

Growing your business internationally



Case study : How Aurecon is growing a Green Buildings Business in Asia, the Middle East and Africa

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Summary of presentation

- Who is Aurecon and where are we located?
- Why are we building a Green Buildings business internationally?
- Case studies on our Green Buildings business in:
 - ❖ Asia
 - ❖ Middle East
 - ❖ Africa
- Lessons learnt

Who is Aurecon?

Aurecon offers multidisciplinary engineering and consultancy services across the following key industries:

Property

Health – Education – Residential – Transport Facilities – Sport, Leisure & Entertainment – Retail – Justice – Commercial

Energy

Power Generation – Transmission and Distribution – Renewable Energy

Mining and Industrial

Agriculture – Food and Beverage – Manufacturing – Metals and Minerals Resources – Oil and Gas

Transportation

Aviation – Marine – Rail – Roads

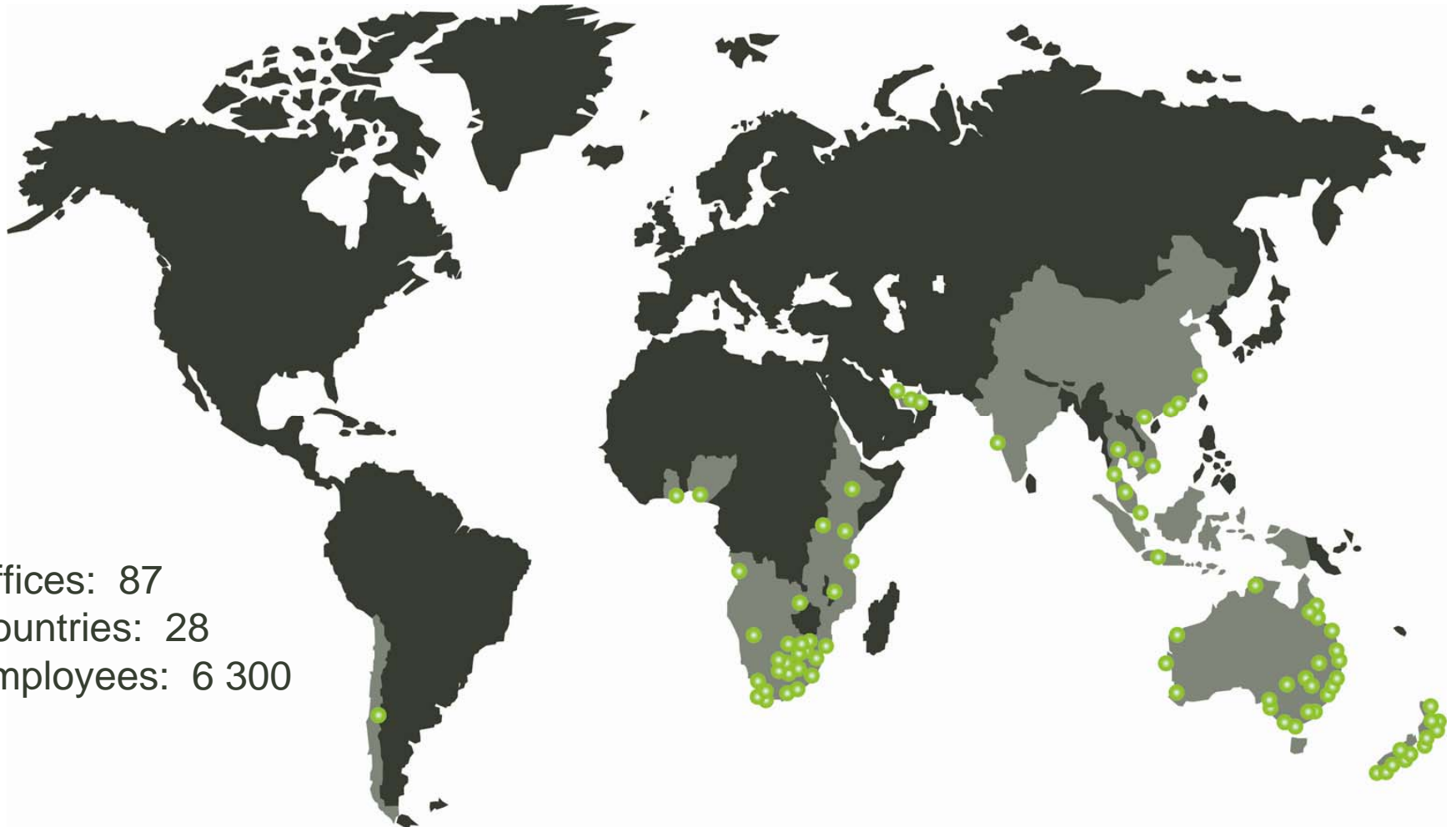
Community Development and Infrastructure

Municipal – Land Development – Urban Renewal – Environmental

Water

Water & Wastewater – Water Resources

Where are we located?



Offices: 87
Countries: 28
Employees: 6 300

Why are we growing a green buildings business internationally?

- There are many opportunities in emerging markets
- We were invited to support our existing clients who were moving into these growing markets and understand the value we can add to their projects
- Sustainable Building design is core design skill in whatever we do where ever we work
- We strategically decided to focus on a number of key areas which will help differentiate us in the market we were entering
- To help attract the smart local staff who want to work on “cutting edge” Green Buildings

Growing a green building business



Some Business Development Strategies

- Understand the market you are entering and where the market is positioned in the Green Buildings development cycle
- Get involved with the local Green Building Council and volunteer to support them where ever you can
- Establish ourselves by employing good local staff supported initially by experts in Australian and New Zealand
- We support our local staff through Peer Reviews, regular teleconferences and our in house knowledge sharing networks and by staff transfers between offices
- We help promote our local business by taking part in international and local conferences and then use the visits to train staff and visit clients
- Develop partnerships with Australian organisations who are working in Asia and have a very strong sustainability culture and appreciate where we are coming from

Case Study : Hong Kong and China



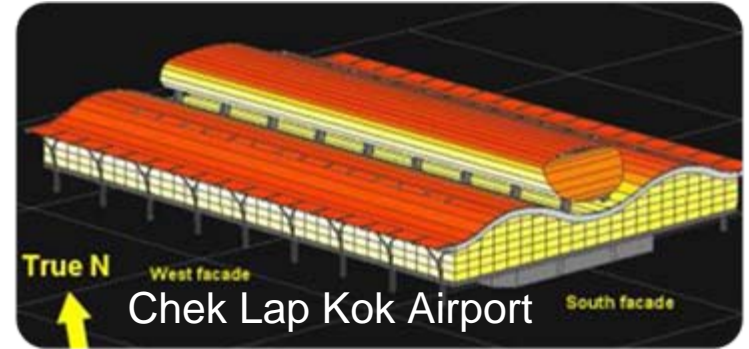
- Aurecon started in Hong Kong in 1970's working on Chek Lap Kok airport
- 6 BEAM professionals and 5 LEED professionals
- All new and recently refurbished buildings are eligible for certification under BEAM PLUS
- Building developers and owners are incentivized by Hong Kong government to pursue BEAM PLUS ratings by GFA concessions (being introduced in April 2011)
- Government buildings are encouraged to be rated under BEAM PLUS
- Developers targeting American clients also pursue LEED ratings
- Many openings to refurbish existing buildings but financial viability is a problem



Case Study : Hong Kong and China



Shanghai Centre



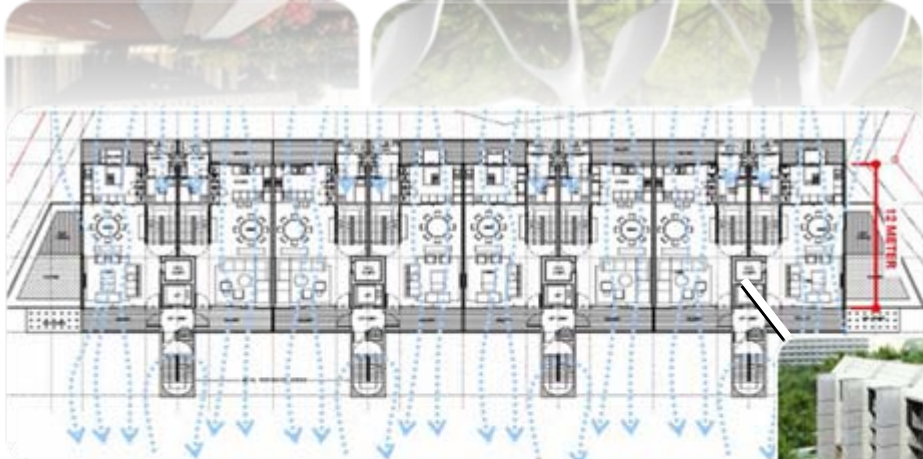
Case Study : Singapore



- Dedicated team of 5 working on ESD projects
- Accreditation in Green Mark (Singapore), Green Building Index Facilitator (Malaysia), LEED Accredited Professional, Green Star Accredited Professional
- The Singapore BCA Green Mark green certification is a mandatory requirement for all new buildings
- Green Mark has 4 certification levels with higher levels requiring building performance validation – Example:
 - ❖ Energy modelling, CFD natural ventilation effectiveness, Day lighting and glare simulations
- We work for developers, architects, owners and M+E consultants
- 50% of work on Singapore projects, 50% on international
- Singapore is a well established market and the Green Mark scheme is government run
- Market for greening the existing building structure will be huge once legislation is passed



Case Study : Singapore



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Natural ventilation
and shading studies
for 8 Nassim Hill

Case Study : Singapore



Stamford American International School

- Great impetus on sustainability and Environmental comfort for the students
- Aurecon were engaged to provide Green Mark, LEED and Green Star consultancy as well as simulation work for daylight and glare, natural ventilation assessment and bus bay exhaust concentration analysis



Sectional view of façade solution

The Peoples Association Singapore



Case Study : Middle East



- Offices in Dubai, Abu Dhabi and Qatar
- Two Green Building Rating Schemes Used, LEED & Estidama (Estidama has 1 to 5 Pearls and rates New Buildings, Villas and Communities)
- Aurecon employs 3 LEED APs , training for Estidama
- Masdar will demonstrate World class sustainability
- Sustainability in the UAE has taken a bit of a hit through the GFC
- Government starting to lead the drive in Abu Dhabi with Estidama
- No market here yet for old stock – tend to knock down and rebuild
- Often a lack of understanding of what is required by the other project team members (architect / client / builders etc). We have to take on an educational role as part of our works
- Some challenges include cost and understanding the Estidama and Estidama process and dealing with the municipality



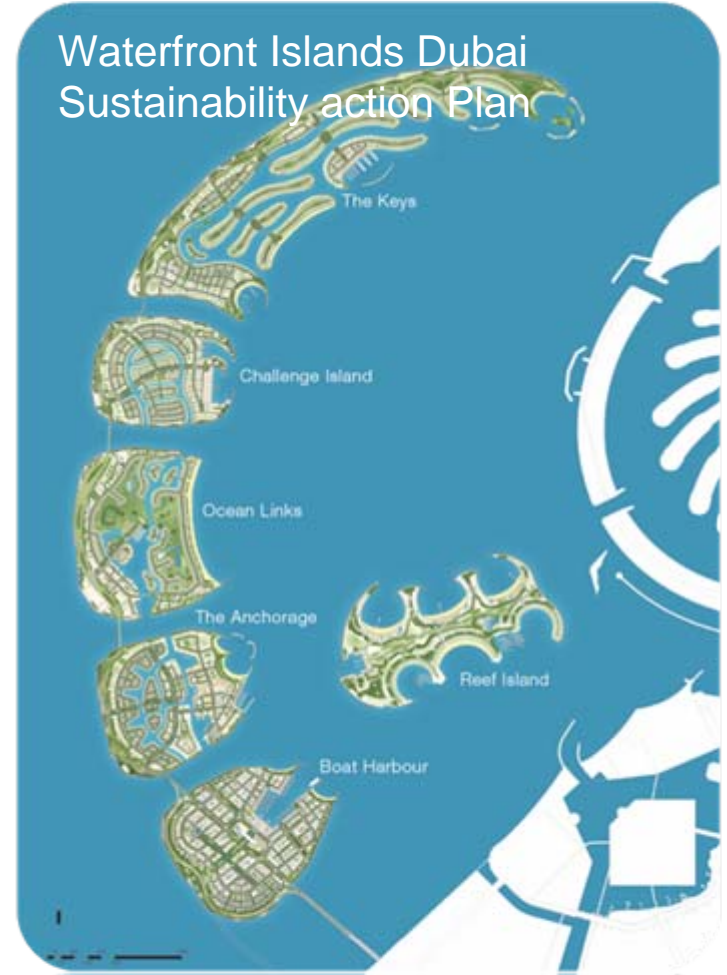
Case Study : Middle East



Capital Centre Commercial
development Abu Dhabi
Targeting a LEED Gold
Rating



Waterfront Islands Dubai
Sustainability action Plan



Case Study : South Africa



- 7 Green Star Accredited Professionals (growing quickly)
- Training to be Green Star assessors
- Early involvement of the Australian practice in helping train staff in South Africa and to Leverage our experience in Australia and New Zealand
- Speaking at conferences, writing articles
- Early assistance with project reviews and modelling
- Staff transfers between Australia and South Africa for skills training



Green Star Case Study 1



Operational Performance of Green Star Buildings

Presentation to The Green Building Council of South Africa Convention & Exhibition by Jeff Robinson, Principal Engineer and Sustainable Buildings Group Leader, Aurecon



Presentation to The Green Building Council of South Africa Convention & Exhibition by Jeff Robinson, Principal Engineer and Sustainable Buildings Group Leader, Aurecon

Case Study : South Africa



- Early involvement with the GBCSA – Silver founding member



- Designed the mechanical services model for the first GreenStar building in South Africa for Nedbank
- Committed to seeking a Green Star rating for Aurecon offices in Cape Town and Pretoria
- Green Star faculty members, technical advisory group members

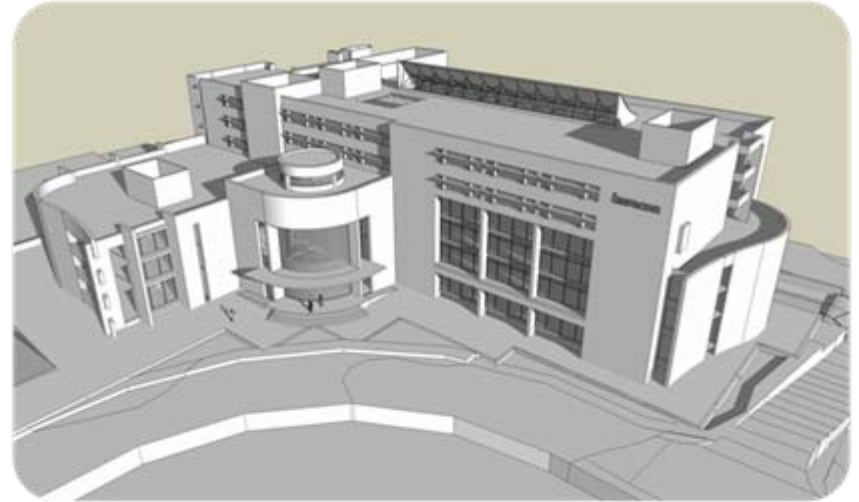
Case Study : South Africa



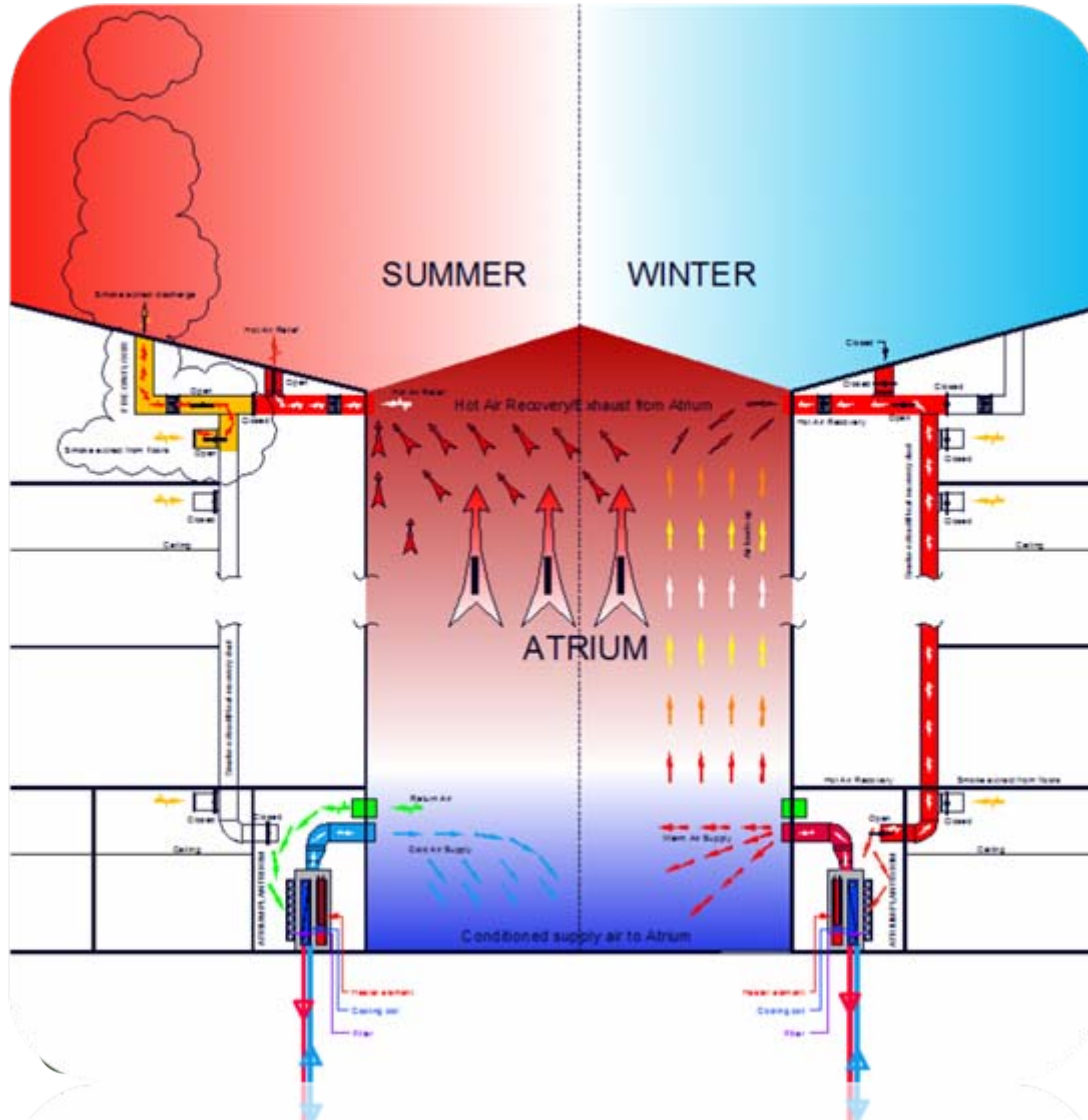
Examples of RSA Green Buildings

- **Aurecon Pretoria office**
 - Office usable area 18 688m²
 - Aim: 4-star Green Star rating
 - Planned completion date April 2011

- **Aurecon Cape Town office**
 - Office area 7 062m²
 - Aim: 4-star Green Star rating
 - Construction Nearly Completed



Case Study : South Africa Nedbank – First Green Star Rated building



Case Study : South Africa



Shepstone and Wylie building

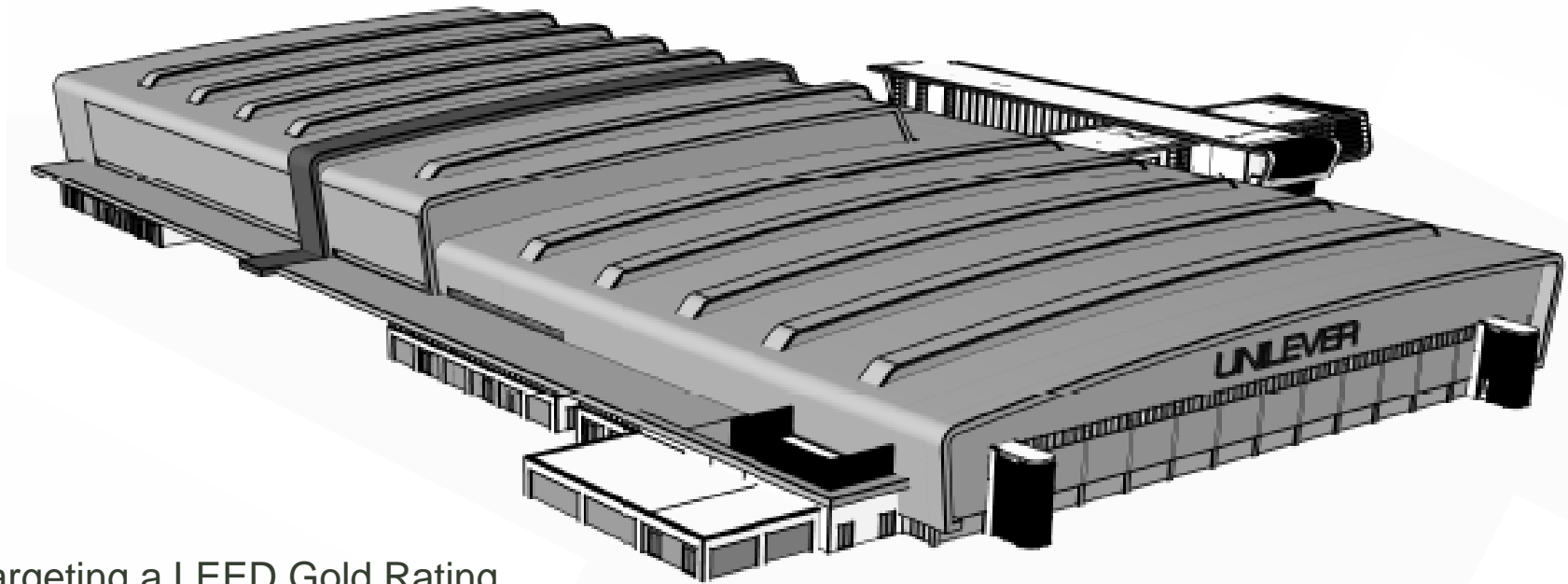
Awarded a 4 Star Green Star rating



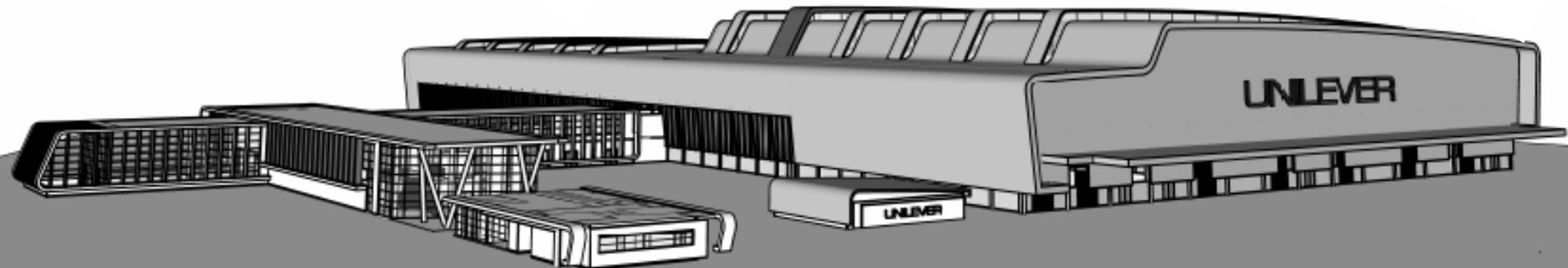
Case Study : South Africa



Unilever Building - Durban



Targeting a LEED Gold Rating



Case Study : South Africa Sandton City



Key lessons we have learnt

- Understand the local market and where it is at in the Green Building cycle of development
- Partner with companies who know the market well
- Don't blindly apply Australian Green Building design solutions overseas
- Study and really understand the local climate and vernacular architectural designs and building practices
- Be prepared to both teach and learn
- Be a strong advocate for the benefits of Green Buildings
- Get involved with the local Green Building Council



Key lessons we have learnt continued

– Support local Green Building Councils

- Attend workshops and training courses
- Encourage employees of all disciplines to become accredited professionals
- Attend and contribute to local conferences
- Volunteer services to serve on advisory panels
- Join as member or founding member



Key lessons we have learnt continued

– Training / Retraining

- Market / educate benefits of green building to clients and network partners, e.g. Architects and Qs
- Train / retrain employees of all disciplines on differences, characteristics and benefits of green buildings
 - » Emphasis on life cycle cost rather than capital cost
 - » Indoor environment quality and productivity improvements
 - » Reduced operating cost
 - » Minimise impact on environment
- Green buildings are essentially just good building design



Key lessons we have learnt continued

– Leverage on International Experience

- Modelling initially by international experts
- Overseas training of staff
- Concept and design reviews
- Share templates and typical reports
- Internal / external reviews of submissions
- Early stage review of points calculator
- What worked and what did not work



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