

BURN Manufacturing: Fueling Sustainability Through Product Innovation and Carbon Financing in Africa

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This case study focuses on BURN Manufacturing, a pioneering clean cookstove manufacturer in Kenya, and its efforts to provide sustainable cooking solutions across sub-Saharan Africa. As of July 2022, biomass fuels still accounted for 85% of household cooking energy in the region, highlighting the urgent need for more efficient alternatives. Co-founder Peter Scott spearheaded BURN's mission by developing fuel-efficient cookstoves, including charcoal, wood, and electric models, followed by LPG stoves. The company emphasized its R&D through the BURN Design Lab and pursued continuous innovation to enhance product efficiency. BURN also established a full carbon value chain, incorporating sustainable manufacturing processes and partnering with credit cooperatives to offer financing options. A gender-focused distribution strategy was employed, training local women to promote cookstoves within their communities, boosting adoption rates. Despite challenges in scaling, BURN implemented financing innovations such as carbon financing and green bonds. The company collaborated with e-commerce platforms, supermarkets, microfinance institutions, and social organizations to accelerate the adoption of clean cooking solutions, particularly in underserved regions. BURN's impact has extended to over 20 million lives, reducing carbon emissions, improving women's health, and providing financial benefits.

Keywords: Clean energy, Emerging markets, Gender empowerment, Impact entrepreneurship, Carbon credits, UNSDG, Climate change
