Emerging markets are in the midst of a construction boom

- World population will reach 9 billion by 2050: 34% higher than today – growth will be fastest in poor countries, where population is expected to actually double.

- The emerging middle class – with rising income levels – is growing by 90 million per year.

- To meet this demographic change, increased employment opportunities will have to be generated in urban areas requiring additional commercial buildings.

Buildings of almost every type represent necessary long-term development infrastructure, yet present a real danger of locking in inefficiencies for decades if constructed unsustainably.
Buildings’ Share

Global GHG Emissions 2010 by End Use

Final Energy Consumption by Sector 2010

Data source: UNEP

Data source: International Energy Agency: Transition to Sustainable Building

We have a window of opportunity to shape our built environment.

Greening construction offers a chance to lock in energy and water savings at a low cost and to secure emission cuts for decade to come.
If the right investment choices are not made today, we will be locking into high-energy urban infrastructure for decades.

Greening construction offers a chance to secure emission cuts at a low cost.

Why isn’t it already happening?

Home Owners

“Our would like lower utility bills, but there aren’t any efficient homes.”

Investors

“We would fund efficient buildings, but there is no demand for them.”

Builders

“We can build energy-efficient homes, but developers don’t ask for them.”

Developers

“We would ask for energy-efficient homes, but investors won’t finance them.”

Many green design options are accessible and cost-effective, but are not selected because of divergent interests in the building sectors.
Perception of costs and affordability of green buildings are much higher than reality given falling technology costs.

Why isn't it already happening?

Understanding commercial value of ‘Green’

Higher Sale Price
- Portland: 8% more
- Seattle: 9% more
- Singapore: 4% more

Quicker Sale
- Portland: -18 days
- Seattle: 4 times

Lower Utility Bills
- USA: 15% less

Lower Default Rate
- USA: 33% less

Higher Resale Value
- UK: +10%-14%
- Netherlands: +3.7%
- California: +8.7%
- Switzerland: .5%- 7%

Once there is a simple, quick, and affordable rating system, all parties can recognize and capture the value of superior building performance.
What will it take to transform the building sector?

Emerging Countries needs a way to make green buildings accessible for the majority of the building industry.

The mass market needs a simple, quick, and affordable rating system for market transformation.

20% EDGE penetration in 7 years
What is EDGE?

• EDGE stands for “Excellence in Design for Greater Efficiencies.”

• EDGE is a resource efficiency certification system designed for new buildings in emerging markets.

• EDGE software reveals technical solutions for going green and captures capital costs and projected operational savings.

• EDGE can be used by building professionals without the need for green building specialists.

• EDGE Certificate will be obtained at design and a construction stages.

What is the EDGE Standard?

‘A greenfield building that has 20% less energy, water and material consumption compared to an equivalent local benchmark.’ The standard provides a performance assurance to buyers and investors.
EDGE Platform

EDGE Market Transformation Platform is seeking to change the way people value green buildings.

EDGE has contextual data of utility costs and climate for different cities.
EDGE uses building physic calculations to give design-specific results.
EDGE spells out the most effective technical measures.
EDGE provides an investment planning tool for building owners.

The ‘EDGE’ platform has the potential to transform the green buildings market with cost effective solutions.

The EDGE Software – www.ifc.org/edge
Key Players

1. Building users
2. Developers/Construction industry
3. Banks
4. Material suppliers

Transforming The Market: The Model

**Finance**
- Assistance in developing specialized financial products

**Financial institutions**

**Property developers**
- Property management Cos
- Construction Cos

**Owners/Tenants**

**Finance:**
- Green Mortgages/Bonds

**Africa-wide upscale**
- EDGE toolkit
- Best practices and standards
- Feedback from implementation

**Certification Assurance**
- Knowledge Awareness
How EDGE can catalyze the market

Developers use EDGE to differentiate

Banks target GB market with new products

Owners recognize operating benefits

Government offer incentives and enables alignment of EE code

20% of all new construction in the [housing] market to be green in target markets in 5-7 years.

Construction Finance for Developers

The Concept: The “Bank” will finance eligible construction finance and rental projects meeting EDGE certification standards* with IFC wrapping a portion of Bank’s capital to lower its exposure in eligible projects.

Benefit to Bank: The bank can use the IFC facility to limit its credit exposure by sharing the risk with IFC which will enable it to provide financing at a lower rate to their developer clients.

Savings in Bank's funding can be passed on to developers and rental property owners to incentivize green construction by offsetting initial “green costs” to the end user.

Impact of Financing Solution: Developers and the end users will be indifferent between purchasing a “green home” and the current standard offering.
Green Mortgages

The Concept: The “Bank” will provide mortgages to Home Buyers to buy Green homes. The mortgage product will be a value addition product as opposed to subsidized interest rate.

Benefit to Home Buyer: Will get better terms from the bank; better debt to equity mix; tenure of mortgage maybe altered; the home buyer will get better credit enhancement

Benefit to Banks: Green home buyers default less (US study); Payment is secured against saving just the bank as assurances thru the certification less risky

Impact of Financing Solution: This helps in closing the supply and demand loop for green housing.

Example EDGE Project in South Africa

- solar hot-water,
- water efficient fittings,
- low energy lights,
- increased level of insulation,
- low E windows,
- low embodied energy materials,
- smart prepaid meters.

IFC/KfW equity investment in a leading affordable home development fund. Committed to getting 1,600-5,000 homes EDGE certified.
THANK YOU

www.ifc.org/EDGE
www.gbcasa.org.za