

Burn Manufacturing

BURN Manufacturing Co. ("BURN") is a C-Corp that provides a market-based approach to address the global challenges of deforestation, advanced respiratory illness, global warming and poverty. By manufacturing and selling 3.45 million clean burning biomass cookstoves in East Africa over the next 10 years, BURN will save families €1 billion, reduce CO₂ emissions by 25 million tons, reduce indoor air pollution among users by up to 90%, and save 9,106,000 MWh of thermal energy. BURN will also create more than 200 sustainable design, manufacturing and sales jobs.

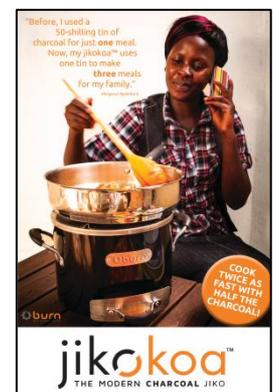
BURN was created to address the enormous need for high-efficiency cookstoves in the developing world where nearly 3 billion people rely on biomass fuels such as wood, charcoal and dung for cooking (WHO, 2011). The burning of biomass in inefficient cookstoves and open fires produces life-threatening smoke. This year, 574,000 people in Africa - mostly women and children - will die from respiratory diseases related to indoor cooking smoke (WHO). Cooking with traditional biomass fuels also accounts for approximately 18% of current global GHG emissions if forest degradation and deforestation are included in the equation (SEI, 2008). Firewood and charcoal production are the largest drivers of deforestation in Sub-Saharan Africa, responsible for more than 52% of all forest loss.



Although the burning of biomass for cooking has huge social and environmental costs, it also offers an enormous market opportunity as there are over 23.5 million potential stove consumers in East Africa currently spending up to €375 each year for fuel. These households have a strong financial incentive to purchase a BURN stove, such as the *jikokoa*TM (right) that reduces fuel costs by as much as €187 each year.

The *jikokoa*TM, BURN's launch stove, is a revolutionary natural-draft charcoal stove that offers best-in-class performance. In the spring of 2013, Berkeley Air Monitoring Group conducted household trials that demonstrated a 45% reduction in median fuel consumption as compared to the KCJ - the existing *improved* charcoal cookstove in Kenya - and a concurrent 65% and 63% reduction of carbon monoxide and particulate matter emissions respectively.

Leading distributors in Kenya such as The Paradigm Project, Living Goods, and MicroEnergy Credits have selected the *jikokoa*TM as the #1 stove in terms of price, performance and user satisfaction after comparing charcoal stoves currently available in the East Africa. BURN's user-centric designs are aspirational products that are sold wholesale through proven distribution networks.



Since the product launch in August 2013, BURN has sold more than 20,000 *jikokoa*TM cookstoves through 130 distribution partners, 50% of those in the last 2.5 months. Sales increased seven fold from January to March in 2014. As of May 2014, BURN is selling a stove every ten minutes in Kenya. In March, BURN began selling the *jikokoa*TM in Equity Bank, Kenya's largest bank, with more than eight million customers. The *jikokoa*TM is the only product sold through Equity Bank. If current sales at BURN's ten Equity locations are extrapolated to all 170 branches in Kenya, it will equate to **11,475 stoves per month**. BURN is also selling the *jikokoa*TM in four of the top six supermarkets (72 retail outlets as of March 2014) in Kenya. When BURN scales to all branches of these supermarkets, it represents **3,532 stoves per month**.

BURN's roll out strategy is split into two phases, Phase 1, assembly of stove kits in Kenya, and Phase 2, full manufacturing in Kenya. This strategy has allowed for a quick start up with low upfront investment, around €35k for the assembly line versus €350k required for Phase 2. Phase 1 also provides BURN a working template for future satellite assembly plants. During Phase 1 stoves are sold at a negative gross margin due to the high cost of sourcing stove components offshore. During Phase 2 (September 2014 onwards) BURN transitions to 100% local manufacturing thereby lowering the cost of goods sold by approximately €6 and generating 39% gross profit. BURN becomes net income positive in March 2015 by selling 7,000 *jikoko*[™] stoves and 2,000 of the new FDS stove (FDS launch date: January 2015). The FDS features a solar powered fan that burns agricultural waste or wood as clean as natural gas for 10% less cost per cooking event.



Phase 1 operations started in August 2013 when BURN installed its first stove assembly line in Nairobi. In March 2014, BURN moved the assembly line to a new 18,000 ft² manufacturing facility in Ruiru, Kenya where the Phase 2 manufacturing facility will be constructed around the existing line. When fully commissioned in September 2014, this facility will be able to produce a stove per minute as well as producing kits for assembly in satellite facilities in Uganda and Tanzania (2015), and Rwanda (2016). Through this venture, BURN seeks to demonstrate that lean, in-country manufacturing can reduce costs compared to offshore production methods and that modern clean cookstoves can be sold commercially in East Africa. Once proven, BURN intends to expand throughout Sub-Saharan Africa.

BURN is led by founder and CEO Peter Scott, one of Foreign Policy Magazine's Top 100 Global Thinkers. He is recognized as one of the leading experts in cookstove commercialization. Mr. Scott leads a team that brings more than 100 years of design and manufacturing experience to the cookstove space. BURN's award-winning approach is unique in the cookstove industry. By owning all stages of the design and manufacturing value chain – R&D through sales – BURN is able to bring new stoves to market faster than the competition.