

## **NON-TECHNICAL SUMMARY**

### **CARBON PROJECT ACTIVITIES IN THE REPUBLIC OF KENYA UNDER GOLD STANDARD PROGRAM 10789 " ECOA\_BURN MULTI-COUNTRY CLEAN COOKING PROGRAMME"**

#### **Introduction**

In most African countries cooking is done on either 3-stone fires or very inefficient traditional cookstoves, consuming a lot of fuel – mostly non-renewable firewood and charcoal.<sup>1</sup> High biomass consumption has negative impacts on the environment leading to deforestation, land degradation, Greenhouse Gas (GHG) emissions, loss of soil fertility and reduced soil water retention. Furthermore, indoor air pollution caused by burning firewood and charcoal results in diseases like pneumonia, stroke, ischemic heart diseases, chronic obstructive pulmonary diseases and lung cancer.

#### **Purpose and Technology of the Voluntary Project Activity (VPA)**

The purpose of a typical Voluntary Project Activity (VPA) included under the Gold Standard Programme of Activities (PoA) "ECO\_A\_BURN Multi-Country Clean Cooking Programme", is the dissemination of highly efficient improved cookstoves (ICS) to urban, peri-urban and rural users in Kenya. These users could be households, communities, institutions or SMEs.

Several GHGs, including carbon dioxide, are produced as a result of the incomplete combustion of biomass used in cookstoves. Non-renewable biomass produces more GHG emissions. ICS improve heat transfer efficiency compared to the baseline traditional cookstoves, thereby reducing both the amount of woody biomass used and the emission of GHGs.

By using the ICS, consumers assign and transfer all rights to the resulting carbon credits to BURN, Coordinating and Managing Entity of the PoA and implementer of the VPA.

ICS are distributed through direct sale/distribution and through a variety of retail outlets to end-users across the country.

#### Target Group and Location

The target group of the VPA is urban, peri-urban or rural households, communities, institutions or SMEs using non-renewable biomass through conventional systems, with no improved combustion air supply or flue gas ventilation (i.e. without a grate or a chimney), prior to receipt of an efficient cookstove. The VPA may cover urban, peri-urban and/or rural areas across the 47 counties in Kenya.

#### Technology

A VPA may deploy different ICS models designed and developed by BURN. The ICS models are highly efficient, and their design takes into account local cooking culture in the project area in

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<sup>1</sup> <http://www.who.int/mediacentre/factsheets/fs292/en/>

order to ensure that improvements in technology and living standards do not come at the expense of cultural traditions. A VPA may opt to distribute other stove models over time.



### Implementation Plan

The project started on August 1st, 2023, with the distribution of the first improved cookstoves. It is estimated that 22,500 ICS will have been distributed by 2027.

### **Carbon Credits**

GHG emission reductions achieved through saving non-renewable biomass will result in carbon credits following certification rules and procedures.

Revenue from the sale of carbon credits enable:

- a) The distribution of improved cookstoves at a subsidized price affordable for end-users
- b) The scaling up and expansion of the programme, thus reaching a wider range of end-users and generating more jobs
- c) Further investment in R&D, thereby producing high quality stoves at a lower cost
- d) Provision of reliable after-sales service
- e) Sensitization and awareness raising amongst end-users about the benefits of improved cookstoves and how to use them

## Contribution to Sustainable Development

Besides reducing GHG emission in line with the United Nations Sustainable Development Goal (SDG) 13: Climate Action,<sup>2</sup> this project will also seek to achieve other long-term sustainability benefits for local families and the environment. Project activities under the PoA are expected to contribute to different SDGs in the following ways:

- Reduction in end-user expenses related to the purchase of fuel for cooking (in line with SDG 1: No Poverty).
- Less harmful carbon monoxide and particulate matter in households will reduce indoor air pollution and thereby decrease the incidence of respiratory diseases, headaches and itchy eyes, particularly for women and children who spend a lot of their time in cooking activities (in line with SDG 3: Good Health and Wellbeing, and 5: Gender Equality).
- Increased penetration of clean and reliable cooking technologies (in line with SDG 7: Affordable and Clean Energy) and increased awareness of their safety, economic and environmental benefits (in line with SDG 4: Quality Education).
- BURN produces its cookstoves in a manufacturing facility located in Kenya, thus generating hundreds of jobs on the African continent. Other jobs are created for sales, marketing, distribution and monitoring staff in Kenya. Continuous training results in permanent knowledge transfer to local people. In the future, BURN may open additional factories or assembly lines across the continent depending on demand (in line with SDG 1: No Poverty, and 8: Decent Work and Economic Growth).
- Reduced deforestation and forest degradation in areas where non-renewable biomass is used as a fuel source. This contributes to the overall stability of forest ecosystems that support biodiversity, watersheds and soil conditions (in line with SDG 15: Life on Land).

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<sup>2</sup> <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

## Economic, Social and Environmental Impacts of the Project as per Safeguarding Principles & Requirements

Safeguarding Principle	Assessment
Human Rights	The project respects internationally proclaimed human rights and is not complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The project will not discriminate with regards to participation and inclusion.
Gender Equality and Women's Rights	The project activity does not endorse any form of discrimination based on gender. The project will take into account gender roles and the abilities of women and men to participate in the decision/design of the project activity. It will ensure that both women/women's associations and men will be invited to the stakeholder consultation so that a representative number of stakeholders of both genders will be present at the physical local stakeholder consultation meeting.
Community Health, Safety and Working Conditions	The project will not expose the community to increased health risks and will not adversely affect the health of the workers and the community.
Cultural Heritage, Indigenous Peoples, Displacement and Resettlement	The project activity will not have any negative impact on cultural heritage or indigenous people, nor will it displace or resettle people.
Corruption	The project doesn't involve, is not complicit in, and does not inadvertently contribute to or reinforce corruption or corrupt practices.
Economic Impacts	The project will respect all labor rights. No negative economic consequences are expected from the project activity. On the contrary, it is expected that the project will contribute to sustainable economic growth.
Climate and Energy	The project will reduce GHG emissions, which will be monitored and verified in line with carbon standard requirements.
Water	The project will not affect natural water patterns/flows or cause any additional erosion and/or water body instability.
Environment, Ecology and Land Use	The project will not have any negative impact on the environment and ecology, and will not involve the use of land and soil for production of crops or other products. The release of particulate matter and carbon monoxide are significantly reduced by the introduction of improved (more efficient) cookstoves.

**MUHTASARI USIO WA KIUFUNDI WA  
SHUGHULI ZA MRADI WA CARBON KATIKA JAMHURI YA KENYA CHINI YA PROGRAM YA GOLD  
STANDARD 10789 " ECOA\_BURN MULTI-COUNTRY CLEAN COOKING PROGRAMME (MPANGO WA  
UPIKAJI SAFI WA NCHI NYINGI"**

**Utangulizi**

Katika nchi nyingi za bara la Afrika, upishi hufanyika kwenye jiko la mawe 3 au majiko ya kienyeji yasiyofaa sana, na hutumia nishati nyingi, hasa kuni zisizoweza kurejeshwa pamoja na mkaa <sup>1</sup>. Matumizi makubwa ya nishati yana athari hasi kwa mazingira inayopelekea ukataji miti na uharibifu wa ardhi, utoaji na uzalishaji wa gesi yenye joto (GHG), kupoteza rutuba ya udongo na kupungua kwa uwezo wa udongo kuhifadhi maji. Zaidi ya hayo, uchafuzi wa hewa ndani ya nyumba kupitia vichafuzi vinavyo athiri afya wakati wa kuchoma kuni na mkaa na husababisha magonjwa kama nimonia, kiharusi, magonjwa ya moyo, magonjwa sugu ya mapafu na saratani ya mapafu.

**Madhumuni na teknolojia ya Shughuli za Mradi wa Hiari (VPA)**

Madhumuni ya Shughuli za Mradi wa Hiari (VPA) uliyojumuishwa chini ya Mpango wa Shughuli wa Kiwango cha Dhahabu, Gold Standard Programme of Activities (PoA), 'ECOA\_BURN (multi-country Clean Cooking Programme)' Mpango wa Upikaji Safi wa Nchi Nyingi', ni usambazaji wa majiko yenye ubora wa hali ya juu ( kwa watumiaji wa mijini, kando ya miji na vijijini. (kaya, jumuiya, taasisi, au SMEs) nchini Kenya.

Gesi chafu kadhaa (GHG), ikijumuishwa na kaboni dioksidi, huzalishwa kama matokeo ya muwako usio kamili wa nishati katika majiko ya kupikia. Uzalishaji zaidi wa GHG hutokana na matumizi ya nishati ambayo haiwezi kurejeshwa. Jiko lililoboreshwa, linaleta ufanisi wa uhifadhi joto ikilinganishwa na majiko ya awali ya kupikia, hivyo basi hupunguza kiasi cha kuni kinachotumika na likiwa na kifaa kinachohusiana na utoaji wa GHG.

Kwa kutumia Majiko yaliyoboreshwa, watumiaji hugawa na kuhamisha haki zote za alama ya kaboni kwa BURN Manufacturing Co., Shirika la Kuratibu na Kusimamia la PoA na utekelezaji wa Shughuli za Mradi wa Hiari (VPA).

Majiko yaliyoboreshwa husambazwa kwa watumiaji wa mwisho kupitia uuzaji/usambazaji wa moja kwa moja kupitia aina mbalimbali za maduka ya reja reja kote nchini.

**Kundi lengwa na Mahali**

Walengwa wa VPA ni jumuiya za mijini, pembezoni mwa mijini au kaya za vijijini, taasisi, au SMEs zinazotumia nishati isiyoweza kurejeshwa yenye mfumo wa kawaida, usio na matumizi ya jiko yasiyo na mfumo mzuri wa mzunguko bora wa hewa au mfumo wa uingizaji hewa wa gesi ya moshi, yaani bila dohani au bomba la moshi, kabla ya kupokea jiko la kupikia la ufanisi. VPA inaweza kujumuisha maeneo ya mijini, pembezoni mwa miji na/au vijijini katika Kaunti zote nchini Kenya.

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<sup>1</sup> <http://www.who.int/mediacentre/factsheets/fs292/en/>

**Teknolojia**

VPA inaweza kuleta miundo tofauti ya Jiko lililoboreshwa na kutengenezwa na BURN. Miundo ya Jiko lililoboreshwa ina ufanisi wa hali ya juu, inayozingatia utamaduni wa upishi katika eneo la mradi ili kuhakikisha kwamba uboreshaji wa teknolojia na viwango vya maisha bora haviji kwa gharama ya mila za kitamaduni. VPA inaweza kuchagua kusambaza miundo mingine ya jiko baada ya muda.



### **Mpango wa utekelezaji**

Mradi ulianza tarehe 1 Agosti 2023 kwa usambazaji wa majiko ya kwanza yaliyoboreshwa. Inatarajiwa kuwa majiko 22,500 zitakuwa zimeuzwa ifikapo 2027.

### **Alama za kaboni**

Upunguzaji wa utoaji wa gesi chafuzi (GHG) unaopatikana kupitia uokoaji wa nishati isiyoweza kurejeshwa utasababisha alama ya kaboni kufuatia sheria na taratibu za uthibitishaji. Mapato kutokana na mauzo ya alama za kaboni husaidia yafuatayo, miongoni mwa mengine:

- a) Kusambaza majiko yaliyoboreshwa kwa bei ya ruzuku inayoweza kumudiwa na watumiaji wa mwisho.
- b) Kuongeza na kupanua programu, hivyo kufikia watumiaji wengi wa mwisho nakuzalisha kazi zaidi;
- c) Kuwekeza zaidi katika tafiti na maendeleo, hivyo basi kuzalisha majiko ya ubora wa hali ya juu kwa gharama ya chini;
- d) Kutoa huduma ya kuaminika baada ya mauzo;
- e) Kuhamasisha na kuongeza ufahamu miongoni mwa watumiaji wa mwisho kuhusu manufaa na jinsi ya kutumia majiko yaliyoboreshwa.

### **Mchango kwa Maendeleo Endelevu**

Mbali na kupunguza utoaji wa GHG kulingana na Lengo la Umoja wa Mataifa la Maendeleo Endelevu (SDG) nambari 13 'Hatua ya Hali ya Hewa', mradi huu pia utalenga kuongeza manufaa mengine endelevu ya muda mrefu kwa familia pamoja na mazingira. Shughuli za mradi chini ya PoA zinatarajiwa kuchangia maendeleo endelevu kwa namna mbalimbali (SDGs) kwa njia zifuatazo:

- Kupunguza gharama za mtumiaji wa mwisho zinazohusiana na ununuzi wa mafuta ya taa kwa ajili ya kupikia (kulingana na SDG 1 'Hakuna Umasikini').
- Kupungua kwa hewa chafu na chembe chembe wakati jiko likiwashwa na kupikiwa ndani, na hivyo kupungua kwa magonjwa ya kupumua, maumivu ya kichwa na macho kuwasha, na haswa kwa wanawake na watoto ambao hutumia wakati mwingi katika shughuli za kupikia (kulingana na SDG 3 'Afya njema na ustawi' na SDG 5 'Usawa wa Jinsia').
- Kuongeza ufikaji wa teknolojia safi ya kupikia inayotegemewa (kulingana na SDG 7 'Nishati Rahisi na Safi') na kuongeza uelewa wa manufaa yanayohusiana na usalama, uchumi na mazingira (kulingana na SDG 4 'Elimu Bora').
- BURN inazalisha majiko yake katika kiwanda kilichoko nchini Kenya, na hivyo kuzalisha mamia ya ajira katika bara la Afrika. Ajira zingine zinapatikana kwa wafanyakazi wa mauzo, uzaji, usambazaji na ufuatiliaji nchini Tanzania. Mafunzo endelevu husababisha upatikanaji wa maarifa ya kudumu kwa wazawa. BURN inaweza kufungua viwanda zaidi siku zijazo au viwanda vya kuunganisha majiko katika bara zima kulingana na mahitaji (kulingana na SDGs 1 'Hakuna Umaskini' na 8
- 'Kazi Yenye Heshima na Ukuaji wa Uchumi').
- Kupunguza ukataji miti na uharibifu wa misitu katika maeneo ambayo nishati isiyoweza kurejeshwa hutumika kama chanzo cha nishati. Hii itachangia uthibiti wa jumla wa mifumo ya ikolojia ya misitu ambayo inasaidia bayoanuwai, maeneo ya maji na hali ya udongo (kulingana na SDG 15 'Maisha kwenye Ardhi').

**Athari za kiuchumi, kijamii na kimazingira za mradi kulingana na Kanuni na Mahitaji ya Usalama.**

<b>Kanuni za Usalama</b>	<b>Tathimini</b>
Haki za Binadamu	Mradi unaheshimu haki za binadamu zinazotangazwa kimataifa na haushiriki katika vurugu au ukiukaji wa haki za binadamu wa aina yoyote kama inavyofafanuliwa katika Azimio la Kimataifa la Haki za Binadamu. Mradi hautabagua kuhusiana na ushiriki na ushirikishwaji.
Usawa wa Jinsia na Haki za Wanawake	Shughuli za mradi hazikubali aina yoyote ya ubaguzi kulingana na jinsia. Mradi utazingatia majukumu ya kijinsia na uwezo wa wanawake na wanaume kushiriki katika uamuzi/usanifu wa shughuli ya mradi. Itahakikisha kuwa wanawake na wanaume wataalikwa kwenye mashauriano ya washikadau ili idadi ya uwakilishi ya washikadau wa jinsia zote iwepo kwenye mkutano wa mashauriano wa wadau wa eneo husika.
Afya ya Jamii, Usalama na Mazingira ya Kazi	Mradi hautahatarisha jamii katika kuongezeka kwa hatari za kiafya na kuhakikisha hauta athiri afya ya wafanyikazi na jamii.
Urithi wa Kitamaduni, Watu wa Asili, Uhamisho na Makazi Mapya	Shughuli ya mradi hazitakuwa na athari yoyote mbaya kwa urithi wa kitamaduni, wakazi wala haitahamisha au kuwapa makazi watu mapya.
Rushwa	Mradi hauhusishi, kushiriki au kuchangia kwa hata bahati mbaya au kuimarisha rushwa au miradi yenye rushwa.
Athari za Kiuchumi	Mradi utaheshimu haki zote za wafanyikazi. Hakuna matokeo mabaya ya kiuchumi yanayotarajiwa kutoka kwa shughuli ya mradi. Kinyume chake, inatarajiwa kuwa mradi utachangia ukuaji endelevu wa uchumi.
Hali ya Hewa na Nishati	Mradi utapunguza uzalishaji wa hewa mbaya (GHG) kama utakavyofuatiliwa na kuthibitishwa kulingana na mahitaji ya kiwango cha kaboni.
Maji	Mradi hautaathiri mifumo/mitiririko ya asili ya maji au kusababisha mmomonyoko wa ziada na/au kuathiri makazi ya maji
Mazingira, ikolojia na utumizi wa ardhi	Mradi hautakuwa na athari mbaya kwa mazingira na ikolojia na hautahusisha matumizi ya ardhi na udongo kwa ajili ya uzalishaji wa mazao au bidhaa nyingine. Uzalishaji chembe chembe na hewa chafu hupunguzwa kwa kiasi kikubwa kwa matumizi ya majiko yaliyoboreshwa (ya ufanisi zaidi).