# THE MOCK SHARKROOM
## Summary of investment proposals

The fourth edition of the Sharkroom took place in Zanzibar, Tanzania at the 40th Annual AUHF Conference and AGM on October 17th 2024. A total of 5 participants took part, from 4 different countries – Burkina Faso, Kenya, Tanzania and South Africa. 3 participants pitched in person while 2 pitched virtually. 2024's Sharkroom focused on 'sustainable and innovative solutions along the housing value chain.'

The panel of investors, with decades of international experience in housing investment among them, constituted Pascaline Pascaline Sefawe, Deputy CEO- Corporate Services of Botswana Housing Corporation; and Debra Erb, Principal of DLE Advisors and Director of Chrysalis Housing Impact Accelerator. The winner of the Mock Sharkroom was the DevelopABLE Development Packaging Application. You can access the presentation here.


*Mfundo Mabaso, AUHF Board Secretary and Chair of the AUHF's Investments Support Committee, facilitates the Sharkroom session on Day 2 of the Conference in Zanzibar, Tanzania.*

Since its formation in 1984, the AUHF has evolved into a member-based, industry association of mortgage banks, building societies, housing corporations, Development Finance Institutions and other organisations involved in the mobilisation of funds for shelter and housing on the African continent. As an industry body, the AUHF promotes the development of effective housing markets and the delivery of affordable housing across Africa, working in the interests of its members and the industry as a whole. For more details about the AUHF, email Thandiwe Dhlamini: thandiwe@housingfinanceafrica.org

## Affordable housing investment summary

## Living and Living Better for the Underprivileged in Boassa, Burkina Faso

Yaam Solidarite (a subsidiary of the architectural agency "YAAM International) is a Community Based Organisation based in Burkina Faso that adopts a participatory approach in the development of sustainable housing that is accessible to the most disadvantaged segments of the population. Email at: sayoubatiemtore@yahoo.fr

### Living and Living Better for the Underprivileged Project is seeking €100 000 to upgrade the housing units and infrastructure in Boassa, Burkina Faso

Burkina Faso was hit by a torrential downpour in 2009, receiving over 263 millimeters of rain in a single day. The heavy rainfall resulted in widespread damage to mud-brick homes, many of which were not built according to proper construction standards. Furthermore, uncontrolled urbanization and the significant lack of urban housing have led to high informality and land insecurity in the housing sector.

Yaam Solidarité, founded in 2010 in response to the floods was involved in the reconstruction and rehabilitation of homes for the affected population. Currently, the association works to improve housing conditions for vulnerable communities, primarily in the Boassa district of Ouagadougou. The organization promotes self-construction and the use of local and sustainable materials.

### Key aspects

The "Living and Living Better for the Underprivileged in Boassa" project is funded by the French Development Agency and the Abbé Pierre Foundation, supported by CRAterre, urbaMonde, and Yaam Solidarité. The project includes the establishment of a revolving fund and also includes a multi-country component to promote the exchange of best practices amongst emerging grass root federations in Burkina Faso, Senegal, and Guinea Bissau.
The project seeks to establish a €100,000 revolving fund to support the rehabilitation of 150 homes.Through the revolving fund, the project is also looking to develop semi-collective sanitation works at street level, public spaces on a neighborhood scale, and also 50 income-generating activities carried out by several community groups to allow residents to increase their savings and further invest in improving living conditions.

*Images of Yaam Solidarite engaging with the local Boassa Community Source: Yaam Solidarite*

# Sharkroom contestant #2

## Affordable housing investment summary

## Dodoma Clay Brick and Tiles Project (DCB) , Dodoma, Tanzania

The DCB project led by Build Africa Holdings aims to increase access to affordable housing, by setting up clay building material plant of **485 000 bricks/day** production capacity in Dodoma, representing total investment of **US$ 24 0 million**. Email Shauri Lyaku: srlyaku@yahoo.com

### Dodoma Clay Brick and Tiles Project

Established in 2014, *Build Africa Holdings (BAH)* is "Tanzania's first infrastructural input manufacturer , utilising cutting-edge technology to produce bricks, roofing tiles, pavers, water tanks, and processed aggregates."

BAH contends that current dynamics in the construction industry demand necessary transformation through mechanized modernisation and product diversification, to exploit huge demand for green buildings in Tanzania's towns and cities. According to BAH, Tanzania's housing and construction sector is highly dominated by the use of cement which (as of now, is not only in short supply, but also carries some negative consequences, like excessive inhouse warming/hotness in dry seasons), needs massive combination of other materials like steel iron bars, sand, water and gravel.

BAH argues that clay building material is the only way to transform Tanzania's housing industry by lowering building costs and facilitating the construction of affordable housing.

### Tanzania's Construction Industry – BAH's Market Analysis

- BAH estimates that Tanzania's housing market requires 600 million bricks per year.
- Bricks supply in Tanzania stands at 250 million bricks per year, of which 40% are made from cement (150 million bricks), 20% are made from clay (50 million bricks), and the remaining 40% are made from other materials.
- According to BAH, more than 80% (200 million) of bricks are produced from the informal sector.
- BAH has identified high demand for walling building material in Tanzania, currently at 350 million bricks per annum, which is 1 million bricks demanded every day worth an estimated US$ 1.2 billion.

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- A 1972 research report, titled 'Clays of Tanganyika,' determined that Tanzania possesses abundant clay resources compared to other natural building materials These clay deposits are widely available in over 19 regions throughout the country.

### The DCB Project will have two Phases:

**Phase I: Project Preparations**: mainly involving geological mapping of clay deposits; fine-tuning the Project's technical design requirements; fulfilling compliance requirements, such as environmental impact assessments; and detailing the Project Plan.

**Phase II: Building Factory**: primarily involving establishment of the Factory at the chosen site.

BAH estimates that both Phase I and Phase II will take not less than 18 months, costing around US$ 24 million for putting- up a semi-automatic plant, with working capital included.

**Current Project Status:** Awaiting Approvals
**Planned Construction Start**: October 2024
**Planned Completion Date:** April 2026

*Example of Build Africa's Operations. Source: Build Africa Holdings*

# Sharkroom contestant #2

## Affordable housing investment summary

## Dodoma Clay Brick and Tiles Project (DCB) , Dodoma, Tanzania

AFRICAN UNION FOR HOUSING FINANCE

BUILD AFRICA HOLDINGS

The DCB project led by Build Africa Holdings aims to increase access to affordable housing, by setting up clay building material plant of **485 000 bricks/day** production capacity in Dodoma, representing total investment of **US$ 16 million.**. Email Shauri Lyaku: srlyaku@yahoo.com

### .Key Aspects

1. A pilot project by BAH at Mbabala has identified a significant clay deposit, making it feasible to establish a semi-automatic clay brick factory. BAH indicates this initial project serves as a model for scaling up similar initiatives in other regions of the country with abundant clay resources.

2. The DCB project has an expected lifecycle of above 25 years, producing *180 million clay bricks, 52 million units of roofing tiles and 36 million units of paving tiles* annually.

3. BAH has secured local purchase agreements (LPAs) with state owned developers with government guarantees.

4. Bulk supply to three state owned Developers Watumishi Housing, Suma JKT and NHC - *Indicative Price for a 290 X 140 X 114 sized brick is US$ 0 27 cents (TZS 7200)*

5. BAH will produce a range of various bricks including paving bricks specific for towns and city roads for pedestrians, eg the Dodoma city outer ring road.

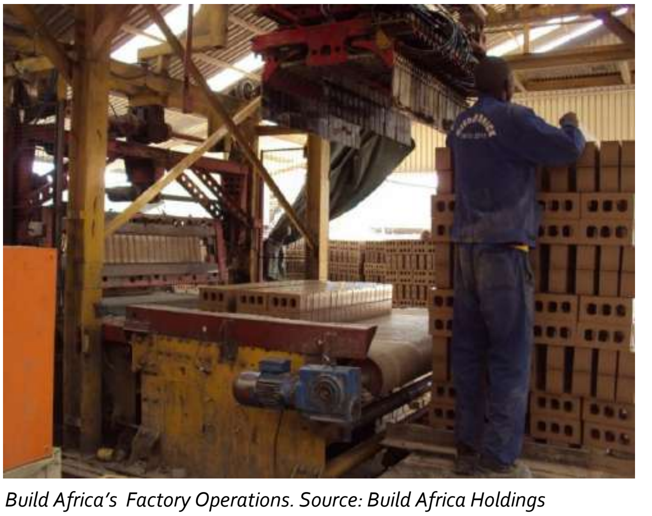
### BAH is seeking debt funding of US$16 million.

*Estimated total project value is US$ 24 million. BAH's equity contribution towards the project is US$ 7,21 million (30 %); and debt funding required is US$ 16 million (70 %).*

*BAH will use the funding for:*

| | |
|---|---|
| Land & clay pits | 558,363 |
| Buildings | 6,035,780 |
| Plant and equipment | 15,082,410 |
| Office equipment | 103,200 |
| Furniture and fittings | 103,200 |
| Motor vehicles | 103,200 |
| Pre-Operating Expenses | 1,244,877 |
| Subtotal: | 23,231,030 |
| Add: Initial Working Capital | 809,799 |
| Total | **24,040,829** |

**Estimated Project Payback Period - 3 years**



*Build Africa's Factory Operations. Source: Build Africa Holdings*

## Financial Projections

| KPI / Year | 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| ROI | | 33% | 39% | 45% | 47% | 49% |
| IRR | 49.46% | | | | | |

# Sharkroom contestant #3

## Affordable housing investment summary

## APT Studios – Infrastructure Development Proposal

APT Studios has been invited by the Senegalese Government to present its Infrastructural Development Proposal, which includes the construction of a factory to produce modular wall panels, light steel frame trusses, and roof sheeting. This local production aims to significantly increase construction capacity and reduce the expenses of structural material costs.

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### Senegal's Zero Slum Program (PROZEBID)

The Senegalese government has initiated the Zero Slum Program (PROZEBID), which includes a plan to construct 100,000 housing units over the next five years. To achieve this, the Ministry of Urban Planning, Housing, and Public Hygiene seeks to collaborate with public and private developers, as well as housing cooperatives in Senegal.

*Senegalese Residential Construction Project . Source: https://www.facebook.com/arfsBlog/posts/senegal-zero-slums-program-prozebid-the-social-housing-project-of-100000-housing/1031942064962706*

The Senegalese government has implemented policies to boost the construction sector and tackle housing shortages. These include tax incentives and simplified procedures for acquiring land and permits. Substantial investments in infrastructure, such as roads, bridges, and renewable energy, are improving connectivity and promoting economic growth.

### APT Studios – Infrastructure Development Proposal

Invited by the Senegalese government to present its Infrastructural Development Proposal, APT Studios is a turnkey development company offering professional architecture, engineering, and construction services. Its modular building solution utilizes cutting-edge technology and aims to revolutionize the building industry and address the continent's housing crisis. Modular panels are factory-prefabricated components that can be easily transported and assembled onsite, providing unparalleled versatility in design and construction while significantly reducing construction time and costs.

**APT Studio's end goal is to construct up to 2,000 houses per month over 5 years.** By expanding its factory and increasing staff capacity, the aim is to complete 100,000 houses in a shorter timeframe, addressing housing shortages and backlogs efficiently.

### Key Aspects

1. **Factory Establishment**:
- Construction and setup of a fully operational factory for manufacturing modular building panels, light steel frame trusses, and IRB roof sheets.

2. **Housing Units**:
- Production and assembly of 2,000 modular houses per month.
- Completion of 100,000 houses over the 5-year project period.

3. **Employment Opportunities:**
- Creation of an estimated 13928 jobs within the factory and on construction sites, contributing to local economic growth.
- Training programs for staff to ensure high-quality production and assembly.

4. **Sustainable Housing Solutions and Community Development:**
- Delivery of affordable, eco-friendly housing units to address the housing crisis and implementation of energy-efficient and sustainable building practices.
- Development of new residential communities with essential infrastructure and amenities.

*Proposed Factory for producing modular wall panels, light steel frame trusses, and roof sheeting . Source: APT Studios*

# Sharkroom contestant #3

AFRICAN UNION FOR HOUSING FINANCE

## Affordable housing investment summary

## APT Studios – Infrastructure Development Proposal

Senegal is undergoing a significant urban transformation, with the government spearheading ambitious projects to alleviate congestion in Dakar and drive economic growth. New urban clusters like Diamniadio and Lac Rose are being developed as engines of growth, focusing on industries, education, and residential development. To support this transformation, substantial investments are being made in critical infrastructure.

### APT Studios is seeking an initial capital investment of US$10,2 million over the duration of the project.

APT Studios plans to use these funds to establish the factory and set up the necessary machinery for manufacturing modular wall panels, light steel trusses and roof sheets. Funds will also cover initial operational costs, including salaries, training programs, and raw materials for the first phase of production. Breakdown of total funding required is as follows:

**Preliminaries and General** US$ 1,8 million
**Professional Fees** – US$ 800 000
**Factory Superstructure 8000sqm**- US$ 5,2million
**Purchase of Machinery-** US$ 2,4 million

### Investment Strategy

- **Revenue Generation**

APT Studios expects revenue to be generated in two ways. This includes the sales of modular houses to the Ministry of Urban Planning, Housing, and Public Hygiene. Secondly, collaborating with the private sector is expected to diversify the project's income streams.

- **Return on Investment**

APT Studios projects that investors can expect initial (short term returns) from the sale of the first batch of houses within the project's first year of operation. Long term returns on investment will result from the project's continuous production and sale of houses over the 5-year period.

- **Risk Management**

To effectively manage risk, APT Studios will conduct regular market analysis, implement stringent quality control measures to ensure the durability and appeal of modular houses and establish a contingency fund to mitigate unforeseen challenges or project delays.

*Image on the Right: An example of APT Studio's Modular House . Source: APT Studios*

### Financial Projections

| Project Year(s) | Phase | Revenue |
|---|---|---|
| 6 months | Setup Phase | 0$ - No sales during the setup and training period |
| 1-5 | Production and Sales Phase | Projected Annual revenue of US$ 367 million |

APT Studio projects an *annual revenue of US$ 367 million from the sale of 20 000 houses per year at US$ 18 350 each.*

**Project Payback Period - 4 years**

APT Studios will dedicate the *first 6 months* of the project to establishing the factory and training staff. According to the company, this phase is vital for ensuring operations are fully established and the team is well-prepared for large-scale production.

*After this setup phase*, APT Studios intends to begin constructing of the first 20,000 houses. Once these initial houses are built and sold, the company forecasts that it will start generating significant revenue which will enable it to be in a strong position to begin repaying the investment.

Based on the company's projected annual net cash flow of US$35 million, APT Studios expects to recover the initial investment within the first year of sales, prior to the initial 6 months commencement of factory setup and training. This structured approach ensures that APT Studios has sufficient time to establish operations, train staff, and start generating returns before commencing repayment.

# Sharkroom contestant #4

## Project proposal summary:

## Affordable Key to Real Estate, Nairobi, Kenya

Hodhi Inc. through its flagship product (AKRE) facilitates the development of affordable housing, access to an affordable and secure investment product as well as access to affordable credit. Hodhi seeks US$ 1.5 million to facilitate the roll out of the AKRE resulting in financing the development of 3500 affordable rental units in Nairobi, Kenya, over 5 years.

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## Affordable Key To Real Estate- AKRE

Hodhi's flagship product, the AKRE (Affordable Key to Real Estate) enables individuals to affordably invest in affordable housing and get a high return (at an average of 19% per annum) from a combination of asset appreciation, rental income and interest from sovereign securities. The product also provides investees with access to affordable rental accommodations in urban areas, credit to either invest in education, start a business or save money to incrementally build or buy their own home.

## Key aspects

1. An AKRE is a digital asset, backed by real estate and sovereign securities, that grows in value over time and whose value is based on the value of the underlying asset, rental income and interest from sovereign securities.

2. AKREs are priced at an affordable 50 Kenyan shillings, enabling investors of all income groups to purchase as many as they can afford.

3. Hodhi's AKREs benefit a wide variety of people and includes Individuals, like mama mbogas (vegetable vendors) who are looking for a secure and affordable investment product, that allows for a one time investment, grows at a rate higher than most secure investment products, while giving them an opportunity to save and access affordable credit.

4. Within five years, Hodhi aims to finance the delivery of at least 3,500 new affordable rental housing units in Nairobi, Kenya, through the sale of AKREs. This will provide affordable rental accommodation to individuals and families across the city, offer an affordable and secure investment opportunity to over 3 million people, and extend more than 13 billion shillings in affordable credit to members of the public and cooperative societies.

**Current Project Status:** Implementation

**Planned Launch Date:** January 2025

## The Ask: US$ 1.5 million

Hodhi seeks **US$ 1.5 million equity funding** to facilitate the roll out of the AKRE. The funding will be used to support technology development, operational costs, professional services and community building.

## Financial Projections

| Investment Metric | Amount (US$) |
|---|---|
| Projected Net Profit | 7,800,000 (5 years) |
| Expenses | 6.7 million |
| Projected IRR | 154 % |
| Projected Sales Revenue | 14,500,000 |

*CAHF conducted an interview with Mao Mukuria, Co Founder of Hodhi Inc. Read the full profile here*

# Sharkroom contestant #5

African Union for Housing Finance

NOVO IMPACT FUND NPC

## Project proposal summary:

### DevelopABLE Development Packaging Application, Cape Town, South Africa

DevelopABLE is a technology-driven, process guided, professional-facilitated development preparation, packaging and approval application by NOVO Impact Fund. Novo is a small impact fund that researches and invests in innovative ideas and institutions to drive inclusive housing solutions in unexplored ways. Email David Gardner: david@gardner.za.net

## DevelopABLE Development Packaging Application, Cape Town, South Africa

Micro and Small Developers (MSDs) encounter significant challenges in acquiring the necessary financing and municipal authorizations for small-scale developments that adhere to planning and building standards, technical specifications, and financial viability criteria. Moreover, MSDs tend to be first time developers with limited experience and sometimes lack the professional training and skills required to efficiently navigate property development.


Source: DevelopABLE Mock Sharkroom Presentation

## Housing Project Packaging Reinvented: DevelopABLE's Vision

DevelopABLE is a PropTech Application built on the iBuild Platform and accessible on desktop & mobile phone. DevelopABLE can be used by developers, professionals, municipalities, financial institutions and development facilitation organizations to radically reduce the time, minimise the costs and increase significantly improve chances of gaining municipal and financial approvals for developments.

**Current Project Status:** Development in progress

**Project Start Date**: 2022

**Planned Launch Date:** March 2025

## The Ask: US$ 350 000 to gear NOVO's Initial investment to take DevelopABLE to the African Market

The development process is partially funded by NOVO Impact Fund and Mukhalu. This initial investment of US$150 000 funded the completion of the concept, business plan, implementation plan, Wireframes, piloting and application development.

The financial ask of **US$ 350 000** is expected to take DevelopABLE to full implementation (Go Live) and provide operations capacity for the next 18 months.

WINNER!

**Technology Development**: iBuild appointed to develop technology to **"Go Live"** (March 2025).

**Operations Capacity for 18 months:**
6-month preparation phase (to March 2025).
12-month launch phase (to March 2026).

DevelopABLE's core modules have undergone development and testing, with successful pilot projects validating their functionality.

The application has garnered strong interest from two financiers, one city government and ten MSDs in South Africa. Given the small-scale rental sector's significant contribution to affordable housing in Africa, Developable has the potential to scale, generate high returns and achieve immediate impact.

**DevelopABLE**

***Development. Packaging. Simplified.***