Lessons learned during and after Global Cleantech
Primary Needs Analysis

• What do customers need / want?
• What do founders / partners want?
• What is the technology situation?
• What factors will drive the market?
• What journey will serve the business best?

• BMC is an iterative model & documents the journey
• Surveys, Pilots, & Technology reviews affect it
• It forms the basis for a detailed business plan
• It is not the end of the road, just the beginning...
### Key Partners
- Bio-mass waste processors & Pellets Manufacturers
  - Saw Mills
  - Waste Processors
- Distributors & Retailers
  - Regional Distribution
  - National Retailer
- Component Manufacturers
  - FAAB Sub-Assembly
  - Metal Components
- Sustainability Influencers
  - Government Health & Energy Departments
  - Welfare & Aid Organisations
  - Responsible Food Companies focusing on food security & sustainability

### Key Activities
- Product Design & Development
- Appliance Assembly and Component Sourcing
- Pellet Sourcing & Packaging
- Distribution & Channel Development
- PAYG Finance & Administration

### Key Resources
- CEO – Dave Lello
- Sales Director – TBA
- International Business Development – Paul Anderson
- Electronic Design – Shane v Jaarsveldt
- Component Sourcing – Skeg Product Design

### Value Propositions
#### Better Lighting
A better home environment after dark and in bad weather.
Charge mobile devices

#### Better Cooking
No smoke while cooking or residual smells on clothing and soft furnishings
Quicker cooking times

#### Saving Money
Monthly savings on what is currently spent on fuel and consumables.
PAYG allows for small deposit and monthly spend from

### Customer Relationships
- Better / smart home environment seekers
- Cost saving over time, and a quick appliance pay back
- Opportunities to upgrade the appliance at a later stage

### Channels
- **PAYG Credit Sales**
  - Two tier distribution: EVD and resellers
- **Cash Sales**
  - National Retailers targeting LSM 4-7: Grocers, Appliance retailers, Hardware stores

### Cost of Goods
- **Cost Structure**
- Appliance COGS
  - Outsourcing
  - Local Assembly
- Pellet Fuel COGS
  - Bulk Supply
  - Local Pack & Distribute

### Revenue Streams
- **Product Sales**
  - FAABulous Appliances - Manufacturing
  - PAYG / Financing Income - Distribution
  - Accessory and Spares for Appliances
- **Fuel Sales & Commissions**
  - Breaking bulk fuel and packaging into customer packs

### Customer Segments
#### Domestic Consumers
- Lower Middle Income, Limited / No access to Grid Power
  - **Primary Market**
    - Urban Off-Grid
  - **Secondary Market**
    - Surrounding Rural Off-Grid
    - Backup Power

#### Geographic
- Identified Cities in Southern & East Africa with Off-Grid communities of over 100,000 inhabitants

#### Ancillary Market
- Camping & Leisure market in Upper Income Bracket sold through National Retail
2013
Rentable Battery
KHAYA POWER partnership formed between Billy & Dave
Winners of SAB Foundation prize for Battery Concept
Decision to build and test electronic platform

2014
Smokeless Cooking
Pilot shows demand for cooking solution.
Designed Cooker as add on to Battery
Battery Concept Piloted

2015
2 in 1 Appliance
Combination Power Appliance
Entered GCIP 2015 Competition
Plioted Stove concept with the help of team from Delft TU

2016
Bluetooth PAYG
PAYG required for customer affordability
Volume Production for manufacturing to lower cost
Khaya Power partnership ended. Ekasi Energy to explore volume micro-financing model.
Experiences - GCIP

- Lots of people with great ideas
- Customer Fit
  - Customer Surveys & Questionnaires
  - Market Analysis & Understanding
- Ability to simplify the message & USP
  - Pitching the idea – crisply and effectively
  - Creating the right take-aways
- Ability to move from concept to business plan
  - Understanding the business & funding model
  - Winning over the people with funds and resources
## OFF-GRID SHACK - HOME ENERGY GOALS

<table>
<thead>
<tr>
<th><strong>SAFER</strong></th>
<th>Reduce Indoor Air Pollution from lamps &amp; cooking</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Reduce the risk of runaway shack fires</td>
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<tr>
<td><strong>CHEAPER</strong></td>
<td>Lower the cost the fuel used for lighting &amp; cooking</td>
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<tr>
<td></td>
<td>Lower the upfront cost of the power appliance - PAYG</td>
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<tr>
<td><strong>GREENER</strong></td>
<td>Capture solar energy into batteries for home use</td>
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<tr>
<td></td>
<td>Switch cooking fuels from fossil fuels to green fuels</td>
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</tbody>
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Harnessing Natural Energy

Power from the Sun
Sunlight stored and used for lighting, and other household devices.

Power from Nature
Biomass grown and used for smokeless cooking and heating in winter.

“2 in 1” Green Power Appliance
Using the power of the sun and nature to provide clean and safe domestic power for homes not connected to the power grid.

- Battery Powered FAAB provides low voltage electricity.
- FAABulous Canister provides 2 stage gasification & combustion of biomass fuel.
Our Purpose

Playing Field

Winning Formula

In Market Capability

Support Systems

Reduce the Health Risk Associated with IAP (Indoor Air Pollution) by Producing and Financing Clean Home Energy Appliances using Solar PV with Battery Power & Bio-Mass Gasification

Families in Informal Settlements in Fast Growing African Cities With No/Inconsistent Grid Power

Our Unique Selling Point (USP) is a Combination Power Appliance that provides both heat & electricity, from sustainable resources at an affordable price point

Our Competitive Advantage is to offer the Power Appliance on credit terms via PAYG that makes the unit affordable, and easy to collect the payments from the end users

We make use of Local Partners to provide Four Key Elements: i.e. Regional Assembly, Electronic Voucher Distributors, Fuel Manufacturers & Local Resellers.

To support our local partners, a Smart Energy PAYG Platform manages the distribution channel and end user finance (the upfront sale of the appliances through resellers and the distribution of PAYG vouchers) & cooking fuel.