

TERMS OF REFERENCE FOR INNOVATION THROUGH RESEARCH SYNTHESIS AND TECHNOLOGY TRANSFER

Background and Overview

The <u>Global Alliance for Clean Cookstoves</u> (Alliance) is a public-private partnership to save lives, improve livelihoods, empower women, and protect the environment by creating a thriving global market for clean and efficient household cooking solutions. The Alliance's goal is for 100 million households to adopt clean and efficient cookstoves and fuels by 2020. We are working with a strong network of public, private and non-profit partners to help overcome the market barriers that currently impede the production, deployment, and use of clean cookstoves in developing countries.

Reaching the "100 million by 2020" goal with clean and efficient cooking solutions requires 1) governments, donors, and investors to drive the market towards better technology options and 2) innovation to increase the number of high-performing stove and fuel options that are available to consumers, which are also affordable and meet user needs. This innovation work also depends on parallel efforts focused on strengthening supply, demand, accessibility, and maximizing sustained adoption of stoves, fuels and practices, which represent other areas of the Alliance's work.

Many organizations have worked for decades on stove design, however it has been an ongoing challenge to develop high-performing products that satisfy user preferences and that are available at an affordable price. This can be attributed to several factors:

- Lessons from research and development (R&D) groups have not been well disseminated to enterprises producing stoves, and R&D groups don't always have user-centered design expertise.
- Design organizations who run workshops or work with stove enterprises are not building off the full R&D knowledge base, which limits what can be achieved in the design process, especially with a challenging engineering problem like burning solid fuels.
- Enterprises have expressed interest in improving their technologies, but have limited expertise and resources to devote to R&D.

The Alliance's goal is to help our partners innovate to improve the performance of their technologies by bringing R&D groups, design organizations and enterprises together, with users at the center, to leverage their individual strengths and expertise.

This Terms of Reference (TOR) is for a consultant or firm to integrate results from ongoing R&D projects, work one-on-one with three (3) enterprises to innovate on their product lines, and lead two (2) regional workshops where multiple entrepreneurs can benefit.

Submit proposals to Ranyee Chiang, Director of Standards, Technology and Fuels (<u>rchiang@cleancookstoves.org</u>) by April 4, 2015. The contract start date is anticipated to be on or around May 5, 2015.

Scope of Work

The consultant will be expected to plan, coordinate, and execute the following activities over a 9 month period:

- Review current work as well as challenges and barriers faced by research, design, and enterprise partners with respect to innovating for improved product performance, while meeting user preferences and increasing affordability.
- Interview enterprise innovation leads, principle investigators and researchers on projects funded by the Alliance's Pilot Innovation Fund and the U.S. Department of Energy's biomass cookstoves R&D initiative. Develop a synthesis report of research findings, which summarizes findings in a way that is accessible to a broad range of clean cooking sector enterprises. This activity needs to respect the intellectual property of the researchers and enterprises, while also encouraging sharing of lessons. The report should also include findings from the review of current innovation work, challenges, and barriers. The report will be published on the Alliance's website.
- Develop criteria to select three (3) enterprises for the in-depth innovation support. The Alliance will use this criteria to solicit short applications from interested enterprises. Review applications and select three (3) enterprises in partnership with the Alliance.
- Work with the three (3) selected enterprises to innovate on their product line to reach higher performance and maximize affordability and usability. Each enterprise can expect a 2 3 month engagement. This work should be based on the research findings and additional user-centered design expertise.
- Based on the above activities, develop lesson plans for two (2) regional innovation workshops, tentatively to be held in East Africa and South Asia. Serve as lead instructor for these workshops and help provide input for integrating other instructors and planning the overall agenda and logistics.
- Develop metrics for tracking effectiveness of direct enterprise support and regional workshops to enable scaling and replication of existing innovations in the clean cooking sector.
- Develop recommendations on how the Alliance could further support scaling and replication of existing innovations in the clean cooking sector.
- Work in close collaboration with the Alliance staff to plan and implement the scope of work.

The consultant also agrees to fill the role of Lead Instructor for a cookstoves-focused <u>International</u> <u>Development Design Summit (IDDS)</u> in Kampala, Uganda in 2016. This summit will be co-organized with the Alliance, the Massachusetts Institute of Technology's International Development Innovation Network (IDIN), Centre for Research in Energy and Energy Conservation (CREEC); Centre for Integrated Research and Community Development Uganda (CIRCODU). This summit activity is a separate scope of work, pending final approval from IDIN.

Proposal Instructions

Applications will be evaluated based on the quality of the proposal as well as the appropriateness of the budget for the proposed work. The Alliance may provide feedback to applicants to adjust the proposals to meet budget or other constraints.

Please submit a work plan describing the following (maximum of 5 pages, 12 point font, single-spaced)

- Proposed timeline and approach for completing the work. The timeline should include dates for the activities as outlined above and specific deliverables.
- Unique qualifications and relevant previous experience of the consultant team, such as partnering with researchers and/or social enterprises, innovation and technology transfer, or user-centered design.
- Budget detailing, per activity, (1) the expected level of effort, (2) daily rates, (3) anticipated direct expenses. As much as possible, the level of effort and daily rates should be indicated by required team members and activity.
- Biographical summaries of consultant team conducting the work