

Partners in Pellets



BioMassters
The Clean Cooking Solution



TRAIDE



Kingdom of the Netherlands

Cooking practices in Rwanda

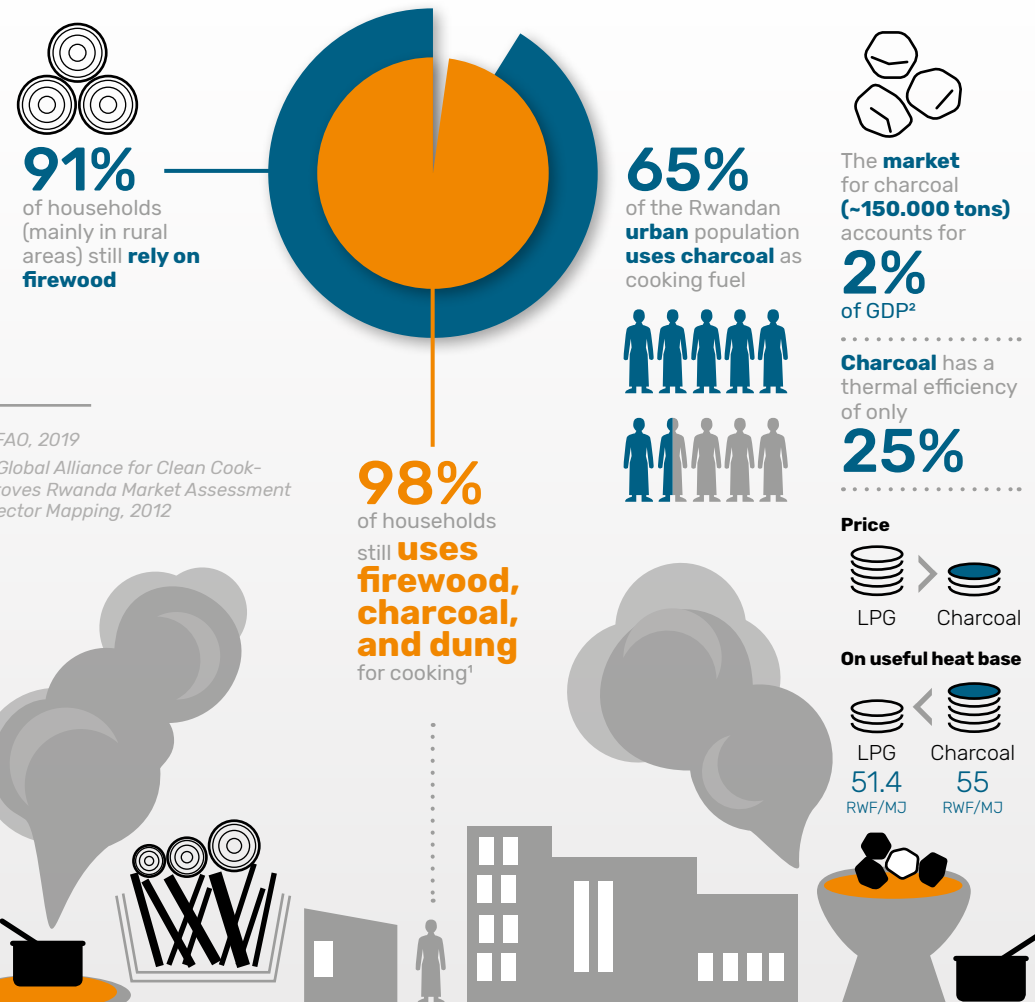


In Rwanda, 98% households are dependent on traditional biomass for cooking. This leads to issues around:

- 1 HEALTH:** the indoor air pollution of cooking causes major health damage to **WOMEN AND CHILDREN**.
- Collecting firewood takes a lot of time per day and charcoal is expensive, which shows the problem in current **ACCESS TO ENERGY**.
- The use of firewood and charcoal leads to major **DEFORESTATION** in Rwanda, which causes high levels of erosion and landslides affecting the rural population.
- The inefficient production of charcoal and the inefficient consumption of firewood and charcoal lead to unnecessarily high **CO₂-EMISSIONS**.

To date, there is **no single scalable cooking solution available** across income levels in Rwanda, and further in the region, which significantly addresses the negative health, economic, and environmental effects of traditional cooking.

Pellets are the affordable alternative that can be the game changer in Rwanda!



Our Solution

Pellets are a biomass product made of substances like wood or other organic waste materials. Sawdust or organic waste is compressed into small cylinders, that are used for cooking or other heating purposes.

The partnership's activities

Developing the market for pellets in combination with using a clean gasifier stove, leads to solutions for households from different income levels and for SMEs using cookstoves in their work:



Pellet cooking is cleaner, faster, more convenient, and more affordable than **charcoal**.



Pellet cooking is as clean as **LPG** but cheaper and less risky.



It is the only advanced biomass cooking solution that is clean (e.g., Tier 4 – **comparable emission levels as gas cooking**), as validated by **several studies** and by the WHO.



Raw materials for pellet production can be **sourced locally**, stimulating **local economic development**, and reducing dependencies on imported energy solutions.



Pellets can even be produced from **waste materials**, such as sawdust or woody agricultural byproducts and coffee husk, thereby creating a **circular** solution.



Many green **jobs** are created within the **value chain** of the project.

Partners in Pellets contributes to the following Sustainable Development Goals (SDGs):



Helping households to make a switch from traditional cooking fuels and inefficient stoves to using cleaner fuels and more efficient stoves that are specifically designed for pellet cooking.



The expansion of pellet production and distribution leads to an increasing availability and diversification of jobs in Rwanda. At the same time, this leads to higher economic productivity. Entrepreneurs, farmers, young graduates (specifically young women) are given the opportunity to step into a new sector that provides both domestic and export opportunities.



By using pellets for consumption instead of firewood or charcoal, fewer trees and other unsustainable biomass products need to be used for cooking. By combating the high deforestation rates of Rwanda, land degradation and biodiversity loss can be combatted as well. By training and educating farmers who are active in forestry to sustainably manage their lands, the project contributes to mitigating landslides and erosion in rural areas.

We have formed a partnership to develop the ecosystem, which none of us could do alone. To make this happen, we:

- 1 Develop skills and increase local knowledge:** Local pellet producers and suppliers of stoves have a shortage of knowledge and skills on scaling this type of technology. We will provide trainings at the demonstration site to show the potential of pellet cooking.
- 2 Partner with local companies:** The overall ecosystem for pellet suppliers and distributors is still in its infancy. We will build partnerships with local stakeholders.
- 3 Increase and facilitate access to finance:** Local pellet producers have very limited access to finance. Various financial instruments are necessary to scale, de-risk and to become investment ready.
- 4 Create a carbon methodology:** Rwandan entrepreneurs have limited access to and knowledge on carbon credits. We will provide trainings and assistance to attract, issue and sell carbon credits.
- 5 Combat deforestation:** We provide trainings on sustainable forest management to farmers and large-scale biomass suppliers.

"We are really interested in exploring the carbon credit topic, despite our early stage. We are really looking forward to learn from FairClimateFund."

"The trainings at the pellet production demo site are a great opportunity for our technician."



Pellet producer Burundi

Building an ecosystem

“We believe that our PAYGO fuel + stove combination is the least-cost, best-fit solution for the masses in urban Rwanda and beyond. It is a truly clean, affordable, sustainable, reliable and modern energy cooking solution.”

To establish a thriving ecosystem in which more households use pellets for cooking, the Partners in Pellets project centers around multiple activities. Every partner brings in its own unique expertise, from producing pellets or cookstoves to giving training or developing a carbon credit methodology.

Using carbon credits

We will build a carbon credits ecosystem for pellet companies. By measuring and monitoring the use of the clean cooking technology and related carbon benefits, the project will develop a methodology to prove achieved emission reductions. If the methodology gets approved, pellet companies might be able to sell carbon credits per ton of reduced CO₂-equivalent emissions. At the same time, the project will actively look for interested customers for the carbon credits.



Who is involved?

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Mimi Moto has developed an advanced Tier-4 biomass stove, designed to burn pellets made from locally available biomass – such as wood or agricultural residues – in a clean and efficient way. Mimi Moto will distribute 820 stoves in a pilot project. It will also contribute to clean cooking awareness among the Rwandan population.

<https://mimimoto.nl>

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BIX Capital provides debt financing to SMEs through an innovative results-based finance structure creating access to high impact products such as cookstoves or water purification systems for low-income households. BIX Capital will lead a prefinancing module. It will support the cluster and the wider ecosystem in applying for prefinancing. BIX will organise and lead training sessions on access to finance for entrepreneurs in Rwanda.

<https://www.bixcapital.nl>

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BioMassters Ltd. is a pellet cooking company, producing “made in Rwanda” pellet fuel out of biomass waste materials and supply Tier-4 gasification pellet stoves to their customers. BioMassters will lead pellet production, operate pellet demonstration sites, organise training sessions and contribute to the expansion of the pellet sector.

<https://www.biomasters.co>

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FairClimateFund finances and implements climate projects and focuses on clean cooking and reforestation projects. FairClimateFund will lead the development of a carbon methodology based on the Gold Standard. It will also provide training sessions on carbon credits for companies active in the pellet ecosystem.

<https://www.fairclimatefund.nl/>

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TRAIDE supports companies to identify and exploit opportunities, while enhancing positive impacts. TRAIDE will carry out project management, communication, logistics and monitoring and evaluation.

<https://www.traide.org>

How to get involved?

Get in touch if you would you like to:

- Learn more about the project
- Partner with the project
- Visit the production facility in Rubavu
- Join a demonstration at the pellet factory in Rubavu
- Discuss opportunities for establishing a pellet cooking ecosystem in your country

Contact

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