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# THE POWER OF FIRE

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**THE INNOVATIVE  
BUSINESS MODEL  
OF BIOLITE**

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**AN ULTRA-CLEAN, ELECTRICITY  
GENERATING, BIOMASS  
COOKSTOVE PROJECT**  
REG10039



**EEP**

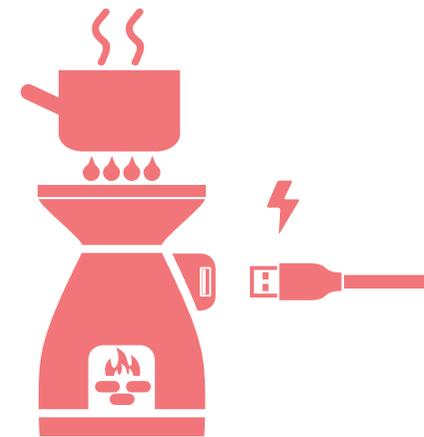
ENERGY AND ENVIRONMENT  
PARTNERSHIP / SOUTHERN AND EAST AFRICA





BioLite is a social enterprise on a mission to bring safe, affordable energy to households across sub-Saharan Africa and India through breakthrough biomass cooking technology that dramatically improves combustion while generating usable electricity.

BioLite takes an ecosystem approach to energy access by developing and commercializing technologies that deliver a range of energy services in a single, integrated ecosystem. Using this approach, BioLite can address multiple basic energy needs (i.e. cooking, lighting, charging) simultaneously, and more cost effectively than in products sold separately. BioLite has developed a unique value proposition to potential customers: as rates of mobile phone ownership continue to outpace rates of electrification, BioLite's clean burning, electricity-generating biomass stoves are positioned as a home appliance desired by customers in Sub-Saharan Africa: this opens up doors for unique retail opportunities, such as the telecom industry.





The BioLite HomeStove is a biomass burning cookstove that uses an internal airflow system to improve the efficiency of its fire, providing faster cooking times with less fuel and eliminating harmful toxic smoke.

The breakthrough technology is in the thermoelectric design that captures waste heat from the fire and converts it into usable electricity to power an internal fan. Surplus electricity is sent to a USB port that can charge phones, LED lights, and more.

Many households in developing markets face an energy paradox: they own a mobile phone, an item essential to daily life, but don't have a way to charge it. So what does this have to do with cooking? Everything.

Families spend disproportionate amounts of time and money charging their phones at local recharging shops – this is just one of the many harmful side effects of living in energy poverty. When looking at a broader ecosystem of energy, it becomes evident that cooking, device charging, and lighting daily life are far more interconnected than one might think. In viewing energy as a currency that can take on different forms, BioLite has developed a clean cooking solution that can simultaneously power small personal devices. By offering the co-benefit of electricity, this appliance suddenly captured the interest not just of women (who are predominantly tasked with cooking), but also the male heads of household, who often control the family phone – and typically make the household purchasing decisions.



Rural customer cooking with BioLite clean stove.



## Beyond the Demo: How To Sell and Scale Meaningfully

In BioLite's first two years of operation in Uganda, calls poured in asking where one might find a HomeStove, revealing the need for a comprehensive retail strategy. Without a wide product assortment, BioLite was not interested in setting up a network of branded shops. Nevertheless, BioLite needed to find a way into existing storefronts to reach customers and offer reliable points of purchase.

As BioLite evaluated the types of retailers that exist at scale, they revisited their core value proposition: a hub for the home. That's when they looked to an unlikely partner: Telecom.



*The BioLite HomeStove reduces smoke by 90% and cuts fuel consumption by 50%.*



*“The telecom shops are a terrific branding opportunity. Nowadays, when I introduce our company to people they often already know about it – they saw us when buying airtime or a new phone”*

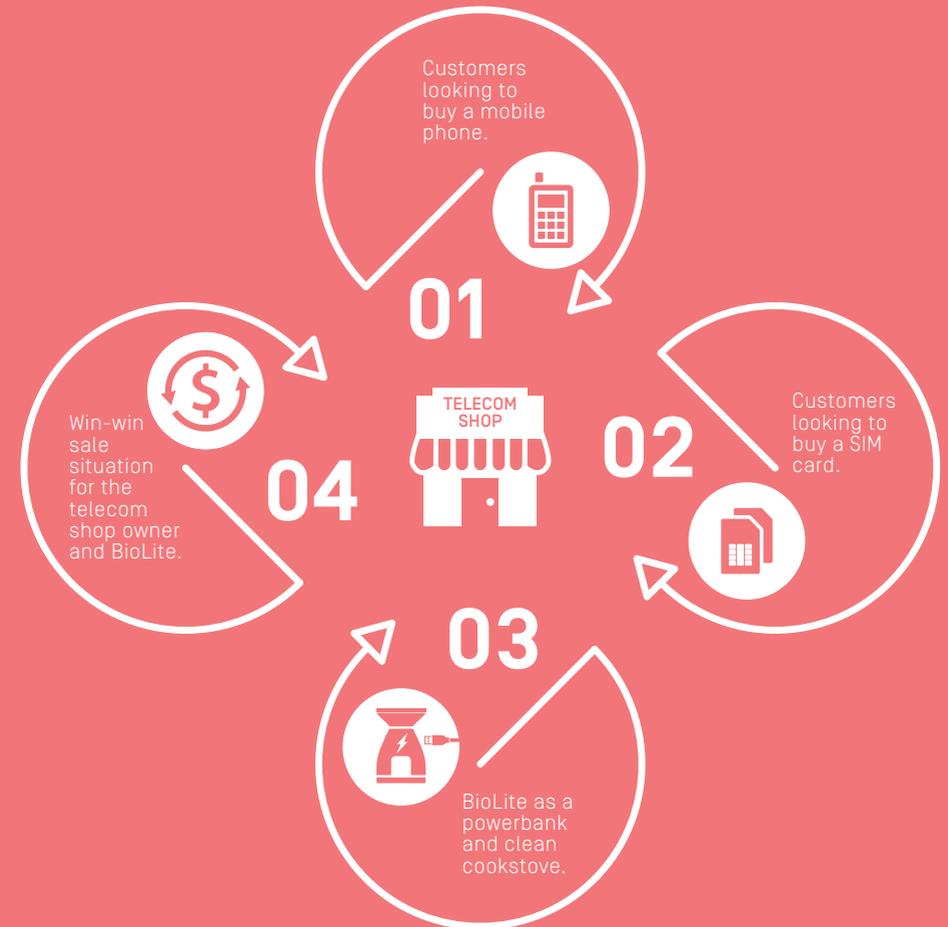
*Jan de Graaf,  
BioLite Uganda  
General Manager*

## Plugging in to a connected home: how the HomeStove found its way into a Telecom Shop.

By positioning the BioLite HomeStove as an advanced home appliance – a dramatic upgrade from a harmful open cooking fire – it made sense to have it sit alongside the other modern technologies that adorn homes seeking connectivity and energy access: mobile phones, SIM cards, powerbanks, routers, etc.

And where does one go for that? The local telecom. BioLite was able to partner with one of the top telecom companies in Uganda.

BioLite's partner has a robust network of shops where customers already know to go to access modern technology. This built-in infrastructure gave BioLite the benefit of increased visibility and an instant positive brand association, reinforcing its presentation as a desirable, yet attainable product.





And the benefits go both ways: BioLite's telecom partner is able to strategically bundle the HomeStove with a mobile phone and SIM card they carry in the shop. Not only does this immediately showcase the tangible benefits of the HomeStove's electricity, it also enables the partner to add to their network mobile customers who were interested in the HomeStove.

### Achievable Aspiration: The Urban/Rural Overlap

Much like the rise of the mobile phone, the HomeStove is a device that is wanted by both urban and rural households in Uganda: for the urban customer, it is a welcome solution to their cooking fire, giving them the power of a strong flame but without any smoke or the painful, expensive reliance on charcoal. For the rural customer, it is an aspirational addition to the home, further connecting them with their urban neighbors.

*One customer from a village near Masaka told BioLite: "I am a tourist attraction in my own village. People visit me to admire my stove and charge their phone"*



Rural customer using the BioLite LED light of his clean stove.

BioLite's combined benefits of faster cooking, device charging, and economic savings create a value proposition that is attractive to a wide variety of potential customers; farmers, nurses, teachers, business owners, even government employees are all tapping into their ability to harness the energy around them and use it according to their specific needs.

With the help and support of the EEP, BioLite has successfully established several core partnerships in both Uganda and Kenya. Furthermore, by embedding own field staff into these channels to provide product demonstrations, customer training, and after-sales service, BioLite strengthened both sales and partner satisfaction.

Soon, the next generation HomeStove will be launched, which will allow BioLite to scale these existing partnerships and enter new markets as well. As three billion people globally still cook their food on biomass fires, there is a long way to go. BioLite offers a unique solution to transform the cookstove sector by demonstrating that cooking, lighting and charging can go together in a clean, affordable and convenient way, while still using a basic fuel like firewood.



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