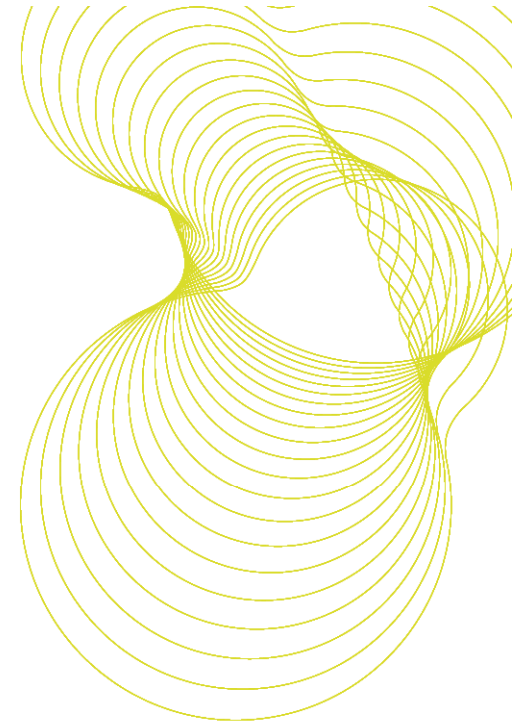


breglobal
BREEAM Gulf



BREEAM Gulf

This presentation aims to give the reader a general overview of the operational and technical aspects of the BREEAM Gulf Scheme specifically.



Key objectives of BREEAM Gulf

- To assess the most common building types in the region using one scheme
 - One common generic manual
 - Same assessment methodology for all buildings
 - Mandatory Credits
- Comparison against national baseline
 - Measure the improvement compared to the national Building Regulations/Guidelines
 - Use of national best practice standards
 - The option to propose the use of other more onerous local codes and standards

Key factors taken into account to "tune" BREEAM to suit the region

- Climate
- Ecology
- Construction materials
- Culture
- Construction practices
- Building Regulations
- Infrastructure
- Historical context
- Political decisions
- Geography...

Scope of the BREEAM Gulf Scheme

BREEAM Gulf

For the purposes of BREEAM, the Gulf is defined as follows;

- United Arab Emirates
 - Oman
 - Qatar
 - Bahrain
 - Saudi Arabia
 - Kuwait
-
- For other countries please contact the BREEAM office

Stages of Assessment

- **Design Stage**
- **Post Construction Stage**
- **Operational Stage (BREEAM in Use in development for projects outside the UK)**

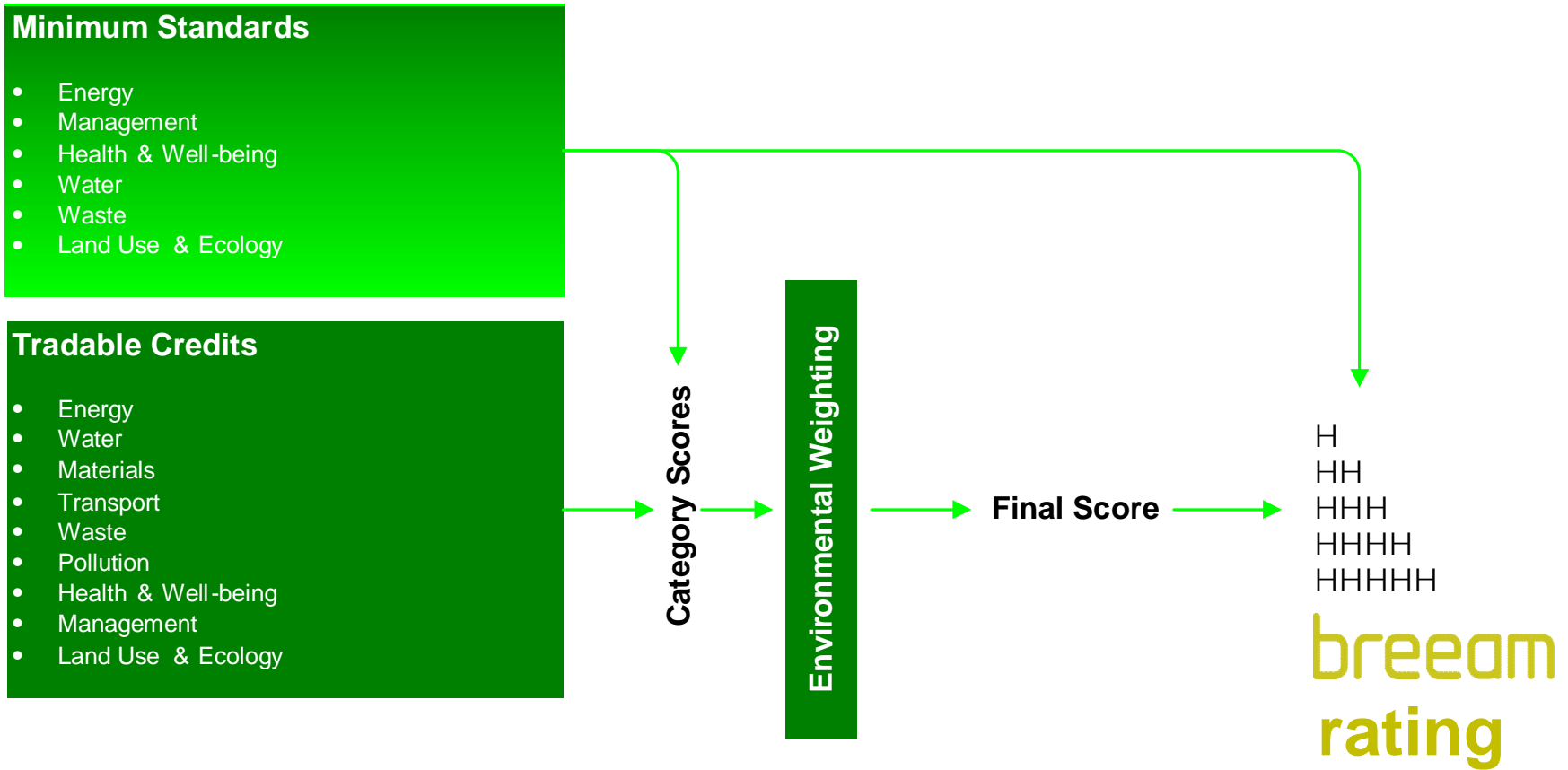
Types of buildings which can be assessed under the BREEAM Gulf Scheme

- **Whole new buildings**
- **Major refurbishments of existing buildings**
- **New build extensions to existing buildings**
- **A combination of new build and existing building refurbishment**
- **New builds or refurbishments which are part of a larger mixed use development**
- **Existing building fit out**

(for further information regarding the function areas of buildings falling under each scheme, please look at the scope of the schemes document on the BREEAM international website)

Scoring and Rating

BREEAM Gulf Scoring process



BREEAM Gulf Environmental Section Weightings

BREEAM Section	Weighting %
	New builds, extensions and major refurbishments
Management	8
Health & Wellbeing	15
Energy	14
Transport	5
Water	30
Materials	9
Waste	5
Land Use & Ecology	7
Pollution	7

Minimum standards

BREEAM credit	BREEAM Rating / Minimum number of credits				
	One Star	Two Stars	Three Stars	Four Stars	Five Stars
Man 1 - Commissioning	-	-	-	1	2
Man 3 - Construction site impacts	-	-	-	1	2
Man 4 - Building user guide	-	1	1	1	1
Hea 4 - High frequency lighting	1	1	1	1	1
Ene 1 - Energy Efficiency	-	-	-	6	10
Ene 2 - Sub-metering of substantial energy uses	-	-	1	1	1
Ene 5 - Low or zero carbon technologies	-	-	-	1	1
Wat 1 - Water consumption	-	-	1	1	2
Wat 2 - Water meter	-	-	-	1	1
Wst 3 - Storage of recyclable waste	-	-	-	1	1
LE 4 - Impact on site ecology	-	-	1	2	2
Pol 9 - Refrigerant ODP	-	-	1	1	1

BREEAM Gulf Rating Benchmarks

BREEAM Rating	% Score
Unclassified	< 30% plus minimum standards
H	≥ 30% plus minimum standards
HH	≥ 45% plus minimum standards
HHH	≥ 55% plus minimum standards
HHHH	≥ 70% plus minimum standards
HHHHH ¹	≥ 85% plus minimum standards

¹BREEAM 5 Star Rating

The following conditions must be met in order to certify a building at the BREEAM 5 Star rating level:

- The building must achieve a final BREEAM Score ≥85%
- Provision of material for the production and publication of a case study

BREEAM Gulf Assessment Tool

BREEAM International: Gulf

Assessment Profile

Please select at least one option from each category and press 'Next':

Stage of assessment

Design & Procurement (new builds & major refurbishment)

Post Construction Review

Building size band

Less than 500 sq.m

500 sq.m or larger

Heating, Ventilation or Air Conditioning (HVAC) services are fitted out?

Yes

No

<< Back Defintions Next >>

BREEAM International: Gulf

Building Areas and Associated Features

Please select from the options below the building areas, functions and features that are part of the development that is being assessed, and then press next.

Building Areas


<input checked="" type="checkbox"/> Reception / Foyer	<input checked="" type="checkbox"/> Laboratories	<input type="checkbox"/> Sports Facilities
<input type="checkbox"/> Offices	<input checked="" type="checkbox"/> Food Retail Space	<input checked="" type="checkbox"/> Changing Rooms
<input checked="" type="checkbox"/> Meeting Rooms	<input type="checkbox"/> General Retail Space	<input type="checkbox"/> Creche
<input type="checkbox"/> Kitchen	<input checked="" type="checkbox"/> Library	<input type="checkbox"/> Exhibition Space
<input checked="" type="checkbox"/> Dining / Bar Areas	<input checked="" type="checkbox"/> Industrial / Workshops	<input checked="" type="checkbox"/> Residential
<input checked="" type="checkbox"/> Integral Cold Storage (Food)	<input type="checkbox"/> Auditoria / Performance Spaces	<input type="checkbox"/> Hotel Bedrooms
<input checked="" type="checkbox"/> Integral Cold Storage (Non-Food)	<input checked="" type="checkbox"/> Teaching Rooms	<input type="checkbox"/> Ancillary

Associated Features

<input checked="" type="checkbox"/> Carpark (internal or external)	<input checked="" type="checkbox"/> Lifts	<input type="checkbox"/> External surfaces/hard landscaping
<input checked="" type="checkbox"/> Delivery yard (internal or external)	<input type="checkbox"/> Escalators and/or travelling walkways	<input type="checkbox"/> Soft landscaping and planting (internal or external)
<input type="checkbox"/> Waste disposal area	<input checked="" type="checkbox"/> Vehicle wash	

<< Back Defintions Next >>

Assessment Tool



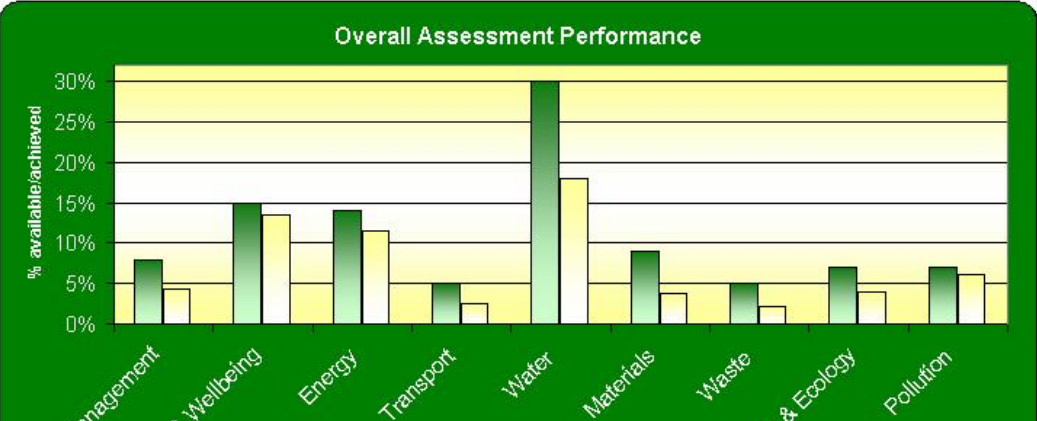
BREEAM International:Gulf

BREEAM Rating: ☆☆☆

Section	Env Weighting	Percentage section credits achieved	Overall Weighted Percentage	Mandatory Credits Achieved
Management	8%	54.55%	4.36%	YES
Health & Wellbeing	15%	89.71%	13.46%	YES
Energy	14%	82.77%	11.59%	YES
Transport	5%	50.00%	2.50%	YES
Water	30%	60.00%	18.00%	YES
Materials	9%	41.67%	3.75%	-
Waste	5%	42.86%	2.14%	-
Land Use & Ecology	7%	55.56%	3.89%	YES
Pollution	7%	87.50%	6.13%	YES
Total Score >>			65.81%	

BREEAM Rating System	
Mandatory credits not achieved	
★	≥30 - <45
★★★	≥45 - <55
★★★★★	≥55 - <70
★★★★★★	≥70 - <85
★★★★★★★	≥85

Overall Assessment Performance



Section	% available/achieved
Management	54.55%
Health & Wellbeing	89.71%
Energy	82.77%
Transport	50.00%
Water	60.00%
Materials	41.67%
Waste	42.86%
Land Use & Ecology	55.56%
Pollution	87.50%

BREEAM Gulf Technical Sections

BREEAM is split into the following categories:

- Management
- Health and Wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- Land use and Ecology
- Pollution



Examples of issues assessed under the Management section

- **Man 1** Commissioning
- **Man 2** Considerate constructors
- **Man 3** Construction site impacts
- **Man 4** Building user guide
- **Man 12** Life cycle costing

Examples of issues assessed under the Health & Wellbeing section

- **Hea 1** Daylighting
- **Hea 2** View out
- **Hea 3** Glare control
- **Hea 4** High frequency lighting
- **Hea 5** Internal and external lighting levels
- **Hea 6** Lighting zones and controls
- **Hea 7** Potential for natural ventilation
- **Hea 8** Indoor air quality
- **Hea 9** Volatile organic compounds
- **Hea 10** Thermal comfort
- **Hea 11** Thermal zoning
- **Hea 12** Microbial contamination
- **Hea 13** Acoustic performance
- **Hea 14** Office space (issue not assessed in the offices scheme)

Examples of issues assessed under the Energy section

- **Ene 1** Reduction of CO2 emissions
- **Ene 2** Sub-metering of substantial energy uses
- **Ene 3** Sub metering of high energy load and tenancy areas
- **Ene 4** External lighting
- **Ene 5** Low or zero carbon technologies
- **Ene 6** Building fabric performance & avoidance of air infiltration
- **Ene 7** Cold storage
- **Ene 8** Lifts
- **Ene 9** Escalators & travelling walkways

Examples of issues assessed under the Transport section

- **Tra 1** Provision of public transport
- **Tra 2** Proximity to amenities
- **Tra 3** Cyclist facilities
- **Tra 4** Pedestrian and cyclist safety
- **Tra 5** Travel plan
- **Tra 6** Maximum car parking capacity
- **Tra 7** Travel information point
- **Tra 8** Deliveries and manoeuvring

Examples of issues assessed under the Water section

- **Wat 1** Water consumption
- **Wat 2** Water Meter
- **Wat 3** Major leak detection
- **Wat 4** Sanitary supply shut-off
- **Wat 5** Water recycling
- **Wat 6** Irrigation systems
- **Wat 7** Vehicle wash

Examples of issues assessed under the Materials section

- **Mat 1** Materials specification (major building elements)
- **Mat 2** Hard landscaping and boundary protection
- **Mat 3** Reuse of building façade
- **Mat 4** Reuse of building structure
- **Mat 5** Responsible sourcing of materials
- **Mat 6** Insulation
- **Mat 7** Designing for robustness

Examples of issues assessed under the Waste section

- **Wst 1** Construction Site Waste Management
- **Wst 2** Recycled aggregates
- **Wst 3** Recyclable waste storage
- **Wst 4** Compactor / Baler
- **Wst 5** Composting
- **Wst 6** Floor finishes

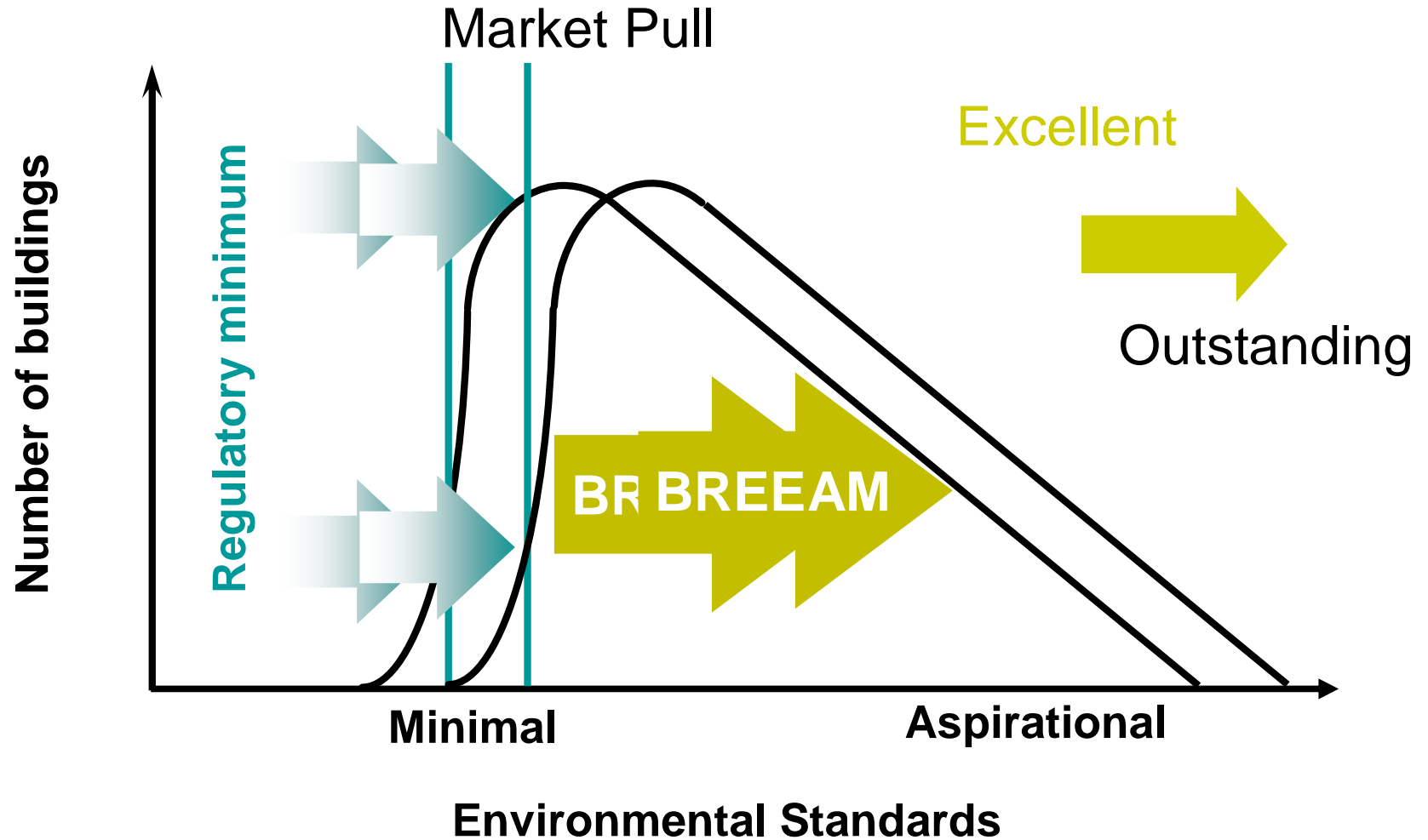
Examples of issues assessed under the Land Use and Ecology section

- **Lue 1** Reuse of land
- **Lue 2** Contaminated land
- **Lue 3** Ecological value of site AND Protection of ecological features
- **Lue 4** Impact on site ecology
- **Lue 6** Long term impact on biodiversity

Examples of issues assessed under the Pollution section

- **Pol 1** Refrigerant GWP - Building services
- **Pol 2** Preventing refrigerant leaks
- **Pol 3** Refrigerant GWP - Cold storage
- **Pol 4** NOx emissions from heating source
- **Pol 5** Flood risk
- **Pol 6** Minimising watercourse pollution
- **Pol 7** Reduction of night time light pollution
- **Pol 8** Noise attenuation

Setting the standard



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