



# EXISTING BUILDING PERFORMANCE Pilot Project Workshop

April 2014

Sponsored by:



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# Introductions

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**Who are you?**

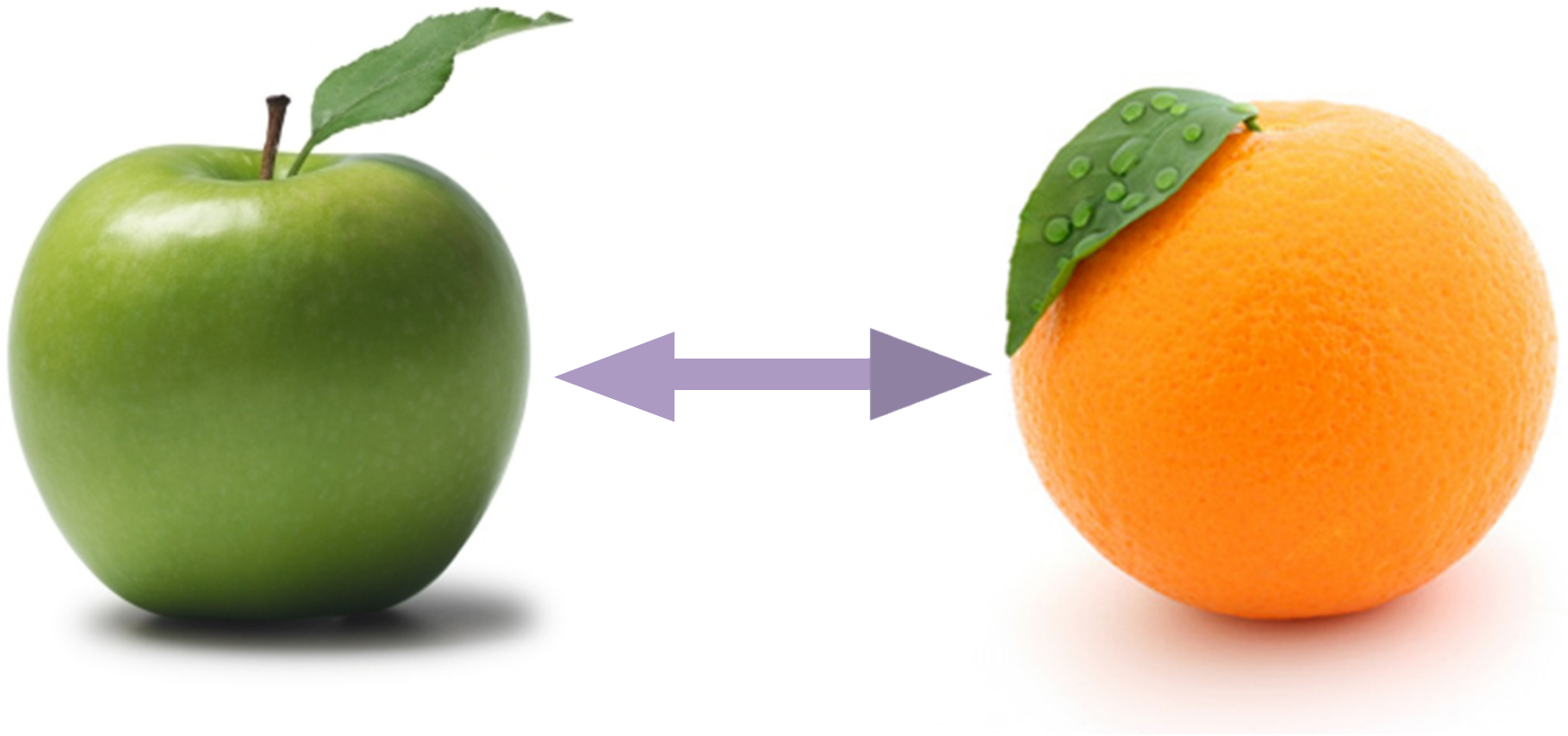
**Who are we?**

**What are your expectations?**

# Green Building Council of South Africa

- Only officially recognised green building authority in SA
- Well represented membership based of 1000+ corporates
- Independent - 'Not-for-Profit' company
- Promotes market-based solutions
- Mission = **Awareness | Recognition | Advocacy**
- Full member of the World Green Building Council
- 54 green buildings certified - many more registered





**How green is green?**  
**How to compare buildings?**

# GREEN STAR SA (New Buildings)

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OFFICE v1 (2008)



RETAIL v1 (2010)



MULTI-UNIT RESIDENTIAL v1 (2011)



PUBLIC & EDUCATION v1 (2012)

# NEW BUILD & REFURB VS EXISTING BUILDING MARKET

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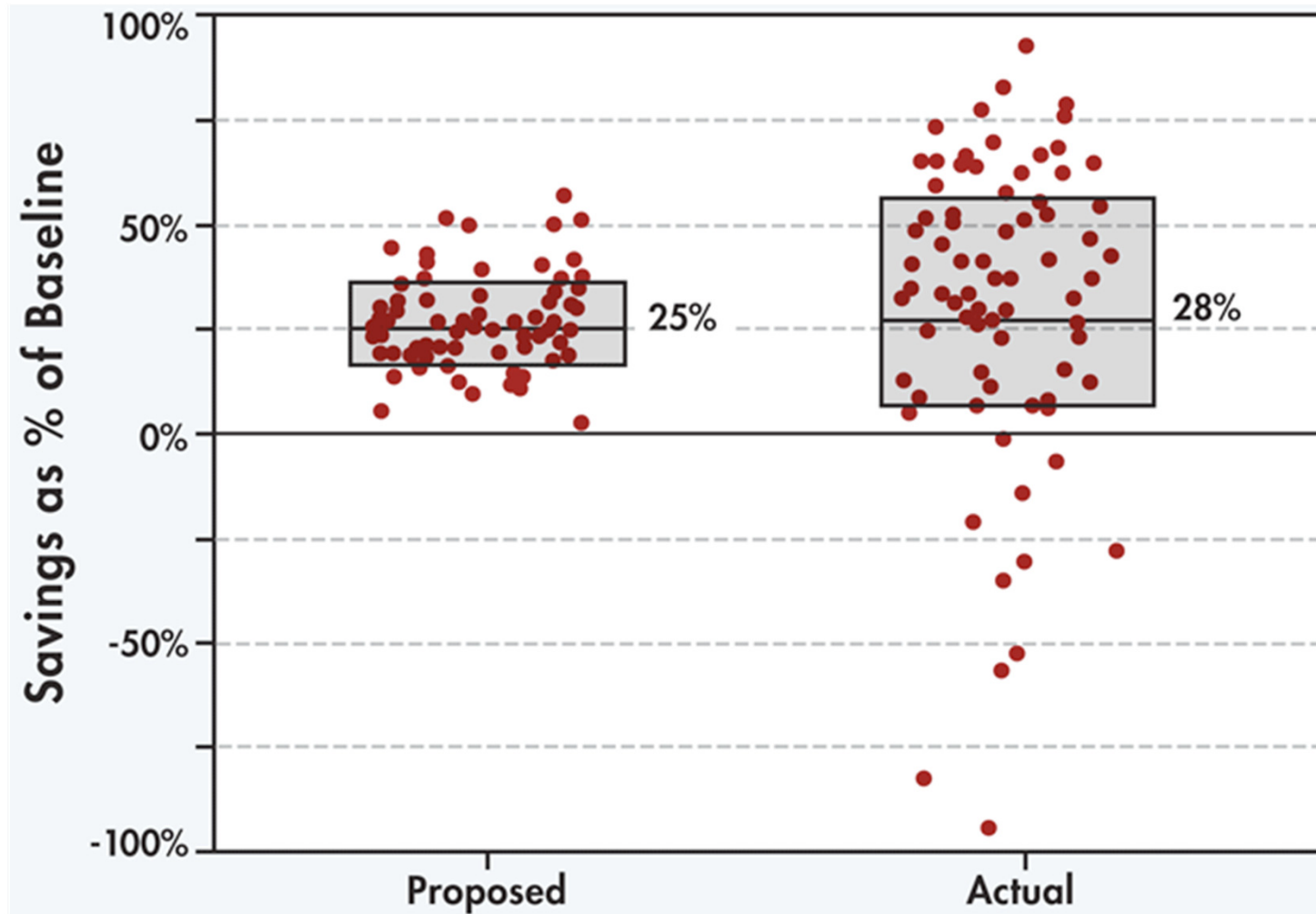
1% New Build & Refurb

99%

Existing Buildings

image compliments of [www.adsoftheworld.com](http://www.adsoftheworld.com)

# ENERGY SAVINGS IN US CERTIFIED BUILDINGS



Jerry Yudelson - Keynote Address at 2012 GBCSA Convention & Exhibition

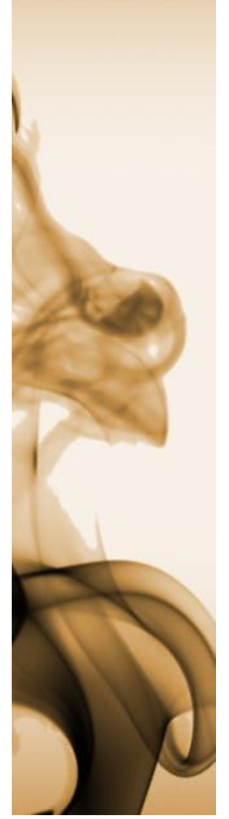
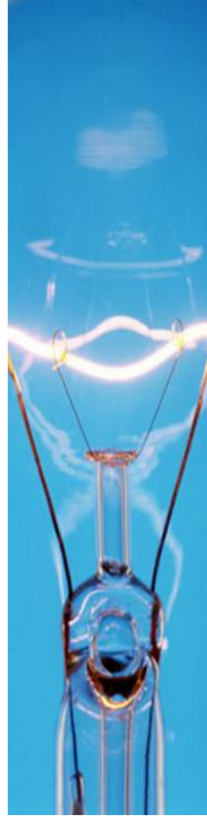


# Existing Building Performance

- Whole Buildings in use
- Performance not predictions
- All Commercial Building Types



## SAME 8 CATEGORIES



Management

Indoor  
Environment  
Quality

Energy

Transport

Water

Materials

Land use  
&  
Ecology

Emission

# CREDITS

MAN-1	Certified Buildings	1
MAN-2	Accredited Professional	1
MAN-3	Building Management	5
MAN-4	Green Cleaning Performance	3.5
MAN-5	Green Leasing	6
MAN-6	Ongoing Monitoring and Metering	2
IEQ-1	Indoor Air Quality	3
IEQ-2	Lighting Comfort	2
IEQ-3	Thermal Comfort	3
IEQ-4	Occupant Survey	2
IEQ-5	Acoustic Comfort	3
IEQ-6	Daylight and Views	2
IEQ-7	Indoor Pollutants	2

ENE-1	Energy Consumption (GHGE)	25
ENE-2	Peak Electricity Demand	2
TRA-1	Alternative Transportation	4
WAT-1	Potable Water Management	12
MAT-1	Procurement and Purchasing	6
MAT-2	Solid Waste Management	6
ECO-1	Ecological and Site Management	2
ECO-2	Groundskeeping Practices	3
EMI-1	Refrigerants	2
EMI-2	Legionella	1
EMI-3	Storm Water	1.5
INN- 1- 3	Marketplace innovation in building operations that fosters the industry's transition to sustainable buildings.	10

# RATINGS

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1,2,3 Star

“Committed to Performance”

*Branding TBC*

10-44 Points



45-59 Points



60-74 Points



75+ Points

# PILOT PROJECTS

- Applications Closed End 2013
- 50 Projects Invited to Participate
  - *Offices*
  - *Retail Centres*
  - *Mixed Use Buildings*
  - *Hotel*
  - *Convention Centre*
  - *School*

# PILOT PROJECTS

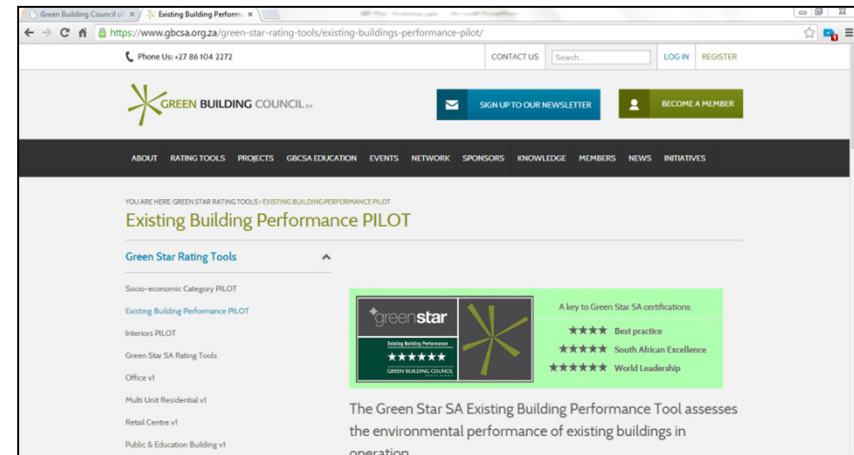
- TEST Rating Tool
- Ensure APPLICABILITY
- INFORM Version 1
- Achieve RECOGNITION

# PILOT PROJECTS

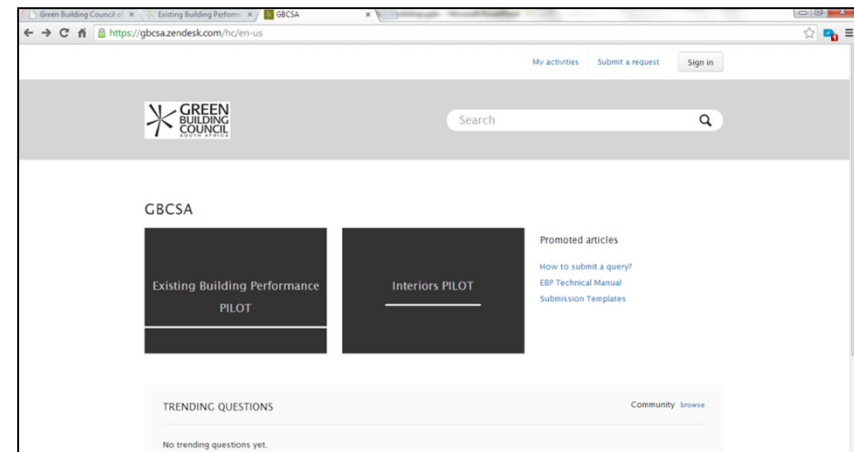
- **APRIL – Ene & Wat drafts**
- **JUNE - Early Round 1 submissions**
- **AUG - Target for Round 1 submissions**
- **NOV - Target V1 Release**

# RESOURCES

[www.gbcsa.org.za](https://www.gbcsa.org.za)



[gbcsa.zendesk.com](https://gbcsa.zendesk.com)



# RESOURCES

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- Rating Tool



- Calculators & Guides



- Technical Manual



- Submission Templates



# TECHNICAL MANUAL



- Aim
- Credit Criteria
- Compliance Requirements
- Documentation Req's
- Additional Guidance
- References

GREEN STAR SA – Existing Building Performance PILOT

TECHNICAL MANUAL

## MAN-1 Certified Buildings

POINTS  
AVAILABLE **1**

### AIM OF CREDIT

To reward buildings that has shown previous environmental achievement through Design/As Built Green Star SA ratings and has maintained this performance in operation.

### CREDIT CRITERIA

#### Certified Buildings

1 point is awarded if the building has a Green Star SA Design/As Built certification.

### DOCUMENTATION REQUIREMENTS

Complete online submission template-  
Provide required documentation as requested with template.

### ADDITIONAL GUIDANCE / RESOURCES

Potential Green Star Certification strategies: it would be possible for an existing building owner to firstly pursue a Refurbishment Green Star SA Design Rating or As Built rating if a substantial Green

# SUBMISSION TEMPLATES



- Complete form
- Attach requested documents

*Green Star SA – Existing Building Performance Tool* *MAN- 2*

SUBMISSION TEMPLATE

## MAN 2 ACCREDITED PROFESSIONAL

1. Credit Criteria		YES	NO
A	Is the principal participant in the existing team a Green Star SA Existing Building Accredited Professional?		
B	Has the AP been employed or engaged by the building owner?		
C	Has the Green Star SA AP – Existing Building had direct contact with the Facilities Management team operating the rated premises?		

**Attachments:**

- Attach a copy of the nominated Green Star SA EBP AP certificate  
OR  
attach printout of the relevant page of the online Green Star SA EBP AP Directory, to be found on the GBCSA website
- Statement of Confirmation from the Building Owner (see checklist below)

Item	Document Title	Description

Report Checklist: Statement of Confirmation		YES	NO
A	Does the Statement of Confirmation confirm the dates of engagement/appointment?		
B	Does the Statement of Confirmation confirm that the AP's scope of work included providing guidance to the building management team and or being responsible for compiling the submission?		

# ON-GOING TOOL DEVELOPMENT

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## Realities of a PILOT tool -

- The tool & technical manuals are not perfect
- Minor errors exist
- Some credits are “works-in-progress”
- Alternative proposals welcomed
- GBCSA will always welcome comment (+ or -)

# ON-GOING TOOL DEVELOPMENT

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## Updates to Resources

- Technical Manual and resources will be updated
- Projects may choose whether to use updates or not
- Updates noted on 'change logs'
- Updates communicated periodically



[gbc.sa.zendesk.com](https://gbc.sa.zendesk.com)

[ebp@gbc.sa.zendesk.com](mailto:ebp@gbc.sa.zendesk.com)

- Queries
- Alternative Proposals
- Feedback

# EDUCATION

## How to become an AP

### 3 Different AP Programmes



NEW BUILDINGS

**PART 1:** Doing this part online enables the student to familiarise themselves with the tools, their purpose and their structure.

**PART 2:** Applies the learning from part one in an interactive and engaging workshop that involves interdisciplinary group exercises and a building tour of a Green Star rated building.

**PART 3:** The open book examination can be done online at anytime in order to achieve your AP status

Online



Face to face workshop



Online exam



Official AP status



EXISTING BUILDINGS

Online



Face to face workshop



Online exam



Official AP status



INTERIORS

Online



Face to face workshop

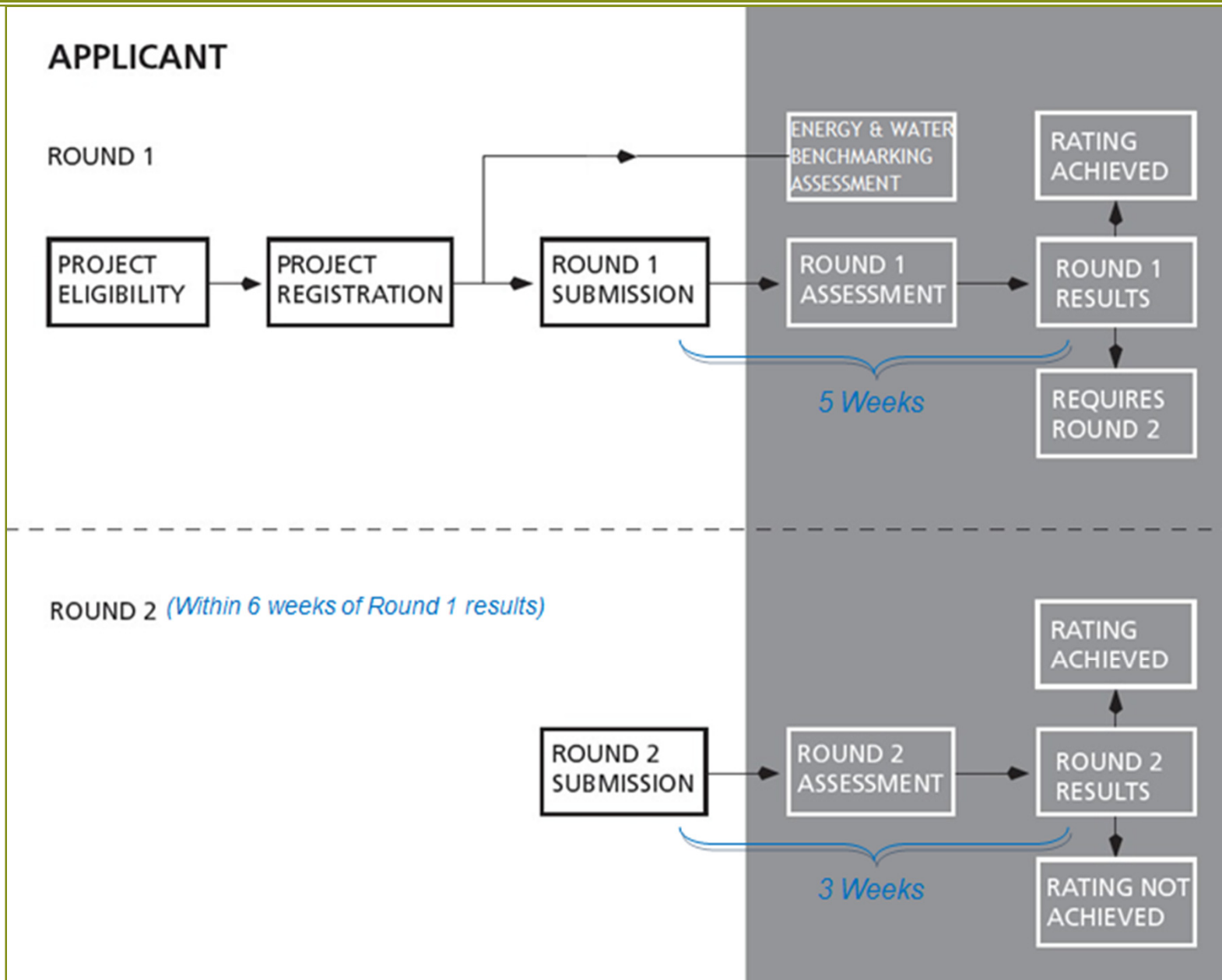


Online exam



Official AP status

# CERTIFICATION PROCESS

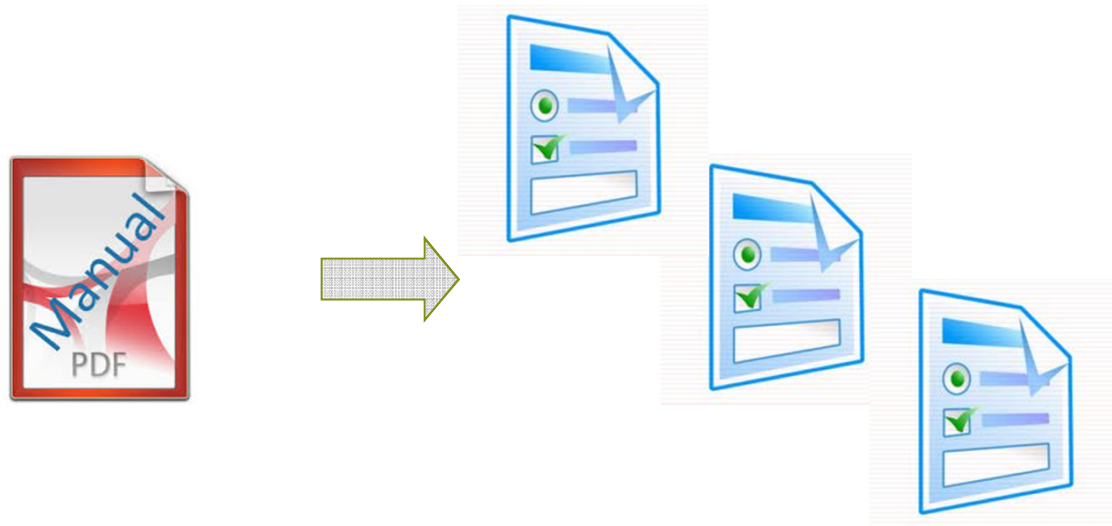


# THE SUBMISSION

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## What is it?:

- It is your Green Star SA project
- It is the minimum information required to communicate your project to Assessors
- Is evidence of why a certified rating is justified for your project



# THE SUBMISSION

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## When is it submitted?:

- When all documentation is included as per Submission Templates
- When GS AP is satisfied with the quality
- Round 1 Target – **Latest 31 Aug 2014**

# THE ASSESSMENT PANEL

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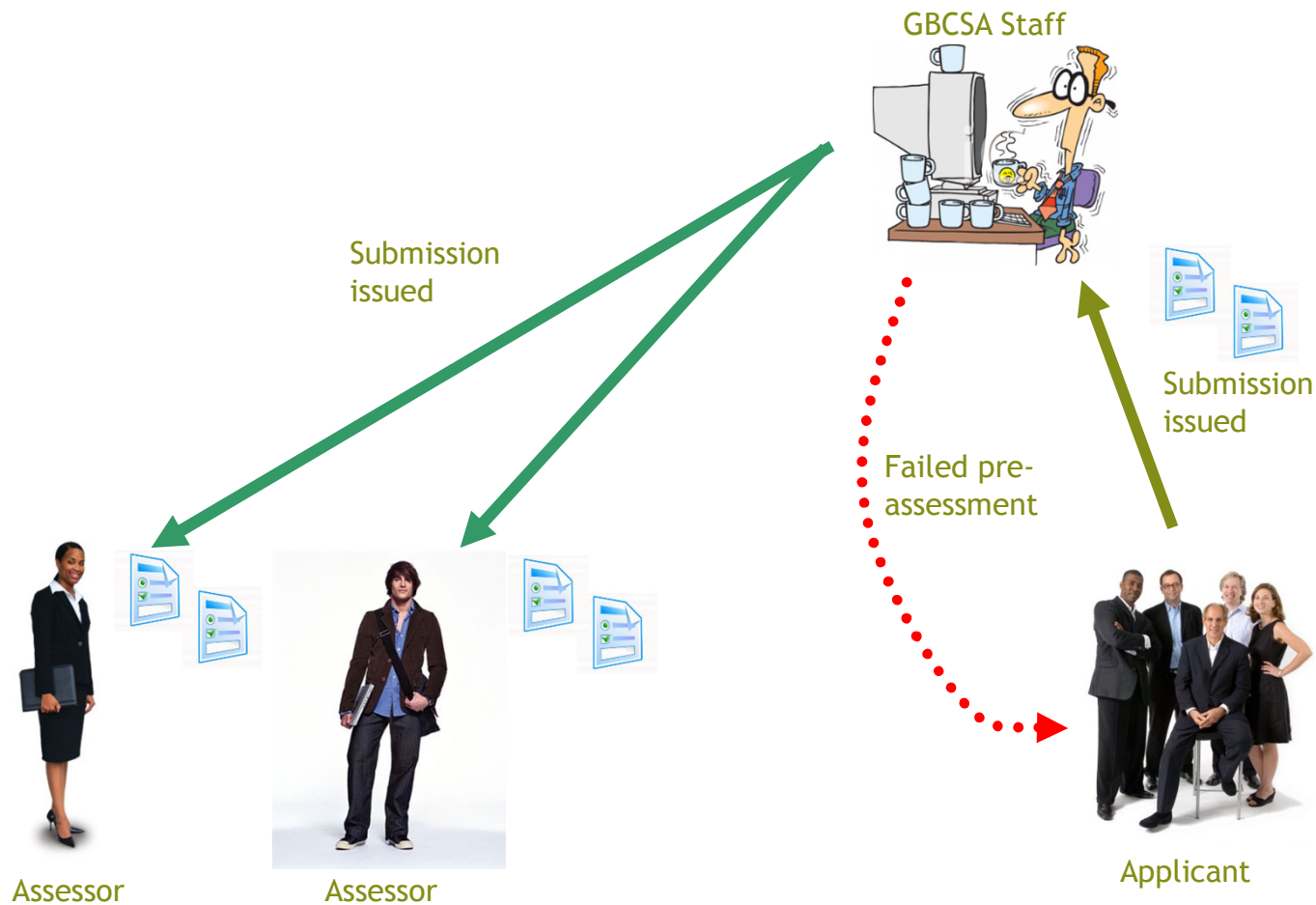
## **Comprised of:**

- 2 Green Star SA Certified Assessors (assessment)

## **Intent is to:**

- Provide fair assessment
- Provide equitable assessment for all projects
- Ensure transparent certification process

# THE ASSESSMENT PANEL



# THE SUBMISSION

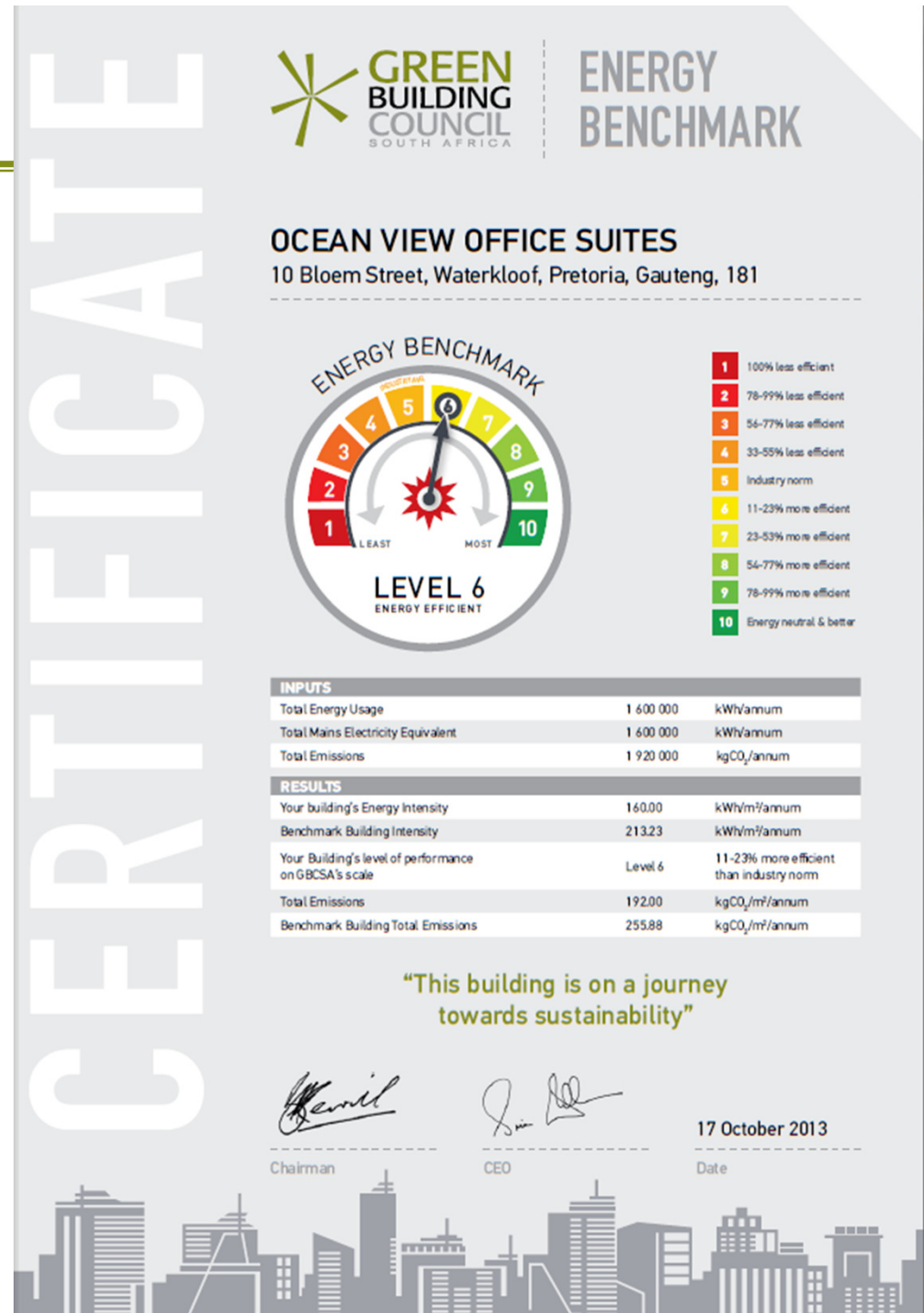
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## 'Checkpoint' Ene & Wat Submission:

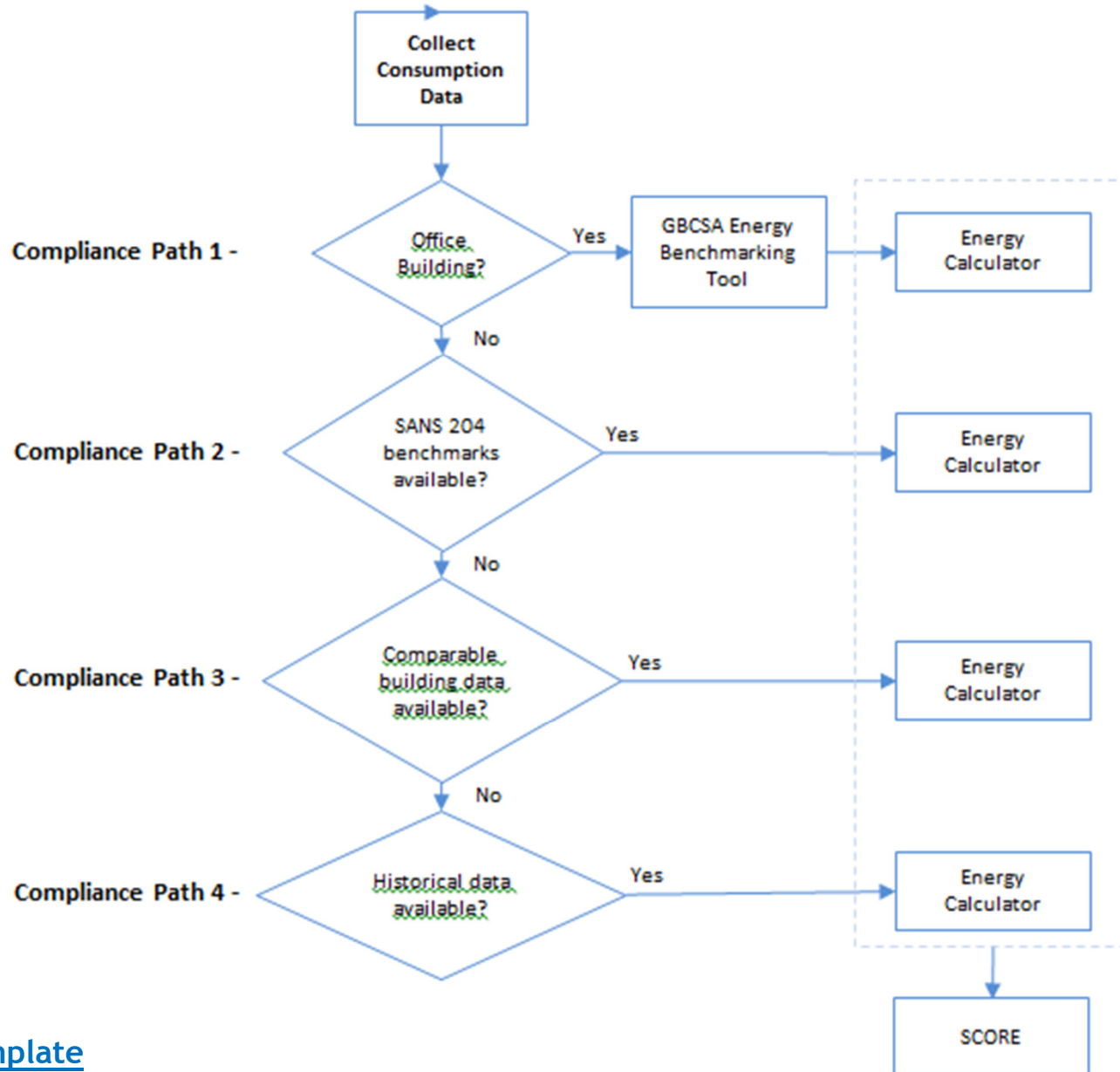
- PILOT projects requested to pre-submit draft Ene-1 and Wat-1 credit submissions
- Credits will be reviewed for quality only and feedback provided to the Applicant
- Credits will not be reviewed for credit compliance
- Target: **April 2014**

# E&W BENCHMARKING

- OFFICE buildings only
- Separate certificate
- Independent of EBP Rating
- Included in Reg. Fee



# ENE-1 ENERGY CONSUMPTION



# WAT-1 WATER CONSUMPTION

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## Compliance Path 1 - Water Benchmarking Tool

- Office buildings only

## Compliance Path 2 - Water Calculator

- Calculator determines 'Notional Consumption'
- Actual consumption compared to Notional

# Take-Aways



- Pilot means Pilot. Use it!
- Resources & Support
  - [gbcsa.zendesk.com](https://gbcsa.zendesk.com)
- Timeframes
  - *April / May - Draft Ene-1*
  - *June - First Round 1 Submissions*
  - *End August - Targeted Round 1*
- Feedback

# QUESTIONS



Vodafone Site Solution Innovation Centre - 6 Star Green Star SA Design V1

ANIMATION PARTNERS  
ForesightAnimation