



Water

Economy

Disaster
Relief

**SUSTAINABLE
DEVELOPMENT**

Environment

Safety

Natural
Resources

Education

Community
Initiatives

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About the Report

Responsible Infrastructure 2015-16, the seventh annual sustainability report of Hindustan Construction Company's (HCC – Engineering & Construction business). We have moved to the next generation G4 reporting guidelines of the Global Reporting Initiative, and have prepared this report 'In Accordance' with the Core option of these guidelines. The report presents management disclosure and performance highlights on the key sustainability issues material to the company. The reporting period is the financial year ending on March 31, 2016.

This report includes the eighth consecutive annual Communications on Progress (COP) on the United Nations Global Compact's CEO Water Mandate Initiative, covering the same reporting period. The report is also in line with 'National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business' (NVGs), as released by the Ministry of Corporate Affairs in July 2011.

The report has undergone limited assurance (as per ISAE 3000 standard) by Ernst and Young LLP, an independent professional services firm.

Our reporting boundary is inclusive of all HCC (Engineering & Construction) projects in progress during the reporting year. Any exceptions in boundary with respect to specific performance indicator are clearly mentioned within the report.

We hope this report provides an insight into our approach to sustainability and our achievements to all stakeholders, and we will strive to continue enhancing our sustainability disclosures going ahead. Any feedback and queries are welcome, and may be directed to:

Mr. Aditya Patwardhan
Assistant General Manager – Corporate Social Responsibility
aditya.patwardhan@hccindia.com

From the Chairman and Managing Director's Desk



Dear Reader,

I am happy to present HCC's Sustainability Report 2015-16. This is the 7th Sustainability Report of HCC prepared as a pro-active disclosure of HCC's triple bottom line performance. This report is inclusive of our eighth consecutive Communication on Progress (COP) on the U.N. Global Compact's CEO Water Mandate, to which HCC is a signatory.

The year under review has started showing signs of revival with a series of measures initiated by the Government. Efforts such as fast-tracking clearances for stalled projects, easing norms for exiting operational projects for stressed concessionaries and providing last-mile funding for projects that are stuck in advanced stages of completion, are expected to provide the much-needed impetus to the infrastructure sector.

While these are noteworthy efforts by the Government, the period under review continued to remain challenging for HCC and the construction industry. The legacy issues of holding back legitimate payments of arbitration awards have impacted the industry resulting in mounting dues and liquidity crisis. To counter this, we realigned our business strategy to focus on capital conservation, higher productivity and increased cash generation. HCC will continue its efforts to streamline operations, optimise efficiencies of on-going projects and the pursuit of pending dues at every level. Additionally, the recent legislative movement on the Goods and Services Tax (GST) proves to be promising with single window taxation and seamless credit availability at all levels.

While the 'Make in India' campaign is yet to be meaningfully implemented by the government, I consider HCC to be a well prepared partner for it, given our legacy of supporting national development goals through robust infrastructure projects whose supply chains are embedded in regional and national spheres. Further, HCC is continuously honing its abilities to overcome challenges, develop technologically-enhanced solutions, and use innovations keeping with current trends. This will enable us to support infrastructure requirement of smart cities, innovation in cities and development of secondary urban spaces in the coming future.

Such achievements are plausible only if, resources are used optimally and environmental impacts are mitigated, while maintaining efficiency and quality of projects. Simultaneously, social factors such as the inclusion of the local communities, maintenance of a high standard of safety and human capital development need to be addressed.

In 2015-16, HCC continued its commitment to the UN – CEO Water Mandate, with improved water use efficiency across operations, accompanied by a community-based water conservation intervention which conserved 735 million litres of water. With these efforts, we became Water Positive with a water index of 1.56.

With "Responsible Infrastructure" as our moto, we recognise the importance of responsible and holistic communications of our non-financial performance with our internal and external stakeholders. We hope this will shed light on our continuous efforts towards sustainable infrastructure.

I trust you will find the report engaging and informative, and I welcome your feedback.

Ajit Gulabchand
Chairman and Managing Director

Message from the President and CEO

Dear Reader,

In continuation of HCC's commitment to sustainable business practices, I am delighted to present our sustainability report for the FY 2015-16. HCC's business vision has been closely woven around the 'triple bottom line approach' wherein environmental responsibility and social commitment is integral part of our financial performance.

At HCC, we have been early adopters of sustainability practices and as we pursue economic growth, we have adopted construction practices that are sustainable, ensure prudent use of natural resources, minimize the impact on the environment and preserve the eco-system. As we grow we are ensuring optimization of the inherent risks and maximizing value for stakeholders across the spectrum without compromising on values of good corporate citizenship.



In the year under review, we adopted various energy efficient practices through the use of latest technology and engineering innovations. We lessened the use of energy intensive chemical additives and enhanced the use of alternate cementing materials such as fly ash, slag, micro silica, to reduce the cement requirement and carbon footprint of the concrete mix. On the other hand, by deploying software such as 'Most3D' for steel profile cutting and shearing and working with our supply chain partners to procure make-to-order consignments in tightest tolerances has helped us in optimisation of resources and reduce wastage thereby conserving precious natural resources.

We have also continued our efforts to further improve our human capital aspects. This year, we achieved a customer satisfaction index of 4.1, higher than any of the previous years. Safety is of overriding importance to our operations, and we introduced Proactive Safety Observation Programme and Behaviour Based Safety programme that has brought a paradigm shift in the way safety has been observed at all HCC project sites.

Being a responsible corporate citizen, HCC has engaged in various community initiatives in the areas of health, water, disaster response and social initiatives in the vicinity of our project sites. Our community initiatives this year have continued under the dimensions of Health, such as blood and blanket donation; Education, by providing support to the local schools in nearby villages; Rural Development Projects, such as sports and cultural activities and Disaster Relief, by providing support to flood victims in Kalpakkam.

Lastly, Economic, Environment and Social risks are inherent to our project businesses. We have well documented risk management policies and procedures that address these issues. A structured risk management information system helps early detection and lay out efficient mitigation.

We welcome you to pursue through the details of our sustainability performance, and we hope you will find the same illuminating.

Arun Karambelkar
President and CEO, HCC



Bogibeel Rail-cum Road Bridge, Assam



Teesta Low Dam Project, West Bengal



Kudankulam Nuclear power plant, Tamil Nadu



Delhi Metro Rail Project

4. Organisational Overview

HCC is a business group developing and building responsible infrastructure through next practices serving the sectors of Engineering & Construction, Real Estate, Infrastructure and Urban Development & Management. As of March 2015-16, the global conglomerate's annual turnover is Rs. 8,768 crore.

The HCC group includes:

HCC Ltd

HCC is one of India's leading construction companies that has developed landmark projects of high complexity, applying its core competencies and skills to deliver world class infrastructure. HCC has constructed 25% of India's hydel power generation and 65% of India's nuclear power generation capacities, over 3800 lane kms of expressways and highways, more than 320 km of complex tunnelling and over 365 bridges.

Steiner AG

Steiner AG is Switzerland's second largest total services contractor. HCC took a controlling stake in this company in May 2010. With a heritage of nearly 100 years, the company specializes in turnkey development of new buildings and refurbishments, and offers services in all facets of real estate development and construction. The company has started its India operations through a subsidiary –Steiner India Ltd

HCC Infrastructure Company Limited

HCC Infrastructure Co Ltd is a leading developer serving India's infrastructure needs in the areas of Transportation, Energy and Urban Infrastructure. The Company is a wholly owned subsidiary of HCC. The road portfolio of the BOT arm of HCC has been consolidated under its 100% subsidiary - HCC Concessions Ltd., incorporated in 2008. Its current asset portfolio includes four concessions of NHAI valued at Rs 4900 crore.

Lavasa Corporation Limited

Lavasa is India's first planned hill city, located at a 3 hour- drive from Mumbai and spread across a picturesque landscape of over 10,000 acres. Meticulously planned

by leading U.S based town planners - HOK International Ltd., the Lavasa city plan has won immense international recognition and awards. The integrated development at Lavasa will include five self-sustaining towns with a permanent population of over 250,000 people.

Highbar Technologies

Highbar Technologies saw a rapid progression into one of the most preferred IT solutions providers for the Infrastructure industry. With a portfolio of ERP Solutions, line of business IT solutions and process consulting, the firm aims to increase organisational efficiencies through Infrastructure domain knowledge backed by IT expertise and strategic alliances delivered through customised IT solutions.

Core Business

Power

Hydel Power

With our rich experience in hydel power projects, we possess the skill, scale and speed to address every possible needs of such project in India. Our constructions include dams, barrages, powerhouses, shafts, tunnels and canals.

- Built 4 out of 10 highest concrete dams
- Built 2 out of 5 largest underground power stations
- Constructed 320 kilometers of tunnels out of which 180 kilometers lies in Himalayan geology
- Built 46 dams and barrages, 21 surface and underground power stations
- 5 EPC projects: Kishanganga HEP, Tehri Pumped Storage, Dagachhu Hep, Sainj HEP, Vishnughad HEP
- Built Chutak and Nimoo Bagzoo HEP at over 10,000 ft altitude

Nuclear Power

We have been a steady partner in India's nuclear journey, right from the birth of India's nuclear power generation program.

- Constructed India's first indigenously built nuclear power plant at Kota

HCC: INFRASTRUCTURE PORTFOLIO



- Built 15 out of 24 nuclear reactors in India
- Involved in construction of all 8 reactors of Rajasthan Atomic Power Plant Project
- Narora atomic power plant built in 1984
- Kakrapar Atomic Power Plant built in 1991
- BARC's DHRUV reactor built in 1986
- India's largest light water reactors built at Kundankulam nuclear power plant in 2010

Thermal Power

We bring to table years of experience and expertise in the field of civil and structural works of a thermal power plant.

- 18 thermal power plants and 3 gas based projects
- India's second diesel based plant at Brahmapuram, Kerala
- A 275 meter high steel flue chimney for Tata Thermal Power Generation Station, Trombay, which is regarded as one of the tallest concrete structures in India
- Currently constructing a 390 MW Muzaffarpur Thermal Power Plant in Bihar

Transportation

We cater to every segment of the transportation sector such as metro rails, bridges, highways, tunnels, sea-links and ports.

- Built the entire Kolkata Metro, and 6 underground sections of the Delhi metro
- 10% of India's highways under the National Highway Development Programme
- India's longest railway tunnel at Pir Panjal
- Bandra Worli Sea Link, India's first cable stayed bridge constructed at open sea
- Currently constructing Dry Dock in Mumbai for the Indian Navy
- Also constructing India's largest rail-cum-road bridge at Bogibeel in Assam

Water Solutions

We specialize in execution of massive complex integrated water management projects on EPC basis, involving source development, treatment, as well as transmission.

- 7 irrigation dams, 19 barrages, 105 water/sewage treatment plants, 460 km pipelines
- World's longest dam at Farakka
- Asia's second largest lift irrigation scheme – Godavari

Lift Irrigation scheme

- India's first concrete gravity dam – Vaitarna
- India's first private sector water supply project at Tirupur
- India's largest water treatment plant in Mumbai

Buildings and Industrial Plants

We have made our mark in the industrial plants and engineering sector owing to of our precision engineering and speed of implementation.

- A total of 109 buildings over the last 7 years measuring 7.5 million sq ft
- Smart City development of 4.4 million sq ft
 - 47 Power plant buildings
 - 18 Metro station buildings
 - 19 Industrial buildings
 - 14 Commercial & Residential Buildings
 - 11 Institutional Buildings

Composition of our Board of Directors:

Name of the Director	Category
Ajit Gulabchand	Promoter, Chairman and Managing Director
Rajas R. Doshi	Independent Director
Ram P. Gandhi	Independent Director
Sharad M. Kulkarni	Independent Director
Anil C. Singhvi	Independent Director
Harsha Bangari	Non-Executive Director
Omkar Goswami	Independent Director
Acharyulu Nateri	Director
Shalaka Gulabchand Dhawan	Whole-time Director

Further details of our corporate governance are available in the Annual Report FY 2015-16 on our website: <http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf>.

Our Equity Share is listed on the Bombay Stock Exchange (BSE) as well as the National Stock Exchange of India Limited (NSE). Global Depository Shares (GDSs) are listed on the Luxembourg Stock Exchange (LSE).

HCC's Clients



Joint Venture Partners (Execution / Risk sharing / Resource)



Technology Partners



Vision, Mission and Values

Vision

To be the Industry Leader and a Market- Driven Engineering Construction Company renowned for excellence, quality, performance and reliability in all types of construction.

Mission

The HCC Corporate Mission encompasses the overall strategies, objectives and goals of the Organization:

- To be a leading construction company in the global market.
- To become the customers' most preferred choice by attaining excellence in quality and value added projects completed on time.
- To continually innovate, develop and adopt state-of-the-art technology in methods and materials to enhance productivity and cost effectiveness.
- To continually improve the competence of our people and make them proud to work at HCC.
- To build a safety culture aimed at continually reducing the frequency severity rate towards achieving zero accidents.
- To identify and mitigate all the environmental impacts arising from our activities and comply with applicable environmental norms.
- To develop and adopt eco-friendly concrete technology to reduce one million tons of greenhouse gas (GHG) emissions in the next 10 years.
- To contribute to the development of the local community and society at large as a part of our corporate social responsibility.

Values

Think Big

- We challenge prevalent norms and practices to come up with better solutions
- We are entrepreneurial and work out costs and profits before we act

Obsessed with Detail

- We are rigorous in our analysis to identify the best solution
- We are meticulous in our planning and adhere to what we have planned

Passionate Commitment

- We strive untiringly to meet external and internal customer requirements
- We work as a team to achieve our goals

World-Class

- We stay up-to-date on the latest global developments to be the best
- We spot and nurture talent with global potential

Awards and Recognition

1. [Infrastructure Company of the Year Award](#) - “Construction Week India” for Outstanding contribution in the Infrastructure sector Outstanding contribution in the Infrastructure sector.
2. [Water Project of the Year Award 2015](#) - “Construction Week India” - Dagachhu Hydroelectric Power Project, Bhutan.
3. [QCI D.L. Shah Quality Award](#) - “Quality Council of India and D.L. Shah Trust” for excellence in Quality - Bogibeel Rail-cum-Road Bridge Project, Assam.
4. [Dun & Bradstreet Infra award 2015 under ‘Railways’ category](#) - Pir Panjal Railway Tunnel Project, Jammu & Kashmir.
5. [Dun & Bradstreet Infra award 2015 under ‘Road and Highway’ category](#) - Mughal Road Project, Jammu & Kashmir.
6. [Dun & Bradstreet Infra award 2015 under ‘Oil and Gas’ category](#) - Padur Cavern Project, Karnataka.
7. [‘Best Concrete Structure of the year’ by Indian Concrete Institute \(ICI\)](#) - Padur Cavern Project, Karnataka.
8. [CIDC Vishwakarma Award 2015](#) - “Best construction projects under the Power category” - Dagachhu Hydroelectric Power Project, Bhutan.
9. [CIDC Vishwakarma Award 2015](#) - “Best construction projects under the Infrastructure category” - Padur Cavern Project, Karnataka.
10. [CIDC Achievement Award 2015](#) - “Social Development & Impact” - HCC’s Water Sustainability Initiatives.
11. [‘Best CSR Practices Award’ by World CSR Congress](#) - HCC’s initiatives for rejuvenation of diversion based irrigation system in Maharashtra.



Advocacy

We are represented at several national, regional and global industries, governmental and developmental forums by Mr. Ajit Gulabchand, Chairman and Managing Director. Through his active participation at these influential platforms, we advocate on a variety of issues pertaining to sustainable development. Some of Mr. Gulabchand's key active memberships are listed below:

- Member, CII National Council
- Member, CII Associations Council
- CII National Committee on Urbanization & Future Cities 2015 -16
- CII National Committee on Sector Skill Councils 2015-16
- CII National Committee on Infrastructure 2015 -16
- Member of the Governors' Steering Board of the Infrastructure and Urban Development (IU) Community at the World Economic Forum (WEF)
- Chair of Disaster Resource Partnership Steering Board, IU, WEF
- Member of Steering Board, Future of Urban Development Services, IU, WEF
- Member of Steering Board, Partnering Against Corruption Initiative (PACI), IU, WEF
- Member of UK India Business Council (UKIBC) Advisory Council
- Chairman of the Governing Council of the Construction Skills Development Council of India (CSDCI)
- Member of the Private Sector Advisory Group, United Nations International Strategy for Disaster Risk Reduction, UNISDR
- Member of Board of Trustees – New Cities Foundation
- Past President of International Federation of Asian and Western Pacific Contractors' Associations (IFAWPCA) (2011-12)
- Signatory member United Nations' Global Compact's CEO Water Mandate
- Signatory member of Caring for Climate, United Nation's action platform for business
- Signatory member of WEF's CEO Climate Leaders
- President of the Construction Federation of India (CFI)
- Past President and Patron Member of the Governing Council of the Builders Association of India (BAI)

- Chairman of the Board of Trustees and Board of Governors of the National Institute of Construction Management and Research (NICMAR)
- Chairman of the Administrative Council of the Walchand College of Engineering
- Executive Committee Member of TERI's (The Energy and Resources Institute) Business Council for Sustainable Development (for the period 2015-18)

In FY 2015-16, Mr. Ajit Gulabchand delivered numerous key note addresses, and participated in several prestigious and internationally recognized sustainable development events, such as:

- Speaker, Physical Infrastructure session, Vijnan Bharati's Smart Cities Conference , Mumbai
- Speaker, Keynote Conversation – Secondary Cities, New Cities Foundation - New Cities Summit, Jakarta
- Panelist, World Economic Forum's Future of Urban Development and Services Roundtable, New Delhi
- Skill India, PMKVY Launch – New Delhi
- Chair, New Cities Foundation Working Group Meeting, Lavasa
- Speaker, Ensuring Water Availability in a Changing Climate, TERI, New Delhi
- Discussion Leader, Growing Cities, Building Resilience; India: What Next, How Fast?, World Economic Forum National Strategy Day on India – New Delhi
- PACI Community Meeting, New Delhi
- Speaker, Infrastructure and Cities of the Future at India Invest Forum, Paris
- Discussion Leader, World Economic Forum - Fostering Innovation in Cities, Davos
- Governors Meeting for Infrastructure & Urban Development (IU), Governors Policy Meeting for IU Community, World Economic Forum, Davos
- CII Seminar on Urban Infrastructure in India with Honourable Kathleen Wynne, Premier of Ontario, Mumbai
- Launch of Make in India by Prime Minister, Mumbai
- Asia Business Forum at Make in India Summit, Mumbai

Notable Events in FY 2015-16

- Mr Surinder Kaul, Chief Administrative Officer, Northern Railway visited the T-48 & T-49A sites on 19th and 20th April, 2015. He visited T-49A tunnels, North portal and Kohili Adit-2 of T-48 Tunnels and evaluated the progress on various fronts.
- Mr. Rakesh Kumar Sharma, IG, BSF - Jammu Frontier, along with Mr. Surjeet Singh, DIG, BSF, SHQ - Sunderbani visited the Sumber site and BSF camp to review the security of Project area on April 21, 2015.
- HCC has achieved two twin tunnel breakthroughs in the Delhi Metro CC34 package. The first breakthrough was achieved on April 24, 2015, while the second one was on May 22, 2015. The TBM breakthrough ceremonies were held in presence of Mr. Mangu Singh, Managing Director of DMRC.
- Shri Nitin Gadkari, the Union Minister for Road Transport, Highway & Shipping, laid foundation stones of two prestigious road projects awarded to HCC in Assam on May 01, 2015. Shri Tarun Gogoi, Honourable Chief Minister of Assam, Smt. Ajanta Neog, PWD Minister of Assam and Shri Nageshwar Rao, Group Project Manager, HCC and dignitaries from central and state government were present during the function.
- Smt. Mamata Banerjee, Chief Minister of West Bengal inaugurated the main flyover of Parama Island – Park Circus elevated corridor on October 09, 2015.
- Dr. R.K. Sinha, Chairman– Department of Atomic Energy laid the foundation stone of the first phase of the Integrated Nuclear Recycle Plant (INRP) of BARC on October 17, 2015. The project is located at coastal town of Tarapur, 130 Km north of Mumbai.
- Honourable Prime Minister of India, Shri Narendra Modi, laid the foundation stone for the four laning of the Udhampur Ramban and Ramban Banihal sections of National Highway 44 at Chanderkote, Ramban in the state of Jammu & Kashmir, on November 7th, 2015. The ceremony was also attended by the Union Minister for Surface Transport Mr. Nitin Gadkari, the State Governor Mr. N N Vohra, the Chief Minister Mr. Mufti Sayeed, the Union Minister of State in the PMO Dr. Jitendra Singh and the Deputy Chief Minister Dr Nirmal Singh.
- Dr. Mangu Singh, Managing Director of DMRC along with Mr. Jitendra Tyagi, Director Works and Mr. D.K. Saini, Director – Project & Planning of DMRC visited the CC-66 project site of the Delhi Metro on December 25, 2016.
- The 15th span of the Bogibeel rail-cum-road bridge was launched on December 28, 2015 and 16th on January 02, 2016. During this period, four dignitaries visited the Bogibeel site to review the progress of the site. These include: Shri P B Acharya - Governor of Assam, Shri Prafulla Kumar Mahanta – Ex-Chief Minister of Assam, Shri V K Pipersernia – Chief Secretary Assam and Shri H K Jaggi, General Manager, North East Frontier Railway.
- Mr. D.V. Singh, Director Technical-THDC along with Mr. Mourya, GM-Tehri Complex, Mr. K. P Singh, AGM-THDC Works and other members of THDC visited Tehri Pumped Storage project on March 02, 2016.



Inauguration of Parama Island flyover, Kolkata

5. Our Approach to Sustainability

Our company's long and illustrious journey has been singularly driven by the passion and commitment of nation building through construction of large and complex infrastructure. Not only our infrastructure is a hallmark of beauty, quality and lasting nature, its execution is often accomplished amidst challenging engineering complexities and difficult terrain. Of equal importance to us is being environmentally responsible during our construction activities and creating sustained values for our local communities through social partnerships and investments.

It is these organizational priorities and cultural traits of nation-building, quality and innovation, optimizing efficiencies, environmental stewardship and social responsibility that are collectively reflected in HCC's approach towards sustainable development - 'Responsible Infrastructure'.

While the above ethos forms the foundation of our approach to corporate sustainability, our views are also continually shaped by the feedback and expectations from our stakeholders and the larger external environment. This includes our careful evaluation of the evolving global challenges as well as our active participation in international coalitions and partnerships that are working to address these challenges.

Our identification of key stakeholder groups takes into consideration the actual or potential impacts that our businesses have on them, and vice versa. We continually engage all our stakeholder groups through structured mechanisms on pre-determined schedules and an ongoing needs basis. Our annual sustainability report informs all our stakeholders of our various initiatives and progress. While the company's senior management is primarily consulted for the preparation of this report, we strive to align the report contents to the interest of our stakeholders.

Stakeholder Engagement:

Our assessment of material sustainability issues is primarily shaped by the nature of our activities, degree of impacts on business and stakeholder expectations. As an infrastructure construction contractor, the nature of

our contracts largely defines our legal responsibility with respect to various social and environmental impacts and their mitigation. However, as a responsible business, we ensure that environmental and social considerations are given utmost importance within our activities, and we strive to propagate them within our sphere of influence.

As a part of the Business development process, we continue to interact with customers of our upcoming projects during prequalification, as well as at various stages of the bidding cycle. Through these interactions we try to understand the customer requirements for the bids. During the bid preparation stage the Business Development group puts maximum efforts to ensure that these requirements are met.

We also form project based strategic partnerships with major international contractors in cases wherein we are unable to meet the prequalification criteria, a new technology is needed or in case of large projects where the risks are required to be shared. We also implemented a 'Partner Management' process in 2012 as a part of which we continue to have bid specific interactions with our joint venture partners.

Detail of Stakeholder Engagement

Customers/ Clients
One-on-one engagement with clients as per necessity
Formalised Customer Feedback Systems (described below)
Suppliers/ Subcontractors
Annual SRA Program and regular vendor meets
One-on-one engagements
A robust feedback system
Employees
Regular interactions, training sessions and communications
HCC Newsletters and E&C Connect Newsletters
Structured performance management systems
Training programs

Investors and Shareholders
Quarterly analyst meets and regular communications
AGMs and EGMs
Quarterly Analysts Meets
AGMs and EGMs
Corporate Website
Publications
Investors' and Shareholders' Grievances Committee
JV Partners
On-going partner management approach
Sustainable partnerships in strategic business sectors
Effective communication channels
Local Communities
Covered in detail in the Our Communities section

As a follow-up to our regular materiality assessment and on account of adoption of the GRI G4 guidelines this year, we undertook a review of our materiality through a workshop with the company's senior management. While the key material issues continue to be as presented in our previous sustainability report, the following aspects of the GRI G4 reporting framework were identified as material for the company, based on stakeholder expectations, the degree of impact to the business, and our ability to mitigate these impacts:

Material Aspects

The report demonstrates our broad understanding of sustainability context, taking into account diverse topics such as water sustainability, employment health safety and environment protection. Given this broad sustainability context, we have identified 20 material aspects as per GRI G4 Framework.

The disclosures on our management approach as well as performance details on indicators pertaining to the above aspects are presented in this report, which is prepared 'In Accordance' with the Core option. We will strive to keep exploring opportunities for enhancing our sustainability disclosures going ahead.

Economic Performance	Occupational Health and Safety
Procurement Practices	Training and Education
Materials	Diversity and Equal Opportunity
Energy	Equal Remuneration for Women and Men
Water	Human Rights investments
Emissions	Non-discrimination
Effluents and Waste	Child and Forced Labour
Environmental Expenditure	Local Communities
Employment	Customer Privacy
Labour Management Relations	Compliance

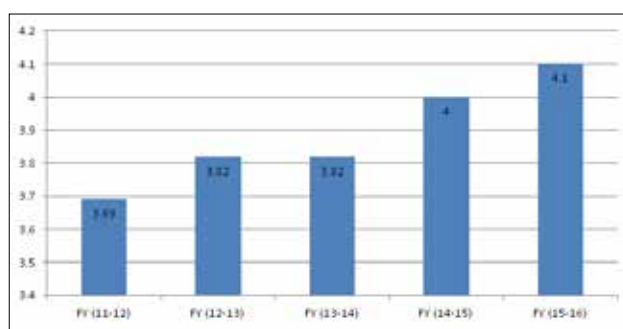
Formalized Customer Feedback System

We obtain customers' feedback about various parameters of HCC's product and services through a standard questionnaire every quarter.

After receiving the feedback, we are analysed and areas of weakness identified by customers are short listed. The summary of customers' feedback is presented to the top management during quarterly management review and the actions recommended by management are planned & followed up as corrective measure.

In case of project obtaining Customer Satisfaction Index (CSI) below 3 in any of the quarters, the Management Representative (MR) along with the concerned Project Manager shall arrange for interaction with the concerned customers to have a better understanding of their expectations. MR shall recommend to the Project Management the necessary actions to mitigate the causes of dissatisfaction. The Project Manager shall take necessary corrective actions within the ambit of the contract and inform the MR about the status of corrective action.

Trend of Customer Satisfaction Index



Our Commitment to NVG Principles

Principle 1: Businesses should conduct and govern themselves with Ethics, Transparency and Accountability

The Board of Directors of HCC has set up an Audit Committee to oversee the company's financial reporting and the disclosure of financial information. To ensure transparent communication, this committee makes sure that all financial statements are credible, accurate and sufficient. All employees and Non-Executive Directors are governed by our Code of Conduct, which covers all aspects under this principle and contains an anti-corruption policy and other related procedures. All executive directors and senior managers are governed by our Code of Conduct that requires observance of ethical conduct, fairness and equity. This code also refers to the Senior Management's commitment to the Company and all its stakeholders by working to the best of their judgement, ability and responsibility. All employees and senior managers of HCC have affirmed compliance with the Code of Conduct. Further information can be found under the Corporate Governance section.

Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle

While we deliver exceptional engineering value in the services that we provide, we are mindful of the impacts that our engineering processes have. We are committed to ensuring sustainability and safety in all our work so that we can responsibly execute our role in creating quality infrastructure for India. Optimizations in our supply chain have enabled inventory and surplus reduction while simultaneously achieving environmental conservation and economic savings. As a part of this endeavour, we continually work towards the development of local vendors. This boosts the local economy and also helps in supply chain optimisation. Further information can be found under the 'Resource Optimisation Initiatives' section.

Principle 3: Business should provide well-being of all employees

We provide regular trainings to our employees to ensure their learning and growth. These training programs include technical trainings that are related to the operation and

maintenance of equipment, as well as health and safety trainings. All workers, including sub-contracted staff and piece rate workers are covered by these trainings which help them to improve their skill sets for continued employability. To improve organisational and team performance we have also initiated a performance based rewards and recognition programme. A zero-tolerance approach towards employee discrimination, bonded labour and child labour issues is followed across our sites. Further information can be found under the 'Our Employees' section.

Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised.

We actively engage with all our stakeholders on a regular basis to address their concerns in a responsible and time bound manner. We have a HIV/AIDS Workplace Policy with special focus on the impacts of HIV/AIDS amongst migrant workers. We also have HIV/AIDS workplace interventions that aim to improve employee inclusiveness. Other areas that are covered by our community level interventions include disaster response management, community development and education. Further information can be found under the 'Our Employees' section.

Principle 5: Businesses should respect and promote human rights

We are a signatory to the United Nations Global Compact (UNGC), which is a global strategic policy initiative. Thus, we share the commitment to aligning our operations and strategy with the ten UNGC principles. These comprehensive principles cover the areas of human rights, labour, environmental protection and prevention of corruption. As a responsible company, all our contracts forbid the use of child labour on our sites. Our onsite security personnel are trained to ensure this, and in case of suspicion they are required to obtain a proof of it. All our stakeholders are also expected to maintain this standard, and uphold all human rights principles. Further information can be found under the 'Our Employees' section.

Principle 6: Business should respect, protect, and make efforts to restore the environment

As a signatory to the UNGC, we are committed to the cause of environment conservation. In line with this commitment, all our projects are designed and constructed in an environmentally responsible and sustainable manner. We also endorse the UN CEO Water Mandate, which has helped us to become more conscious as a company when it comes to water. We have an Integrated Management System (IMS) Policy that conveys our constantly improving environmental performance, beyond regularity compliance. Apart from this, HCC has adopted several initiatives to enhance its environmental performance. Further information can be found under the sections 'Environmental Performance' and 'Our Employees'.

Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.

We are an active member of a number of industrial associations and developmental bodies, and we regularly participate in public and regulatory policy discussions, globally as well as at the national level. Our representation at these bodies is at the highest levels, including by our Chairman and Managing Director. Further information can be found under the 'Advocacy' section.

Principle 8: Businesses should support inclusive growth and equitable development

As an organisation that has its footprint across the length and breadth of the country, we are well aware of our impact on the socio-economic development of the country. In line with our commitment to the welfare of the society, we have a long tradition of supporting communities in and around our project sites. The numerous community development initiatives that we have undertaken have had a positive impact on the overall well-being and progress of many communities across the country. Further information can be found under the 'Beyond Bread' section.

Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner

Our Standards Contracts System allows us to streamline our contracts, thus providing us a uniform approach to all our contracts. This allows us to provide consistent service to all our stakeholders. We have a robust system of continuously engaging with our customers, collecting formalized feedback, and addressing any concerns. Further information can be found under the 'Business Development, Sales Planning and Review Process' section.



6. Engineering Highlights

We continually focus on research and development with the objectives of achieving continual efficiency enhancement, reduction in material costs, process development, improving speed, enhancement of construction quality and sustainability. These efforts are undertaken through interdisciplinary engineering within the organization and in technical collaboration with vendors, consultants and academia sharing similar interests. Some of our R&D efforts are listed below:

- i. Optimizing concrete ingredients with specific focus on reducing cement content, reducing carbon footprint and making Portland cement concrete a sustainable choice. This is partly achieved by using less energy intensive chemical additives, enhanced use of alternate cementing materials (like fly ash, slag, micro silica, etc.) and optimal quality assurance planning;
- ii. Controlled quarrying and crushing of aggregates for construction with an objective of reducing wastage and environmental impact;
- iii. Through the use of the philosophy of materials integrated design, maximization of locally available construction materials is achieved;
- iv. Development of alternate equivalent, less expensive construction materials from industrial wastes in close coordination with specialized vendors;
- v. Speedier Construction technologies like roller compacted concrete (RCC) for the construction of dams;
- vi. Alternate feasible structural designs (ex. alternate pavement design) with objectives such as improvement in the specifications, enhanced design life, reduced use of natural construction materials and improved sustainability;
- vii. Construction methods such as pumping of concrete through 2.4 km for productivity enhancement.

Efforts made towards technology absorption and adaptations during the last five years are:

- i. Roller Compacted Concrete (RCC) Material and Construction Technology for Dam Construction(2012 – 2015): This construction material and technology were used for completing the dam construction at the Teesta Low Dam Project (TLDP-IV);

- ii. Long-Distance Pumping of Self-Compacting Concrete(2012 – 2015): Concrete pumping at Sainj hydel project in Himachal Pradesh for the lining of its headrace tunnel was accomplished using pumping of self-compacting concrete through 2.432 km. This also led to creation of a world record in pumping concrete across such a long distance;
- iii. TBM Tunneling in Himalayan Geology(2010 – 2014):Technology adapted. For the first time, a double-shielded Tunnel Boring Machine (TBM) was used successfully to bore the headrace tunnel in the challenging Himalayan geology at the Kishanganga HEP. A record boring of 816 meter/ month was achieved at peak;
- iv. Incremental Launching of 125 M Double Decker Steel Bridge 125 M Span(2014 – ongoing): HCC with its consortium partner from Germany is using the method for incremental (continuous) launching of ten spans of 125 meter each, for the road cum railway double-decker steel bridge over river Bramhaputra. This steel bridge is also unique due to the use of welded connections;
- v. Composite Pavement Construction (2013 – ongoing):We are making use of various pavement design methods, construction machineries and alternate materials to reduce the construction time and construction materials and increase the life of the constructed pavements. Demonstration stretches have been constructed at NH34 and designs are being developed for the Indo-Nepal border and Numaligarh-Jorhat road projects;
- vi. Use of 3D Analysis for Optimized Design(2014 – ongoing):Optimized design of the powerhouse complex for the Tehri Pumped Storage Project is being done by using FLAC-3D Software in close coordination with experts from France and Canada. It is being used in optimizing the rock support;
- vii. Dam Construction Using Concrete Faced Rockfill Dam (CFRD)(2013 – ongoing):A CFRD dam is being constructed at the Kishanganga HEP with expertise from Greece. Constructing CFRD at such a height i.e. at an elevation of close to 2400 m and working at sub-zero temperature conditions makes it even more challenging.

Lean construction

Lean Construction is “a new and transformational way to design and build capital facilities”. The goal is to make optimum use of critical resources in processes, including manpower, equipment, material, time and money, to avoid wastage and promote a cost-effective solution for project management.

However, lean construction is not just minimising wastage at the construction site but taking a holistic view of the project starting at the grassroots level, people within the organisation. For without the active involvement of key personnel, better management and timely execution of projects is a distant reality.

HCC have been adopting the concept to eliminate wastage and make construction processes efficient that eventually result in improved productivity, faster delivery and other benefits.

In the detailed engineering phase, value engineering optimises the judicious use of resources from planning to construction. For example, the emphasis on planning and engineering has enabled HCC to devise alternate construction methods and schedules that reduces time, cost and delivery overruns among others.

Thanks to high-quality benchmarks, the company routinely constructs and delivers complex projects faster and at lower costs, thereby meeting, and even exceeding, customers’ expectations. This lean construction approach

is helping HCC maximise value and minimise wastage in the important areas of project management including supply-chain management, logistics, safety and adoption of innovative technologies / methodologies.

During construction of two tier Bogibeel Bridge, the country’s longest railcum-road bridge over the Brahmaputra in Assam, HCC team was faced with a challenge — how to place the 125-metre long fully-welded steel spans, each weighing 1,700 tonnes, on the pillars or columns embedded in the riverbed.

On-site engineers had two choices — lift the spans with floating cranes or erect them with a launching truss. Which option would be more practical and economical?

After weighing the pros and cons, the HCC team came-up with a third option of pulling the steel trusses with a set of jacks and winches on the pillars. This eliminated the need to enter the river, which was often turbulent during monsoons. Besides, it also ensured safer working conditions, precluded the mobilisation of giant setup on either side of the river having width of 4.8km and accelerated the pace of the project.

The strategy is a testimony of the company’s value engineering, an important feature of the globally-practiced ‘Lean Construction’ that is changing the way projects are executed from design to construction.



Bogibeel Rail-cum Road Bridge, Assam

Technical Paper Presentation:

Based on all these efforts, over 10 technical papers were published/ presented in various forums including international and national research journals, periodicals, conferences and magazines.

We have realized the following benefits from the above technology adoption and adaptation initiatives:

- i. Faster progress implying earlier completion of projects
- ii. Efficiency improvements
- iii. Enhancement of quality
- iv. Enhanced life of built-structures
- v. Improved sustainability

Technical papers presented during 2015-16

Book Chapters

- “Harnessing sustainable solutions through challenges – a case study of world record long-distance pumping of concrete”, Chapter in Sustainability Issues in Civil Engineering (under production), Springer presented by Chetan Hazaree, Viswanath Mahadevan, Sunil Bauchkar and Shankar Kottur.
- “Materials’ Specifications: The missing link to Sustainability planning”, Chapter 15, Accepted for Green Building and Concrete, Sabnis Gajanan (editor), CRC Press, Taylor and Francis, 2015- presented by Chetan Hazaree and Peter Taylor.
- “Roller Compacted Concrete: A Sustainable alternative”, Chapter 6, Accepted for Green Building and Concrete, Sabnis Gajanan (editor), CRC Press, Taylor and Francis, 2015 – presented by Chetan

Hazaree, Ponnosamy Ramasamy and David Pittman

International Journals

- “Single stage pumping of concrete through 2.432 km (1.51 miles): Admixture, Mixture and Full Scale (Accepted for publication in ASCE Journal of Materials in Civil Engineering) – presented by Chetan Hazaree, Viswanath Mahadevan
- “Single stage concrete pumping through 2.432 km (1.51 miles): Weather and execution challenges”, Case Studies in Construction Materials, Vol.3, 2015, pp. 56-69 - presented by Chetan Hazaree, Viswanath Mahadevan
- “Are specifications impeding sustainability of fly ash concrete?” The Indian Concrete Journal, July 2015, pp.52-63 – presented by Chetan Hazaree, Shashank Vaidya, Peter Taylor, Ashok Tiwari and Rajesh Gupta.

Paper presentations

- Mr. Satish Kumar Sharma - Head Engineering Management and Mr. Rakesh Khali, Group Project Manager presented two technical papers on tunnelling technologies at the ‘Tunnelling Asia 2015’ conference organized in New Delhi on 15th and 16th April 2015.
- Mr. Rakesh K Khali, Group Project Manager of HCC for T-48 & T-49A tunnel projects in J&K presented a paper on ‘HCC’s tunnelling expertise’ in the World Tunnel Congress held in Dubrovnik, Croatia on May 22, 2015. The paper was titled ‘Challenges involved in construction of tunnel with New Austrian Tunnelling Method (NATM) in the adverse geological conditions of Himalayas’.



7. Our Employees

Our people are critical to the growth and success of the Company, and we remain committed to the creation and retention of best-in-class workforce. Employee well-being, health and safety, learning and development, human rights (equal opportunity and non-discrimination) are some of the key tenets of our human resource practices. We have adopted policies and instituted several initiatives to this end.

Attracting talent

We have a streamlined and efficient recruitment and selection process to find and attract the best talent, thereby creating competitive strength and strategic advantage for the Company. Considering that our project sites are often located in remote and difficult geographical locations, we ensure that our employees deployed at these projects are provided with high quality facilities as well as a safe and secure living environment. We have also standardized the camp amenities for contract workmen across all our project sites.

Employee wellbeing

The safety, health and well-being of all our employees and workers is given the utmost priority in all our operations and activities. We conduct safety and health related trainings and awareness drives at all our project sites for our employees, contract workers and members of the surrounding communities. The safety performance across all project sites is monitored centrally at the corporate office on a continual basis and is reported to the senior management.

Skills Development

Learning and Development continues to be an important aspect of our human resources strategy. Skill development not only enhances the personal growth of our employees but is also key to realizing our vision of being an industry leader renowned for excellence, quality, performance and reliability in engineering construction. A wide range of technical and managerial training programs, catering to specific needs of various business sectors, functions and individual employees, are conducted through both internal and external trainers.

Graduate and management trainees are provided with

focussed trainings through a combination of classroom and on-the-job training as well as special assignments. These training programs, together with coaching and mentoring provided by seniors, help them transition smoothly into corporate life within HCC. We also focus on training the workers; including sub-contract and PRW staff, in order to upgrade their skills, creating a safe working environment and contributing to their continued employability.

Performance Management System

The Performance Management System at HCC provides a platform to employees for a transparent discussion and feedback on performance and development on an annual basis. To foster an environment of meritocracy and team work the rewards are linked to individual, functional / business and organizational performance.

Zero tolerance to discrimination

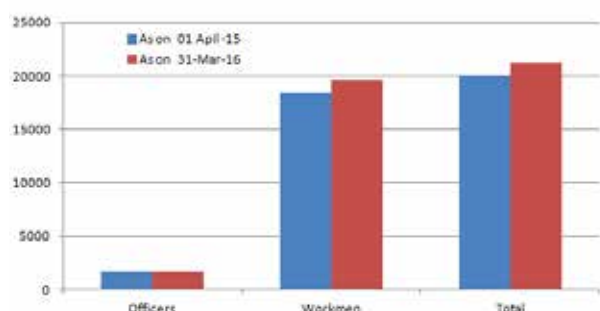
As a responsible employer, we are committed to fair labour practices and are in compliance with all applicable laws. We follow a zero-tolerance approach on the issues of employee discrimination, bonded labour, child labour, corruption and unethical conduct. We strictly enforce age verification of employees and contract labourers at our project sites.

Contract workmen

Responsibility towards all our contract workmen is an important element of our responsible infrastructure philosophy. We remain committed to ensuring their health, safety, overall well-being, continual learning and development, equal opportunity and upholding all facets of human rights as per the law of the land.

Employment

Our human resources focus continued to be on improving efficiencies and reducing cost. While the trend of attrition continued, it remained within industry standard. At the same time, we continued to hire people with the right skill sets in order to ensure efficient, timely and high quality execution of our projects. We also ensured that existing benefits to our employees continue to remain available despite challenging business environment.



As of 31st March 2016, our total workforce strength (HCC Engineering & Construction business) was 21297. This comprised of 1619 Senior, Middle and Junior Management Officers, 46 Trainees, Apprentices and Short-term Contracts, as well as 19632 Workmen (on project rolls, sub-contracted and piece rate workers).

A snapshot of our employment data, as of 31st March 2016 is presented below:

Social Performance – Key Performance Indicators ¹	FY 2015-16
Total Workforce	
Workforce by Level of Employment	
Officers (Senior, Middle, Junior Management)	1619
Others (Short Term Contracts, Trainees etc.)	46
Workmen (Excluding FTC)	19632
Workforce by Type of Contract	
Permanent Employees	5451
Sub-contract	5858
Piece-rate Workers	8323
Fixed-term Contract	68
Workforce by Gender (excluding Workmen)	
Male	1594
Female	71

¹ All workforce figures are as of 31 March 2016 and pertain to all active project sites of the Company; HCC has pan-India presence and does not report regional breakdown; None of our project sites fall within areas defined as insecure;

The details of new employee hires and attrition in FY 2015-16 is presented in the table below:

	Numbers left Voluntarily in FY 15-16 (attrition rate)	Numbers left involuntarily in FY 14-15 (attrition rate)	Number of new hires in FY 14-15	Numbers of new hires, who voluntarily left in FY 14-15	Numbers of new hires, who involuntarily left in FY 14-15
By gender					
Male	393 (24.90%)	43(2.72%)	462	70	2
Female	8 (11.03%)	3(4.14%)	7	0	1
By Age groups					
< 30 years	152 (41.93%)	3 (0.83%)	260	31	1
30-50 years	226 (21.01%)	20 (1.86%)	184	37	1
>50 years	23 (10.82%)	23 (10.82%)	25	2	1

Our workmen (both permanent and temporary) at offices and project sites have the right of collective bargaining. While the workers on our rolls are fully unionized, the terms and conditions of the workmen on the sub-contractor rolls and piece rate workers are bargained by their respective sub-contractors/PRWs.

Reward and Recognition

We have adopted a Recognition and Reward Policy that governs our approach to recognizing and rewarding the outstanding performance and contributions of individual employees and teams. The key areas in which performance is recognized under this policy are

- Project performance (physical progress, financial and safety performance)
- Order acquisition / order booking
- Promoting safety culture at projects, and
- Claims & Collections.

The policy also aims at institutionalizing the company's brand values, promoting innovation, team work and recognizing the contributions towards the company's priority areas.

The recognition is given on a quarterly / half yearly and an annual basis in the Project Managers conference and the half yearly and annual awards in the E&C Business Conference. This recognition scheme has resulted in continuous improvement in our productivity and performance.

Employee Benefits

Our full time employees enjoy the following benefits during their association with us:

- Medical Insurance Scheme
- Superannuation Scheme/ Pension Scheme
- Executive Health check-up facility (Senior and Middle Management)
- Annual Performance linked incentive (Senior and Middle Management) and incentives for project sites
- Additional allowance/ benefits for employees posted in difficult locations

All the above benefits are subject to company policies. The Provident Fund benefit is also extended to our contractual employees in addition to our full time staff.

Diversity and Equal Opportunity

Respect for gender diversity and equal opportunity is intrinsic to our philosophy and culture, including equal remuneration for men and women. In this regard, we go beyond legal requirements and follow global best practices, including the UN Global Compact Principles of Labour Standards and Human Rights. All our operations and contracts meet the appropriate human rights criteria

as required by the applicable laws of the land. We have adopted a Policy on Prevention & Redressal of Sexual Harassment, in line with the statutory requirements. All 469 new hires have undergone awareness training on Human rights and Prevention of Sexual Harassment. We have well defined systems in place for addressing any grievances.

We remain committed to gender diversity and all our hiring and career progression activities, employee remuneration and benefits, initiatives and engagements are non-discriminatory. While the nature of our business and remote locations of our project sites does not allow for a suitable working environment for women employees, our corporate office employs 71 females, 2 out of which are in the senior management position, while 69 others are in the middle and junior management. There were 17 women employee participants in training programs conducted in FY 2015-16, amounting to 379 training hours. The table below shows the ratio of basic salary and remuneration of women to men for each employee category across our project sites in India:

Ratio of Basic Salary and Remuneration of Women to Men	
Senior management	1.04
Junior and middle management	0.99

All our women employees are entitled to maternity leave. The table below shows the data pertaining to the return and retention of women employees post maternity leave:

Return to Work after Parental Leave	
Number of Employees Entitled (all Women)	71
Number of Employees Aailed and Returned	2
Number of Retentions 12 Months After Return	2

Employee Training and Development

We strive to provide the best learning opportunities to our employees and workers. A variety of technical and functional programs catering to specific needs of various project sites, functional areas and individual development needs were conducted during 2015-16. Key training sessions conducted for officers include:

- Essentials, Trends and Issues in Concrete Construction
- Civil Construction in Hydropower
- Equipment Management
- Project Accounts Officers Development Program
- Advanced Materials Management and Inventory Control

- Udaan - Achieve your Potential
- Beyond Boundaries
- Safety Officers Competency Building Program
- Behaviour Based Safety
- Workplace Ergonomics
- Environment Protection at site
- Housekeeping & Site Logistics

Key training sessions conducted for workers during the reporting year include:

- Basic Construction Safety
- Defensive Driving
- Construction Safety
- Operation and maintenance of various construction equipment
- Construction Methodology modules

The table below shows average employee training man-hours received by employees in FY 2015-16:

Average Employee Training Man-hours by Level of Employment	
Officers	17.98
Trainees	44.85
Workers	4.65
Average Employee Training Man-hours by Gender (Trainees included)	
Officers (Male)	19.2
Officers (Female)	5.2 ²

*We do not discriminate between male & female employees for training.

² A majority of our female employees are based out of HO. Since a majority of our trainings are focussed on technical aspects and operational safety, relevant for on-site workers who are primarily male employees, the average training man-hours for male employees is relatively higher than females.

Personal Development Program

With an objective to enable our junior management officers to achieve their personal and organizational goals with excellence and enhance their workplace effectiveness, two personal development programs were launched at head office. These were experiential learning workshops in which role plays, games, group activities and discussions were conducted to provide insights, tool & techniques to the participants for enhancing their skills in the following areas:

Beyond Boundaries – For Site Personnel Officers

- Crisis Management
- Empathy & Interpersonal Awareness
- Communication & Assertiveness
- Constraints Management

Udaan - For All other Officers

- Self Management
- Communication Skills
- Constraints Management
- Team Management

Planning & Contracts Engineers Development Program

To augment the competencies in the organisation, Group HR in collaboration with National Institute of Construction Management & Research Pune, designed customized training program for Contracts & Planning Function. 58 Civil engineering graduates were hired through an extensive selection process who underwent rigorous training in Planning & Contracts functions for one month at NICMAR. The training was delivered through classroom studies and case based exercises by experienced faculty with an objective to prepare the participants to take on the roles in the planning or contracts functions.

8. Health and Safety

Proactive Safety observation Program (PSOP)

Safety, as they say, is much more important than convenience and it is perhaps the most effective insurance policy. At HCC, paramount importance is given to safety at every juncture, every step of the way. The company advocates efforts to achieve zero incident at every project site. Several initiatives have been undertaken over the years to improve the safety performance at HCC including mandatory induction and training programmes, tool box talks, usages of personal protective equipment etc.

A new initiative called Proactive Safety Observation Programme (PSOP) was launched in 2013 that has brought a paradigm shift in the way safety has been observed at all HCC project sites. This entails a dedicated PSOP round and is not combined with any other safety inspection round.

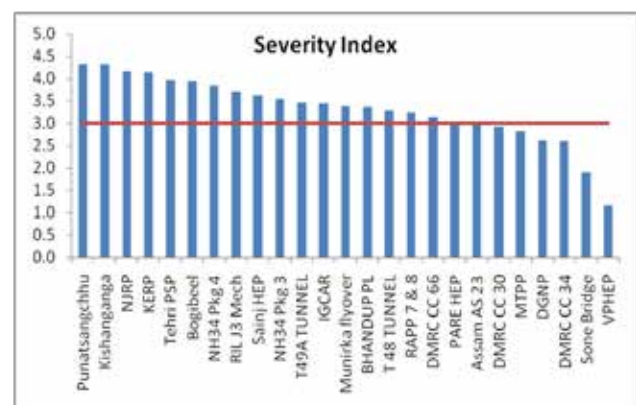
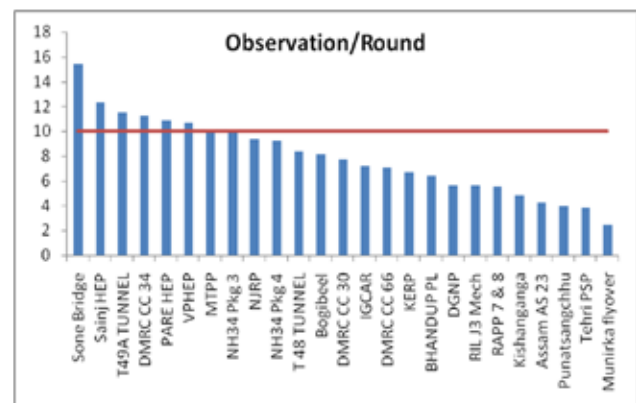
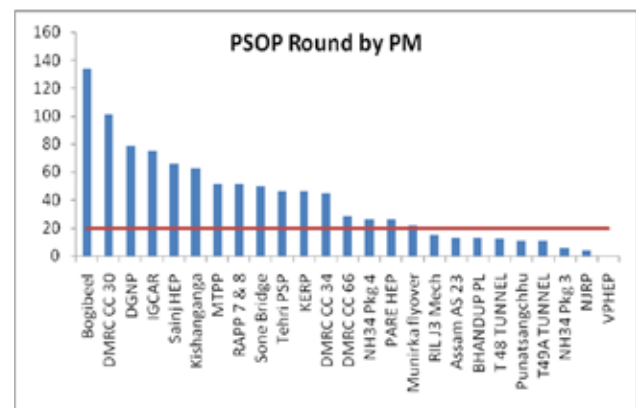
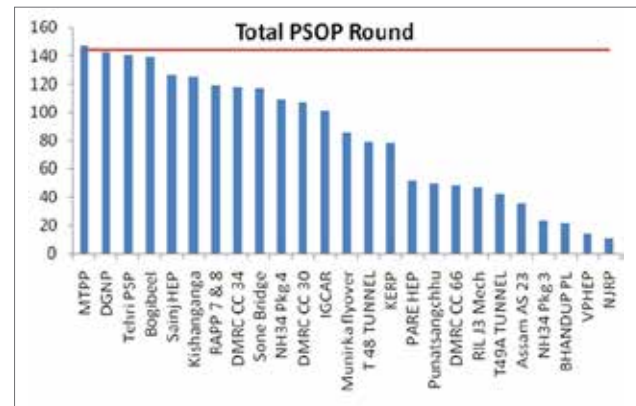
The PSOP round consists of a cross functional team walking through the site on a weekly basis for site safety observations. During PSOP rounds, members of the team identify unsafe act, unsafe condition, unsafe practices adopted at site. Subsequently, Project HSE Head will document the observation in PSOP report detailing with action required to address the observations and responsibility given to section heads for taking corrective and preventive actions as well as their close out.

Project Managers also attends PSOP round at least once in a month to show his commitment for safety to other site team members. PSOP observations are discussed in the monthly safety committee meetings in the presence of Project Managers, who reviews all observations and gives direction to responsible person to ensure full compliance.

Daily Safety Reporting

We have initiated online daily safety reporting to simplify our reporting system and make sure everyone knows about it. It provides immediate consolidation of HSE information and easy monitoring of reporting of safety performance indicators and also facilitates data analysis. This reporting helps us set daily target for the projects and

PSOP Dash Board for FY 15-16



makes site personnel more involved and accountable at the site.

Under this system, the project site has to send the data of safety performance indicators daily to the safety department at Head office. The data includes various indicators such as unsafe condition, unsafe act, near miss, first aid case, tool box talk, trainings, penalty enforced etc. A compilation of the data from all project sites is then forwarded to the senior management through automatic computer generated mail daily by showing daily reporting against target.

This online Daily safety reporting keeps the project management informed on progress as well as any current or possible issues. It also helps create a record of daily events that can be reviewed for improvement. This initiative has helped us in the development and implementation of proactive safety culture at project & further leads to achieve our company goal 'Zero Reportable Accident'.

Safety Trainings



Trainings are critical in making our employees and workers competent in safety and can help to avoid accidents. We have started a train-the-trainer program so that we can develop skill and competency level of our employees. We have conducted so many Internal and external training programs at our projects based on the project requirements.

Following are the detail of training program organized at our projects during FY 2015-16:

Training	Total No. of employees attended
Trainings conducted by Project HSE personnel	1,28,611

Monthly Safety theme



We celebrate first day of every month as a Safety Day of the Month, which is followed by a training being organization on the safety theme adopted for that month. This includes short speech by the Project Manager and senior staff to the assembled gathering of employees, workmen, client and sub-contractors at each project site.

The monthly safety theme topic is displayed at the prominent locations at the site and notice boards urging to the involvement of the staff and employees. Motivational awards are distributed to the workers/ staff who have taken active involvement in enhancing the safety culture in their respective work areas.

List of Safety Themes celebrated at projects during FY 2015-16:

FY 2015-2016	
Month	Safety Theme
April'15	Scaffolding
May'15	5'S for Good housekeeping*
Jun'15	Behaviour Based Safety
July'15	First Aid responder Training
Aug'15	Behaviour Based Safety
Sept'15	Electrical Safety
Oct'15	Safety in Equipment & Machinery Operation
Nov'15	Behaviour Based Safety
Dec'15	Safety Awareness Month
Jan'16	Road Safety Week
Feb'16	Screening of Safety film
Mar'16	National Safety Day theme based training

*5S is the acronym for five Japanese words that refer to good housekeeping techniques for enhancing productivity, quality and safety at the workplace

Safety Statistics

Safety Statistics*	
Man-hours Worked	6,56,28,809
Injuries	10
Fatalities	06
Lost Days	37,048
Frequency Rate	0.24
Severity Rate	564.5
Frequency Severity Index	0.37

* Includes HCC Employees and Subcontracted Workmen.

Behaviour Based Safety Programme:



HCC has added a new dimension to our safety programme by introducing a 'Behaviour based Safety Programme'. Behaviour based safety (BBS) emphasizes that employees need to take an ownership of their safe as well as unsafe behaviours. If they behave unsafe, they are not punished, instead they are repeatedly told to correct; and when they behave safe, they are encouraged. Both unsafe and safe behaviours are counted and displayed. BBS also discusses the unsafe conditions that influence unsafe behaviours.

BBS is a data driven decision-making process. BBS believes that what gets measured gets done and each employee can make a difference in organizational safety. Employees are the basic source of expertise of behavioural change (observe and correct). BBS begins by briefing sessions for all work areas and depts. BBS is a teamwork; it is companywide and people driven.

The feedback process reinforces the use of safe behaviours and helps us determine why certain at-risk behaviours were performed. Collecting information about at-risk behaviour helps the management determine the

root cause of behaviour and develop an action plan to remove the barrier causing the behaviour.

Safety Achievements & Client Appreciation:



- A certificate of appreciation was awarded to HCC on 3rd February 2016, by HSE Leadership Forum, in recognition for achieving more than 5 million safe man hours without a Lost Time incident at the Reliance J3 Project.
- A certificate of appreciation was awarded to HCC, by URS, for exhibition of exceptional safety behaviour and achieving 7.46 million safe man hours in 2014.
- A certificate of appreciation was awarded to HCC, by Sardar Sarovar Narmada Nigam Ltd., for its contribution towards the achievement of 5 million safe man hours up to 25th March 2015 and for its strict adherence to HSE practices at Kachchh Branch Canal Pkg-II.
- A Safety Recognition certificate was awarded to HCC on 28th April 2015, by the Ministry of Labour and Human Resources-Royal Government of Bhutan, in recognition for adopting good Occupational Health and Safety practices at the workplace for 2014.
- A certificate of appreciation was awarded to HCC on 27th October 2014, by National Safety Council of India, in recognition of appreciable achievement in Occupational Safety & Health at the Maroshi Ruparel Tunnel Project, during the assessment year 2012.

9. Economic Performance

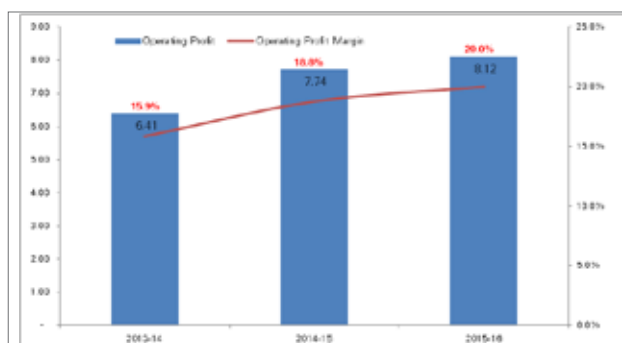
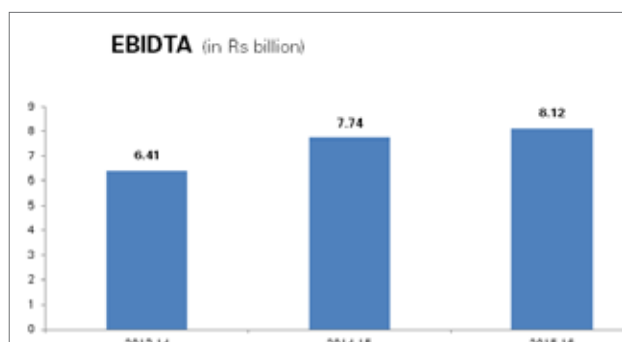
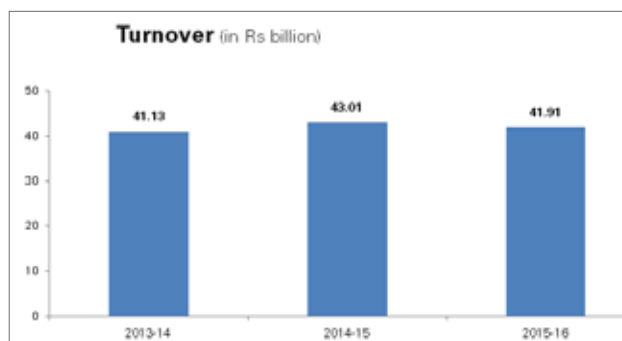
Over the last 90 years, we have grown to become one of India's leading construction companies and a name to reckon with in the infrastructure industry. During this long and eventful journey, we built strong capabilities that have enabled us to successfully deliver a wide variety of projects. This has helped us deliver value to all stakeholders in a dynamic and challenging environment.

During the last few years, most companies in the construction industry in India had to grapple with slowdown in orders and large cost over-runs in stalled projects which have not been duly compensated by the clients. We have faced a similar situation where the debt burden has increased in a manner that is not commensurate with the size of our operations and there has been severe stress in terms of cash flows. To meet this challenge, we have realigned our business strategy to focus on generating cash from monetisation of noncore assets. To accomplish this, we have monetised few assets and land parcels. In addition, we have streamlined our processes with an emphasis on capital conservation, productivity and increased cash generation.

These steps have helped improve our financial performance in FY 2015-16. Our EBITDA in FY 2015-16 stood at INR 812.4 crore, an increase of 5% over the previous year. We also saw improvements in our EBITDA margin as well as our PAT, which improved by 4.1 % to INR 84.97 crore for FY 2015-16.

Focus on large orders has increased the order backlog of our core business by 25% to INR 18,123 crore. Our robust order book is spread across the sectors, with new orders having an average size of over INR 700 crore. Such large order size enables better management of project and provides an opportunity of generating better margins.

We are confident of achieving greater benefits out of efficiency improvements and cost optimization. Infrastructure developers and construction companies tend to go through sharper business cycles than many other sectors. With strengths in technical expertise and execution capabilities, along with a firm determination to surmount all odds, we are confident to emerge from the slumps stronger than before.



Economic Performance - Key Performance Indicators	Value (Million INR) (FY 2015-16)
Economic Value Generated	40524.16
Revenues	40524.16
Economic Value Distributed	40806.24
Operating Costs	28060.22
Employee Benefits and Wages	3703.56
Payment to Providers of Capital	6898.83
Payments to Government (Indian)	2139.54
Economic Value Retained	(282.08)

10. Environmental Performance

HCC has long standing commitment to creating Responsible Infrastructure that improves the quality of life of all people. Social commitment and environmental responsibility have become integral principles of our business goals. We have an Integrated Management System (IMS) Policy that demonstrates our commitment to improve our performance on various environmental aspects that go beyond regulatory compliance.

Our management regularly revises the IMS, which comprises of a number of policies and procedures that are communicated to and implemented across all our project locations. HCC is certified for ISO 14001:2004 Environmental Management Systems, ISO 9001: 2008 Quality Management Systems, and BS OHSAS 18001: 2007 Occupational, Health and Safety Systems.

We are a signatory to the UN Global Compact CEO Water Mandate program and are committed to the aim of reducing our total water consumption and thereby improving our water efficiency index. This is in line with our ultimate objective of achieving water-neutrality, an ambitious goal that is strongly supported by our top decision-makers. The water consumption footprint at all our operating sites is measured and tracked through water meters.

We have imbibed the principle of optimal utilization of critical natural resources in our material procurement practice. This includes reuse of materials, minimizing waste generation, sourcing locally to the extent possible and stronger procurement controls centrally in order to decrease avoidable long-distance transport.

We are also cognizant of our energy consumption and aim to optimize it by adoption of energy efficient practices through the use of latest technology and engineering innovations.

We do not have any construction projects that are located in ecologically sensitive areas. However our on-site teams remain sensitive to the local ecology, landforms and communities, and take several proactive initiatives to conserve the natural local environment around our project sites.

Resource Optimization Initiatives

Cut to length Plates at Bogibeel Project site

At the Bogibeel site, instead of using the readily available standard size plates, about 95 different variants of sizes were procured in order to reduce the wastage of steel. In addition, HCC used 'Most 2D' automatic nesting software to generate efficient two-dimensional cutting plans for fabricating the steel superstructure for the bridge. The nesting technology was based on advanced cutting algorithms specially designed to optimise the cutting layouts in shearing. The software generates high-utilisation layouts, significantly reducing waste and maximise productivity.

Plates from Essar for Sawarakuddu

At Sawarakuddu HEP, steel plates from Essar Steel are procured for construction of steel liner in the pressure shaft and penstock. HCC team negotiated with the supplier Essar Steel to manage tighter tolerances on thickness, width and lengths of steel plates. The supplier worked on process tightening to manufacture these plates to achieve tolerances tighter than the one specified by the IS standards and even the client, Himachal Pradesh Power Corporation Limited. Through this initiative, a savings of 87.155 MT of steel was achieved.

Energy Conservation

We are continuing with energy saving measures initiated earlier. These include:

Usage of Load Sharing System in D.G. sets

DG Sets of various ratings are provided with synchronized arrangement. Based on the load, the operators switch 'on' or 'off' the DG Sets without interrupting the load. With this arrangement, the DG Loading can be controlled to ensure better productivity.

APFC (Automatic Power Factor Controller) panels

As a practice, we are installing APFC Panels at site electrical installations in strategic locations, in order to improve the power factor. Further, we are also installing additional 'Capacitor Banks' at high inductive load ends.

Most of the loads at construction sites are motor load (i.e. inductive load) and hence installing power factor correcting devices results in substantial cost savings. Improvement in Power Factor has following effects: • Reduced reactive current, thus reduction in I²R losses • Reduction in reactive current, which results in lesser IR Voltage drops • Lower expenditure for electricity consumption

FCMA (Flux Compensated Magnetic Amplifier) Starter for Main Crusher Motors

Main Crusher Motors are generally of very high ratings due to starting torque requirement. For starting these Crusher Motors, the Transformer, DG set and Switchgear configuration in conventional systems has a very high rating. To overcome this, we introduced Electronic Soft Starters. However the cost of maintenance of Electronic Soft Starters was high (in order to handle starter breakdown). Therefore, FCMA Starters were introduced. Due to these starters, the requirement of Transformers, DG Set and Switchgear ratings have been lowered in comparison to the conventional system. This indirectly trickles down to savings in terms of electricity consumption.

Variable Frequency Drive (VFD) Starting System for Ventilation Fans & EOT/ Gantry Cranes

In certain applications such as Ventilation Fans and Cranes, the Motor ratings selected are for the Peak requirement, whereas for most of the time it runs at reduced loads. Under such circumstances, the use of VFD has resulted in reduced electricity consumption. For example, during tunnel excavation, VFD plays a vital role in reducing the fan speed / air flow of the ventilation system as per the requirement, thereby reducing power consumption.

Use of Energy Efficient Motors in Gantry Cranes

This is a Continuous process and all new cranes are generally procured with Energy Efficient Motors.

Our Environmental Footprint

Environmental Performance – Key Performance Indicators	Unit	FY 2015-16
Materials		
Raw Materials	Tons	3507025.14
Semi-manufactured Goods or Parts	Tons	332454.39
Associated Materials *	Tons	4389.47
Energy		
Diesel	L GJ	17,487,340 639162.28
ATF	L GJ	131671 4783.08
Total Direct Energy	L GJ	643945.36 178873710.4
Total Indirect Energy (Purchased electricity)	kWh	37219145
CO₂ Emissions		
GHG emissions due to direct energy use	Ton CO ₂ eq	47696.74
GHG emissions due to indirect energy use	Ton CO ₂ eq	30337.33
GHG emissions intensity from construction ³	Ton CO ₂ eq	1.09
GHG saved on account of Fly Ash Utilization and ground granulated blast furnace slag	Ton CO ₂ eq	13150.7
Waste Disposed		
Solid Hazardous Waste (Empty drums, batteries, E-waste)	Numbers	120 drums, 22 batteries
Liquid hazardous waste (used oil)	KL	49.58
Non-hazardous Waste (Used oil filters, tyres, cement bags)	Numbers	NA
Non-hazardous waste (Steel Scrap, used spares)	Tons	NA
Environmental Expenditure		
Waste disposal, emissions treatment and remediation costs	INR Million	9421
Prevention and environmental management costs	INR Million	4,72,65,366.88

*In addition to the above mentioned quantity, 96.29 kL of oils were used
³GHG emissions intensity has been calculated using a sum of emissions from direct and indirect energy use at our project sites in scope. Scope 3 emissions have not been accounted for. Emission factors for direct energy have been used as per the IPCC Guidelines for GHG Inventories (2006), while the emission factor for indirect energy (i.e. purchased electricity) is taken from the Indian Central Electricity Authority (CEA)'s 2009 Baseline Carbon Dioxide Emission Database Version 9.0. Annual turnover of HCC (E&C business) was taken from our Annual Report available on the web-link mentioned in this Report.

World Water Day Celebration



The World Water day was celebrated across our project sites and head office on March 22, 2016. This year's World Water Day theme focussed on the central role that water plays in creating and supporting good quality jobs. The HCC group had endorsed the UN Global Compact's CEO Water Mandate in March 2008 and initiated a number of interventions to judiciously use natural water resources and continuously improve water use efficiency



across its project sites. On this occasion, various initiatives were undertaken across project sites to create awareness and educate the masses on efficient usage of water. Posters and banners about water conservation awareness were displayed at the Head Office as well as project sites.

World Environment Day



The World Environment Day was celebrated across our project sites on June 05, 2015. This year's theme for World Environment Day was 'Seven Billion Dreams – One Planet – Consume with Care'. To mark this day, a communication was sent by the Chairman and Managing Director, Mr. Ajit Gulabchand to all employees. It highlighted the importance of finite natural resources and suggested living within planetary boundaries to ensure a healthy future. As a responsible organization in



environmental awareness, HCC project sites took a variety of initiatives like clean up drives around the vicinity, tree plantation drives and environmental awareness campaigns, along with quiz and poster competitions. Posters and banners were displayed to create mass awareness in the nearby areas of project sites.

11. COP: UN CEO Water Mandate

Preamble

The year 2015 was marked by low rainfall and a resultant drought like situation across large swathes of the country. This led to lower stocks in the reservoirs, severely affecting the availability of fresh water. As a result, water scarcity has become a topic of national interest that requires urgent attention. At such a time, it is imperative that the 4 R's (Reduce, Reuse, Recycle and Replenish) of water conservation are effectively adopted by all the consumers of water across the spectrum.

In 2007, HCC endorsed UN Global Compact's CEO Water Mandate and since then we have consciously endeavoured to adopt sustainable practices to ensure prudent use of water. The mandate is based on the notion that there is a business imperative and a responsibility for companies to promote efficient and clean practices for handling water in their operations and to encourage and facilitate sustainable management of the watersheds they operate in. In order to implement this at the ground level, we have imbibed the 4Rs of water conservation in our direct operations.

In this 8th Communication on Progress, we present the efforts made by the company towards propagating water consciousness in FY2015-16.

This Communication on Progress pertains to data from the following 24 project sites of the company:

Transport

- Assam Road Project *
- Kolkata Elevated Corridor
- NH 34 Pkg 3
- NH 34 Pkg 4
- Bogibeel
- Delhi Metro Rail Corporation CC 30
- Delhi Metro Rail Corporation CC 34
- J&K Rail T-48 Project
- J&K Rail T-49/A Project
- Numaligarh - Jorhat Road Project
- Munirka Elevated Corridor Project

Hydro

- Kashang HEP*
- Kishanganga HEP

- Pare HEP
- Punatsangchhu HEP
- Sainj HEP
- Tehri HEP
- Teesta HEP Stage IV*
- Sawrakuddu HEP
- Vishnugad Pipalkoti HEP

Nuclear & Special

- Muzaffarpur Thermal Power Project - II
- Rajasthan Atomic Power Project Unit - 7 & 8
- Dry Dock Project (DGNP)
- Indira Gandhi Centre for Atomic Research, Kalpakkam Project

* These 3 project sites were active only for a part of the year.

1. Direct Operations

HCC is a Construction and Engineering company which deals with construction of Tunnels, Dams, Roads, Nuclear Power Plants, and Water Solutions for cities and huge industrial buildings.

Water challenges

i. Water usage at project locations

While water is vital for our operations, water related risk is limited for HCC. A sufficient amount of good quality freshwater is available for use across all our sites, with surface water being the primary source of water. Further, the water related risk remains only till the completion of the project, hence risk assessment is restricted to this period only. The impact of our water use at the area of operations as well as the basin is very limited as the work operation is restricted to a stipulated period of 3 to 4 years.

ii. Water discharge at project locations

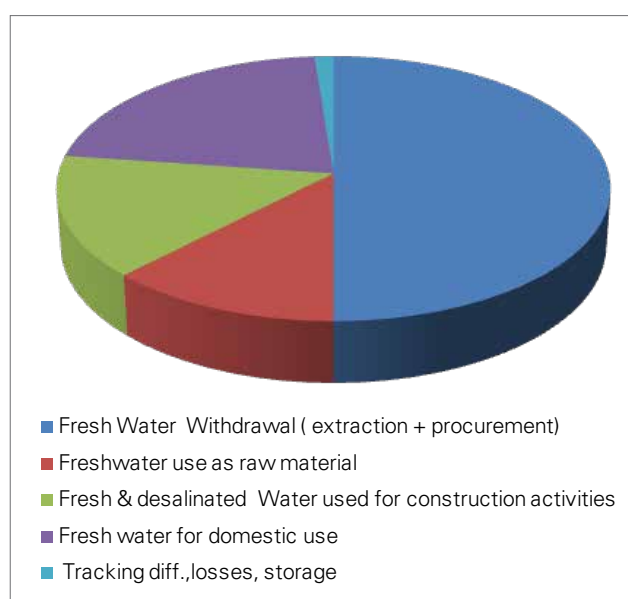
Water used in few operations such as boomer activity and curing of the concrete is either recycled or discharged in the natural streams after adequate treatment. Each project has sedimentation tanks that facilitate the recycling of water from the batching plants. This water may contain traces of cement, hence it is used for sprinkling on roads to suppress the dust.

Water management scenario at HCC's direct operation

Sr.	Description	Qty in million litre	Unit
1	Fresh Water Withdrawal (extraction + procurement)	742	ML
	Freshwater use as raw material	322	ML
	Fresh & desalinated Water used for construction activities	388	ML
	Fresh water for domestic use	563	ML
	Tracking diff., losses, storage	32	ML
2	Water Recycled / Reused (fresh water saving)	28	ML
3	Total Water used at HCC sites	769	ML
4	Water disposal in natural water bodies after treatment	272	ML
5	Net water use at HCC sites	470	ML
6	Consolidated water use Efficiency at HCC sites (water reuse / net water use) x 100	6%	

Domestic Water Management

Sr.	Description	Qty in million litre	Unit
1	Water consumption for domestic use at officers colonies and Worker's Camps	563	ML
2	Domestic Sewage from Colonies and Worker's camps	466	ML



2. Watershed Management

HCC is conscious of watershed management around its project sites. While extracting water from the natural resources, proper monitoring systems are put in place for judicious water utilisation. Efforts are made to reuse and recycle water wherever it is possible. During times of water scarcity, the local communities are supported by the company by providing drinking water supply from the operations.

At the Kishanganga hydro power project site, water tankers from the Public Health Engineering Department are being purchased and made available to 5 villages around the project site. This has been happening for the last 4 years, with company spending approximately INR 4.5 Lacs in FY 2015-16.

3. Community Engagement: Beyond Fence Initiative

Case Study: Rejuvenation of Diversion Based Irrigation System on Mhalungi River

Background:

Ashapur, a village located in Sinnar taluka of Maharashtra, had been suffering from acute water scarcity. The unavailability of sufficient water from wells forced the farmers to shift to low yielding crops. It also affected the fodder availability for cattle and the farmers were forced to sell out their cattle. This severely affected the socio-economic condition of the villagers.

HCC, with the help of Yuva Mitra, an NGO Based in Sinnar, rejuvenated the diversion based Irrigation system which had become defunct due to siltation. This initiative helped to enhance the ground water table and rejuvenate the wells (more than 60 across 135 hectares of farms). 735 million litres of water was conserved using the canal system, post the 2015 monsoon. The rejuvenation of canal system ensured sufficient water availability in both Kharif and Rabbi Seasons. As a result, the farmers started utilizing the entire available area for cultivation and expanded their range to crops such as Carrot, Peas, Cauliflower, Cabbage, Broccoli, Red Cabbage, Tomatoes, Wal and Chilli. The diversity in the crop pattern helped them to achieve better realization.

Impacts:

The rejuvenation of canal at Ashapur village proved to be a good example of socio-economic improvement. Though the complete impact would be visible over a period of time, the intervention has already started bringing positive change to the lives of the people of the village.

Water consumption and conservation statistics:

This community-based water conservation intervention has conserved 735 million litres of water by increasing the ground water table through water percolation.

Thus HCC has become water positive (by way of offsetting) with water index of 1.56.

4. Collective Action and Public Policy

Mr. Ajit Gulabchand, Chairman and Managing Director, HCC, participates in various national and international dialogues and events on environmental issues, including water, as listed below;

- Panelist, World Economic Forum's Future of Urban Development and Services Roundtable, New Delhi
- Speaker, Ensuring Water Availability in a Changing Climate, TERI, New Delhi
- Discussion Leader, Growing Cities, Building Resilience; India: What Next, How Fast?, World Economic Forum National Strategy Day on India – New Delhi
- PACI Community Meeting, New Delhi
- Speaker, Infrastructure and Cities of the Future at India Invest Forum, Paris
- Discussion Leader, World Economic Forum - Fostering Innovation in Cities, Davos
- Governors Meeting for Infrastructure & Urban Development (IU), Governors Policy Meeting for IU Community, World Economic Forum, Davos
- CII Seminar on Urban Infrastructure in India with Honourable Kathleen Wynne, Premier of Ontario, Mumbai
- Asia Business Forum at Make in India Summit, Mumbai
- The World CSR Congress, a body endorsed by the Indian Institute of Corporate affairs, recognized Mr. Aditya Patwardhan (AGM – CSR), in the Global Listing Category, among the '50 most Impactful Leaders in Water and Water Management'.

- 'Best CSR Practices Award' by World CSR Congress - HCC's initiatives for rejuvenation of diversion based irrigation system in Maharashtra.
- CIDC Achievement Award 2015 - "Social Development & Impact" - HCC's Water Sustainability Initiatives.
- Mr. Aditya Patwardhan (AGM-CSR) has been appointed on the Advisory Council of World CSR Congress.



5. Transparency: Communication on Progress (COP)

We remain committed to the United Nations Global Compact's CEO Water Mandate initiative and will continue to promote water consciousness and internalize water efficiency in all our direct operations.

We have a Water Policy which is being implemented at all the functional project sites. Water meters are provided at all water withdrawal sources in order to count each drop of water. We have a trained team of Water Champions who are deployed across all project sites and are responsible for accounting of water withdrawal, the implementation of the 4 R's (reduce, reuse, recycle and replenish) and water sensitization among all employees.

Review by E&Y assurance Team

This chapter serves as Communication on Progress (COP) for reporting period as April 2015 to March 2016. As part of the limited assurance of HCC's Sustainability Report 2015-16, Ernst & Young LLP has reviewed the water related performance indicators as per GRI G4 CRESS guidelines. The assurance process included field visits to the project sites as specified in the EY assurance statement.

12. Community Sustainability

Responsibility towards growth and development of the local communities around our project sites is an integral element of our philosophy of creating responsible infrastructure. Our approach to towards Corporate Social Responsibility (CSR), as enshrined in the motto 'Beyond Bread', is defined by a well-defined CSR Policy, which sets out the objectives and focus areas of our CSR interventions.

The objectives of the CSR policy are:

- Translate the underlying principal of the vision into action and continue to contribute towards the organization and society at large;
- Promote business policies that are ethical, equitable, environmentally conscious and sensitive to societal needs;
- Ensure proactive participation in the community development for the wellbeing of the society;
- Set high standards of quality in executing the CSR initiatives by creating robust processes.

Focus Areas:

- **Health:** The Company will promote various initiatives to support health and well-being of the community and make provision for preventive health care.
- **Education:** The Company will undertake initiatives in the field of education to enhance employability and wellbeing of the community.
- **Environment:** The Company will promote environmental sustainability and conservation of natural resources.
- **Rural Development Projects:** The Company will undertake rural development initiatives to improve the standard of living, enhance infrastructural development and significantly improve the wellbeing and socio-economic conditions of the community.
- **Disaster Relief:** The Company will support response to natural calamities including preparedness and relief.

Summary of our CSR initiatives at Project Sites in FY 2015-16

Health

- **RAPP, Rajasthan:** A blood donation camp was

organized at the HCC Colony at Tamalav, with the theme of "Thank you for saving my life". A total of 55 HCC employees donated blood during this event which was organized with support of Kota Blood Bank, Kota, Rajasthan.

- **NH 34 Pkg 4, West Bengal:** The Tribal community at Fatehpur village in Sidhpahari, where distributed 39 blankets during the winter season.

Education

- **Construction Skill Development Council of India:** HCC donated INR 3,568,073 for the functioning of the institute.
- **Teesta Low Dam IV HEP (West Bengal):** Supported the Primary School at Kalijhora village by providing salary to the teachers. This helped more than 50 local children by ensuring availability of teaches at the school.
- **Sainj HEP, Himachal Pradesh:** For the last five years, HCC has supported the local schools in the villages of Gadapalli and Senser by paying salaries of the teachers in these schools. About 200 students from the surrounding valley attend these schools. Support was also provided to the Senser Grampanchayat for construction of a stadium at the school to encourage students and children from the local community to take up sports
- **Kishanganga HEP, Jammu & Kashmir:** Honoured the request by Deputy Commissioner, Bandipora, to support the top 10 scorers in class 10 of Govt. GHSS Bandipora by giving them cash rewards.

Disaster Relief

- **IGCAR, Tamil Nadu:** Food and other relief material was distributed to the local community of Sadras village at the Indira Gandhi Centre for Atomic Research, Kalpakkam, during the floods in December 2015. Another 250 flood affected individuals were directly supported by the HCC site team at Kalpakkam.

Rural Development

- **Kashang, Himachal Pradesh:** Supported the promotion of sports among the tribal youth of rural India by

organizing sports activities through Rockland club of Kinnaur, Himachal Pradesh. A Cricket Tournament for tribal sportsmen associated with 20 clubs was also organized through Rockland club of Kinnaur.

- HCC supported the 'Kinnaur Mahotsav', which was organized by the local govt. authorities to showcase the rich cultural heritage of the local tribal community. It also acted as an effective initiative to empower the locals by providing them a platform to sell their farm and other products.

HIV/AIDS Awareness

Programs for awareness on HIV/AIDS were conducted across all HCC project sites for officers and the workmen. Every year, we observe World AIDS Day on 1st December to raise employee awareness on topics related to HIV/AIDS. This year's theme was 'Zero new HIV infection. Zero discrimination. Zero AIDS-related deaths'. Several events were organised on this day which included rallies, expert talks, pinning of red ribbons, displaying the posters provided by NACO/ILO and State AIDS Control Societies. Informative educational material was also circulated amongst the employees at the project sites.



Local schools in the villages of Gadapalli and Senser, Sainj HEP

Disaster Response Network

First Responder's Training (FRT) was announced as the safety theme of July 2015. At all the functioning sites (27 in total), the site Health, Safety & Environment (HSE) personnel teamed up with the medical/paramedic team for conducting the FRT. At some of the projects, FRT has now been made a part of the tool box meetings. The internal resources at the site Occupational Health Centres conducted the trainings with help of power point presentations and video clips on 5 B's, followed by practical demonstrations with help of first aid kits. Training on 5 B's of Breathing, Bleeding, Burns, Bones and Bruises was aimed at early identification and management of injuries and their symptoms.

Gulabchand Foundation

The Gulabchand Foundation primarily focuses on carrying out various health care and educational initiatives for the advancement of underprivileged rural and urban section of the society. It is a non-profit making company duly registered in the year 2003 under Section 25 of the Companies Act, 1956, under the leadership of Mr. Ajit Gulabchand, Chairman & Managing Director of HCC.



Blankets donated to villagers to use during winter, NH-34



HIV/AIDS awareness at project sites on World AIDS Day



Providing drinking water for local people, Kishanganga HEP

13. Our Sustainability Performance

Economic Performance - Key Performance Indicators	Value (Million INR) - FY 2015-16
Economic Value Generated	40524.16
Revenues	40524.16
Economic Value Distributed	40806.24
Operating Costs	28060.22
Employee Benefits and Wages	3703.56
Payment to Providers of Capital	6898.83
Payments to Government (Indian)	2139.54
Economic Value Retained	(282.08)

Environmental Performance – Key Performance Indicators	Unit	FY 2015-16
Materials		
Raw Materials	Tons	3507025.14
Semi-manufactured Goods or Parts	Tons	332454.39
Associated Materials*	Tons	4389.47
Energy		
Diesel	L GJ	17,487340 639162.28
ATF	L GJ	131671 4783.08
Total Direct Energy	GJ kWh	643945.36 178873710.4
Total Indirect Energy (Purchased electricity)	kWh	37219145
Greenhouse Gas Emissions		
GHG emissions due to direct energy use	Ton CO ₂ eq	47696.74
GHG emissions due to indirect energy use	Ton CO ₂ eq	30337.33
GHG emissions intensity from construction ⁴	Ton CO ₂ eq/INR Mn [Turnover]	1.09
GHG saved on account of Fly Ash Utilization and ground granulated blast furnace slag	Ton CO ₂ eq	13150.70
Waste Disposed		
Solid Hazardous Waste (Empty drums, batteries, E-waste)	Numbers	120 Drums, 22 batteries
Liquid hazardous waste (Used oil)	KL	49.58
Non-hazardous Waste (Used oil filters, tyres, cement bags)	Numbers	NA
Non-hazardous waste (Steel Scrap, used spares)	Tons	NA
Environmental Expenditure		
Waste disposal, emissions treatment and remediation costs	INR	9421
Prevention and environmental management costs	INR	47265366.88

Social Performance – Key Performance Indicators	FY 2015-16
Total Workforce	
Workforce by Level of Employment	
Officers (Senior, Middle, Junior Management)	1619
Others (Short Term Contracts, Trainees etc.)	46
Workmen (Excluding FTC)	19632
Workforce by Type of Contract	
Permanent Employees	5451
Sub-contract	5858
Piece-rate Workers	8323
Fixed-term Contract	68
Workforce by Gender (excluding Workmen)	
Male	1594
Female	71
New Employee Hire and Turnover	
Total Number of New Hires (excluding Workmen)	469
Male	462
Female	7
<30 years	260
30-50 years	184
>50 years	25
Total Number of Employees Leaving Employment (Officers only)	447
Male	436
Female	11
<30 years	155

Social Performance – Key Performance Indicators	FY 2015-16
30-50 years	246
>50 years	46
Return to Work after Parental Leave	
Number of Employees Entitled (all Women)	71
Number of Employees Availied and Returned	2
Number of Retentions 12 Months After Return	2
Ratio of Basic Salary and Remuneration of Women to Men	
Senior management	1.04
Junior and middle management	0.99
Average Employee Training Man-hours by Level of Employment	
Officers	17.98
Trainees	44.85
Workers	4.65
Average Employee Training Man-hours by Gender (Permanent employees only)	
Male	19.2
Female	5.2 ⁵
Safety Statistics ⁶	
Man-hours Worked	65628809
Injuries	10
Fatalities	06
Lost Days	37048
Frequency Rate	0.24
Severity Rate	564.5
Frequency Severity Index	0.37

*In addition to the above mentioned quantity, 96.29 kL of oils were used

⁴GHG emissions intensity has been calculated using a sum of emissions from direct and indirect energy use at our project sites in scope. Scope 3 emissions have not been accounted for. Emission factors for direct energy have been used as per the IPCC Guidelines for GHG Inventories (2006), while the emission factor for indirect energy (i.e. purchased electricity) is taken from the Indian Central Electricity Authority (CEA)'s 2009 Baseline Carbon Dioxide Emission Database Version 9.0. Annual turnover of HCC (E&C business) was taken from our Annual Report available on the web-link mentioned in this Report.

⁵A majority of our female employees are based out of HO. Since a majority of our trainings are focussed on technical aspects and operational safety, relevant for on-site workers who are primarily male employees, the average training man-hours for male employees is relatively higher than females.

⁶Includes HCC Employees and Subcontracted Workmen.

14. Independent Assurance Statement



Independent Assurance Statement

The Board of Directors and Management
Hindustan Construction Company Limited
Mumbai, India

Ernst & Young LLP (EY) was retained by Hindustan Construction Company Ltd. (the 'Company') to provide independent assurance to its Sustainability Report (the 'Report') for its Engineering and Construction Business for the financial year 2015-16.

The development of the Report is based on the Global Reporting Initiative (GRI) G4 Guidelines (2013) and the Construction and Real Estate Sector Supplement (CRESS); its content and presentation are the sole responsibility of the management of the Company. EY's responsibility, as agreed with the management of the Company, is to provide independent assurance on the report content as described in the scope of assurance. Our responsibility in performing our assurance activities is to the management of the Company only and in accordance with the terms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any dependence that any such third party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

Scope of Assurance

The scope of assurance covers the following aspects of the Report:

- Data and information related to the Company's sustainability performance for the period 1st April 2015 to 31st March 2016;
- The Company's internal protocols, processes, and controls related to the collection and collation of sustainability performance data;
- Review of information on sample GRI G4 (2013) indicators covering the Company's Corporate Office at Mumbai and the following project sites within its Engineering and Construction business:
 1. Delhi Metro Rail Corporation CC-66 Project (New Delhi);
 2. Kishanganga Hydro Electric Power Project (Jammu & Kashmir).

Limitations of our review

The assurance scope excludes:

- Operations of the Company other than those mentioned in the 'Scope of Assurance';
- Aspects of the Report and data/information other than those mentioned above;
- Data and information outside the defined reporting period i.e. 1st April 2015 to 31st March 2016;

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EY refers to the global organization, and/or one or more of the independent member firms of Ernst & Young Global Limited.



- The Company's statements that describe expression of opinion, belief, aspiration, expectation, aim or future intention provided by the Company;
- Data and information on economic and financial performance of the Company.

Assurance criteria

The assurance engagement was planned and performed in accordance with the International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000). Our evidence gathering procedures were designed to obtain a 'limited' level of assurance (as set out in ISAE 3000) on reporting principles as well as conformance of sustainability performance indicators as per GRI G4 (2013) Guidelines.

What we did to form our conclusions

In order to form our conclusions we undertook the following key steps:

- Interviewed select key senior personnel of the Company to understand the current processes in place for capturing sustainability performance data as per GRI G4 Guidelines, the Company's sustainability vision and the progress made during the reporting period;
- Reviewed the Company's approach to stakeholder engagement and processes for determining material issues through interviews and review of associated documents with issue owners at the corporate office at Mumbai;
- Reviewed relevant documents and systems for gathering, analysing and aggregating sustainability performance data in the reporting period;
- Interviewed the top management to understand their commitment to sustainability, systems for sustainability performance management and the future outlook.

Our Observations

The Company undertook materiality assessment exercise during the reporting year, which was carried out through a senior management workshop. The Report describes the Company's ongoing efforts on various environmental and social aspects, including water conservation and developmental initiatives in communities around its project sites. Going forward, the Company may consider strengthening its materiality assessment by seeking inputs from key external stakeholder groups. There is also scope for the Company to expand its reporting by inclusion of additional indicators under identified material aspects.

Our Conclusion

On the basis of our review scope and methodology, nothing has come to our attention that would cause us not to believe that the Report presents the Company's triple bottom-line performance, in material respect, in line with the GRI G4 reporting principles and criteria.



Our assurance team and independence

Our assurance team, comprising of multidisciplinary professionals, has been drawn from our climate change and sustainability network and undertakes similar engagements with a number of significant Indian and international businesses. As an assurance provider, EY is required to comply with the independence requirements set out in International Federation of Accountants (IFAC) Code of Ethics¹ for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code.

for Ernst & Young LLP

Sudipta Das
Partner
2 November 2016
Kolkata

¹ International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants (2016) establishes ethical requirements for professional accountants.

15. GRI G4 Content Index



GENERAL STANDARD DISCLOSURES		
General Standard Disclosures	Page Number (or Link)	External Assurance
STRATEGY AND ANALYSIS		
G4-1	Message from: the Chairman and Managing Director's Desk (2), the President and CEO's Desk (3)	YES
ORGANIZATIONAL PROFILE		
G4-3	About the Report (1)	YES
G4-4	Organizational Overview (5 - 8)	YES
G4-5	Organizational Overview (5 - 8)	YES
G4-6	About the Report (1), Organizational Overview (5 - 8)	YES
G4-7	Organizational Overview (5 - 8)	YES
G4-8	Organizational Overview (5 - 8)	YES
G4-9	Organizational Overview (5- 8), Revenues – Economic Performance: Key Performance Indicators (36), Total Workforce - Social Performance: Key Performance Indicators (37)	YES
G4-10	Social Performance: Key Performance Indicators (37)	YES
G4-11	Our Employees (20)	YES
G4-12	As a diversified infrastructure company, HCC's supply chain comprises of multiple suppliers/stakeholders that are spread across the country. Labour contractors, technology/equipment providers, construction JV partners and raw material suppliers are an integral part of our supply chain with cement, aggregates, steel being the most important raw materials for us.	YES
G4-13	No significant changes in the reporting entity, including ownership, during the reporting period.	YES
G4-14	HCC's Annual Report 2015-16 - Risk Management (35, 36)– http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf	YES
G4-15	GRI G4 CRESS (https://www.globalreporting.org/resource/library/GRI-G4-Construction-and-Real-Estate-Sector-Disclosures.pdf), UN Global Compact (https://www.unglobalcompact.org/what-is-gc/mission/principles), UN CEO Water Mandate (http://ceowatermandate.org/), ISO 9001:2008 (http://www.iso.org/iso/catalogue_detail?csnumber=46486), ISO 14001:2004 (http://www.iso.org/iso/catalogue_detail?csnumber=31808), OHSAS 18001:2007 (http://www.bsigroup.com/en-IN/BS-OHSAS-18001/), National Voluntary Guidelines for Environmental, Economic and Social Performance for Businesses (NVG)- (http://www.mca.gov.in/Ministry/latestnews/National_Voluntary_Guidelines_2011_12jul2011.pdf)	YES
G4-16	Advocacy (11 - 12)	YES
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
G4-17	The financial statements include all the businesses of HCC (for further details please refer to HCC's Annual Report 2015-16 - http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf), whereas the reporting boundary of this report only includes the E&C business of HCC.	YES

GENERAL STANDARD DISCLOSURES		
General Standard Disclosures	Page Number (or Link)	External Assurance
G4-18	Our Approach to Sustainability (13 - 14)	YES
G4-19	Material Aspects (14)	YES
G4-20	Our Approach to Sustainability (13 - 14)	YES
G4-21	Our Approach to Sustainability (13 - 14)	YES
G4-22	None	YES
G4-23	None	YES
STAKEHOLDER ENGAGEMENT		
G4-24	Our Approach to Sustainability (13)	YES
G4-25	Our Approach to Sustainability (13 - 14)	YES
G4-26	Our Approach to Sustainability (13 - 14)	YES
G4-27	Our Approach to Sustainability (13 - 14)	YES
REPORT PROFILE		
G4-28	About the Report (1)	YES
G4-29	FY 2014-15	YES
G4-30	About the Report (1)	YES
G4-31	About the Report (1)	YES
G4-32	About the Report (1), GRI Content Index(41-45), Independent Assurance Statement(38-40)	YES
G4-33	About the Report (1), Independent Assurance Statement(38-40)	YES
GOVERNANCE		
G4-34	Board of Directors (6), HCC's Annual Report 2015-16: for Board of Directors - (28,29), Code of Conduct (Page 31) and Board Committee (31)- http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf	YES
ETHICS AND INTEGRITY		
G4-56	Vision, Mission and Values (9), HCC's Annual Report 2015-16 – (page 31) http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf	YES

SPECIFIC STANDARD DISCLOSURES					
DMA and Indicators	Page Number (or Link)	Identified Omission(s)	Reason(s) for Omission(s)	Explanation for Omission(s)	External Assurance
CATEGORY: ECONOMIC					
MATERIAL ASPECT: ECONOMIC PERFORMANCE					
G4-DMA	Economic Performance(27)				
G4-EC1	Economic Performance (27), Economic Performance - Key Performance Indicators (36), Community Sustainability (34-35)				No
G4-EC3	Employee Benefits (20-23)				No
G4-EC4	Economic Performance (27). Government is not present in the share-holding structure. Also refer to the HCC's Annual Report 2015-16 - (page 49) - http://www.hccindia.com/pdf/HCC-annual-report-2015-16.pdf				No

SPECIFIC STANDARD DISCLOSURES					
DMA and Indicators	Page Number (or Link)	Identified Omission(s)	Reason(s) for Omission(s)	Explanation for Omission(s)	External Assurance
MATERIAL ASPECT: PROCUREMENT PRACTICES					
G4-DMA	Economic Performance(27)				
G4-EC9	As HCC has an extensive pan- Indian project footprint, our definition for local sourcing continues to remain nation-wide. Almost 100% of the significant procurement budget at the projects in this reporting period was sourced locally (within India).				NO
MATERIAL ASPECT: MATERIALS					
G4-DMA	Economic Performance(27)				
G4-EN1	Our Sustainability Performance (36-37)				YES
MATERIAL ASPECT: ENERGY					
G4-DMA	Economic Performance(27)				
G4-EN1	Environmental Performance - Key Performance Indicators - Energy (36)				YES
MATERIAL ASPECT: WATER					
G4-DMA	Economic Performance(27)				
G4-EN8	CoP : CEO Water Mandate - Water management (31-33)				YES
G4-EN10	Environmental Performance - Key Performance Indicators - Greenhouse Gas Emissions (36)				YES
MATERIAL ASPECT: EMISSIONS					
G4-DMA	Economic Performance(27)				
G4-EN15	Environmental Performance - Key Performance Indicators - Greenhouse Gas Emissions (36)				YES
G4-EN16	Environmental Performance - Key Performance Indicators - Greenhouse Gas Emissions (36)				YES
CRE4	Environmental Performance - Key Performance Indicators – Energy, Footnote on GHG emissions intensity (36)				NO
MATERIAL ASPECT: EFFLUENTS AND WASTE					
G4-DMA	Economic Performance(27)				
G4-EN22	CoP : CEO Water Mandate - Water management (31-33)				YES
G4-EN23	Environmental Performance - Key Performance Indicators - Waste Disposed (36)				YES
MATERIAL ASPECT: OVERALL					
G4-DMA	Economic Performance (27)				
G4-EN31	Environmental Performance - Key Performance Indicators - Environmental Expenditure (36)				NO

SPECIFIC STANDARD DISCLOSURES					
DMA and Indicators	Page Number (or Link)	Identified Omission(s)	Reason(s) for Omission(s)	Explanation for Omission(s)	External Assurance
CRE5	Construction activities by HCC have not caused any significant land contamination, therefore there has been no need for remediation				YES
CATEGORY: SOCIAL					
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK					
MATERIAL ASPECT: EMPLOYMENT					
G4-DMA	Our Employees (20-23)				YES
G4-LA1	Our Employees (20-23), Social Performance: Key Performance Indicators (37)				YES
G4-LA2	Our Employees (20-23)				YES
MATERIAL ASPECT: LABOR/MANAGEMENT RELATIONS					
G4-DMA	Our Employees (20-23)				
G4-LA4	No such changes during the reporting period. As prescribed under the Industrial Disputes Act, 1947 (www.ilo.org/dyn/natlex/docs/ELECTRONIC/32067/109726/F1337789385/IND32067%202.pdf), 21 days' notice period is provided.				YES
MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY					
G4-DMA	Our Employees (20-23)				
G4-LA5	All our project level health and safety committees have an equal representation of management and workers.				YES
G4-LA6	Social Performance: Key Performance Indicators (37)				YES
CRE6	Environmental Performance (28)				YES
MATERIAL ASPECT: TRAINING AND EDUCATION					
G4-DMA	Our Employees (20-23)				
G4-LA9	Social Performance: Key Performance Indicators (37)				YES
G4-LA10	Our Employees - Employee Training and Development (22-23)				YES
MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY					
G4-DMA	Our Employees (20-23)				
G4-LA12	Organizational Overview(5), Social Performance: Key Performance Indicators (37)				YES
MATERIAL ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN					
G4-DMA	Our Employees (20-23)				
G4-LA13	Social Performance: Key Performance Indicators (37)				YES

SPECIFIC STANDARD DISCLOSURES					
DMA and Indicators	Page Number (or Link)	Identified Omission(s)	Reason(s) for Omission(s)	Explanation for Omission(s)	External Assurance
SUB-CATEGORY: HUMAN RIGHTS					
MATERIAL ASPECT: INVESTMENT					
G4-DMA	Our Employees (20-23)				
G4-HR1	Our Commitment to NVG Principles - Principle 5 (15). Currently, our investment agreements do not include clauses on human rights.				YES
MATERIAL ASPECT: NON-DISCRIMINATION					
G4-DMA	Our Employees (20-23)				
G4-HR3	No such incidents of discrimination were reported during the reporting period.				YES
MATERIAL ASPECT: CHILD LABOR					
G4-DMA	Our Employees (20-23)				
G4-HR5	Our Commitment to NVG Principles – Principle 5 (15). No operations and suppliers with significant risks have been identified yet.				YES
MATERIAL ASPECT: FORCED OR COMPULSORY LABOR					
G4-DMA	Our Employees (20-23)				
G4-HR6	No operations and suppliers with significant risks have been identified yet.				YES
SUB-CATEGORY: SOCIETY					
MATERIAL ASPECT: LOCAL COMMUNITIES					
G4-DMA	Community Sustainability (34-35)				
G4-SO1	Community Sustainability (34-35). We carry out community engagement and development programs at all our project sites. Given the contractual nature of our work, these programs last through the construction phase.				YES
MATERIAL ASPECT: COMPLIANCE					
G4-DMA	Our Employees (20-23)				
G4-SO8	No significant fines or sanctions were levied on HCC during the reporting period.				YES

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