



## UNITED REPUBLIC OF TANZANIA

Promotion of Bio-Ethanol  
as alternative clean fuel  
for cooking

### Outlook

The project seeks to promote the use of bio-ethanol as an alternative, clean cooking fuel in Tanzania. Activities undertaken are meant to enable the creation of a market for bio-ethanol for cooking in the country, from the production of the fuel itself to the fabrication of clean cooking stoves adequate for its consumption.

### Context

More than 80% Tanzania's population has biomass as a main energy source for household cooking. As a result, biomass constitutes the major share of the country's overall energy mix. Amongst biomass fuels, firewood and charcoal stand out as the most common cooking fuels used in the country, especially amongst low-income households. Although there are distinct regional preferences, more than 70 percent of urban dwellers use charcoal, while more than 90 percent of rural populations have firewood as their preferred fuel when cooking. The over-dependence on biomass is the root cause of deforestation in Tanzania, posing a huge threat to the country's biodiversity. Moreover, the lack of access to more modern energy services creates a vicious cycle of poverty in rural communities due to limited income generation opportunities and social services.

### Strategy

This project promotes bio-ethanol as an alternative fuel in Tanzania. This is done by enabling the production of bio-ethanol from molasses, a by-product of sugar cane, one of the most important crops for the country's economy. However, molasses is still highly underutilized in Tanzania's sugar factories when it comes to its potential for energy production.

The project will take advantage of this untapped potential and establish local capacity to three key industries: stove suppliers and manufacturers, ethanol fuel producers and suppliers as well as retail distributors, responsible for the provision of both the ethanol clean cookstoves and fuel. The project target market is 500,000 household within 5 years which will be implemented in Dar es Salaam.

### Impact

The project will improve the capacity for market development of fuel grade ethanol production and usage; assist the government in developing a conducive policy and regulatory environment necessary for market establishment and growth, design a market enabling framework for switching 500,000 households to from traditional polluting fuels to clean fuel (ethanol) in Dar es Salaam; and market for 90 million litres/year of ethanol fuel supply which will be created.

The clean cooking programme is a high impact initiative for women empowerment, which will directly benefit a minimum of 500,000 women.

### At a glance

**Project title:** Promotion of Bio-Ethanol as Alternative Fuel for Cooking in the United Republic of Tanzania (UNIDO ID:150208)

**Goal:** To promote the use of bio-ethanol as a clean cooking fuel and cut down deforestation and greenhouse gas emissions due to the high dependence on biomass a source of energy

**Thematic areas:** Access to clean cooking fuels & technologies, land degradation, climate change, biodiversity SDGs 1,3,5,7,8,9,13

**Donor:** Global Environment Facility (GEF)

**Project counterpart:** Ministry of Energy and Minerals (MEM), First Vice presidents oce, Department of Environment, Zanzibar, Vice Presidents Oce – Division of Environment, Tanzania Bureau of Standards (TBS), TIB Development Bank

**Budget:** \$2,557,078

**Duration:** January 2018 - December 2022