbourhood Care Points and other public facilities;
- A private-sector engagement strategy covering commercial models, investment conditions, enterprise support and PPPs where justified;
- A procurement and market-development roadmap for priority fuels and technologies;
- A capacity-building plan for government, regulators, service providers and market actors;
- Short-, medium- and long-term targets over a 5- to 10-year horizon;
- A risk assessment and mitigation framework;
- A monitoring and evaluation framework with sex-disaggregated indicators and targets;
- A communication, consumer awareness and behaviour-change strategy;
- A costed, phased Implementation Plan with defined responsibilities;
- A gender action component with costed activities, responsible institutions and measurable indicators; and
- A Theory of Change linking public and private inputs, activities, outputs, outcomes and long-term clean cooking impacts.

5. DELIVERABLES

The Consultant shall submit:

14. Inception Report, including a detailed methodology, stakeholder-engagement plan, quality-assurance plan, workplan and data-gap assessment, within 4 weeks of contract signing.
15. Baseline and Diagnostic Report, including a dedicated Gender and Social Inclusion chapter, within 10 weeks.

16. Technology, Fuel and Market Options Assessment Report, including market sizing and institutional cooking options, within 14 weeks.
17. Draft National Clean Cooking Transition Strategy and costed Implementation Plan, including institutional and commercial cooking components, within 20 weeks.
18. Stakeholder Validation Workshop Report within 22 weeks.
19. Final National Clean Cooking Transition Strategy, Costed Implementation Plan and Investment and Financing Roadmap, incorporating comments from the validation workshop, within 24 weeks of contract signing.
20. Clean datasets, modelling files, consultation records and other supporting analytical products at final submission.

All reports shall be submitted electronically in editable and PDF formats.

6. METHODOLOGY

The Consultant shall apply a participatory, evidence-based and gender-responsive methodology, including:

- Desk review of relevant policies, data and reports;
- Stakeholder consultations with government, regulators, the private sector, civil society and development partners;
- Targeted consultations with institutional users, including education, health, correctional services and Neighbourhood Care Points;
- Application of the ESMAP Multi-Tier Framework for tracking clean cooking access and informing target-setting;
- Technical Working Group consultations and validation workshops;
- Field visits, infrastructure assessments, surveys and primary data collection, supported by a statistically sound sampling methodology. The Consultant shall propose, in the Inception Report, an appropriate sampling design, sample size, geographic coverage and data collection methodology for approval by the Ministry and the Technical Working Group prior to commencement of fieldwork;
- Financial, economic and scenario modelling;
- Targeted focus-group discussions with women users, institutional cooks and vulnerable groups, with participation reported by sex and user category;
- Regional benchmarking;
- Scenario modelling under alternative electricity-tariff and fuel-price trajectories;
- Political economy, institutional and stakeholder analysis, including the assessment of governance arrangements, institutional roles, coordination mechanisms and implementation responsibilities;
- SWOT analysis as a synthesis tool rather than a substitute for substantive analysis;
- A Theory of Change linking interventions and financing models to measurable clean cooking outcomes; and

- Validation of assumptions, data sources and recommendations with the Technical Working Group.

7. INSTITUTIONAL ARRANGEMENTS

The Consultant shall report to the Ministry of Natural Resources and Energy. A Technical Working Group comprising relevant ministries, regulators, public institutions, private-sector representatives, civil society and development partners shall provide oversight and guidance.

The Technical Working Group shall designate a Gender and Social Inclusion focal point or subcommittee to oversee gender integration across deliverables and validation processes.

The Ministry shall facilitate access to available data and stakeholders, but the Consultant shall remain responsible for data quality, analytical rigour, timely delivery and the technical integrity of all outputs.

8. ELIGIBILITY AND COMPLIANCE REQUIREMENTS (MANDATORY)

All bidders shall meet the following mandatory requirements. Failure to comply may result in disqualification at the preliminary evaluation stage:

- Proof of legal registration in the country of origin;
- Valid trading licence for locally registered firms;
- Valid tax-clearance certificate or equivalent proof of tax compliance;
- Police clearance not older than three months, where legally applicable;
- Labour-compliance certificate, where legally applicable;
- Disclosure of actual or potential conflicts of interest; and
- Signed confidentiality undertaking.

International firms shall demonstrate willingness and ability to comply with Eswatini's legal, tax, labour and regulatory requirements during contract execution.

The procuring entity should confirm before advertisement that every mandatory document is legally applicable to both local and international bidders, because an inapplicable requirement can create avoidable procurement challenges.

9. QUALIFICATIONS AND EXPERIENCE

The Consultant, whether a firm or consortium, shall demonstrate:

- At least 10 years of relevant experience in energy policy, clean cooking or energy-transition planning;
- Proven experience developing national energy, clean cooking or comparable transition strategies;
- Strong knowledge of clean cooking technologies, value chains, standards and safety systems;
- Relevant experience in Sub-Saharan Africa, preferably Southern Africa;

- Expertise in financial modelling, investment planning, climate finance and market development;
- Strong stakeholder-engagement and participatory research capacity;
- Familiarity with the ESMAP Multi-Tier Framework and global clean cooking financing instruments;
- Demonstrated capacity to integrate gender equality, social inclusion and sex-disaggregated monitoring into energy-sector assignments; and
- Experience assessing institutional cooking demand and private-sector delivery models.

Minimum team composition:

- **Team Leader:** Master's degree in energy economics, environmental management, engineering, public policy or a related field, with at least 10 years of relevant experience and demonstrated leadership of comparable national assignments.
- **Clean Cooking Technology and Infrastructure Specialist:** Advanced qualification in engineering, energy or a related field, with experience in LPG, electric cooking, biogas, improved biomass technologies, standards and institutional cooking systems.
- **Energy Economist / Financial Analyst:** Advanced degree in economics, finance or a related field and at least 7 years of experience in energy-sector financial analysis, including results-based finance, carbon finance or blended finance.
- **Gender and Social Inclusion Specialist:** Demonstrated experience in energy access or clean cooking, gender analysis, social inclusion and gender-responsive monitoring and evaluation.
- **Market Development / Private Sector Specialist:** At least 7 years of experience in clean cooking market development, value-chain analysis, enterprise support and private-sector engagement.
- **Environmental and Public Health Specialist:** Relevant advanced qualification and experience in household air pollution, environmental assessment, climate impacts and occupational health and safety.
- **Institutional and Regulatory Specialist:** Experience in energy-sector policy, regulation, institutional analysis and stakeholder coordination.
- **National Consultant:** At least one national expert with in-depth knowledge of Eswatini's energy sector, regulatory environment, institutions and local stakeholder landscape.

10. LEVEL OF EFFORT AND DURATION OF THE ASSIGNMENT

The assignment shall be completed within 26 weeks from the date of contract signing.

The level of effort is indicated as follows:

Position	Indicative person-month[1]
Team Leader	6

[1] The person-month allocations above are indicative only and are intended to provide guidance on the expected level of effort. Bidders may propose alternative allocations where justified by their methodology.

Clean Cooking Technology and Infrastructure Specialist	4
Energy Economist / Financial Analyst	3
Gender and Social Inclusion Specialist	2.5
Market Development / Private Sector Specialist	2.5
Institutional and Regulatory Specialist	2.0
National Consultant(s)	5.0

11. EVALUATION CRITERIA

Only proposals meeting the mandatory eligibility and compliance requirements shall proceed to detailed evaluation. Proposals shall be evaluated on:

- Understanding of the assignment and Eswatini context;
- Technical approach and methodology;
- Relevant experience of the firm or consortium;
- Qualifications and availability of key personnel;
- Stakeholder-engagement and knowledge-transfer approach;
- Quality-assurance and risk-management arrangements;
- Workplan and allocation of level of effort;
- Financial proposal and value for money.

The solicitation document shall state the detailed scoring weights, minimum technical pass mark and treatment of joint ventures or subcontractors.

12. CONFIDENTIALITY, DATA PROTECTION AND OWNERSHIP

All reports, data, models, consultation records and materials produced under this assignment shall remain the property of the Government of the Kingdom of Eswatini. The Consultant shall maintain strict confidentiality and shall not disclose or reuse information without written authorization and in line with the Data Protection Act, 2022 (Act No. 5 of 2022).

The Consultant shall apply appropriate data-protection, informed-consent, anonymization and secure-storage procedures, particularly for household surveys, gender analysis and information concerning vulnerable groups.