

KENYA GREEN BUILDING SOCIETY

Build Green, Save Kenya

SUSTAINABLE AND AFFORDABLE HOUSING POCKET GUIDE

ACKNOWLEDGEMENTS

This Pocket Guide is a collective effort.

The following people contributed the development of this pocket guide:

Project Lead and Supervisor : Nasra Nanda

Project Team and Sustainable & Affordable Housing Support : Paul Anyango, and Kigweru Mumbi

KGBS Youth Member Support: Michael Anakala, and Viona Kamia

Reviewers : Florence Nyole and Lydia Owuor

We would also like to appreciate all the partners and individuals who have contributed to the development of the sustainable and affordable housing market and movement.

Thank you.



TABLE OF CONTENTS

PART 1: INTRODUCTION, OBJECTIVES, WHO WE ARE AND WHO WE WORK WITH

- 1. INTRODUCTION
- 2. OBJECTIVES
- 3. WHO WE ARE AND WHAT WE DO
- 4. OUR SERVICES: HOW WE CAN SUPPORT YOU
- 5. KEY PARTNERS, MEMBERS AND PLAYERS DRIVING SUSTAINABLE & AFFORDABLE HOUSING

PART 2: UNPACKING SUSTAINABLE & AFFORDABLE HOUSING

- 6. WHAT IS THE AFFORDABLE HOUSING PROGRAM (AHP) IN KENYA
- 7. KEY STAKEHOLDERS IN AFFORDABLE HOUSING (DEMAND AND SUPPLY)
- 8. BENEFITS OF AFFORDABLE HOUSING

PART 3: A DEEP DIVE ON WHERE WE ARE

- 9. ADDRESSING THE GAPS, CHALLENGES, UNLOCKING OPPORTUNITIES IN SUSTAINABLE AND AFFORDABLE HOUSING
- 10. THE GAPS AND CHALLENGES
- 11. OPPORTUNITIES

PART 4: AFFORDABLE HOUSING IN ACTION

- 13. SOME NOTABLE AFFORDABLE HOUSING PROJECTS IN KENYA
- 14. CONCLUSION
- 15. CONTACT US

PART 1: INTRODUCTION, OBJECTIVES, WHO WE ARE AND WHO WE WORK WITH



1.INTRODUCTION

Kenya is at the forefront of driving the climate agenda for the Global South, with sustainable urban development as a critical focus. At the Kenya Green Building Society (KGBS), we understand that addressing the country's housing deficit in an inclusive, environmentally responsible, and economically viable manner is paramount to achieving this vision.

Affordable housing is a pressing issue globally, with millions of people lacking access to dignified, affordable, and operationally sustainable dwellings. In Kenya alone, the housing deficit is estimated at 2 million units, with an annual demand of 250,000 new homes far outpacing the supply of approximately 50,000 units.

In both global and African contexts, the goal of affordable housing is to provide homes that are within reach for low- and middle-income earners while promoting environmental and social sustainability. Currently, the global housing deficit affects over 1.6 billion individuals living in inadequate conditions, and Africa alone faces a shortfall of at least 50 million housing units, with Kenya requiring an additional 2 million homes.

2. OBJECTIVES

This guide aims to:

- Define affordable housing in both global and African contexts.
- Increase awareness and adoption of sustainability, and green building best practices in the context of Affordable Housing.
- Highlight the importance of sustainable building practices in achieving affordability.
- Provide insights into financing models and the roles of various stakeholders.
- Showcase successful sustainable housing projects in Kenya.
- Guide developers and policymakers on regulations, certifications, and incentives.
- Highlight the role of strategic partnerships in advancing sustainable development.

3. WHO WE ARE & WHAT WE DO

The KGBS is an independent, non-profit, non-political organization dedicated to transforming the built environment in Kenya.

As a green building council, traditionally, our mandate is to advocate for, educate about, and certify green buildings to foster an environmentally, socially, and economically progressive built environment.

However, the KGBS, is not your traditional green building council, we recognize that the built environment is an ecosystem comprising all that enables or prevents the proper functioning of cities, spaces and infrastructure that make up a space. In this regard, for us, the built environment is an ecosystem of opportunity, serving as a platform for dignity, in relation to communities, a platform for prosperity in relation to businesses, and a platform for legacy, for government.

In particular, in the context of housing, our role, is to champion sustainable, gender, youth, and differently abled, inclusive, and affordable housing,

KGBS is an established member of the World Green Building Council, and our CEO currently serves as the Chairperson of the Africa Regional Network of the World Green Building Council.

4. OUR SERVICES: HOW WE CAN SUPPORT YOU

KGBS, in collaboration with partners and members, provide a variety of services to support your sustainable and affordable housing journey:

1. Technical Expertise & Certification

Providing technical advisory services and comprehensive project support to assist developers in achieving green certification standards, thereby enhancing access to sustainable finance and fulfilling investor expectations.

2. Education, Knowledge Management and Capacity Building

- Offering training on ESG, green buildings, and other sustainability courses in support of both sustainable developers and professionals supporting affordable housing projects.
- Creating customized training programs to align projects with sustainability objectives and streamline their execution.

3. Strategic Advisory & Market Research

- Performing market feasibility studies.
- Delivering strategic advisory services to bolster the long-term sustainability of housing projects.

4. Project Implementation Support

- Providing expert consultations on sustainable design, construction, and operations.
- Helping integrate green building principles into both new and existing projects.

5. Resource Provision

 We enable access to Jenga Green Library, a repository for sustainable building materials and services (<u>Jenga Green Library</u>), so that your project uses low carbon materials from inception, enhancing your chances of being a green development.

6. Research, Grants & Innovation

- Carrying out case studies, technical guides, and best practice research to identify gaps and opportunities in the market.
- Encouraging the adoption of innovative, sustainable building technologies.

7. Advocacy & Policy Engagement

- Advocating for sustainability policies at both national and county levels.
- Collaborating with stakeholders to develop regulations that sustainability affordable Housing

8. Networking & Community Building

- Encouraging collaboration through events, partnerships, and online platforms.
- Providing opportunities for professionals to exchange insights and foster market transformation.

5. KEY PARTNERS, MEMBERS AND PLAYERS DRIVING SUSTAINABLE & AFFORDABLE HOUSING

KGBS leverages its strategic partnerships to enhance impact and support with a view of localizing solutions and globalizing our reach by tapping into regional and global expertise. KGBS collaborates with our diverse network of partners to facilitate market transformation :

Government & Public Institutions:



MINISTRY OF LANDS, PUBLICWORKS, HOUSING AND URBAN DEVELOPMENT

State Department for Housing and Urban Development

• State Department of Housing & Urban Development

The State Department of Housing & Urban Development is the key government agency responsible for planning and implementing affordable housing initiatives in Kenya. It oversees policies and programs aimed at increasing access to decent housing, particularly through the Affordable Housing Programme (AHP). The department works with various stakeholders to bridge the housing gap by facilitating investments, land use planning, and policy reforms that enhance housing affordability.

KGBS collaborates with the State Department of Housing & Urban Development to integrate sustainability into Kenya's affordable housing agenda. This partnership involves advocating for green building guidelines in housing projects, training developers and policymakers on sustainable construction practices, and promoting climate-resilient urban planning. By working together, KGBS and the department are ensuring that Kenya's affordable housing initiatives incorporate energy efficiency, water conservation, and low-carbon materials, making homes more sustainable and cost-effective for residents.



• State Department of Public Works

The State Department of Public Works is responsible for the design, construction, and maintenance of public infrastructure in Kenya. It plays a central role in setting standards for the built environment, ensuring that infrastructure projects align with national development goals and sustainability objectives. The department oversees public building projects, enforces construction regulations, and integrates climate resilience into infrastructure development.

KGBS partners with the State Department of Public Works to promote green building standards in public infrastructure projects, including affordable housing. collaboration sustainable and This involves EDGE and LEED certifications incorporating in public housing developments, advocating for climate-friendly building materials, and ensuring that government-initiated housing projects align with Kenya's Nationally Determined Contributions (NDCs). Through joint capacitybuilding programs and technical assistance, KGBS is supporting the integration of energy efficiency and climate resilience in Kenya's public housing projects.



• Kenya Mortgage Refinance Company (KMRC)

The Kenya Mortgage Refinance Company (KMRC) is a financial institution established to provide affordable long-term funding to primary mortgage lenders, enabling them to offer low-interest home loans. KMRC plays a crucial role in deepening Kenya's mortgage market and making homeownership accessible to middle- and low-income households. By providing liquidity and risk-sharing mechanisms, KMRC enhances the affordability of housing finance.

As a stakeholder in the Affordable Housing Sector, KMRC is dedicated to advancing green affordable housing finance in Kenya. Recognizing the critical need for sustainable and environmentally friendly housing solutions, KMRC leverages strategic partnerships and has been implementing and participating in initiatives geared towards unpacking opportunities in Green Affordable Housing and establishing linkages that would help drive green residential housing development.

Development & Research Organizations:



• UN-Habitat

UN-Habitat is the United Nations agency dedicated to promoting socially and environmentally sustainable urban development. It works globally to advance affordable housing, urban resilience, and climate-responsive infrastructure while advocating for policies that create inclusive and livable cities. UN-Habitat plays a key role in supporting governments to implement sustainable urbanization strategies, ensuring that cities are climate-smart and resilient to emerging challenges such as rapid urban growth and climate change.

KGBS collaborates with UN-Habitat to promote sustainable and affordable housing through the integration of green building principles in urban planning and housing policies. This partnership includes joint initiatives on sustainable urban development, capacity-building programs for policymakers and developers, and pilot projects that showcase energy-efficient and climate-resilient housing solutions. KGBS and UN-Habitat work together to support the implementation of Kenya's affordable housing agenda, ensuring it aligns with global sustainability frameworks such as the New Urban Agenda and SDG 11 (Sustainable Cities and Communities).



• Reall

Reall is a global social enterprise that improves the lives of under-served households in urban Africa and Asia by building and increasing access to green, resilient, affordable homes. Through its investments in climatesmart, affordable housing, Reall delivers across the range of sustainable development goals. Reall works to increase market confidence through demonstration, evidence, and advocacy by creating and unlocking scalable, sustainable, and financially viable housing solutions to bridge the affordable housing gap.

KGBS partners with Reall to advance the adoption of climate-smart, affordable housing by promoting sustainable construction practices and innovative financing solutions. Together, KGBS and Reall are working to address the gender finance gap n green affordable housing finance, through GAHF, and work towards ensuring that affordable housing developments in Kenya are not only accessible but also inclusive, environmentally sustainable and climate-resilient.



Creating Markets, Creating Opportunities

• International Finance Corporation (IFC)

The International Finance Corporation (IFC), a member of the World Bank Group, is a leading development finance institution that promotes private sector investment in emerging markets. IFC provides financial and advisory services to businesses and governments, with a strong focus on sustainable infrastructure, green finance, and climate resilience. Through its EDGE certification program, IFC is driving the global adoption of resource-efficient and low-carbon buildings.

KGBS collaborates with IFC to promote green building certification and financial incentives for sustainable and affordable housing projects. Through this partnership, KGBS supports the adoption of IFC's EDGE certification in Kenya's housing sector, equipping developers with tools to design and construct resource-efficient homes. Additionally, the collaboration focuses on mobilizing climate finance for green affordable housing, and facilitating knowledge exchange on sustainable construction practices.



• Centre for Affordable Housing Finance in Africa (CAHF)

The Centre for Affordable Housing Finance in Africa (CAHF) is a research and advocacy organization dedicated to improving housing finance systems across the African continent. CAHF provides critical market intelligence, policy recommendations, and financial models that support the growth of affordable housing markets in Africa. It works with governments, financial institutions, and private sector players to create an enabling environment for housing affordability.

KGBS partners with CAHF to research on innovative green financing mechanisms, policy advocacy for incentives such as sustainability-linked mortgages, and technical support for financial institutions integrating green finance into housing loans. By working together, KGBS and CAHF are fostering an ecosystem where affordable housing development aligns with sustainability goals and financial viability.



• Habitat for Humanity

Habitat for Humanity is a global non-profit organization that works to provide safe, decent, and affordable housing for low-income communities. Through partnerships with governments, private sector players, and civil society organizations, Habitat for Humanity develops housing solutions that integrate climate resilience, sustainable construction, and community-driven approaches to shelter.

KGBS collaborates with Habitat for Humanity to scale up green, affordable housing initiatives by advocating for sustainable construction policies, facilitating capacity-building programs. This partnership focuses on ensuring that low-income housing developments incorporate climatesmart materials, energy efficiency measures, and water conservation systems. By combining KGBS's expertise in green building with Habitat for Humanity's extensive reach in community-based housing, this collaboration is advancing Kenya's commitment to sustainable and inclusive housing solutions.

Industry Associations & Private Sector



• Architectural Association of Kenya (AAK)

The Architectural Association of Kenya (AAK) is a leading professional association for built environment professionals in Kenya, representing architects, quantity surveyors, town planners, engineers, landscape architects, environmental design consultants, construction project managers and interior designers. AAK plays a crucial role in setting standards, advocating for professional excellence, and shaping policies that influence Kenya's urban and built environment. Through research, training, and policy engagement, AAK advances sustainable architectural practices and promotes responsible urban planning.

KGBS collaborates with AAK in promoting sustainable and affordable housing by integrating green building principles into architectural designs and planning standards. This partnership involves advocacy for green building codes, capacity-building programs for professionals on green building certifications, and joint efforts to ensure that sustainability is a core aspect of affordable housing projects in Kenya. By working together, KGBS and AAK are influencing policies that support climateresilient housing solutions and drive the adoption of energy-efficient and low-carbon building materials.



• Nairobi Securities Exchange Plc

The Nairobi Securities Exchange Plc (NSE) is Kenya's primary securities market, facilitating investment through equities, bonds, and financial instruments. It plays a key role in mobilizing capital for economic growth and sustainable development. Through initiatives like Green Bonds and Real Estate Investment Trusts (REITs), NSE promotes ESG-aligned investments, driving climate-friendly and impact-driven financing in Kenya.

KGBS, like the NSE supports sustainable and affordable housing by recognizing sustainability as an opportunity to drive investment by recognizing green financing solutions such as Green Bonds and Green REITs to fund energy-efficient and climate-resilient developments. Together, they advocate for regulatory incentives, educate stakeholders on green finance, and drive investment in low-carbon housing, ensuring Kenya's affordable housing agenda aligns with sustainability goals.



• Kenya Property Developers Association (KPDA)

The Kenya Property Developers Association (KPDA) is a membershipbased organization that represents the interests of property developers in Kenya. KPDA plays a pivotal role in advocating for policies that create an enabling environment for real estate development, ensuring sustainability, efficiency, and economic viability in the housing sector.

KGBS partners with KPDA to champion sustainable and affordable housing by engaging property developers in green building certification, financing mechanisms for green homes, and policy advocacy for incentives such as tax rebates on eco-friendly materials. This collaboration enhances the adoption of sustainable real estate practices, promotes the construction of climate-resilient homes, and ensures that green housing solutions are both scalable and financially viable for developers and homeowners.



• REITS Association of Kenya (RAK)

The REITS Association of Kenya (RAK) promotes the development and growth of Real Estate Investment Trusts (REITs) as a key financial instrument for real estate investments in Kenya. By advocating for policies that enhance the adoption of REITs, RAK facilitates capital flow into the housing sector, including sustainable and affordable housing developments.

KGBS like the RAK recognises the importance of green investments in real estate and aim to integrate sustainability into real estate investments, for RAK, this is through the promotion of Green REITs investment vehicles that prioritize environmentally responsible housing projects. This partnership involves advocating for regulatory incentives for green investments, and fostering investor confidence in climatesmart housing developments. Through this synergy, KGBS and RAK aim to drive large-scale investments in affordable, energy-efficient, and lowcarbon housing projects across Kenya.



• Acorn Holdings

Acorn Holdings is a leading real estate developer in Kenya specializing in purpose-built student accommodation, and a KGBS Member. Through their innovative investment models, including the Acorn Student Accommodation REITs (Real Estate Investment Trusts), Acorn has revolutionized the student housing market by providing high-quality, affordable, and sustainable housing solutions for students in Nairobi and other urban centers. Their developments emphasize energy efficiency, smart water management, and green building practices.

KGBS partners with Acorn Holdings to promote sustainability in student housing through green certification and financing mechanisms. Acorn has embraced IFC's EDGE certification to ensure their buildings are energy- and water-efficient. KGBS supports Acorn by providing technical expertise, advocating for green finance models such as green bonds, and driving policy engagement to ensure that student housing developments align with Kenya's climate resilience and low-carbon goals.



• International Housing Solutions

International Housing Solutions (IHS) is a private equity investor focused on affordable housing across Africa since 2005. IHS currently manages six Africabased Affordable Housing funds including the first fund in Kenya where they're members of KGBS.

The firm has a well-established reputation in Africa for delivering Green Affordable Housing from conception, through to construction and property management targeting middle and lower-income groups . IHS is also a pioneer in the implementation of "Green" Affordable Housing in Africa meeting the IFC EDGE Green Buildings standards for their residential properties

KGBS collaborates with IHS to drive green financing for affordable and climate-resilient housing projects in Kenya ensuring that affordability does not compromise sustainability.



• National Housing Corporation

The National Housing Corporation (NHC) is a state-owned enterprise tasked with implementing the Kenyan government's housing policies, particularly in the development of affordable housing for low- and middle-income groups and a KGBS Member. NHC plays a crucial role in expanding access to homeownership through innovative financing models and large-scale public housing projects.

KGBS partners with NHC to integrate sustainability into Kenya's public housing programs by advocating for green building standards and climateresilient housing solutions. This collaboration includes the adoption of lowcarbon materials, solar energy integration, and smart water conservation systems in public housing projects, KGBS also provides technical support to NHC for its affordable housing projects by incorporating KGBS green building experts in NHC projects.



• Mi Vida

Mi Vida is a real estate development company focused on delivering quality, middle-income housing solutions in Kenya and a KGBS Member. As a joint venture between Actis and Shapoorji Pallonji Real Estate, Mi Vida brings international expertise in sustainable housing and large-scale urban development. Their projects emphasize energy efficiency, modern construction techniques, and affordability.

KGBS collaborates with Mi Vida to promote green-certified housing developments by integrating sustainable building technologies into their projects. This includes advocating for EDGE certification, renewable energy integration, and the use of climate-smart materials.



• Zima Homes

Zima Homes is a sustainable affordable housing developer committed to providing eco-friendly and budget-conscious homes for Kenya's urban population and a KGBS Member. Their developments focus on green design, energy efficiency, and sustainable construction materials while maintaining affordability for middle- and lower-income families.

KGBS supports Zima Homes in obtaining EDGE certification, integrating solar energy solutions, and accessing climate finance mechanisms such as green bonds and concessional loans. Additionally, KGBS and Zima Homes work together to educate homebuyers on the long-term benefits of sustainable living, ensuring that green homes remain attractive and accessible to urban residents



• HFC

HFC, a subsidiary of HF Group, is one of Kenya's leading mortgage lenders and real estate developers and a KGBS Member. HFC provides housing finance solutions that enable homeownership for low- and middle-income earners while also engaging in the development of affordable housing projects.

KGBS partners with HFC to promote green mortgage products that incentivize homeowners and developers to invest in sustainable housing. Through this collaboration, KGBS and HFC are ensuring that climate-resilient housing is not only developed but also remains financially accessible to Kenyans.

PART 2 : UNPACKING SUSTAINABLE & AFFORDABLE HOUSING



6.WHAT IS THE AFFORDABLE HOUSING PROGRAM(AHP) IN KENYA ?

Kenya's Affordable Housing Programme was launched in December 2017 as one of the national government's four pillars of growth, in the then President H.E. Uhuru Kenyatta's Big Four Plan. The measures for implementing the AHP are stipulated in the AHP Development Framework Guideline 2018. The policy framework provides for both the supply- and demand-side, creating an enabling environment and incentives to deliver housing.

Access to adequate and affordable housing is a basic human need. Article 43 of the Constitution of Kenya provides that every person has the right to accessible and adequate housing. In addition, under the social pillar of the Kenya Vision 2030, development of quality and affordable houses for low-income Kenyans is a priority. Further, through the Bottom-Up Economic Transformation Agenda under the current President, H.E. Dr. William Ruto, the government plans to close the housing gap by facilitating the delivery of 250,000 houses per year.

The AHP targets beneficiaries from three income segments: social whose income range is (Ksh 0-19,999), Low-cost level (Ksh 20,000-49,999) and mortgage gap (Ksh 50,000-149,999).

Key strategies include:

- Public-Private Partnerships (PPPs) to leverage government land.
- An Affordable Housing Levy to facilitate financing.
- Regulatory frameworks such as the Affordable Housing Act, 2024 and the Affordable Housing Regulations, 2024.
- VAT Exemptions: Construction inputs and services for approved affordable housing projects are exempt from VAT, lowering project material costs by 16%.

7.KEY STAKEHOLDERS IN AFFORDABLE HOUSING (DEMAND AND SUPPLY)

- **Government** Supplies land, tax incentives, and regulatory frameworks.
- **Financial Institutions** Commercial banks and the Kenya Mortgage Refinance Company (KMRC) provide funding solutions to expand the mortgage markets through affordable housing schemes.
- **Developers & Investors** Participate in construction and project financing.
- End Users (Homeowners & Renters) Gain improved access to housing through initiatives like *Boma Yangu*.

8.BENEFITS OF AFFORDABLE HOUSING

Well-regulated Aaffordable housing programs are is critical for fostering sustainable urban development and social equity. Key benefits include:

Economic Benefits

- **Job Creation:** Stimulates employment in the construction, real estate, and related industries.
- Increased Disposable Income: Lowers household expenditure on rent, allowing families to allocate resources to education, healthcare, and savings.
- Economic Growth: Drives investment in housing-related sectors, boosting local economies.

Social Benefits

- Improved Living Standards: Provides safe, secure, and adequate housing for low- and middle-income families.
- Healthier Communities: Reduces overcrowding and enhances access to clean water, sanitation, and ventilation.
- Enhanced Education Outcomes: Stable housing improves children's school performance by providing a conducive learning environment.

Environmental Benefits

- Lower Carbon Footprint: Incorporating green building practices reduces energy and water consumption.
- **Sustainable Land Use:** Promotes efficient urban planning and reduces informal settlements.

Climate Resilience: Enhances resilience to extreme weather through ecofriendly construction materials and designs.

9.CURRENTLY UTILIZED FINANCING MODELS FOR AFFORDABLE HOUSING

There are several financing mechanisms that support affordable housing projects, each catering to different stages of development and types of investors:

1.Real Estate Investment Trusts (REITs)

REITs are collective investment vehicles that pool funds from multiple investors to finance income-generating real estate, including affordable housing. Investors earn returns through rental income and capital gains.

<u>Modern Financing Model</u>: REITs are a relatively modern structure that increases access to real estate markets for both institutional and retail investors, offering liquidity and regulatory oversight.

2. Equity & Loans

This refers to the injection of private capital (equity) and borrowing from financial institutions (loans) to finance housing developments. Private developers often combine both for risk-sharing and capital leverage.

<u>Traditional Financing Model:</u> Loans and private equity are common traditional financing tools, though modern financing increasingly blends equity with impact or concessional finance to support affordability.

3.Customer Deposits (Off-plan Sales)

Developers sell units before construction begins, using customer deposits to finance construction. This model reduces the developer's reliance on external borrowing and aligns supply with demand.

<u>Traditional to Modern Hybrid</u>: While off-plan sales are a traditional model in real estate, they're evolving with digital platforms and escrow systems to build buyer confidence and transparency.

4.Commercial Papers (CPs)

CPs are short-term unsecured debt instruments issued by companies to raise quick capital, typically for working capital or bridging finance during construction.

<u>Modern Financing Model:</u> CPs are increasingly used in real estate development for flexibility, especially by large and creditworthy developers, as an alternative to traditional bank loans.

Traditional v. Modern Financing Models

Below is a comparative table showing the differences between traditional and modern financing models for affordable housing.

Aspect	Traditional Financing Models	Modern Financing Models
Source of Capital	Bank loans, mortgages, government subsidies	REITs, commercial papers, crowdfunding, blended finance
Accessibility	Limited to high-credit borrowers or developers	Institutional, retail, and diaspora investors
Flexibility	Rigid terms, interest- heavy loans	Flexible terms, diversified structures
Risk Distribution	Developer or borrower, bears most risk	Risk shared among stakeholders
Instruments Used	Mortgages, long-term, loans, personal savings	REITs, green bonds, commercial papers, equity
Customer Participation	End-user mortgage,after construction	Customer deposits through off-plan models
Regulatory Environment	Local banking and,housing authorities	Capital Markets Authority, other regulated bodies
Technology Use	Low	High – fintech, platforms, blockchain
Speed of Fund Mobilization	Slower due to bureaucratic or credit processes	Faster via capitalmarkets and market-driven tools

PART 3 : A DEEP DIVE ON WHERE WE ARE



10. ADDRESSING THE GAPS, CHALLENGES, AND UNLOCKING OPPORTUNITIES

Why Sustainable Affordable Housing Matters for Kenya's Future

Sustainable affordable housing is a key pillar in Kenya's development strategy, directly supporting the Big Four Agenda (specifically Affordable Housing) and Vision 2030, while also aligning with global commitments such as the Sustainable Development Goals (SDGs).

Point A: Current Market Landscape (Baseline / Status Quo)

- Housing Deficit: Kenya faces a housing shortfall of over 2 million units, growing by 200,000 units annually, with only 50,000 units delivered per year. (Centre for Affordable Housing Finance in Africa (CAHF) Kenya Housing Profile (2023); Kenya National Bureau of Statistics (KNBS))
- Energy Inefficiency: Typical low-income homes use up to 50% more energy for lighting and cooling compared to sustainable alternatives. (IFC EDGE Kenya Market Study (2020); UN-Habitat "Energy Efficiency in Buildings" Report)
- Health Risks: Poor ventilation, inadequate sanitation, and use of toxic materials contribute to respiratory diseases and waterborne illnesses. (Ministry of Health (Kenya); WHO Housing and Health Guidelines (2018))
- Affordability Gap: Many housing units remain unaffordable due to high construction costs and limited financing options. (State Department for Housing and Urban Development (Kenya), World Bank Urban Development Overview (2022))
- Environmental Impact: Construction and building operations contribute to nearly 40% of total carbon emissions globally, with Kenya's urban expansion adding pressure on ecosystems and resources. (UNEP Global Status Report for Buildings and Construction (2023))

Point B: Sustainable Affordable Housing Future (With Sustainability Integrated)

By incorporating sustainability, Kenya can transition to a housing model that offers:

• SDG 11 – Sustainable Cities and Communities

→Development of resilient, inclusive neighbourhoods with access to basic services.

→ E.g. Green homes use up to 40% less water and 35% less energy, reducing living costs. (IFC EDGE Green Buildings Market Transformation Program; World Green Building Council "The Business Case for Green Buildings")

• SDG 7 – Affordable and Clean Energy

→ Integration of solar PV, energy-efficient appliances, and passive design, cutting utility bills for families by Ksh 1,500–3,000 per month. (Kenya Green Building Society; EDGE Project Case Studies – e.g., Acorn Student Housing)

• SDG 13 – Climate Action

→ Adoption of low-carbon materials, waste reduction practices, and green mobility, helping reduce CO₂ emissions by up to 50% per unit. (WorldGBC Net Zero Carbon Buildings Commitment; EDGE Certification data (IFC))

• SDG 3 – Good Health and Well-being

→ Improved indoor air quality, access to green spaces, and better sanitation reduce disease burden by 20–30%, especially for children and elderly. (WHO Housing and Health Guidelines (2018); UN-Habitat)

• SDG 8 – Decent Work and Economic Growth

→ Creation of green jobs in construction, retrofitting, design, energy, and maintenance; up to 300,000 green jobs could be generated with full adoption of sustainable housing programs. (International Labour Organization (ILO) – "Green Jobs for Sustainable Development" Kenya Report (2022); World Bank Green Jobs Assessment (2021))

• SDG 9 – Industry, Innovation and Infrastructure

→ Use of prefabrication, modular housing, and circular construction methods improves speed and lowers costs, enabling 30–50% faster delivery. (McKinsey & Company – "Reinventing Construction: A Route to Higher Productivity" (2017); UN-Habitat Innovation Reports)

• SDG 12 – Responsible Consumption and Production

→ Incorporating circular design principles and local materials reduces construction waste by up to 60%. (Ellen MacArthur Foundation – "Circular Economy in Construction"; IFC – "Green Buildings: A Finance and Policy Blueprint")

Why the Shift from A to B Is Crucial

Integrating sustainability in affordable housing is not optional — it is the smart, inclusive, and future-proof pathway forward.

Sustainability is how Kenya can also unlock green finance, reduce long-term costs, enhance urban resilience, and meet both local development goals and global climate commitments — ensuring no one is left behind.

Metric	Point A (Current Model)	Point B (Sustainable Model)
Energy Use	High, inefficient systems	30–50% reduction through green design
Affordability	Limited to upper middle income	Wider reach due to lower life-cycle costs
Construction Waste	~40% of materials wasted	Up to 60% reduction
Job Creation	Traditional labor only	+300,000 green jobs possible
GHG Emissions	Rising per capita CO2 footprint	Up to 50% lower emissions per unit
Health Outcomes	High burden from indoor pollution	20–30% health improvement
Water Use	Excessive and poorly managed	40% reduction through low-flow systems

11. THE GAPS AND CHALLENGES

Kenya's Affordable and Sustainable Housing Challenge: Evidence-Based Snapshot

Despite Kenya's commendable efforts to enhance access to affordable housing, significant barriers persist—particularly in scaling sustainable, inclusive housing solutions. These challenges are well-documented across policy reports, financial sector analysis, and development studies.

Housing Deficit & Supply Gaps

Kenya is experiencing a housing deficit of over 2 million units, with an annual demand of 250,000 units, yet only 50,000 units are delivered per year(Centre for Affordable Housing Finance in Africa (CAHF), 2023; State Department for Housing and Urban Development).

High Financing Costs

Homeowners face mortgage interest rates ranging between 13% and 16%, far above global averages, making home ownership unaffordable for most(Kenya Mortgage Refinance Company (KMRC); Central Bank of Kenya, 2023).

Developers also struggle with high borrowing rates (up to 18% for unsecured lending) and limited access to long-term capital, especially for sustainable housing solutions (CAHF 2023 Kenya Housing Finance Report; World Bank Kenya Urbanisation Review).

This financing environment discourages investment in green features, which often require upfront capital but yield long-term savings.

Prolonged Approval Processes

The construction and building permit process in Kenya can take up to 8–12 months, especially in urban counties(CAHF Housing Investment Chronicles, 2022; Doing Business Kenya).

Delays are caused by complex and duplicated approval procedures across multiple agencies (e.g., NEMA, NCA, county planning offices), increasing costs and investor uncertainty.

Restricted Access to Resources – Land

Access to serviced land remains one of the biggest barriers to housing supply, particularly in urban areas.

Land use restrictions, tenure insecurity, and cumbersome titling processes cause an average of 400+ legal disputes annually in Nairobi alone, slowing down investment and increasing risk(National Land Commission (NLC) 2022; Kenya Judiciary Land and Environment Court Reports).

Sustainability Integration Challenges

Despite strong policy frameworks like the Vision 2030, and Kenya's commitment at COP28, enforcement and implementation remain weak at both national and county levels.

Lack of tailored financial products (e.g., green mortgages, climate-smart construction loans) prevents developers and homeowners from embracing sustainable solutions.

Inclusion Gaps in Affordable Housing

- 1. **Disability Inclusion:** Most affordable housing developments lack universal design features. There is no national requirement mandating disability-accessibility in public housing projects.(Kenya National Commission on Human Rights (KNCHR); UN Habitat Kenya 2022 Review).
- 2. **Gender Barriers:** Women face cultural and financial barriers to property ownership. Only 32% of land titles are registered under women in Kenya(Kenya Land Alliance; FAO Gender and Land Rights Database)
- 3.Gender-responsive housing policies, such as customized mortgage products for women, are yet to scale.
- 4. **Community Integration:** Affordable housing has not fully embraced mixed-income, socially cohesive development. Design often lacks public spaces, play areas, or community facilities that encourage inclusion.
- 5. **Safety & Livability:** Poor lighting, informal settlements, and lack of basic services create unsafe environments, particularly for women and children. (UN-Habitat Safer Cities Programme; Nairobi Women's Safety Audit 2021)

The Opportunity Ahead

By addressing these gaps, Kenya can:

- Boost green jobs and local industry through sustainable construction
- Improve health, safety, and dignity for low-income families
- Reduce household energy and water costs
- Position itself as a regional leader in climate-resilient urbanization

KGBS's Role in Accelerating the Transition

The KGBS has actively supported Kenya's global climate and housing commitments, and is now leading efforts to localize and implement these through:

- Championing the mainstreaming green building codes and standards
- Promoting the use of low-carbon, locally available materials
- Supporting the development of green finance tools and certifications
- Advocating for inclusive, people-centered and climate-resilient housing design

12. THE OPPORTUNITIES

1.Green Building Certification for Affordable Housing

Certifying affordable housing projects under globally recognized frameworks such as IFC EDGE, LEED, and Green Star provides several benefits, including:

- Energy Efficiency & Lower Utility Costs: Certified green homes consume less energy and water, reducing household expenses for low-income residents.
- Increased Financing Opportunities: Green-certified projects attract concessional financing, green bonds, and sustainable investment funds.
- Higher Property Value & Market Competitiveness: Green-certified developments have longer asset lifespans and enhanced marketability.
- Healthier Living Environments: Use of non-toxic materials, better indoor air quality, and improved thermal comfort enhance residents' well-being.
- Regulatory & Policy Incentives: Certified projects may qualify for tax incentives, faster approvals, and sustainability grants.
- Certified affordable housing projects gain a competitive edge by meeting ESG (Environmental, Social, and Governance) investment criteria.

2.Innovative Financing Mechanisms

There is also an opportunity for financiers to provide the following products to incentivize this market segment:

- Green Bonds & Sustainability-Linked Loans: Raising capital for developers focusing on low-carbon, energy-efficient housing.
- Blended Finance Models: Combining public, private, and donor funding to de-risk investment in sustainable housing.
- Affordable Green Mortgages: Financial institutions offering lower interest rates for eco-friendly homes.
- Pay-as-you-go financing for solar energy and water-efficient solutions can make sustainable homes more accessible and energy efficient.

3. Circular Economy and Sustainable Materials

- Use of Alternative / Low carbon Building Materials: Prefabricated panels, sustainable wood, green concrete, 3D printing, bamboo, and compressed earth blocks can reduce construction costs while enhancing sustainability and reducing the environmental impact.
- Waste-to-Energy Projects: Integrating waste management solutions within housing developments to enhance sustainability.

4. Renewable Energy and Resource Efficiency

- Solar Power Integration: Encouraging solar home systems and net-zero housing solutions.
- Water-Efficient Technologies: Adoption of rainwater harvesting, greywater recycling, and smart irrigation.
- Energy-Efficient Appliances: Government incentives for installing efficient lighting and HVAC systems.

5..Gender-Inclusive and Socially Responsive Housing

There is also a gap in the market for gender inclusive and socially responsive products that tap into women, communities and Kenya's youth as a target demographic:

- Women-Led Homeownership Programs: Providing financial products tailored to women and vulnerable groups.
- Inclusive Design: Ensuring accessibility for persons with disabilities and elderly-friendly housing.
- Community-Led Housing Models: Encouraging participatory planning and resident-driven development.
- Employment & Skills Development: Women's participation in green construction and housing cooperatives fosters economic opportunities.

6. Public-Private Partnerships (PPPs) & Policy Support

Public-Private Partnerships (PPPs) and policy support can play a crucial role in advancing sustainable and affordable housing by leveraging both government initiatives and private sector investment.

Through well-structured PPP frameworks, governments can facilitate land access, provide incentives, and create favorable regulatory environments that attract private sector participation in green and affordable housing projects. Policy support, including tax incentives, streamlined permitting processes, and sustainability regulations, ensures that housing developments prioritize energy efficiency, low-carbon materials, and resilience to climate change. . There is also an opportunity to explore:

- Streamlined permitting and approval processes
- sustainability regulations, ensures that housing developments prioritize energy efficiency, low-carbon materials, and resilience to climate change
- Leveraging Government Land: Partnerships with private developers to build sustainable, affordable housing.
- Tax Incentives for Green Developments: Reduction in VAT and import duties for eco-friendly building materials.
- Strengthening Building Codes & Regulations: Integrating mandatory sustainability measures into Kenya's housing policies, with incentives to facilitate market transformation.

7.Technology, financial mechanisms, and NDC integration within the design and project stage

Integrating digital technologies and financing mechanisms such as green bonds and consideration on how housing can support

NDCs can further enhance affordability and scalability, making sustainable housing accessible to low- and middle-income communities while driving Kenya's transition towards a net-zero built environment.

PART 4 : AFFORDABLE HOUSING IN ACTION







Garden City Residences, Mi Vida

13. SOME NOTABLE PROJECTS

Public & Private Affordable Housing Projects

Starehe Affordable Housing Project (Public)

A major initiative under the Nairobi Affordable Housing Program, this project aims to deliver approximately 6,000 housing units.

Mavoko Affordable Housing (Public-Private Partnership)

Developed in collaboration with private sector partners, this project plans to construct around 5,300 units, comprising:

- 960 one-bedroom units
- 2,400 two-bedroom units
- 1,440 three-bedroom units
- 560 studio units

Green-Certified Affordable Housing Projects

1.Mvule Gardens by 14Trees

Kenya's first 3D-printed affordable housing project, Mvule Gardens is set to deliver 52 houses in total. This project has achieved IFC EDGE Advanced certification for its sustainability features.

2. Qwetu & SPB Housing by Acorn Holdings

These are green-certified student housing projects that integrate energy efficiency and water-saving technologies.

3.Keza by MiVida

A green-certified mixed-use affordable housing project incorporating sustainable building practices. While the exact number of units is not specified in the available information, MiVida has launched multiple projects under the "Keza" brand, focusing on affordable housing.

4.National Housing Corporation, Stoni Athi Housing Project

EDGE-certified, demonstrating Kenya's commitment to green housing. The NHC Stoni Athi Housing Project includes 50 units in the Economy Block (rental) and 120 units in the main development.

5 Muzi Salama by International Housing Solutions

A green-certified affordable housing project focused on low-carbon, energyefficient affordable housing within Tilisi Developments.

14. CONCLUSION

Sustainability in affordable housing in Kenya presents both urgent challenges and transformative opportunities. Addressing existing gaps—such as high financing costs, limited inclusive design, and weak policy enforcement requires a multi-stakeholder approach that brings together government, private sector, financiers, civil society, and communities.

By integrating policy reforms, innovative financing models, and capacitybuilding efforts, Kenya can go beyond simply meeting its housing demand—it can create resilient, inclusive, and climate-smart communities that uplift lives and protect the planet.

Our Call to Action

- **Government:** Accelerate the enforcement of green building codes, reduce approval bottlenecks, and incentivize green affordable housing through tax reliefs and subsidies.
- **Private Sector:** Scale up investment in sustainable materials, design innovation, and green-certified developments.
- **Financiers:** Develop and deploy accessible green finance products such as climate-linked mortgages and concessional loans for developers.
- **Development Partners & NGOs:** Support technical assistance, capacity development, and research to localize global sustainability best practices.
- **Communities & Civil Society:** Advocate for inclusion, monitor transparency, and co-create solutions that reflect the lived realities of Kenyan households.

Way Forward

By embracing sustainability as a central pillar in affordable housing, Kenya can position itself as a regional leader in climate-resilient urban development. This transition will not only unlock green jobs, reduce household energy burdens, and improve health outcomes, but also ensure that no one is left behind in the journey toward dignified, safe, and affordable living.

Let's build not just homes, but a future where every Kenyan has access to a home that is affordable, inclusive, and sustainable.





Build Green, Save Kenya

15. CONTACT

We are always keen to support you on your journey. Should you have any questions please reach out to us on:

Email: admin@kgbs.co.ke

Phone: +254710869547

Website: <u>www.kgbs.co.ke</u>