SHA Sustainable Green Village

By Smart House Afrika (Pty) Ltd
Promoter
Content

- The Company
- The Village Concept
- The Need
- The Solution
- Investment
- Management
- Impact
- Conclusion
Key Directors

1. Dr. Ivan H Louw (President )
2. Lizbeth Zwane (Vice)
3. Veronica Beeby ( CEO )
4. Lundi Daniels (CFO)
5. Org Bentley (Project Director )
6. Johannes J. De Wet
7. Jean Niyonzima
The Strategic Partners

GAN EDEN 888 PRODUCTS (Food security)
LEGACY (Humanitarian Aid)
SOURCE (Water from Air)
NOCA (Clean Energy)
ZIMA HOLDINGS (CDC Village Management & Training)
SHA CIVILS (Roads & landscaping)
Vision & Mission Statement

Smart House Afrika vision is to become a model for innovation and excellence for a sustainable village development integrating culture, social enterprise, housing, health, education, security, environment and agricultural sustainability.

The company aims to (i) provide quality and affordable low-cost housing and improved living conditions; (ii) restore dignity of the homeless; and (iii) promote economic development and growth by creating a continuum of innovative projects that enhance the quality of living and promote self-sufficiency.
Registration / Licenses

SABS (South African Bureau of Standards) certification as per Report No: 2538/2971 E/AMT14
National Home Builders Registration Council (NHBRC), Reg. No: 3000148196
CIDB (Construction Industry Development Board) Certificate Number 10091692
SARS (South African Revenue Services) 9067522228
Black Economic Empowerment (BEE) Status BEE Certificate Number 01/B-BBEE EME /24/07/2013/098 Level 3
Import and export Import and export permit No 21312188
SHA Village is a new and unique model where, education, health, agriculture, recreation, commercial social enterprises and residential housing are integrated to create a healthy and viable community place that is economically and environmentally sustainable.

The village facilities are designed to complement each other such that the interactions, synergies and potential of each individual component can be optimized.
The Smart House Afrika Green Village model “SHA Village” is a concept pioneered and Patented ABT by Dr. Ivan H Louw and will be implemented by Smart House Afrika (Pty) Ltd.

It uses green technologies and economic programmes packages under investment and financial parameters that ensure sufficient earnings are generated to sustain and expand the model.
The Design

- The SHA village concept, is designed to make our cities and human settlements, inclusive, safe, resilient and sustainable.
- The model encompasses the larger goals of global sustainability.
- The design guiding principles include among others: environment, density and urban designs, village centre, local economy, transportation, affordability, water, energy, recycling and wheelchair friendly.
SHA SELF SUSTAINABLE GREEN VILLAGE LAYOUT

- Recycle Area
- CHICKEN BREEDING
  - 10 000 FREE RANGE
  - PER MONTH
  - DOUBLE BREASTED

- FARMERS MARKETS
- PARKING FOR 300 CARS FOR PUBLIC
  - FENCED IN WITH ONE SECURE GATE
- BUSINESS CENTRE AND RETAIL DOUBLE STOREY
- ARMED SECURITY

Seize of land 100 Hectares
- 50 for houses
- 10 Business Complex
- 25 for Agriculture
- 10 Burial Site
- 5 for Parking
Key features of the village

- Business Centre
- Agriculture (Seeds and Fertilisers, Fisheries, Hydroponics, Poultry, etc.) no GMO
- Recreational Area & Sports field
- Pre-school & Dispensary
- Food Pole Manufacturing
- Bakery
- Farmers’ Market
- B&B with conference centre
- Wheelchair friendly
The Village will provide residents with a range of benefits including an opportunity to live in a community, life style and convenience, flexible services and a range of social and economic benefits such as: Education, Social & Health care, garden services, security, Internet, etc..

Utility services will be provided (water and electricity). Each house is fitted with a water machine (100L/Day) and 5000L water tank while electricity is provided by Smart Power.

SHA products; and seeds and fertilizers for the agricultural program.
How does SOURCE work?

SOURCE Hydopanels harness the power of the sun to create a drinking water solution free from infrastructure, lengthy supply chains or transportation risk. SOURCE ensures the human right to clean water by providing the first ever path to complete drinking water ownership.

- Ambient air is drawn into SOURCE’s air heater and water vapor in the air is absorbed into our specially engineered material.
- The water vapor is collected as the air flow passes through a condenser and the resulting liquid water flows into the onboard reservoir.
- The collected water is reinjected for optimal health/waste and treated (with ozone) to maintain optimal water quality over time.
- Water is pumped through a polishing cartridge prior to being dispersed to the customer.
- Each pane is connected to a network and is monitored in real-time for performance and quality parameters.

Installation

**BASIC ARRAY DIMENSIONS**

**SAMPLE INSTALL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Install Angle</th>
<th>Max Wind Speed</th>
<th>Mounting Options</th>
<th>Anchor Size/Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoenix, Arizona</td>
<td>40</td>
<td>70 KPH</td>
<td>Ground/Concrete Roof</td>
<td>3/4&quot; HD expansion anchor</td>
</tr>
<tr>
<td>Mexico City, Mexico</td>
<td>35</td>
<td>10 KPH</td>
<td>Ground/Concrete Roof</td>
<td>1/4&quot; HD expansion anchor (4)</td>
</tr>
<tr>
<td>Manila, Philippines</td>
<td>35</td>
<td>20 KPH</td>
<td>Ground/Concrete Roof</td>
<td>1/4&quot; HD expansion anchor (4)</td>
</tr>
<tr>
<td>Oakland, California, USA</td>
<td>35</td>
<td>50 KPH</td>
<td>Ground/Concrete Roof</td>
<td>1/4&quot; HD expansion anchor (4)</td>
</tr>
<tr>
<td>Guaynabo, Puerto Rico</td>
<td>90</td>
<td>90 KPH</td>
<td>Bolts</td>
<td>200lbs</td>
</tr>
</tbody>
</table>

World-Class Reliability

- 4C Quality Assurance Testing
- Solar-Thermal Assembly: Temp cycling and damp heat tested to 10+ years
- Lower-Housing Assembly: Temp cycling and damp heat tested to 10+ years
- Internal components: Temp cycling and damp heat tested to 10+ years
- Reservoir/Boiler: Assembly: Temp cycling and damp heat tested to 10+ years
- EPA analysis testing methods (ED50, E270C, 3M, 80750)

Network Operations Center

Each SOURCE panel is connected to the Zero Mass Water Network Operations Center (NOC). Data is returned from each panel to the NOC and stored in the cloud with redundancy. Panel performance is remotely optimized using machine learning. Panel performance is constantly monitored with algorithms that identify any production irregularities. The NOC resolves any alerts remotely or displays the field service team as needed.

Required Maintenance

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Filter</td>
<td>Every Year</td>
</tr>
<tr>
<td>Water Filter</td>
<td>Every Year</td>
</tr>
<tr>
<td>Mineral Cartridge</td>
<td>Every 5 Years</td>
</tr>
<tr>
<td>Panel Life</td>
<td>10 Years</td>
</tr>
<tr>
<td>Standard Warranty</td>
<td>1 Year</td>
</tr>
<tr>
<td>Service &amp; Monitoring</td>
<td>Available Upon Request</td>
</tr>
</tbody>
</table>
The Food House

Length inside 6.10M

30cm apart

The passage is 4.1m long and .70cm wide

20cm apart

50cm Between wall and the poles

Food Security Producing $1000.00 PM
Floor Plan – Kristan & Food House
Kristan - Standard House (103sqm)
Apartments, 125Sqm
House Quality Specification

- ISO 9001
- 100% Green
- Fire Proof, Can not burn
- Can not leak or crack
- Wheelchair friendly
- Can withstand earthquake of 8 Richter scale.
- Can with stand 280 hurricane
- Vertical farming 6.3 x 1.8 x 2.5 attached.
- Guaranteed for 50 years.
Hierarchy of Needs

Maslow’s Hierarchy of Needs

Housing is a basic need

- Physiological Needs: Food, Water, Shelter, Warmth
- Safety Needs: Security, Stability, Freedom from Fear
- Belonging & Love: Friends, Family, Spouse, Lover
- Self-Esteem: Achievement, Mastery, Recognition, Respect
- Self-Actualization: Pursue Inner Talent, Creativity, Fulfillment
In 2015, the Heads of States and Governments of the World, resolved among other things:

1. To end poverty and hunger everywhere; combat inequalities within and among countries; build peaceful, just and inclusive societies; protect human rights and promote gender equality and the empowerment of women and girls; and ensure the lasting protection of the planet and its natural resources.

2. To create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.
Key Sustainable development Goals

- **Goal 1.** End poverty in all its forms everywhere
- **Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- **Goal 3.** Ensure healthy lives and promote well-being for all at all ages
- **Goal 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
The World Bank estimates that by 2030, three billion people, or 40 percent of the world’s population will need new housing units.
The proposed village development will not only help countries meet their human rights and sustainable development goals but also accelerate service delivery, especially housing.

The village is built with proper facilities, including social centres, that translate into quality living, secure environments that facilitate a non-racial integrated society.

Dignity restoration through ownership of better homes, training, enterprise development and creation of better paying jobs.
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and Rezoning</td>
<td>150000000,00</td>
</tr>
<tr>
<td>Houses</td>
<td>1000000000,00</td>
</tr>
<tr>
<td>Civils</td>
<td>300000000,00</td>
</tr>
<tr>
<td>Business Development</td>
<td>250000000,00</td>
</tr>
<tr>
<td>Professional Fees</td>
<td>100000000,00</td>
</tr>
<tr>
<td>Working Capital</td>
<td>500000000,00</td>
</tr>
<tr>
<td>Contingency</td>
<td>200000000,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2500000000,00</strong></td>
</tr>
</tbody>
</table>
## Income Projection, Select Year

<table>
<thead>
<tr>
<th>INCOME STATEMENT (USD)</th>
<th>Year 1</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Revenue</td>
<td>2,815,578,14</td>
<td>4,667,324,794</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>1,610,277,418</td>
<td>1,451,701,648</td>
</tr>
<tr>
<td>Gross Profits</td>
<td>1,205,301,296</td>
<td>3,215,623,146</td>
</tr>
<tr>
<td>Operating Expenses:</td>
<td>305,945,60</td>
<td>450,785,09</td>
</tr>
<tr>
<td>Operating Profits</td>
<td>1,174,706,736</td>
<td>3,170,544,637</td>
</tr>
<tr>
<td>Less: Interest Expense</td>
<td>-5,000,000,00</td>
<td>-3,276,626,72</td>
</tr>
<tr>
<td>Net Profits Before Taxes</td>
<td>674,706,736</td>
<td>2,842,881,965</td>
</tr>
<tr>
<td>Taxes</td>
<td>-202,4120,21</td>
<td>-852,864,589</td>
</tr>
<tr>
<td><strong>Net Profit After Taxes</strong></td>
<td><strong>472,294,715</strong></td>
<td><strong>1,990,017,375</strong></td>
</tr>
</tbody>
</table>
## HH Loan Repayment Capacity

<table>
<thead>
<tr>
<th>House Hold (HH)</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard House Selling Price</td>
<td>50000,00</td>
</tr>
<tr>
<td>Gross Income/HH</td>
<td>1000,00</td>
</tr>
<tr>
<td>Production Cost/HH</td>
<td>300,00</td>
</tr>
<tr>
<td>Income Before Loan Repayment</td>
<td>700,00</td>
</tr>
<tr>
<td>Loan Repayment @ 5%interest/HH</td>
<td>200,00</td>
</tr>
<tr>
<td>Net HH Income</td>
<td>500,00</td>
</tr>
</tbody>
</table>
Funding Strategies

Letter of Intent from Minister of Housing
In the past Governments had to give a Sovereign Guarantee to receive Humanitarian Funding.

We however only need a BOT from the Minister of Housing stating the number of houses they need and that the land and beneficiaries will be provided for by the Minister.

90 Days later we can start with construction.
Management
The initial management team shall consist of the directors of Smart House Afrika (Pty) Ltd.

SHA will establish a Community Development Corporation (CDC) to manage the villages. Its initial Managing Director shall be Jean Niyonzima.

Each village shall have a residence association which will in turn form a Body Corporate to partner CDC.

The President of Smart House Afrika shall be a de facto Chairperson of CDC.
The company will implement the sustainable development program through partnerships / collaboration with industry leaders and the community.

As the company continues to grow and more SHA villages are developed, CDC will establish a centralized procurement system to increase efficiency and deliver cost effective products to our customers.

It will also be necessary to take on additional help in the marketing and Research & Development as growth continue.
### Job creation/ Village

<table>
<thead>
<tr>
<th>Number of Jobs Departments/Job specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>20   Plant Setup</td>
</tr>
<tr>
<td>10   Master builders</td>
</tr>
<tr>
<td>10   Electrician</td>
</tr>
<tr>
<td>10   Plumbers</td>
</tr>
<tr>
<td>50   Landscape/Farming</td>
</tr>
<tr>
<td>10   Painters</td>
</tr>
<tr>
<td>10   Cabinet Makers</td>
</tr>
<tr>
<td>10   Aluminium Frame makers/glazers</td>
</tr>
<tr>
<td>10   General Laborers</td>
</tr>
</tbody>
</table>

**Total Number of Jobs created per village:** 140
Income Generation

- The Food House is the primary source of income for each house hold in the SHA Village. The Food House generates a gross revenue of 1000 USD per month which is sufficient to service the loan.

- Other income is derived from participation in Agriculture, sell of SHA products and other social enterprises.
Humanitarian Funding Formula

Professional Fees  5%
Management         12%
Training           2%
Social Outreach    1%
Housing           80%

Monthly draw downs against Audited reports for 5 years

First year we will receive 250M USD
Conclusion

- We are ready, able, and willing to build 100 sustainable green villages in any Country.
- All we need is for the participants to be good citizens; participate in all the Programs, service their loans and pay for all municipality services and other applicable levies and service charges as per prevailing laws.

“The future is upon us”

THANK YOU!
Dr. Ivan H Louw  
Founder and President  
Smart House Afrika (Pty) Ltd

Dr. Ivan Howard Louw was born in Fietas Johannesburg on the 17 TH March 1956 and forcefully removed to Kliptown where he schooled before moving to Eldorado Park. He is the co-founder of Brotherhood with Dr. Don Mattera, a soccer club. He championed the rights of disabled people and was instrumental in restoring the dignity of disabled by successfully changing the care centre names from crippled to disabled. He created 200 employment opportunities for disabled in Eldorado and assisted in obtaining grants and land for them. He was also actively involved in black independent churches leadership where he successfully fought for churches to be granted land to build churches. He was awarded an Honorary Doctorate in Business Science by the Zionist Christian University. He is currently a Deacon at Mount Carmel Ministries International in Eldorado Park under Ps. Desmond Petersen

He is currently serving as The President of Smart House Afrika (Pty) Ltd which he founded in 2012. He owns the patent and copy rights on the Smart House Afrika (ABT) Alternative Building Technology Worldwide. He also holds the patent rights to The Food Pole. An invention that will create food security for the poor and needy and provide an income of 1000 Dollars per month for any household.

He has travelled to 27 countries of the world where he also registered and patented his products. Is married to the wife of his youth Ann a retired teacher, together they have been blessed with 4 children and 6 grandchildren.
George William Bentley  
Project Director  
Smart House Afrika (Pty) Ltd  

George Bentley was born in South Africa and matriculated in 1977 at Florida high school. He joined the police force in 1978 before joining the family construction business in 1983. George has extensive experience in construction either gained from his work experience or studies. He has been involved in various building projects for government such as schools, hospitals, retirement villages, post offices and nursery schools.

George Bentley holds a Master’s degree in Business Administration and has various qualifications in quantity surveying, building master project management, payroll management, architectural drawings, and theology. He is a rugby coach and referee and was ordained a pastor in 2000. He is a member of NHBRC and BIFSA.
Jean Niyonzima was born in Rwanda and currently resides in Lesotho. He is a Director and Founder of Zima Holdings (Pty) Ltd, Le Reve Research and Management Services and Star Energy (Pty) Ltd. He is currently serving as the Management Strategic Partner for Smart House Afrika (Pty) Ltd through Zima Holdings (Pty) Ltd, the project management company for Smart House Afrika (Pty) Ltd. The management company provides advisory and consulting services including contract and/or Project management, Board participation, business development and strategic planning, research, active involvement in pursuing acquisition opportunities, negotiation of agreements, and assistance in obtaining financing.

Jean Niyonzima holds a M.Sc. in Responsibility and Business Practices from the Bath University School of Management in UK, a B.Sc. degree in Forestry and a Diploma in Education. Jean has extensive experience in projects management and corporate direction gained from his studies and work with various international development organizations and businesses. He has served as a Managing Director for Friesland Country Dairies (Pty) Ltd and Masimu Investments (Pty) Ltd. As a consultant, he works with smaller and medium enterprises helping them to develop and manage their businesses. He has also consulted for the government of South Africa on Land Reform, the United Nations on Corporate Responsibility and NEPAD on barriers to entrepreneurship in East and Central Africa.

He is an associate of the New Academy of Business, a member of the South African New Economics Foundation, The Association for Sustainability Practitioners and the World Institute for Leadership Management in Africa.
Contact

Dr. Ivan H Louw
President & Founder
Smart House Afrika (Pty) Ltd
Tel: +27 76 2233880
Email: theivanh@smarthouseafrika.com
Website: www.smarthouseafrika.com
Skype: thekhoisan