Status of Green Building in South Africa

Presented at NBI seminar, COP17, Durban

Manfred Braune, PrEng, GBCSA Technical Executive
7 December 2011
Why participate in such events at COP17?
Presentation Overview

1. Two realms: regulatory & voluntary
2. Celebrate progress: regulatory
3. Celebrate progress: voluntary
4. Looking ahead
5. Conclusion

Mayfair on the Lake – 4 Star Design rating
Need for both ‘compulsory’ & ‘voluntary’ benchmarks

Legislated Compulsory Standards:
Ensure that a minimum compulsory standard for sustainable development is nationally required and implemented by all – these must adapt and become more stringent and broad-based over time.

Voluntary Benchmarks & Leadership:
Provides stretch targets for leaders to go beyond minimum compulsory standards – draws organisations into new levels of transformation beyond legislated requirements.
GBCSA’s approach is to pull the market forward

Building regulation requirements

Typical practice 75%

Top 25% of Green building best practice
The Green Building Council of South Africa will lead the transformation of the South African property industry to ensure that all buildings are designed, built and operated in an environmentally sustainable way.
Celebrate Landmark Moments - COP17 hosted in Durban

Proud moment in SA’s history

COP17 hosted in Durban
opportunity to showcase South Africa’s leadership and the challenges faced by developing countries, and be the voice of Africa to the world. Green Building agenda has had significant presence.
Celebrate Landmark Moments - SANS 10400 XA

Proud moment in SA’s history

SANS 10400 part XA promulgated in Nov 2011 – South Africa’s first compulsory national standard for energy efficiency in buildings was passed.
Celebrate Landmark Moments - New Policy Dev.

Proud moment in SA’s history

Launch of NDPW’s Draft Framework for Green Buildings
In 2011 cidb gazetted 4 Star Green Star SA as government’s best practice benchmark for their own buildings – out of the 20 buildings currently registered for Green Star, 4 are government.
Celebrate landmark moments - ESKOM incentives

ESKOM has developed a whole new range of highly accessible financial incentives with less red tape and a broad range of applications.
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pre-2008: green claims
how do you compare?
now we can compare
Examples of leadership in market transformation

Menlyn Maine, Tshwane – all buildings to be Green Star SA certified
Examples of leadership in market transformation

Green Star SA in 2008 lead to local low VOC paint production
Green Star SA ‘Asset’ Rating Tools developed - four

- Office
- Retail Centre / Shopping Centre
- Multi Unit Residential
- Public & Education Building PILOT
GBCSA lead the green retrofit of 30 homes

The British High Commission in South Africa is the main funder of this project.
Looking ahead...
OF THE 9 Billion People predicted to live on Earth in 2050, 70% are expected to live in urban areas.

GBCSA will begin the development of a neighbourhood scale rating tool in 2012 for buildings in context of cities.
Two kinds of rating systems

Asset rating: 10 l/100km
Operational rating: 14 l/100km?
asset rating – finish line?

SANS 10400
Green Star As Built

asset rating – finish line?
What is an energy/water operational rating?

- Position your building’s actual performance (consumption) against industry performance (consumption)
- Position your buildings within your own portfolio

Your building

Poor ▾ Excellent

eg. level of energy efficiency
Final Tool

- ONLINE User Interface
- Freely Accessible (self assessment)
- Option for Independent Certification by GBCSA (at a cost)
- Anonymous Data Entry
- Portfolio Management (ex. Energy Star Portfolio Manager)
Benchmarking Tool Application in Green Star SA

Using an external Energy Benchmarking tool (similar to how LEED in the USA uses Energy Star) linked into overall tool.

- Energy benchmarking tool
- National database of building energy use
- Green Star SA Existing buildings performance rating tool
  - Management
  - **ENERGY**
  - Water
  - Waste
  - Materials
  - Etc…

ENERGY PERFORMANCE CERTIFICATE
Benchmarking Tool – draft data collection results

EUI (kWh/m²/yr)

100-225 kWh/m²/yr
Sponsorship of the Tool

- **Growthpoint** have committed to sponsor R1.5 million of the tool development cost in 2011.

- A further R1.5 million is required before mid 2012 (GBCSA in discussions with various organisations)

- Further R 11.5 million required over the next 3-5 years, to further develop the tool/survey in other sectors
EDUCATION

Almost 2500 professionals have attended the AP Course

345 Green Star AP's
EDUCATION

Mauritius & Ghana
SAVE THE DATE
28-30 October 2012

THANK YOU FOR YOUR SUPPORT AND PARTICIPATION DURING THE
2011 GBCSA Convention & Exhibition
Conclusion

Reduce GHG emissions & costs NOW

Mayfair, Umhlanga– 4 Star Design rating
Questions

manfred.braune@gbc.sa.org.za
Thank you

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