



CALL FOR CLEAN COOKING TECHNOLOGIES FOR RWANDA CLEAN COOKING PROGRAM

To support the implementation of Rwanda's Biomass Energy Strategy, the Government of Rwanda is collaborating with the World Bank for a clean cooking program under the Rwanda Energy Access and Quality Improvement Project. The objective of the clean cooking program is to provide new or improved access to clean cooking solutions to 500,000 households by 2026. The program will set up a results-based financing (RBF) window to provide cash incentives to the private sector players to deliver qualified clean cooking solutions to eligible households. It will also provide technical assistance and capacity building to support an enabling environment for clean cooking sector development. For more information about the clean cooking program, please refer to the Rwanda Energy Access and Quality Improvement Project appraisal document accessible through EDCL.

The objective of this call for clean cooking technologies is to encourage manufacturers and vendors of clean cooking technologies to submit their products as candidate technologies for evaluation. If accepted, these products will be qualified for inclusion in the Rwanda Clean Cooking Program for support and promotion such as RBF incentives, technical assistance, and public campaign.

Key Evaluation Criteria

The evaluation process will involve a set of test methods based on the methods and guidance in ISO 19867-1 and performance criteria informed by Technical Report ISO/TR 19867-3. The general testing/evaluation requirements are listed below. Additional evaluation criteria may be added according to the requirements of the Rwanda Standards Board.





Cooking Technology	Testing/Evaluation Requirements	
Stoves and accessories using biomass fuels that require no additional processing	Meeting thermal efficiency and PM _{2.5} and CO emissions Tier 2 requirements, according to ISO VPTs*.	Evaluate for safety and durability (the expected lifetime is at least 3 years and the manufacturer's warranty at least 1 year).
Stoves and accessories using biomass fuels that may require additional processing (for example, charcoal, wood, briquettes/pellets) and/or ventilation (for example, chimney)	Meeting thermal efficiency and PM _{2.5} and CO emissions Tier 3 requirements, according to ISO VPTs; vented stoves will be assessed for fugitive emissions and efficiency.	
Stoves and accessories using modern fuels/energy, which may include LPG, biogas, ethanol, electricity (including electric rice cooker and electric pressure cooker), solar energy, pellets, or other biomass fuels	Meeting thermal efficiency and PM _{2.5} and CO emissions Tier 4 or Tier 5 requirements, according to ISO VPTs.	

*Tier 2 cooking technologies are considered as a transition technology and may be only qualified for support and promotion by the project during the initial 2 years.

The testing and evaluation results will be communicated in private to the submitting organisation, however if the product is accepted by the project for promotion, the key performance information will be made available to the public.





The document submitted with the cooking technology must specify the source of energy to be used which should be readily available in Rwanda during project implementation and may include the following:

- Unprocessed biomass including wood
- Charcoal
- Pellets/briquettes or other types of processed biomass
- Liquid fuels
- Gas fuels
- Electricity

Domestic cooking technologies may have one or multiple burners and are expected to have adjustable (controllable) cooking power to regulate the delivery of cooking energy, and further, be able to adequately perform typical cooking tasks for rural and urban families in Rwanda. For cooking technologies that are specialized for certain cooking functions (e.g. water heating, slow cooking), the applicants must specify such functions and the relevance to Rwandan cooking practices.

The key performance indicators which will be evaluated include: cooking power, controllability (high-to-low power turn-down ratio), fuel type(s), fuel consumption (system efficiency), emissions of particulate matter (PM_{2.5}) and carbon monoxide (CO), and separate safety and durability scores. Cooking stoves fitted with a chimney to carry emissions outside the building will be assessed for fugitive PM_{2.5} and CO emissions (leakage into the home) during typical patterns of use, instead of total emissions.

Application Process

- Fill in the application form in Attachment 1.
- The application form should contain a short background statement about the applicant (individual, organization, institutions, company, etc.), relevant experience (especially





ones relevant to clean cooking solution development and dissemination), interest in the clean stove market in Rwanda, and a description of the product(s) including characteristics and how they may serve the needs of the Rwandan market/consumers.

- Interested applicants should then send their application form to ECDL by email to urutagarama@edcl.reg.rw and copy to apnivibizi@edcl.reg.rw. The application form is attached to this invitation and may also be downloaded from www.reg.rw.
- Applicants whose application has passed the initial screening will be contacted for information on how to proceed, including the logistics for sending their product(s) to the testing centre and signing of a non-disclosure agreement (NDA). Technical drawing will be required for the product(s) tested to be eligible for the program.
- For every cooking technology invited, applicants should send 3 (three) units for evaluation, with the required fuel if the fuel is specialised.
- Applicants shall cover all costs incurred to transport the stoves to the Rwanda Standards Board's Headquarters located at:

Kigali-Kicukiro,

P.O Box: 7099

KK 15 Rd, 49

Tel: +250 0788303492

Email: info@rsb.gov.rw

- The deadline for applying is

Arriving applications will be reviewed on a rolling basis

Done at Kigali on.....04 DEC 2020.....

Felix GAKUBA
Managing Director



CLEAN COOKING SOLUTIONS APPLICATION FORM

Section I APPLICANT

1. Name:

Address:

Post code (If any):

Country:

Phone:

Email:

Website (If any):

Mobile:

Profile: provide a summary of your background and activities related to clean stoves (This may be done on a separate paper not exceeding one page)

2. For this application, do you represent a company/organization/ institution/etc.?

If Yes, please fill in the following:

Company/Organization/Institution/etc.

Name of company/organization/institution/etc:

Address:

Post code:

Country:

Phone:

Fax:

Email:

Website:

Contact person:

Email:

Mobile/Cell:



Profile: provide a short description of the company/organization/institution/etc. especially those related to clean stoves (This may be done on a separate paper not exceeding one page)

3. Photo of producer/manufacturer: please provide a photo in JPG format, minimum 1 MB.

Section II PRODUCT DETAILS

Name of product:

4. Product materials: please list and describe

5. Types of product:

household stove small industry stove water boiler

6. Photo of product: please provide photos of the product from different angles (sides, top and bottom) in JPG format, minimum 1 MB for each photo.

7. Testing report: If the product has been tested by a testing lab, please feel free to share a copy of the testing results. However, it will not be guaranteed that the testing results will be used for the evaluation.

8. Energy: What types of energy sources can be used with the stove?

- Wood: (dimension, types, moisture content)
- Charcoal: (dimension, types, moisture content)
- Rice husk: (moisture content)
- Sawdust: (types, moisture content)
- Pellets: (dimension, types, moisture content)
- Briquettes: (dimension, types, moisture content),
- Agricultural and plantation waste: (dimension, types, moisture content).
- Ethanol/Methanol (% content)
- LPG
- Biogas
- Electricity (AC, DC, voltage)
- Other _____

9. Product Technology Class

- Uncontrolled draught
- Controlled natural draught
- Forced draught (e.g. through use of a fan, etc.)
- Other _____

10. Product Function

- General cooking



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- Water heating
 - Slow cooking
 - Automatic cooker (e.g. for rice, for bread)
 - Other _____

Section III FUEL AVAILABILITY

11. Is the type of fuel used in the stove available and easily accessible, and can it be easily purchased? If YES, please explain.

If NO, explain how you envision consumer access to fuel needed for the stove at an affordable price and in a sustainable manner.

12. Will you establish a fuel supply chain/distribution system? If so, describe its mechanisms.

Section IV PRODUCT AVAILABILITY

13. Is the stove in production now?

- Yes No

14. How many of this exact model have been produced? _____

15. Is the stove produced on regular basis or only when you receive an order?

- Regular production When requested

16. What is your production capacity?

Units per month _____ Lead time _____

17. If the stove has yet not been produced. what is your business plan if the sample stove passes the test?

18. Marketing of the stove

Has the stove ever been **sold** on the market? Yes No

If "YES" where in the market
and how many?

_____	_____
_____	_____
_____	_____

If "NO", has the stove been **used** or **tested** in a community/household? Yes No

If "YES" where in the market?
And how many?

_____	_____
_____	_____
_____	_____

19. Country of Origin – Appliance

Rwanda

Outside Rwanda. Please specify location: _____

20. Country of Origin – Fuel

Rwanda

Outside Rwanda. Please specify location: _____

