

A clean-cooking programme has supplied 1,280 households in five resettlement villages in Kigali with locally made gasifier stoves and specialised fuel, as efforts to reduce reliance on polluting cooking fuels gather pace.

The households received 1,280 Tier-4 gasifier stoves and a combined 25,600 kilogrammes of fuel, with the equipment and fuel valued at Rwf94.208 million at prevailing market prices.



The distribution began on September 23 in Busanza village, Kicukiro District, through a partnership between BioMassters Ltd, the Government of Rwanda, Rwanda Housing Authority (RHA), City of Kigali, Energy Development Corporation Limited (EDCL) and Innovate UK.

The five villages were selected after BioMassters assessed 18 villages housing people relocated from different parts of Kigali.

The assessment examined the cooking fuels used by households, their spending on cooking, and whether they could access the specialised fuel and technical services required to continue using the stoves.

BioMassters said the exercise was intended to ensure that households receiving the equipment would continue using it after the free distribution programme ends.

Each selected household received one stove and 20 kilogrammes of fuel. The company says one stove normally sells for Rwf65,000, while a kilogramme of its specialised fuel costs Rwf430.

Sylvain Rucyaha, BioMassters' director of business development and sales, said maintaining access to fuel was critical to ensuring the stoves remain in use.

"We are not just selling stoves. We are also building a network to deliver fuel to their owners," he said.

BioMassters currently has more than 40 points where the fuel is available through its shops and partners in Kigali and other parts of the country. The five villages covered by the programme will also have locations where residents can obtain the fuel after their initial supply runs out.

The company manufactures the fuel locally using plant residues and other organic waste.

For some beneficiaries, reducing household cooking costs is one of the main attractions.

Beatha Mukarutesi, one of the first recipients, said her household normally spends about Rwf16,000 on a bag of charcoal and uses two bags each month.



“This stove has come at the right time and is cheaper compared with the charcoal we used before,” she said.

Jean Pierre Iyakaremye, head of the hygiene committee in Rwanga Cell, said charcoal had also affected household cleanliness because of smoke and charcoal residue.

The programme comes as Rwanda continues to face challenges in expanding access to cleaner cooking. The World Health Organization says 98.5% of the country’s population was still using polluting cooking fuels in 2023. It also reported that household air pollution was associated with 6,932 deaths in Rwanda in 2019.

BioMassters says its Iryacu stove, which has been tested and approved by the Rwanda Standards Board, has a 97% safety rating and energy efficiency of more than 40%.

The company says the Tier-4 technology can reduce biomass fuel use by up to 90% and lower cooking costs by up to 50% compared with charcoal. The actual savings will depend on household consumption and fuel use.

Claudia Muench, chief executive of BioMassters, said households receiving the stoves would continue to receive technical support.

Users can receive additional training free of charge, while the company provides repair services when equipment develops problems. Each stove comes with a three-year warranty.

BioMassters says about 8,500 households across Rwanda are already using its cooking equipment daily.

The company is also expanding its work to institutional kitchens. Rucyaha said BioMassters had worked with the Ministry of Education to introduce the technology in 10 schools, while a memorandum of understanding covers plans to convert cooking systems in 250 schools in the coming years.

The company says replacing conventional charcoal with fuel made from organic residues could reduce pressure on forests while also putting agricultural and other organic waste to use.

Since December 2025, BioMassters says it has distributed 1,555 stoves and 31,100 kilogrammes of fuel free of charge to households in Nyagatare, Rubavu and Kigali. It puts the value of those distributions at Rwf114.4 million.

Jean Pierre Hitimana, senior research and development engineer at RHA, said cleaner cooking technologies were particularly relevant in densely populated settlements such as Busanza, where more households are being accommodated.

The latest distribution is supported by the government through EDCL under the Rwanda Energy Access and Quality Improvement Project (EAQIP), with funding from the World Bank and Innovate UK.