

## Toyola Energy Ltd

[www.toyolaenergy.com](http://www.toyolaenergy.com)

### Efficient biomass cook stoves in Ghana and neighboring countries



**History of organization:** Ghanaian entrepreneurs Suraj Wahab and Ernest Kyei received training in stove manufacturing skills in 2003 with Enterprise Works (an NGO backed by USAID), along with more than 70 other stove makers. When the training ended in 2006, they decided to set up their own company and registered Toyola Energy Ltd. Initially selling 3k stoves per year, a loan from social investor E+Co allowed Toyola to grant credit to its distributors, themselves passing it on to customers, which boosted sales. Toyola is now expanding in other West African countries, and since 2008 has diversified in selling solar lighting products.

**Product/service offering and value proposition:** Clients can choose between 5 types of efficient cook stoves, 2 restaurant stoves and 3 household stoves (all allowing a 30-40% decrease in charcoal use), made of locally available materials (scrap metal and fired clay liners) and local techniques. Customers pay \$7-12 (12-20 GHC) depending on the stove size, with a \$1 (2 GHC) premium for payment on credit, and a \$1 (2 GHC) premium covering extra distribution costs in remote areas (in the North). They can pay over a month (without any down payment), by placing the savings made on charcoal in the “Toyola Money box” (a simple cardboard or metal box), that agents will collect on their next visit (a family of 5-6 people will spend around 0.5 GHC on charcoal a day with a medium stove, saving about the same amount each day, thus having saved about 15 GHC at the end of the month). The stove comes with a 6-month warranty, and usually lasts 3-5 years before the ceramic liner breaks. Toyola offers to replace it at 30% of the cost of the overall system.

**Value chain:** Toyola buys stoves in one of the 5 production centers in Ghana or from 1 in Togo, 1 in Nigeria and 1 in Benin, from the manufacturers it has trained. Toyola also has “mobile production teams” who can take the parts to a distant place once they know there is enough demand, and build the finished products on site (notably at the depots). This allows transporting about three times as many stoves in parts as finished products per vehicle, thus limiting transport costs. Toyola agents, who collect them at one of the production centers or depots, then distribute the stoves in peri-urban areas via local retailers, and in rural communities through direct delivery. As of January 2012, Toyola had trained around 30 Key sales agents, 16 of which are still active (with 12 currently working) and one of which has become process administrator. Agents are entirely paid on commission (around \$1 on average or 1-3GHC per stove sold), to serve both retailers and rural villagers. Often satisfied customers spread the word on the stoves in their communities, aggregate orders and can go as far as collecting the money from all the new clients, greatly simplifying the work of the marketer-distributor. Once they have brought 10 clients they officially become “Evangelists” and are rewarded for their effort (e.g., by getting a free stove for 10 sold, or 1 GHC per stove sold). Agents collect the money after one month, when usually the stoves have nearly been fully repaid by fuel savings. Agents can use one of the 11 Toyola’s vehicles, with capacity of 100 to 1000 stoves each.

**Results:** Toyola crossed the 200k cook stove landmark mid 2011. In Ghana, sales reached 65k in 2011, and Toyola started new production centers in Togo in February 2011, Benin, in August and Nigeria in December 2011 (where Toyola already exported stoves). Repayment rate is over 95% (as claimed by founder Suraj Wahab: “sometimes people pay late but they always pay: they cannot afford to lose the trust of their fellow villagers by not paying”) for the 80-90% of sales on credit. In 2012, waiting for carbon finance to kick in to finance the rising costs of scrap and for its new procurement methods to start (metal sheet from Chinese suppliers and purchase of the clay mine), Toyola is selling more through retailers who pay cash or with a shorter payment delay, with only about 10% of sales made on credit. The year ended with nearly 100,000 cook stoves sold in Ghana alone. Toyola registered a profit of 7% in 2011 thanks to carbon credits, down from net profit of 9% of sales in 2010 and more than 20% in previous years.

**Exchange rate:** 1 USD= 1.8 GHC

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