



# Status of Green Building in South Africa

Presented at NBI seminar, COP17, Durban

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# 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

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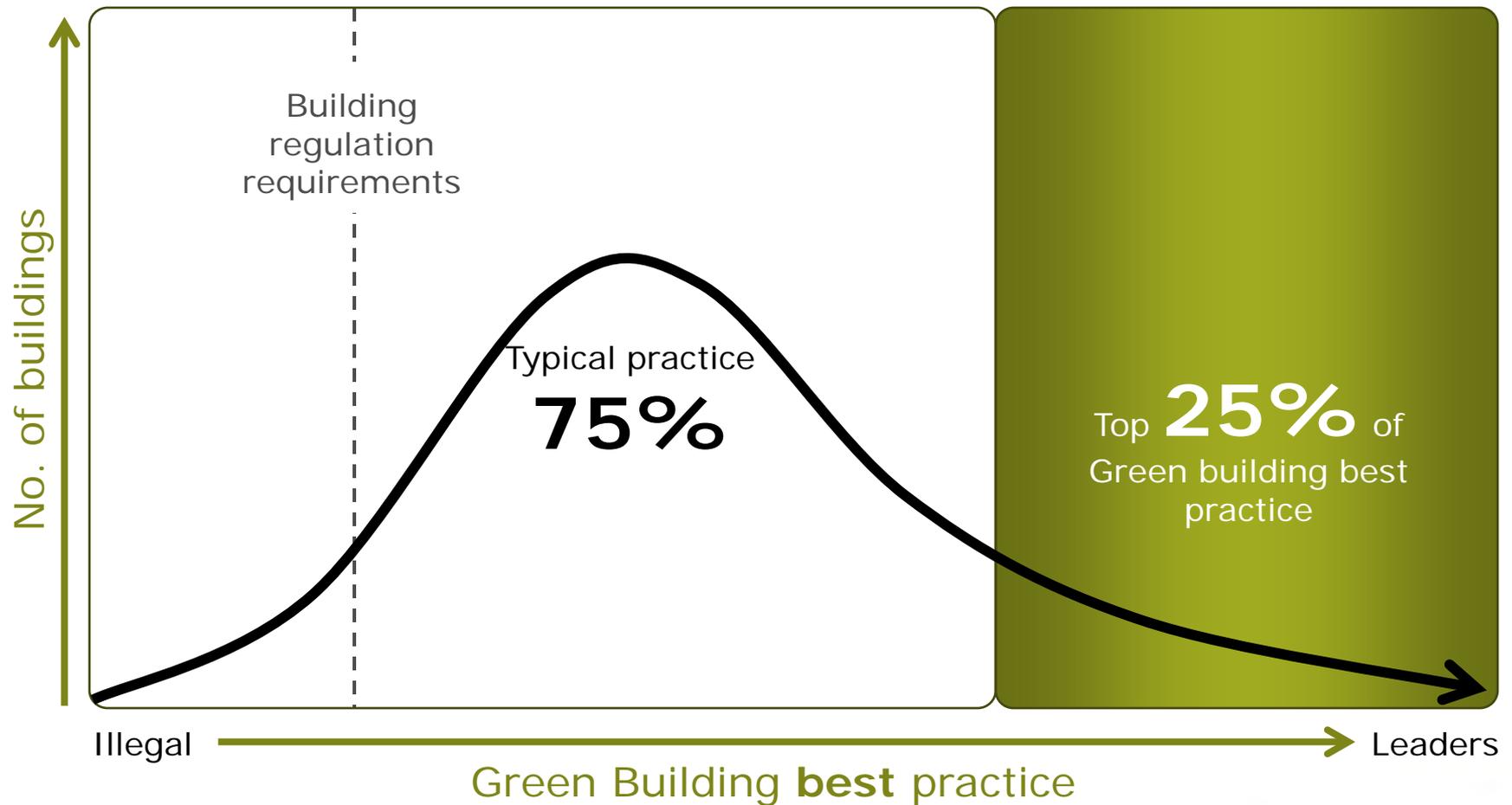
## **Legislated Compulsory Standards:**

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



# VISION

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.**

**Vodafone Innovation Centre – 6 Star Design rating**



**CELEBRATE MOMENTS**

**Celebrate Landmark Moments – COP17 hosted**

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**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

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# 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**

# Celebrate landmark moments – cidb best practice



**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

(energy saving lamps)  
Find out more

Eskom Improved Standard Offer   Standard product   Esko model

**Eskom**

Esco list  
Integrated Demand Management - the art of managing the use of electricity.

Library   School yard   Agricultural   Residential virtual tour   Residential   Commercial   Solar water heating   Industrial   Heat pumps

**R**

**Learn about Integrated Demand Management**

Integrated Demand Management is dedicated to ensuring short-term security of electricity supply through coordinating and consolidating the various initiatives aimed at optimising energy use and balancing electricity supply and demand.

[click here to learn more about Integrated Demand Management](#)

nding-options

**Save money now!**

Select an option:

**ESKOM has developed a whole new range of highly accessible financial incentives with less red tape and a broad range of applications**



FORBY & OOK

CELEBRATE MOMENTS

# World Green Building Council – GBCSA full member 2007

1. Australia
2. Brazil
3. Canada
4. Germany
5. India
6. Japan
7. Mexico
8. New Zealand
9. Taiwan
10. UAE
11. UK
12. USA
- 13. South Africa**
14. Argentina
15. Columbia
16. Netherlands
17. Poland
18. Romania
19. Singapore
20. Spain





**pre-2008: green claims**



**how do you compare?**



**Vodafone Innovation Centre**



**24 Richefond Circle**

**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.



British  
High Commission  
Pretoria



environmental affairs  
Department  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



COP17/CMP7  
UNITED NATIONS  
CLIMATE CHANGE CONFERENCE 2011  
DURBAN, SOUTH AFRICA

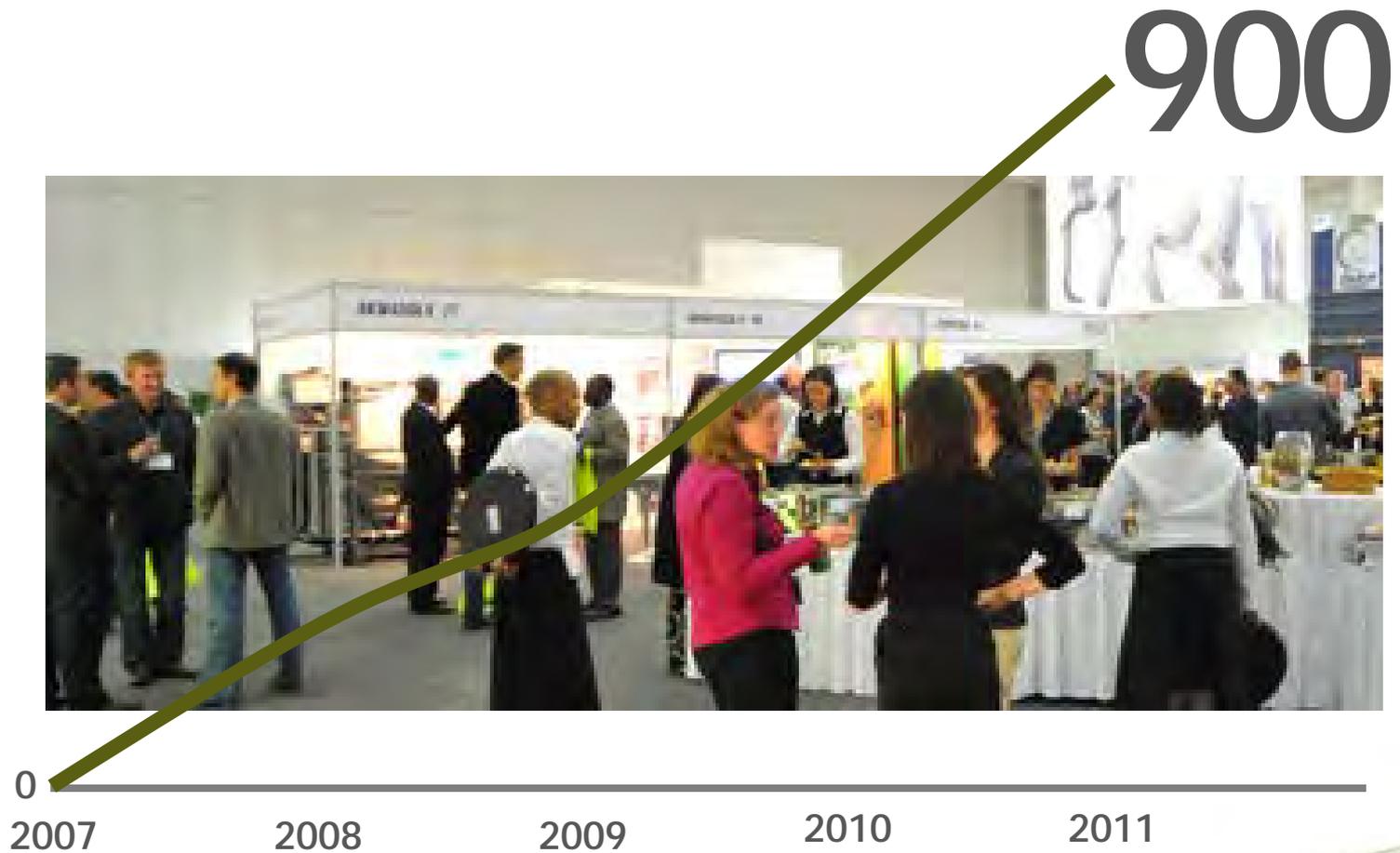


ETHEKWINI  
MUNICIPALITY



Eskom

# GBCSA Members



Looking ahead...



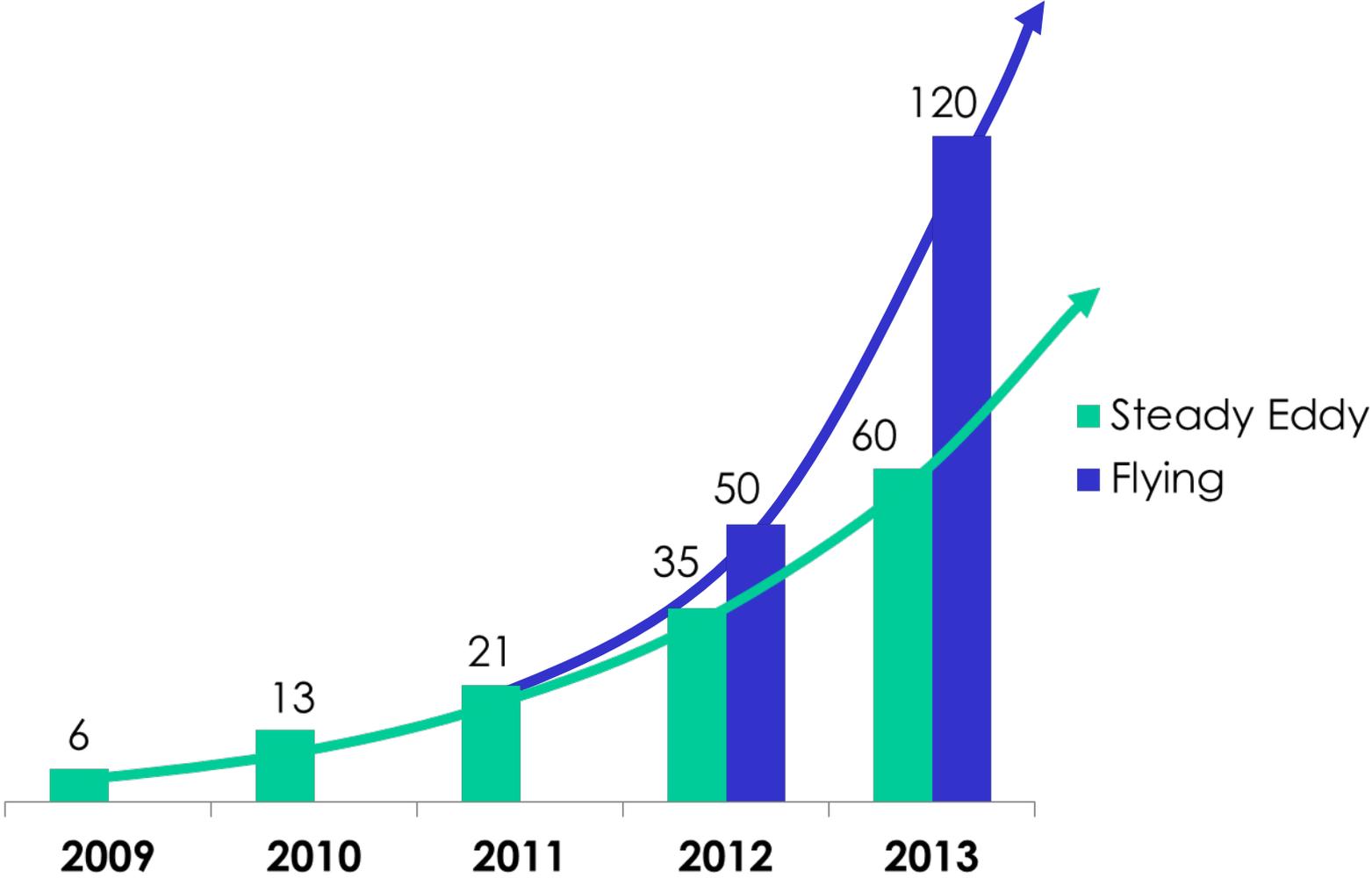
OF THE  
**9 Billion**  
People predicted to live on Earth in 2050,  
**70%** ARE EXPECTED  
TO LIVE IN  
URBAN AREAS



**GBCSA will begin the development of a neighbourhood scale rating tool in 2012**

**buildings in context of cities**

# Growth in Registrations



# Two kinds of rating systems



**asset rating**

**operational rating**

**specification**

Category	Parameter	Value
General	Make	Audi
	Model	R8
	Year	2010
	Color	Red
	Engine	4.2L V8
	Transmission	7-Speed S-tronic
	Drive	AWD
	Top Speed	250 km/h
	0-100	4.2 sec
	Weight	1700 kg
Performance	Max Power	310 kW
	Max Torque	430 Nm
	Gearbox	7-Speed
	Drive Type	AWD
	Brake	Disc
	Wheels	19 inch
	Interior	Leather
	Exterior	Aluminum
	Options	Carbon fiber
	Price	150,000

**10 l/100km**



**consumption**

**14 l/100km?**

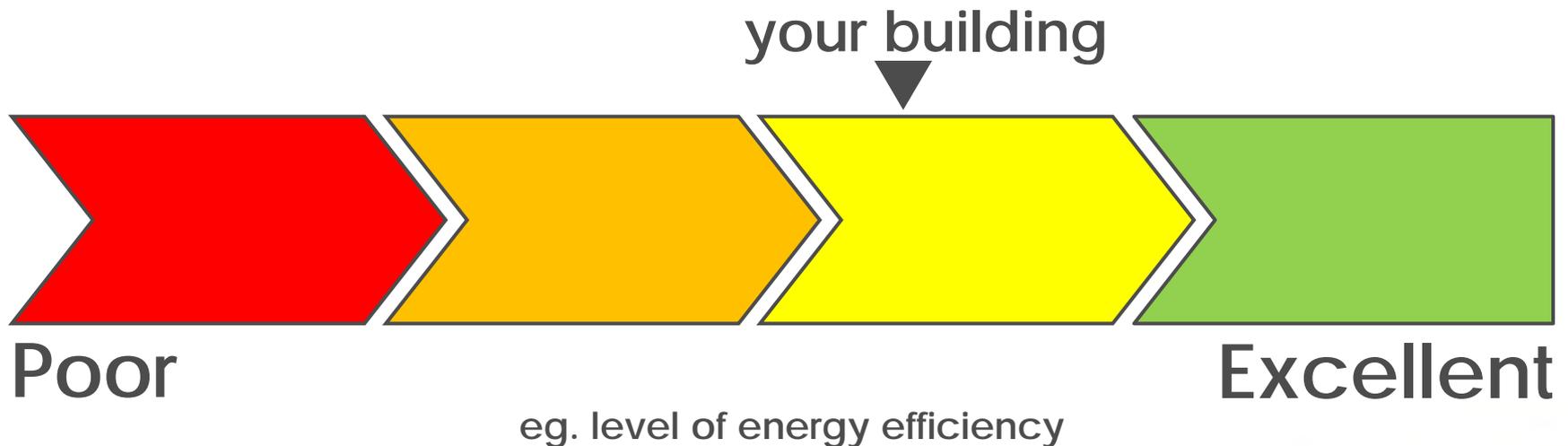
**7 l/100km?**



asset starting block 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



# Final Tool

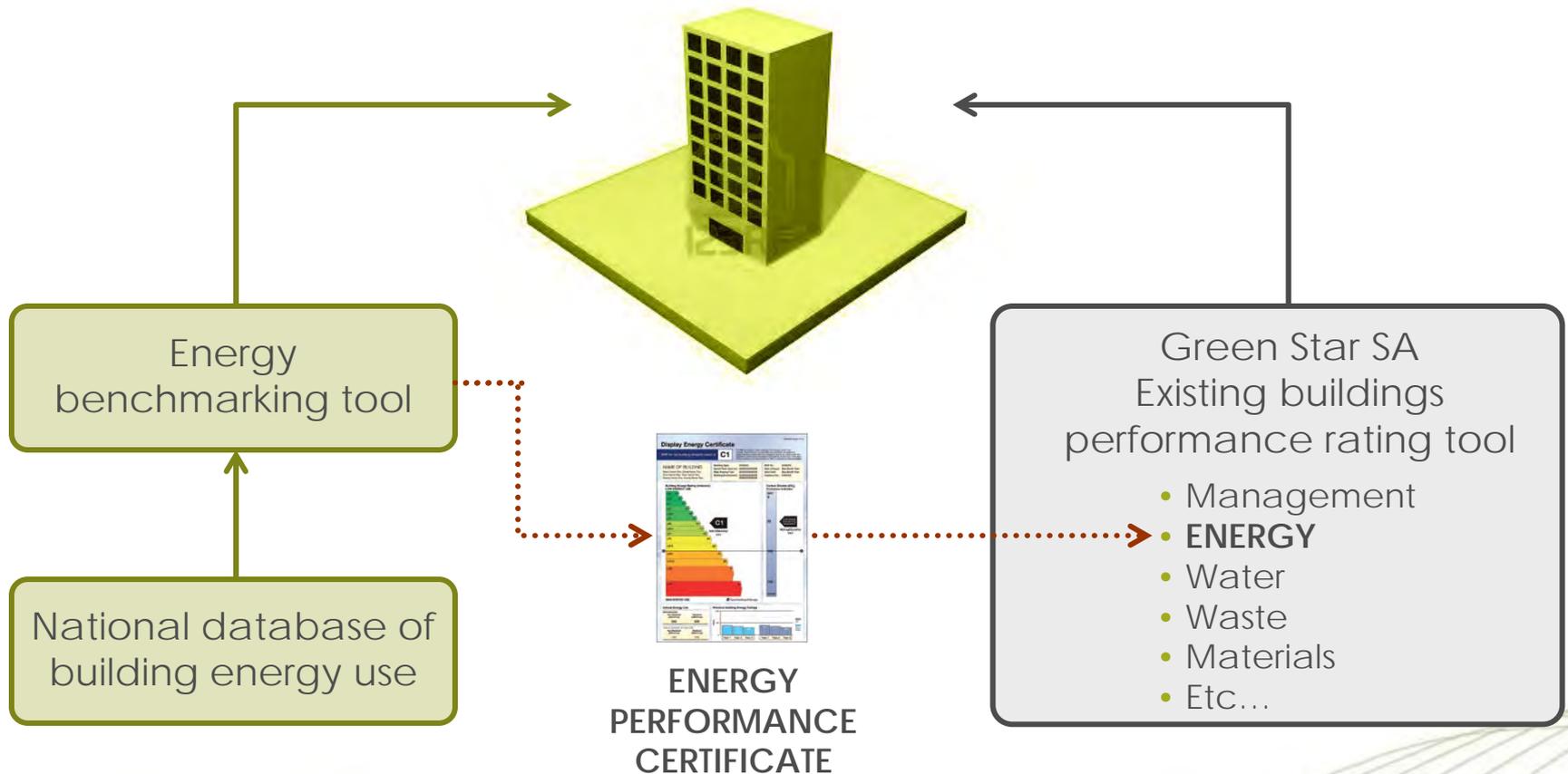
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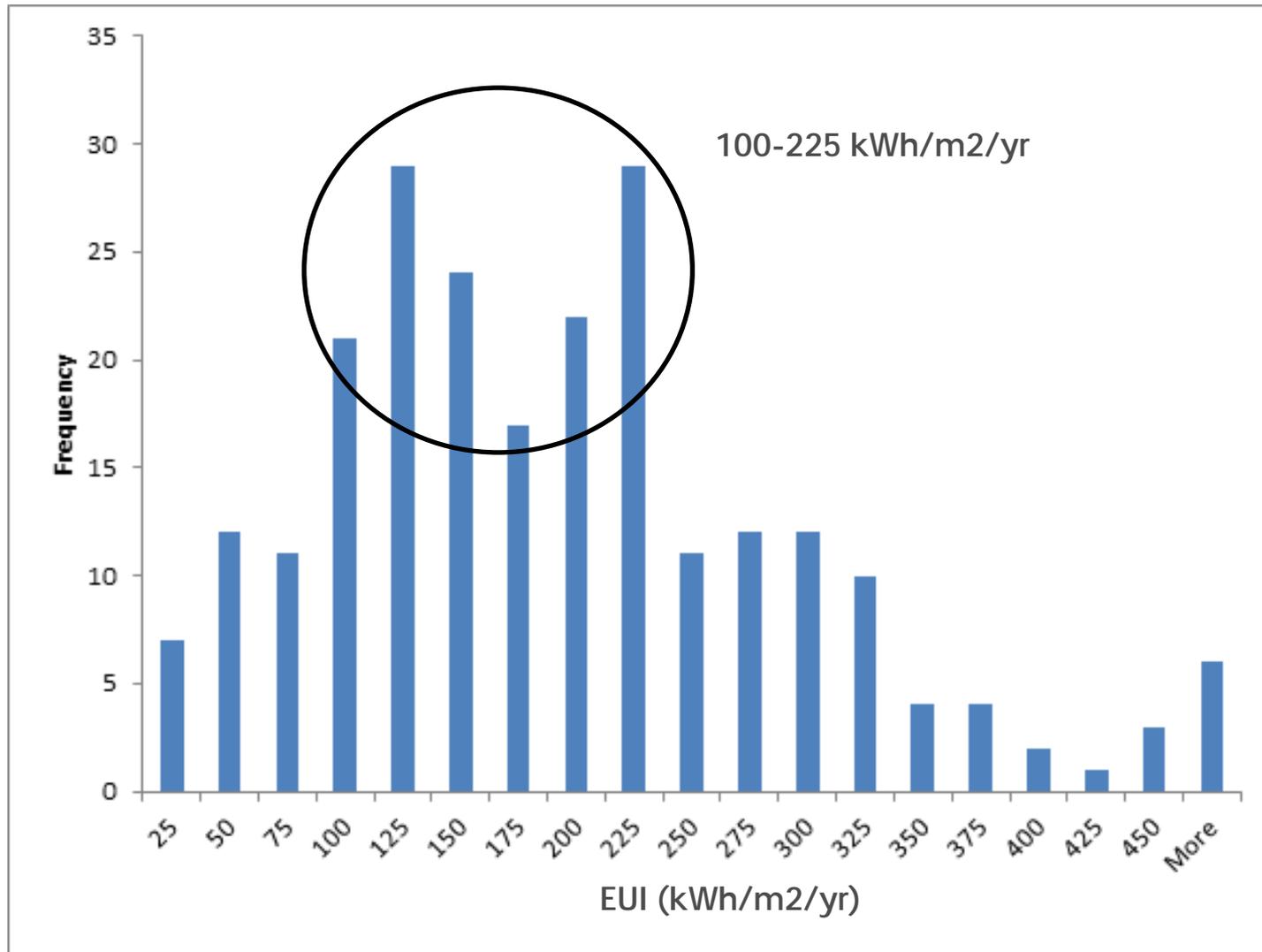
- ONLINE User Interface
- Freely Accessible (self assessment)
- Option for Independent Certification by GBCSA (at a cost)
- Anonymous Data Entry
- Portfolio Management (ex. Energy Star Portfolio Manager)

# 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.



# Benchmarking Tool – draft data collection results



# Sponsorship of the Tool

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- **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**

# GBCSA Convention & Exhibition 2012

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**SAVE THE DATE**

**28-30 October 2012**

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

# Conclusion



**Mayfair, Umhlanga– 4 Star Design rating**

# Questions

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Thank you

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7 December 2011