



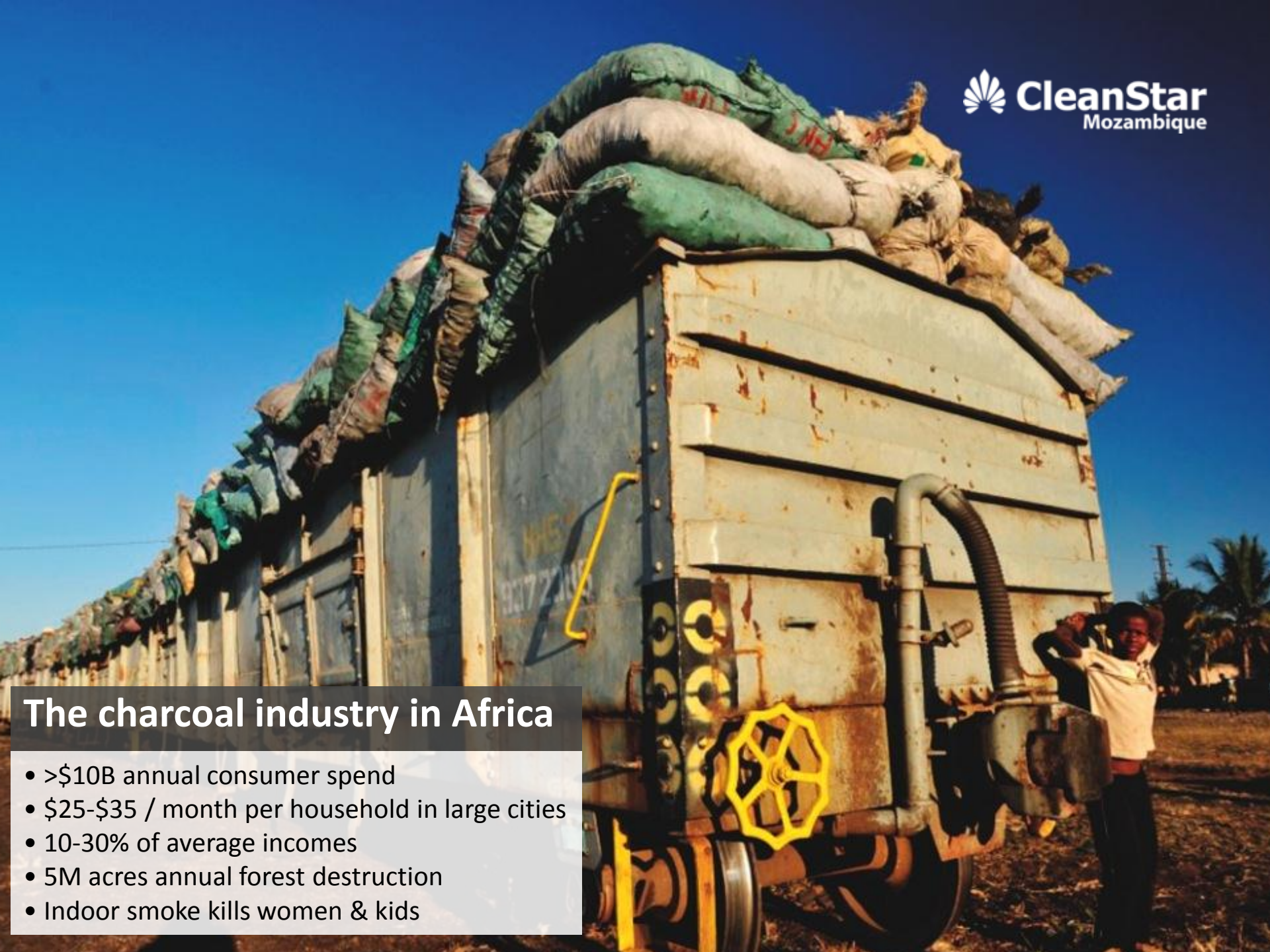
 **CleanStar**  
Mozambique





## 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



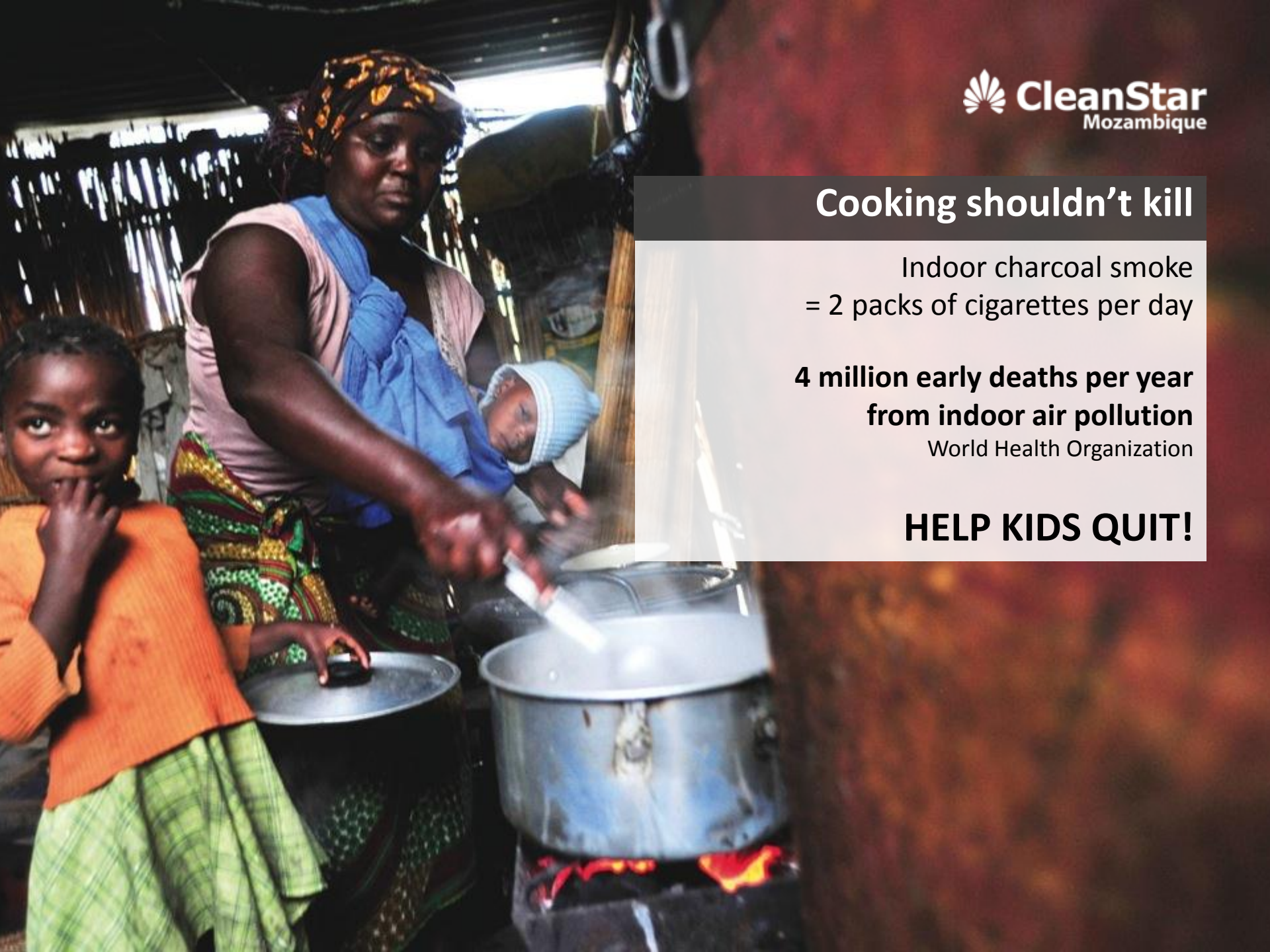
## Cooking shouldn't kill

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



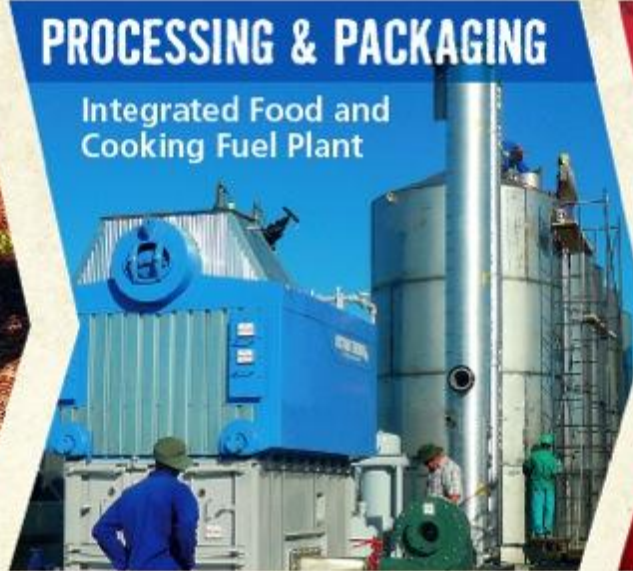
## CULTIVATION

Smallholder farmers



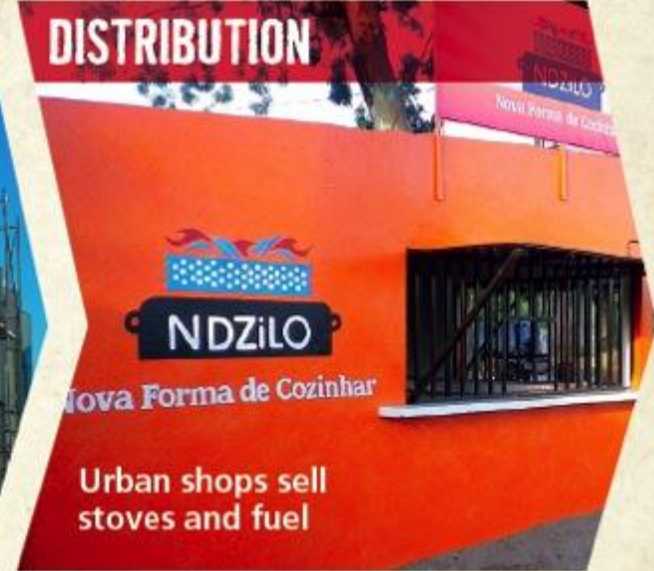
## PROCESSING & PACKAGING

Integrated Food and Cooking Fuel Plant



## DISTRIBUTION

Urban shops sell stoves and fuel



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



- Impact Venture developer, head office in New York
- Ventures under development in Africa, Latin America and Australia



- Global leader in enzymes for bioenergy and agriculture
- \$2 billion revenue & 6,000 people



- US ethanol process technology contractor
- Built 6.7 billion gallons of ethanol capacity globally over last 30 yrs



- Leading global bank, \$50 billion environmental commitment
- Innovative financier in carbon and climate solution markets



SOROS ECONOMIC  
DEVELOPMENT FUND

- Commercial investor in post-conflict societies, part of Soros group
- Invests in sustainable businesses that alleviate poverty



INVESTERINGSFONDEN  
FOR UDVIKLINGSLANDE

- 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



Reforestation belts around fields



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

# Solution Awareness Starting to Grow

THE WALL STREET JOURNAL.

Forbes

FAST COMPANY

The New York Times

theguardian

SCIENTIFIC AMERICAN™

BloombergBusinessweek

ALJAZEERA

BBC WORLD SERVICE

treehugger  
A DISCOVERY COMPANY

TriplePundit  
people, planet, profit

Environmental Finance AWARDS 2012

BIOENERGY FINANCE deal of the year

Screw Business as Usual

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

UNITED NATIONS FOUNDATION

Virgin unite

FT FINANCIAL TIMES

IFC International Finance Corporation World Bank Group

FT/IFC Sustainable Finance Conference & Awards 2012

London, Thursday 14 June 2012

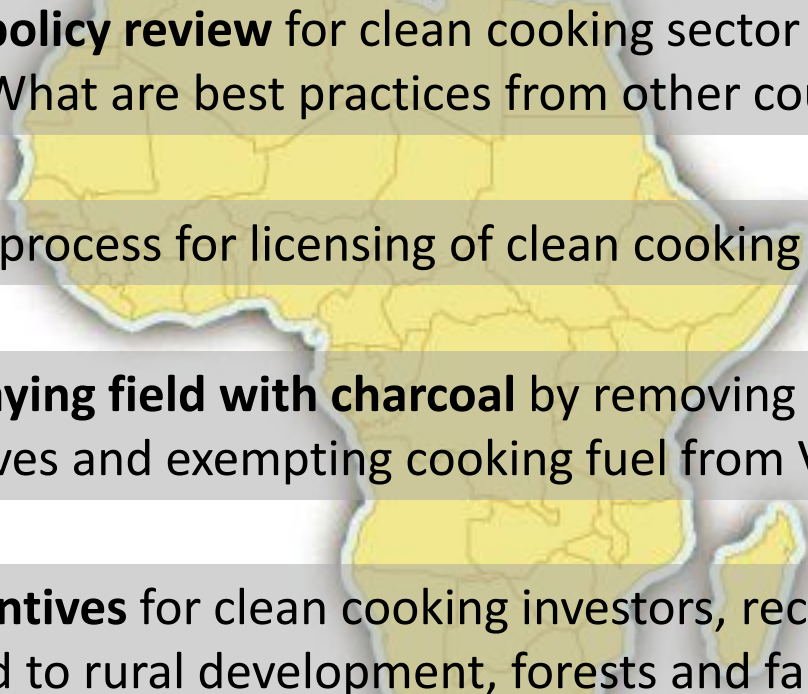


THIS IS Africa Beyond Business Awards 2012

- Sustainable Investment of the Year: Special Commendation



## What can governments do to attract investment into the clean cooking fuel industry?

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- **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.



## Contact us

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