



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF ENERGY

NATIONAL CLEAN COOKING STRATEGY

(2024 – 2034)

MAY, 2024



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ABBREVIATION

AIDS	Acquired Immune Deficiency Syndrome
AQG	Air Quality Guideline Level
CAMARTEC	The Centre of Agricultural Mechanization and Rural Technology
CBOs	Community Based Organizations
COSTECH	Commission for Science and Technology
ERA	Electricity Regulatory Authority
EWURA	Energy and Water Utilities Regulatory Authority
FBOs	Faith Based Organizations
HIV	Human Immunodeficiency Virus
ICS	Improved Cookstove
ITMOs	Internationally Transferred Mitigation Options
LPG	Liquefied Petroleum Gas
MMscf	Million Standard Cubic Feet
MTF	Multi-Tier Framework
MW	Megawatt
NACTVET	National Council for Technical and Vocational Education and Training
NBS	National Bureau of Statistics
NCMC	Tanzania National Carbon Monitoring Centre
NEEC	National Economic Empowerment Council
NEMC	National Environment Management Council
NGO's	Non-Governmental Organization
OSHA	Occupational Safety and Health Authority
PCCB	Prevention and Combating of Corruption Bureau
PM	Particulate Matter
PO- RALG	President's Office - Regional Administration and Local Government Authority
PPP	Public-Private Partnership
REA	Rural Energy Agency
SDGs	Sustainable Development Goals
SE4ALL	Sustainable Energy for All
Shillings	Tanzanian Shillings
TAFF	Tanzania Forest Fund
TAFORI	Tanzania Forestry Research Institute
TANESCO	Tanzania Electric Supply Company Limited
TANROAD	Tanzania National Roads Agency
TARURA	Tanzania Rural and Urban Road Agency
TBS	Tanzania Bureau of Standards
TEMDO	Tanzania Engineering and Manufacturing Design Organisation
TFS	Tanzania Forest Services Agency
TIC	Tanzania Investment Centre
TPA	Tanzania Ports Authority
TPDC	Tanzania Petroleum Development Corporation
TRA	Tanzania Revenue Authority
TRC	Tanzania Railway Corporation
UNIDO	United Nations Industrial Development Organisation

PREFACE

Clean cooking is a specific agenda that has taken significant importance in policies, plans and strategies of various Governments worldwide. The importance of this agenda is driven by the increasing environmental degradation, climate change, and health impacts associated with the use of traditional cooking methods. Goal Number 7 of the United Nations Sustainable Development Goals focuses on ensuring access to affordable, reliable, sustainable, and modern energy for all. However, there are still challenges in accessing affordable, sustainable, and reliable energy for various uses, particularly for cooking, especially in Sub-Saharan African countries, including Tanzania. This situation causes many people and some institutions to continue using traditional cooking solutions, which further exacerbates environmental, health, economic, and social impacts.

The Government of the United Republic of Tanzania, in collaboration with various stakeholders, has been formulating and implementing policies and strategies aimed at promoting the use of clean cooking solutions and environmental conservation. Despite the implementation of these policies and strategies across various sectors and institutions, there is no national guideline providing specific direction to ensure universal adoption of clean cooking solutions and elimination of traditional sources. Based on that situation, Her Excellency Dr. Samia Suluhu Hassan, President of the United

Republic of Tanzania, during the opening of the National Clean Cooking Conference in 2022, directed the preparation of a National Strategy to provide guidance on the use of clean cooking solutions.

In that context, the government has prepared the National Clean Cooking Strategy, which provides guidance for the country's transition to using clean cooking solutions. This strategy aims to ensure that 80 percent of Tanzanians use clean cooking solutions by the year 2034.

Therefore, I take this opportunity to call upon all stakeholders, including Sectoral Ministries, Public Institutions, Government Departments, Regional Administration and Local Government Authorities, Civil Society Organizations, Private Sectors, Development Partners, and the general public, to actively participate in implementing this strategy. It is my belief that by the year 2034, our country will have made significant progress in increasing the adoption of clean cooking solutions, enabling environmental conservation, improving community health and well-being, fostering economic growth, and contributing to the achievement of the United Nations Sustainable Development Goals by 2030.



Dr. Doto Mashaka Biteko (MP)
DEPUTY PRIME MINISTER AND MINISTER FOR ENERGY

FOREWORD

The Government of the United Republic of Tanzania, through various national and international policies, recognizes the importance of using clean cooking energy as a crucial tool in addressing environmental, health, social, and economic challenges. These policies outline objectives to improve the lives of citizens through the use of clean cooking solutions. To achieve these goals, the Government has prepared this Strategy, which provides guidance on the use of clean cooking solutions in the country through the efforts of various stakeholders.

This strategy is divided into seven chapters. The first chapter is an Introduction that provides a summary on the concept of clean cooking, the background, the guidelines considered in the preparation of the strategy, the outcomes of the strategy, methodology used and benchmarking. The second chapter gives elaborations on the current situation of fuels and technologies used in the country, the effects of using traditional cooking solutions, barriers to the use of clean cooking solutions, and cross-cutting issues. The third chapter outlines the vision statement, mission, main objective, and specific objectives.

The fourth chapter outlines the strategies, targets, and outcome indicators for implementing specific objectives. The fifth chapter presents the implementation matrix of

the Strategy, specifying objectives, strategies, targets, outcome indicators, implementation timelines, and stakeholders responsible for strategy implementation. The sixth chapter identifies the responsibilities of clean cooking stakeholders, while the seventh chapter presents the monitoring and evaluation framework for implementation of the Strategy.

I would like to take this opportunity to express my gratitude to all stakeholders who participated in the preparation of this Strategy. I acknowledge the involvement of various stakeholders, including Ministries, Regional Administration and Local Government Authorities, Independent Departments, Government Agencies, Public Institutions, Private Sector, Non-Governmental Organizations, and Development Partners. Last but not least, I would like to thank all

members of the National Clean Cooking Working Group who participated in the preparation of this Strategy.



A handwritten signature in blue ink, consisting of a large, stylized 'F' followed by a series of loops and a final dot.

.....
Eng. Felchesmi Jossen Mramba
PERMANENT SECRETARY

The background of the slide is a photograph of a gas stove with blue flames. A large, semi-transparent green rectangle is overlaid on the right side of the image, extending from the top to the bottom. The word "INTRODUCTION" is written in white, bold, uppercase letters at the bottom of this green area.

INTRODUCTION



1. INTRODUCTION

1.1. The Concept of Clean Cooking

According to the World Bank Multi-Tier Framework (MTF) of 2020, clean cooking is attributed to efficiency, convenience, fuel availability, safety, affordability and the avoidance of exposing users to toxic and hazardous environments. Additionally, the World Health Organization Guidelines of 2021 state that clean fuel and technologies are assessed based on the levels of fine particulate matter not exceeding $2.5 \mu\text{m}$ and carbon monoxide emissions. Fuel and technology combinations will be classified as clean if they achieve:

- i. Annual average air quality guideline level (AQG, $5 \mu\text{g}/\text{m}^3$) or the Interim Target-1 level (IT1, $35 \mu\text{g}/\text{m}^3$) for Particulate Matter with a size of $2.5 \mu\text{m}$ (PM_{2.5}); and
- ii. 24-hour average air quality guideline level (AQG, $4 \text{ mg}/\text{m}^3$) or the Interim Target-1 level (IT-1, $7 \text{ mg}/\text{m}^3$) for carbon monoxide (CO).

Thus, in the context of the National Clean Cooking Strategy, clean cooking refers to fuels and appropriate technologies that collectively produce a minimum level of toxic emission when used appropriately. This concept aims to ensure the safety, sustainability, and easy accessibility of cooking energy, saving time, and reducing usage costs, as well as minimizing environmental and health impacts for users. It is also a crucial tool in implementing national and international commitments aimed at combating climate change and reducing greenhouse gas emissions.

1.2. Background

The National Clean Cooking Strategy arises from the need for a comprehensive national plan to address the increasing environmental degradation and the health, economic, and social impacts associated with the use of traditional cooking methods. Due to the cross-cutting nature of cooking energy issues, there have been challenges in implementing strategies to mitigate these impacts. Since Tanzania gained independence in 1961, there has never been an integrated national plan to reduce the use of traditional solutions.

According to the National Energy Policy of 2015, the increasing demand for solid biomass based fuels for cooking coupled with traditional wood to energy conversion technologies, cooking methods and the use of inefficient stoves have contributed to environmental degradation. Furthermore, the policy indicates that the use of wood-fuel in rural and urban areas has also contributed to health problems associated with smoke and recommends necessary exploration of possibilities for fuel switching to other forms of energy such as compressed natural gas, liquefied petroleum gas (LPG) and electricity.

This strategy has been prepared to fulfill the objective of the National Energy Policy of 2015, which aims to improve quality of life by promoting the use of modern fuels. It specifically targets the following policy statements (i) enhance fuel switch from woodfuel to modern energy; and (ii) facilitate adoption of appropriate cooking appliances to promote alternatives to woodfuel.

Moreover, the implementation of this Strategy will enable the achievement of the objectives outlined in various national policies, including the National Environmental Policy of 2021 which aims to strengthen forest conservation for environmental preservation through the use of cost-effective and readily available alternative energy sources for cooking; the National Forest Policy of 1998 which aims to ensure sustainable availability of forest products and services by maintaining a sufficient forest area under strict management; the National Health Policy of 2007 which directs the establishment of a good and sustainable system of conserving, preserving, and protecting the environment for the benefit of the health of the people and future generations; and the National Women and Gender Development Policy of 2000 which focuses on conserving the environment to reduce the burden to women of fetching firewood and water to facilitate their participation in social activities.

During the opening of the National Clean Cooking Energy Dialogue held in November 2022, Her Excellency Dr. Samia Suluhu Hassan, President of the United Republic of Tanzania, issued directives for

the preparation of a National Clean Cooking Strategy to provide guidance on transitioning to the use of clean cooking solutions. Additionally, the President directed that 80 percent of Tanzanians should transition to the use of clean cooking solutions within ten years.

Therefore, the purpose of this Strategy is to ensure the availability of clean, safe, affordable, sustainable, and reliable cooking energy. This Strategy outlines implementation strategies, targets, outcome indicators, and the stakeholders responsible for implementing the Strategy and their roles. Other issues addressed in the Strategy include the implementation timeline and the action plan for its execution.

1.3. Guidelines Considered in the Preparation of the Strategy

The preparation of this strategy considered relevant national and international policies, laws, regulations, and guidelines related to clean cooking solutions. These guidelines include: the United Nations Sustainable Development Goals for 2030 (SDGs 2030), the African Union Agenda 2063, the Sixth East African Community Development Strategy (2021/22 – 2025/26), Tanzania's Sustainable Energy for All Agenda (SE4ALL 2015), the National Development Vision 2025; and the Election Manifesto of the Ruling Party CCM for 2020 – 2025. Other guidelines include the Third Five-Year National Development Plan (2021/22 – 2025/26), the National Master Plan for Conservation and Environmental Management (2022 - 2032), Tanzania's Nationally Determined Contribution (2021), the National Energy Policy of 2015, the National Environmental Policy of 2021, the National Forestry Policy of 1998, the National Health Policy of 2007, the National Policy on Women and Gender Development of 2000, and the Education and Training Policy of 2014, and the Agriculture Policy of 2013.

1.4. Outcomes of the Strategy

This strategy has established strategies, targets, and outcome indicators that will serve as tools to ensure the following outcomes:

- i. Increased awareness among citizens and institutions on the importance of using clean cooking solutions;
- ii. Increased access of clean, affordable, sustainable, and reliable cooking solutions by improving infrastructure, ensuring availability of raw materials, and simplifying procurement processes;
- iii. Reduced cost of clean energy, appliances and efficient cook stoves;

- iv. Existence of enabling policies, laws, regulations and guidelines to facilitate the adoption of clean cooking solutions;
- v. Increased investment in clean cooking solutions, thereby contributing to economic growth;
- vi. Enhanced capacity to effectively implement clean cooking projects;
- vii. Expanded scope of research and innovation in technologies related to cooking solutions and
- viii. Decrease of HIV and AIDS transmission and promotion of gender equality and good governance in clean cooking.

1.5 Methodology

This strategy has been developed by reviewing various documents related to cooking solutions, including policies, laws, regulations, guidelines, and publications from within and outside the country.

The development of this strategy involved Ministries, Independent Departments, Regional Administrations and Local Government Authorities, Government Agencies and Public Organizations. This ensured that they understand their responsibilities well and execute them accordingly. Other stakeholders involved included the Private Sector and Non-Governmental Organizations, who were engaged through meetings, dialogue and consultation. Additionally, development partners have been involved through discussions on areas of collaboration, funding for specific projects, and sectoral assistance.

1.6. Benchmarking

Another method used in the preparation of this Strategy is the analysis of various policies and strategies of countries which have succeeded or are keen to increase the use of clean cooking solutions. Those countries include:

1.6.1 India

According to the World Bank statistics of the year 2023, 71.1 percent of the Indian population had access to clean cooking energy in 2021. In promoting the use of clean cooking energy in India, the Public Institution managing Natural Gas is responsible for development of natural gas transmission infrastructure. The Regulatory Authority initiates and oversees the bidding process for allocating specific zones for the construction of the infrastructure for natural gas distribution. One of the criteria of the evaluation process is the number of households to be connected to natural gas in proximity to the identified project. The Private Sector develops natural gas distribution networks to customers and pays for transmission tariffs.

With regard to the promotion of LPG, the Government of India, through the Ministry of Petroleum and Natural Gas, has been implementing the “Pradhan Mantri Ujjwala Yojana Scheme” since 2016. This scheme aims at providing LPG cylinders to low-income households. According to the Ministry of Petroleum and Natural Gas in India, as of 30th January, 2023, a total of 95,870,119 households had benefited from the scheme.

The private sector in India is responsible for production of biogas plants. The feedstocks for the biogas plants is from agricultural, municipal and industrial wastes. The produced biogas provides sustainable energy including cooking energy. The produced gas is also compressed into special cylinders (tanks) for easier transportation.

The experience drawn from India highlights how the Private Sector is involved in the distribution of natural gas, whereby this Strategy has developed specific strategies for allocating specific zones to implement distribution projects. Additionally, subsidy programs for clean cooking solutions targeting low-income households is the notable experience, whereby specific strategies have been developed to implement such programmes to promote the use of clean cooking solutions nationwide. Furthermore, the establishment of biogas industries is a viable solution for producing clean cooking energy in the country.

1.6.2 Kenya

According to the World Bank Statistics for the year 2023, 23.9 percent of the population in Kenya had access to clean cooking energy in 2021. In promoting the use of clean cooking energy, financial support is provided through the provision of affordable loans for LPG cylinders. According to the Kenya Market Assessment Final Report of 2013, Micro-finance Institutions collaborate with suppliers to provide affordable and low interest loans. The main objective of this program is to make the initial cost of purchasing cylinders more affordable through a long-term repayment schedule.

Also, in Kenya, the Energy Policy of 2004 aims to develop biogas technology for household use. The government has made development efforts in collaboration with various development partners, whereby according to the Ministry of Energy report of 2023, it is estimated that Kenya has approximately 20,000 biogas systems. Additionally, the government has policies and strategies aimed at promoting the use of biogas, providing technical and financial support, and building infrastructure networks for distributing biogas in various areas.

The Kenya Ethanol Cooking Fuel Master Plan of 2021 outlines strategies for the development of bioethanol so as to increase its usage for cooking. The proposed strategies for increasing the usage and demand for bioethanol include: removing the Value Added Tax (VAT) on bioethanol for cooking to stimulate demand; creating an enabling environment for Private Sector participation in bioethanol projects; and designating specific areas for growing bioethanol feedstocks. Other Strategies were promoting bioethanol markets through affordable loans; establishing strategies to benefit from climate funds; and encouraging results-based financing to support development of the bioethanol industry. Bioethanol is expected to make a significant contribution to the energy mix in Kenya in achieving the goal of 100% clean cooking access by 2028.

The experience drawn from Kenya is on how financial institutions are involved in providing low-interest loans to enable clean cooking entrepreneurs to investment. Additionally, this Strategy has utilized this experience in formulating and enhancing Strategies to develop bioethanol so as to increase its usage for cooking in the country.

1.6.3 Uganda

According to World Bank statistics for the year 2023, 0.7 percent of the population in Uganda had access to clean cooking in 2021. Despite this low level, the Government of Uganda has been striving to promote the increased usage of clean cooking through various initiatives including the introduction of a special electricity tariff framework for cooking approved by the Uganda Electricity Regulatory Authority (ERA), this framework was launched in 2021. The framework aimed at contributing to reducing the use of charcoal and firewood for cooking starting from January 2022 by making the cost of cooking tariff in households cheaper than using charcoal. The ERA introduced a Declining Block Tariff Structure that allows for differentiated tariff levels based on the amount of energy consumed. In this system, the electricity price decreases as the usage increases beyond the threshold set by the Authority. This system aims to encourage the use of electricity for cooking by ensuring that users who cook with electricity benefit from lower prices.

The experience taken from Uganda is on how to increase the use of electricity for cooking through prepaid meter payments (LUKU). This Strategy has utilized this experience in preparing strategies to increase electricity usage through a system of paying different electricity tariffs to encourage electricity use in cooking in the country.

1.6.4 Ghana

According to World Bank statistics for the year 2023, 30.3 percent of the population in Ghana were using clean cooking energy in 2021. In promoting the use of clean cooking energy, the Ghanaian Government developed the Clean Cooking Energy Strategy (2020 - 2024) in 2019. Additionally, the government has joined the international Paris Agreement. This agreement aims to address climate change and reduce greenhouse gas emissions, including carbon dioxide emissions and other gases contributing to global warming. It also provides opportunities for countries to engage in the ITMOs trade (Internationally Transferred Mitigation Outcomes), where nations can exchange emissions reduction credits.

According to Ghana's Framework on International Carbon Market and Non-market Approaches report of 2022, Ghana utilizes and benefits from Article 6 of the Paris Agreement through approaches that encourage collaboration with various countries. The collaboration focuses on three main areas which are: partnerships with the private sector; technology and knowledge transfer; and, the ITMOs trade. These actions support Ghana in implementing its climate change mitigation strategies.

The experience drawn from Ghana illustrates how to reduce the costs of using clean cooking solutions through subsidies that can be derived from carbon trading. This Strategy has utilized this experience in formulating strategies to leverage funds and international environmental programs to promote the use of clean cooking energy in the country.



SITUATIONAL ANALYSIS



2. SITUATIONAL ANALYSIS

Fuels and technologies that emit low levels of toxicity are recognized to be clean. These energies and technologies include electricity, biogas, natural gas, LPG, bioethanol, solar energy, improved cookstoves and briquettes with standards acceptable by the Standards Regulatory Authority.

According to the World Bank's 2023 Report, the number of Tanzanians using clean cooking solutions has been gradually increasing but at a slow rate from 1.5 percent in 2010 to 6.9 percent in 2021. This percentage is below the global average of 71 percent for the year 2021. Figure 1 illustrates the trend of clean cooking usage in Tanzania from 2010 to 2021.

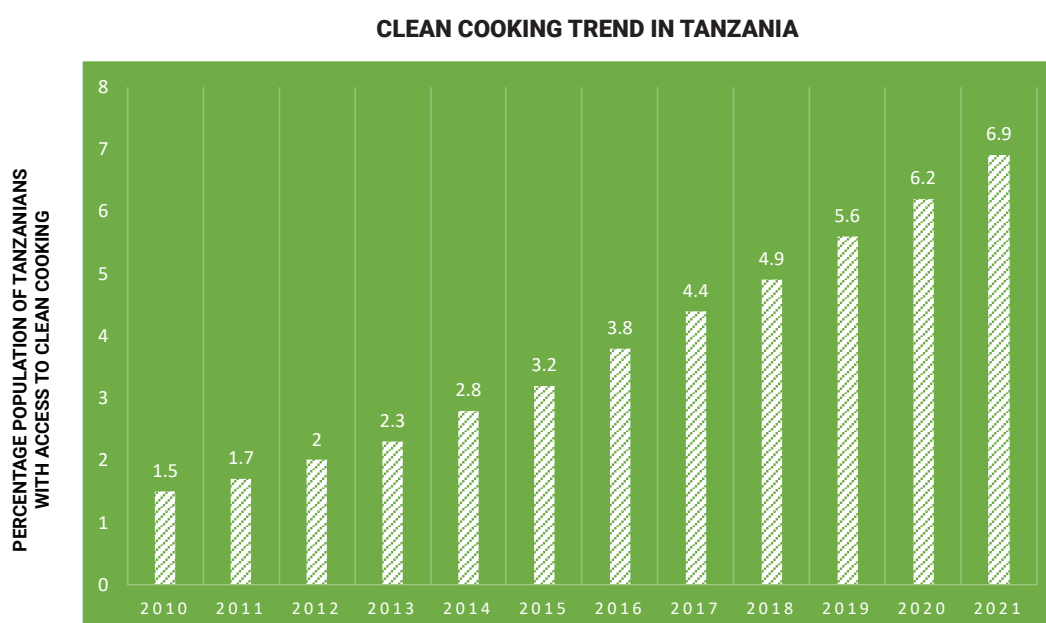


Figure 1: Access to Clean Fuels and Technologies for Cooking (percent Of Population) from 2010 - 2021

Source: World Bank, 2023

2.1. Fuels and Technologies Used in the Country

Fuels and technologies used for cooking in the country include animal dung and plant residues, firewood, charcoal, kerosene, briquettes, bioethanol, LPG, natural gas, biogas, electricity, improved cookstoves and solar energy cookstoves. According to the Cooking Energy Action Plan 2022, approximately 82 percent of the primary energy used in the country comes from biomass. For cooking purposes, it is estimated that around 90 percent of households in the country rely on wood and charcoal as their primary cooking energy, with wood accounting for 63.5 percent and charcoal for 26.2 percent of usage. The remaining 10 percent includes LPG at 5.1 percent, electricity at 3 percent, and other energy sources at 2.2 percent as shown in Figure No. 2.

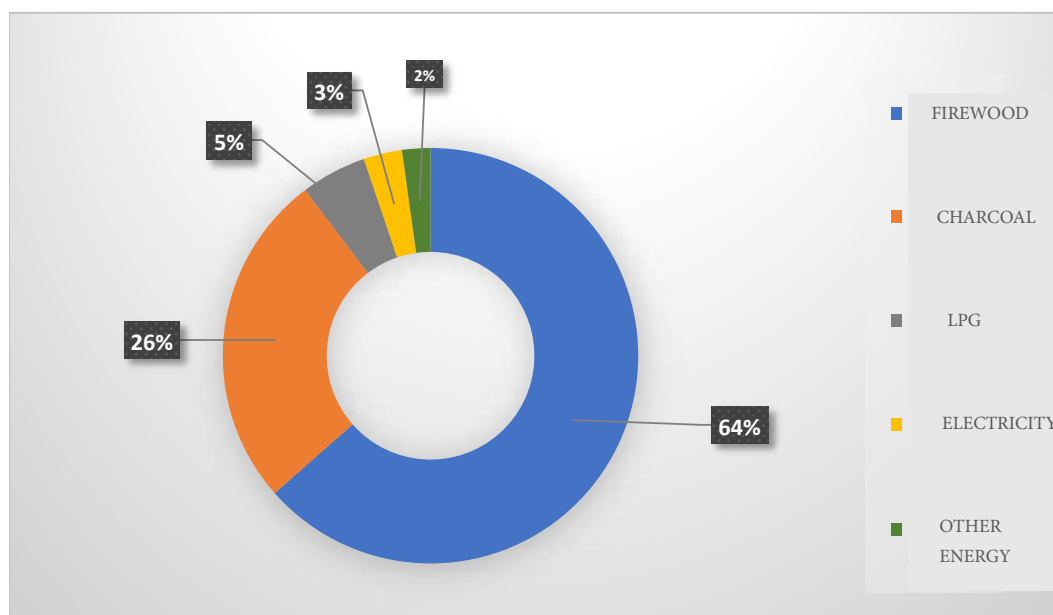


Figure 2: Household Cooking Energy Use, Mainland Tanzania 2019/20

There are technologies in the market which include improved cookstoves, that enhance efficient usage of various energy sources. Improved cookstoves require less firewood or charcoal depending on their quality. Despite the presence of modern energies and cooking technologies, many households continue to use unsafe and polluting energy sources due to various reasons, including perceptions and economic factors.

The Government in collaboration with various stakeholders, has been implementing strategic projects to enhance energy access in the country. These projects include electricity generation and distribution; exploration, production, and distribution of natural gas; LPG, biogas and bioethanol. The current situation regarding the availability, cost, and distribution of cooking fuels and technologies in the country is as follows.

2.1.1 Animal Dung and Plant Residues

Energy from animal dung, such as from cattle is obtained by drying the dung, and using it as a fuel source in charcoal or wood-fired stoves. This energy source is predominantly available in rural areas in Pastoral communities.

Plant residues are used as energy sources both in households and industries, utilizing various types of stove technologies. Animal dung and plant residues as energy sources are not costly since they can be collected from livestock and nearby fields.

2.1.2 Firewood

According to the Household Budget Survey of 2017/18, firewood is predominantly used in rural areas, whereby 84.8 percent of households rely on this energy source compared to 17.4 percent in urban areas. The demand for firewood in rural areas is high because it is believed to be the most affordable energy option. However, the availability of firewood in the country remains a challenge as people often have to travel long distances to get this energy source, which negatively affects other developmental activities, including access to education for children.

2.1.3 Charcoal

According to the Cooking Energy Action Plan 2022, approximately 10 to 12 tons of logs are burned to produce 1 ton of charcoal. Charcoal is the predominant source of energy in urban areas because it is believed to be affordable and is also available in small quantities based on the user's income. Additionally, charcoal can be easily transported, distributed, and stored. According to The Potential and Optimal Strategies for Charcoal Sub-Sector Development in Tanzania of 2019 report, charcoal consumption is widespread in urban areas, with over 50 percent of the charcoal produced in the country being used in Dar es Salaam. Moreover, according to the Household Budget Survey of 2017/18, 60.5 percent of households in urban areas use charcoal, compared to 11.5 percent in rural areas.

Although charcoal usage has been a source of income in the country, its use has health and environmental implications. According to the Contribution of Forest Sector to the National Economy of 2021 report, in 2020, the For-

estry Sector in Tanzania produced and sold 1.9 million tons of charcoal, contributing 44.22 percent to the sector's revenue, which is approximately 2 trillion Shillings.

The increase in demand for charcoal in the country is due to population growth, urbanization, ease in accessibility, transportation, distribution, and storage of charcoal and increased prices of alternative energy sources. The ability to buy in small quantities and the low cost of stoves using charcoal compared to other energy sources contribute to this increase. The cost of purchasing one kilogram of charcoal is approximately 1,500 Shillings, and it is estimated that an average household of six people uses two kilograms of charcoal to cook three meals per day.

2.1.4 Kerosene

Kerosene has been used for many years as a cooking fuel in certain areas of the country. However, it is important to recognize that the use of kerosene for cooking comes with various challenges, including safety concerns as it can cause fires or explosions. Due to its high flammability and ability to spread fire easily, its use for cooking can be hazardous to the users' safety.

Kerosene emits odor and smoke when burned, which can affect the indoor air quality in households or kitchens. This can have health implications by causing respiratory problems. The smoke from kerosene contains chemicals such as carbon monoxide and particulate matter (PM2.5), which can lead to respiratory diseases, cardiovascular diseases and lung cancer.

2.1.5 Briquettes

Briquettes is an alternative charcoal produced from various plant residues and agricultural waste, which are bound together using a binder such as clay, starch (including cassava and sweet potato flour), molasses and/or glue. These residues include materials such as paper, sawdust, wood shavings, dry leaves and rice husks. The use of these residues not only produces energy but also helps to preserve the environment. The composition used to make alternative charcoal determines its quality and price.

Briquettes can also be produced using coal dust which is mixed with wood dust, along with molasses, and compressed to form the alternative charcoal. The challenge in producing this charcoal is on how to reduce the level of emissions present in it, shortage of machinery for producing the required amount of briquettes and lack of sufficient knowledge to obtain the correct mixture to reduce the heat content in this charcoal. The entire production and distribution chain for the produced coal briquettes has not been established to facilitate its availability.

The production of briquettes began in the 1980s at the Center for Agricultural Mechanization and Rural Technology (CAMARTEC) in Arusha. Currently, there are many companies involved in the development of this technology. However, the lack of markets, high costs and availability of raw materials are obstacles to the advancement of this technology.

The challenges facing the development of briquettes technology include limited awareness among the community regarding the energy source and high initial production costs, including the cost of machines for production and drying. Also, the heat content of briquettes varies depending on the type of raw material used and some forms of this energy source require special stoves that add extra cost to the user. One of the raw materials used in the production of charcoal briquettes is dust from charcoal which is a forest produce that contributes to deforestation. The cost of briquettes ranges from 500 Shillings to 1,500 Shillings per kilogram, depending on the raw material used.

2.1.6 Bioethanol

Bioethanol is obtained from carbohydrates of sugar or starchy crops via alcoholic fermentation. Among other uses, it can be used for cooking. The Government in collaboration with the United Nations Industrial Development Organization (UNIDO), has been implementing a project of promoting the use of Bioethanol as an alternative cooking energy since 2018. This project intends to reach 500,000 households in the city of Dar es Salaam whereby over 10,000 households have already been reached.

Under this project, the cost of a single-plate stove is approximately 38,000 Shillings and a double-plate stove is approximately 90,000 Shillings. These prices have been subsidized to half the actual price of the stoves. The price of bioethanol fuel is 2,500 Shillings per litre and can be used for four hours. The adoption of bioethanol technology in the country has not spread extensively due to challenges in obtaining raw materials. Limited awareness among users and the absence of guidelines to promote the use of this energy and technology have also contributed to the slow rate of adoption.

2.1.7 LPG

LPG is a fuel stored in cylinders and is derived from the refining of crude oil, and natural gas with a propane and butane content exceeding 15 percent. Tanzania has been importing LPG from other countries because the ongoing exploration in the country has not discovered oil and there is no crude oil processing plant. The natural gas discovered in the country has a low propane content (0.3 percent) and butane content (0.06 percent), which is insufficient for LPG production.

The imported LPG in 2022 was 250,200 metric tons, of which 160,610 metric tons were used within the country and 89,590 metric tons were exported to neighboring countries. LPG consumption has increased in the country from 20,000 metric tons in 2010 to 160,610 metric tons in 2022.

Infrastructures for receiving LPG are available at the ports of Dar es Salaam and Tanga. The LPG receiving terminal has the capacity to handle vessels with a maximum cargo capacity of 5,500 metric tons. The limited capacity of the LPG receiving terminal reduces the economic benefits of importation. The storage capacity for LPG in Dar es Salaam and Tanga is 15,750 metric tons while the storage capacity in the remaining regions is 2,055 metric tons, all these storage facilities are privately owned.

The initial costs of purchasing a 15-kilogram cylinder are approximately 110,000 Shillings, a two-burner LPG stove is approximately 50,000 Shillings and a 6-kilogram cylinder with its stove is approximately 58,000 Shillings. These initial costs are high compared to the initial costs of using biomass. It is estimated that the cost of refilling a 6-kilogram gas cylinder ranges from 17,000 Shillings to 25,000 Shillings, while for a 15-kilogram cylinder, it ranges from 44,000 Shillings to 59,000 Shillings.

LPG is predominantly used in urban areas compared to rural areas due to the ease of access, relative affordability and increased awareness of its safety. However, the LPG business faces significant challenges, primarily the high initial cost of purchasing the cylinders and refilling. Adoption rate of LPG is low in rural areas due to low income levels and inadequate distribution infrastructure.

2.1.8 Natural Gas

Natural gas is recognized as a cleaner energy source compared to other petroleum-based fuels because it emits a lower amount of carbon dioxide. The natural gas found in Tanzania has a methane content of approximately 97 percent. Currently, the estimated volume of natural gas discovered in the country is approximately 57.54 trillion cubic feet. Natural gas has been utilized in Tanzania since 2004 for electricity generation, industrial use and household consumption.

Gas from Mtwara and Lindi is transported through two pipelines. One pipeline is a 551 kilometers that connects Songo Songo in Lindi and Mnazi Bay in Mtwara via Somangafungu in Lindi to Dar es Salaam. The other pipeline is a 232 kilometers that runs from Songo Songo in Lindi through Somangafungu to Dar es Salaam. During the financial year 2021/2022, Tanzania produced 72,533.56 MMscf of natural gas, showing an increase com-

pared to the 60,691.12 MMscf produced in 2020/2021.

Natural gas is mostly used in areas along the distribution infrastructure, however it has been a challenge to connect areas outside the vicinity of the distribution network. Natural gas is used in households for cooking purposes in Lindi, Mtwara and Dar es Salaam regions, however the Government is implementing households natural gas connection projects in Pwani Region. Currently, 13 Institutions and 1,511 households have been connected to natural gas with 425 households in Mtwara, 209 households in Lindi and 877 households in Dar es Salaam.

The cost of connecting natural gas infrastructure in areas covered by the distribution network depends on the distance from the existing infrastructure. The cost of purchasing a natural gas stove is approximately 50,000 Shillings. One unit of natural gas for household use costs 1,000 Shillings and it is estimated to be sufficient for an average household of six people to cook three meals per day. Users pay for natural gas according to their usage. The Government in collaboration with the private sector will continue to invest in natural gas projects to ensure that natural gas reaches more households and institutions.

2.1.9 Biogas

Biogas is a mixture of various gases, including methane produced from the processing of animal and human waste, food waste or plant remains in an anaerobic environment. It is estimated that about 40 to 60 kilograms of feedstock are required to produce sufficient gas for six hours of cooking for a household of four people.

According to the Tanzania Domestic Biogas Program of 2017 implemented by CAMARTEC, it is estimated that 12,000 biogas systems were installed at the household level and 100 systems were installed at institutional levels outside the program. Biogas has been used in the country since the 1970s, but its adoption is still low due to high initial investment cost. The initial cost of establishing these systems includes the construction of biogas plants which depends on the availability of construction materials, water and feedstock for biogas production. The cost of biodigesters at the household level ranges from 1,600,000 Shillings to 2,000,000 Shillings for a 6m³ size, 2,400,000 Shillings to 3,000,000 Shillings for a 9m³ size and 3,200,000 Shillings to 3,600,000 Shillings for a 13m³ size. These costs are high compared to the initial costs of using firewood and charcoal, making it a challenge for low-income individuals to afford.

Other challenges facing adoption of biogas include the unavailability of reliable feedstock, difficulties in accessing water particularly in areas with water scarcity and negative perceptions of the community regarding the use of waste as feedstock. There have also been limited studies on the development of this technology.

Despite these challenges, biodigesters can last for at least 30 years if built in accordance with the required standards and they do not require close monitoring and frequent maintenance. Therefore, the use of biogas can be an alternative to firewood and charcoal if the initial costs of purchasing equipment and installing biogas systems are reduced.

2.1.10 Electricity

The Government has continued to build infrastructure for the power generation, transmission and distribution in all regions of mainland Tanzania, aiming to reach all towns and villages in the country and strengthen the national grid. The National Development Plan 2021/22 - 2025/26 aims at achieving 85 percent of electricity access for Tanzanians nationwide.

According to the Energy Access and Use Situation Survey II in Tanzania Mainland of 2020, 73.2 percent of households are connected to electricity in urban areas, while in rural areas it is 24.5 percent. The city of Dar es Salaam leads in connections with 85.7 percent of households connected. The Government, through various projects, continues its efforts to increase access to electricity.

The sources of electricity generation in the country include natural gas, hydropower, crude oil, solar, wind and biomass. The installed capacity within the National Grid system has increased to 2,138 MW as of March 2024 from 1,872.1 MW generated in the year 2022/23, marking a 14.2 percent increase.

The cost of electricity connection for households varies between urban and rural areas, with urban areas costing 320,960 Shillings and in rural areas costing 27,000 Shillings. The cost per unit of electricity for residential use is 298 Shillings for general usage customers and 100 Shillings for household customers with low consumption with monthly consumption not exceeding 75 units. However, any unit exceeding 75 kWh is charged a high rate of 350 Shillings per kWh for the low consumption household customers.

There are efficient electric stoves in the market that have the capacity to cook one meal per unit. However, the initial cost of purchasing these stoves which starts at 50,000 Shillings poses a challenge for low-income individuals to afford. Electricity is predominantly used in urban areas for cooking compared to rural areas because the residents can afford to buy electric stoves. Decrease in negative perceptions regarding the cost of cooking with electricity has also helped in increasing the adoption rate of eCooking.

2.1.11 Improved Cookstoves (ICS)

Improved cookstoves are a type of stoves that utilize efficient technology to reduce the emission of toxic smoke and amount of biomass used in cooking. The lack of easy access to improved cookstoves in many areas of the country, especially in rural areas, results in low adoption rates of these stoves.

These cookstoves require the presence of specialized workshops for manufacturing and repairs. Insufficient research in this area has resulted in the use of technologies that do not meet quality standards.

2.1.12 Solar cookstoves

These stoves harness solar radiation and convert it into heat, which is then stored and used for cooking. Solar cookstoves utilize solar energy through various means, including the use of sun-targeting reflectors, solar panels, or other devices that convert solar energy into heat. Solar cookstoves have modern or traditional designs and can be used in urban or rural environments as a renewable and sustainable energy source.

The challenges facing the adoption of solar energy for cooking includes the high cost of solar cookstoves compared to traditional stoves, however prices are decreasing as solar energy technology continues to improve. Solar energy production is dependent on weather conditions and solar radiation. This can be a challenge for users of solar cookstoves as they require sufficient energy to operate their stoves.

Solar-powered cookstoves often lack the ability to store energy for future use, therefore, the generated energy needs to be used immediately or stored in separate batteries for later use. This can be a challenge in areas where there are extended periods of sunlight scarcity or when energy demands exceed production. It is

important to consider that solar energy technology is continuously being researched and improved. Therefore, these challenges may diminish as technology continues to advance and become more widespread.

2.2. Effects of Using Traditional Cooking Solutions

The use of traditional cooking solutions is directly associated with environmental, health, economical, educational, and social effects. The following aspects provide a detailed description of the impacts resulting from the use of traditional cooking solutions

2.2.1 Health Effects

Smoke resulting from the use of traditional cooking solutions contains toxic gases and fine particles of dust containing toxic components that can weaken the respiratory system and lead to chronic illnesses such as coughing, pneumonia, tuberculosis, asthma, and lung cancer. These toxins can result in complications during pregnancy, cause premature birth or giving birth to children with health issues.

Other diseases associated with these toxins include cardiovascular and eye diseases, high blood pressure, and paralysis. The most affected groups are children under the age of five and women who spend a significant amount of time in the kitchen preparing food. Women and children who obtain firewood also carry heavy loads on their backs or heads which affect their spinal cord, heads and legs. These health effects overwhelm healthcare systems, but can be prevented by using clean cooking solutions. It is estimated that approximately 33,000 people die each year from respiratory diseases caused by indoor air pollution.

2.2.2 Environmental Effects

The process of acquiring traditional cooking energy sources is directly associated with environmental degradation. According to the National Forest Policy Implementation Strategy (2021-2031), it is estimated that 469,420 hectares of forests are destroyed each year for various human activities, including cutting trees for harvesting firewood and charcoal production. These activities contribute to increased drought and ecological impacts in the country. According to Mpangokazi wa Utekelezaji wa Kampeni Kabambe ya Hifadhi na Usafi wa Mazingira (2021-2026), approximately 16 percent of the country's area has already turned into a desert.

2.2.3 Social Effects

The process of searching for firewood is a risky endeavour which requires women and children to travel long distances which in turn exposes them to incidents of gender-based violence such as rape. The search for firewood requires an extensive amount of time leading to the women returning home late and facing the ordeal of being beaten by their spouses. These scenarios jeopardize social and family ties such as marriage. They are also exposed to the risk of being harmed by wildlife and miss out on opportunities to engage in various social and political activities. The use of traditional and unsafe cooking solutions can also lead to eye irritation, causing redness which can subject the affected individuals to superstitious beliefs from surrounding community.

2.2.4 Economic Effects

The process of searching for firewood takes an average of six hours per day which takes away from the time that could be used for development activities such as educational advancement, self-employment and income generation.

2.2.5 Educational Effects

The involvement of children in obtaining firewood affects their school attendance and academic performance because they spend most of their time and energy on this activity. Similarly, women miss the chance for their educational advancement because of the time waste in obtaining firewood.

2.3. Barriers to the Use of Clean Cooking Solutions

2.3.1 Limited Awareness among Citizens and Institutions Regarding Clean Cooking Solutions

Limited awareness among citizens and institutions about the health, environmental, educational, economical and social impacts of using traditional cooking solutions hinders the transition to clean cooking. Citizens and institutions lack sufficient understanding of the benefits of clean cooking solutions. To achieve the goal of transitioning to the use of clean cooking solutions, the Strategy has outlined how to sensitize and educate the public through various sustain programs and campaigns on clean cooking.

2.3.2 Limited Access to Clean, Affordable, Sustainable and Reliable Cooking Solutions

Ensuring reliable access to clean cooking solutions is a crucial tool that will facilitate a smooth transition of Tanzanians to the use of clean cooking. The challenge of access leads to unreliability and increased costs associated with these cooking solutions. The success of the National Clean Cooking Strategy will depend on effective strategies that involve improving the availability of raw materials and expansion of infrastructure for producing, receiving, storing and distributing clean cooking solutions.

2.3.3 Costs of Clean Cooking fuel, Appliances and Efficient Cookstoves

The initial costs and usage expenses of clean cooking fuel, appliances and efficient cooking stoves pose a challenge that prevents many Tanzanians from affording clean cooking solutions in the country. These costs lead Tanzanians to resort to using traditional and unsafe cooking solutions that are believed to be cheaper. To achieve the goal of 80 percent of Tanzanians using clean cooking solutions, it is crucial to make clean cooking affordable in all areas of the country, especially for low-income households.

2.3.4 Lack of Alignment in Policies, Laws, Regulations and Guidelines Regarding Cooking Solutions

Lack of alignment in some Policies, Laws, Regulations and Guidelines regarding the management and development of cooking solutions poses a barrier in transitioning to the use of clean cooking solutions. For example, the National Forest Policy of 1998 and the Forest Act of 2002, Section 323 and its regulations recognise firewood and charcoal as sources of revenue. These guidelines contradict with the objectives of the strategy, which aims to promote the use of clean cooking solutions as an alternative to firewood and charcoal.

The Government in collaboration with stakeholders, will improve policies, laws, regulations and guidelines that are inconsistent with the development of the clean cooking sub-sector, in order to align them with current needs. This Strategy will ensure compatibility, sustainability and an investment-friendly environment in the clean cooking initiatives.

2.3.5 Low Investment in the Clean Cooking Initiatives

The clean cooking sub-sector faces a challenge of insufficient investment along the value chain, which hampers the availability of clean cooking solutions. There is also insufficient awareness among stakeholders about opportunities available in the clean cooking initiatives.

The transition to clean cooking solutions will impact investment in the firewood and charcoal industry. This will affect the livelihoods of firewood and charcoal vendors as well as the revenue of Local Government Authorities and Public Institutions that collect taxes and levies from the sale of these cooking solutions. This challenge could slow down the transition to clean cooking solutions.

Therefore, investors need to be encouraged to invest in the clean cooking sub-sector by creating an enabling environment that ensures the sustainability of their investments. There should also be awareness programmes regarding new opportunities in clean cooking solutions that will help them improve their economic prospects.

2.3.6 Insufficient Research, Innovation and Invention in Clean Cooking Technologies

Insufficient research, innovation and invention on clean cooking solutions is a challenge that results in the absence of data, limited understanding of the actual trends in clean cooking solutions usage and the inability to develop appropriate strategies to increase its use in the country. The scarcity of sufficient technology in cooking fuels, equipment, stoves and business models leads to increased costs of clean cooking solutions. Therefore, this Strategy outlines how to expand the availability of data and research including allocating a special budget for the advancement of research, innovation, and technology development related to clean cooking. The strategy also outlines how to ensure that existing research and statistics are updated to reflect the current needs of the energy sector.

2.3.7 Limited Capacity of Implementers in Clean Cooking Projects

Limited financial, technical and human resource capacities in some institutions implementing clean cooking projects slow down the transition to clean cooking solutions. This Strategy outlines strategies to address this challenge by identifying ways to build their capacities that will enable them to implement projects in the required standards. A comprehensive assessment of skill

requirements will be conducted to identify the training needs that will enhance the capacity of the relevant institutions in clean cooking projects for both public servants and the private sector involved in such projects.

2.4. Cross Cutting Issues

2.4.1 HIV/AIDS

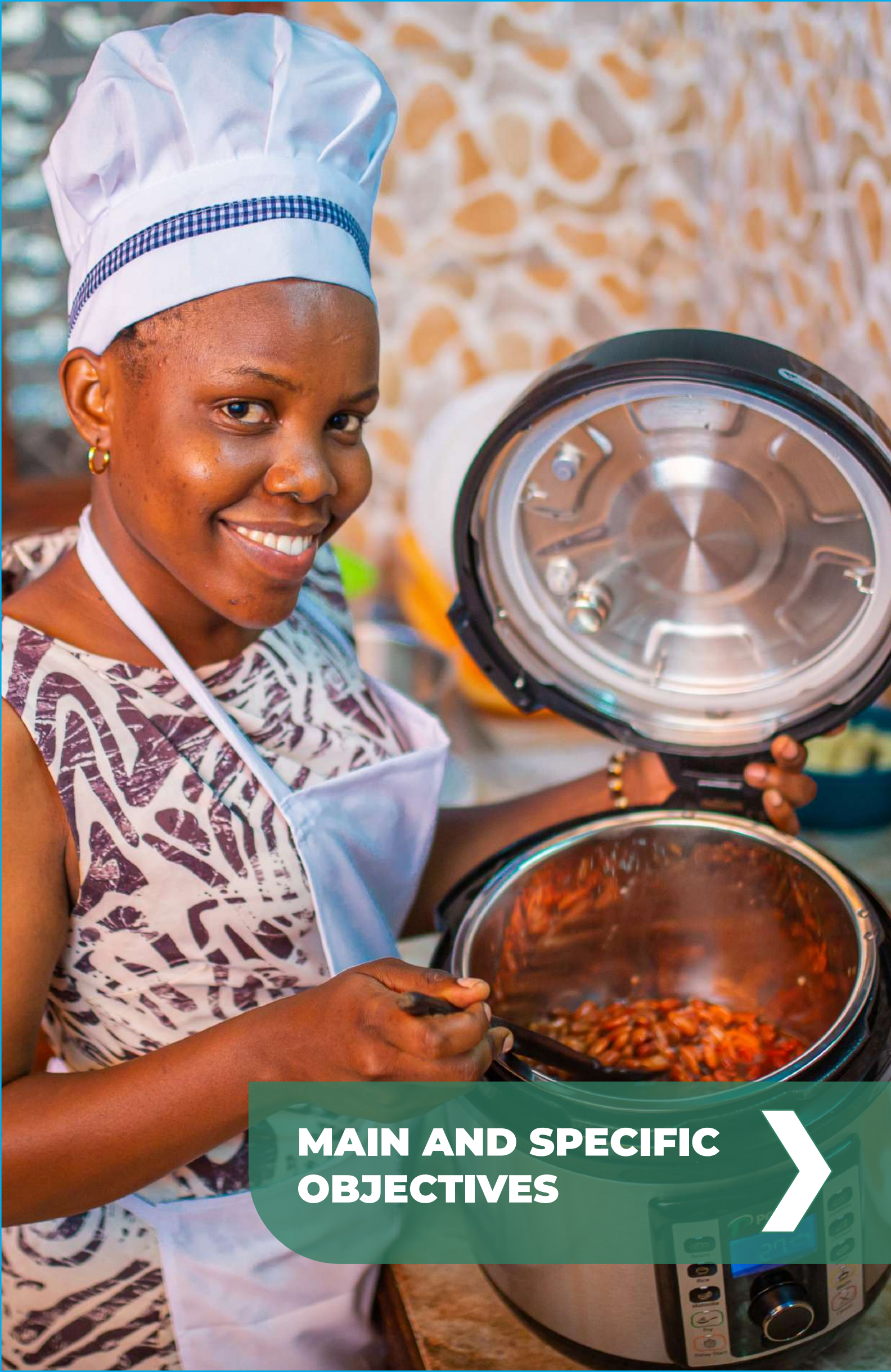
Various activities carried out in the clean cooking value chain can contribute to the spread of HIV/AIDS within the surrounding communities. Including HIV/AIDS education and awareness programs in the strategy will reduce the impact of the disease to the implementers and the community at large.

2.4.2 Gender

Including gender issues in clean cooking projects is crucial in promoting inclusive economic development within the community. However, there have been insufficient efforts to ensure women's participation in the clean cooking value chain. For successful implementation of this Strategy, it is important to promote women's participation in the clean cooking value chain.

2.4.3 Good Governance

The presence of Good Governance which emphasizes transparency and accountability is essential in the management of the clean cooking activities. All clean cooking stakeholders must collaborate and ensure accountability and monitoring of the established strategies, including effective enforcement of relevant policies and laws.



**MAIN AND SPECIFIC
OBJECTIVES**



3. MAIN AND SPECIFIC OBJECTIVES



3.1 Vision

Every Tanzanian should use clean cooking solutions to protect their health, environment, and improve livelihoods.



3.3 Main Objective

To ensure that 80 percent of Tanzanians use clean cooking solutions by the year 2034.



3.2 Mission

To ensure accessibility of affordable, sustainable, safe, and easy to use clean cooking solutions.

3.4. Specific Objectives and Challenges

The specific objectives of this Strategy are to:

- i. Increase public and Institutional awareness on the importance of using clean cooking solutions;
- ii. Strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions;
- iii. Reduce the cost of clean cooking energy sources, appliances and efficient cook stoves;
- iv. Develop, update and harmonize enabling Policies, Laws, Regulations and Guidelines to facilitate the adoption of clean cooking solutions;
- v. Promote investments in clean cooking;
- vi. Build the capacity of implementers of clean cooking projects;
- vii. Broaden the scope of research and innovations in technologies related to cooking solutions;
- viii. Incorporate HIV/AIDS issues in clean cooking initiatives;
- ix. Incorporate gender equality issues in the clean cooking value chain; and
- x. Strengthen Good Governance in clean cooking.

Table 1: Summary of Challenges and Specific Objectives

No.	Challenge	Specific Objective
1.	Limited awareness to the public and institutions on the importance of clean cooking	Increase Public and Institutional awareness of the importance of using clean cooking solutions
2.	Inadequate raw materials and infrastructure for accessing clean cooking solutions in the country	Strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions
3.	High initial and usage cost of clean cooking energy, appliances and efficient cooking stoves	Reduce the cost of clean cooking energy sources, appliances and efficient cook stoves
4.	Lack of alignment in Policies, Laws, Regulations and guidelines regarding cooking solutions	Develop, update and harmonize enabling Policies, Laws, Regulations and Guidelines to facilitate the adoption of clean cooking solutions
5.	Low investment in clean cooking	Promote investments in clean cooking
6.	Limited capacity of implementers of clean cooking projects	Build the capacity of implementers of clean cooking projects
7.	Insufficient research, invention and innovations in technology related to cooking solutions	Broaden the scope of research, inventions and innovations in technologies of cooking solutions
8.	HIV/AIDS transmission in the clean cooking value chain	Incorporate HIV/AIDS issues in clean cooking initiatives
9.	Insufficient efforts in integrating gender equality in the clean cooking value chain	Incorporate gender equality issues in the clean cooking value chain
10.	Lack of good governance in clean cooking	Strengthen good governance in clean cooking

4. STRATEGIES, TARGETS AND OUTCOME INDICATORS

This chapter describes the strategies, targets and outcome indicators for the implementation of specific objectives for the transition to clean cooking, as outlined in Chapter Three.

4.1. Public and Institutional Awareness on Cooking Solutions

Challenge: Limited awareness to the public and institutions regarding clean cooking.

Specific Objectives: To increase public and institutional awareness on the importance of using clean cooking solutions.

Strategies:

- i. Educate the public about the importance of using clean cooking solutions, and the health and environmental impact associated with the use of traditional cooking solutions;
- ii. Sensitize the public and institutions on the transition to the use of clean cooking solutions.

Targets:

- i. The National Communication Strategy on the use of clean cooking solutions has been prepared and implemented from September, 2024;
- ii. Awareness and Sensitization Plan on the use of clean cooking solutions has been prepared and implemented by September, 2024;
- iii. Educational and awareness programmes on the use of clean cooking solutions is implemented through various platforms and groups including women, youth, and schools from July, 2024; and
- iv. A National Clean Cooking Conference is held annually.

Outcome Indicators:

- i. Commencement of the use of National Communication Strategy on the use of clean cooking solutions;
- ii. Commencement of the use of Awareness and Sensitization Plan on the use of clean cooking solutions;
- iii. Number of educational and awareness programmes for promoting clean cooking usage implemented through various platforms and groups; and
- iv. Number of national Clean Cooking conferences conducted.

4.2. Access to Raw Materials and Reliable Infrastructure of Clean Cooking Solutions

Challenge:

Inadequate raw materials and infrastructure for accessing clean cooking solutions in the country.

Specific Objective: To strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions.

Strategies:

- i. Improve access to raw materials and infrastructure for producing, receiving, storing, and distributing clean cooking energy; and
- ii. Involving the Private Sector in the construction of clean cooking infrastructures.

Targets:

- i. Waste collected in all Local Government Authorities across the country has been used to produce biogas, briquettes and bioethanol from July, 2025;

- ii. Special farms for raw materials to produce biogas and bioethanol have been established by June, 2025;
- iii. Infrastructure for receiving LPG has been expanded to accommodate vessels with a capacity of up to 40,000 metric tons by June, 2029;
- iv. Natural gas distribution infrastructure has been expanded from 4 to 9 Regions by June, 2034;
- v. Electricity distribution infrastructure has reached all Villages and Hamlets by June, 2028;
- vi. Prototype machines for the production of briquettes, biogas, and bioethanol has been installed in each Region by June, 2027.
- vii. The production and distribution of briquettes has increased by July, 2025;
- viii. The production of improved cookstoves has increased by July, 2025;
- ix. Electric stoves have started being manufactured in the country by July, 2025;
- x. LPG storage infrastructure has increased in all regions by June, 2029;
- xi. The annual production capacity of accessories and cylinders of LPG and natural gas in the country has increased by June, 2034;
- xii. Public-Private Partnership (PPP) clean cooking projects have increased from June, 2026; and
- xiii. Procedure for allocating specific areas for the distribution of natural gas has been established by June, 2025.

Outcome Indicators:

- i. Amount of biogas, briquettes and bioethanol produced from collected Municipal waste;
- ii. Amount of biogas and bioethanol produced from plant-based feedstock;
- iii. Capacity of the port infrastructure to receive LPG;
- iv. Number of households and institutions connected to natural gas;
- v. Number of Villages and Hamlets with access to electricity;
- vi. The number of prototype machines for briquettes, biogas, and bioethanol production;
- vii. Amount of briquettes produced per year;
- viii. Number of improved cookstoves produced in the country;
- ix. Number of electric cookstoves produced in the country;
- x. Number of LPG storage facilities;
- xi. Production rate of accessories and cylinders of LPG and natural gas;
- xii. Number of Public-Private Partnership (PPP) clean cooking projects; and
- xiii. Number of designated areas for the distribution of natural gas.

4.3. The cost of Clean Cooking Energy, Appliances and Efficient Cooking Stoves

Challenge: High initial and usage cost of clean cooking energy, appliances and efficient cooking stoves.

Specific Objective: To reduce the cost of clean cooking energy, appliances and efficient cooking stoves.

Strategies:

- i. Ensuring the initial and usage costs of clean cooking energy, appliances and efficient cooking stoves have decreased; and
- ii. Promoting the involvement of financial institutions in supporting clean cooking stakeholders.

Targets:

- i. Taxes and fees imposed on clean cooking energy, appliances and efficient stoves have been reduced by June, 2026;
- ii. Subsidies in clean cooking projects have increased from July, 2024;
- iii. A system of paying for clean cooking energy and efficient technologies through affordable loans has been prepared by July 2025;
- iv. Electric cookstoves and cooking appliances are paid for through the LUKU system by June, 2025;
- v. Pay-As-You-Go systems for clean cooking energy have been implemented in every Region by June, 2024;
- vi. Financial institutions have established a mechanism to provide low-interest loans to clean cooking stakeholders by June, 2025; and
- vii. Financial education has been provided to clean cooking stakeholders from July, 2025.

Outcome Indicators:

- i. Reduced taxes and levies on clean cooking energy, appliances and cookstoves;
- ii. Number of subsidized clean cooking projects;
- iii. Number of businesses that have established a mechanism for payment of clean cooking energy and efficient technologies through affordable loans;
- iv. Number of customers paying for electric cookstoves and efficient cooking appliances through LUKU system;
- v. Number of customers benefiting from Pay-As-You-Go systems for clean cooking energy in each Region;
- vi. Amount of loan funds disbursed for clean cooking projects; and
- vii. Number of financial education programmes provided to clean cooking stakeholders.

4.4. Policy, Laws, Regulations and Guidelines on Cooking Solutions

Challenge: Lack of alignment in Policies, Laws, Regulations and guidelines regarding cooking solutions.

Specific Objective: To develop, update and harmonize enabling Policies, Laws, Regulations and Guidelines to facilitate the adoption of clean cooking solutions.

Strategies:

- i. Reviewing, developing and updating Policies, Laws, Regulations and Guidelines related to cooking solutions; and
- ii. Strengthening the coordination in implementation of Policies, Laws, Regulations and Guidelines related to cooking solutions.

Targets:

- i. Policies, Laws, Regulations and Guidelines regarding the use of cooking solutions have been developed or updated by June, 2026;
- ii. Guidelines on the quality standards of cooking energy, appliances and cookstoves have been developed or updated and implemented from June, 2025;
- iii. Regulations for the management of LPG business have been reviewed and improved by June, 2026;
- iv. Guidelines for monitoring the air quality in residential areas and Institutions have been prepared by June, 2026;
- v. Guidelines for the use of natural gas in households, industries and vehicles have been prepared or updated by June, 2026;
- vi. Plans for incorporating clean cooking energy infrastructure in land use plans have been implemented from July, 2026;
- vii. Construction projects for residential and commercial buildings, hotels, restaurants and recreational buildings have started installation of clean cooking infrastructure from June, 2025;
- viii. National Clean Cooking Fund has been established or clean cooking initiatives have been integrated into existing funds and commenced operations by June, 2025;
- ix. Forest management to be increased in all areas by July 2025;
- x. Ban on the use of firewood and charcoal in 31,395 Institutions that prepare food and feed more than

100 people has been implemented by January, 2024;

- xi. Ministries, Departments, Public Institutions, Regional Administration and Local Government Authorities have incorporated clean cooking issues into their plans and strategies from July, 2024;
- xii. Desk Officers responsible for coordinating the implementation of clean cooking strategies in each Ministry, Department and Public Institutions, Regional Administrations and Local Government Authorities are appointed by July, 2024;
- xiii. A Committee for monitoring the Clean Cooking strategy has been established by July, 2024; and
- xiv. Coordination guidelines for the clean cooking Strategy have been prepared by June, 2024.

Outcome Indicators:

- i. Existence of coordinated Policies, Laws, Regulations and Guidelines regarding cooking solutions;
- ii. Implementation of guidelines on the quality standards of energy, appliances and cookstoves;
- iii. Presence of revised and improved regulations for the management of LPG business;
- iv. Availability of guidelines on the measurement of air quality in residential and institutional settings;
- v. Existence of guidelines on the use of natural gas in households, industries and vehicles;
- vi. Integration of plans to incorporate clean cooking energy infrastructure into land use plans;
- vii. Presence of a criterion for the goal of connecting residential customers in the issuance of construction permits and licenses for the operation of natural gas infrastructure in industries and refueling stations;
- viii. Operationalization of the National Clean Cooking Fund;
- ix. The number of forest management programs;
- x. Number of residential and commercial buildings, hotels, restaurants and recreational buildings equipped with clean cooking energy infrastructure;
- xi. Number of institutions that prepare and provide meals for more than 100 people per day that have stopped using charcoal and firewood for cooking;

- xii. Number of plans and strategies that have incorporated clean cooking issues;
- xiii. Number of Desk Officers in Ministries, Departments, Public Institutions, Regional and Local Government Authorities coordinating the implementation of clean cooking strategies;
- xiv. Existence of a Committee for monitoring the Clean Cooking strategy; and
- xv. Presence of guidelines for the coordination of the Clean Cooking Strategy.

4.5. Investment in the Clean Cooking Initiatives

Challenge: Low investment in clean cooking initiatives.

Specific Objective: To promote investments in clean cooking.

Strategies:

- i. Encouraging private sector to seize business opportunities within the clean cooking value chain; and
- ii. Promoting the use of national and international funds and programmes to foster and enhance investment in clean cooking.

Targets:

- i. Clean cooking projects have been included in investment guidelines for each Region by June, 2025;
- ii. Cost of permits for advertising clean cooking solutions has decreased from July, 2024;
- iii. Awards for innovators in technology and clean cooking energy are given out from July, 2024;
- iv. Low-interest loans are granted to implementers of clean cooking projects from July, 2024;
- v. Database of statistics and information on clean cooking solutions has been developed by June, 2025;
- vi. Environmental funds (green funds) have started funding clean cooking projects from July, 2024;
- vii. International agreements on carbon trading in clean cooking projects within the country have been established from July, 2024; and
- viii. Education on benefits from opportunities in national and international funds and programmes are provided to clean cooking investors from July, 2024.

Outcome Indicators:

- i. Number of clean cooking projects included in the investment guidelines of each Region;
- ii. Cost of permits for advertising clean cooking solutions in the Local Government Authorities;
- iii. Number of awards given to innovators in technology and clean cooking;
- iv. Amount of funds disbursed through low-interest loans for clean cooking projects;
- v. Existence of statistics and information database on clean cooking;
- vi. Number of clean cooking projects funded by environmental funds (green funds);
- vii. Number of clean cooking projects benefiting from carbon trading markets; and
- viii. Number of training programmes on opportunities available in national and international funds and programmes.

4.6. Capacity of Clean Cooking Project Implementers

Challenge: Limited Capacity of Implementers of Clean Cooking Projects

Specific Objectives: To build the capacity of implementers of clean cooking projects.

Strategies:

- i. Enabling the testing of quality standards for cooking energy, appliances and stoves;
- ii. Ensuring capacity building for implementers and project managers of clean cooking projects; and
- iii. Ensuring local content in the implementation of clean cooking projects.

Targets:

- i. Infrastructure for testing the standards of quality for clean cooking energy, equipment and cookstoves are installed by the relevant Standards Authority, Research Institutions and Colleges by June, 2025;
- ii. Provision of education on the standards of quality for clean energy, equipment and efficient cooking stoves has commenced from July, 2024;
- iii. All Technical Education and Vocational Training Colleges nationwide have incorporated clean cooking issues into their curricula by June, 2026;

- iv. Desk Officers responsible for coordinating the implementation of clean cooking strategies in Ministries, Departments, Public Institutions, Regional Administrations and Local Government Authorities have undergone training from July, 2024;
- v. The department responsible for carbon trading management has been strengthened operationally by June, 2025;
- vi. Training for entrepreneurs on clean cooking has been provided in every Local Government Authority from July, 2024; and
- vii. Guidelines governing local content have been integrated in clean cooking projects from July, 2024.

Outcome Indicators:

- i. Number of infrastructure for testing the quality standards of energy, equipment and cookstoves;
- ii. Number of educational programmes on the quality standards of clean energy, equipment and efficient cooking stoves;
- iii. Presence of curricula incorporating clean cooking issues in Technical Education and Vocational Training institutions;
- iv. Number of trained Clean Cooking Desk Officers;
- v. Capacity and effectiveness of the department responsible for carbon trading management;
- vi. Number of training programmes on clean cooking provided to entrepreneurs in every Local Government Authority; and
- vii. Number of locals involved in the implementation of clean cooking projects.

4.7. The Scope of Research, invention and Innovation in Technologies Related to Clean Cooking

Challenge: Insufficient research, invention and innovation in technology in clean cooking solutions.

Specific Objectives: To broaden the scope of research, invention and innovations in technologies of cooking solutions.

Strategies:

- i. Strengthening the capacity of institutions and centers involved in the research, innovation and invention of technology of clean cooking solutions; and
- ii. Strengthening collaboration between clean cooking investors, and research and development, Higher Education and Technical Institutions.

Targets:

- i. The Ministries responsible for clean cooking have allocated or increased budgets for the development of research, innovation and invention in technology related to clean cooking from July, 2024.
- ii. Training on clean cooking has been provided to trainers of institutions and research centers dealing with clean cooking solutions from July, 2024;
- iii. Research and Development Institutions, Higher Learning Institutions and Technical Education and Vocational Training Colleges have established a communication platform with clean cooking investors by July, 2025; and
- iv. Private sector engaged in the manufacturing of clean fuel, appliances and efficient cookstoves have been involved in the preparation and implementation of hands-on training programs for experts from Universities starting from July 2024.

Outcome Indicators:

- i. Budget allocated and utilized for clean cooking research matters;
- ii. Number of trainers trained in clean cooking;
- iii. Existence of a communication platform between Research and Development Institutions, Higher Learning Institutions, Technical Education and Vocational Training Colleges and clean cooking investors; and
- iv. Number of professionals from Universities who have received practical training in industries involved in clean cooking.

4.8. Cross-cutting Issues**4.8.1 HIV/AIDS**

Challenge: HIV/AIDS transmission in the clean cooking initiatives.

Specific objective: To incorporate HIV/AIDS issues in the clean cooking initiatives.

Strategies:

- i. Promoting the provision of HIV and AIDS education to stakeholders in clean cooking initiatives; and
- ii. Ensuring access to HIV prevention equipment for stakeholders in the clean cooking initiatives.

Targets:

- i. National Awareness and Sensitization Plan on the use of clean cooking solutions has incorporated HIV/AIDS education by September, 2024;
- ii. HIV testing awareness programmes have been implemented in the clean cooking initiatives from July, 2024;
- iii. HIV prevention equipment are available in clean cooking projects from July, 2024; and
- iv. Education on the proper use of HIV prevention equipment has been provided in the clean cooking initiatives from July, 2024.

Outcome Indicators:

- i. Existence of a National Awareness and Sensitization Plan on the use of clean cooking solutions that incorporates HIV/AIDS education;
- ii. Number of HIV testing awareness programmes implemented in the clean cooking initiatives;
- iii. Increase in the availability of HIV prevention equipment; and
- iv. Number of training programmes on the proper use of HIV prevention equipment provided in the clean cooking initiatives.

4.8.2 Gender

Challenge: Insufficient efforts in integrating gender equality in the clean cooking value chain.

Specific Objective: To incorporate gender equality issues in the clean cooking value chain.

Strategies::

- i. Encouraging women and youth participation in the clean cooking value chain; and
- ii. Incorporating gender equality in decision-making levels in clean cooking.

Targets:

- i. Number of programmes to facilitate the participation of women and youth in the clean cooking value chain has increased from July, 2026;
- ii. Budget enabling the participation of women and youth in clean cooking projects is allocated and utilized annually;
- iii. Gender equality in decision-making levels regard-

ing clean cooking has increased from July, 2025 and

- iv. Leadership training for female decision makers in clean cooking has been provided in every Council from July, 2024.

Outcome indicators:

- i. Number of women and youth in the clean cooking value chain;
- ii. Amount of budget allocated and utilized to enable the participation of women and youth in clean cooking projects;
- iii. Number of women in decision-making levels regarding clean cooking; and
- iv. Number of leadership training programs provided to female clean cooking decision makers in every Council.

4.8.3 Good Governance

Challenge: Lack of good governance in clean cooking.

Specific Objective: To strengthen good governance in clean cooking.

Strategies:

- i. Strengthening accountability and oversight of policies, programs, and laws regarding clean cooking energy issues.

Targets:

- i. Strategies for oversight and monitoring policies, programs, and laws to strengthen governance and accountability in clean cooking issues to be implemented by July, 2025; and
- ii. Strategies for effective resource management and corruption prevention in clean cooking are implemented by July, 2025.

Outcome Indicators:

- i. Implementation of strategies for overseeing and monitoring policies, programs, and laws regarding good governance in clean cooking issues being implemented; and
- ii. Implementation of strategies for effective resource management and corruption prevention in clean cooking.



**IMPLEMENTATION
MATRIX OF THE
STRATEGY**



5. IMPLEMENTATION MATRIX OF THE STRATEGY

This chapter concerns the implementation of specific objectives for transitioning to clean cooking solutions as outlined in Table No2

Table 2: Matrix for the execution of the specific goals

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
1.	To increase public and Institutional awareness on the importance of using clean cooking solutions	Educate the public about the importance of using clean cooking solutions, and the health and environmental impact associated with the use of traditional cooking solutions	The National Communication Strategy on the use of clean cooking solutions has been prepared and implemented by September, 2024	Commencement of the use of National Communication Strategy on the use of clean cooking solutions	September, 2024	Ministry of Energy; Ministry of Education, Science and Technology; Ministry of Information, Communications and Information Technology; Ministry of Community Development, Gender, Women and Special Groups; Ministry of Health; Ministry of Natural Resources and Tourism; Ministry of Industry and Trade; Development Partners; Private Sectors; Social Organizations; Traditional Leaders;
			Awareness and Sensitization Plan on the use of clean cooking solutions has been prepared and implemented by September, 2024	Commencement of the use of Awareness and Sensitization Plan on the use of clean cooking solutions	September, 2024	

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
		Sensitize the public and institutions to transition to the use of clean cooking solutions	Educational and awareness programmes on the use of clean cooking solutions is implemented through various platforms and groups including women, youth, and schools from July, 2024	Number of educational and awareness programmes for promoting clean cooking usage implemented through various platforms and groups	July, 2024	PO-RALG; Ministry of Community Development, Gender, Women and Special Groups; Ministry of Education, Science and Technology; Development Partners; Private Sectors NGO's
			A National clean cooking conference is held annually	Number of national clean cooking conferences conducted	Annually	Ministry of Energy
2.	To strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions	Improve access to raw materials and infrastructure for producing, receiving, storing, and distributing clean cooking energy	Waste collected in all Local Government Authorities across the country has been used to produce biogas, briquettes and bioethanol from July, 2025	Amount of biogas, briquettes and bioethanol produced from collected municipal waste	July, 2025	PO-RALG; Ministry of Energy; Private Sectors
			Special farms for raw materials to produce biogas and bioethanol have been established by June, 2025	Amount of biogas and bioethanol produced from plant-based feedstock	June, 2025	Ministry of Agriculture; Ministry of Industry and Trade; Development Partners; Private Sectors NGO's
			Infrastructure for receiving LPG has been expanded to accommodate vessels with a capacity of up to 40,000 metric tons by June, 2029	Capacity of the port infrastructure to receive LPG	June, 2029	Ministry of Works; Ministry of Energy; TPA

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Natural gas distribution infrastructure has been expanded from 4 to 9 Regions by June, 2034	Number of households and institutions connected to natural gas	June, 2034	PO-RALG; Ministry of Energy; Ministry of Finance; EWURA; TPDC; REA; TIC; Private Sectors
			Electricity distribution infrastructure has reached all Villages and Hamlets by June, 2028	Number of Villages and Hamlets with access to electricity	June, 2028	Ministry of Energy; EWURA; TANESCO; REA TIC; Private Sector
			Prototype machines for the production of briquettes, biogas, and bioethanol has been installed in each Region by June, 2027.	The number of prototype machines for briquettes, biogas, and bioethanol production.	June, 2027	Ministry of Industry and Trade; TIRDO; SIDO; TEMDO; STAMICO; CAMARTEC
			The production and distribution of briquettes has increased by July, 2025	Amount of briquettes produced per year	July, 2025	Ministry of Industry and Trade; Ministry of Minerals; Ministry of Natural resources and Tourism Vice President's Office
			The production of improved cookstoves has increased by July, 2025	Number of improved cookstoves produced in the country	July, 2025	Ministry of Industry and Trade; TIRDO
			Electric stoves have started being manufactured in the country by July, 2025	Number of electric cookstoves produced in the country	July 2025	SIDO; TBS; Private Sectors
			LPG storage infrastructure has increased in all regions by June, 2029	Number of LPG storage facilities	June, 2029	PO-RALG; Ministry of Energy; EWURA; Private Sectors

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			The annual production capacity of accessories and cylinders of LPG and natural gas in the country has increased by June, 2034	Production rate of accessories and cylinders of LPG and natural gas	June, 2034	Ministry of Industry and Trade; TIC; Private Sectors
		Involving the Private Sector in the construction of clean cooking infrastructures	Public-Private Partnership (PPP) clean cooking projects have increased from June, 2026	Number of Public-Private Partnership (PPP) clean cooking projects	June, 2026	PO - Planning and Investment; Ministry of Energy; Ministry of Foreign Affairs and East African Cooperation; TIC; Private Sectors
			Procedure for allocating specific areas for the distribution of clean cooking energy has been established by June, 2025	Number of designated areas for the distribution of clean cooking energy	June, 2025	Ministry of Energy; Ministry of Lands, Housing and Human Settlements Development; PO-RALG
3.	To reduce the cost of clean cooking energy, appliances and efficient cooking stoves	Ensuring the initial and usage costs of clean cooking energy, appliances and efficient cooking stoves have decreased	Taxes and fees imposed on clean cooking energy, appliances and efficient stoves have been reduced by June, 2026	Reduced taxes and levies on clean cooking energy, appliances and cooking stoves	June, 2026	Ministry of Finance; Ministry of Energy; PO-RALG;
			Subsidies in clean cooking projects have increased from July, 2024	Number of subsidized clean cooking projects	July, 2024	Ministry of Finance; Ministry of Energy; PO-RALG; Ministry of Natural resources and Tourism; Development Partners; Financial Institutions
			A system of paying for clean cooking energy and efficient technologies through affordable loans has been prepared by July, 2025	Number of businesses that have established a mechanism for payment of clean cooking energy and efficient technologies through affordable loans	July, 2025	Private Sectors

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Electric cookstoves and cooking appliances are paid for through the LUKU system by June, 2025	Number of customers paying for electric cookstoves and efficient cooking appliances through LUKU system	June, 2025	TANESCO; Private Sectors
			Pay-As-You-Go systems for clean cooking energy have been implemented in every Region by June, 2034	Number of customers benefiting from Pay-As-You-Go systems for clean cooking energy in each Region	June, 2034	Private Sectors
		Promoting the involvement of financial institutions in supporting clean cooking stakeholders	Financial institutions have established a mechanism to provide low-interest loans to clean cooking stakeholders by June, 2025	Amount of loan funds disbursed for clean cooking projects	June, 2025	Financial Institutions
			Financial education has been provided to clean cooking stakeholders from July, 2025	Number of financial education programmes provided to clean cooking stakeholders	July, 2025	Ministry of Energy; Private Sectors; Development Partners; Financial Institutions
4.	To develop, update and harmonize enabling Policies, Laws, Regulations and Guidelines to facilitate the adoption of clean cooking solutions	Reviewing, developing and updating Policies, Laws, Regulations and Guidelines related to cooking solutions	Policies, Laws, Regulations and Guidelines regarding the use of cooking solutions have been developed or updated by June, 2026	Existence of coordinated policies, laws, regulations and guidelines regarding cooking solutions	June, 2026	Prime Minister's Office Ministry of Constitutional and Legal Affairs; PO-RALG; Vice President's Office Ministry of Energy; Ministry of Natural resources and Tourism; Attorney General's Office; EWURA; REA; TANESCO; TPDC; TFS

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Guidelines on the quality standards of cooking energy, appliances and cookstoves have been developed or updated and implemented from June, 2025	Implementation of guidelines on the quality standards of energy, appliances and cookstoves	June, 2025	Ministry of Industry and Trade TBS, TIRDO TEMDO CARMATEC
			Regulations for the management of LPG business have been reviewed and improved by June, 2026	Presence of revised and improved regulations for the management of LPG business	June, 2026	Ministry of Energy EWURA
			Guidelines for monitoring the air quality in residential areas and Institutions have been prepared by June, 2026	Availability of guidelines on the measurement of air quality in residential and institutional settings	June, 2026	Vice President's Office - Environment Ministry of Health Ministry of Energy OSHA NCCMC
			Guidelines for the use of natural gas in households, industries and vehicles have been prepared or updated by June, 2026	Existence of guidelines on the use of natural gas in households, industries and vehicles	June, 2026	Ministry of Energy PO-RALG Vice President's Office - Environment Ministry of Industry and Trade Ministry of Works Ministry of Transport TPDC, EWURA
				Presence of a criterion for the goal of connecting residential customers in the issuance of construction permits and licenses for the operation of natural gas infrastructure, in industries and refueling stations	June, 2024	Ministry of Energy EWURA

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Plans for incorporating clean cooking energy infrastructure in land use plans have been implemented from July, 2026	Integration of plans to incorporate clean cooking energy infrastructure into land use plans	July, 2026	Ministry of Lands, Housing and Human Settlements Development; Ministry of Works; Ministry of Transport; PO-RALG; Ministry of Energy; TANROADS; TARURA; TRC; Housing Corporations
			Construction projects for residential and commercial buildings, hotels, restaurants and recreational building have started installation of clean cooking infrastructure from June, 2025	Number of residential and commercial buildings, hotels, restaurants and recreational buildings equipped with clean cooking energy infrastructure	Julai, 2025	PO-RALG; Ministry of Natural resources and Tourism; Ministry of Energy Housing Corporations Private Sectors
			National Clean Cooking Fund has been established or clean cooking initiatives have been integrated into existing funds and commenced operations by June, 2025	Operationalization of the National Clean Cooking Fund	June, 2025	Ministry of Energy; Ministry of Finance
		Strengthening the coordination in implementation of Policies, Laws, Regulations and Guidelines related to cooking solutions	Ban on the use of firewood and charcoal in 31,395 institutions that prepare food and feed more than 100 people has been implemented by January, 2024	Number of institutions that prepare and provide meals for more than 100 people per day that have stopped using charcoal and firewood for cooking	January, 2024	Vice President's Office - Environment; PO - RALG Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; Ministry of Energy
			Forest management to be increased in all areas by July 2025.	The number of forest management programs	July, 2025	PO - RALG; Ministry of Tourism and Natural Resources; TFS; TAFORI; Private sectors
			Ministries, Departments, Public Institutions, Regional administration and Local Government Authorities have incorporated clean cooking issues into their plans and strategies from July, 2024	Number of plans and strategies that have incorporated clean cooking issues	July, 2024	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; PO-RALG

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Desk officers responsible for coordinating the implementation of clean cooking strategies in each Ministry, Department and Public Institution, Regional administration and Local Government Authorities are appointed by July, 2024	Number of Desk officers in Ministries, Departments, Public Institutions, Regional and Local Government Authorities coordinating the implementation of clean cooking strategies	July 2024	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination ; PO-RALG
			Committee for monitoring the Clean Cooking Strategy has been established by July, 2024	Existence of a Committee for monitoring the Clean Cooking Strategy	July, 2024	Ministry of Energy
			Coordination guideline for the Strategy of the Clean Cooking strategy has been prepared by June, 2024	Presence of guidelines for the coordination of the Clean Cooking Strategy	June, 2024	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; Ministry of Energy
5.	To promote investments in clean cooking	Encouraging private sector to seize business opportunities within the clean cooking value chain	Clean cooking projects have been included in investment guidelines for each region by June, 2025	Number of clean cooking projects included in the investment guidelines of each Region	June, 2025	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; PO-RALG
			Cost of permits for advertising clean cooking solutions has decreased from July, 2024	Cost of permits for advertising clean cooking solutions in the Local Government Authorities	July, 2024	PO-RALG; Ministry of Energy

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Awards for innovators in technology and clean cooking energy are given out from July, 2024	Number of awards given to innovators in technology and clean cooking	July, 2024	Ministry of Energy; COSTECH
			Low-interest loans are granted to implementers of clean cooking projects from July, 2024	Amount of funds disbursed through low-interest loans for clean cooking projects	July, 2024	Financial Institutions
			Database of statistics and information on clean cooking solutions has been developed by June, 2025	Existence of statistics and information database on clean cooking	June, 2025	Ministry of Energy; Ministry of Information, Communications and Information Technology; NBS; e-GA
		Promoting the use of national and international funds and programmes to foster and enhance investment in clean cooking	Environmental funds (green funds) have started funding clean cooking projects from July, 2024	Number of clean cooking projects funded by Environmental Funds (green funds)	July, 2024	Vice President's Office - Environment; Financial Institutions; Development Partners
			International agreements on carbon trading in clean cooking projects within the country have been established from July, 2024	Number of clean cooking projects benefiting from Carbon Trading markets	July, 2024	Ministry of Foreign Affairs and East African Cooperation; Vice President's Office - Environment; Ministry of Energy
			Education on benefits from opportunities in national and international funds and programmes are provided to clean cooking investors from July, 2024	Number of training programmes on opportunities available in national and international funds and programmes	July, 2024	Ministry of Energy; Vice President's Office - Environment; PO-RALG; Ministry of Natural resources and Tourism; REA; COSTECH; Financial Institutions; Development Partners

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
6.	To build the capacity of implementers of clean cooking projects	Enabling the testing of quality standards for cooking energy, appliances and stoves	Infrastructure for testing the standards of quality for clean cooking energy, equipment and cookstoves are installed by the relevant Standards Authority, Research Institutions and Colleges by June, 2025	Number of infrastructure for testing the quality standards of energy, equipment and cookstoves	June, 2025	Ministry of Industry and Trade; TBS
			Provision of Education on the standards of quality for clean energy, equipment and efficient cooking stoves has commenced from July, 2024	Number of educational programmes on the quality standards of clean energy, equipment and efficient cooking stoves	July, 2024	Ministry of Industry and Trade; TBS; TIRDO
		Ensuring capacity building for implementers and project managers of clean cooking projects	All Technical Education and Vocational Training Colleges nationwide have incorporated clean cooking issues into their curricula by June, 2026	Presence of curricula incorporating clean cooking issues in Technical Education and Vocational Training Institutions	June, 2026	Ministry of Education, Science and Technology; NACTVET
			Desk officers responsible for coordinating the implementation of clean cooking strategies in Ministries, Departments, Public Institutions, Regional Administrations and Local Government Authorities have undergone training from July, 2024	Number of trained Clean Cooking Desk Officers	July, 2024	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination PO-RALG Sectoral Ministries Development Partners
			The department responsible for carbon trading management has been strengthened operationally by June, 2025	Capacity and effectiveness of the department responsible for carbon trading management	June, 2025	Vice President's Office - Environment
		Ensuring local content in the implementation of clean cooking projects	Training for entrepreneurs on clean cooking has been provided in every Local Government Authority from July, 2024	Number of training programmes on clean cooking provided to entrepreneurs in every Local Government Authority	July, 2024	PO-RALG NEEC Development Partners NGO's Private Sectors

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Guidelines governing local content have been integrated in clean cooking projects from July, 2024	Number of locals involved in the implementation of clean cooking projects	July, 2024	Ministry of Energy; Ministry of Industry and Trade; NEEC; TPDC; REA; CAR-MATEC; TIRDO
7.	To broaden the scope of research, invention and innovations in technologies of cooking solutions	Strengthening the capacity of institutions and centers involved in research, innovation and invention in technology on clean cooking solutions	Ministries responsible for clean cooking have allocated or increased budgets for the development of research, innovation and invention in technology related to clean cooking from July, 2024	Budget allocated and utilized for clean cooking research matters	July, 2024	Vice President's Office - Environment; PO-RALG; Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; Sectoral Ministries; COSTECH; NBS; TIRD; CAMARTEC
			Training on clean cooking has been provided to trainers of institutions and research centers dealing with clean cooking solutions from July, 2024	Number of trainers trained in clean cooking	July, 2024	Prime Minister's Office - Labour, Youth, Employment and People with Disabilities; Ministry of Education, Science and Technology Development Partners
		Strengthening collaboration between clean cooking investors and research and development, Higher Education and Technical Institutions	Research and development institutions, Higher Learning Institutions and Technical Education and Vocational Training Colleges have established a communication platform with clean cooking investors by July, 2025	Existence of a communication platform between research and development Institutions, Higher Learning Institutions and Technical Education and Vocational Training Colleges and clean cooking investors	July, 2025	Ministry of Education, Science and Technology; Higher Learning Institutions; Technical Colleges; Private Sectors

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Private sector engaged in the manufacturing of clean fuel, appliances and efficient cookstoves have been involved in the preparation and implementation of hands-on training programs for experts from universities starting from July 2024.	Number of professionals from universities who have received practical training in industries involved in clean cooking	July, 2024	Private Sectors; Higher Learning Institutions; Technical Colleges
8.	To incorporate HIV / AIDS issues in the clean cooking initiatives	Promoting the provision of HIV / AIDS education to stakeholders in clean cooking initiatives	National Awareness and Sensitization Plan on the use of clean cooking solutions has incorporated HIV / AIDS education by September, 2024	Existence of a national awareness and sensitization plan on the use of clean cooking solutions that incorporates HIV / AIDS education	September, 2024	Ministry of Energy
			HIV testing awareness programmes have been implemented in the clean cooking initiatives from July, 2024	Number of HIV testing awareness programmes implemented in the clean cooking initiatives	July, 2024	
		Ensuring access to HIV prevention equipment for stakeholders in the clean cooking initiatives	HIV prevention equipments are available in clean cooking projects from July, 2024	Increase in the availability of HIV prevention equipment	July, 2024	Sectoral Ministries; Private Sectors
			Education on the proper use of HIV prevention equipment has been provided in the clean cooking initiatives from July, 2024	Number of training programmes on the proper use of HIV prevention equipment provided in the clean cooking initiatives	July, 2024	
9.	To incorporate gender equality issues in clean cooking value chain	Encouraging women and youth participation in the clean cooking value chain	Number of programmes to facilitate the participation of women and youth in the clean cooking value chain has increased from July, 2026	Number of women and youth in the clean cooking value chain	July, 2026	PO-RALG; Ministry of Community Development, Gender, Women and Special Groups; Ministry of Energy; NEEC; Development Partners ; SIDO; CARMATEC; TIRDO; NGOs

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
			Budget enabling the participation of women and youth in clean cooking projects is allocated and utilized annually	Amount of budget allocated and utilized to enable the participation of women and youth in clean cooking projects	Annually	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; President's Office-Rural Authority and Local Government; Sectoral Ministries
		Incorporating gender equality in decision-making levels in the clean cooking	Gender equality in decision-making levels regarding clean cooking has increased from July, 2025	Number of women in decision-making levels regarding clean cooking	July, 2025	Office of the President - Public Service Management and Good Governance President's Office - Public Service Management; President's Office-Rural Authority and Local Government Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; NGOs; Development partners
			Leadership training for female decision makers in clean cookings has been provided in every Council from July, 2024	Number of leadership training programs provided to female decision makers in clean cooking in every Council	July, 2024	Ministry of Community Development, Gender, Women and Special Groups Sectoral Ministries

No.	Specific Objective	Strategy	Target	Outcome Indicator	Timeline	Responsible Entity
10.	To strengthen good governance in clean cooking	Strengthening accountability and oversight of policies, programs, and laws regarding clean cooking energy issues.	Strategies for oversight and monitoring policies, programs, and laws to strengthen governance and accountability in clean cooking issues to be implemented by July, 2025	Implementation of strategies for overseeing and monitoring policies, programs, and laws regarding good governance in clean cooking issues being implemented	July, 2025	President's Office - Public Service Management and Good Governance Sectoral Ministries
			Strategies for effective resource management and corruption prevention in the clean cooking are implemented by July, 2025	Implementation of strategies for effective resource management and corruption prevention in clean cooking	July, 2025	President's Office - Public Service Management and Good Governance; Ministry of Finance; National Audit office of Tanzania (NAOT); The Prevention and Combating of Corruption Bureau (PCCB)



RESPONSIBILITIES OF CLEAN COOKING STAKEHOLDERS



6. RESPONSIBILITIES OF CLEAN COOKING STAKEHOLDERS

This chapter describes the responsibilities of various stakeholders in the implementation of this Strategy, as outlined in Chapter Four.

6.1. Responsibilities

The Ministry responsible for Policy, Parliamentary Affairs, and Coordination will coordinate the implementation of this Strategy and ensure that the objectives are achieved. The relevant Ministries, Institutions, and Agencies involved in cooking solutions will develop annual plans, development programmes and projects in accordance with this Strategy.

As the coordinator of this Strategy, it will ensure that all stakeholders understand their responsibilities. The following are the responsibilities of the relevant stakeholders:

6.1.1 Ministry Responsible for Energy

This Ministry has the overall responsibility of overseeing the implementation of the clean cooking agenda, including overseeing the implementation of this Strategy. Additionally, it will develop and coordinate the implementation of the National Communication Strategy and the National Awareness and Sensitization Plan on the use of clean cooking solutions. It will also facilitate the review of Policies, Laws, Regulations, and Guidelines related to cooking, coordinate the functions of the Fund that will implement clean cooking roles; oversee the improvement of clean cooking energy infrastructure; and establish a database containing information and statistics on clean cooking. Furthermore, it will conduct comprehensive Monitoring and Evaluation of the implementation of the National Clean Cooking Strategy in collaboration with key stakeholders.

6.1.2 The Coordination Offices

The coordination offices play a significant role in ensuring that the responsibilities outlined in this Strategy are implemented. Ministries responsible for Policy, Parliamentary Affairs, and Coordination; as well as Regional Administration and Local Government Authorities will be involved in coordinating this Strategy at the regional level. Furthermore, the roles of these Offices include providing guidance and coordinating the implementation of tasks within their respective areas of operation.

6.1.3 Sectoral Ministries

The sectoral ministries have crucial responsibilities in the implementation of this Strategy. These ministries include: The Ministry responsible for Environment; Finance; Constitution and Legal Affairs; Health, Community Development, Gender, Women and Special Groups; Natural Resources and Tourism; Education, Science, and Technology; Industry and Trade; Minerals; Home Affairs; Works and Transport; Lands, Housing and Human Settlements; Culture, Arts and Sports; and Information, Communication and Information Technology. These sectoral ministries are responsible for ensuring that their strategies and plans align with the priorities of this Strategy in promoting clean cooking activities.

The responsibilities of sectoral ministries include preparing and improving Policies, Laws, Regulations and Guidelines related to clean cooking; conducting education and awareness campaigns on the use of clean cooking; and promoting private sector involvement in clean cooking. Other responsibilities include: encouraging investment in clean cooking initiatives; capacity building of personnel in overseeing clean cooking projects; and promoting the use of National and International Funds and Programmes to promote and develop the clean cooking initiatives in the country.

Additionally, the Ministry responsible for Environment will coordinate the implementation of the ban on the use of traditional firewood and charcoal. Likewise, the Ministry responsible for research, science, technology, and innovation will promote and foster research, innovation and technology development in energy, appliances, stoves, and business models.

6.1.4 Government Institutions, Authorities, Agencies and Departments

The Government Institutions, Authorities, Agencies, and Departments have crucial responsibilities in the implementation of this Strategy. These institutions, authorities, agencies and departments include: the Tanzania Revenue Authority (TRA), the Attorney General's Office, the Tanzania Petroleum Development Corporation (TPDC), the Energy and Water Utilities Regulatory Authority (EWURA), the

Rural Energy Agency (REA), the Tanzania Electric Supply Company Limited (TANESCO), the Tanzania Ports Authority (TPA), the Petroleum Bulk Procurement Agency (PBPA), the Tanzania Bureau of Standards (TBS), the Public Procurement Regulatory Authority (PPRA), and the National Economic Empowerment Council (NEEC).

Other institutions include the Prevention and Combating of Corruption Bureau (PCCB), the Commission for Science and Technology (COSTECH), the National Council for Technical Education and Vocational Training (NACT-VET), the National Carbon Monitoring Centre (NCMC), the Tanzania Investment Centre (TIC), the National Environment Management Council (NEMC), the Tanzania Forest Services Agency (TFS), the State Mining Corporation (STAMICO), the Tanzania Industrial Research and Development Organization (TIRDO), the Centre for Agricultural Mechanization and Rural Technology (CAMARTEC), the Tanzania Engineering and Manufacturing Design Organization (TEMDO), and the National Bureau of Statistics (NBS). These institutions, authorities, agencies and departments have the responsibility of implementing this Strategy within their respective areas of operation. The Ministry responsible for implementation of the clean cooking agenda (Ministry responsible for Energy) will work closely with these stakeholders.

6.1.5 Financial Institutions

Financial institutions will establish financial systems to enable local entrepreneurs' participation in the clean cooking value chain; provide low interest loans to local entrepreneurs distributing clean cooking products and services; encourage women's participation in the clean cooking value chain; finance clean cooking projects; and promote the use of national and international funds and programmes to support the growth and development of the clean cooking initiatives in the country.

6.1.6 Education and Research Institutions

Education and Research Institutions have the responsibility to produce experts in clean cooking; conduct research, innovation and technological advancements in energy, appliances, cookstoves and business models related to clean cooking; preserve and disseminate research findings on cooking energy; and build capacity for stakeholders in implementing clean cooking projects. Other responsibilities include: participating in sensitization and public awareness on clean cooking; advising the government on science, technology and innovation in clean cooking solutions, including policy and law formulation, research priority setting, resource planning and utilization; and providing technical guidance on all aspects related to cooking solutions..

6.1.7 Private Sector

The Private Sector will collaborate with the Government to ensure reliable and sustainable access to clean cooking; participating in sensitization and public awareness on clean cooking; develop and implement programmes to enable low-income individuals in affording clean cooking solutions; collaborate with the Government to identify Policies, Laws, Regulations and Guidelines that hinder efforts in the distribution of clean cooking solutions; ensure the distribution network of clean cooking energy, appliances and cookstoves reaches to all areas of the country; and create clean cooking employment opportunities.

6.1.8 Development Partners

Development Partners will collaborate with the Government to promote clean cooking initiatives by building capacity; providing technical and financial support; facilitate technology transfer from both domestic and foreign sources to local producers; and support the implementation of the Strategy and investments in the sector.

6.1.9 Non-Governmental Institutions

Non-Governmental Institutions including Non-Governmental Organizations (NGOs), Community-Based Organizations (CBOs) and Faith-Based Organizations (FBOs), will participate in sensitization and public awareness on clean cooking; provision of support to different groups in preparing procedures and contracts, as well as building their capacity and market networks; offering advisory assistance, mobilizing stakeholders on clean cooking initiatives; advocating for the implementation of Policies and Laws related to cooking solutions; and conducting research while advocating for the interests of vulnerable groups.

7. MONITORING AND EVALUATION

7.1. Monitoring and Evaluation Framework

The Monitoring and Evaluation framework is a crucial tool/requirement in ensuring the achievement of the objectives, strategies, and targets of the National Clean Cooking Strategy. The framework aims at assessing the implementation and effectiveness of sectoral performance to facilitate informed decision-making on the progress of clean cooking adoption. Additionally, it provides important measures for monitoring performance indicators for each specific objective of the strategy. Moreover, this framework serves as a tool to monitor compliance with the implementation of the strategy.

The relevant ministries responsible for clean cooking have the overall responsibility of monitoring and evaluating the implementation of the Strategy. Each stakeholder will be required to establish a robust internal monitoring system to ensure effectiveness in the implementation of the Strategy within their respective organizations.

The monitoring and evaluation framework will include baseline studies, indicators, and sources of information. There will be annual reviews, which will focus on assessing whether the planned activities aligns with the objectives and targets set. Furthermore, the reviews will involve conducting studies and evaluations on the beneficiaries to monitor any changes in the outcomes achieved during the assessment period.

7.1.1 The Objectives of Monitoring and Evaluation

The main objective of the Monitoring and Evaluation Framework is to ensure the effective implementation of the National Clean Cooking Strategy (2024 - 2034) and to achieve its objectives within the intended timeframe. This framework will also oversee and provide guidance on the involvement of stakeholders in implementation and monitoring activities; control and measure resource utilization during the implementation of the Strategy; and assess the accountability of each stakeholder and their role in the implementation.

7.1.2 Areas of Consideration in Monitoring and Evaluation

Monitoring and evaluation of the Implementation of the Strategy will focus on the following;

- i. Capacity Building in Monitoring and Evaluation;
- ii. Alignment with other Monitoring and Evaluation frameworks;
- iii. Adoption of Results-Based Management Approaches; and
- iv. Readiness to use the Monitoring and Evaluation System,

7.1.3 Scope of Monitoring and Evaluation framework

The scope of the Monitoring and Evaluation Framework includes:

- i. Assessment of activities, procedures, and outcomes of the Implementation of the National Clean Cooking Strategy and its contribution to the society; and
- ii. Databases and reporting schedules to be used in the monitoring and evaluation framework of the National Clean Cooking Strategy.

7.1.4 Performance Indicators

Performance indicators are a way to measure the success of the National Clean Cooking Strategy (2024 – 2034). The main function of a performance indicator is to regularly measure progress towards achieving the intended goals. The success of the Monitoring and Evaluation of the Strategy relies on the robustness of the performance indicator measurement system. The performance indicators for the Monitoring and Evaluation Framework of the National Clean Cooking Strategy are attached in Appendix No. 1.

7.2. Data Collection and Analysis

The main methods of data collection are conducting surveys, reviewing reports and institutional records, as well as visiting projects in various locations. The collected data will be analyzed and disseminated to relevant stakeholders for implementation.

7.3. Monitoring and Evaluation Report

7.3.1 Types of Monitoring and Evaluation Report

The following are important Monitoring and Evaluation reports:

- i. Implementation reports;
- ii. Evaluation reports;
- iii. Reports on various studies, researches and survey reports conducted on cooking solutions;and
- iv. Reviews of the National Clean Cooking Strategy.

7.3.2 Submission of Reports

Reports on the progress of the implementation of this strategy will be prepared by the relevant ministries on a quarterly, semi-annual and annual basis as specified in Table No. 3. These reports will be submitted to the Ministry responsible for Policy, Parliamentary Affairs and Coordination. The reports will be reviewed and summarized before being presented to other stakeholders with the aim of providing information and improving the performance of the clean cooking initiatives.

Table 3: Submission of Reports

Type of Report	Content of the Report	Time of Submission
Performance reports	Consolidated reports covering progress on the implementation of activities	Quarterly, semi- and annual reports
Evaluation reports	Success of the strategy objectives, challenges and lessons learnt, including Relevance, effectiveness, efficiency, impact/outcome and sustainability of interventions	Three times (2027, 2030 and 2034)
Various researches, studies and survey reports	Findings and recommendations on specific issues	As needed basis
Strategy review	Overall achievements of the National Clean Cooking Strategy objectives, challenges and lessons learnt.	After 5 Years

Additionally, these reports will aim to identify the progress made in clean cooking projects and will be presented in a dashboard system that includes objectives, indicators, implementation status and the source of information. An evaluation to assess the implementation of the strategy will be conducted every three years to determine its trajectory.

APPENDIX

Appendix No. 1: Performance Indicators

No.	Specific Objective	Indicator	Outcome	Baseline	Source
1.	To increase public and institutional awareness on the importance of using clean cooking solutions.	Commencement of the use of National Communication Strategy on the use of clean cooking solutions	Control of the content and type of information provided about clean cooking	Not available	Implementation report
		Commencement of the use of Awareness and Sensitization Plan on the use of clean cooking solutions	Awareness to the public about the importance of using clean cooking solutions	Not available	Implementation report
		Number of education and awareness programmes for promoting clean cooking usage implemented through various platforms and groups	Various stakeholders with education on clean cooking	Not available	Implementation report
		Number of national Clean Cooking conferences conducted.	stakeholders meeting and discussing issues about clean cooking	1	Implementation report
2.	To strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions	Amount of biogas, briquettes and bioethanol produced from collected municipal waste	Increase in the availability of biogas and alternatives charcoal and bioethanol in the country	Baseline study	Research and Implementation report
		Amount of biogas and bioethanol produced from plant-based feedstock	Increase in the availability of plant-based feedstocks used to produce biogas and bioethanol	Baseline study	Implementation report
		Capacity of the port infrastructure to receive LPG	Increase in the amount of LPG received at the port	5,500 Metric tonnes	Implementation report
		Number of households and institutions connected to natural gas	Increase in the utilization of natural gas for cooking	1,511 households and 13 Institutes	Implementation report
		Number of Villages and Hamlets with access to electricity	Increase in the utilization of electricity for cooking	10,127 villages 28,659 hamlets	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
		The number of prototype machinery for briquettes, biogas, and bioethanol production	Increase in the production of briquettes, biogas, and bioethanol	Baseline study	Research and Implementation report
		Amount of briquettes produced per year	Increase in the use of alternative charcoal for cooking	Baseline study	Research and Implementation report
		Number of improved cookstoves produced in the country	Increase in the use of efficient stoves	Baseline study	Research and Implementation report
		Number of electric cookstoves produced in the country	Decrease of cost and increase in the availability of efficient e-cooking stoves	Not available	Implementation report
		Number of LPG storage facilities	Increase in capability of LPG storage	Regions with LPG storage infrastructure are: Dar es salaam, Dodoma, Arusha, Shinyanga, Kagera, Iringa, Geita, Kigoma, Kilimanjaro, Lindi, Manyara, Mara, Mbeya, Morogoro, Mwanza, Njombe, Rukwa, Ruvuma, Shinyanga, Singida, Tabora, Tanga	Implementation report
		Production rate of accessories and cylinders of LPG and natural gas	Decrease in the cost of LPG and natural gas cylinders and equipment	Baseline study	Research and Implementation report
		Number of Public-Private Partnership (PPP) clean cooking projects	Increase in participation of the private sector in the clean cooking projects	Baseline study	Research and Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
		Number of designated areas for the distribution of natural gas	Increase in participation of the private sector in implementation of projects concerning natural gas	Not available	Implementation report
3.	To reduce the cost of clean cooking energy, appliances and efficient cook stoves	Reduced taxes and levies on clean cooking energy, appliances and cookstoves	Decrease in cost of clean cooking energy, Equipment and cooking stoves	Not available	Implementation report
		Number of subsidized clean cooking projects	Decrease in cost of project implementation	Baseline study	Research and Implementation report
		Number of businesses that have established a mechanism for payment of clean cooking energy and efficient technologies through affordable loans	Increase in the users of clean cooking energy and efficient technologies	Not available	Implementation report
		Number of customers paying for electric cookstoves and efficient cooking appliances through LUKU system	Increase of electric users for cooking	3 percent of household	Implementation report
		Number of customers benefiting from Pay-As-You-Go systems for clean cooking energy in each Region	Increase in the users of clean cooking energy who utilize the Pay-As-You-Go systems	Baseline study	Implementation report
		Amount of loan funds disbursed for clean cooking projects	Increase in number of projects about cleaning cooking solutions	Baseline study	Research and Implementation report
		Number of financial education programmes provided to clean cooking stakeholders	Stakeholders of clean cooking solutions with financial literacy	Baseline study	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
4.	To develop, update and harmonize enabling policies, laws, regulations and guidelines to facilitate the adoption of clean cooking solutions	Existence of coordinated policies, laws, regulations and guidelines regarding cooking solutions	Policies, Laws, Regulations and Guidelines enabling the implementation of the National Clean Cooking Implementation Strategy	Existing guidelines	Implementation report
		Implementation of guidelines on the quality standards of energy, appliances and cookstoves	Increase in clean energy, instruments and improved stoves	Existing guidelines	Implementation report
		Presence of revised and improved regulations for the management of LPG business	Equal business competition among LPG traders	Not available	Implementation report
		Availability of guidelines on the measurement of air quality in residential and institutional settings	Decrease in metric tonnes of carbon produced in the country	Not available	Implementation report
		Existence of guidelines on the use of natural gas in households, industries and vehicles	Increase in the number of households and institutions connected with natural gas	Not available	Implementation report
		Presence of a criterion for the goal of connecting residential customers in the issuance of construction permits and licenses for the operation of natural gas infrastructure, in industries and refueling stations		Not available	Implementation report
		Integration of plans to incorporate clean cooking energy infrastructure into land use plans	Integration of plans for the adoption of clean cooking energy infrastructure into land use plans	City land use Master Plan	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
		Number of residential and commercial buildings, hotels, restaurants and recreational houses equipped with clean cooking energy infrastructure	Increase in the number of residential and commercial building projects, hotels, restaurants and recreational homes equipped with clean cooking energy infrastructure	Baseline study	Research and Implementation report
		The number of forest management programs	Increase in number of forest	Not available	Implementation report
		Operationalization of the National Clean Cooking Fund	Successful implementation of the roadmap for transitioning to clean cooking solutions usage	Not available	Implementation report
		Number of institutions that prepare and provide meals for more than 100 people per day that have stopped using charcoal and firewood for cooking	Increase in institutions preparing food using clean cooking solutions	31,395 Institute use firewood and charcoal in cooking	Research and Implementation report
		Number of plans and strategies that have incorporated clean cooking issues	Implementation of the Strategy for the Clean Cooking Roadmap in every Ministry, Department and Public Institution, Regional Authorities and Local Government Authorities	Baseline study	Implementation report
		Number of Desk officers in Ministries, Departments, Public Institutions, Regional and Local Government Authorities coordinating the implementation of clean cooking strategies	Ease of coordination of clean cooking issues within the government	Baseline study	Implementation report
		Existence of a Committee for Monitoring the Clean Cooking Strategy	Ease of monitoring of the implementation of Clean Cooking Strategy	Not available	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
		Presence of guidelines for the coordination of the Clean Cooking Strategy	Ease of coordination in Clean Cooking Strategy	Not available	Implementation report
5.	To promote investments in clean cooking	Number of clean cooking projects included in the investment guidelines of each Region	Increase in investment in clean cooking solutions in each region	Baseline study	Implementation report
		Cost of permits for advertising clean cooking solutions in the Local Government Authorities	Increase in the number of advertisements about clean cooking solutions in the local government authorities	Baseline study	Research and Implementation report
		Number of awards given to innovators in technology and clean cooking	Increase in innovators of technology in clean cooking	Baseline study	Implementation report
		Amount of funds disbursed through low-interest loans for clean cooking projects	Increase in number of clean cooking projects	Baseline study	Research and Implementation report
		Existence of statistics and information database on clean cooking	Ease of access to information and data on clean cooking issues	Not available	Implementation report
		Number of clean cooking projects funded by Environmental Funds (Green Fund)	Increase in clean cooking projects	Baseline study	Research and Implementation report
		Number of clean cooking projects benefiting from Carbon Trading markets	Increase in clean cooking projects	Baseline study	Implementation report
		Number of training programmes on opportunities available in national and international funds and programmes	Increase in the utilization of opportunities from national and international funds and programmes	Baseline study	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
6.	To Build the capacity of implementers of clean cooking projects	Number of infra-structure for testing the quality standards of energy, equipment and cookstoves	Ease of measuring the quality standards of energy, appliances and cooking stoves	Baseline study	Research and Implementation report
		Number of educational programmes on the quality standards of clean energy, equipment and efficient cooking stoves	Increase in the production of clean energy, high-quality appliances and standardized cooking stoves	Baseline study	Implementation report
		Presence of curricula incorporating clean cooking issues in Technical Education and Vocational Training institutions	Increase in skilled graduates in the field of manufacturing clean energy, appliances and standardized cooking stoves	Baseline study	Implementation report
		Number of trained Clean Cooking Desk Officers	Desk officers with the capacity to oversee clean cooking issues at their respective stations	Not available	Implementation report
		Capacity and effectiveness of the department responsible for carbon trading management	Increase in the capacity and efficiency of the department responsible for carbon trading management	Baseline study	Implementation report
		Number of training programmes on clean cooking provided to entrepreneurs in every Local Government Authority	Increase in entrepreneurs in clean cooking in every Local Government Authority	Baseline study	Implementation report
		Number of locals involved in the implementation of clean cooking projects	Increase in the number of local individuals with the capacity to implement clean cooking projects	Baseline study	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
7.	To broaden the scope of research, invention and innovations in technologies of cooking solutions	Budget allocated and utilized for clean cooking research matters	Increase in the number of research studies on clean cooking	Baseline study	Implementation report
		Number of trainers trained in clean cooking	Increase in the number of trainers with the capacity to deliver training on clean cooking issues	Baseline study	Research and Implementation report
		Existence of a communication platform between Research and Development Institutions, Higher Learning Institutions, Technical Education and Vocational Training Colleges and clean cooking investors	Research conducted on clean cooking meets the needs of the community	Not available	Implementation report
		Number of professionals from universities who have received practical training in industries involved in clean cooking	Increase in skilled experts from universities knowledgeable about clean cooking issues	Baseline study	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
8.	To incorporate HIV and AIDS issues in clean cooking initiatives	Existence of a national awareness and sensitization plan on the use of clean cooking solutions that incorporates HIV/AIDS education	Stakeholders of clean cooking are reached with HIV/AIDS education	Not available	Implementation report
		Number of HIV testing awareness programmes implemented in the clean cooking initiatives	Decrease in HIV infections in clean cooking projects	Not available	Implementation report
		Increase in the availability of HIV prevention equipment	Decrease in HIV infections in clean cooking projects	Not available	Implementation report
		Number of training programmes on the proper use of HIV prevention material provided in the clean cooking initiatives	Increase awareness and decrease HIV infection	Not available	Implementation report
9.	To incorporate gender equality issues in the clean cooking value chain	Number of women and youth in the clean cooking value chain	Increase in the participation of women and youth in clean cooking projects	Baseline study	Implementation report
		Amount of budget allocated and utilized to enable the participation of women and youth in clean cooking projects	Increase in the participation of women and youth in clean cooking projects	Baseline study	Implementation report
		Number of women in decision making levels regarding clean cooking	Decisions regarding clean cooking that consider gender equality	Baseline study	Research and Implementation report
		Number of leadership training programs provided to female clean cooking managers in every Council	Increase in the participation of women and youth in leadership	Baseline study	Implementation report

No.	Specific Objective	Indicator	Outcome	Baseline	Source
10.	To strengthen good governance in clean cooking	Implementation of strategies for overseeing and monitoring policies, programs, and laws regarding good governance in clean cooking issues being implemented	Increase in accountability in the clean cooking issues	Baseline study	Implementation report
		Implementation of strategies for effective resources management and corruption prevention in clean cooking	Reduced incidents of corruption and misuse of resources in matters related to clean cooking energy	Baseline study	Implementation report

Appendix No. 2: Action Plan of the National Clean Cooking Strategy (2024 – 2034)

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
1.	Educate the public about the importance of using clean cooking solutions, and the health and environmental impact associated with the use of traditional cooking solutions	The National Communication Strategy on the use of clean cooking solutions has been prepared and implemented by September, 2024	Procurement of a Consultant to prepare a National Communication Strategy on the use of cooking solutions	Ministry of Energy	July, 2024	100,000,000
			Developing a National Communication Strategy through the Consultant by involving all relevant stakeholders.		September, 2024	500,000,000
			Distributing the National Communication Strategy on the use of clean cooking solutions to various stakeholders including various political, religious, traditional leaders, and influential individuals		2024-2034	3,000,000,000
			Implementing the National Communication Strategy on the use of clean cooking solutions to various stakeholders including various political, religious, traditional leaders, and influential individuals	All Ministries; Departments and Public Institutions; Private Sector; Civil Society Organizations; Development Partners; NGO's.		1,800,000,000
		Awareness and Sensitization Plan on the use of clean cooking solutions has been prepared and implemented by September, 2024	Developing an Awareness and Sensitization Plan on the use of clean cooking solutions	Ministry of Energy	September , 2024	150,000,000
			Conducting awareness and sensitization on the use of clean cooking solutions	All Ministries; Departments and Public Institutions; Private Sector; Civil Society Organizations; Development Partners; NGO's.	2024-2034	20,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
2.	Sensitize the public and institutions on the transition to the use of clean cooking solutions	Educational and awareness programmes on the use of clean cooking solutions is implemented through various platforms and groups including women, youth, and schools from July, 2024	Establishing and implementing programmes to provide education on clean cooking solutions in nursery, primary and secondary schools.	PO-RALG; Ministry of Education, Science and Technology; Ministry of Natural Resources and Tourism; Ministry of Health; TPDC.	2024-2034	2,500,000,000
			Establishing and implementing programmes to provide education on clean cooking solutions in technical and vocational colleges and universities.	Ministry of Education, Science and Technology; Ministry of Health		
			Developing and implementing education and awareness programmes on clean cooking solutions to target women and youth.	PO-RALG; Prime Minister's Office - Labour, Youth, Employment and People with Disabilities; Ministry of Energy; Ministry of Culture, arts and sports ; Ministry of Natural Resources and Tourism; Ministry of Finance; Ministry of Education, Science and Technology; Ministry of Community Development, Gender, Women and Special Groups; TIRDO; TPDC, EWURA; REA STAMICO; TANESCO; CAMARTEC.	2024-2034	188,930,000,000
			Preparing guidelines for establishing clean cooking platforms in each Regional Administration and Local Government Authorities.	PO-RALG; Vice President's Office - Environment; Ministry of Energy; Ministry of Natural Resources and Tourism	2024-2025	100,000,000
			Establishing and coordinating activities for clean cooking platforms.	PO-RALG; Ministry of Energy; NEEC.	2024-2025	100,000,000
		A National clean cooking conference is held annually	Organizing a National clean cooking conference	Ministry of Energy	2024-2034	15,000,000,000
			Conducting a National clean cooking conference			

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
3.	Improve access to raw materials and infrastructure for producing, receiving, storing, and distributing clean cooking energy	Waste collected in all Local Government Authorities across the country has been used to produce biogas, briquettes and bioethanol from July, 2025	Organizing and providing training on the production of biogas, briquettes, and bioethanol using organic matter.	Ministry of Industry and Trade; Ministry of Energy; SIDO; TIRDO; CAMARTEC.	2024-2034	3,600,000,000
			Setting up a guideline for waste separation procedure prior to collection.	PO-RALG	2024-2025	100,000,000
			Technology transfer to promote mass production of briquettes and bioethanol using organic matter.	TIRDO; SIDO; TEMDO; CAMARTEC; COSTECH.	2024-2034	2,000,000,000
		Special farms for raw materials to produce biogas and bioethanol have been established by June, 2025	Preparing and providing training on farming for raw materials to produce biogas and bioethanol	Ministry of Agriculture; Ministry of Industry and Trade;	2024-2034	5,000,000,000
			Preparing a guideline on efficient farming practices for raw materials used in biogas and bioethanol production	Ministry of Agriculture	2024-2025	100,000,000
		Infrastructure for receiving LPG has been expanded to accommodate vessels with a capacity of up to 40,000 metric tons by June, 2029	Conducting a feasibility study on the construction of LPG receiving infrastructure	Ministry of Works, Ministry of Transport; TPA	2024-2029	500,000,000
			Procuring a Consultant for the construction of LPG receiving infrastructure			
			Procuring a Contractor for the construction of LPG receiving infrastructure			
		Natural gas distribution infrastructure has been expanded from 4 to 9 Regions by June, 2030	Constructing five (5) CNG mother stations to supply gas to special CNG trucks to distribute to areas lacking piped gas infrastructure	TPDC; REA.	2024-2034	54,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Constructing twenty three (23) CNG daughter stations that will receive gas from mother station using special CNG trucks	TPDC	2024-2034	58,000,000,000
			Procurement of eighteen (18) special CNG trucks	TPDC	2024-2034	18,000,000,000
			Construction of mini LNG plant			50,000,000,000
			Construction of nineteen 19 small scale LNG regasification plants in different regions			200,000,000,000
			Construction of natural gas pipeline from Tegeta to Bagamoyo			80,000,000,000
			Construction of natural gas pipeline from Kinyerezi to Zegeleni and Kwala in Pwani			250,000,000,000
			Construction of natural gas distribution network to households in Dar es Salaam, Pwani, Lindi, Mtwara, Tanga, Morogoro and Dodoma			200,000,000,000
			Implementation of natural gas distribution project in Mtwara, Lindi and Pwani	TPDC; REA	2024-2034	18,500,000,000
			Issuing construction permits and operating licenses for natural gas distributors and transporters	EWURA	2024-2034	500,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Organizing and conducting meetings with various stakeholders to encourage them to participate in the construction of natural gas processing, transportation, and distribution infrastructure	Ministry of Energy; EWURA, Private Sector.	2024-2034	200,000,000
			Organizing and conducting meetings to promote activities related to exploration, production, and distribution of natural gas	Ministry of Energy; PURA; Private Sector.	2024-2034	200,000,000
		Electricity distribution infrastructure has reached all Villages and Hamlets by June, 2028	Construction of electrical distribution lines in all villages in Tanzania	REA	2024-2034	9,990,000,000
			Construction of electrical distribution lines in all hamlets in Tanzania			-
			Implementing densification projects to increase access to electricity in rural areas that have been electrified.			-
			Implementing renewable energy projects including mini-grids and off-grid solutions, in remote households in rural areas that cannot be reached by the national grid.			18,900,000,000
			Empowering project developers of small-scale renewable energy projects in rural areas under the Project Preparation Support Facility (PPSF) scheme			4,700,000,000
		The manufacturing of prototype machines for the production of briquettes, biogas, and bioethanol has been carried out in each Region by June, 2027	Manufacturing of prototype machines for the production of briquettes, biogas, and bioethanol from organic biomass	Ministry of Industry and Trade; TIRDO; SIDO; TEMDO; STAMICO; CAMARTEC.	2024- 2027	6,200,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		The production and distribution of briquettes has increased by July, 2025	Providing training on production of briquettes.	TIRDO; SIDO; TEMDO.	2024-2034	3,200,000,000
			Conducting meetings with producers and distributors of briquettes to increase production and distribution	Ministry of Industry and Trade; Ministry of Energy; Ministry of Minerals; STAMICO; Private Sector.	2024-2034	500,000,000
		The production of improved cookstoves has increased by July, 2025	Providing training on the production of improved cookstoves	PO-RALG; CAMARTEC; TEMDO; TIRDO; SIDO; TBS.	2024 - 2027	1,350,000,000
			Monitoring the production and distribution of improved cookstoves	PO-RALG; Ministry of Industry and Trade; Ministry of Energy.	2024 - 2027	500,000,000
		Electric stoves have started being manufactured in the country by July, 2025	Preparing and conducting meetings with potential investors capable of manufacturing efficient electric stoves in the country	PO - Planning and Investment ; Ministry of Foreign Affairs and East African Cooperation; Ministry of Industry and Trade; Ministry of Energy; TIC.	2024-2027	500,000,000
		LPG storage infrastructure has increased in all regions by June, 2029	Preparing and conducting meetings with potential investors capable of investing in LPG infrastructure	Ministry of Energy; EWURA; Private Sector.	2024 - 2029	500,000,000
		The annual production capacity of accessories and cylinders of LPG and natural gas in the country has increased by June, 2034	Preparing and conducting meetings with potential investors capable of investing in local factories specializing in the manufacture of accessories and cylinders of LPG and natural gas	Ministry of Industry and Trade; Ministry of Energy; TPDC; EWURA; Private Sector.	2024-2026	200,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
4.	Involving the Private Sector in the construction of clean cooking infrastructures	Public-Private Partnership (PPP) clean cooking projects have increased from June, 2026;	Preparing and promoting opportunities for collaboration between the Government and the Private Sector to invest in clean cooking projects	PO - Planning and Investment ; Ministry of Foreign Affairs and East African Cooperation; Ministry of Industry and Trade; Ministry of Energy; TIC; Private Sector.	2024-2034	600,000,000
			Preparing and conducting meetings with potential investors capable of investing in natural gas infrastructure	PO - Planning and Investment ; Ministry of Energy; TPDC, EWURA, PURA; TIC; Private Sector	2024-2034	500,000,000
			Preparing and conducting meetings with potential investors capable of investing in LPG infrastructure	PO - Planning and Investment ; Ministry of Energy; EWURA, TPA, TIC; Private Sector.	2024-2027	500,000,000
		Procedure for allocating specific areas for the distribution of clean cooking energy has been established by June, 2025	Conducting research to identify and map specific areas for the distribution of natural gas.	Ministry of Energy	2024-2025	200,000,000
			Preparing a guideline for the allocation and advertisement of specific areas for the distribution of natural gas	Ministry of Energy	2024-2025	100,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
5.	Ensuring the initial and usage costs of clean cooking energy, appliances and efficient cooking stoves have decreased	Taxes and fees imposed on clean cooking energy, appliances and efficient stoves have been reduced by June, 2026	Preparing and conducting stakeholder consultation meetings on taxes and levies related to clean energy, appliances, and efficient cook stoves.	Ministry of Finance; Ministry of Energy; Ministry of Industry and Trade	2024-2026	500,000,000
			Conducting an analysis of stakeholder feedback and present it to the Tax Reform Taskforce			
			Preparing a draft bill for amendments to laws pertaining to clean cooking			
		Subsidies in clean cooking projects have increased from July, 2024	Preparing and implementing programs to provide subsidies for clean cooking projects.	Ministry of Finance; Ministry of Energy; Ministry of Natural resources and Tourism; TAFORI; TFS; TAFF; REA.	2024-2034	20,000,000,000
			Distributing Improved Cookstoves to households in rural and peri-urban areas	PO-RALG; Ministry of Natural resources and Tourism; REA.	2024-2034	20,100,000,000
			Distributing LPG cylinders and cookstoves to households in rural areas	REA	2024-2034	30,200,000,000
		A system of paying for clean cooking energy and efficient technologies through affordable loans has been prepared by July 2025;	Organizing and conducting awareness meetings to educate and sensitize entrepreneurs to encourage them to establish a system for users to pay for clean cooking energy and efficient technology through affordable loans	Ministry of Industry and Trade.	2024-2025	300,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		Electric cook-stoves and cooking appliances are paid for through the LUKU system by June, 2025	Conducting an analysis of LUKU systems to integrate them into efficient cookstoves and appliances using electricity.	TANESCO	2024-2025	200,000,000
			Conducting meetings with private institutions involved in the distribution of clean cooking appliances to integrate loan agreements with LUKU payment system.		2024-2034	500,000,000
		Pay-As-You-Go systems for clean cooking energy have been implemented in every Region by June, 2034;	conducting awareness meetings to educate and sensitize entrepreneurs to encourage them to invest in Pay-As-You-Go systems for clean cooking energy	Ministry of Industry and Trade; Ministry of Energy; Private Sector.	2024-2034	800,000,000
6.	Promoting the involvement of financial institutions in supporting clean cooking stakeholders.	Financial institutions have established a mechanism to provide low-interest loans to clean cooking stakeholders by June, 2025	Conducting meetings with Financial Institutions to motivate them to establish a mechanism for providing low-interest loans to clean cooking stakeholders	Ministry of Finance; Ministry of Energy; Private Sector	2024-2034	500,000,000
		Financial education has been provided to clean cooking stakeholders from July, 2025	Organizing and providing financial training to clean cooking stakeholders	Ministry of Finance; Ministry of Energy.	2024-2034	500,000,000
7.	Reviewing, developing and updating Policies, Laws, Regulations and Guidelines related to cooking solutions	Policies, Laws, Regulations and Guidelines regarding the use of cooking solutions have been developed or updated by June, 2026	Organizing and conducting stakeholder consultation meetings on policies, laws, regulations, and guidelines that require improvement.	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination;	2024-2025	600,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Improving policies, laws, regulations, and guidelines related to clean cooking.	All Ministries; Departments and Public Institutions	2024-2027	2,000,000,000
		Guidelines on the quality standards of cooking energy, appliances and cookstoves have been developed or updated and implemented from June, 2025	Analyzing existing guidelines on standards of fuel, appliances, and cooking stoves.	Ministry of Industry and Trade; Ministry of Energy; TBS.	2024-2025	300,000,000
			Developing/improving guidelines on standards of fuel, appliances, and cook stoves.	Ministry of Industry and Trade; TBS.	2024-2025	500,000,000
		Regulations for the management of LPG business have been reviewed and improved by June, 2026	Organizing and conducting stakeholder meetings to gather feedback on the improvement of regulations for the management of LPG business.	Ministry of Energy; EWURA.	2024-2026	300,000,000
			Improving regulations for the management of LPG business.			
		Guidelines for monitoring the air quality in residential areas and Institutions have been prepared by June, 2026	Developing guidelines for checking indoor air quality in residences and institutions.	Ministry of Health	2024-2026	700,000,000
			Overseeing Guidelines on monitoring indoor air quality in residences and institutions.	Vice President's Office - Environment; Ministry of Health.	2024-2034	500,000,000
			Procurement of equipment for checking indoor air quality in residences and institutions.	Vice President's Office - Environment; Ministry of Health; NEMC.	2024-2026	900,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		Guidelines for the use of natural gas in households, industries and vehicles have been prepared or updated by June, 2026	Developing and improving guidelines for the use of natural gas in households, industries, and vehicles.	Ministry of Energy; Ministry of Lands, Housing and Human Settlements Development; Ministry of Industry and Trade; Ministry of Works; Ministry of Transport; EWURA; TPDC; NHC.	2024-2026	500,000,000
			Enforcing guidelines for the use of natural gas in households, industries, and vehicles.	Ministry of Energy; EWURA.	2024-2034	1,000,000,000
		Plans for incorporating clean cooking energy infrastructure in land use plans have been implemented from July, 2026	Organizing a stakeholder workshop to build a shared understanding of integrating clean cooking infrastructure into land use plans.	Ministry of Energy; Ministry of Lands, Housing and Human Settlements Development.	2025-2026	200,000,000
			Monitoring the integration of clean cooking infrastructure into land use plans.	Ministry of Energy	2024-2034	500,000,000
		Construction projects for residential and commercial buildings, hotels, restaurants and recreational building have started installation of clean cooking infrastructure from June, 2025	Developing a guideline for the installation of clean cooking infrastructure in residential and commercial buildings.	Ministry of Works; Ministry of Transport.	2024-2025	300,000,000
			Monitoring the installation of clean cooking infrastructure in residential and commercial buildings.	PO-RALG; Ministry of Energy.	2024-2034	400,000,000
		National Clean Cooking Fund has been established or clean cooking initiatives have been integrated into existing funds and commenced operations by June, 2025	Conducting a detailed analysis of revenue sources for the fund implementing clean cooking functions.	Ministry of Finance; Ministry of Energy; Attorney General's Office.	2024-2025	300,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
8.	Strengthening the coordination in implementation of Policies, Laws, Regulations and Guidelines related to cooking solutions.		Analyzing and providing recommendations for the amendment to the law governing the fund implementing clean cooking.			
			Drafting specific regulations for the operation of the fund implementing clean cooking functions.			
		Forest management to be increased in all areas by July 2025	Managing forest conservation guidelines.	PO-RALG; Ministry of Natural resources and Tourism; TFS.	2024-2025	50,000,000
			Developing and implementing forest management programs.			
		Ban on the use of firewood and charcoal in 31,395 institutions that prepare food and feed more than 100 people has been implemented by January, 2024	Preparing and issuing a ban for public institutions that use firewood and charcoal in preparing food and serving more than 100 people.	Vice President's Office - Environment	2024-2025	50,000,000
			Drafting regulations for implementation of the ban.	Vice President's Office - Environment.	2024-2025	300,000,000
			Developing and implementing a monitoring plan for ban enforcement.	PO-RALG; Ministry of Energy; Vice President's Office - Environment;	2024-2034	2,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Conducting an assessment of the installation of clean cooking infrastructure in institutions under each Ministry.	All Ministries	2024-2025	500,000,000
			Implementing projects to facilitate the installation of clean cooking infrastructure in institutions under each Ministry.	All Ministries	2024-2026	3,000,000,000,000
			Implementing a project to facilitate the construction of Biogas digesters for 100 institutions serving more than 300 people per day.	REA	2024-2025	9,000,000,000
		Ministries, Departments, Public Institutions, Regional administration and Local Government Authorities have incorporated clean cooking issues into their plans and strategies from July, 2024	Preparing and incorporating clean cooking plans into various activity plans and strategies.	All Ministries; Departments and Public Institutions	2024-2034	-
		Desk officers responsible for coordinating the implementation of clean cooking strategies in each Ministry, Department and Public Institution, Regional administration and Local Government Authorities are appointed by July, 2024	Appointing a desk officer to coordinate the implementation of clean cooking strategies.	All Ministries; Departments and Public Institutions.	July, 2024	-

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		Committee for monitoring the Clean Cooking Strategy has been established by July, 2024	Appointing members of Monitoring Committees for the implementation of the National Clean Cooking Strategy.	Ministry of Energy	2024-2025	-
		Coordination guideline for the Strategy of the Clean Cooking strategy has been prepared by June, 2024	Drafting guidelines for coordinating the implementation of the National Clean Cooking Energy Strategy.	Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; Ministry of Energy.	June, 2024	100,000,000
9.	Encouraging private sector to seize business opportunities within the clean cooking value chain	Clean cooking projects have been included in investment guidelines for each region by June, 2025	Preparing investment areas for clean cooking projects and integrating them into investment guidelines for each region.	PO-RALG; TIC.	2024-2025	500,000,000
		Cost of permits for advertising clean cooking solutions has decreased from July, 2024	Organizing and conducting meetings for review of advertising permit costs.	PO-RALG	2024-2025	500,000,000
			Drafting a bill for amendments to by-laws for decreasing advertising permits costs on clean cooking.	PO-RALG	2024-2025	500,000,000
		Awards for innovators in technology and clean cooking energy are given out from July, 2024	Establishing a competitive procedure and award system for innovators in clean cooking.	Ministry of Energy; COS-TECH.	2024-2034	2,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		Low-interest loans are granted to implementers of clean cooking projects from July, 2024	Developing programs and providing low-interest loans for implementers of clean cooking projects.	Financial Institutions	2024-2034	-
		Database of statistics and information on clean cooking solutions has been developed by June, 2025	Procure a consultant to develop a database on clean cooking.	Ministry of Energy	2024-2025	100,000,000
			Creating a database of clean cooking.	Ministry of Energy	2024-2026	500,000,000
			Procure a consultant and conduct a baseline study on clean cooking.	Ministry of Energy	2024-2026	1,000,000,000
			Collecting and inputting data on clean cooking into the database.	All Ministries	2025-2034	400,000,000
10.	Promoting the use of national and international funds and programmes to foster and enhance investment in clean cooking	Environmental funds (green funds) have started funding clean cooking projects from July, 2024	Preparing and providing training for implementers of clean cooking projects on the opportunities available in Environmental Funds.	Vice President's Office - Environment; Ministry of Energy; Ministry of Natural resources and Tourism; Financial Institutions.	2024-2034	200,000,000
		International agreements on carbon trading in clean cooking projects within the country have been established from July, 2024	Conducting analysis of areas and countries for collaboration in carbon trading business.	Vice President's Office - Environment; Ministry of Energy; Ministry of Foreign Affairs and East African Cooperation; Ministry of Industry and Trade.	2024-2034	200,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Analyzing opportunities in clean cooking technologies that can be used in international agreements on carbon market trading.			
			Holding discussions on areas of collaboration in carbon trading.			4,000,000,000
			Drafting agreements for areas and countries to collaborate on carbon trading.			
		Education on benefits from opportunities in national and international funds and programmes are provided to clean cooking investors from July, 2024	Preparing and providing training for investors in clean cooking on the opportunities available in national and international funds and programs.	Vice President's Office - Environment; Ministry of Energy; Ministry of Natural resources and Tourism; Ministry of Industry and Trade; REA; COSTECH; NEEC; Tanzania Education Authority (TEA); Development Partners; Financial Institutions.	2024-2034	5,000,000,000
11.	Enabling the testing of quality standards for cooking energy, appliances and stoves	Infrastructure for testing the standards of quality for clean cooking energy, equipment and cookstoves are installed by the relevant Standards Authority, Research Institutions and Colleges by June, 2025	Preparing and implementing procurement plan of infrastructure for checking of standards of clean fuel, appliances, and stoves	Ministry of Industry and Trade; TBS; TIRDO; CAMARTEC; Research Institutions.	2024-2025	20,000,000,000,
			Improving infrastructure for quality assurance of fuel, appliances, and cook stoves	Ministry of Industry and Trade; TBS; TIRDO; CAMARTEC.	2024-2025	12,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
			Building capacity for quality assurance officers of clean cooking fuels, appliances, and cook stoves.	TBS; TIRDO; CAMARTEC; SIDO; TEMDO; Research Institutions; Research Institutions; Vocational training centers.	2024-2034	2,000,000,000
		Provision of Education on the standards of quality for clean energy, equipment and efficient cooking stoves has commenced from July, 2024	Preparing and providing training on standards of clean cooking fuel, appliances, and efficient cook stoves for stakeholders in the clean cooking value chain.	Ministry of Industry and Trade; educational institutions; TBS; TIRDO.	2024-2034	1,000,000,000
12.	Ensuring capacity building for implementers and project managers of clean cooking projects	All Technical Education and Vocational Training Colleges nationwide have incorporated clean cooking issues into their curricula by June, 2026	Gathering and analyzing feedback from stakeholders for curriculum enhancement to incorporate clean cooking issues." Reviewing and improving the curricula of Technical Education and Vocational Training Colleges to include clean cooking issues.	Ministry of Education, Science and Technology; Ministry of Health; NACTVET	2024-2026	5,000,000,000
		Desk officers responsible for coordinating the implementation of clean cooking strategies in Ministries, Departments, Public Institutions, Regional Administrations and Local Government Authorities have undergone training from July, 2024	Organizing and providing training for desk officers coordinating the implementation of clean cooking strategies.	Ministry of Energy	2024-2034	5,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		The department responsible for carbon trading management has been strengthened operationally by June, 2025	Reviewing and improving the structure of the department responsible for carbon trading management.	Vice President's Office - Environment;	2024-2025	50,000,000
13.	Ensuring local content in the implementation of clean cooking projects	Training for entrepreneurs on clean cooking has been provided in every Local Government Authority from July, 2024	Organizing and providing training for entrepreneurs on clean cooking.	PO-RALG; Ministry of Industry and Trade; TIRDO; SIDO; NEEC; Development Partners; Private Sectors; NGOs.	2024-2034	185,000,000,000
		Guidelines governing local content have been integrated in clean cooking projects from July, 2024	Organizing and providing training for locals on existing guidelines governing their participation in projects.	All Ministries; Departments and Public Institutions;	2024-2034	1,000,000,000
14.	Strengthening the capacity of institutions and centers involved in the research, innovation and invention of technology of clean cooking solutions	Ministries responsible for clean cooking solutions have allocated or increased budgets for the development of research, innovation and invention in technology related to clean cooking from July, 2024	Developing plans and allocating/ increasing budgets for the promotion of research, innovation and invention of technology on clean cooking.	All Ministries; Departments and Public Institutions responsible with Research, Innovation and Invention of technology.	2024-2034	-
		Training on clean cooking has been provided to trainers of institutions and research centers dealing with clean cooking solutions from July, 2024	Preparing and providing training for trainers from institutions and research centers on clean cooking.	Ministry of Energy; Ministry of Education, Science and Technology; Research and Development institutions; Development Partners;	2024-2034	2,500,000,000
			Developing and implementing a short-term training curriculum for trainers from institutions and research centers focusing on clean cooking.	Ministry of Education, Science and Technology; Ministry of Energy; Development Partners;	2024-2034	2,000,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
15.	Strengthening collaboration between clean cooking investors, and research and development, higher education and technical institutions	Research and development institutions, higher learning institutions and technical education and vocational training colleges have established a communication platform with clean cooking investors by July, 2025	Conducting an analysis of the existing procedures to identify existing challenges.	Ministry of Education, Science and Technology; COSTECH; Higher Learning Institutions; Vocational Training Institutions.	2024-2025	50,000,000
			Developing and providing guidelines on the creation of a communication platform between research and development institutions, technical and vocational education institutions, higher education institutions, and clean cooking investors.			200,000,000
		Private sector engaged in the manufacturing of clean energy, appliances and efficient cookstoves have been involved in the preparation and implementation of hands-on training programs for experts from universities starting from July 2024.	Organizing and delivering hands-on training programs for trainers from universities.	Private Sector; Ministry of Education, Science and Technology; Ministry of Industry and Trade; Higher Learning Institutions; technical and vocational education colleges.	2024-2026	500,000,000
			Organizing programs and deploying trainers for hands-on training.	Ministry of Education, Science and Technology; Higher Learning Institutions; technical and vocational education colleges.	2024-2034	495,000,000
16..	Promoting the provision of HIV and AIDS education to stakeholders in clean cooking initiatives	National Awareness and Sensitization Plan on the use of clean cooking solutions has incorporated HIV and AIDS education by September, 2024	Identifying and incorporating HIV and AIDS issues into the National Awareness and Sensitization Plan on the use of clean cooking.	Ministry of Energy; Ministry of Health; Ministry of Community Development, Gender, Women and Special Groups.	2024-2025	-

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		HIV testing awareness programmes have been implemented in the clean cooking initiatives from July, 2024	Developing and implementing awareness programs for HIV testing in clean cooking projects."	All Ministries; Departments and Public Institutions; Private Sector; Development Partners.	2024-2034	500,000,000
17.	Ensuring access to HIV prevention equipment for stakeholders in the clean cooking sub-sector	HIV prevention equipments are available in clean cooking projects from July, 2024	Allocating budget for procurement of HIV prevention tools in clean cooking projects.	All Ministries; Departments and Public Institutions; Private Sector; Development Partners.	2024-2034	1,000,000,000
			Distributing HIV prevention tools in clean cooking projects.	All Ministries; Departments and Public Institutions; Private Sector; Development Partners.	2024-2034	500,000,000
		Education on the proper use of HIV prevention equipment has been provided in the clean cooking initiatives from July, 2024	Organizing and providing training on the proper use of HIV prevention tools.	All Ministries; Departments and Public Institutions; Private Sector; Development Partners.	2024-2034	300,000,000
18.	Encouraging women and youth participation in the clean cooking value chain	Number of programmes to facilitate the participation of women and youth in the clean cooking value chain has increased from July, 2026	Organizing and providing training on available opportunities in the clean cooking value chain for women and youth.	PO-RALG; Prime Minister's Office Labour, Youth, Employment and Persons with Disability; Ministry of Energy; Ministry of Community Development, Gender, Women and Special Groups; Development Partners; NGOs.	2024-2034	600,000,000
		Budget enabling the participation of women and youth in clean cooking projects is allocated and utilized annually	Incorporating budgets for women and youth participation in clean cooking projects into various budget and program frameworks	All Ministries; Departments and Public Institutions; Development Partners; NGOs.	2024-2034	-

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
19..	Incorporating gender equality in decision-making levels in clean cooking	Gender equality in decision-making levels regarding clean cooking has increased from July, 2025	Preparing and providing training for women to enhance their capacity to participate in decision-making levels regarding clean cooking.	Office of the President - Public Service Management and Good Governance; Ministry of Community Development, Gender, Women and Special Groups; Departments and Public Institutions; Development Partners; NGOs.	2025-2034	300,000,000
		Leadership training for female decision makers in clean cooking has been provided in every Council from June, 2024	Organizing and providing leadership training for female decision makers in clean cooking in all councils.	PO-RALG; Office of the President - Public Service Management and Good Governance; Prime Minister's Office - Policy, Parliamentary Affairs and Coordination; Ministry of Community Development, Gender, Women and Special Groups; Ministry of Energy.	2024-2034	500,000,000
20	Strengthening accountability and oversight of policies, programs, and laws regarding clean cooking energy issues	Strategies for oversight and monitoring policies, programs, and laws to strengthen governance and accountability in clean cooking issues to be implemented by July, 2025	Preparation of strategies on law enforcement and accountability in clean cooking.	Office of the President - Public Service Management and Good Governance; Sectoral Ministries.	2024-2025	100,000,000
			Implementation of strategies on law enforcement and accountability in clean cooking.	All Ministries; Departments and Public Institutions; Development Partners.	2024-2034	300,000,000

No.	Strategy	Target	Activity	Responsible Entity	Timeline	Cost
		Strategies for effective resource management and corruption prevention in clean cooking are implemented by July, 2025	Preparation of resource management and corruption prevention strategies in matters related to clean cooking.	Office of the President - Public Service Management and Good Governance; Office of the Auditor and Controller General; PCCB.	2024-2025	100,000,000
			Implementation of law effective resource management strategies and prevent corruption in clean cooking.	All Ministries; Departments and Public Institutions; Private Sector; Development Partners.	2024-2034	300,000,000
GRAND TOTAL						4,554,015,000,000