The charcoal industry in Africa

- >$10B annual consumer spend
- $25-$35 / month per household in large cities
- 10-30% of average incomes
- 5M acres annual forest destruction
- Indoor smoke kills women & kids
Charcoal-based deforestation

- Causes land degradation and flooding
- Soil erosion leads to food insecurity
- 10kg of wood = 1kg charcoal
- Major source of GHG emissions
Cooking shouldn’t kill

Indoor charcoal smoke = 2 packs of cigarettes per day

4 million early deaths per year from indoor air pollution
World Health Organization

HELP KIDS QUIT!
We operate across the value chain

- Ethanol-based cooking fuel
- Ethanol clean cookstove

- Clean, safe and fast
- Cheaper than charcoal
- 20 litres / month / family
- 1 ton CO2 saved / month / family
## Strategic Partners

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| ![CleanStar Ventures](image) | - Impact Venture developer, head office in New York  
- Ventures under development in Africa, Latin America and Australia |
| ![Novozymes](image) | - Global leader in enzymes for bioenergy and agriculture  
- $2 billion revenue & 6,000 people |
| ![ICL](image) | - US ethanol process technology contractor  
- Built 6.7 billion gallons of ethanol capacity globally over last 30 yrs |
| ![Bank of America Merrill Lynch](image) | - Leading global bank, $50 billion environmental commitment  
- Innovative financier in carbon and climate solution markets |
| ![SEDF](image) | - Commercial investor in post-conflict societies, part of Soros group  
- Invests in sustainable businesses that alleviate poverty |
| ![IFU](image) | - Danish government-owned Development Finance Institution  
- Invests in sustainable businesses in least developed countries |
Company-owned retail network

Sales team undertakes in-home demonstrations and take orders

Customers visit shops to fulfil orders and collect stoves & fuel

NDZiLO shop network being rolled out in low-income neighbourhoods

Customers return every day / week to buy more fuel
Worlds First Sustainable Cooking Fuel Plant

Opened 17 May 2012
Partnering with small farmers: Integrated food and energy agroforestry systems

Baseline farming is subsistence-only
Lack of inputs/storage/markets

High-yielding disease-free cassava, soya, beans, sorghum, pigeon peas

Rural Impact: ↑ incomes ↑ nutrition ↑ tree cover ↑ soil health

Reforestation belts around fields
Solution Awareness Starting to Grow

The New York Times  the guardian

Bloomberg Businessweek  ALJAZEERA

treecugger  TriplePundit

Environmental Finance Awards 2012

SBAU award at Rio+20 from Sir Richard Branson & UN Foundation

Sustainable Finance Conference & Awards 2012

London, Thursday 14 June 2012

- Sustainable Investment of the Year: Special Commendation
What can governments do to attract investment into the clean cooking fuel industry?

- **Comprehensive policy review** for clean cooking sector – what are policy barriers? What are best practices from other countries?

- **Create fast track** process for licensing of clean cooking ventures

- **Create a level playing field with charcoal** by removing import duties on clean cookstoves and exempting cooking fuel from VAT

- **Create fiscal incentives** for clean cooking investors, recognizing the benefits delivered to rural development, forests and family health.