

# HCC- Hindustan Construction Company Limited



**HCC**

The background features a grid of four quadrants defined by thin white lines. The top-left and bottom-left quadrants are filled with a dark green color. The top-right and bottom-right quadrants are filled with a medium blue color. A diagonal line runs from the bottom-left corner to the top-right corner, creating a triangular shape in the bottom-left quadrant that is filled with a lighter blue color. The text 'GRI - CRESS' is centered in the top-right quadrant.

GRI - CRESS

# CRESS group and sector supplement workings

A geographically diverse multi-stakeholder working group, consisting of representatives of ten construction and real estate companies and ten non industry stakeholders who are environmental, labor, and social experts, will work together to design the sustainability reporting guidance over the course of two years during **6 international working group meetings**.

## **Why did HCC join the working group:**

Participation is a valuable opportunity for HCC to demonstrate its leadership position on addressing the major challenge of sustainability in the construction and real estate industry, engage and share with others in the field but above all contribute to the content development of this important guidance.

# Some of the leading reporters in our sector

## Communication on Sustainability performance

Vinci Group

ACS Group

Bouygues Group

Acciona

Taisei

FCC

Skanska

L&T



Hitos 2007 y Retos 2008

Proyectos/Hitos 2007	Objetivos 2008
<p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p> <p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p> <p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p>	<p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p> <p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p> <p>Completar la obra de la Estación de Tratamiento de Aguas Residuales de San Sebastián de los Reyes (Madrid).</p>

## Key features of SD report

- Discussion on commitments, actions and future goals
- Discussion on economic, environmental and social challenges
- Crisp reporting on economic, environmental and social bottom lines
- Engagement with various stakeholders
- Deliberation on **material issues**

- Fostering innovation and knowledge-ex.
- **Green Buildings.**
- **Carbon Emissions** in logistics and construction machinery.
- Community Development - providing education, healthcare, shelter, etc. Minimize site nuisances.
- Transparency in communication

- Customer health and safety- Regulatory **Compliance-** National & International
- Worker/ sub contractor's health & safety.
- **Ethical** supplier & sub contractor selection.
- Environment Management
- Protecting **labour rights**

# Gammon ( Hong Kong)

The report provides background understanding on how the following key drivers to business galvanized corporate strategy into action

– The Key Indicators

- Safety
- Risk
- Innovation
- Supply chain

## Gammon's Quadruple Bottom Line



Each indicator is addressed in detail, supported by performance indicators and, where applicable, illustrated through relevant Gammon projects



HCC Group

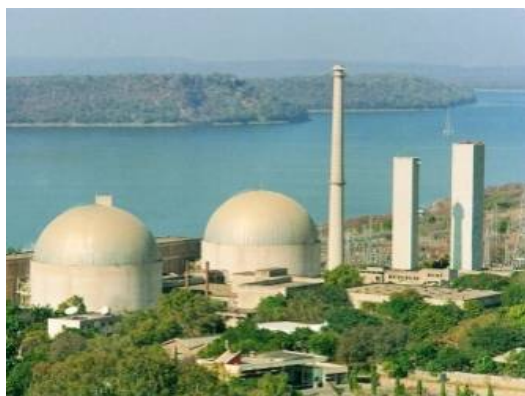
# HCC Group of companies

HCC  
Engineering &  
Construction

HCC Infrastructure

HCC Real Estate

Lavasa  
Corporation



Lump sum turnkey / EPC  
Design-build / Construction  
Projects

Infrastructure Projects  
in BOT Format

Integrated Real Estate  
Development

Urban Development  
and Management

The background features a complex geometric design. It is divided into several rectangular and triangular sections. On the left side, there are vertical bands of dark green and a lighter green. A diagonal line separates a dark green area from a dark blue area. The right side of the image is dominated by a large, solid blue area. A thin yellow grid is overlaid on the entire image, consisting of a single vertical line and a single horizontal line that intersect at the center.

# HCC Engineering & Construction



# Presence in engineering and construction across sectors

## Hydro



- Dams & Barrages
- Tunnels
- Powerhouses
- Shafts & Penstocks

## Water Solutions



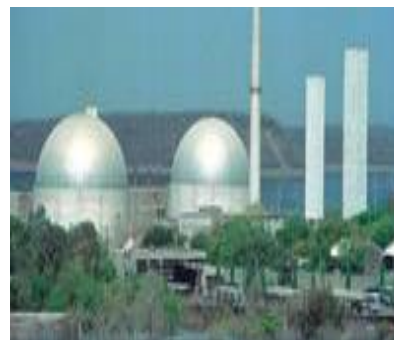
- Storage Dams & Barrages
- Bulk water transmission
- Canals, Tunnels, Pipelines
- Pumping Stations
- Treatment Plants

## Transportation



- Roads
- Bridges
- MRTS
- Tunnels
- Railways

## Nuclear & Special Projects



- Nuclear Power plants
- Utility Buildings & Industrial structures
- Underground caverns
- Ports

## EPC



- Lumpsum Turnkey
- EPC
- Design Build
- Engineering Centre

# HCC Engineering & Construction - Hydro

## 25% of India's installed capacity

- 2 out of India's 5 largest underground powerhouses
- 2 out of India's 5 largest pumped storage projects
- 18 surface / underground powerhouses
- Current Market share ~ 55%

## 43 dams / barrages

- 5 out of India's 10 highest concrete dams

## Over 170 km of tunneling

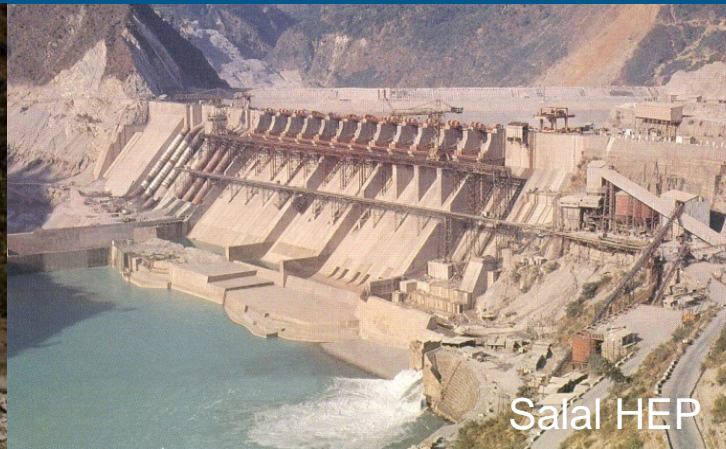
- Over 90 km of tunneling experience in geologically complex Himalayan region.
- Extensive experience in dealing with adverse geological occurrences



# HCC Engineering & Construction - Hydro



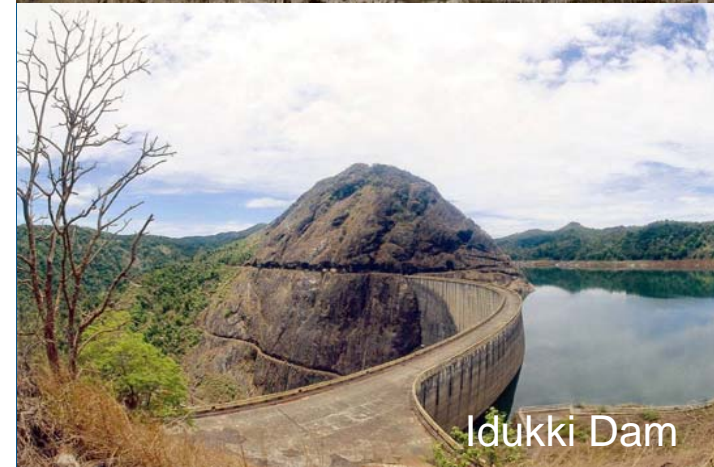
Tala HEP



Safal HEP



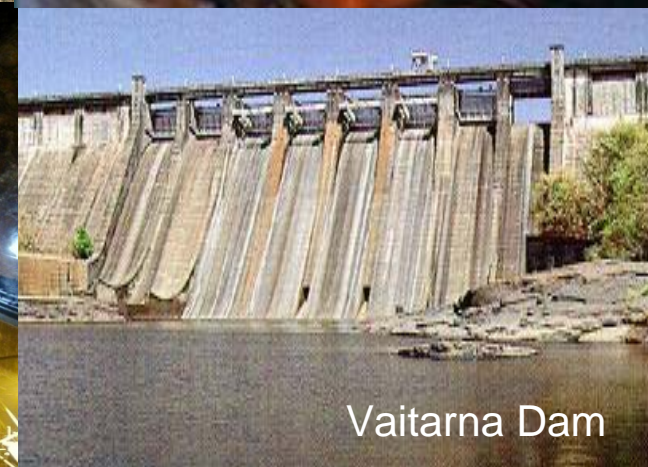
W19 Water supply Tunnel



Idukki Dam



Vizag Cavern



Vaitarna Dam

# HCC Engineering & Construction – Water Solutions

## Irrigation Projects

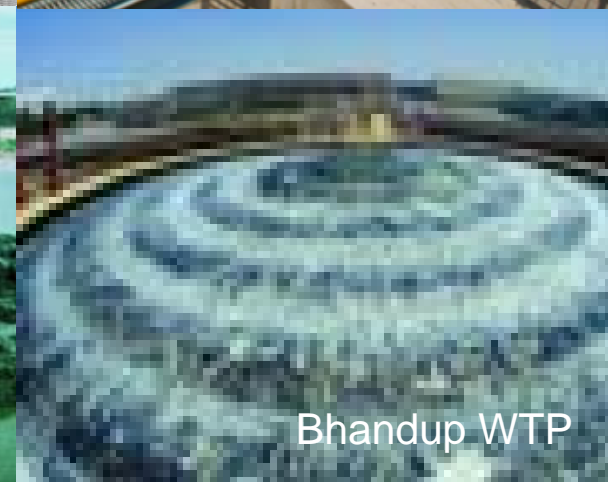
- Front Runners in execution of large scale integrated projects on EPC basis.
- Built 7 irrigation dams , 18 barrages, 35 Water treatment plant, 70 Sewage treatment plant.
- World's longest Barrage ,Farakka West Bengal
- Expertise in design & construction of prestressed and reinforced concrete aqueducts.
- World's largest aqueduct – Gomti Aqueduct, Uttar Pradesh

## Water Supply Projects

- India's first & largest private sector water supply project on EPC basis at Tirupur
- India's largest water treatment plant - Bhandup water treatment plant, Mumbai
- Over 25 km of tunneling with TBM in congested urban environment



# HCC Engineering & Construction – Water Solutions



# HCC Engineering & Construction - Transportation

## Roads, Expressways and Highways

- Over 2300 lane – km of highway construction
- India's first concrete pavement expressway project- Mumbai Pune Expressway

## Bridges

- Over 300 bridges – Road / rail / Road cum rail
- India's longest open sea cable stayed bridge- Bandra Worli Sealink, Mumbai
- Only company to have bridged the mighty Brahmaputra river twice

## MRTS & Railway Projects

- India's first & second MRTS projects at Kolkata & Delhi
- Executing India's longest railway tunnel project – Pir Panjal tunnel in J& K

# HCC Engineering & Construction - Transportation



Mumbai Pune  
Express way



Naini



Varanasi



Godavari



Kaliabhomora



Delhi Metro



A P-8



# HCC Engineering & Construction

## Transportation - Bandra Worli Sea-link Project, Mumbai



India's first Sea-link with longest cable stayed span 500m and pylons rising to 125m



# HCC Engineering & Construction

## Nuclear & Special Projects

### Nuclear Power

- Over 50% of India's installed nuclear power capacity.
- 11 out of total 19 nuclear reactors in India.
- India's largest nuclear power plant- Kudankulam Nuclear Power Plant, TN
- HCC AMEC partnership to offer Consulting and EPC services for the establishment of nuclear power plants in India

### Thermal Power

- 18 Thermal Power Projects
- 3 Gas based Power Projects

### Industrial & Special Projects

- Asia's largest Rail Coach factory
- Executing India's first cavern for strategic storage of crude oil
- Asia's largest breakwaters- Ennore breakwater, Tamil Nadu

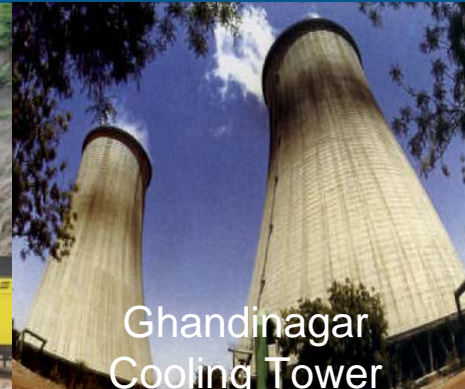
# HCC Engineering & Construction Nuclear & Special Projects



KKNP



Vizag Cavern



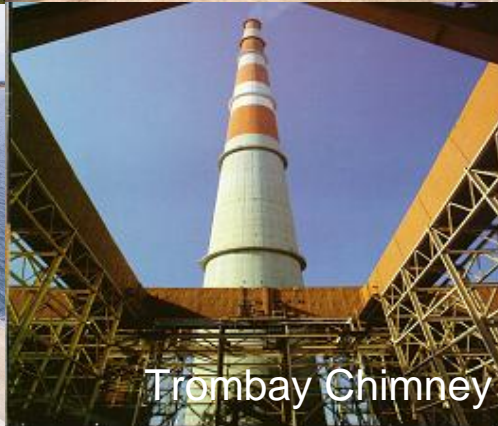
Ghandinagar  
Cooling Tower



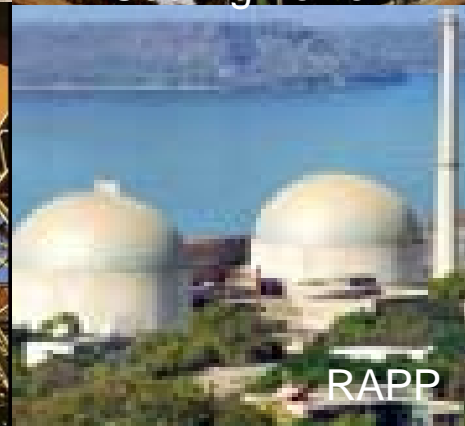
Kapurthala Rail Coach  
Factory



Ennore Breakwater



Trombay Chimney



RAPP



Brahmapuram Diesel  
Power Plant

# HCC Engineering & Construction-EPC

## Kishanganga Hydro -Electric project J &K (330 MW)

All civil and associated infrastructure works ,supply ,installation, testing and commissioning of all the electro- Mechanical plant and machinery and hydro-mechanical components including generating units on EPC

## JCR Devadula Lift Irrigation scheme

Phase I&II of stage I ,Phase I has 10 cumecs capacity,135 km of pipeline ,pumping stations  
Phase II-14 cumecs capacity,200 km of pipeline ,pumping stations

## Tirupur water supply pipeline- Tamil Nadu

185MLD system includes intake water treatment plant ,booster pumping station, master balancing reservoir & 56 km of pipeline.

## Delhi Metro Rail Corridor project, contract MC-1A

4 km long underground Mass Rapid Transit System



# HCC Engineering & Construction - EPC



# HCC Engineering and Construction

## Integrated Management Systems (IMS)

- 1<sup>st</sup> Engineering Construction company in India to establish & implement IMS
- Certified by TUV-Nord
- Continuous scanning of effectiveness through internal auditing- 200 qualified internal auditors
- 185 qualified engineers dedicated to quality, safety & environment
- Constant improvement of product and services - Leading to high degree of Customer satisfaction.

**Quality systems  
(ISO 9001-2000)**



**Environment Mgt Systems  
(ISO 14001-2004)**



**Occupational Health & Safety  
(BS OHSAS 18001-2007)**

# HCC Engineering and Construction

- HCC's manpower base
  - Workforce exceeding 32,000
  - 1800 Engineers
  - 12000 technicians and skilled workmen



- R&D Centre
  - Recognition from Ministry of Science & Technology, GOI
  - Affiliations – Fly Ash mission, GOI; NCCBM & CANMET, Canada
- Training Centre





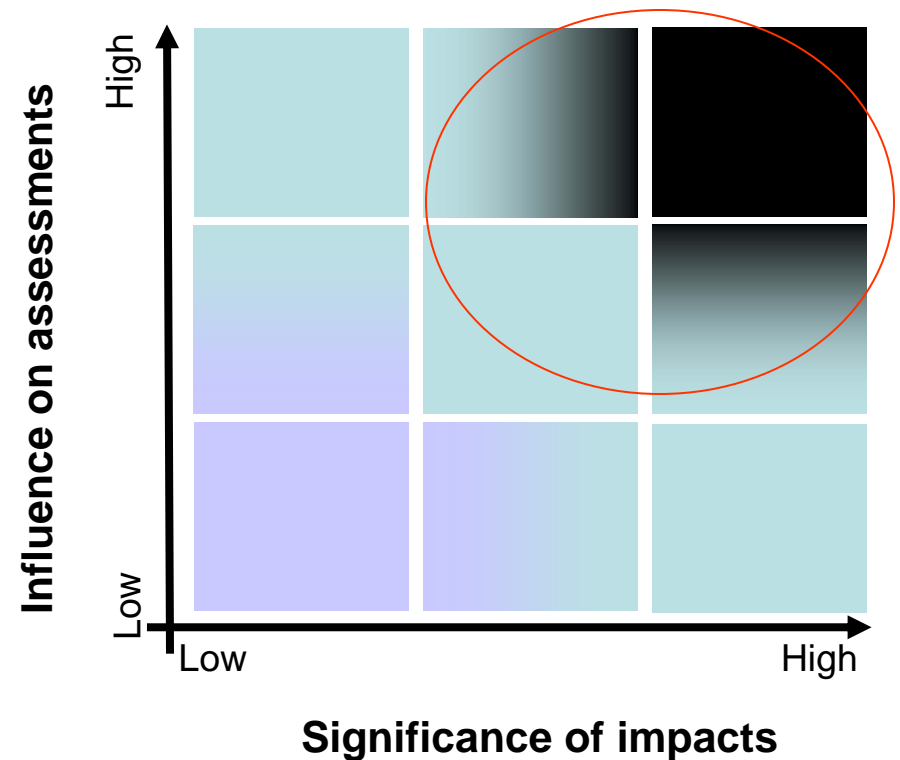
# HCC Engineering and Construction



Modern fleet of over 10,000 specialized equipments and state of art workshop  
Owned equipments valued over Rs 1,500 Crore (USD 305 Mn)

# Materiality

- Employee Health and Safety
- Construction Waste Minimization
- Energy and Fuel Use
- Pollution and Water
- Equal right and opportunities
- Community Development

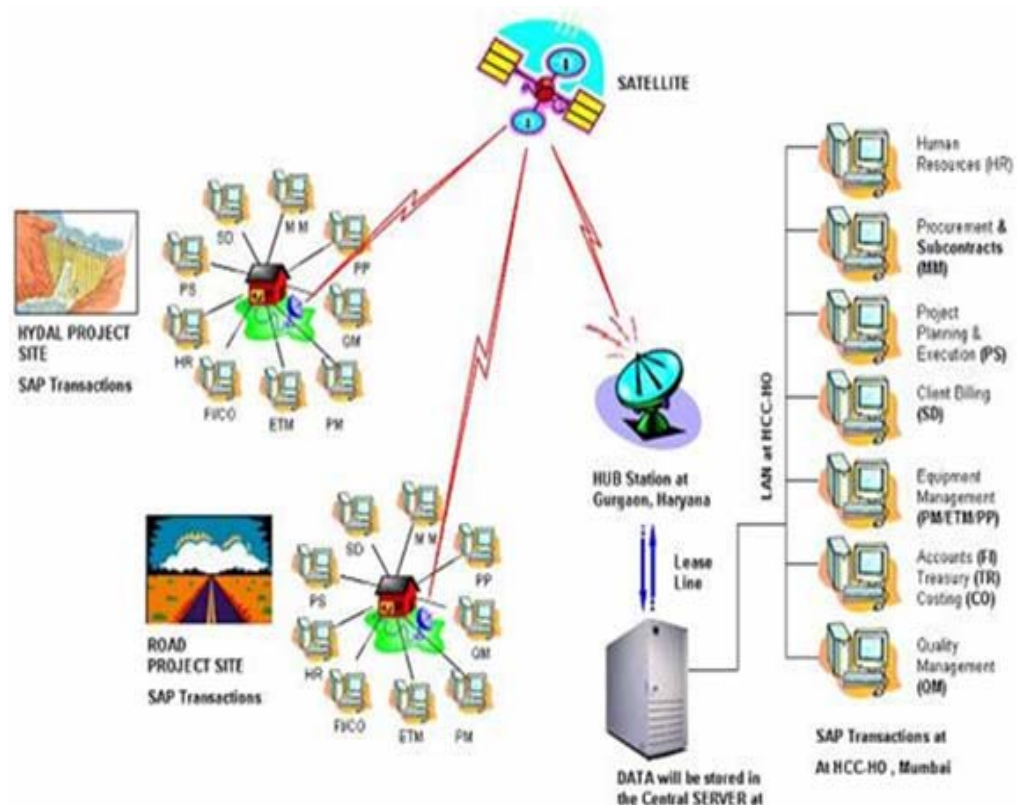




# HCC Engineering and Construction Information Management

## Focused metrics

- Inventory Reduction
- Equipment utilisation
- Reduced POL consumption
- Optimal procurement Rates
- Wastage Control
- Contract Management
- Workforce Productivity
- Document Management

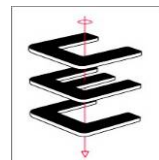


**ERP Live at all Project Sites**

# Strategic Partnerships



SKANSKA



KUMAGAI  
GUMI



ÖZALTIN

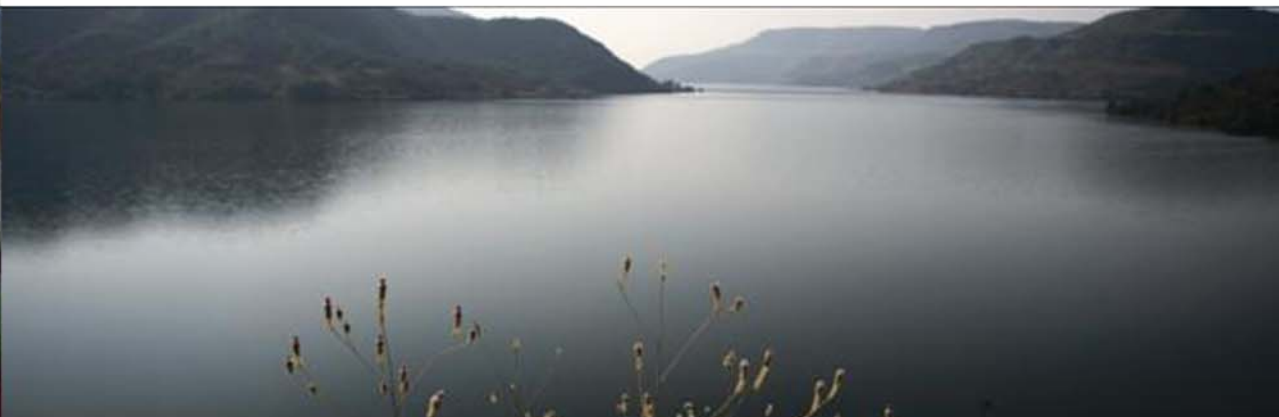




Lavasa



Lavasa Corporation Limited





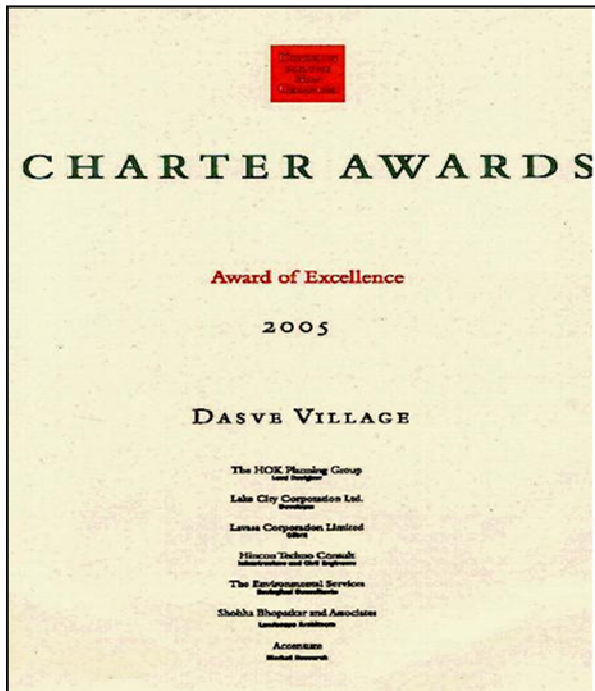
# Lavasa – Free India's First Hill City

- 1/4th the size of Mumbai and as big as Paris (100 sq. kms)
- Where people can Live, Work, Learn & Play in harmony with nature
- 3 lakh (0.3 million) permanent residents & 20 lakh (20 million) tourists per annum
- Pioneering the concept of 'Future Cities' in India



# The Master Plan

- 1st 'planned' hill city led by the private sector after independence
- Eco-friendly town planning by HOK, USA



# Lavasa City – Life in Full

## Live

- Villas & Apartments
- Studio & Serviced Apartments
- Rental Housing
- Retiree Housing
- Family Entertainment Centre
- Promenade and Marinas
- Health and Wellness Centres
- Spiritual Centres
- 24x7 Power, Water and Connectivity
- GIS and e-Governance
- Social Infrastructure



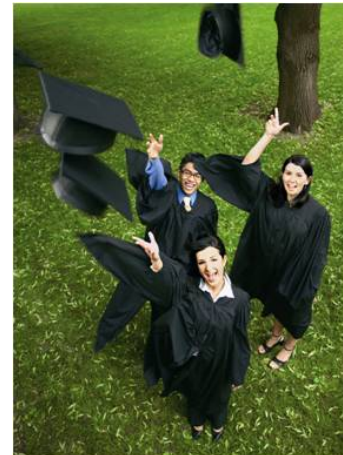
## Work

- Non – polluting industries
- IT/ITES
- Biotechnology
- R&D centres
- Training Centres
- Fashion Design
- Film Production
- Animation Studios
- Professional Services
- Convention Centre
- Town Support Services



## Learn

- Schools and Colleges
- Management Institutes
- Executive Education Centres
- Post Graduation Institutes
- Adventure Training Institute
- Vocational Institutes
- Sports Academy
- Music Academy
- Edutainment Park



## Play

- Budget to Luxury Hotels
- Clubs and Resorts
- Spas
- Cricket ground
- Golf Course & Academy
- Multiple Theme Parks
- Eco Safari
- Water Sports
- Adventure Sports
- Nature Trails
- Cafes, Restaurants and Shopping centres
- Multiple Leisure Activities





# The Brand Ideology - woven into the Master Plan

- Lifelong Learning : Products and services that offer not just academic learning but also intellectual and personal growth
- Technology Leadership : Use of technology to simplify life which is 'Felt' not 'Necessarily Seen'
- Cosmopolitan Style : A range of products and services that are targeted at multiple customer groups
- Spiritual Harmony : Products and services that offer a sense of inner peace and balance





# Lavasa Development Plan

- New Urbanism design principles combined with an aspirational lifestyle
- Infrastructure over Rs. 4000 crores (almost \$ 1bn) being created in the hills
- A city planned for permanent living which will evolve from second homes to permanent homes for residents
- Many firsts to its credit; some of them being
  - Technology leadership and e-Governance
  - First Indian city developed using Geographical Information System (GIS)
  - Use of Biomimicry as a science in town planning

# Lavasa Development Plan

- 90,000 employment opportunities to be created at all levels
- A 365 Day Economy Plan
- Non polluting industry to drive permanent resident population
  - Tourism, Hospitality & Leisure
  - Education, R&D, Training
  - IT, Biotech, KPOs
  - Art, Fashion, Animation
- World class infrastructure & service for business
  - Internal Roads, Access Roads
  - 24x7 power supply, 24x7 water supply and Telecom
  - e-Governance (partnerships with Microsoft, Wipro, Cisco)
  - WTP (Water treatment plant) and STP (Sewage Treatment Plant)

# Lavasa Development Plan

- An inclusive city that caters to multiple socio economic spectrum
- Facilities for residential, education, health care, entertainment, etc.
- Residences :
  - Range of residences from starter homes, apartments to villas
  - Strong rental housing model integrated in the master plan
  - Rental units starting from Rs. 500 (approx \$10) per month; 15,000 units to be ready by 2012
- Education :
  - A range of offerings from English medium to Marathi medium schools
  - From primary education to executive education programs
  - From Christel House (fees at approx \$1 per month) to programs by SBS, Oxford University
  - Leading tie-ups with global brands : Ecole hôtelière de Lausanne, Institute of International Business Relations (Germany), Symbiosis, etc.

# Lavasa Development Plan

- Healthcare

- Primary Healthcare Centre by Apollo Hospitals
- Apollo Pharmacy operational

- Hospitality infrastructure to cater to multiple segments

- Dormitories , low cost boarding & lodging and budget hotels
- Serviced apartments
- Star hotels
- A range of options for tourism and leisure
- Watersports – State of the art equipment like pontoons , personal water craft, etc.
- Cricket , Golf Academy
- Nature Trails, Nursery
- Games Arcade
- Adventure Sports

# Environment & CSR at Lavasa

- Use of Biomimicry as a science in town planning
- Enhancement of Eco- system a continuous process
  - ‘Hydro-seeding’ - 2 million seeds, 10 lakh sq. meters area
  - Continuous contour trenches - 20,000 running meters
  - Bioengineering, vermicomposting, mass fertigation
  - Future initiatives - renewable energy , wind farms, wind solar farms, etc.
- LEED Certification for neighborhood development for Lavasa (pilot)
  - Green certification (LEED- NC) for Fortune Select Dasve hotel at Lavasa awarded
- Villager resettlement and rehabilitation – key focus
  - ‘Gaothans ‘(small villages) created
  - Employment opportunities, health, education, and child care facilities
  - Potable treated water, Road connectivity

# Lavasa Tie-ups

Tourism , Hospitality & Leisure

Education

Health & Wellness

Corporate tie up



1500 rooms

2 million visitors

10,000 students tied up

Medicity

Work component

# World Class Service Providers





HREL



# 247 Park, LBS Road, Vikhroli, Mumbai

## The new age office destination is now operational

- The single stand alone building with the largest combined floor Plate of approx 100,000 sq. ft.
- Total development spanning over 18 Lakh sq. ft.
- Exclusive Utility Building of over 40,000 sq ft
- Disaster Management Ready with integrated Building Monitoring System to ensure 24 X 7 work environment
- Received LEED GOLD Certification as a largest stand-alone commercial Green Building in Core and Shell Category
  - Energy – efficient fenestration eliminating sound pollution
  - 100% power back-up from synchronized DG Sets
  - Intelligent lighting
  - Zero Waste Discharge Complex
  - Water cooled air-conditioning system
- The building has over 1200 car parks to cater to the ever increasing demand of parking
- It also houses a business centre, ATMs, banks, a gymnasium, business centre, food courts and high-end restaurants.
- In the second phase approx. 600,000 sq ft office building is planned.



## Latest Project Offering

- **Vikhroli Corporate Park – Phase 2** : 2.3 million sq.ft (30 storey) Vikhroli, Mumbai
- **Slum Redevelopment** : 40 acres, Hariyali village, Vikhroli, Mumbai
- **Water Front City**: 4000 acres, Dholera, Gujarat
- **Short-listed for Theme based Development** : 250 acres, Kharghar, Navi Mumbai by CIDCO
- **Themed Township** : 100 acres, Kharghar, Navi Mumbai
- **Mega Township** : 500 acres, Nasik
- **Mega Township** : 183 acres, Thane
- **INS VIKRANT(The Indian WAR ship)** : Converting a warship into Museum

# Select Tenants



LAVASA

HCC

LEMUIR GROUP

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# Corporate Responsibility



# Our Philosophy

*DO GOOD TO DO WELL*

*&*

*DO WELL TO DO GOOD*

# HCC GROUP CR MANDATE

Disaster Management

Education

HIV/AIDS

Water

- ***Our CR activities have won us the prestigious Golden Peacock Award***
- ***Our clients have lauded us for our efforts in the areas of HIV AIDS and Disaster Management***
- ***Our Group is viewed as a leader across industry forums in India & abroad***

## CR activities to fulfill HCC's objectives

Our CR activities are rooted in creating business excellence parameters for HCC such as efficiency, productivity, quality and safety, which have become critical differentiators for the Indian construction industry.

### **Disaster Management: Motivate, retain our engineers; provide safety for personnel, assets on project sites**

Our projects are located in remote disaster prone areas and our personnel are trained as First Responders and Emergency responders to mitigate problems effectively. **9400 employees and workers have been given the First Responder training till date and man hours spent in this in 40000 hrs.** Another **60 HCC Engineers** have undergone the 7-day intensive training on Engineering Response in Emergencies

### **HIV Aids Initiative: Facilitate Good Health of our workforce for higher productivity .**

•The immediate impact of HIV/AIDS on the businesses is the loss of working hours and increased cost of production due to sickness of the workers who require frequent medical care. Thus, HCC views HIV/AIDS more as a socio-economic issue than a purely social one. People most affected by HIV/ AIDS include migrant workers, sex workers, injected drug users and truck drivers. HCC has more than 30,000 migrant labourers and truck drivers and has indeed found a positive correlation between migrant workforce and their vulnerability to HIV/AIDS. Hcc does an awareness and Workplace Intervention Program for all its employees .**As of March 31, 2009, 21904 workers and employees have undergone WIP sessions. In addition, HCC launched its HIV AIDS Workplace Policy in 2008.**

### **Water: Decrease threat to sustainable business practices; create community goodwill**

HCC is the endorser of **UN CEO Water mandate**. This mandate gives us direction on efficient usage of water in our direct operations, recharging ground water and working with communities and other stakeholders.

### **Education: To create trained engineers, other personnel for our in-house HR needs**

The challenge of closing the productivity gap vis-à-vis global competition is more acute in the infrastructure sector. Support to technical education is thus a logical extension of the pioneering vision of building strong infrastructure across the length and breadth of the country.

# Why Report

## Beyond Fence

- Investments : access and cost of Capital
- Favored partners for Association
- Responsible Employer
- Leadership position
- Transparency

## Within Fence

- Risk Mitigation
- Robust Processes
- Innovation
- Motivated workforce



# Learning from Reporting exercise

- Robust processes but garbled data
- Lack of big picture awareness of processes on data owners
- Sustainability data is available and is collated centrally, however it is not reviewed periodically, which indicates weak internal assurance.
- There are adequate processes for internal as well as external audits of Integrated Management Systems (IMS) (ISO9001, ISO14001, OHSAS 18001). The focus is more towards achieving compliance to systems requirements.
- Communication with some external stakeholder is weak also there is no record that indicates follow-up of the results of engagement with them.