

## **AGENDA**

- Sustainability:A Global Business Trend
- A Business Case:
   CDL's Ideas, Initiatives &
   Impacts that Add Business
   Value
- Ideals:
   Firm Commitment for Long-Term Sustainability





# SUSTAINABILITY A Global Business Trend



## SUSTAINABILITY FOR BUSINESS LEADERSHIP

A GLOBAL BUSINESS MEGATREND

"In our interdependent world, business leadership cannot be sustained without showing leadership on environmental, social and governance issues."

H.E. UN Secretary-General Ban Ki-Moon (2007)



## **MULTIPLE DRIVERS OF SUSTAINABILITY TODAY**

#### **Investor Activism**

**886 SRI Funds** managing **€84 billion** in Europe (June 2011)

#### **Carbon Disclosure Project**

Over 3,000 companies; 655 investors Managing a combined assets of U\$\$78 trillion (2012)

#### Licence to Operate

#### **Energy Conservation Act**

From May 2012: impacts S'pore corps that use **15 GWh of energy a year** 

## Building Control Act (Amendment Bill)

From 2013:, existing buildings to submit energy audit & energy consumption data once every 3 years

#### Min. Green Building Standard

Since 15 April 2008: min. Green Mark Certified Level for all new & existing buildings that undergo major retrofitting



#### **Talent Attraction**

Values and ethics, transparency and accountability to society, arguments, all of them operating in key attraction of "talent". - PricewaterhouseCoopers

Singaporean employees are most motivated by work-life balance

 nearly 60% of workers polled in an Ernst & Young survey agreed that it is a key factor

### **Community Welfare**

"Prosperous companies can only exist in a stable prosperous world."

- Minister Vivian Balakrishnan, Asian Forum on CSR, November 2008

Growing influence of various social media platforms & NGOs



## SUSTAINABILITY IN SINGAPORE

#### A STRATEGIC BUSINESS ISSUE

## REDEFINING THE ROLE OF BOARD OF DIRECTORS – SUSTAINABILITY TO BE CONSIDERED AS PART OF CORPORATE GOVERNANCE

"... consider sustainability issues, e.g. environmental and social factors, as part of its strategic formulation."

Monetary Authority of Singapore Revised Code of Corporate Governance (2 May 2012)

#### INCLUSION OF ENVIRONMENTAL & SOCIAL DATA AS PART OF REGULATORY DISCLOSURE

"(I)ssuers should assess and disclose the environmental and social aspects of their organisational performance, in addition to the financial and governance aspects that are already part of the customary and regulatory disclosure practiced."

Singapore Exchange Policy Statement on Sustainability Reporting (June 2011)



## SUSTAINABILITY: A BUSINESS CASE FOR DEVELOPERS

#### **INCREASE IN CAPITAL VALUE**

Retrofitting commercial buildings could reap an increase in capital value of about 2%

#### **AVERAGE EXPECTED SAVINGS**

■ 10% in operating expenses & 17% in energy consumption resulting from the retrofitting

#### INVESTMENT

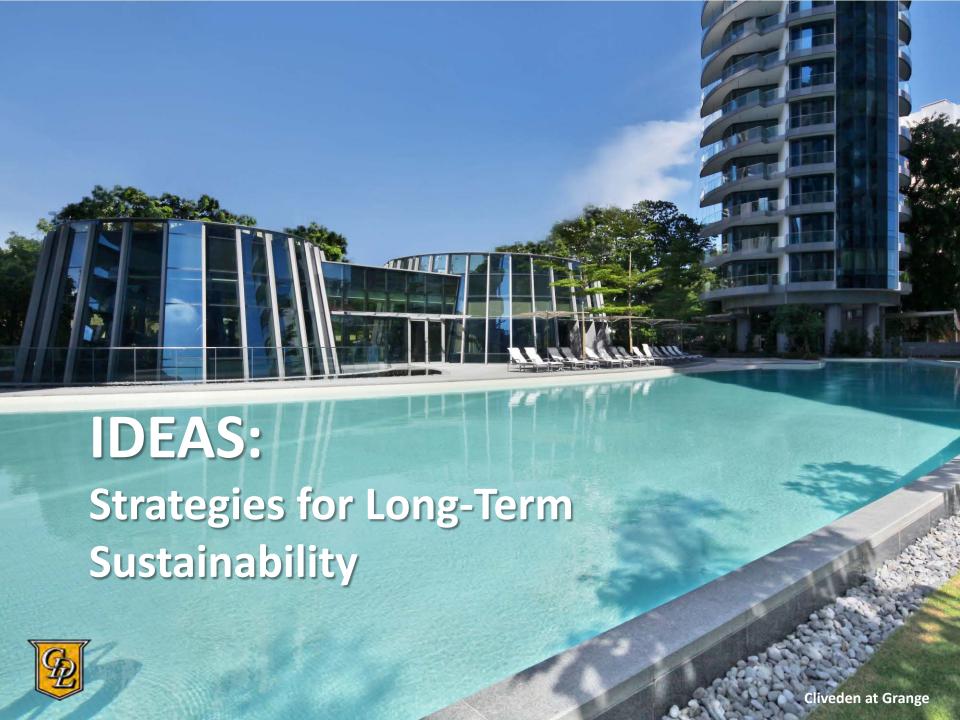
The effort to achieve Green Mark certification need not be costly. If the retrofit cost is expressed as a percentage of the current market value of property, it is 0.5% for retail and 1% for offices

#### **PAYBACK**

Upfront cost of retrofitting energy inefficient buildings can be recovered in about 4 to
 7 years

Source: Joint study by the Building and Construction Authority (BCA) & the Department of Real Estate, National University of Singapore (NUS) in collaboration with the top six real estate consultancy firms (CB Richard Ellis, Chesterton Suntec, Colliers International, DTZ Tie Leung, Jones Lang LaSalle and Knight Frank) (September 2011)





## **OUR GREEN VISION SINCE MID-1990S**

"Companies with sustainability in their DNA are more resilient and make a better business model for success and long term growth.

In the mid-1990s, 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.

From design, construction, procurement, maintenance and even user engagement, the entire cycle has been aligned with environmental sustainability in mind."

Kwek Leng Joo Managing Director



## **SUSTAINABILITY IN A HOLISTIC FRAMEWORK**

**ALIGNING BUSINESS PRACTICES WITH ISO 26000** 

## **Vision & Mission**

#### **Corporate Vision**

To maintain industry
leadership in innovation,
product quality, service
standards, profitability and
Corporate Social
Responsibility

#### **CSR Mission**

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

## **Framework**

#### Aligned with ISO26000

- Corporate Governance & Risk Management
- The Environment
- Fair Operating Practices
- Consumer Issues
- Human Rights
- Labour Practices
- Community Involvement & Development

## **Operationalisation**

## Embedded throughout the organisation

- Corporate Culture
- Policies & Practices
- Product Innovation
- Stakeholder relations
- Supply Chain
- Community Outreach



## **KEY GREEN MILESTONES**

2001

Launched CDL 5-Star **EHS Assessment System** at all worksites

2002

Launched Singapore's First Eco-Condo Savannah CondoPark; & Project: Eco-Office; Listed on FTSE4Good Index Series

2003

Established Corporate EHS Policy, achieved ISO 14001 & OHSAS 18001 for property development & project management

2007

**BCA Green Mark** Champion Award; 1st **Private Developer** to achieve Green Mark Platinum

(for City Square Mall & The Oceanfront @ Sentosa Cove)

2008

Publication of 1st dedicated Sustainability Report; Formation of CSR Committee: ISO 14001 for Corporate Management & Operations

2009

Inaugural recipient of **BCA Built Environment** Leadership Platinum Award

2010

Launch of First Carbon Neutral® development in Singapore & Asia Pacific Listed on Global 100 Most Sustainable Corporations in the World

2011

Listed on **Dow Jones** Sustainability Indexes -World & Asia Pacific; Inaugural recipient of **BCA Green Mark** Platinum Champion Award

2012

1st Listed Co & **Developer** in Singapore to publish GRI Checked Report

62 BCA Green Mark developments - the most by a private **Level A+ Sustainability** developer; with 21 of the Platinum tier

Launch of 1st BCA Green Mark Platinum Landed **Housing Estate in** Singapore
- HAUS@SERANGOON GARDEN

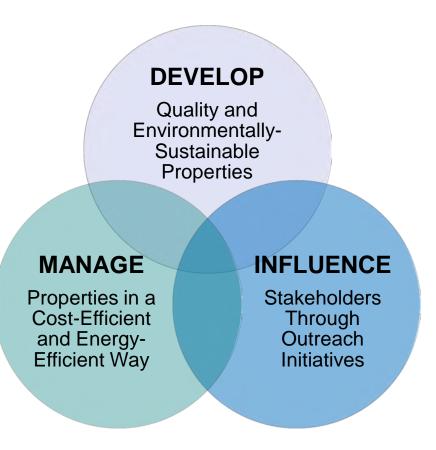




## HOLISTIC, LIFE-CYCLE APPROACH

#### OUR THREE-PRONGED STRATEGY FOR A CLOSED LOOP

- Championing green building development through innovation since the 1990s
- Adoption of a triple bottom line model to develop properties that are sustainable, functional and financially marketable



**CDL's Three-Pronged Strategy** 





## INTERNALISING "SAFE & GREEN" CORPORATE PHILOSOPHY

- 5-Star EHS Assessment to raise builders' EHS standards since 2001
  - Independently appraised & graded quarterly by independent auditors engaged by CDL
- Environmental, Health and Safety (EHS) policy since 2003
  Align vision with operations for supply chain & staff to mitigate impact on environment
- Invest 2% to 5% of each new project's construction cost on green design/features
- Achieve a minimum BCA Green Mark Gold<sup>Plus</sup> Rating for all new developments
- Green Procurement Guidelines to influence our vendors and suppliers since 2008





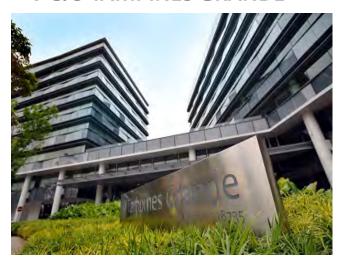
# LEADING THE WAY THROUGH GREEN INNOVATION

11 TAMPINES CONCOURSE



- First CarbonNeutral® development in Singapore & Asia Pacific
- First building in Singapore constructed with extensive use of recycled materials for structural building components – Green Concrete

7 & 9 TAMPINES GRANDE



- First development to achieve LEED

  (Leadership in Energy & Environmental Design Rating Design) Gold

  Certification under Core & Shell category in Singapore
- Features one of the largest and most extensive use of solar technology in a commercial property in Singapore





# BUILDING A SUSTAINABLE FUTURE THROUGH INNOVATION

- 62 BCA Green Mark Awards accorded developments, highest amongst private developers
- 21 are of Green Mark Platinum tier the highest rating for green developments in Singapore







**Fuji Xerox Towers** 



**Tampines Grande** 



Quayside Isle



The Oceanfront@ Sentosa Cove



Tree House



H<sub>2</sub>O Residences







# MANAGE

# OPTIMISING WATER & ENERGY EFFICIENCY

## Improve energy efficiency

- Commercial buildings consumes 30% of total energy in Singapore.
- Air conditioning takes up 65% within commercial buildings.\*

## Regular energy audits in particular on air-con plants

- 1) Preliminary site study & collection of data to understand the air-con chiller plant performance & building load profile
- 2) Detailed audit
- 3) Financial study for Return on Investment (ROI)

## Regular training on energy efficiency for Operation & Management staff

To be certified as Green Mark Managers, Green Mark Facility Managers
 & Certified Energy Managers





# DRIVING AWARENESS AMONGST STAKEHOLDERS & SUPPLY CHAIN







## **SUSTAINABILITY REPORTING**

A GLOBAL TREND FOR TRANSPARENCY & BETTER COMMUNICATION

**Updates from the Rio+20 Corporate Sustainability Forum on 21 June 2012:** 

- First global call by stock exchanges for sustainability disclosure and performance by listed companies: commitment by five stock exchanges (collectively listing over 4,600 companies) to promote sustainable investment.
- A call by investors for integrating sustainability issues within annual reports of all listed and large private companies.
- Growing consensus that **Responsible Investment and Sustainable Finance represent investors' contribution** to overall global sustainable development.

Sustainability Reporting*	Singapore	Australia	UK
2010	11	103	71
2011	21	110	80
2012	49 (to date)	N/A	N/A





## **SUSTAINABILITY REPORTING**

WHAT GETS MEASURED GETS MANAGED

Vision, Mission & Implementation

Dedicated Reporting

International Benchmarking

Mid 1990s - Early 2000

2008

2010

- Various stakeholder engagement programmes based on CSR vision & mission
- Began measuring performance and reporting as a part of the Annual Report (2004-2007)

- CSR committee headed by senior management
- Dedicated GRI report since 2008
- 1st Singapore company to have report checked by GRI

- AA1000AS assured since 2010
- Alignment with ISO26000 & continuous improvement (2011)
- 1<sup>st</sup> Singapore listed company to achieve GRI-Checked A+ Level (2012)



# DEDICATED GRI-CHECKED SUSTAINABILITY REPORT SINCE 2008

2008



2009





- 1<sup>st</sup> GRI-checked report published by a S'pore corporation (GRI Level C)
- GRI G3 Guidelines
- 1st GRI Level B+ checked report by a S'pore developer
- Report audited by independent 3<sup>rd</sup> party
- GRI G3 Guidelines

2010



AA1000



- 1<sup>st</sup> S'pore corporation to achieve International AA1000 Assurance Standard for Sustainability Reporting
- GRI G3 Guidelines

2011



AA1000



- 1st S'pore report to address ISO 26000: Guidance on social responsibility principles
- GRI G3.1 Guidelines

2012







- 1st S'pore listed co & developer to achieve GRI-Checked Level A+ report
- GRI G3.1 Guidelines with Construction & Real Estate Sector Supplement



## WHAT WE REPORT

#### DATA DISCLOSURE ALIGNED WITH 7 CORE AREAS OF ISO 26000

#### **ORGANISATIONAL GOVERNANCE**

Established processes, systems and structures to implement socially responsible behaviour

## THE ENVIRONMENT

- GHG emissions
- Water consumption
- Energy consumption
- Efforts to reduce
   Water & Energy
   Usage
- Waste management

#### HUMAN RIGHTS

- Incidents of discrimination
   actions taken
- Effective grievance mechanism

## LABOUR PRACTICES

- Work-related injury & fatality rates
- Absenteeism
- Gender diversity & Equal opportunity
- Employee Turnover

## CONSUMER ISSUES

- Health and safety impacts of products and services
- Practices related to customer satisfaction (e.g. survey results, feedback channels)
- Fair marketing practices

## FAIR OPERATING PRACTICES

- Adherence to laws, standards, and voluntary codes
- Respect for property rights
- Safeguards for fair competition & transparency

#### **COMMUNITY INVOLVEMENT & DEVELOPMENT**

- Local engagement & impact assessments
- Employee volunteer man-hours per year
- Employee volunteer participation rate



# IMPACTS: Enhancing Business Competitiveness



## **KEY SUSTAINABILITY HIGHLIGHTS IN 2011**

#### **FINANCIAL**

Approximated some \$\$19.7m in annual energy savings from CDL's 37 Green Mark awarded buildings (2008 - 2011)

#### **ENVIRONMENTAL**

- CDL produced less carbon per leased square metre of area.
   Our total carbon intensity emissions has been reduced by
   7% to 31,589 tonnes CO<sub>2</sub>/m<sup>2</sup> from baseline year 2007.
- Energy reduction of 22% has been achieved at CDL's Corporate Office since 2006.

#### **SOCIAL**

Employee volunteer participation rate of 71% with total of 2,838 employee volunteer manhours achieved.





## **OPERATIONAL BENEFITS**

IMPROVED OPERATIONAL EFFICIENCY & SAVINGS DERIVED FROM GREEN BUILDINGS

## Estimated S\$19.7m in annual energy savings from CDL's 37 Green Mark awarded buildings (2008-2011)

- Harnessing renewable energy CDL buildings generated a total of 198,935 kWh of renewable energy.
- Energy reduction By 2011, achieved 22% energy reduction at CDL's Corporate Office since 2006.
- Water efficiency In 2011, CDL conserved 99,237 m³ of potable water (equivalent to almost 40 Olympic-sized swimming pools)\* at all our worksites.



## **OPERATIONAL BENEFITS**

#### IMPROVED OPERATIONAL EFFICIENCY & SAVINGS DERIVED FROM GREEN BUILDINGS

#### **CITY SQUARE MALL**

- Investment of 4.85% of construction cost on green & energy efficient technologies
- Annual energy savings of 14.9 million kWh or over \$\$4 million in 2011
- Payback of green investment within 2.5 years
- Cost of water efficiency design \$\$262,600 (one time) potential savings per year \$47,600
- **40%** less total water consumption beyond code compliance

Key Features at City Square Mall	Annual Water Savings (m³)	Equivalent Olympic Size Swimming Pool (50m x 25m x 1.6 m)
Water Efficiency Label Scheme Fittings	10,653	5.3
Waterless Urinal	1,205	0.6
Water Efficient Irrigation for Landscaping	4,243	2.1
Recycled condensation water from PAU	4,332	2.2
Total	20,433m³/yr	10.2



Singapore's First Eco-mall & BCA Green Mark Platinum Award building

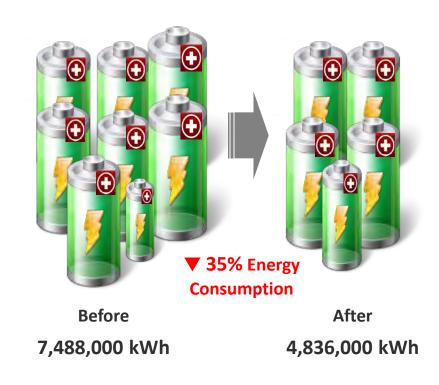


## **OPERATIONAL BENEFITS**

#### RETURN ON INVESTMENTS FOR RETROFITTED BUILDINGS

#### **FUJI XEROX TOWERS CHILLER SYSTEM UPGRADING**

- Energy consumption on air conditioning: fall from 70% to 51% of total energy
- Drop in landlord's overall electricity consumption: by 35% per year
- Air conditioning plant's energy efficiency improved by 54%
- Saving calculation based on average tariff rates over the last year (2011) approx. S\$700,000 annual savings





## **BENEFITS FOR END-USER**

#### SAVINGS FOR HOME BUYERS

#### **RESIDENTIAL PROPERTIES**

- The Oceanfront @ Sentosa Cove
  - First private residential development awarded BCA Green Mark Platinum Award in 2007, demonstrating 30% energy and water savings. Residents can enjoy energy savings of up to \$\$1,000 per year on average from energy efficient airconditioners in their apartments
- HAUS@SERANGOON GARDEN
  - First **BCA Green Mark Platinum** landed housing estate can achieve approx **40% utilities savings** for each typical terrace house







## LICENCE TO OPERATE

#### READY FOR REGULATORY CHANGES AND REDUCED RISKS

Regulatory readiness to the Singapore Government's commitment to manage carbon emissions (16% below Business-as-usual levels by 2020\*)

#### **Minimum Green Building Standard**

Since 15 April 2008, a minimum environmental sustainability standard equivalent to the Green Mark Certified Level is required for new buildings and existing buildings that undergo major retrofitting.

## Energy Conservation Act (since May 2012)

Companies with 15 GWh of annual energy consumption to appoint an energy manager report energy use and submit plans to improve energy efficiency.

- Reduced infrastructural and financial risks arising from climate change in the long run
- Lower Environment, Health & Safety (EHS) related and operating risks
- Revised Corporate Governance Code (wef Nov 2012) with key changes including board's role to include CSR



\* Subject to legally binding global deal that obliges all countries to cut emissions, and if other countries offer significant pledges

## **EMPLOYEE ENGAGEMENT**

#### **RETENTION & SATISFACTION**

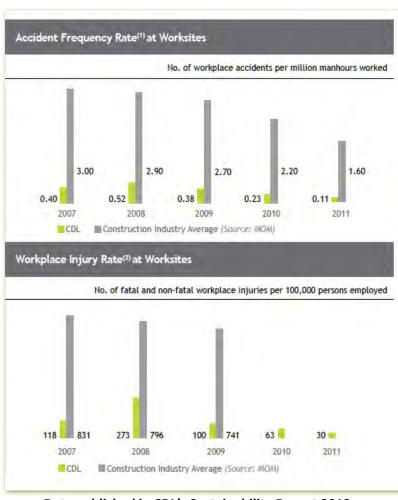
- Low employee turnover of 14.4%, as compared to national average (2011: 32.4%) reduced business cost in rehiring and training new employees
- Achieved a score of 69% for level of Employee Effectiveness Index, higher than Singapore country norm
- Garnered two accolades at the Singapore Human Resource institute Awards
  2011 Leading HR Practices in Corporate Social Responsibility Award and
  Leading HR Practices in Quality Work-Life, Physical & Mental Well-Being
  Award
- 71% of employees participated in community activities clocking **2,838 volunteer hours** in 2011



## SUPPLY CHAIN ENGAGEMENT

#### **BUILDING CAPACITY IN GREEN BUILDING, EHS EXCELLENCE & PRODUCTIVITY**

- Annual CDL 5-Star EHS Excellence Awards and quarterly CDL 5-Star EHS Assessment audits at all worksites
- CDL EHS Excellence CEO Pledge for Zero (2010) endorsed by builders and consultants go commit to raising EHS standards at all CDL worksites
- Low Accident Frequency Rate (AFR) and Workplace Injury Rate at CDL Worksites below the construction industry's average value as a result of CDL's EHS initiatives
- Green Procurement Policy (since 2008) to influence vendors and suppliers at CDL's Corporate Office to adopt green procurement practices



Data published in CDL's Sustainability Report 2012 www.cdl.com.sg/sustainabilityreport2012

## POSITIVE REPUTATIONAL IMPACT

#### STRONG PRESENCE & REPUTATION IN INTERNATIONAL ARENA

#### **Sustainability Rankings & Benchmarks**

- FTSE4Good Index Series (since 2002)
- Global 100 Most Sustainable Corporations in the World (since 2010)
- Dow Jones Sustainability Indexes World & Asia Pacific (since 2011)
- Asian Sustainability Rating (since 2010)
  Ranked top (1/60) in Singapore and amongst listed developers (1/62) in 2011
- **UN Global Compact** Signatory since 2005 & only Spore co in Advanced Level (2012)
- Carbon Disclosure Project (participated since 2007)









## POSITIVE REPUTATIONAL IMPACT

## **Regional/Local**

- CNA Green Luminary Award (2012)
- Inaugural BCA Green Mark Platinum Champion (2011)
- SBF Outstanding Sustainability Award (2010)
- Most BCA Green Mark Awards (2005 2012)
- BCA Built Environment Leadership Platinum Award (2009)
- BCA Green Mark Champion (2008)
- President's Award for the Environment (2007)
- ASEAN Business Awards "Most Admired ASEAN Enterprises" in CSR (Large Company) (2011)
- NYAA Distinguished Partner Award (2012)
- Distinguished Patron of the Arts (2011 & 2012) and Friend of the Arts Award (since 1997)
- President's Social Service Award (2007)
- Singapore Quality Class (2009 current)









## SETTING BENCHMARKS IN SINGAPORE

- First Singapore listed company & property developer to successfully publish a GRI Level A+ Sustainability Report
- First and only Singapore corporation to be listed on all three of the world's top sustainability benchmarks; FTSE4Good Index Series (since 2002); The Global 100 Most Sustainable Corporations in the World (for 3 consecutive years since 2010), and the Dow Jones Sustainability Indexes World & Asia Pacific (since 2011).
- First property developer accorded **BCA Green Mark Platinum Champion** and has the highest number of **Green Mark Awards** since its launch in 2005
- Only Singapore company listed on UN Global Compact Advanced Level corporation (2012)





## **CLIMATE CHANGE COMMITMENT**

#### A LONG-TERM VISION

**Targets in Carbon Reduction:** 

2020: 22% reduction vs baseline year 2007

2030: 25% reduction





#### **BCA GREEN MARK**

Minimum BCA Green Mark Gold<sup>Plus</sup> rating for all new developments

Since 2010: Voluntary reduction of annual carbon emissions (corporate office operations & data centre)



## **OUR SUSTAINABILITY PLEDGES**

ONGOING PLEDGES & CERTIFICATIONS – ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG)

- ISO 14001 (Property Development and Project Management since 2003)
- OHSAS 18001 (Property Development and Project Management since 2003)
- UN Global Compact (Signatory since 2005)
- ISO 9001 (15 CDL Buildings since 2007)
- **ISO 14001** (Corporate Management and Operations − since 2008)
- Caring for Climate Statement (Signatory since 2008)
- Employers' Pledge for Fair Employment (Signatory since 2008)
- Anti-Corruption & Compliance Declaration (Signatory since 2009)
- SIAS Corporate Governance Statement of Support (Signatory since 2010)
- **WSH Pledge for Zero A CEO Commitment Charter** (Signatory since 2010)
- OHSAS 18001 (Property Management since 2011)



## PIPELINE COMMUNITY INITIATIVES

#### **ENGAGING THE YOUNG & ENHANCING ENVIRONMENTAL AWARENESS**





Artist's Impressions of "My Tree House"

## "My Tree House"

## - World's 1st Green Library for Kids by CDL & NLB

Targeted for completion in mid-2013, the green library will encourage children to explore, discover and challenge their curiosity in learning and caring for the environment.



## PIPELINE COMMUNITY INITIATIVES

#### **ENGAGING THE YOUNG & ENHANCING ENVIRONMENTAL AWARENESS**

## **BCA-CDL Green Sparks Competition 2012**

A collaborative initiative with the Building and Construction Authority (BCA) to promote green building design and application amongst tertiary students in the built environment – Singapore's future architects, designers, engineers and environmentalists.

The theme for the 2<sup>nd</sup> competition is for students to conceptualise a new generation green show suite, for possible implementation in one of CDL's upcoming residential development at Buangkok Drive / Sengkang Central.

The final competition will be held in March 2013.





