

African Clean Energy: Powerful cooking; Anywhere, Anytime.

Amsterdam, Netherlands Maseru, Lesotho



Judith Joan Walker

<https://www.youtube.com/watch?v=tiskHkfyDsQ>

<http://vimeo.com/106007437>



Year Founded:

2011

Organization type:

for profit

Project Stage:

Growth

Budget:

\$500,000 - \$1 million

Website:

<http://www.africancleanenergy.com/press>

Twitter:

<http://www.twitter.com/acelesotho>

Facebook:

<http://www.facebook.com/AfricanCleanEnergy>

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Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

African Clean Energy provides clean cooking and renewable energy through the manufacture and distribution of the ACE 1 Solar Biomass Cookstove throughout Southern and Eastern Africa. The ACE 1 has the power to save millions of lives, alleviate financial and energy poverty and slow deforestation.

WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"

What if we could save over 4 millions lives per year with a product even the very poorest want to buy?

About Project

Problem: What problem is this project trying to address?

Over 4.3 million people die every year from the affects of Household Air Pollution, this is more than Aids, Malaria and TB combined. Beyond this staggering fact, many of the BOP spend a huge 25% of their income on fuel alone, or collectively use 4 million hectares of forest per year, spending up to 3 hours per day finding fuel. 67% of Africa has no access to electricity and are trapped in the cycle of poverty all the above problems create.

Solution: What is the proposed solution? Please be specific!

The ACE 1 Solar Biomass Cookstove is a multifunctional high tech Clean Cookstove that provides smokeless cooking, mobile phone charging and LED lighting with the aid of its solar rechargeable battery. In combination with micro-financing contracts, this highly desired product is not only affordable, but usually saves the customer money, if not immediately, then certainly from the moment it is paid off. On top of providing energy and eliminating the health risks associated with Household Air Pollution, this clever cookstove can reduce biomass fuel consumption by up to 70% and allows for processed fuels sources from more sustainable sources. Beyond the product and its benefits, we additionally create jobs and entrepreneurial opportunities.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

The ACE 1 is smokeless, so it can eliminate the risk of death and diseases proven to be caused by Household Air Pollution. It provides energy access through USB and DC ports, thus reducing the cost and time spent on lighting and mobile phone charging. The ACE 1 can seriously reduce the global biomass consumption, with each person cooking on open fire (around 1/3 of the world's population) being able to reduce their fuel consumption by around 70%. This in turn can create a drastic reduction in human CO2 release. Most importantly, health improvement, time and financial savings and access to energy will most certainly hugely improve not only quality of life, but the economic situation for the poorest people in the world.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

We have made and sold over 35,000 high tech clean cookstoves to date, with over 11,000 ACE 1 Cookstoves this year alone. We estimate this to have postively impact almost 40,000 people this year alone. With our projected sales and markets taken into consideration, our goal is to have impacted the lives of 3.4 million people before 2020. This is based on conservative sales figures. We have created over 35 jobs in Lesotho (a Least Developed Country (LDC)) We have provided basic energy access to around 6000 households by March 2016. As we scale up we are designing more accurate ways of recording our impact.

Spread Strategies: Moving forward, what are the main strategies for scaling impact?

ACE 1 stoves are already being distributed in 5 countries, with the aim to expand throughout neighbouring Southern African countries, East Africa and South East Asia by end 2016. We are finalising the tested sales and distribution models to prove a 'copy, paste, scale' strategy in order to expand throughout applicable markets. Our smarter distribution strategies allows us to expand rapidly with or without support from large development organisations as well as local partners. There are several incentive strategies that can be included that significantly stimulate the local economy long-term.

Sustainability

Financial Sustainability Plan: What is this solution's plan to ensure financial sustainability?

ACE is profitable and in the process of scaling up. The expansion from stove sales to fuel sales and further use of this expansive network of customers will allow us to continues exploring new revenue streams while still ensuring the viability of the core business of selling ACE 1 cookstoves. Due to the impact potential there is also a lot support from grants and impact investment available, but we will not need to rely on outside funding.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

There are many other Improved Cookstove products on the market. Most of them are not comparable in function or quality, with most failing to reduce smoke release significantly enough to impact health risks at all. Of the ones that are more comparable in quality, Philips and Biolite, neither match in function in terms of energy access and neither use solar power (yet). There will be more comparable competition as our success continues as the size of the market is very attractive, but until now, most products have failed to be as desirable to the customers as the ACE 1.

Team

Founding Story

African Clean Energy (ACE) is a family company founded in 2011. Stephen and Alice Walker were already living in Maseru, Lesotho and saw first hand the extent of the problems that are caused by rudimentary stoves and open fires. Stephen, and electrical engineer with 28 year corporate experience and 4 greenfield factories, teamed up with Ruben Walker, his son and environmental engineer, to explore the existing technology and what was lacking to prevent rapid adoption of a solution. It wasn't long before Judith Joan Walker, daughter and sister, joined to help develop the strategy for expansion and operations. In 2014 ACE launched the ACE 1 and the Walker family has been joined by 35+ coworkers.

Team

Ruben Walker- CEO and Business Development lead. Environmental engineer. Building partnerships and securing funding to expand ACE globally. Judith Joan Walker- COO and Strategy lead. Film Production background. Formalising and building Best Practises to be scaled through to future markets Stephen Walker - Manufacturing and Product Development lead. Extensive corporate and plant management background. Manages all R&D and Manufacturing. Alice Troostwijk-Walker- Sales and Logisctics Director Lesotho. Integral part of the on the ground operations in Lesotho.

File attachments:

 [solution.png](#)

 [stove_banner_smaller.png](#)

Background

Please confirm how you heard about the Unilever Awards:

Impact hub

Please confirm your role in the initiative (eg Founder/co-Founder) and your organisational title:

Co-Director/ COO

Which of the 8 UN Global Goals (Sustainable Development Goals) pre-selected for this competition does your solution relate most closely to? [select all that apply]

No Poverty, Gender Equality, Affordable and Clean Energy, Decent Work and Economic Growth, Responsible Consumption and Production, Climate Action.

Leadership and the Unilever Awards

Please provide examples of any previous entrepreneurial initiatives you have pioneered.

Beyond your existing team, who else are you working with to achieve your objectives, eg partners, advisors, mentors?

World Bank- Research Projects

Liverpool School of Tropical Medicine- Research Projects (CAPS study)

Kiva- Microfinancing

Vodacom Lesotho- Mpesa Mobile Payments and Network expansion

Global Alliance for Clean Cookstoves- Support, funding and network

Miller Centre for Social Entrepreneurship- GSBI programme , highly skilled mentors and support network.

SNV Cambodia- Distribution and funding for smaller distributors

RaboBank

BMW Foundation

Source URL: <https://www.changemakers.com/globalgoals2015/entries/african-clean-energy>