



## **Green Financing for Affordable Housing Projects In The Republic of Kenya**

AUHF's 30th Anniversary Conference and AGM  
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## **Macro Factors to Consider in Green Financing and Energy Sustainability**

### **1) Urbanization**

- *The world is rapidly urbanizing at an unprecedented rate: The world's population today is close to 7 billion, with half (50.5%, 2010) of the people living in urban centres.*
- *The level of urbanization worldwide is expected to increase to 68% by 2050 with most of the growth going to take place in Africa and Asia. African cities will double in size until 2050, adding more than 15 million people to the urban population each year.*

### **2) Housing Demand**

- *As Africa is urbanizing rapidly, so is the demand for new housing in cities. This demand is not always followed by the supply of housing to accommodate new urban dwellers. In Kenya for instance, the estimated annual supply of housing in urban areas of 30,000-50,000 units stands against an estimated annual demand of over 150,000 units.*

### **3) Energy and Water Efficiency in Buildings**

- *Buildings alone account for over 40 % of global energy consumption (for cooling, lighting and heating etc.) and thus a significant amount of carbon emissions, too. Indeed many contemporary buildings in Africa make little reference to the environment and to sustainable building designs*

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# HF's Approach to Energy Sustainability

1. Leveraging HF's 20% market share in real estate based lending in Kenya to introduce "green building" into the market to reduce the barriers to wider adoption
2. HF's need to introduce sustainability in its business operations to not only cater for future generations, but also reduce the overall running and maintenance costs in an inflationary macro-environment, for the first time Kenyan home-buyer.
3. HF's desire to become a pioneer and a market leader in sustainable finance and green building technologies in Kenya.
4. The introduction of new green building methods tailor-made and bespoke to the African environment, through the introduction of financing and technical partnerships with global institutions actively involved in the climate change agenda.

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## ERC Regulations

- Kenya's Energy Regulatory Commission (ERC) gazetted the Solar Water Heating Regulations (2012) to facilitate uptake of solar water heating and renewable energy systems
- The regulations require for installation of solar water heating systems in all residential and commercial premises
- For new buildings, these regulations came into force and all premises with hot water requirements of a capacity exceeding 100 liters per day should install and use solar heating systems
- This regulation seeks to ensure that in 5 years from initial enforcement, all premises as described in the regulation will have installed and will be using solar heating systems
- Failure to adhere to this regulation is considered an offence and on conviction one is liable to a fine of one million shillings, or to imprisonment for a term of one year or both.

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# The IFC's Green Building Finance Facility to Housing Finance (HF)



- In February 2013 and following successful negotiations, HF secured a kshs 1.7 billion (\$20 million) line of credit from the International Finance Corporation (IFC). \$4m of this funded through the Canada Climate Change Program to finance energy efficient projects
- The funding specifically promotes homes construction that leads to at least a 20% reduction on water and energy consumed daily

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## IFC Line of Credit Features



- The IFC Line has the following important features:

<b>Lender</b>		
Loan	Senior Loan for an amount of up to US\$20 million or equivalent in Kenya Shillings (KES).	
Canada Climate Change Portion (CCCP)	US\$ 4 million of the IFC Loan to finance Energy Efficient (EE)/Renewable Energy (RE) eligible projects	
<b>Number of Fully Constructed Green Building Units</b>	<b>Reduction of CCCP Portion Dollar Spreads</b>	<b>Applicable Green Portion Dollar Spread</b>
Zero	Zero	430
500	100	330
1000	200	230
1500	300	130
2000	400	30

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## 3 Pillars of HF's Green Building Strategy

### 1. Public Awareness

Public Events and Publication Materials targeted with HF project financing product to introduce energy saving awareness to the market. The public sensitization and conferencing with property developers will also review international best practices

### 2. Development of a Green Building Rating System

A Green Building Rating System for the Kenyan scenario in conjunction with UN-Habitat, AAK, IFC and Ministry of Housing towards the achievement of the 20% reduction.

For energy efficiency, solar hot water systems and energy efficient lighting,

- a) The construction of homes with rain-water harvesting, low-flow shower heads and dual flush tanks for water closets, to reduce water consumption by more than 20%
- b) Design techniques that reduce direct sunlight into the home while enhancing air circulation and ventilation that negates the need for indoor air-conditioning in less temperate regions of Kenya.

### 3. The inclusion of a developer rebate for the successful implementation of the green features under the line of credit provided by the IFC

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## Overall Objectives of Strategy

- Environmental Sustainability through Innovation
- Reducing Energy and Water Usage to achieve housing affordability
- Tapping international sources of capital to unlock domestic opportunities
- Market Leadership
- Promoting Green Technologies for wider adoption in Kenya



# Thank You

