

NS-151 - The Promotion of the Use of Efficient Institutional Stoves in Institutions

Uganda

NAMA Seeking Support for Preparation

A Overview

A.1 Party

Uganda

A.2 Title of Mitigation Action

The Promotion of the Use of Efficient Institutional Stoves in Institutions

A.3 Description of mitigation action

This NAMA intends to reduce emissions through the promotion of the use of improved energy efficient cook stoves in educational institutions at all levels in the different regions of Uganda. Greenhouse gas (GHG) emissions will be reduced because the efficient cookstoves require less woodfuel (up to 50%) to generate the same amount of energy required for cooking as ordinary three stone cookstoves.

The promotion of energy efficient cookstoves will be achieved first by sensitising the main stakeholder, who are the Ministry of Education and Sports, to encourage the development of a policy instrument that ensures all educational institutions (EIs) in the country use energy efficient stoves. This policy instrument could include incentives in form of grants and loans for compliance.

Sensitisation will then be directed towards district staff including the District Education Officer, the District Inspector of Schools, headteachers, teachers, school management committees and parents on the importance of mitigating GHGs through the use of energy efficient stoves.

A database of schools and their energy status will be made and subsequently updated on a regular basis. From this database beneficiary educational institutions will be selected based on particular criteria that will include number of pupils, energy status, financial status and willingness to pay. The EIs will be divided into five groups corresponding to the intended year of installation. The first group of EIs will then be assisted to apply for subsidies and loans from microfinance institutions (MFIs) depending on their need. The intent is to provide a subsidy for half the cost, and a loan for the remainder. The loans will be provided through a revolving fund, which will introduce an element of sustainability to the initiative. An amount of money will be available as a loan facility to the EIs through an MFI depending on their needs. This amount will enable the EIs to purchase the required number of stoves from manufacturers or their dealers, who will then be responsible for supplying and maintaining them. Manufacturers or their dealers will sign an installation and maintenance contract. The EIs will start repaying the loan after purchasing and installing these stoves and complete repayment should be between 6 and 9 months. This amount will then be available to the next group of EIs and thus become revolving.

The NAMA will also support the development of a sustainable stove industry by providing entrepreneurs including technicians and artisans with loans through microfinance institutions to improve their businesses or start up new businesses. This loan facility will be accompanied with both technical skills in the manufacture and maintenance of stoves and financial and business skills in small and medium enterprise (SME) management. The NAMA will provide funds to MFIs and build capacity to develop appropriate business models for stove manufacturers.

In order to assure the quality of stoves being produced, this NAMA will support the development of an appropriate standard for institutional stoves with Uganda National Bureau of Standards.

The types of stove to be promoted include mainly the rocket stove (Adkins *et al*, 2010) which can reduce fuelwood consumption by 33% and other appropriate models.

Greenhouse gases covered by the mitigation action - the NAMA will avoid emissions of CO₂ because of more efficient combustion in the improved institutional stove, compared to the BAU scenario. More heat energy will be produced per kilogram of woodfuel, which means less woodfuel would be required for the same cooking activity. This would mean less woodfuel would be used and thus fewer emissions would be generated.

A.4 Sector

<input type="checkbox"/> Energy supply	<input type="checkbox"/> Transport and its Infrastructure
<input type="checkbox"/> Residential and Commercial buildings	<input type="checkbox"/> Industry
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Forestry
<input type="checkbox"/> Waste management	

Other

A.5 Technology

<input type="checkbox"/> Bioenergy	<input type="checkbox"/> Cleaner fuels
<input checked="" type="checkbox"/> Energy Efficiency	<input type="checkbox"/> Geothermal Energy
<input type="checkbox"/> Hydropower	<input type="checkbox"/> Solar Energy
<input type="checkbox"/> Wind Energy	<input type="checkbox"/> Ocean Energy
<input type="checkbox"/> Carbon Capture and Storage	<input type="checkbox"/> Low till / No till
<input type="checkbox"/> Land fill gas collection	

Other

A.6 Type of action

<input checked="" type="checkbox"/> National/ Sectoral goal	<input type="checkbox"/> Project: Investment in machinery
<input type="checkbox"/> Strategy	<input type="checkbox"/> Project: Investment in infrastructure
<input type="checkbox"/> National/Sectoral policy or program	<input type="checkbox"/> Project : other

Other

A.7 Greenhouse gases covered by the action

<input checked="" type="checkbox"/> CO ₂	<input type="checkbox"/> CH ₄
<input type="checkbox"/> N ₂ O	<input type="checkbox"/> HFCs
<input type="checkbox"/> PFCs	<input type="checkbox"/> SF ₆

Other

B National Implementing Entity

B.1.0 Name Climate Change Department
B.1.1 Contact Person 1 Ag. Commissioner Chebet Maikut
B.1.2 Address
B.1.3 Phone
B.1.4 Email chmaikut@gmail.com

B.1.5 Contact Person 2
B.1.6 Address
B.1.7 Phone
B.1.8 Email
B.1.9 Contact Person 3
B.1.10 Address
B.1.11 Phone
B.1.12 Email
B.1.13 Comments

The Ministry of Energy and Mineral Development (MEMD) will be the lead agency because the NAMA is primarily an Energy sector intervention. A coordination office will be established at the Ministry headquarters under the Commissioner Energy Resources Department led by the Project Coordinator MEMD. This Coordination office will liaise with a *designated officer* under the Commissioner Educational Planning in the Ministry of Education and Sports (MOES) headquarters. This designated officer will act as the Coordinator MOES. The Coordinator MOES will work closely with the Assistant Commissioner Construction Management Unit (CMU) MOES who will nominate a technical officer to be responsible for the project. The Coordinator MOES will also liaise directly with District staff led by the District Education Officers (DEO).

The DEO would identify candidate educational institutions that need support as well as an appropriate district-based NGO to carry out the sensitization. The selection of the institution would be based on the specific criteria mentioned above. The Uganda National Bureau of Standards will develop standards for institutional stoves. Stove manufacturers will manufacture and install the stoves, while microfinance institutions will provide financial products and business models for the educational institutions.

Below is a description of the key roles of the main stakeholders under this NAMA.

- i) Ministry of Energy and Mineral Development:**
- a) To conduct overall coordination of programme
 - b) To liaise with other stakeholders including donors
 - c) To develop workplans and requisition for funds
 - d) To monitor the progress of implementation
 - e) To disburse funds to the key stakeholders

- f) To prepare financial reports and audits
- g) To conduct sensitization of stakeholders with assistance of NGOs
- h) To conduct quarterly progress meetings
- i) To prepare quarterly monitoring reports including emissions reduction

ii) Ministry of Education and Sports:

- a) To develop a policy to promote the use of energy efficient cookstoves
- b) To conduct a baseline survey on energy in EIs
- c) To identify the EIs to be attended to
- d) To liaise with the District Education Staff, District Inspector of Schools, Headteachers, teachers and school management committees

iii) District Education staff:

- a) To identify suitable NGOs
- b) To monitor the implementation of the programme with the MOES CMU
- c) To provide quarterly reports

iv) Uganda National Bureau of Standards:

- a) To conduct research on existing standards
- b) To test the performance of institutional cookstoves
- c) To develop appropriate standards with international certification
- d) To monitor the construction and installation

v) NGOs:

- a) To develop appropriate materials for different stakeholders
- b) To conduct sensitization workshops for MOES staff, District staff, School Staff including school management committees.
- c) To provide training to artisans, technicians and on both the technical aspects of stove installation and maintenance and the financial and managerial aspects of developing stoves businesses

vi) Stove Manufacturers:

- a) To manufacture, install and maintain the institutional cookstoves
- b) To receive loans for business development from microfinance institutions
- c) To receive technical and business skills from NGOs

vii) Microfinance Institutions:

- a) To develop appropriate financial products and business models for the Educational institutions, the stove manufacturers.
- b) To disburse funds and ensure repayments
- c) To monitor the use of the funds and the repayments.

C Expected timeframe for the preparation of the mitigation action

C.1	Number of months for completion	6
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D Currency

D.1	Used Currency	<input type="text" value="AED"/> Conversion to USD: 1
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E Cost

E.1.1	Estimated full cost of preparation	100000
E.1.2	Comments on full cost of preparation	<ul style="list-style-type: none">• Background and feasibility studies : US\$ 20,000• Technical assessments and designs: US\$ 20,000• Consultations with stakeholders : US\$ 20,000• Work plans, including specific activities and elements: US\$ 10,000• Capacity Building: US\$ 30,000

F Support required to prepare the mitigation action

F.1.1	Amount of Financial support	100000
F.1.2	Type of required Financial support	<input checked="" type="checkbox"/> Grant <input type="checkbox"/> Loan (sovereign) <input type="checkbox"/> Loan (Private) <input type="checkbox"/> Concessional loan <input type="checkbox"/> Other <input type="text"/> <input type="checkbox"/> Guarantee <input type="checkbox"/> Equity <input type="checkbox"/> Carbon finance
F.1.3	Comments on Financial support	
F.2.1	Amount of Technical support	
F.2.2	Comments on Technical support	
F.3.1	Amount of capacity building support	
F.3.2	Type of required capacity building support	<input type="checkbox"/> Individual level <input type="checkbox"/> Institutional level <input type="checkbox"/> Systemic level <input type="checkbox"/> Other <input type="text"/>
F.3.3	Comments on Capacity Building support	

F.4	Financial support required	<input type="checkbox"/>
F.5	Technological support required	<input type="checkbox"/>
F.6	Capacity support required	<input type="checkbox"/>

G Relevant National Policies strategies, plans and programmes and/or other mitigation action

G.1 Relevant National Policies

8.1. Links to National Development Plan:

This intervention responds to two objectives in the Energy sector, which is considered one of the Complementary Sectors in the National Development Plan:

- *Objective 4 - Promotion of Energy Efficiency.* The combustion of woodfuel is more efficient in modern institutional stoves than in traditional three stone stoves.
- *Objective 6 - Promotion of Renewable Energy.* The institutional stove is a modern renewable energy technology.

This NAMA is consistent with the overall goal of the *Renewable Energy Policy (2007)* which is to increase the use of modern renewable energy from 4% to 61%. It addresses the sustainable use of biomass as an objective in the Renewable Energy Policy.

8.2. Links to Climate Change Policy: The NAMA supports *Policy Priority No 9* in the Climate Change Policy (2013), which seeks to *promote sustainable energy access and utilisation as a means of sustainable development in the face of uncertainties related to climate change.* The NAMA also promotes the use of energy efficient cookstoves, which is also one of the strategies of the climate change policy.

G.2 Link to other NAMAs

H Attachments

H Attachments

Title	Description
NAMAs Proposal cookstoves.docx	

H.1 Attachment description

H.2 File

I Support received

I.1 Outside the Registry

No support received yet

I.2 Within the Registry

Support provided	SupportType	Amount	Comment	Date
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