INTEGRATING SUSTAINABILITY FOR BUSINESS SUCCESS AND FUTURE VALUE

WGBC – APAC Leadership in Green Building Awards Roadshow (Jakarta and Kuala Lumpur)

By Esther An
Chief Sustainability Officer

21 and 23 August 2015
ABOUT CDL

- Singapore’s property pioneer since 1963; Listed international property and hotel conglomerate with a global network across 25 countries
- Group revenue - S$3.76B (FY 2014); Market Cap - S$8.48B (31 Aug 2015)
- Built over 36,000 homes & owns some 7.2 million square feet of lettable commercial and residential space in Singapore and abroad
- London-listed subsidiary Millennium & Copthorne Hotels plc (M&C) owns and manages over 120 hotels
- Leader in CSR/Sustainability: 1st Singapore company listed in all three international sustainability benchmarks - FTSE4Good since 2002, Global 100 Most Sustainable Corporations since 2010 & DJSI since 2011
- Other Accolades: Asia’s Top Property Developer - Channel NewsAsia Sustainability Ranking (2014), GRESB Green Star 2015, Channel NewsAsia Green Luminary Award (2012), BCA Green Mark Platinum Champion Award (2011) and BCA Built Environment Leadership Award (2009)

- "Corporate Social Responsibility": 63.5 million search results
- "Sustainability": 111 million search results
- "Sustainability and Innovation": 84.9 million search results
- "CSR": 145 million search results

Source: Google Search (as of September 2015)
EVOLVING STAKEHOLDER PREFERENCE FOR RESPONSIBLE BUSINESS & PRACTICES

51% of Millennials would ‘PAY EXTRA for sustainable products

Source: 2014 AC Nielsen Global Survey on Corporate Social Responsibility [Sample: 30 000 Consumers in 60 Countries]
CDL’S 20-YEAR CSR JOURNEY
Driving Innovation & Future Proofing Business

Defying Norms & New Vision
- Strategic Transformation “Conserve as we Construct”
- Integrate CSR into Corp Vision & Mission

Align with Global Best Practices
- 2002: FTSE4Good
- 2005: Signatory to UN Global Compact;
- 2003: ISO 14001, OHSAS 18001
- 2008: Publish SG’s 1st GRI-checked SR
- 2002: Project Eco-Office; EHS 5-Star Assessment, Seminars and Awards

Sustainable Business Model & Creating Future Value
- Global Recognition for Sustainability Efforts
- 2014: CNA Sustainability Ranking – Top Asian Developer
- Investment properties ISO 50001 certified
- CDL Green Lease Partnership

1995
- Broad range of Stakeholder Engagement
- Driving Change in Industry
- Committed to Green Building & Innovation
- Tracking & Reporting

2000s
- 2002: FTSE4Good
- 2005: Signatory to UN Global Compact;
- 2003: ISO 14001, OHSAS 18001
- 2008: Publish SG’s 1st GRI-checked SR
- 2002: Project Eco-Office; EHS 5-Star Assessment, Seminars and Awards

2010 - 2014
- Global Recognition for Sustainability Efforts
- 2014: CNA Sustainability Ranking – Top Asian Developer
- Investment properties ISO 50001 certified
- CDL Green Lease Partnership

2015
- CDL Future Value 2.0: Enhanced Vision & Strategy
- Adopt Integrated Reporting
- BCA Green Mark Pearl Prestige

1995
- Green Building Innovation: Game-changing technologies – PPVC and Solar Energy Solutions
- Carbon Reduction Targets and Climate Change Policy
- Raised Standards for CSR and Sustainability Reporting

City Developments Limited
CREATING VALUE FOR THE FUTURE
CDL’S GREEN JOURNEY
Defying Norms, Transforming Strategy.

“In the mid-1990s, the building sector was seen as ‘destroying before constructing’. CDL as a pioneering developer was determined to change this perception and committed to transforming our business strategy to one that ‘conserves as we construct’ for long term sustainability.”

Mr Kwek Leng Joo
Deputy Chairman
City Developments Limited
DRIVERS OF CHANGE AND VISION
“Conserving As We Construct” since 1995

INDUSTRY PERCEPTION
In 1990s, building sector seen as ‘Destroying before Constructing’

BUSINESS EXPANSION
Residential Developer to international hotel conglomerate with global operations

CORPORATE MISSION
To be a responsible corporate citizen committed to creating value for stakeholders, conducting sustainable business practices, caring for the community and protecting the environment

CORPORATE VISION
Maintain industry leadership in innovation, product quality, service standards, profitability and CSR

Leadership Commitment & CSR Culture
Integrating CSR into Business Operations
- Policies & Practices
- Org Structure
- Product Innovation
- Stakeholder Engagement
- Supply Chain
- Community Outreach
PROACTIVE CSR: INNOVATING FOR SUSTAINABILITY

Turning Vision into Action for Sustained Value

“Conserve as we Construct”

ADOPT INTERNATIONAL
BEST PRACTICE
Align with Global Benchmarks

GREEN BUILDING
INNOVATION
Creating Inspiring Living Spaces

VISION | COMMITMENT | ACTION

INNOVATIVE
Products

Strong
Branding

Investor
Value

Sustainable
Business

BETTER
PERFORMANCE
Greater Efficiency and Higher Productivity

ENGAGING
STAKEHOLDERS
Transforming Behaviour; Licence to Operate

CDL Future Value 2.0

CDL Future Value 2.0
CREATING VALUE FOR SUSTAINABLE GROWTH

Communicating Our Capitals Clearly

Commitment to Stakeholders

<table>
<thead>
<tr>
<th>CUSTOMERS</th>
<th>To offer quality and innovative products, unsurpassed service and value for money.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAREHOLDERS &amp; INVESTORS</td>
<td>To maintain profitability and achieve optimum returns for their investment.</td>
</tr>
<tr>
<td>EMPLOYEES</td>
<td>To maximise their potential and care for their personal well-being and career development.</td>
</tr>
<tr>
<td>BUILDERS &amp; SUPPLIERS</td>
<td>To select based on quality work and their ability to complement our commitment to environment, health and safety.</td>
</tr>
<tr>
<td>THE COMMUNITY</td>
<td>To serve the community we operate in so as to create a better place for all, especially by caring for the less fortunate, enhancing youth development, promoting the arts and conserving the environment.</td>
</tr>
</tbody>
</table>

CREATE FUTURE VALUE

Six Capitals

| FINANCIAL            | • Earnings  
|                      | • Equity  
|                      | • Investments  
|                      | • Assets |
| MANUFACTURED         | • Green building and innovation  
|                      | • Quality developments  
|                      | • Sustainable construction methods and technologies |
| ORGANISATIONAL       | • Leadership and culture  
|                      | • Corporate governance  
|                      | • Policies and practices  
|                      | • Risk management |
| SOCIAL AND RELATIONSHIP | • Stakeholder relations  
|                      | • Partnerships  
|                      | • Social licence to operate  
|                      | • Community development |
| HUMAN                | • Health and safety  
|                      | • Benefits and remuneration  
|                      | • Learning and development  
|                      | • Job creation and security |
| NATURAL              | • Carbon emissions  
|                      | • Energy management  
|                      | • Water stewardship  
|                      | • Waste and resource management |

City Developments Limited

CREATING VALUE FOR THE FUTURE
BUILDING ORGANISATIONAL CAPITAL: SUSTAINABILITY FOCUSED STRATEGY, POLICIES & OPERATIONS
MANAGE ENVIRONMENTAL IMPACT AND NURTURE ‘GREEN’ CORPORATE CULTURE

ISO 14001, OHSAS 18001 and ISO 50001:

- **2003**: 1st private property developer to receive ISO 14001 Environmental Management System (EMS) and OHSAS 18001 Occupational Health and Safety Management (OHS) System in Property Development and Project Management
- **2008**: CDL Corporate Office achieved ISO 14001
- **2014**: 1st property developer in Singapore to achieve the ISO 50001 Energy Management System (EnMS) certifications for its commercial buildings

Track and review progress for continual improvement
LOW CARBON PRACTICES & CLIMATE CHANGE POLICY

Initiatives include

- **Since 2008**: Corp Office attained ISO 14001 EMS certification
- **Since 2009**: Carbon-neutralise HQ operations
- **2011**: Set Reduction Target for Carbon emission intensity
- **2015**: Climate Change Policy formalised & publicly posted
ENGAGING VALUE CHAIN TO RAISE EHS STANDARDS & REDUCE OPERATIONAL RISKS

- **Corporate Statement on Human Rights (2012)**
  - Incorporates workers’ welfare & good labour practices which are also criteria for EHS Assessment
  - Workers Welfare Award to recognise committed builders

- **Green Procurement Guideline (2008)**
  - Expanded scope to include preference for environmental friendly products approved by Certification Body e.g. FSC, Green Label
  - Updated in 2013 and reviewed annually

- **Corporate EHS Policy (2003)**
  - Penalties added to Awards for contractors to account for poor EHS
  - Moving towards “Total WSH” – promoting health, safety and wellbeing of the workforce

100% of CDL suppliers are ISO 14001 and OHSAS 18001-certified
BUILDING MANUFACTURED CAPITAL: PIONEERING GREEN INNOVATIONS & SUSTAINABLE CONSTRUCTION METHODS
CREATING MANUFACTURED CAPITAL

Committed to Green Building & Innovation

- Invest 2 - 5% of construction cost on green design & features
- Inspiring innovations & pioneering numerous “firsts”

7 & 9 Tampines Grande
- Most extensive use of solar panels in a commercial property (2009)

11 Tampines Concourse
- Asia Pacific’s First CarbonNeutral Development (2009)

City Square Mall
- Singapore’s First Eco-mall (2009)

Savannah CondoPark
- Singapore’s First Eco-condo (2002)

H2O Residences
- Singapore’s first condo integrating design with Park Connector & Waterway (2011)

D’Nest
CREATING MANUFACTURED CAPITAL
Committed to Green Buildings & Innovation

- Game-changing Technology to Raise Productivity & Sustainability

**Guinness World Record for Largest Vertical Garden: Tree House Condominium (Apr 14 – Jun 15)**

- 24-storey; 78m ht x 20m wide
- Green wall reduces heat absorption by up to 3°C and lowers the energy needed to cool indoor spaces
- Est. energy savings of 15% to 30% (est. $12,000 to $24,000 annually) from reduced usage of air-conditioning for 48 west-facing master bedrooms insulated by the wall

**World’s Largest PPVC Application for a 638-unit Residential Dev’t: Brownstone EC**

- 638 units; > 5,000 modules
- Up productivity by over 40%, save 55,000 Man Days
- Cleaner, safer worksites
- Better quality control
CREATING MANUFACTURED CAPITAL
Lower Energy Consumption And Operational Cost

CITY SQUARE MALL (2009)
- Maintained Annual energy savings of 14.9 million kWh or > S$4 million since 2012
- Payback of green investment within 2.5 yrs

THE OCEANFRONT @ SENTOSA COVE (2010)
- 1st BCA Green Mark Platinum private residential development in 2007
- 30% energy and water savings
- Energy-efficient air-conditioners lead to average savings of $1,000 per year per apartment

HAUS @ SERANGOON GARDEN (Q2 2016)
- 1st BCA GM Platinum landed estate in 2012
- Approx 40% utilities savings for each typical terrace house / home owners
Fuji Xerox Towers
Chiller System Upgrading

- Landlord’s overall electricity consumption: 35% per year
- Air conditioning plant’s energy efficiency: 54% &
  Energy consumption on air conditioning: 51% from
  70% of total energy
- Annual Savings: > $700,000
  [based on average tariff rates for year 2012]

▼ 35% Energy Consumption

Before
7,488,000 kWh

After
4,836,000 kWh
2008 – 2014: CDL’s 57 Green Mark awarded buildings est. to achieve a reduction in electricity consumption of approx. $36.5m in value

Electricity Cost Savings (S$m)

- Residential: $2.85m, (8%)
- Commercial: $8.64m, (24%)
- Hotels: $24.9m, (68%)

City House - GM Pearl Prestige 2015
Energy Savings: 1.9 mln kWh (est. S$500,000/yr)

M Social Hotel – GM Platinum

368 Thomson – GM Platinum & CONQUAS ‘STAR’
(Top score: 98.9)
CREATING MANUFACTURED CAPITAL

Taking Our Sustainability Ethos Overseas

**Eling Residences – Chongqing**
1st Residential Project in China certified BCA Green Mark Platinum:

- 36% more energy efficient and 24% more water efficient**
  [Energy savings: est. 2.3 million kWh/yr & Water savings: est. 20,000 m³/yr]
- Cost Savings: approx 1.2 million RMB/yr
  [CQ residential electricity tariff - 0.53RMB/kWh]
- Equivalent Reduction of > 1,100 tonnes CO₂ emission/yr

**Hong Leong City Centre – Suzhou**
1st LEED* Platinum Serviced Apartment in China:

- 18% more energy efficient and 45% more water efficient**
  [Energy savings: est 1.3 million kWh/yr & Water savings: est 75,000 m³/yr]
- Cost Savings: approx 1.1 million RMB/yr
  [SZ commercial electricity tariff - 0.8751 RMB/kWh]
- Equivalent reduction of > 626 tonnes of CO₂ emission/yr

*LEED: Leadership in Energy & Environment Design  **as compared to industry standards in China
BUILDING SOCIAL AND RELATIONSHIP CAPITAL: ENGAGING STAKEHOLDERS ALONG THE VALUE CHAIN
DRIVING USER BEHAVIORAL CHANGE FOR ENERGY CONSERVATION

- Behavioral control: vary energy consumption up to 17%

- Building owners and tenants account for almost equal share of the total buildings’ electricity consumption

  BCA Building Energy Benchmark Report 2014

**Offices**
- 52% (Building Owner’s Electricity Consumption)
- 48% (Tenants’ Electricity Consumption)

**Retail Buildings**
- 50% (Building Owner’s Electricity Consumption)
- 50% (Tenants’ Electricity Consumption)
BUILDING SOCIAL & RELATIONSHIP CAPITAL
Shaping Stakeholders’ Behaviour

Project Eco-Office (since 2002)

Promoting 3Rs to office workers at national level

1°C UP (since 2007):
Reduce Energy Consumption

Green Lease Partnership Programme (2014)

- Engage Tenants to adopt Eco friendly design, materials & fittings/equipment and lightings
- Indoor greenery, energy/water conservation measures & waste management
- First Automated Meter Portal for tenants to track energy usage (CDL & Tuas Power) for improvement
BUILDING SOCIAL & HUMAN CAPITAL
Ensuring EHS Excellence along the Value Chain

EHS 5-Star Assessment System

- Well-equipped with air conditioned bedrooms and personal lockers
- Clean and colourful toilets
- Clean and safe worksites

EHS Seminar and Awards

EHS and Workers’ Welfare Pledge by Main Builders
BUILDING SOCIAL & RELATIONSHIP CAPITAL
Deliver Green Homes and Promote Eco-Lifestyle

- Let’s Live Green Talks & Exhibitions @ TOP Fairs: Achieved 80% satisfaction rate (2014); Talks by NEA, NParks to share topical issues eg. mosquito breeding, high-rise greening

- Future TOP Fairs: For 2015, exploring gift ideas to promote a “Car-Lite” and “Eco-Smart” nation, in line with the Singapore Sustainable Blueprint

- Green Living Kit: Distributed to over 1000 households in 2014; projected over 2,000 households for 2015
BUILDING SOCIAL & RELATIONSHIP CAPITAL
Creating Green Spaces for Wider Community

**MY TREE HOUSE**
WORLD’S 1st GREEN LIBRARY FOR KIDS

- Launched on 31 May 2013 @ Central Public Library
- Visitors: over 1 million/year

**CDL GREEN GALLERY**
@ SBG HERITAGE MUSEUM

- Opened by PM Lee Hsien Loong on 30 November 2013
- Visitors: 2 million/yr (up by 35% since UNESCO World Heritage Site in June)
BUILDING SOCIAL & RELATIONSHIP CAPITAL
Raising Eco-Awareness & Nurture Future Green Champions

CDL E-Generation Challenge
- Nurture green advocates across the masses
- Dynamic and interactive format
- Align with key national environmental focus

CDL-Compact Singapore Young CSR Leaders Award
- Sustainability-focused business case competition
- Be mentored by experienced CSR consultants
- Attachment to large-cap firms

BCA-CDL Green Sparks Competition
- Promote innovative solutions for the sector
- Raise awareness of green building practices
- Develop green building professionals
STAKEHOLDER COMMUNICATION

2008: 1st SG company to publish GRI-checked Sustainability Report

2014: 1st to Adopt Integrated Reporting in SG Property Sector

2004 - 2007

2008 - 2011

2012 - 2014

2015 and Beyond

2004: Brief CSR Report as part of Annual Report

2008: 1st SG Company to publish GRI-Checked SR

2012: 1st SG Company to achieve GRI Level A+

SGX: “Report or Explain” by 2017

Integrated Reporting Approach

CDL Future Value 2.0
Creating Value for Future Generations

REFINING OUR REPORTING APPROACH: MATERIALITY, RISK MANAGEMENT, INTEGRATED FOR VALUE CREATION
CREATING FUTURE VALUE:
BENEFITS & IMPACT
REPUTATIONAL GAIN – INTERNATIONAL & REGIONAL

- World GBC Asia Pacific Regional Network Leadership Awards in Green Building – Business Leadership in Sustainability (2014)
- UN Global Compact 100 (2014) – Only S’pore Corporation listed
- CNA Sustainability Ranking 2014 – ‘Top Asian Developer’
- STOXX Asia/Pacific ESG Leaders 50 index
- Guinness World Record – Largest Vertical Garden (2014, Tree House)
- Ethibel EXCELLENCE Investment Register (2014)
- Brownstone EC – Set To Be World’s First Large-Scale PPVC Dev’t
- FTSE4 Good Index Series (since 2002)
- Global 100 Most Sustainable Corporations in the World (since 2010)
- Dow Jones Sustainability Indices (since 2011)
- Global Real Estate Sustainability Benchmark (GRESB) since 2013
- MSCI ESG Research – “AAA” Rating (constituent since 2009)
- IR Magazine SE Asia Award – Sustainability Best Practice (2013)
- Channel NewsAsia Green Luminary Award (2012)
- 2012 Asia Pacific Green Builder of the Year Award
- MIPIM Asia Awards 2013
REPUTATIONAL GAIN – LOCAL

- BCA Green Mark – Most Awarded Developer with >80 properties
- Inaugural BCA Green Mark Pearl Prestige (2015)
- SBF Singapore Sustainability Awards 2011 & 2014 – Top Honour
- Asia Responsible Entrepreneurship Awards 2014
- Singapore Creative CSR Award – Environment (2014)
- BCA Quality Excellence Award – Quality Champion Platinum (since 2013)
- Singapore Corporate Awards 2014 – Best IR Bronze
- BCA Construction Productivity Advocate Award (2013)
- Inaugural BCA Green Mark Platinum Champion (2011)
- BCA Built Environment Leadership Platinum Award (2009)
- BritCham Business Awards – Exceptional CSR Practice (2012)
- Singapore Quality Class (since 2009)
- Friend of the Arts Award (since 1997) & Distinguished Patron of the Arts (since 2011)
- BCA Green Mark Champion (2008)
- President’s Social Service Award (2007)
- President’s Award for the Environment (2007)
BEST PRACTICES >> BETTER PERFORMANCE

- **Industry Leader for Environmental Conservation, Product Quality & Differentiation:**
  - Highest number of BCA Green Mark awarded properties
  - Winner of Inaugural BCA Built Environment Leadership Platinum (2009)
  - 1st Developer conferred the Green Mark Platinum Champion (2011)
  - BCA Green Quality Excellence Award – Quality Champion (since 2013)
  - 1st & Sole Winner of BCA Green Mark Pearl Prestige Award (2015)

- **An Engaged Workforce:**
  - Lower Employee Turnover: 15.9% vs 24.3% (National Avg 2014)
  - Higher Employee Engagement Scores: 70% (National Avg 64%, 2014)
  - Over 3,000 staff volunteer hours clocked; 79% Staff Participation Rate [2014]
## LICENCE TO OPERATE

### Energy Conservation Act:

**Since April 2013:**

*Companies with high energy usage are required* to appoint energy managers, report energy use & submit energy efficiency improvement plans annually

*National Environment Agency (April 2013)*

### Mandatory Tender Requirements:

**Since 2H 2014:**

SG Govt mandates productive technologies like the **Prefabricated, Pre-finished Volumetric Construction (PPVC)** and **Cross Laminated Timber (CLT)** as part of tender conditions for certain government land sales sites

*Channel NewsAsia (10 March 2014)*

### Mandatory Waste Reporting:

**Since 2014:**

*Hotels with over 200 rooms* and *Shopping Malls with Net Lettable Area of 50,000 sqft or more* are required to report waste data and submit waste reduction plans

*Environment Public Health Act (Amended 2014)*

### Mandatory Sustainability Reporting:

**17 October 2014:**

SGX announced ‘**Comply or explain**’ approach for sustainability reporting

**By 2017:**

Target year for proposed listing rule and reviewed guide to be implemented

*TODAY online (31 Oct 2014)*
GOODWILL TODAY FOR TOMORROW – GROOMING FUTURE ECO CHAMPIONS VIA PUBLIC EDUCATION

- Collection: abt 70,000 children books
- 30% of which have environmental conservation focus
- Since 2011: Nurture future CSR leaders
- Target: Tertiary Students aged 17 to 30

My Tree House – World’s 1st Green Library for Kids

CDL-Compact Singapore Young CSR Leaders Award
THANK YOU!

For more information, visit
www.cdl.com.sg