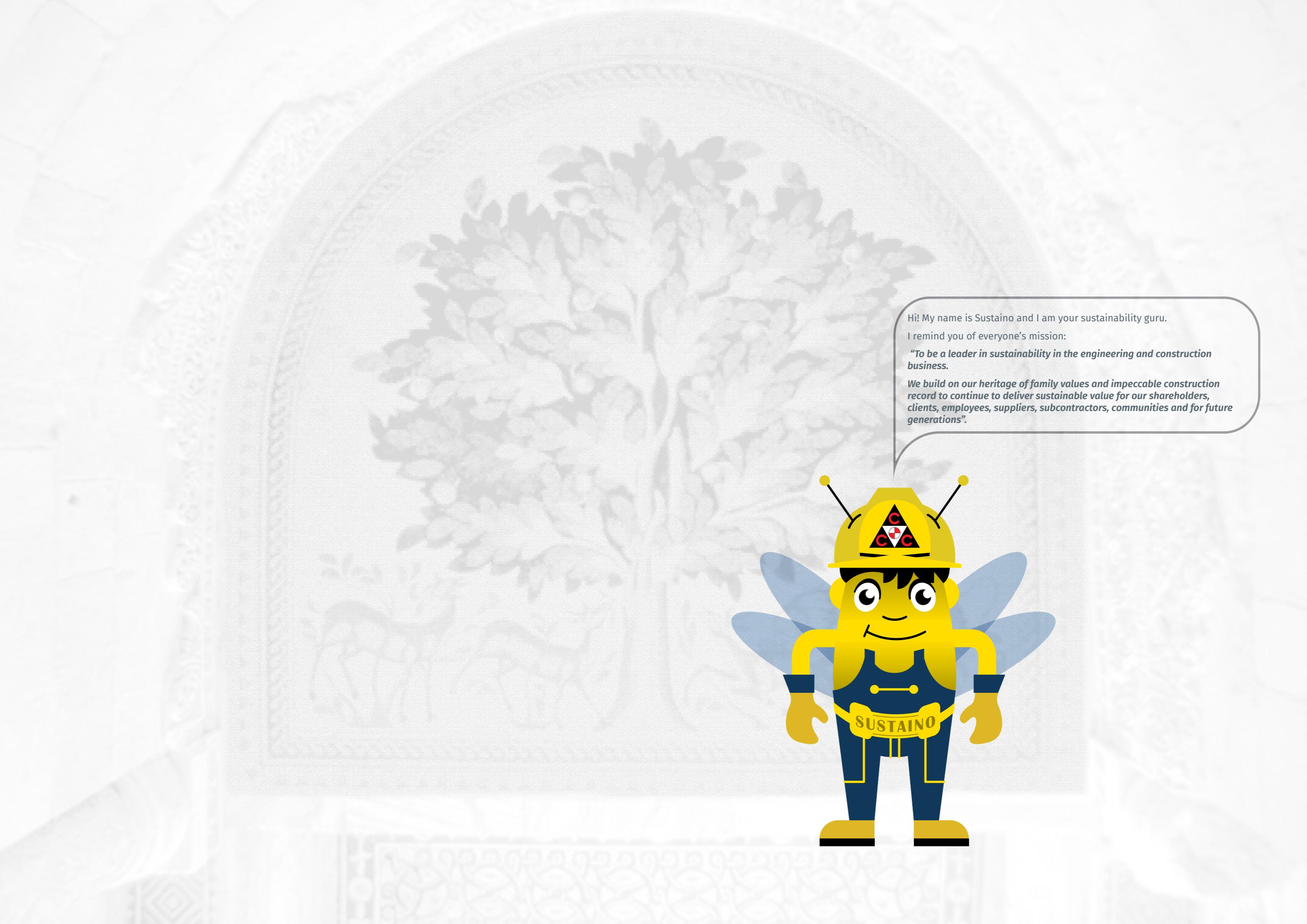




COVERING 2014-2015 ACTIVITIES





Hi! My name is Sustaino and I am your sustainability guru.

I remind you of everyone's mission:

***To be a leader in sustainability in the engineering and construction business.***

***We build on our heritage of family values and impeccable construction record to continue to deliver sustainable value for our shareholders, clients, employees, suppliers, subcontractors, communities and for future generations".***





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# Our Commitment

We remain committed to understanding how our growth can better interact with the welfare and development of the communities, ecologies and economies wherever we operate.

In the years 2014 and 2015 we further embedded the principles of sustainable development in our business. We broadened the incorporation of sustainability principles into strategic planning, operations, training and stakeholder engagement and intensified the implementation of sustainability initiatives and policies.

This report reflects upon our operations for 2014 and 2015 calendar years. It makes use of the Global Reporting Initiative (GRI) which is the most widely used and respected sustainability reporting guideline in the world.



**Economy**



**Society**



**Environment**

**We proudly announce that this report is in accordance with the GRI G4 Sustainability Reporting framework at the core level.**

# Message from the **President Engineering & Construction**



Samer S. Khoury

Dear **Stakeholders**,

I am very pleased to present to you CCC's third Sustainability Report covering activities of the period 2014-2015.

I can now proudly classify our Sustainability journey as an institutionalized success.

We have gone well beyond being just a well-intended corporate responsibility initiative launched back in 2011 into a mature corporate core value.

We are honoring our solemn duty in protecting the environment, in safeguarding our employees and in assisting and developing the local communities and adhering to corporate ethics.

Regarding our achievements of last year, we are very proud that:

- We have reduced our carbon footprint by 5.6% compared to our 2012 data, through high energy efficiency initiatives and renewable energy applications.
- We have institutionalized the use of renewable energy and recycling in most of our large camps, with a switch over from conventional energy that was substantiated by demonstrable commercial feasibility and business cases.
- Our HSE record was quite impressive with very low Lost Time Accidents despite more than 393 million man hours logged, a result of the utmost and stringent attention to safety regulations.

Greater care for the Environment has taken place through the usage of recycled materials, waste management and dust control. Our induction programs for staff, labor, subcontractors and suppliers continue to raise higher attention awareness to sustainability issues.



Our efforts in Sustainability have been recognized. We have gained the below awards:

1. IPLOCA Environmental Award 2016 on "Portable Green Technologies" for reducing the environmental impact of pipeline construction projects.
2. Gold Emirates Energy Award 2015 under category "Energy Efficiency-Private Sector" from the Dubai Supreme Council of Energy for the sustainability initiatives applied at CCC projects.
3. Sustainable Project of the Year at the Construction Week Oman Awards 2016 for the new corporate head office in Oman, constructed in accordance to green building standards and earned a USGBC LEED certification.
4. Best Green Initiative of the Year 2014 for commending excellence in sustainability in the BGREEN Awards, the only sustainability award organization in the Middle East.

Being a multi-discipline international contractor operating in over 40 countries in 5 continents allows CCC to face interesting challenges in terms of adapting to all the diverse cultures with varying rules and regulations. CCC has, for more than 60 years, successfully managed to cooperate with local communities, train, develop and recruit from them. In general, our CSR community is very well established and is extremely active and resourceful. This is evident from the feedback we receive from the local communities. In fact, our CSR programs rank high in being appreciated and recognized for their extensive care to support and promote human health, and welfare.

We continue to closely follow global and regional trends through active memberships and participation in related forums of several international organizations like the World Economic Forum, the United Nations Global Compact, the European Network of Construction Companies for Research & Development (ENCORD), GBC Health, Disaster Resource Partnership and the Emirates Environmental Group.

Through this report, we cement our commitment to developing and safeguarding Mother Earth and its inhabitants for the future generations.

Sincerely,

Samer S. Khoury

# Group Profile

Consolidated Contractors Group, better known as Consolidated Contractors Company (CCC) is a leading contractor in the international construction field. In more than 60 years of operation, CCC has grown to become a company transcending geographical and cultural borders with a distinctive competence for challenging projects and remote areas.

CCC was founded in 1952 when the late Kamel Abdul-Rahman, the late Hasib Sabbagh and the late Said Khoury, joined forces to create one of the first Arab construction companies. Today, it is the largest construction company in the GCC and ranks among the top 25 international contractors.

CCC (which has always remained in private ownership) is renowned as a family company and has continuously preserved a family culture.

**CCC's diverse portfolio includes all aspects of construction, engineering and procurement (EPC), project management and development for:**

- Oil and Gas Projects
- Petrochemical Plants and Refineries
- Pipelines
- Offshore Construction Works
- Environmental Projects
- Heavy Civil and Marine Works
- High Quality Buildings
- Roads and Infrastructures
- Dams, Harbors and Airports
- Power and Water Projects

## CCC's Mission

We are a leading diversified company carrying out construction, engineering, procurement, development and investment activities internationally, as such:

We are committed to providing reliable, amicable, and professional service to our valuable clients, and to being supportive to local businesses and social activities, being friendly to the environment as well as being proactive in the socio-economic environments within which we operate.

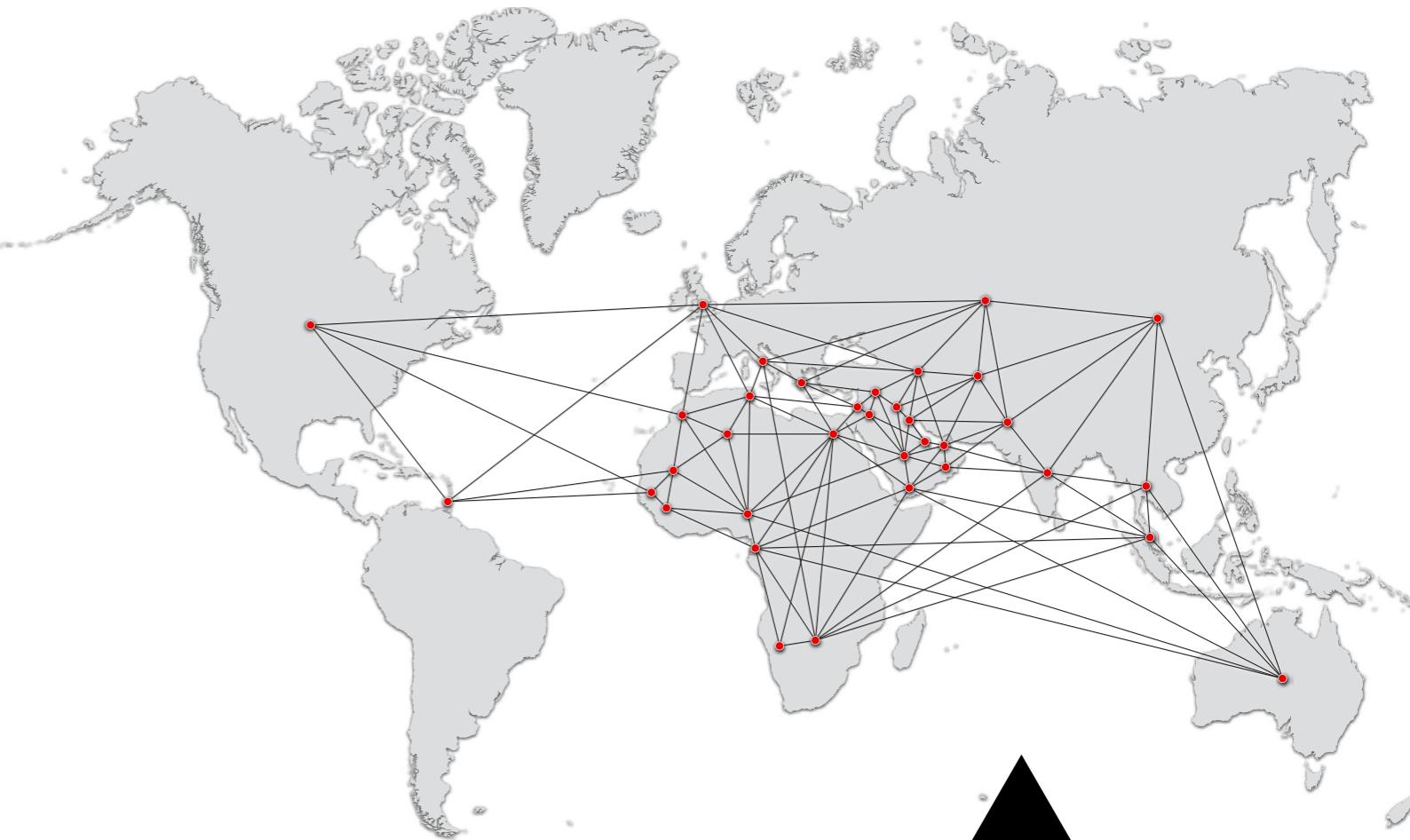
We are highly sensitive to our clients' interests, evidenced by meeting their requirements and ensuring high quality work, this is the prime directive of our management.



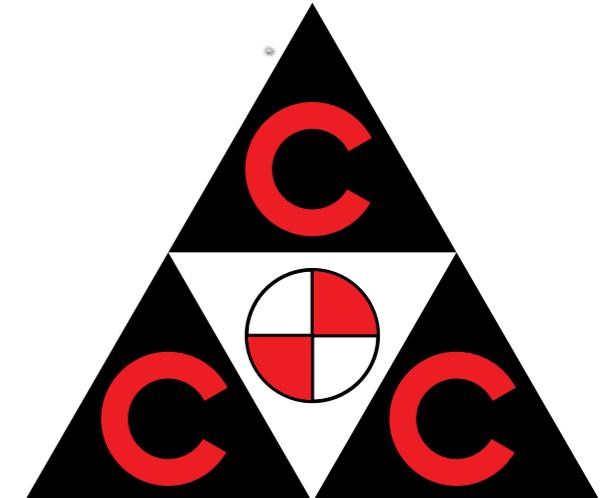
Our growth and profitability are maintained through innovation, technical enhancement, and adaptability to all our markets. Our profitability is directed towards sustaining growth and to providing satisfactory returns to our shareholders.

Our commitment to growth is firmly linked to our commitment to our employees' continuous development and rewarding careers.

We are also devoted to our employee's safety and health, job security, and welfare. Our strength emanates from our distinct culture, strong and close relationships with our clients, employees' competence and loyalty, entrepreneurial and flexible management, capability, dynamism, focus on quality and safety, and commercial acumen.



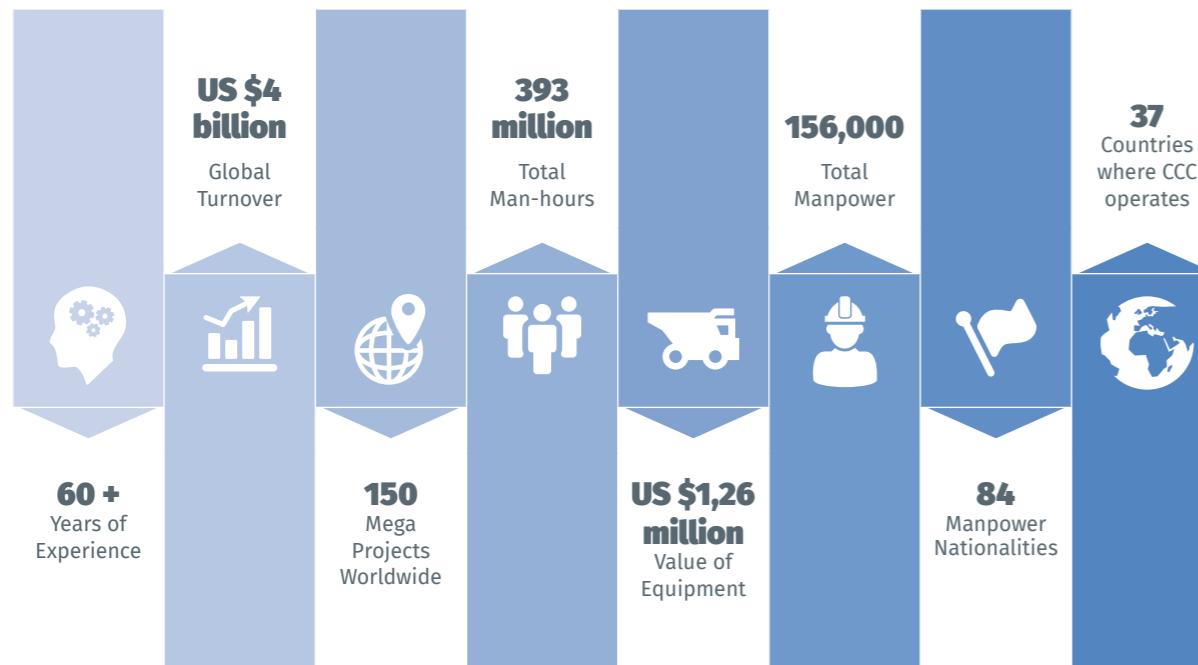
While strongly dominant in the Middle East, CCC has successfully expanded its operations to numerous countries in Africa, the Caribbean, CIS countries, Australia and Papua New Guinea. It is headquartered in Beirut, Lebanon and maintains a branch office in Athens, Greece.



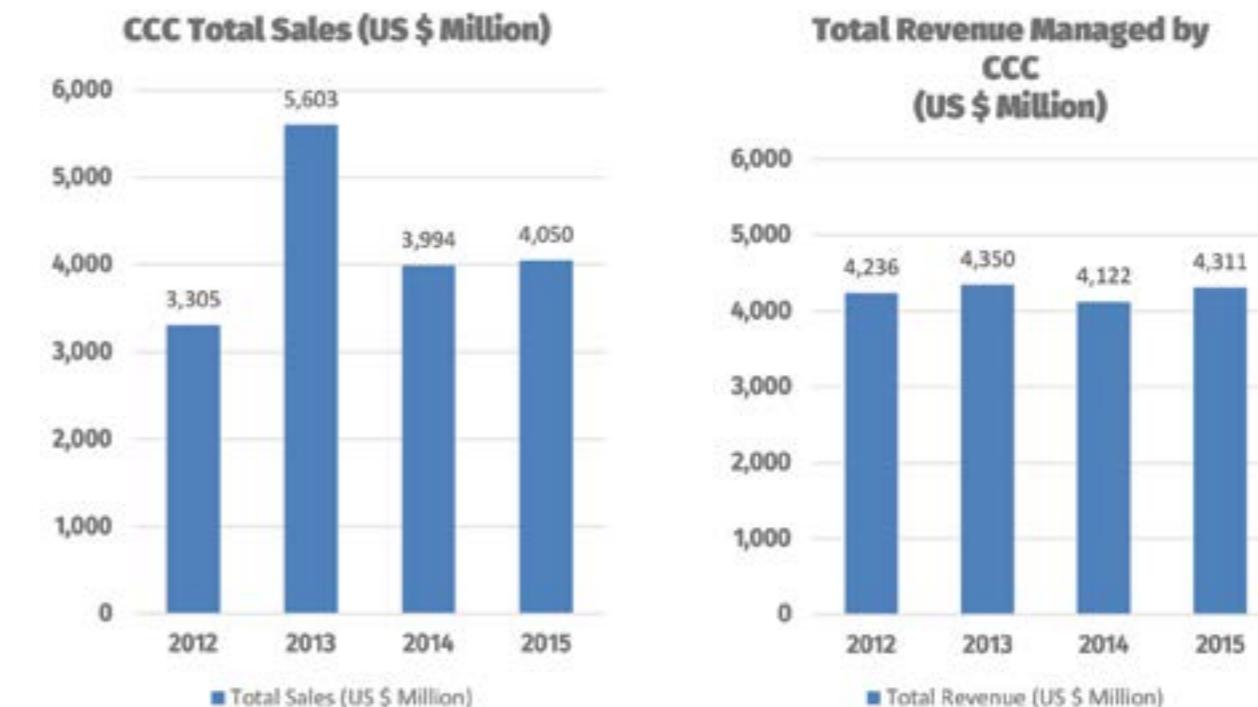
EUROPE	AFRICA		AMERICA	
Greece	Morocco	Mauritania	Equatorial Guinea	USA
Italy	Algeria	Senegal	Namibia	Grenada
United Kingdom	Tunisia	Guinea	Botswana	OCEANIA
Azerbaijan	Egypt	Nigeria		Australia

ASIA				
Lebanon	Iraq	Bahrain	Turkmenistan	Thailand
Palestine	Saudi Arabia	Qatar	Kazakhstan	Malaysia
Jordan	Yemen	UAE	Pakistan	China
Syria	Kuwait	Oman	India	

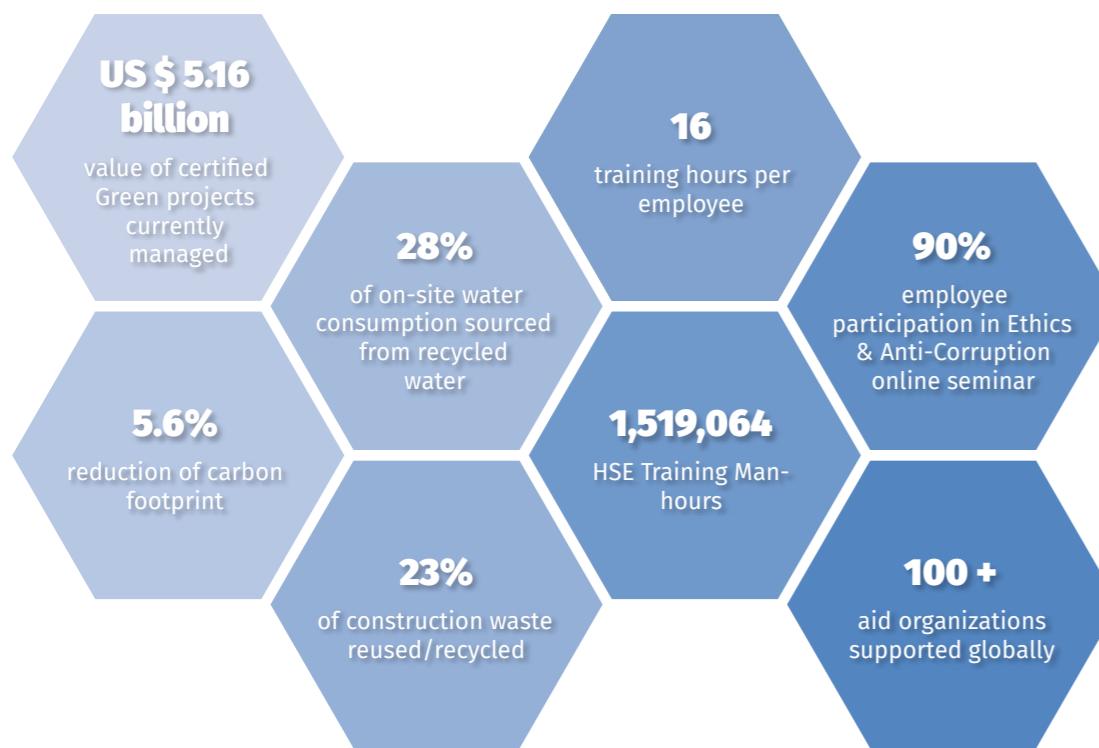
# Key Facts & Figures (as of end 2015)



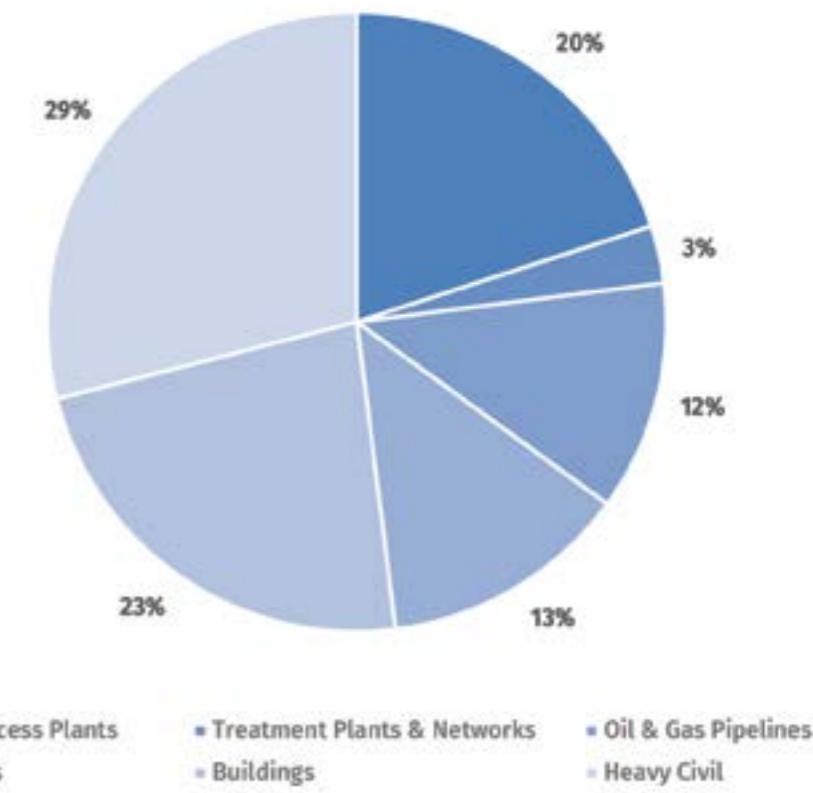
# Financial Highlights



# Sustainability Snapshot



Actual Sales Last 5 Years  
by Segments



# Projects per Segment



## Mechanical

RasGas LNG Expansion (Trains 6 & 7)

QATAR

## Buildings

Presidential Palace

ABU DHABI, UAE



## Pipelines

APLNG Pipelines

AUSTRALIA

## Infrastructures

Ras Laffan Port Expansion

QATAR



## Heavy Civil

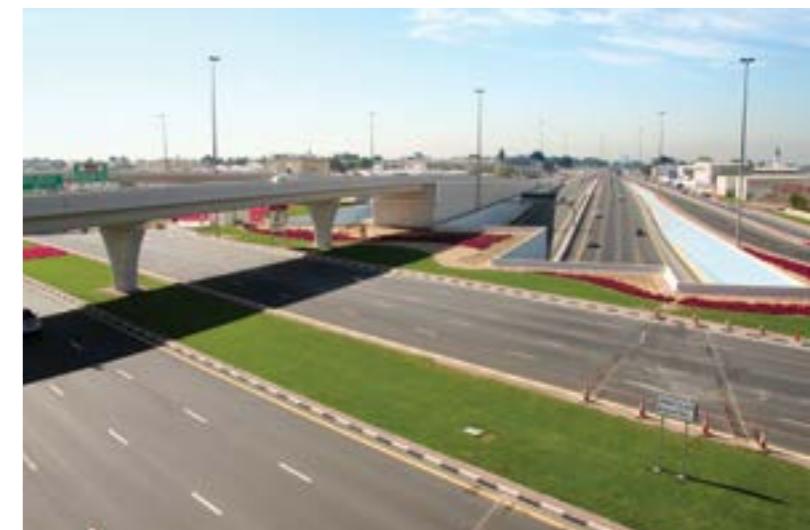
Wadi Dayqah & Sadle Dams

OMAN

## Roads

Nad Al Hamar Beirut Road Tunnel 2

DUBAI, UAE



# CCC Sustainability

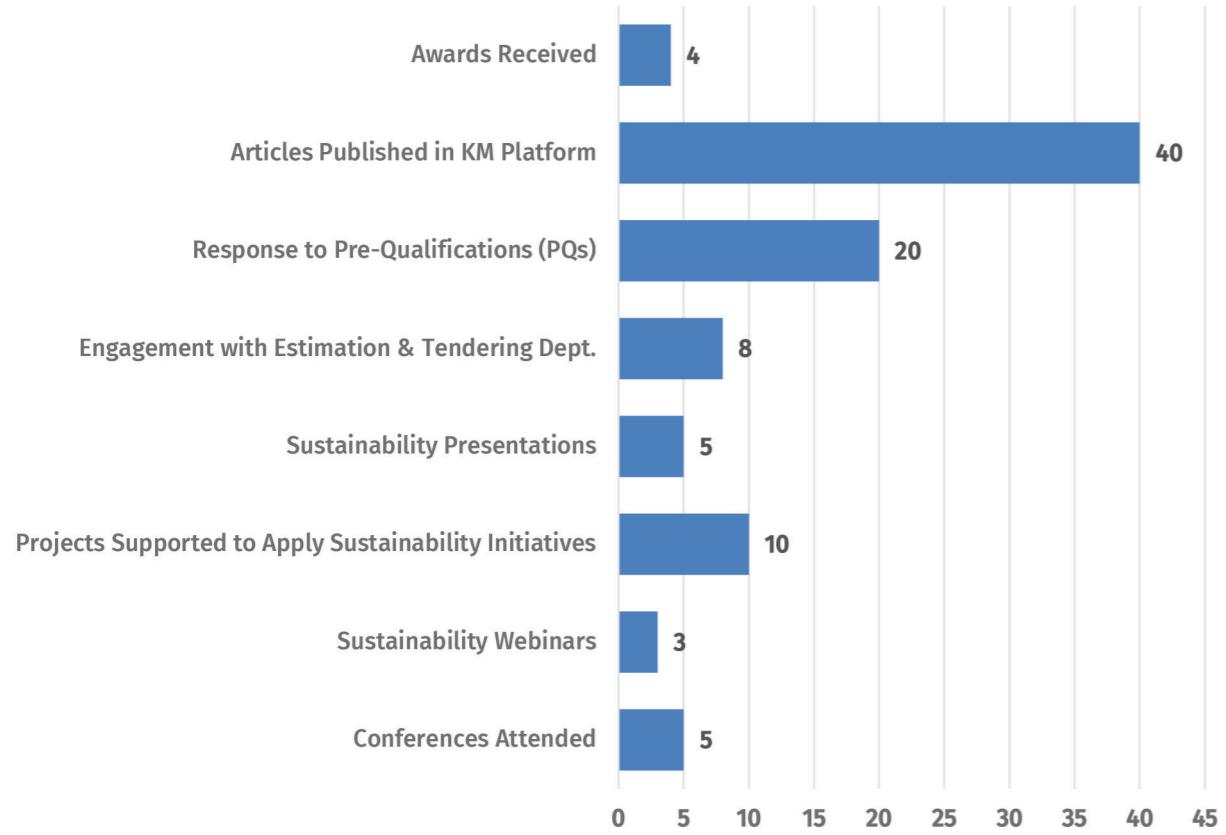
## Policy Statement & Objectives

# Group Sustainability

## Overview

CCC has adopted a proactive approach to integrating sustainability around projects and operations. The below graph provides an overview of our various internal and external undertakings.

**CCC Sustainability Activities 2014-2015**

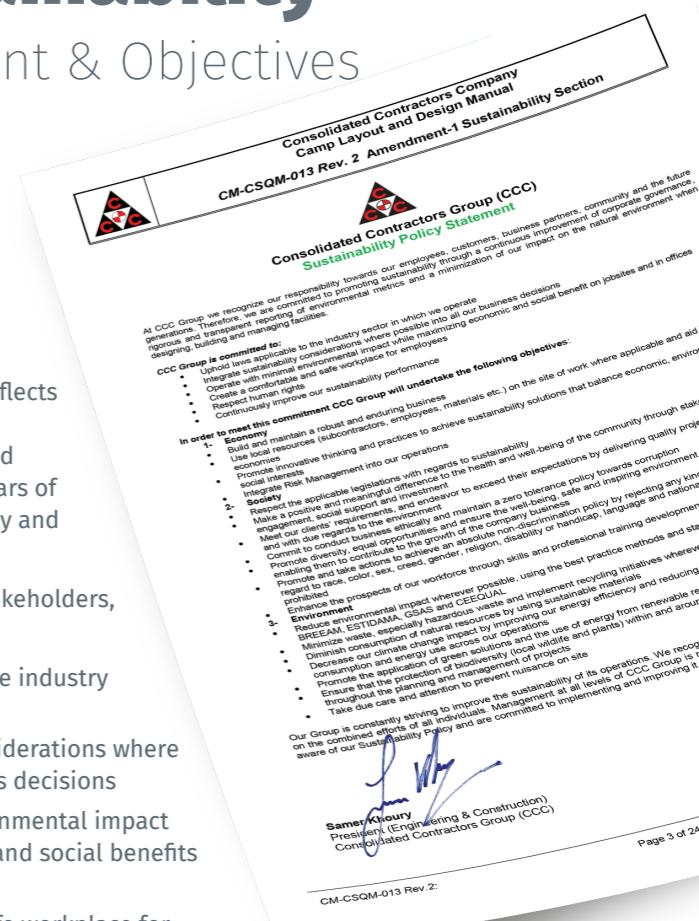


Our commitment to sustainability has undertaken a formal endorsement through the Sustainability Policy. CCC's Sustainability Policy Statement defines the framework of sustainability within CCC and reflects the basic principles of conduct. It outlines our commitments and strategy towards the "three pillars of sustainability": economy, society and environment.

Recognizing the needs of its stakeholders, CCC Group is committed to:

- Uphold laws applicable to the industry sector in which we operate
- Integrate sustainability considerations where possible into all our business decisions
- Operate with minimal environmental impact while maximizing economic and social benefits on jobsites and in offices
- Create a comfortable and safe workplace for employees
- Respect human rights
- Continuously improve our sustainability performance

Dedicated to fulfill our sustainability commitments and in accordance to this policy, CCC has established qualitative and quantitative objectives. These help us understand and manage our economic, environmental and social performance.



November 2015

# Supply Chain Sustainability

Our clients rely on our skills and experience to deliver high quality projects. We achieve this through the support of our partners (suppliers and subcontractors) and we seek they meet the same high business standards as we set ourselves.

We have adopted a supply chain sustainability strategy in order to:

- Lower business risk including reputational, regulatory, security and quality.
- Enhance CCC's reputation in the marketplace.
- Generate cost saving methods by focusing on total life-cycle costs when sourcing services and goods rather than solely prices.

CCC's strategy to encourage responsible business conduct from those who work with us includes sharing with them our sustainability principles and policies as well as our targets - this is part of our social responsibility.

## % of new suppliers screened for non-commercial criteria:

- |                         |     |
|-------------------------|-----|
| • Environmental aspects | 9%  |
| • Human rights          | 12% |
| • Impacts on society    | 9%  |

Our suppliers and subcontractors are being screened for their compliance with business conduct principles, some of which are specifically related to their impact on the environment and society including safety, labor practices and human rights.

We are using our CCC Suppliers and Subcontractors Sustainability Assessment tool to screen suppliers and subcontractors against the following sustainability categories:



CATEGORY	INDICATOR
<b>Company Management</b>	<b>General</b>
	Environmental Management
	GHG & Energy Usage
	Water
	Materials
	Waste
	Green Solutions
	Employment Practices
	Health and Safety
	Wages and Compensation
	Disciplinary Practices
	Working Hours
	Training and Education
	Company Provided Accommodation
<b>Environment</b>	Child Labor
	Discrimination
	Forced Labor
	Training
<b>Social</b>	Local Communities
	Individual Conduct (Bribery & Corruption)
	Compliance
<b>Labor Practices</b>	
<b>Human Rights</b>	
<b>Society</b>	

## Creating Local Value

**"Throughout the duration of our projects we are committed to work closely with the local communities and societies, contribute to their economic development, offer employment opportunities, utilize local resources and support the enhancement of their life quality."**

*CCC Core Values, Guiding Principles and Code of Practice.*

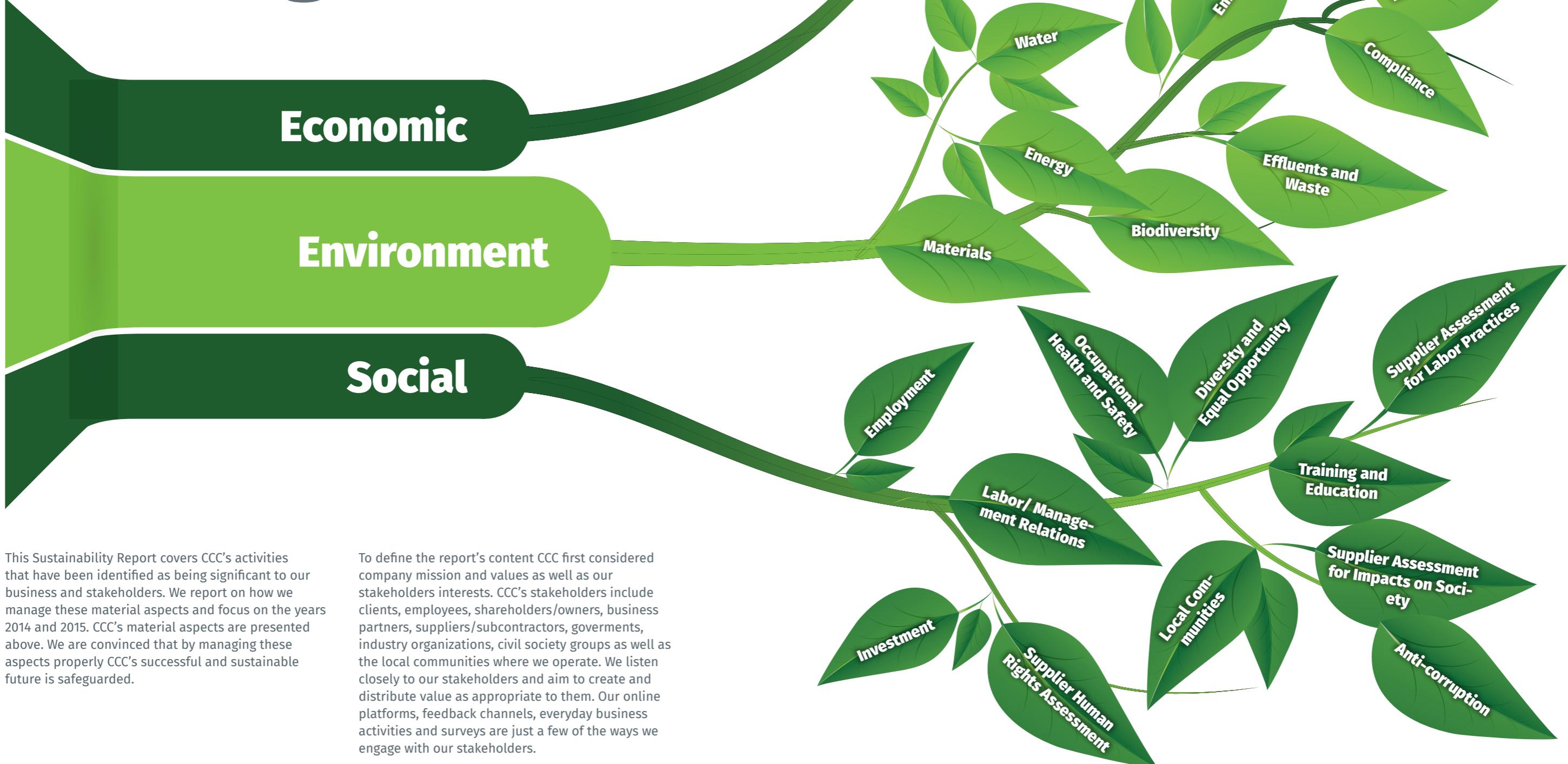
CCC's mega infrastructure projects apart from increasing the standard of living for millions around the world also have a socioeconomic impact on the local communities. We are committed to support the development of local communities hosting our projects by local recruitment, building regional business relations, procuring local materials as well as training and transferring expertise.

Our community engagement initiatives improve job and education opportunities and contribute to the local capacity in the long term. We actively interact with diverse local suppliers and subcontractors in accordance with projects contracts. Our objective is for all our projects and operations to integrate national content in order to stimulate economic and social growth.

Our efforts to use local resources as much as possible are indicated in the below statistics referring to 2015:

- 34% of our suppliers and subcontractors were locally hired
- 23.4% of our employees came from regional market
- 20% of materials used were purchased locally

# About this Report and How to Navigate it



# Environment

CCC is aware that its core business sectors (building and infrastructure construction) have an impact on the Earth's natural resources in terms of material, soil, water, air and biodiversity. We strive to minimize the environmental impacts of our day to day operations and project execution. We seek to improve performance in the environmental, resource and climate protection sectors so as to lower the footprint of our business.

Morocco, Sahara desert flower



## Environmental Management System (EMS)

CCC's EMS is a framework signifying our corporate dedication to environmental conservation utilized to grasp our footprint and integrate pollution prevention strategies. Our EMS implemented throughout CCC projects represents standards and practices that comply with ISO 14001:2004, local country laws and regulations, client requirements and corporate standards. The below figure depicts CCC's EMS structure and the environmental indicators that relate to our business.

**CCC's Environmental Management System (EMS) is ISO 14001:2004 certified.**

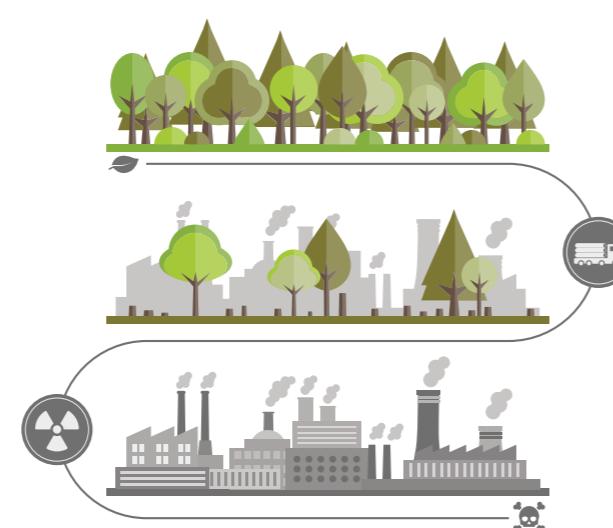


CCC's Sustainability Strategy is supported by Key Performance Indicators (KPI's) developed to help us measure and report our:

# Energy Efficiency & CO<sub>2</sub> Emissions

CCC is committed to taking on its share of responsibility in terms of reducing global greenhouse gas emissions so that global warming can be limited to the international standard of 2 °C (3.6 °F). This will also help the countries within which we operate to achieve their targets and uphold their commitment towards the 2015 Paris Climate Agreement under the United Nations Framework Convention on Climate Change. Accordingly, we developed a Camp Sustainability Manual (for more details refer to page 0) to identify sustainable options on CCC's projects, offices and camps. This manual contains numerous sustainability initiatives that help us use energy and water as efficiently as possible as well as reduce our carbon and water footprint. In 2015, we also launched a CCC Sustainability Awareness Campaign to increase awareness among our employees as well as save on water and electricity consumption.

We strive to continuously improve our operational efficiency and environmental performance.



The projects highlighted below have demonstrated outstanding percentage of GHG emissions reduction in 2015 by implementing numerous emission reduction initiatives and using renewable energy:

Project Name	% of GHG Emission Reduction
Bab-Habshan-1 development Project (UAE)	21%
Midfield Terminal Building (UAE)	17%
Dukhan Highway Project (Qatar)	12%

## Greenhouse Gas Emissions

Direct carbon emissions (Scope 1) are being measured since 2012 whilst indirect carbon emissions were included from 2014 onwards. Due to the nature of our business in the construction sector, we stay flexible regarding the number of offices and projects that are featured in the sustainability report. We report our carbon intensity based on the man hours worked.

We base our carbon footprint accounting on the Greenhouse Gas Protocol (GHGP). This is a corporate accounting and reporting standard for the carbon footprint inventory.

## Reduce CCC's Carbon Footprint

### Vision

We reduce our Greenhouse Gas (GHG) emissions in line with the reduction targets announced in the countries where we operate.

### Target 2015

CCC's target is to reduce our total CO<sub>2</sub> emissions by 5% by 2015 compared to 2012 emissions data, taking into account the turnover and type of the projects.

### Key Actions Planned

- Increase proportion of renewable based energy in our site offices and camps.
- Use of high energy efficient HVAC units in site offices and camps.
- Use of low consumption engines.

### Data / KPI's

The Carbon intensity (greenhouse gas emissions per Man-Hours worked):

YEAR	2014	2015
Carbon intensity (tCO <sub>2</sub> eq/Man-Hours)	1,780.3	1,883.6

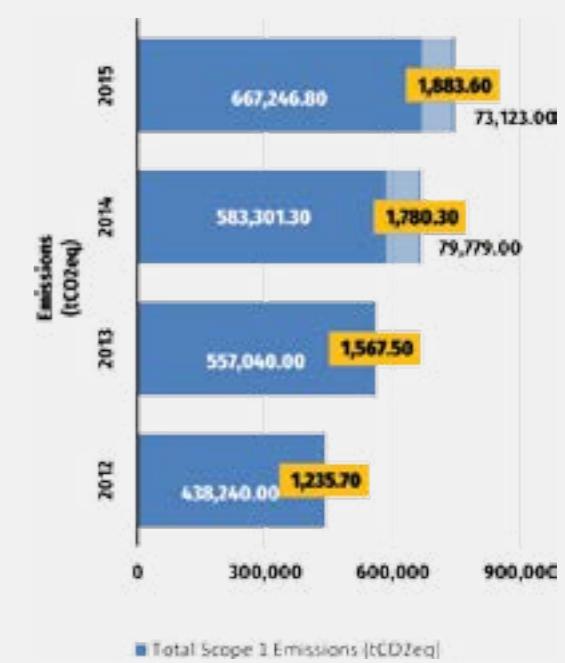
We reduced our carbon footprint by 5.6% (\*).

We categorized CCC's emissions under direct and indirect categories which is in accordance with the Greenhouse Gas Protocol (GHGP) corporate standard (outlined below):

- Scope 1 includes all direct emissions that are owned or controlled by CCC (such as carbon emissions from generators and vehicles).
- Scope 2 includes all indirect emissions from the company's consumption of energy (electricity, district heating).

Our reported figures are recorded in tons of carbon dioxide equivalent (tCO<sub>2</sub>eq) (this includes carbon dioxide and methane).

In order to calculate our emissions, we used CCC's GHG Emission Calculator based on the country's specific emission factors from the world Resources Institute's "Emission Factors from Cross-Sector Tool" (April 2014), as well as factors published by local governments within countries that we operate.



## Fuel Management

Fuel management is fundamental to CCC's activities. In light of this, the company is moving ahead based on a fuel economy strategic plan. Our strategy includes: targeting basic plant department functions such as new purchases, implementing high tech solutions to improve efficiency and assembling cloud based accurate and reliable data. This approach is providing drastic improvements in recording ability, auditability and accountability.

**CCC is committed to continue improving fuel efficiency and embedding sustainability into company culture.**



## Hand Held Device

As a first step, CCC is utilizing hand held devices for every fuel distribution point. Fuel attendants use this to log in distribution data thus digitalizing our fuel management system and facilitating the development of fully automated fuel dispensing systems. Hand held devices store the information and export it when connected to a computer then digital consumption reports are generated and fed into our Asset Management system (IBM MAXIMO).

## Advanced Fuel Dispensing System (AFDS)

One of the major advantages of this system is its ability of communicating fuel consumption in real time. CCC is developing a direct link between AFDS and its Asset Management system to eliminate the need for any human interaction when uploading consumption figures. The AFDS will be submitting four parameters to IBM MAXIMO: date, fuel consumption, asset number and fuel in stock.

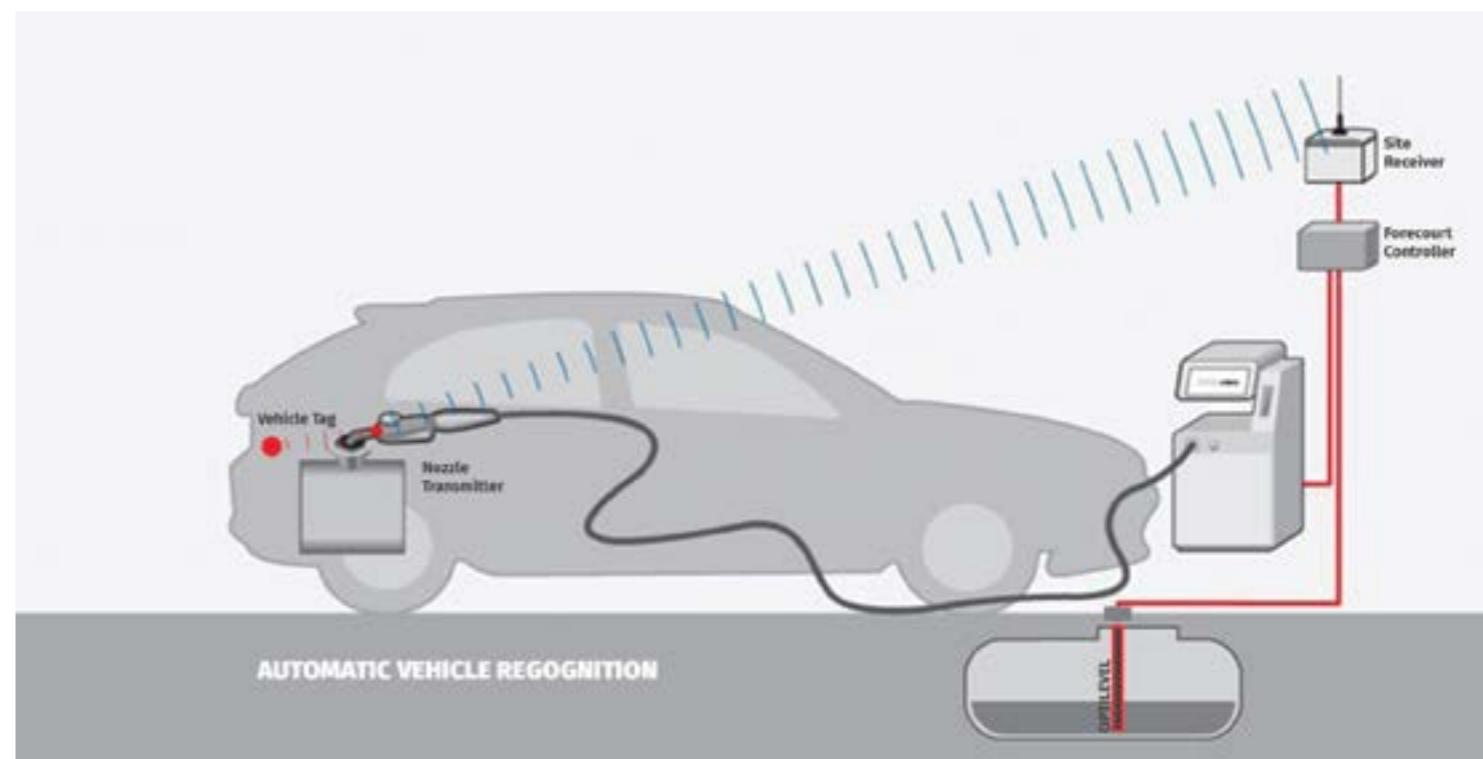
## Real Time Monitoring System

The factor most relevant to CCC's fleet sustainability program is the availability of data monitoring: driver behavior and vehicle location, performance and maintenance. Tracking driving behavior is critical as it may result in a 25% reduction of fuel consumption in off-highway usage, as shown in published research undertaken by the University of Michigan in 2013. Additional information such as mileage, working hours and idle hours are also measured and stored. CCC has linked vehicle telematics to our Asset Management System. Currently, the system retrieves mileage and working hours automatically from asset telematics without human intervention.

## Asset Management System

A comprehensive asset life-cycle based management system assists in minimizing capital expenditures, operating expenses and maximizing the useful life of an asset. In 2015, CCC started utilizing IBM MAXIMO to optimize the performance and management of corporate assets. This system, apart from assisting in achieving sustainability goals it improves the new asset acquisition process by giving easy access to vital information on assets performance such as fuel and lubricants consumption, and break down rate.

<b>Digitalization</b>	<b>Maintenance</b>	<b>KPIs</b>
<ul style="list-style-type: none"> <li>Fuel Consumption</li> <li>Mileage</li> </ul> <b>Automation</b> <ul style="list-style-type: none"> <li>Live Data Streaming</li> </ul>	<ul style="list-style-type: none"> <li>Tasks Done</li> <li>Spare Parts</li> <li>Activity Planning</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> Emitted per Area</li> <li>CO<sub>2</sub> Emitted per Type</li> <li>CO<sub>2</sub> Emitted versus Working Hours</li> </ul>
<b>Fuel Management</b>	<b>iFalcon</b>	<b>Maintenance</b>
<ul style="list-style-type: none"> <li>Location Log</li> <li>Velocity Log</li> <li>Idle / Working Time</li> <li>Travel Distance</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Based</li> <li>Directly Connected to Inputs Feeds</li> </ul>	



## Integration

CCC utilizes a monthly report system to measure CO<sub>2</sub> emitted by company assets. Emissions are measured against asset utilization, fuel consumption and power generation in case of a power generation unit. The below report is submitted on a monthly basis to monitor emissions, identify irregularities and investigate them. An investigation report is produced with recommended actions depending on case severity.

PROJECT: STARTING DATE: MONTH ENDING:						MONTHLY REPORT - PART VII - PLANT FUEL AND KW.HR CONSUMPTIONS WITH USING PETROL / DIESEL FUEL CORESPONDING EMITTED CO <sub>2</sub> BY FLEET (PLEASE DELETE AS APPLICABLE)										SHEET: OF: DATE PREPARED:							
PLANT ALLOCATED TO, OWNED OR HIRED BY THE PROJECT						MACHINE MONTHS TO DATE		FLEET NOMINAL HOURS <i>[Derived from Number of Days on Sitex10 hrs/day (Exd. w/ends)]</i>	ACTUAL HOURS / KM SPENT <i>Taken from HR or Kilo Meters</i>		FUEL CONSUMPTION PER FLEET		KW.HR APPLICABLE FOR GENERATORS ONLY		CO <sub>2</sub> EMISSION PER FLEET								
CO.	FLEET CODE	DESCRIPTION	Type of Fuel: Diesel or Petrol	No. OF UNITS BUDGETED					BUDGET	SPENT	THIS MONTH	TO DATE	THIS MONTH HOURS or KM	CUMULATIVE (Incl. This Month)	THIS MONTH HOURS or LITERS	CUMULATIVE (Incl. This Month)	THIS MONTH KW.HRS	CUMULATIVE (Incl. This Month)	THIS MONTH EMITTED CO <sub>2</sub> TONS	CUMULATIVE (Incl. This Month)			
				AT PEAK	THIS MONTH																		
<b>Automatic from Asset Management System</b>										<b>iFalcon</b>		<b>Fuel Management System</b>						<b>Automatic Calculation</b>					

## Fuel Efficiency Improvement Plan Progress in 2014-2015

PHASE	STATUS	DESCRIPTION
<b>Phase 1 - Short Term</b>		
Consistent systems capturing actual fuel consumptions	Completed	Achieved through corporate procedures and BI tools.
KPI's monitoring entire fleet utilization and corresponding emissions.	Ongoing	Tracking effects of fleet disposal, renewal and operation.
Estimate studies including expected CO <sub>2</sub> footprint	Ongoing	Applied based on estimates of equipment barcharts.
Environmentally based criteria shaping new equipment acquisitions	Ongoing	Adopted where applicable, subject to country restrictions and ultra-low sulphur (ULS) fuel availability.
Synergy of operational technologies and IT reinventing fleet management	Ongoing (advanced stage)	Applications progressing and implemented widely upon completion.
Interface of simulation systems and real data monitoring to optimize job execution method statement	Forthcoming	Planning an initial implementation as a pilot project in Oman.
Capturing operational idle time and other deviations with control systems and linking them to CO <sub>2</sub>	Ongoing	Idle and working time automatically captured for most of CCC vehicles. CO <sub>2</sub> corresponding to idle time is being calculated (currently manually and planning shift to automatic process). Telematics linked with Maximo allow automated meter reading retrieval and automatic generation of due maintenance job cards.
<b>Phase 2 - Medium Term</b>		
Expanding the data collection process to include advanced indicators	Ongoing	New sets of KPI's analyzed and evaluated.
Emphasizing operator training schemes.	Investigating best practices	Focusing on operator training simulator systems. Constant communication with major suppliers to establish a flexible and feasible scheme. Limitations mainly imposed by existing simulation systems not accommodating CCC's preferred equipment. Topic is relatively new and continuous changes are anticipated until better market maturity is reached.
Introducing mobile modular wash bay units with waste water treatment and water recycling systems	Under review	Applications considered on a case by case basis.
<b>Phase 3 - Long Term</b>		
Launch advanced automation in the fuel distribution process and control	Investigating best practices	Numerous systems are being evaluated. Target is to finalize selection and move into pilot testing phase.
Explore the usage of Dynamic Gas Blending Kits on Power house generators	Pending	Dependent on improvement in gas supply availability on CCC projects.
Investigate breakthrough systems (EcoVolt)	Pending	Conducting market research.

# Water & Wastewater Management

Water is a key aspect in almost any construction project. CCC is committed to reduce its water footprint by implementing best practices to ensure the proper management of potable water onsite. We are concentrating our efforts on installing high efficiency low flow water fixtures to reduce water usage and minimize water discharge. Additionally, our Sustainability Awareness Campaign is designed to improve employees' understanding on the importance of reducing water consumption.

The projects highlighted below have demonstrated outstanding percentage of water consumption reduction in 2015.

PROJECT NAME	% of Effluent Water Recycled
Wasit Gas Field Development (KSA)	90%
Future Growth Project (Kazakhstan)	90%
Ras Al Khair Power Plant (KSA)	80%
North South Carrier 2.1 Water Transfer (Botswana)	57%
Batinah 6 Highway (Oman)	50%
Agricultural Feeder Roads - Phase 2 (Grenada)	40%

Sewage treatment plants have been installed in various projects in order to recycle and treat the discharged water as well as reduce potable water consumption. The treated water was used for the following applications:

- Irrigation
- Dust suppression / dust control
- Toilets flushing
- Concrete curing (upon client's approval)

## Reduce CCC's Water Footprint

### Vision

To reduce our water consumption in line with the reduction targets announced in the countries where we operate.

### Target 2015

CCC's target is to reduce our total water footprint by 20% by 2015 compared to 2012 data, taking into account the turnover and type of the projects.

### Key Actions Planned

- Install high efficient and low flow water fixtures.
- Install Sewage Treatment Plants where possible.

### Data / KPI's

The water consumption reduction:

YEAR	2014	2015
Total reduction of construction waste	11%	23%

28% of water consumption at sites was sourced from recycled water (\*).



# Waste Management

The amount of construction waste we produce is directly linked to the number of buildings and infrastructure construction sites we manage. The more work we carry out, the more waste is produced. In 2015 we set a target that 20% of our construction waste should be diverted away from ending up in a landfill.

**CCC is committed to minimizing construction waste throughout all our operations.**

A number of our projects have achieved notable results on reusing construction materials (mainly concrete, timber steel, rebar and so on).

PROJECT NAME	% of Construction Materials Recycled
Midfield Terminal Building (UAE)	96%
Batinah 6 Highway (Oman)	90%
Dukhan Highway Project (UAE)	54%
Wasit Gas Field Development (KSA)	40%
Development of Muscat International Airport (Oman)	34%

We aim to manage waste on our sites in the most efficient way by encouraging reusing and recycling of materials on-site and maximising segregation throughout site waste management plans. By recycling and recovery we monitor and report the waste generated on each project and the quantity diverted from the landfill. Each of our sites has a waste champion and our environmental managers regularly visit sites to audit operations and ensure the implementation of procedures that aim to minimise the environmental impact of our operations.

## CCC's Waste Management Process

1. Waste Segregation Separated into:
  - Combustible solid waste
  - Non-combustible solid waste
  - Recyclable and reusable solid waste
  - Hazardous Waste
2. Waste Collection
3. Waste Storage:
  - Non-Hazardous waste
  - Hazardous waste
4. Waste Transport
5. Waste Disposal

## Reduce CCC's Construction Waste

### Strategy

Managing waste responsibly:

- Reduce the amount of waste we produce
- Reuse resources or pass them to others to do so
- Recycle by segregating materials which cannot be reused
- Recover energy from materials which can't be recycled
- Dispose resources only as a last resort.

### Target 2015

CCC's target is to reduce our total construction waste by 20% by 2015 compared to 2012 data, taking into account the turnover and type of the projects.

### Key Actions Planned

- Implementation of CCC's Construction and Demolition Waste Management Plan in all our projects.

### Data / KPI's

The reduction of construction waste:

YEAR	2014	2015
Total water recycled and reused	18%	28%

More than 23% of our produced construction waste was diverted from the landfill (\*).



## Testimonial of “Waste Champion”

Mohammed Bani Jaber (HSE Coordinator) from Midfield Terminal Building (MTB) Project Abu Dhabi International Airport

For the prestigious MTB project which is pursuing a 3 Pearls ESTIDAMA rating, responsible waste management is a top priority. For example, project requirements call for 75% (\*) of construction waste to be reused or recycled contractually. The Waste Management Strategy (WMS) followed at MTB aims to not only meet but exceed waste management obligations. The applied strategy is based on the classic waste minimization hierarchy revolving around ‘the three Rs’: Reduce, Reuse, Recycle.

Applied examples include:

a. **Reduce**

- Training personnel involved in waste management activities
- Avoiding disposable items such as plastic and paper cups or plates
- Purchasing goods in bulk to avoid excess packaging

b. **Reuse**

- Waste timber as formworks and signage
- Aggregates for backfilling at roadworks from concrete waste
- Scrap tire as traffic barriers

c. **Recycle**

- Office appliances and offsite equipment disassembled and used as raw material
- Office paper
- Ink and cartridges

The key element ensuring proper waste handling at MTB is the ongoing and collaborative efforts between all involved parties including the project management, construction teams, HSE team, sustainability and Estidama professionals.



Construction Waste Streams and Diversion from Landfill Ratio:		2015 Data
<b>Steel</b>	Total Waste (Tons)	2028
	Waste Diverted/Recycled (Tons)	2028
	Diversion Percentage	100%
<b>Concrete</b>	Total Waste (Tons)	24501
	Waste Diverted/Recycled (Tons)	24501
	Diversion Percentage	100%
<b>Wood</b>	Total Waste (Tons)	2381
	Waste Diverted/Recycled (Tons)	2381
	Diversion Percentage	100%
<b>Cardboard</b>	Total Waste (Tons)	196
	Waste Diverted/Recycled (Tons)	196
	Diversion Percentage	100%
<b>Plastic</b>	Total Waste (Tons)	267
	Waste Diverted/Recycled (Tons)	267
	Diversion Percentage	100%
<b>Aluminum</b>	Total Waste (Tons)	15
	Waste Diverted/Recycled (Tons)	15
	Diversion Percentage	100%
<b>Gypsum</b>	Total Waste (Tons)	435
	Waste Diverted/Recycled (Tons)	435
	Diversion Percentage	100%
<b>General Waste</b>	Total Waste (Tons)	2450
	Waste Diverted/Recycled (Tons)	0
	Diversion Percentage	0%
<b>Total Waste</b>	Total Waste (Tons)	32273
	Waste Diverted/Recycled (Tons)	29823
	Diversion Percentage	92%

# Materials

We are working towards maximizing the landfill diversion rate depending on the areas of operate in. As a result, we recognise the need to 'close the loop' by specifying and using materials that have a higher recycled content.

In 2012, CCC started reporting on the amount of recycled content of various materials used by our projects. Projects deliver information about the use of concrete, steel, aluminum, wood, bricks and limestone which are consumed in large quantities during construction activities and have a significant impact on natural resources. This helps us reduce the quantities of materials we send to landfills as well as the amount of virgin materials we use.

In 2015, a number of our projects have achieved notable results for using recycled input materials (the recycled content is determined based on information provided by our suppliers).

PROJECT NAME	% of Construction Material used that are of Recycled input
Midfield Terminal Building (UAE)	45%
Dukhan Highway Project (UAE)	41%
Abu Dhabi Plaza (Kazakhstan)	34%
Future Growth Project (Kazakhstan)	30%



## Increase Usage of Building Products that Incorporate Recycled Content Materials

### Vision

Maximize the landfill diversion

### Target 2015

CCC's target is to reduce our total construction CCC's target is to increase usage of building products that incorporate recycled content materials by 10% by 2015 compared to 2012 data, taking into account the turnover and type of the projects.

### Key Actions Planned

- Maximizing the use of materials with recycled content.

### Data / KPI's

The percentage of materials with recycled content used:

YEAR	2014	2015
The percentage of materials used with recycled content	4%	9%

More than 9% of our total purchased material where materials with recycled content (\*).

# Biodiversity



**CCC is committed to conserving the natural environment and biodiversity around its projects.**



As stated in CCC's Sustainability Policy we aim to ensure the protection of biodiversity when conducting our business. Given CCC's nature of business, some construction contracts are situated in ecologically important and sensitive areas. In order to safeguard the natural environment of such sites we apply certain management systems and operational practices. The specific measures applied are clearly explained in CCC's Project Environmental Management Plan.

The impacts arising from construction works on the surrounding habitats and their ecology are mainly due to site clearance, vegetation removal and establishment of permanent facilities. Other impacts include: noise from construction, general human activities and ecological effects resulting from habitat fragmentation as well as disturbance to migratory routes. When working in ecologically important areas the primary mitigation measure is avoidance based on pre-construction surveys (if available), establishment of buffer zones and installation of exclusion fencing. We take particular notice in protecting ecologically sensitive habitats declared as such by responsible authorities or based on Environmental Impact Assessments (EIA).

A prime example of our efforts to protect biodiversity is the development and implementation of a Sensitive Habitat Management Plan at CCC's Khazzan Central Processing Facility (CPF) project in Oman. The main purpose of the plan was to provide methods for protecting the surrounding habitats during construction and operational works. Apart from covering schemes such as tree planting, site reinstatement and fencing the plan focused on preventive measures for hazardous waste discharge and oil spills.

Another example is that of the MTB project in Abu Dhabi, UAE. A project-specific environmental management plan was prepared in order to protect, conserve and reduce the impacts on the surrounding ecological habitats at the site. The plan has classified the project's impacts based on a previously compiled EIA study that elaborated all possible environmental damages that might prevail from the project. This included possible effects and suitable mitigation measures in order to preserve the existing flora and fauna of the area.



**CCC's efforts to protect biodiversity at Khazzan Central Processing Facility (CPF) project in Oman.**



# Green Solutions

## Integrating Sustainability

In line with our sustainability policy, we aim to integrate sustainability in all our operations.

Our business as a construction company falls under three main categories:

### 1. Project Development

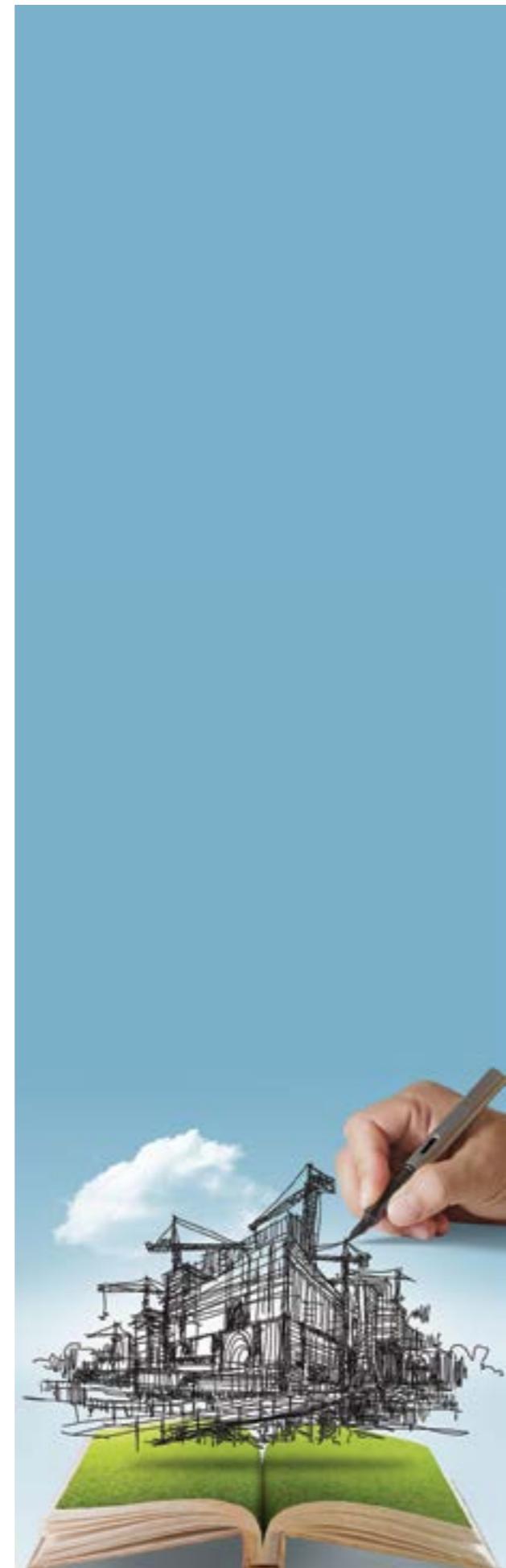
- When we operate either as the main property developer or as part of a Public Private Partnership (PPP). In this context, we have the greatest opportunity to maximize sustainability outcomes, as we can set relevant targets in the early concept stages. We are empowered to benefit from the principles of sustainable construction by proactively reducing our environmental impact and decreasing maintenance and operation costs. As an example, we build CCC's head office in Oman according to the standards of green design and technology and achieved a LEED-2009 certification.

### 2. Design & Build Contract

- Under this type of contract we translate the client's requirements into project specifications. We still maintain an opportunity towards contributing to sustainable development at a reasonably low cost by offering smarter design solutions to optimize sustainability.

### 3. Build Contract

- In this situation, CCC's involvement as a main contractor begins after the design phase has been settled. At this point, our influence in pursuing sustainability solutions is limited. Whilst carrying out our construction operations we implement numerous environmentally friendly initiatives that are in keeping with our commitment to sustainability.



# CCC Sustainability Initiatives

CCC emphasizes environmental excellence as being an integral part of our construction operations. One of the ways to achieve this is by applying initiatives to mitigate our environmental impact and increase our alternative energy capacity. In our projects, camps and offices we follow a meticulous sustainability strategy underpinned by detailed practices in the fields of energy efficiency,

renewable energy and overall environmental responsibility. Some of our applied measures include: solar power plants, wastewater treatment and recycling construction materials.

In 2014 and 2015, we continued implementing numerous sustainability initiatives, an overview of which is included in the table below. A detailed presentation of selected initiatives follows.

CATEGORY	PROJECT / LOCATION	INITIATIVE	RESULT (annually)
Renewable Energy	Habshan Project & Camp (UAE)	PV Power Plant	Reduced electricity consumption by 381 MWh
		PV outdoor lighting systems	Offset 18,025 tons of CO <sub>2</sub> emissions
	Bausher Waste Water Project (Oman)	PV outdoor lighting systems	Reduced electricity consumption by 15.5 MWh
		LED rope Solar light	Offset 10,7 tons of CO <sub>2</sub> emissions
Energy Efficiency	APM Head House (UAE)	LED Lights	Reduced electricity consumption by 27.4 MWh
		High Efficient HVAC	Offset 216 tons of CO <sub>2</sub> emissions
	Habshan Project & Camp (UAE)	Low flow sanitary fixture installations	Offset 14.1 tons of CO <sub>2</sub> emissions
Water Consumption	MTB Project (UAE)	Wastewater treatment plant	Offset 62.8 tons of CO <sub>2</sub> emissions
	Habshan Project & Camp (UAE)	2 Wastewater treatment plants	Reduced water consumption by 70,300m <sup>3</sup> (40%)
	MTB Project (UAE)	On-site Recycling Concrete & Aggregates	Reduced freshwater supply by 110,000.0m <sup>3</sup>
Construction Waste	MTB Project (UAE)	On-site Recycling Concrete & Aggregates	Reduced freshwater supply by 410,000.0m <sup>3</sup>
			992,160 m <sup>3</sup> recycled concrete and aggregates
			Offset 2,469 tons of CO <sub>2</sub> emissions

# CCC Sustainability Initiatives

## Renewable Energy

### Habshan Project & Camp (UAE)

#### PV Power Plant (PV/Diesel Hybrid System)

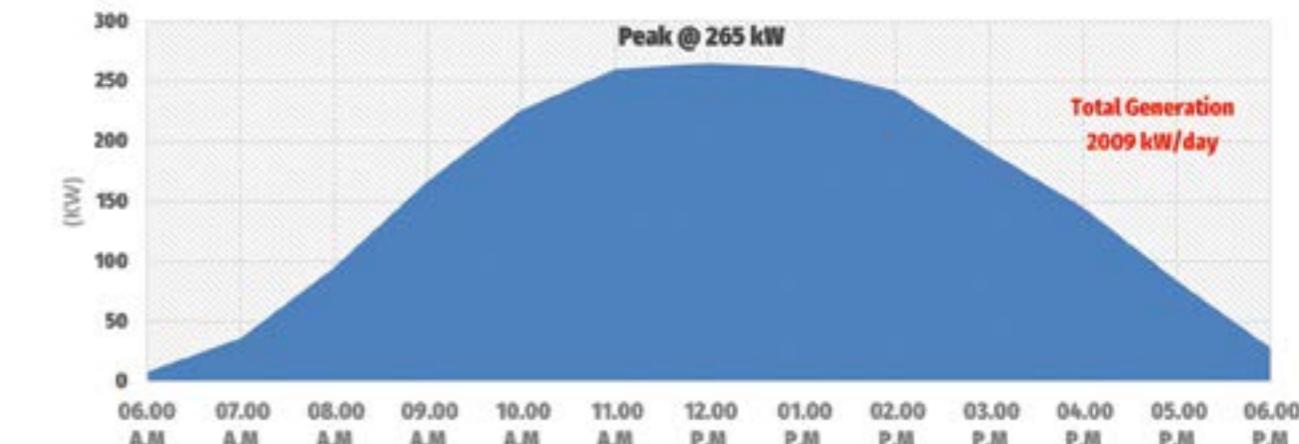
A rooftop photovoltaic system with an output of 368 kilowatt-peak was initially installed at CCC's Qusahwira camp. At the time, this was one of the largest off-grid solar installations in the UAE. Upon completion of this specific project, the plant was dismantled and reinstalled at Habshan project with ground strip foundations in January 2014. The rationale behind this scheme was to reduce the electrical energy consumed by the project and camp facilities by utilizing environmentally friendly technologies. As CCC's workforce typically exceeds 100,000 people (the majority of which live on construction camps) continued efforts to minimize electric consumption is a priority both in terms of environmental responsibility as well as economical merits. The PV installation generates on average 450 Megawatt-hours per year, which is used for air conditioning, lighting and other daytime power activities. This clean energy initiative minimizes CCC's carbon footprint by offsetting 15,856 tons of CO<sub>2</sub> emissions annually, by refraining to use diesel generators and transportation of diesel trucks.



### Habshan PV Power Plant Technical Data

Nominal DC Output	<b>368kWp</b>
Module Area	<b>2,565m<sup>2</sup></b>
Q Cells 240 Watt Polycrystalline modules	<b>1,536 No</b>
SMA Inverter 17MW	<b>16 No</b>
SMA Inverter 12MW	<b>8 No</b>
Monitoring System Data Logger	<b>1 No</b>

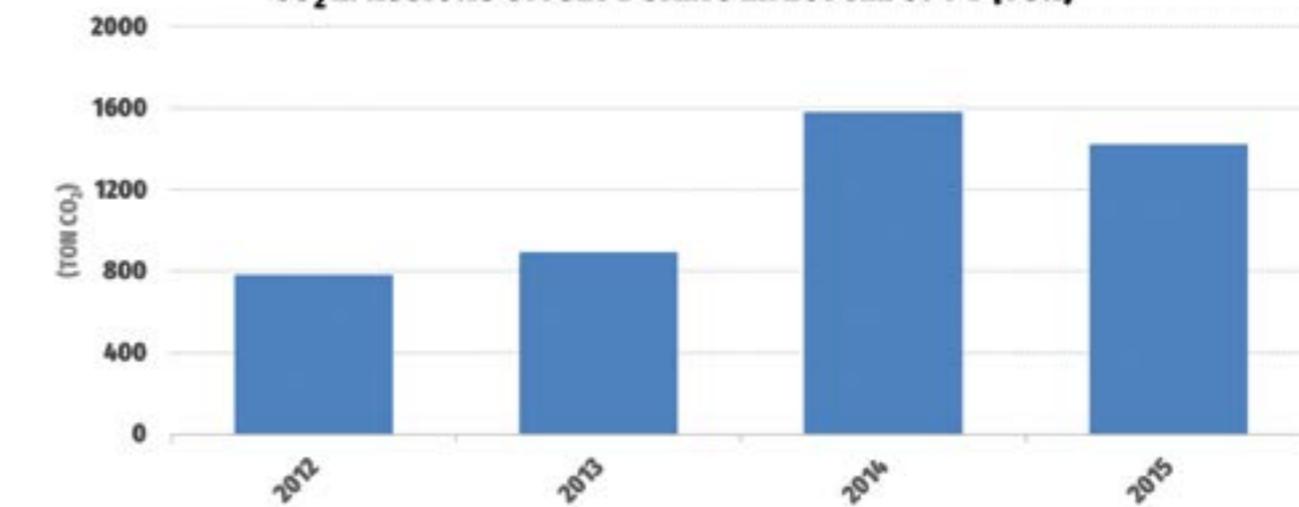
MAXIMUM POWER GENERATED IN ONE DAY PER THE YEAR-6/09/2015 (kW)



TOTAL SOLAR POWER GENERATED IN YEAR 2015 (GW)



CO<sub>2</sub> EMISSIONS OFFSET DURING LIFECYCLE OF PV (TON)



## CCC SUSTAINABILITY INITIATIVES

# CCC Sustainability Initiatives

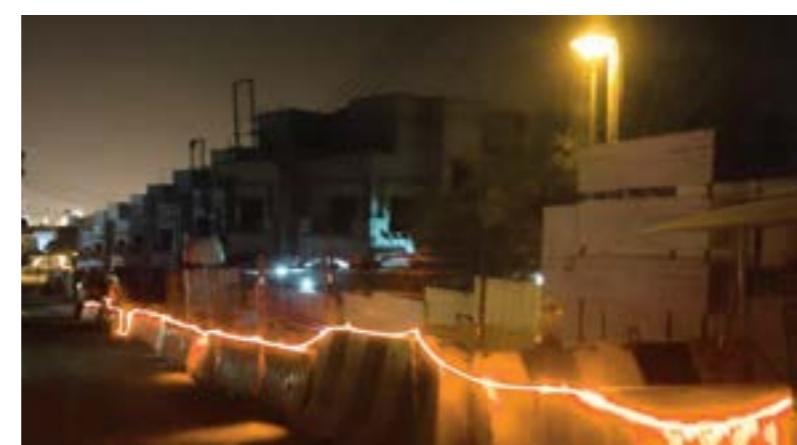
## Water Consumption

**Habshan Project & Camp (UAE)****PV Lighting System**

A solar powered outdoor lighting system, comprised of 100 items was set up. It produces approximately 15.5 Megawatt-hours per year and is used for street illumination throughout the project camp. The solar lights initiative reduces CCC's carbon footprint by offsetting 10.7 tons of CO<sub>2</sub> emissions annually.

**Bausher Waste Water Project - Madinat Sultan Qaboos (Oman)****LED Rope Solar Light**

CCC's team developed their own solar system to power the safety lights required for a road construction project. Compared to a generator which would be the alternative, this system minimizes the need for regular maintenance and produces no noise-a significant benefit as the project is located in a heavily inhabited district of Muscat. Currently, 12 such systems are in operation which annually reduce electricity consumption by 27.4 MWh and offset 216 tons of CO<sub>2</sub> emissions.



Implemented for sewage treatment purposes of projects' site offices and camps, the three plants (with an average capacity of 250 and 900m<sup>3</sup> for Habshan and 300m<sup>3</sup> for MTB) use MBR technology. The treated water produced is used for toilet flushing, dust control and irrigation usages. Combined, the installations reduce the freshwater supply demand by more than 500,000m<sup>3</sup> annually.



MTB Project, UAE



MTB Project, UAE



Wastewater Treatment Plants



Habshan Project &amp; Camp, UAE

# CCC Sustainability Initiatives

## Recycling Construction Waste

The project team decided to recycle the concrete and use the aggregates in certain applications (mostly non-structural), such as base and sub-base for temporary roads and backfilling (provided the recycled aggregates pass the specifications compliance test per the QA/QC procedure). CCC has recycled and used a total of 992,160m<sup>3</sup> of recycled aggregates (48,105m<sup>3</sup> recycled aggregates and 944,055m<sup>3</sup> recycled backfilling material). Additionally, we have eliminated the production of harmful emissions during transportation to landfill. By recycling the aggregates 'on-site', the transportation from the site to the landfill is avoided and an approximate of 3,118,170 km of truck transportation have been eradicated. This initiative reduces CCC's carbon footprint by offsetting 2,469 tons of CO<sub>2</sub> emissions annually.

# Sustainability Awards and Recognition

## Emirates Energy Award (EEA)

CCC received the highest accolade "Gold Award" in the category of "Energy Efficiency - Private Sector" for the year 2015, in recognition of the sustainability initiatives applied at construction camps and site facilities of projects in UAE and Qatar. The Emirates Energy Award (EEA) is organized by the Dubai Supreme Council of Energy, under the patronage of Sheikh Mohamed bin Rashid al-Maktoum, Vice-President and Prime Minister of UAE. CCC was honored with this international prize, for the cost effective and exemplary measures implemented and for promoting a positive impact in the MENA region.



Energy Efficiency-Emirates Energy Award

## Sustainable Project Construction Week Oman Award

CCC's new Oman head office was nominated "Sustainable Project of the Year" at the Construction Week Oman Awards 2016. This eminent industry award was conferred to CCC for applying advanced sustainable building practices and achieving a LEED certification for the new corporate office. The judges' panel congratulated CCC for the numerous sustainable features embedded in the project, especially since there is little demand for LEED in Oman. When complete, this will be one of the first LEED accredited building in Muscat. (For more details on this project please refer to p.0).

Fehmi Ouaja (Project Manager of CW Oman Awards partner, The Big Show Oman) presenting Amr El Khatib (CCC Project Engineer) and Samir Thabet (CCC Sustainability Coordination Manager) with the award.



## Energy Efficiency – Private Sector

### Gold Award

Consolidated Contractors International Company (CCC)

(UAE)  
Sustainability Initiatives in Housing Camps



CCC Executives Receiving Emirates Energy Award

We have developed, embedded and implemented numerous sustainability themes to reduce our environmental footprint and strive to go even further. We are honored with the recognition earned for our sustainability efforts so far.



## IPLOCA Environmental Award

CCC was named the winner of the 2016 IPLOCA Environmental Award sponsored by Shell for our applied "Portable Green Energies". This award was presented to CCC in recognition of the exemplary achievements in reducing the impact on the environment of pipeline construction projects. According to the Adjudication Committee, the winning elements of CCC's success were: high management commitment to safeguard the environment, extensive investment to produce clean energy and an effective waste management programs.

# CCC's Sustainability Camp Manual

**01**

## GET STARTED

- Decide on the sustainability initiatives/program
- Establish a sustainability team

**02**

## SET GOALS

- Select initiatives and evaluate options
- Develop a sustainability plan

**03**

## IMPLEMENT

- Execute the plan
- Measure progress of chosen program/initiatives

**04**

## REPORT

- Report on results (*narrative*)
- Report on results (*metrics*)

**05**

## RECOGNIZE

- Ensure continual improvement
- Acknowledge individual and team contribution

Aiming to address sustainability commitments during our operations in a systematic manner, CCC has developed a Camp Sustainability Manual. This manual is designed to provide guidance in implementing sustainable practices consistently and as part of the daily operations at projects, offices and camps.

It encompasses CCC's sustainability aspects, economic growth, social responsibility and environmental protection, thereby providing benefits to CCC and its clients. The manual contains a Sustainability Initiatives checklist that covers various categories under the Environmental, Social and Economic sphere. These categories include: Energy and Water Conservation, Transportation, Renewable Energy, Waste Management, Environmental Procurement, Air Purification, Safety and others.

The manual provides a comprehensive framework enabling each project team to select and target certain sustainability areas. Followed by planning and implementing sustainability options in an appropriate manner. The structure suggested in the manual is illustrated in the table on the left.



The sustainability initiatives checklist offers ideas and stimulates thoughts on the evaluation and selection of sustainability opportunities at CCC operations. We have compiled many initiatives and categorized them to achieve alignment with sustainability targets.

To facilitate the monitoring and reporting process of sustainability performance throughout CCC, we have developed a toolkit based on international

standards. This CCC Toolkit contains the following calculators:

- GHG Emission Calculator
- Energy Consumption Calculator
- Water Consumption and Recycling Calculator
- Indoor Air Quality Calculator
- Material Used Calculator
- Construction Waste Calculator

These calculators assisted the sustainability team to measure the company's performance and calculate environmental footprint.



Consolidated Contractors Company  
CAMP LAYOUT AND DESIGN MANUAL  
CM-CSQM-013 Rev.2

SUSTAINABILITY INITIATIVES CHECKLIST			
ITEM	SUSTAINABILITY INITIATIVES	Implementation	Remarks
Site Offices & Camps			
1	<b>Energy Conservation</b>		
1.1	Use high energy efficient HVAC units (Units with Inverter/ high star rating).		
1.2	Use of fully synchronized power house.		
1.3	Use of light-emitting diode (LED) lighting fixtures.		
1.4	Change all incandescent bulbs & fluorescent lamps (CFLs) to light-emitting diode (LED) lamps.		
1.5	Use of high mast LED Flood Lights for camp lighting.		
1.6	Use of Solar powered luminaires for the inner street lighting (the perimeter lights will be kept electrically powered for security reasons).		
1.7	Use of Timers for users' consumption to switch off the power on the cabins during the day when the laborers are on site, possibility of manual override to be provided.		
1.8	Use of Motion Detectors.		
1.9	Use of Pre-fab units and offices with thick/high density insulation (this will save on HVAC unit capacities and power consumption).		
1.10	Use ENERGY STAR labeled appliances.		
1.11	Windows and doors in the units and offices to be properly airtight to avoid air infiltration.		

# Green Construction & Projects

## USGBC Membership

Working to champion sustainability, CCC has become a member of the U.S. Green Building Council, the leading institution promoting sustainable building practices. The USGBC is a global platform comprised of 15,000 organizations and individuals from the entire building industry, with a mission to develop structures that are environmentally conscious, profitable, and healthy to live and work in. LEED (Leadership in Energy & Environmental Design), the certification program guiding buildings towards sustainability has been created by the USGBC. For CCC, this membership embodies our commitment to be a leader in sustainable development, a driver of green building innovation, and a facilitator of more prosperous communities.



## Green Building Contractor

CCC is involved in the development of environmentally friendly, energy saving construction projects, targeting to fulfill the requirements of green buildings. Our business strategy is to provide holistic green building solutions covering the entire life cycle of infrastructure projects and including environmentally friendly materials and efficient energy management.

Our projects in the table below set benchmarks for their green design and construction features:

No.	PROJECT NAME	LOCATION	CLIENT	PROJECT PHASE	
				DESIGN	CONSTRUCTION
COMPLETED					
1	Palestinian Museum	Palestine	The Welfare Association	LEED Silver (Certified)	LEED Silver (Certified)
2	LMH Project (Multipurpose Hall at Lusail Sports Club)	Qatar	Qatar Olympic Committee	3-Stars GSAS (Certified)	4-Stars GSAS (Certified)
3	Princess Nora University Project (PNU Academic Campus Part-1 & 2)	KSA	Ministry of Finance	LEED Gold (Certified)	LEED Gold (Certified)
IN PROGRESS					
1	Abu Dhabi Plaza (Mixed-use development)	Kazakhstan	Aldar Properties PJSC.	Target LEED Silver (In-Progress)	Target LEED Silver (In-Progress)
2	Abu Dhabi International Airport - Midfield Terminal Building	UAE	Abu Dhabi Airports Co. (ADAC)	Target ESTIDAMA 3-Pearl (In-Progress)	Target ESTIDAMA 3-Pearl (In-Progress)
3	Riyadh Metro, Lines 1 & 2	KSA	Arriyadh Development Authority (ADA)	Target LEED Silver (In-Progress)	Target LEED Silver (In-Progress)
4	CCC Headquarter Building	Oman - Muscat	CCC	LEED Silver (Certified)	Target LEED Silver (In-Progress)
5	CCC KIZAD logistic facility	UAE	CCC	ESTIDAMA 1-Pearl (Certified)	Target ESTIDAMA 1-Pearl (In-Progress)
6	New Port Project	Qatar	New Port Project Steering Committee NPP	GSAS 2-Stars (Certified)	Target GSAS 2-Stars (In-Progress)
7	Automated People Mover Head House Phase 1	UAE	Abu Dhabi Airports Co. (ADAC)	ESTIDAMA 1-Pearl (Certified)	Target ESTIDAMA 1-Pearl (In-Progress)
8	City Centre Almaza	Egypt	Majid Al Futtaim Properties Egypt	Target LEED Silver (In-Progress)	Target LEED Silver (In-Progress)



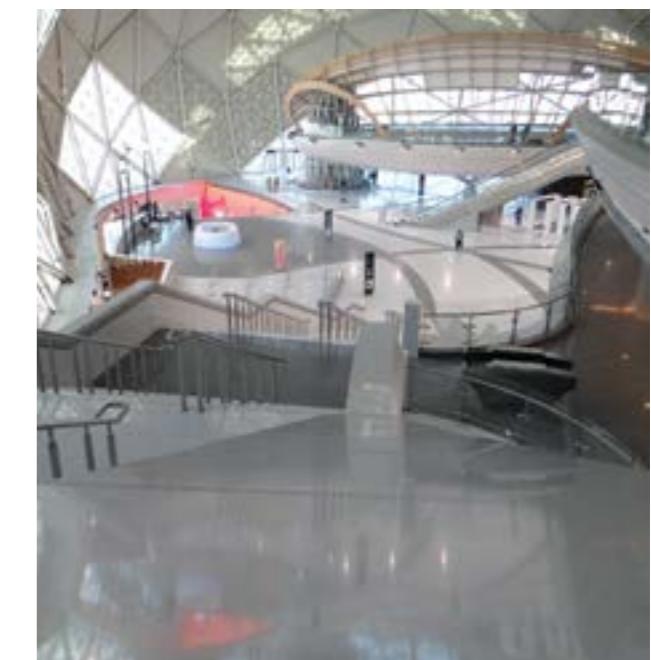
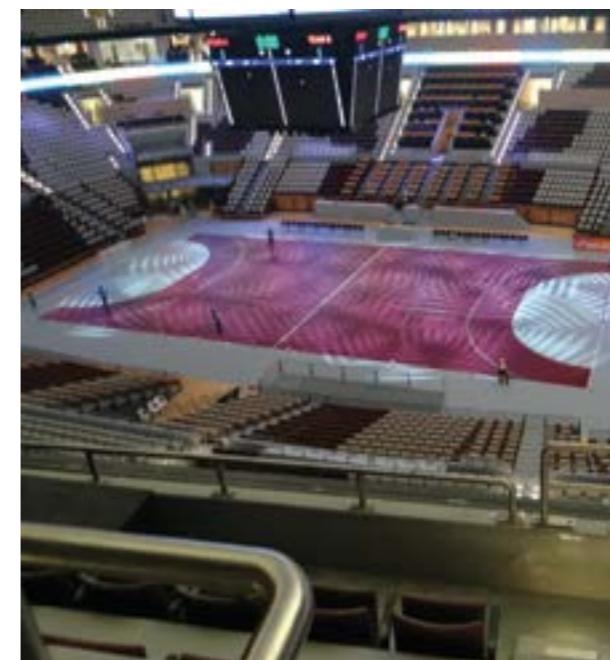
## Lusail Multipurpose Hall - LMH

(Qatar)

CCC was the main contractor for the LMH project, a major Olympic standard indoor venue intended to host national and international sporting events. The project's design and construction followed sustainability principles under the Global Sustainability Assessment System (GSAS) guidelines, developed by the Gulf Organization for Research and Development (GORD).

Some of the sustainable features the project showcases include:

**LMH was awarded a prestigious 4-star GSAS accreditation the first sports hall in the region to achieve such a high rating.**



### Energy

- 70% glazing efficiency improvement
- 36% lower lighting power density through LED lighting and occupancy sensors
- Efficient envelope design to minimize heating loads
- Energy recovery units to reduce cooling demand
- Efficient chillers and electric water heating systems

### Water

- 100% greywater recycling and reuse
- Water recycling tank incorporating storm water and grey water with a provision for a TSE (Treated Sewage Effluent) connection
- Water efficient irrigation system (bubblers and drip systems)
- Plumbing fixtures procured based on low water flow rate
- Low water-using plants throughout the landscape

### Waste

- 75% waste recycling
- Detailed waste management strategies (segregation, food waste)

### Materials

- 35% of materials designed to be disassembled upon projects' decommissioning to enable reuse and recycle
- 91% of construction materials and expenditure

engaged local resources (within a 125 mile radius of the project)

- 27% of responsibly sourced construction materials
- 20% of construction materials constitute recycled content materials

### Indoor Environment

- Low polluting interior finishes
- Verified air flow

# Abu Dhabi Plaza Mixed Development - ADP

(Kazakhstan)

CCC and Arabtec (as a Joint Venture) are the main contractors responsible for designing and building, the Abu Dhabi Plaza (ADP) in Astana, Kazakhstan. ADP is one of the iconic projects in Astana chosen for EXPO 2017, representing a model investment partnership between Kazakhstan and United Arab Emirates. The project design and construction stages target and follow LEED certification for each building separately (see bottom right picture). As a multi-LEED certification development project strict design and construction systems are followed.

The main features of these systems are:

**Efficiency and environmental responsibility are reflected in the entire ADP project: from design to construction, through to commissioning and occupancy.**

## Energy

- 14-20% saving (\*) during occupancy by:
- High efficient HVAC systems
- Optimized façade systems
- High insulated external roofs
- Low lighting power density fixtures with occupancy sensors
- Enhanced commissioning process
- Strict measurement and verification plan

## Water

- 40% saving (\*\*) during occupancy by:
- Low flow and flush fixtures

## Waste

- Optimized garbage collection system ensuring effective recycling process during occupancy

## Materials

- 10-20% of permanently installed material is of recycled content
- More than 50% of the permanent wood comes from sustainable sources (FSC certified)

## Indoor Environment

- CO<sub>2</sub> sensors and ventilation systems for common areas
- Low VOC content for all permanently used paints, adhesives, etc.

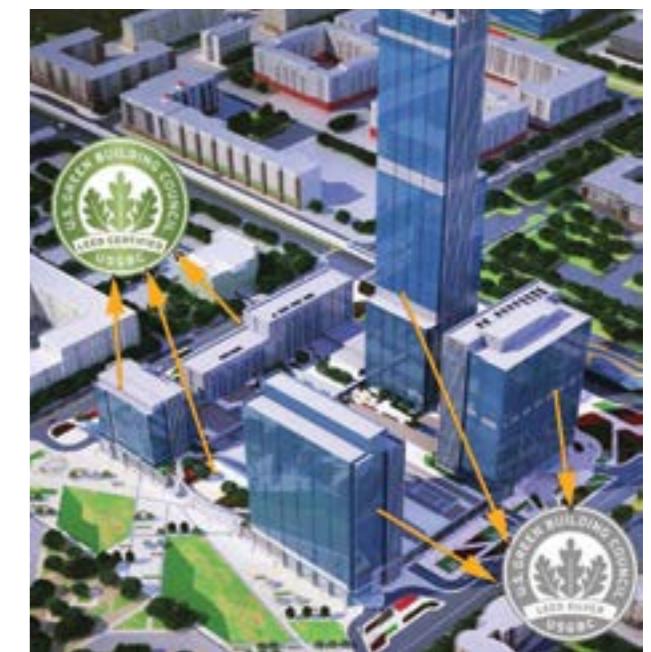


## Sustainable Site

- Promotion of carpooling and low emission vehicles by providing designated parking spaces
- Easy access to public transportation
- Erosion and sedimentation control
- Minimizing "heat island effect" by using high solar reflectance roofing materials

## Community Engagement

- Sustainability education plan for future building occupants
- Green cleaning program promoting environmentally friendly products
- Supporting recently established Kazakhstan Green Building Council



## CCC Oman Head Office

The new corporate head office in Oman represents CCC's commitment to sustainable building practices. It has achieved a LEED-2009 certification and was honored as the Sustainable Project of the Year at the Construction Week Oman Awards 2016. Being one of the first LEED-certified buildings in Muscat the project is a model of sustainable and economic development, which minimizes environmental impact and seeks to restore ecological resources.

CCC applied numerous environmentally friendly elements, under the below categories:

### Energy

- Efficient HVAC system
- High efficiency glazing system

### Water

- Water consumption reduced by 53% (\*) by specifying ultra-low flow fixtures
- Dual flush toilets and waterless lavatories save 159,570 gallons of potable water

### Waste

- Over 50% of all construction waste scheduled to be recycled
- Storage and collection of recyclables

### Materials

- More than 30% of construction materials extracted and manufactured within 500 miles of Muscat

### Indoor Environment

- Sensors monitoring building ventilation and CO<sub>2</sub> content
- Low VOC interior finish materials



### Sustainable Site

- Alternative transportation encouraged (bicycle racks and shower facilities provided)
- Special parking spaces for carpooling and low-emission/fuel efficient vehicles
- Reduction of light pollution as all exterior lighting is aimed straight down
- Heat island effect limited through appropriate roofing material and three level underground parking space



# The Palestinian Museum

(Birzeit - Palestine)

The Palestinian Museum is a flagship project of the Welfare Association (WA), a non for profit organization set up by members of the Palestinian and Arab business and intellectual communities. CCC completed the construction of this modern historical museum dedicated to preserving and commemorating the Palestinian heritage with PROJACS International and Arabtech Jardaneh. The Palestinian Museum is Palestine's first green building with silver-rated LEED certification, presenting an example of long-term sustainability in accordance to internationally benchmarked standards.

**Energy-saving measures will reduce the Museum's annual energy consumption by 27% and water usage by 37%.**

The state-of-the-art museum building and its lush gardens present an example of long term sustainability by:



## Implementing LEED (Design Phase)

### Potable Water Use Reduction

- Three water tanks to collect and use rainwater
- Wastewater treated and reused for landscape irrigation and flushing
- Gardens planted with native plants requiring minimum water

### Energy Use Reduction

- Building's orientation minimizes heating and cooling demand
- Hot water solar energy system used to heat water for public use
- Efficient lighting fixtures (LED)

### Green Materials

- Materials exposed to the public (paint, carpet, adhesives etc.) contain less toxic substances, creating a healthier environment for museum users
- Use of materials with recycled content
- Building materials sourced within a 500 mile radius of the project site

## Implementing LEED (Construction Phase)

### Erosion and Sedimentation Control (ESC)

- Dust prevention measures
- Installation of silt fence
- Stock piles of backfill and excavated materials suitably protected

### Construction Waste Management (CWM)

- Building waste segregated per material type and transported to recycling facility

### Indoor Air Quality Plan (IAQ)

- Numerous measures addressing issues such as: HVAC system protection, maintaining a clean job site and proper material handling



# Social

Fundamental ingredients of CCC's business is our profound commitment to provide a safe and healthy workplace, respect human rights and be a good employer. Developing a world class safety culture, is not just a slogan we believe in but something we are working hard to achieve with all the available resources necessary. Respecting human rights is essential for a sustainable business and our approach towards internationally proclaimed human rights is progressively strengthening. Maintaining an inspiring working environment, promoting diversity and equal opportunities and enabling employees to contribute to CCC's growth are employment objectives of prime importance to us.



Egypt, Nile River - Aswan Bank



## Health, Safety & Environment (HSE)

Our staff is our greatest asset and this is reflected in the company's core values. Ensuring our employees' health and safety is our primary goal. CCC has made Health and Safety a priority for many years and we remain determined to constantly enhance our safety strategy and provide the best protection to our staff. Our HSE Group offers high level Health, Safety and Environment support, direction, guidance and solutions to all CCC projects and operations globally.

**"We believe that nothing is more precious than human life and well-being and ensure that all conceivable measures are taken when we conduct our business to strictly comply with the highest international health and safety standards for achieving the ultimate goal of protecting human life".**

*CCC Core Values, Guiding Principles and Code of Practice.*



## HSE Management System

CCC's HSE management system provides a framework to manage HSE issues effectively. The objective is to ensure a safe and healthy working environment for CCC employees and avoid causing environmental damage. Our system provides an efficient way of monitoring projects' HSE performance and makes comparisons through trend analysis.

In 2014, a process to enhance the HSE Management System began in order to include requirements from clients and regulatory authorities. In 2015, the improvement process is ongoing with updates and lessons learned being integrated in HSE plans and procedures. By re-establishing the Research and Development section, innovative initiatives particularly related to new technologies are being assessed.

**CCC's systems are internationally certified with OHSAS 18001 and ISO 14001.**



## HSE Performance & Statistics

### Overview

We continue to work towards world class HSE performance, targeting the safety of our direct employees and our subcontractors' staff.

On a yearly basis, comprehensive HSE data and statistics are compiled from all the divisions of CCC's worldwide operations (civil, mechanical and pipeline projects). Recording and analyzing HSE numbers accurately and reliably is key to understanding our current position and set specific future targets. The figures below demonstrate CCC statistics during 2014 and 2015. These performance indicators are categorized as leading or lagging, a reliable tool to measure safety.

In 2015, CCC recorded the highest number of total man hours worked over the past six years: 393,733,720 hours. In 2014, the equivalent number was 372,314,094 hours. In addition to the increase in total-man hours worked in 2015, the recorded First Aid Cases decreased by 294 compared to 2014. The charts illustrate that the recorded Lost Time Injuries and Recordable Cases increased in 2015 compared to 2014.

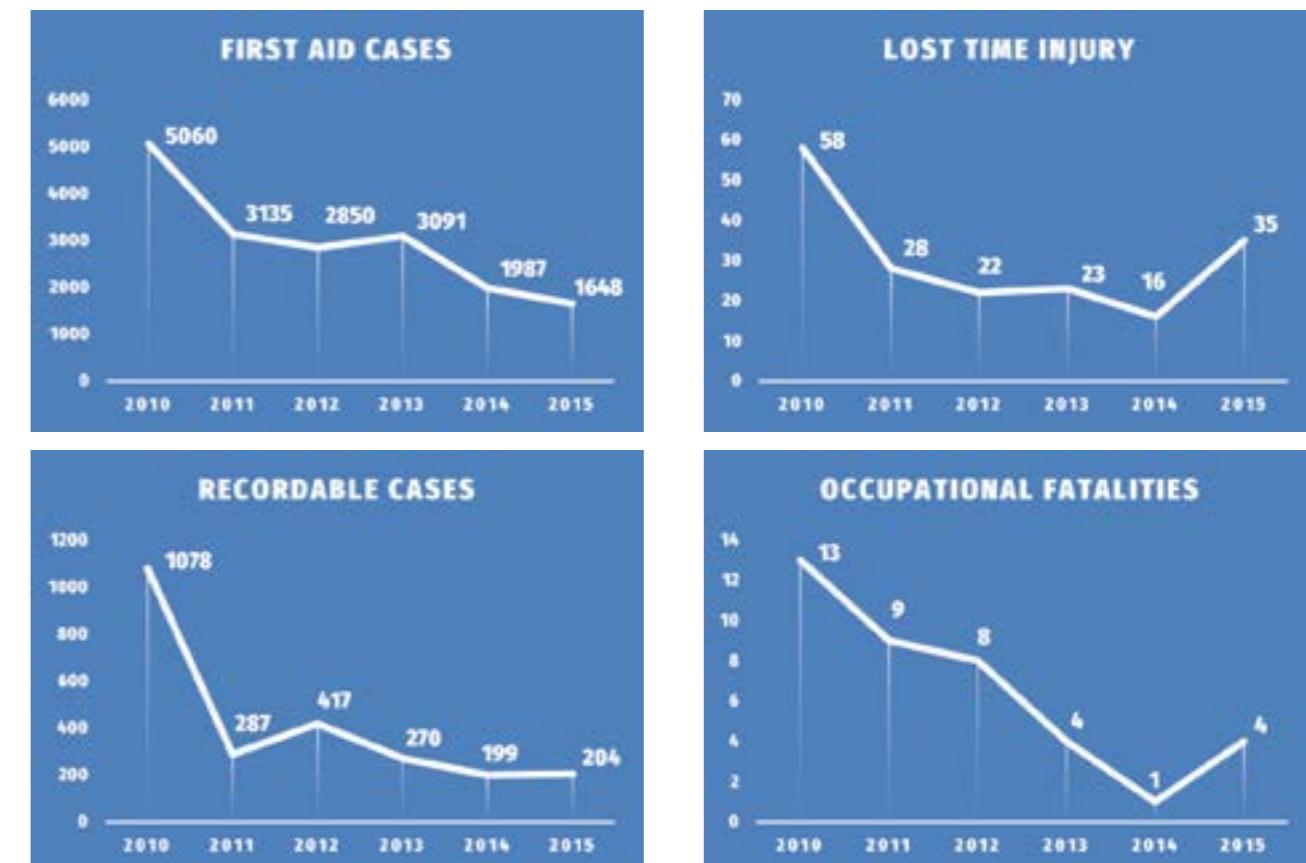
Finally, construction remains a high risk industry that results in the loss of many lives globally every year. At CCC we do our very best to avoid any work related deaths, injuries and cases of ill health. However, though we have ultimate responsibility incidents beyond our control do occur.

In 2015, 4 (four) work related occupational fatalities occurred. Lessons were learned and procedural reviews took place after these incidents occurred so as to avoid such accidents in the future.

### Leading HSE Indicators

DESCRIPTION	TOTAL
HSE Training Man-hours	1,311,818
Safety Meeting	8,804
Percentage of Projects Achieved HSE Training Target	66.7%
HSE Audits	19
Incident Investigation	17
Near Miss Reports	14,404
Installation Vehicle Monitoring System (IVMS)	4,130 (out of 5,848)

### Lagging HSE Indicators



# A Proactive HSE Strategy

CCC's HSE Group applies a proactive approach in building and maintaining a strong culture of safety that inspires employees and management to safeguard their well-being and avoid accidents. Our committed team closely examines CCC's Health and Safety records and coordinates schemes to foster the integration of safety across all levels.

CCC's HSE approach includes:

## 1. Training

**37 Courses provided  
1,069 Attendees**

A wide range of training courses is conducted to promote safety practices among employees.

Some examples are:

- NEBOSH Training and Examination
- OSHA for Construction
- Senior Safety Workshops
- HSE Officer Orientation
- Project HSE Managers Induction
- Defensive Driving

## 2. Health and Safety Assessments

**197,167 Inspections**

These reviews aim to ensure full compliance with HSE management standards and policies.



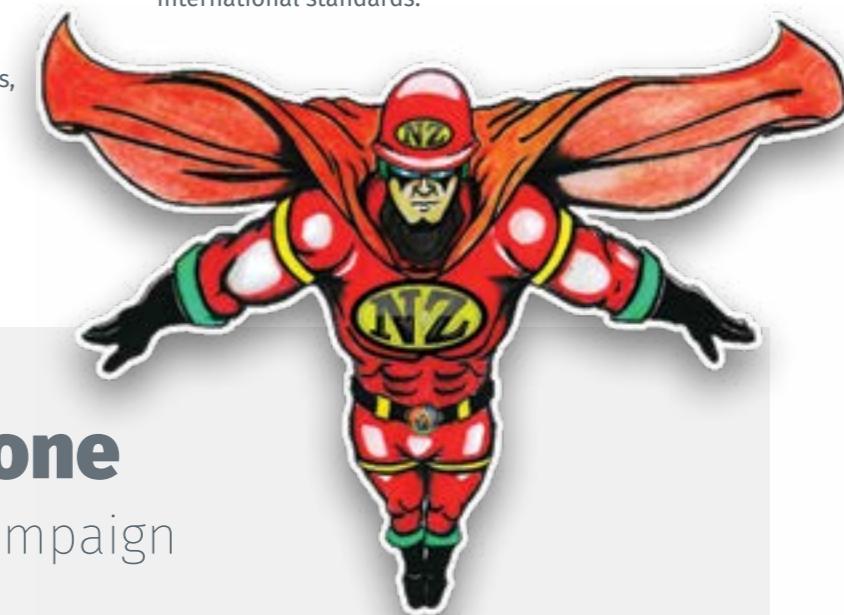
# Focus on Occupational Health

As Occupational Health (OH) continues to be a main concern, efforts were intensified. In 2014, a Health Policy was composed to foster a "Culture of Health". This concept focuses on creating a working environment where employees' health and safety are valued and driven through workplace health programs, procedures and benefits.

We promote employees' wellness through health prevention initiatives such as: hygiene inspections, first aid training and medical equipment checks. This is done so as to ensure that any equipment necessary for occupational health is in excellent working order. We have also enhanced pre & post-employment medical screening procedures so that all employees have a valid "Medical Fitness to Work" certificate at all times. We aim to have all employees with chronic medical conditions (arterial hypertension, diabetes mellitus & others) and those in sensitive trades (drivers, crane operators and others) undergo medical screenings every six months.

**We closely monitor Global Disease Epidemics and issue appropriate Health Alerts to guide employees in preventing infections.**

In 2015, further awareness was raised about OH during trainings and project visits in UAE, Oman, Jordan, Qatar and Kazakhstan. Also, a detailed manual was designed to guide HSE managers and supervisors in managing OH matters. In conclusion, following increasing demand from major clients a detailed OH management plan was prepared to enable CCC projects achieve full compliance with international standards.



## Captain No Zone

### Safety Awareness Campaign



A great challenge in safety is to communicate the correct message and ensure it is understood accurately. Considering this, a "Safety-Super Hero" was developed to improve awareness and urge CCC employees to think about safety. **"Captain No-Zone"** effectively draws employees' attention to control measures, safety barriers and fully understanding the task. This construction super hero emphasizes important HSE themes such as unsafe conditions and work accidents. On a monthly basis, a new adventure of "Captain No-Zone" is distributed, translated in several languages.



# Human Rights

Everyday CCC's global manpower population spanning across five continents and stemming from 84 nationalities work side by side in harmony to deliver mega projects. While going about our impressive work achievements we never lose sight of our enduring promise to uphold and respect human rights.

CCC continuously embraces key human rights principles regarding work ethics and we are dedicated to developing and nurturing a culture of respect, diversity and equal opportunities. We consider these principles of paramount importance to everyday life and business.

CCC's respect towards the protection of internationally proclaimed human rights includes, among others:

- Upholding the United Nations Universal Declaration of Human Rights (UDHR)
- Adopting of the United Nation's Global Compact principles
- Conforming to all the local employment and labour laws
- Adhering to stringent OH&S directives and procedures tailored to our projects
- Promoting diversity and fair employment opportunities



**At CCC we respect our people's dignity, value their welfare and promote fair treatment based on merit.**

## Fostering Human Rights Awareness within CCC

- Every year more than 10,000 employees are trained on issues related to ethics and human rights.
- A Human Rights virtual knowledge community was set up to share timely insights and experiences, generating interest among 2,000 active users.

# Human Rights in Action

In recent years, there has been increased international interest on workers' human rights and labor practices in the Gulf States particularly for contractors. Already, certain countries such as UAE and Qatar are providing guidance and legal frameworks for companies to review adherence to human rights and give this matter the attention it deserves. A responsible and human rights conscious company like CCC can only benefit from an increased global awareness of the relevant practices among contractors.

As a devoted upholder of the UN Universal Declaration of Human Rights (UDHR) CCC strives to offer its workforce with favorable working conditions at all camp locations and sites.

## Mess Halls

We place great significance on the wellbeing of our workers and take meticulous consideration of all health safety aspects such as food hygiene preparation and storage. At projects in UAE, Qatar and KSA, to ensure our workers receive the best care and welfare, we implement strict rules and perform controls to guarantee that these are adhered. Our kitchens also cater to the various dietary habits of our multicultural workforce. CCC's unyielding commitment to provide high quality food and hygiene services at messing facilities was recognized in Qatar. CCC along with 25 other companies working under the Mesaieed Industrial City participated in the Qatar Petroleum Annual Food Safety & Hygiene Awareness Session organized by the prestigious local petroleum company. CCC was awarded a "Certificate of Appreciation for compliance & excellent execution of food safety/hygiene regulations in 2014"

## Screening Business Partners

The responsibility of an organization to respect human rights extends beyond the narrow framework of its own employees. On many occasions, in our capacity as main contractor we employ a large number of specialized contractors which in turn employ further subcontractors. This process results in a heightened need for due diligence in human rights practices. We are currently allocating increased materiality on monitoring our subcontractors' respect towards human rights. A prime example showcased as a best practice is the MTB project at Abu Dhabi, described below:

All workers on this project must be accommodated in camps that meet or exceed the requirements set in UAE Cabinet Decision No.13/2009 (General Standards Manual for Group Labor Accommodation). A directive protecting worker's rights and improving accommodation. Compliance is mandatory among all contractors, subcontractors and suppliers. Requirements are included in the contractual documents so that every party involved is fully aware of the relevant standards prior to joining. All contractors/subcontractors must demonstrate compliance prior to mobilization through the submission of inspection reports supported with evidence, such as photos. This is then followed up by further inspections and auditing by CCC (being part of the main contracting team). On average, CCC conducts one audit per camp per subcontractor per month. Regular assessments are carried out to ensure that the same level of compliance is maintained at all times. Companies who fail to comply with the requirements are penalized and a relevant sum is withheld from their monthly progress payments.

# Human Resources

Over our more than 60 yearlong existence, we have built a geographically diverse presence in 37 countries. This unique position allows us to benefit from growth in emerging markets whilst maintaining solid positions in established enterprises around the world. An intrinsic factor in this success is the human element that has been at the forefront of our values and practices since day one.

During 2014 and 2015 an increased effort was carried out to accumulate and present the statistics

## Our Global Workforce

CCC's year-end 2015 global workforce was 156,000 personnel, of which, 113,000 are directly employed by CCC and 43,000 are contracted workers through subcontractors.

In 2015 our workforce grew by 8.6%, this increase is mainly reflected through:

- A rise of 3% in the daily skilled staff
- A reduction of 1% in management
- A rise of 2% in commercial staff and daily unskilled staff

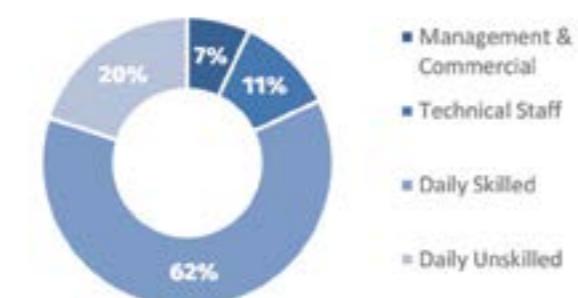
The below five countries comprise 76% of CCC's total workforce. A number projected to rise in the coming years with new hires due to projects being awarded in those areas.

**Our staff is CCC's greatest asset.**

pertaining to CCC's workforce dynamics. While we are proud with the ground we have covered so far, we recognize that more work is required from our part to record and disclose additional data reflecting key areas such as employees' nationality, age groups and turnover.

The distribution of workforce per job field for 2015 is shown below:

### Employees by Job Function



### Top 5 Areas - Manpower





## Promoting Arab Youth Employment

CCC is supporting an initiative led by the World Economic Forum to create an enabling environment in which young people can fulfil their professional aspirations.

With more than half of its population under 25 years of age and the world's highest unemployment rate, the MENA region faces critical challenges that need to be addressed. The World Economic Forum through the Arab Youth Employment Initiative engages leaders from business, government, civil society and academia to identify the reasons and potential solutions for youth unemployment and skill gaps in the region. The initiative adopts a holistic approach by involving numerous stakeholders, building on existing individual or collaborative efforts and promoting a mutual understanding between all involved parties.

At CCC we believe it is a business imperative for companies to actively contribute towards tackling unemployment and building talent for today's as well as tomorrow's labour market. The Arab Youth Employment initiative provides an ideal platform to help business leaders foster competitive and sustainable economies. CCC has committed to create employment opportunities for 2,000 youth and offer them on-the-job training. In partnership with, public sector organizations, international agencies and civil society CCC is developing vocational training centres in seven countries to train youth in the construction related fields.

**CCC plans to create 2,000 employment opportunities in partnership with the World Economic Forum.**



## Community Vocational Training

Vocational Training Centers have been a long standing practice for CCC, reaffirming our commitment to strengthen local employment and develop local know-how. For years now, CCC has been setting up industry specific training centers in countries where we operate such as Jordan, Oman, KSA, China and Turkmenistan. The target being to foster advanced technical skills among the local workforce and build a competent manpower for our projects.

CCC, in partnership with the Vocational Training Corporation of Jordan, has designed and delivered an integrated Health, Safety and Environmental program under the auspices of the Hasib Sabbagh Academy (HSA). The "Occupational Health and Safety" program promotes the vision of workplace safety and improves graduates' employability prospects with CCC and other companies. The rigorous 2 year course aims to provide Jordanians and other nationals of the region with high-quality professional training in an enhanced learning environment comprised of qualified instructors and modern facilities.

### Occupational Health and Safety Program

#### Hasib Sabbagh Academy

- Duration: 2 years
- Start: 2014
- Completion: 2016
- Student Capacity: 30
- Curricula: OSHA Standards, Market-driven (targeting industry entry-level positions)

The HSA undertakes various responsibilities such as:

- Training and development of instructors
- Preparing course outline
- Directing program accreditation and assessment
- Developing partnerships within the construction industry
- Raising public awareness for the training program

The Hasib Sabbagh Academy has been accredited as a certified training facility by City and Guilds, an international institution setting global standards for skills and learning. This endorsement brings added value to the qualifications of the Academy's graduates. Our objective is to constantly improve the vocational trainings delivered by HSA and use all experience gained as a best practice example to enhance vocational training schemes in other countries.



**During 2014 and 2015 more than 400 trainees have graduated from CCC's vocational training centers in Oman and Jordan.**



## Training and Development

A key element in achieving CCC's strategic objectives is to maintain a highly trained, competent and motivated workforce that will strive to succeed in terms of their own development and that of the company. To achieve this, CCC focuses largely on training and development programs which enhance employees' abilities to conduct their job requirements, ensure their growth as individuals and reinforce CCC's commitment to them.

Our Training and Development (T&D) department continuously oversees the career development of CCC employees and ensures that each level and specialization receives the appropriate training in

**We continue to strive towards the premise that a cornerstone of CCC's strategy is the training and development of our people.**

order to perform effectively and enhance employee career paths. We have always regarded training of utmost importance for the development of our staff. Qualified experts and certified CCC instructors hold extensive training workshops on a regular basis, making them readily available for employees.

## Technical and Project Management Training

This scheme is an in-house learning experience focusing on mechanical, civil and project management topics as well as overall business expertise. The specializations offered respond to project needs and aim to increase employee performance. Also, the project management programs conducted are endorsed by the reputable Project Management Institute as CCC is a Registered Education Provider (R.E.P.)

### CIVIL

Advanced Concrete Issues  
Bridges Engineering & Construction  
Civil Engineering Fundamentals  
Dewatering And Soil Improvement  
Formwork In Construction  
High-Rise Buildings  
Roads Engineering & Construction  
Special Topics & Lessons Learned (Civil)  
"Super" High-Rise Buildings & Strct Sys.

### MECHANICAL

Piping Control Using Talisman  
Commissioning  
Cranes, Rigging, & Heavy Lift  
The World Of Pipelines  
Erection & Welding Of Piping Works  
Fabrication & Welding  
Hydro-Testing & Pre-Commissioning  
Special Topics & Lessons Learned (Mech)  
Structural Steel  
Pmv Best Practices (Utiliz. & Selection)

### UPCOMING PROGRAMS

Advanced Planning & Scheduling  
Productivity Enhancement In Const.  
Modularization In Construction  
Stakeholders Management  
Technical English Skills For Engineers

### CCC's Technical and Project Management Training:

- 1, 000 Attendees per year
- 50 Courses
- 12 Countries

Listed below are the training courses held under CCC's Technical and Project Management training:

### PROJECT MGT/BUSINESS

Accounting For Non Accountants  
Adv. Presentation & Powerpoint Skills  
Advocacy & Influence  
Audit & Fraud Investigation  
Claims & Management Of Claims  
Construction Planning & Scheduling  
Contracts Change Mgt & Impacts  
Cost Management (Fundamentals)  
Cost Mgt (Est, Budget & Cost Controls)  
Csr, Ethics, & Anti-Corruption  
Green Buildings Stndrds (Gsas, Leed, ...)  
Hr Essential Skills Management  
Insurance Issues In Construction  
Intro To Construction Contracts  
Leed Ap Certification Exam Prep.  
Monthly Technical Brown Bag Lunch  
Osha Construction Safety-10 Hours  
Pmp Exam Prep Accelerated Review  
Procurement Management  
Project Mgt Prof. (Pmp) Exam Review  
Quality Management  
Risk Mgt Prof. (Rmp) Exam Review  
Risk Management  
Safety Leadership & Incident Invest.  
Six Sigma & Lean Const. Practices  
Value Engineering

## Building CCC's Talent

Developing CCC's future leaders, preparing employees for higher positions and producing a core of high achieving personnel are important priorities for us. CCC conducts tailored training programs to groom employees for key positions. In collaboration with leading external partners such as INSEAD, Hay Group and University of Texas we have designed a number of training programs to build and maintain a talent pool in CCC. These programs provide participants with the necessary individual coaching, mentoring, development, support and challenge all within CCC's highly diversified working environment.

**A 2 week specialized training scheme is held for high potential candidates to nurture skills necessary for their future careers.**

A list of our programs is below:

- High Fliers and Succession Program
- Professional Development Program
- Graduate under Development (GUD) Program
- Discipline Leaders Program

## Sustainability Education

A knowledge framework is being established to promote greater sustainability consciousness, drive behavior change among CCC employees and provide them with valuable skills.

**Enhancing employees' sustainability knowledge and skills is essential in achieving CCC's goals.**

## Webinars

To accommodate CCC's geographic span with a view of omnipresent dissemination, there has been an increased use of webinars. The webinars are unique training opportunities, aligned with CCC's commitment to sustainability. During the webinars, market leading experts share exclusively with CCC their insights on sustainable solutions related to the construction industry. Interaction between the presenter and the audience is a key element so after each presentation, a live question and answer session follows. All webinars are recorded and upon completion posted online on CCC's Knowledge Management platform "Fanous" for all interested users to analyze and understand the content as thoroughly as possible.



So far, the below topics have been presented:

- Solar Heating and Energy Efficiency
- Wastewater Treatment Plants
- Waste to Energy Systems
- Photovoltaic Energy Systems
- Water Conservation Solutions

## Awareness Campaign

To maintain the Sustainability momentum high within CCC, sustainability awareness posters were created featuring the CCC Sustainability mascot SUSTAINO. The posters emphasize the popular slogan of the Paris Climate Change Summit 2015 "There is no Planet B" and cover themes such as energy, water and waste. Posters are available in various languages: Arabic, Hindi, Urdu, French, Kazakh and Russian. They have been printed on recycled paper and are being displayed throughout CCC's area offices, projects and camps.



## Developing Sustainability Experts

Training in sustainability standards and green building is high on our agenda. We diligently encourage employees to acquire state of the art expertise related to the sustainability of the built environment. Our employees traditionally pursue the below qualifications:

- Green Building Certification LEED by USGBC
- Pearl Qualified Professional (PQP) by Abu Dhabi Urban Planning Council.
- Global Sustainability Assessment System (GSAS) by Gulf Organization for Research and Development.

**In 2015 alone, a 177% increase of CCC employees accredited by leading green building institutions was recorded.**

## HUMAN RESOURCES

### Women Representation in CCC

We aim to expand employment opportunities for women in CCC as we realise the value this creates in maintaining CCC's diverse workforce culture.

An effort was made throughout 2015 and 2014 to tabulate and present concise female/male statistics in terms of how our workforce is comprised. In the future, we aim to improve our process in order to grasp how women representation features in terms of training, recruitment and job level.

#### Composition of Women Employment per Region

INTERNATIONAL	MIDDLE EAST	EUROPE
18%	12.3%	33%

In the past, CCC's co-founder Mr. Said Khoury send a clear message on how women should in the future play a stronger than their current role in

#### Interviews:

##### Dana Mahboobeh

**Joined CCC in:** May 2013, **Title:** Sustainability Engineer, **Department:** HSE  
**Project:** APM Head House Phase1. **Location:** Abu Dhabi - UAE

- **What attracted you to join CCC?**

*CCC is one of the top 25 contractors in the world with a highly reputable international standing that takes on outstanding project awards.*

- **What have you been involved in during your presence in CCC?**

*Initially, I worked as an Environmental Engineer on the MTB project. Currently, being an Estidama Pearl Qualified Professional, my responsibilities cover all the duties of a Sustainability and Environmental Engineer.*

- **What knowledge, skills and experience have you gained?**

*These range from time management to problem solution and teamwork skills. I also learnt how to handle third party environmental audits while simultaneously expanding my personal sustainability expertise.*

- **Can you give a personal example of sustainability in your department?**

*At APM project we procured energy efficient AC units for the temporary site offices as well as high efficiency, low water use fixtures. Also, we placed*

our organization. In the present cultural context of the countries where our main operations are centered, the answer to the question of women's representation in our staff is not a straightforward one. Additionally, the technical nature of our industry in conjunction with the harsh and sometimes dangerous working environment inherent to our business limits the possibility of increased female presence in our staff list.

Currently, CCC seeks to focus on the propagation of young female talent in a variety of sectors and scopes of work. Seeing that the Middle Eastern region has adapted to women being introduced to the workplace in a multitude of areas, we are aiming to increasingly integrate young female university graduates through training schemes, job placements and ongoing career development.

In light of this, we would like to present the viewpoint of two CCC female employees.

*"Switch Off...Save Energy" stickers next to the lights switches in the site offices to encourage colleagues to save energy.*

- **How can CCC improve and become more sustainable?**

*One idea is to increase sustainability training opportunities for CCC staff around the world. Another is to conduct competitions between CCC projects to encourage staff to come up with ideas and initiatives that would help the company become more sustainable.*

- **What is your message about sustainability and gender equality in the region and industry?**

*The construction industry still has a traditional gender split, however I'm one of three women in our project. The importance of gender equality and women's empowerment in achieving sustainable development has been increasingly recognized in recent decades. In the UAE, women, both nationals and expatriates, are a significant part of the country's workforce and contribute to its economy. For women to thrive in business, the UAE is certainly one of the best places in the world to be.*

##### Abeer Afshi

**Joined CCC in:** Sept 2014, **Title:** Sr. Sustainability Administrator, **Department:** Sustainability  
**Project:** Rivadh Metro Project. **Location:** Rivadh Saudi Arabia

- **What attracted you to join CCC?**

*Apart from CCC's leading construction position, during my application and interaction with CCC management, I saw plenty of opportunities to contribute whilst developing my personal and professional skills. Being a Saudi woman eager to emphasize the importance of increasing female participation in the workspace was an important factor in influencing my decision to join CCC.*

- **What have you been involved in during your presence in CCC?**

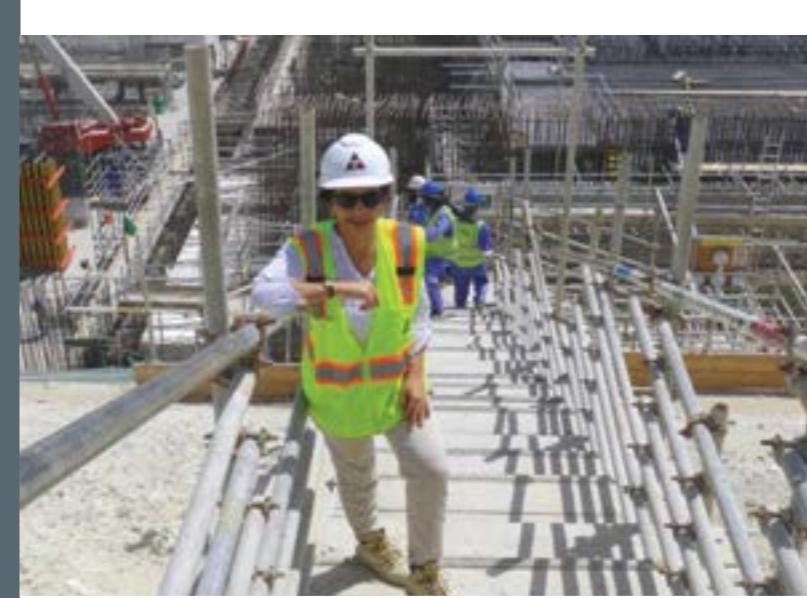
*I am responsible for coordinating a wide range of activities related to LEED requirements as well as organizing sustainability awareness campaigns and training programs. Also, as a Stewardship Committee member I participate in community-based programs, led by local NGO INJAZ.*

- **What knowledge, skills and experience have you gained?**

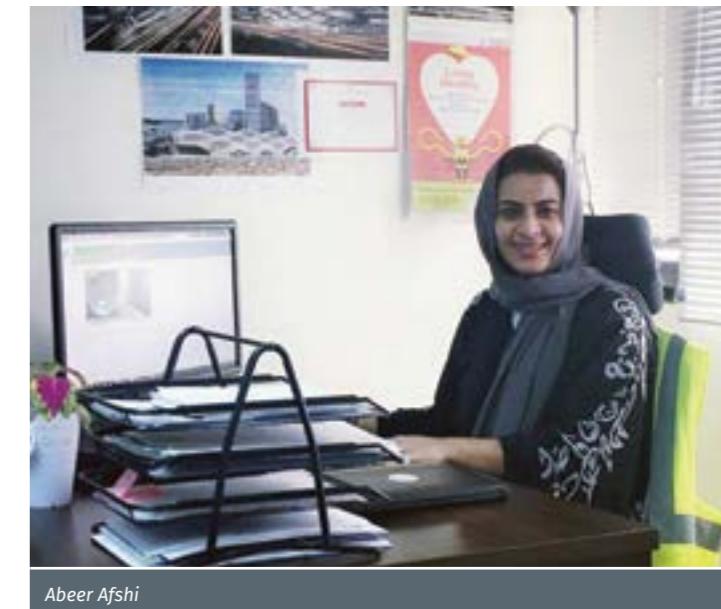
*Besides advancing my interpersonal skills, I have gained greater background knowledge about Green Building standards (especially LEED) and generally the technical aspects of sustainability.*

- **Can you give a personal example of sustainability in your department?**

*Our department initiated a "No-printing policy" to increase reliance on digital documents. As part of this, other departments were encouraged to "go paperless" at least once a week.*



Dana Mahboobeh



Abeer Afshi



Abu Dhabi, UAE, Rub Al Khali Desert Falcon

# Governance

CCC is governed under the direction of the Board of Directors who act in the best interest of the company and its stakeholders. CCC's family ownership and commitment to the Group creates enduring value and safeguards the legacy, reputation and profitability of our organization. Our "Core Values, Guiding Principles and Code of Practice" direct that all company activities must be performed with honesty, integrity and full compliance with the law. The risk management strategy we apply enhances our corporate governance by strengthening our Board's oversight and improving overall decision making. Above all, we maintain a strong ethical framework with zero tolerance to bribery and corruption.

# Risk Management

## Corporate Structure

CCC's organizational structure is defined through the Board of Directors which is the company's supreme governing body. Adhering to the principles of sound corporate governance, the Board oversees the Group's organisation and management of business. CCC's Board members serve as trustees and custodians of the company's assets and with their strategic decisions ensure the development and continuous growth of CCC's services, markets and finances.

We strongly believe that sound corporate governance significantly impacts a company's long term success and is pivotal for good business prospects.

CCC has grown to become a pioneer in the international construction and engineering arena. To maintain our leading position in this industry which ranks high in terms of volatility and change we recognize that risk management is key in preserving our success.

CCC, like any other business, faces risks every day but instead of trying to avoid them, we strive to mitigate impacts and explore opportunities. We have adopted a forward looking approach to risk management, with a focus on being proactive rather than merely reactive so as to drive CCC's competitive advantages and sustain our corporate profitability and growth. Our applied risk management system derives from established industry best practices (including the ISO 31000:2009 guidelines) tailored to CCC's specific needs.

During the years 2014 and 2015, we continued to enhance our risk management framework. A meticulous process was followed to identify and compile all corporate and project risks in order to understand and manage them. For project risk analysis, we continue to concentrate on project objectives, which typically include cost, schedule and quality, whereas for corporate risk, we look at the overall impact on corporate goals including strategic, financial, operational and compliance

CCC has developed **iRisk** and the **Risk Executive Dashboard** as systems that not only boost business intelligence but also drive continuous improvement for the company as a whole.

objectives. Regular workshops are conducted with CCC's senior management and project directors to review the top risks that could affect CCC's operations. The risk priority ratings assigned are always revalidated with executive management before further analysis is carried out and mitigation plans proposed.

To track our progress and measure the level of risk, we developed a number of KRIs (Key Risk Indicators). We invested significant IT resources to develop a dedicated executive dashboard which simplifies tracking these key risk indicators at the corporate level. In addition, our risk toolkit includes our own iRisk software which tracks the risk register for individual projects. These tools ensure consistency of tracking and reporting, and allow us to embed both qualitative and quantitative risk analysis into our operational management cycle.



## Corporate Values

Since its founding, CCC has experienced steady expansion in both numerical and geographical terms. Our corporate culture has evolved over the years and is defined by an uncompromising commitment to CCC's "Core Values, Guiding Principles and Code of Practice".

CCC's core values include:

- Safety, health and environmental protection.
- Quality of work
- Responsibility and accountability
- Recognition of others in the achievement of corporate goals
- Respect for local cultural issues on all its projects
- Ethical behavior, integrity, honesty and fairness
- Sustainability and planning for the long-term good of the company, employees and the local communities where projects are located

Encompassing the fundamental elements of CCC's family culture and the ten principles of the UN Global Compact, our core values outline the way we conduct ourselves and make decisions. They describe how all CCC employees are expected

We trust that faithful adherence to our Core Values ensures CCC's profitable growth and value creation for the communities we serve.

to perform their day to day business duties, in line with the highest standards of personal and professionally integrity. Clearly communicating the correct and ethical behaviors all employees should follow, our values ensure that CCC operates in a responsible and legitimate manner.

CCC's "Core Values, Guiding Principles and Code of Practice" booklet was republished in 2014 and distributed to all CCC locations. It is available in English and Arabic while it can also be downloaded from CCC's website. Throughout our operations and projects, all employees must read the "Core Values, Guiding Principles and Code of Practice" and adhere to the practices it presents.

"A ship is safe in harbor, but that's not what ships are for."  
William G.T. Shedd



# Ethics & Anti-Corruption

Honesty, integrity and family values have always been the backbone of our Code of Practice and the basis of our successful operation that led us to where we are today.

CCC maintains its commitment of zero tolerance for corruption, bribery or any unethical behavior.

## Ethics & Anti-Corruption Program (our EACP)

To maintain CCC's ethical foundation that was inherited to us by our Founders, ethics compliance has always been on top of our operational agenda. Bearing this, in 2008 our Corporate Ethics Compliance Department (CECD) introduced the company's Ethics & Anti-Corruption Program (EACP) which became a mandatory policy applicable to all CCC's operational areas and respective projects. Since the original version of EACP (Rev. 1) was launched in 2008, anti-corruption and bribery laws and legislations changed and became more stringent. To maintain the currency and compliance of our program with the global standards, the EACP was further revised in mid-2014 (Rev. 2) to cater for changes and updates that by then fell short from

being up-to-date. Our EACP has specific clauses that require senior managers and staff in positions of authority to sign different commitments and declarations confirming their full compliance with the terms and directives of the Program. These declarations are updated periodically and filed as detailed in the clauses of EACP.

As a final statement on behalf of CCC's top management, implementation of the EACP is mandatory to all the areas, projects, employees and related parties who should all adhere to the strict compliance and enforcement of its terms and directives. The Group is committed to take all necessary actions to deter these unlawful activities and to apply strict disciplinary actions as applicable.

CCC's commitment to battle corruption is reflected through our support towards the below:

- UN Convention Against Corruption
- UN Global Compact Principle 10
- World Economic Forum-Partnering Against Corruption Initiative (PACI) Principles
- Transparency International-Business Principles for Countering Bribery
- Pearl Initiative



Workshop in Saudi Arabia



Workshop in UAE

## Communication and Training

In 2014 and 2015, we further intensified the anti-corruption training workshops for our employees and particularly senior staff holding positions of authority in various CCC locations. These workshops covered awareness and training specifically related to the details and compliance toward the CCC's Ethics & Anti-Corruption Program. During these sessions, approximately 300 CCC senior employees based in UAE, Qatar, Saudi Arabia, Jordan, Palestine and Greece were trained by a certified Ethics & Anti-Corruption Trainer and successfully completed the training program.

Considering the fact that the CCC's Ethics Compliance Department has a mandate to expose and educate the maximum possible number of staff on the content of our EACP, an initiative to develop a bespoke online training program based on an

Almost 300 high-ranking employees participated in CCC's Ethics & Anti-Corruption workshop and 5,500 staff members completed the online training.

e-learning platform was completed and launched in early 2015. The program is bi-lingual, English and Arabic, and is mandatory for all staff at all levels to complete it. New recruits joining CCC must also complete the training as part of their induction program. The online program was distributed to approximately 5,500 employees and participation exceeded 90%. All participants who completed the program have received completion certificates, a copy of which was automatically sent to their personal files held at HR Department.





Lebanon, Cedar Forest

# Community

Since the inception of CCC, the principles of Corporate Social Responsibility were placed at the core of our management values. Our CSR philosophy originated from the Founders' strong belief that CCC should always give back to society and consider stakeholder's interests as being of prime concern.

# Corporate Social Responsibility

In all areas of operation CCC's CSR commitment manifests itself through programs of corporate citizenship ensuring that business decisions balance between contributing to company growth and improving the quality of life for employees, their families, communities and societies at large.

We understand civil society as a partner of paramount importance in our endeavors and form mutually beneficial partnerships with NGO's who guide us and increase the impact of our initiatives.

Effective corporate responsibility is always work in progress as all of CCC's business is. Therefore, we strive to enhance our applied schemes to better align them with our business strategy and sustainability objectives so that we deliver long-term value to our stakeholders.

Globally, we carry out projects focusing on the areas of:

- Supporting Local Communities
- Environmental Responsibility
- Education
- In house programs for CCC Employees

**We never lose sight of the fact that the responsibility of our corporation towards society is ultimately demonstrated by the way we go about performing our main business activities. We strive to ensure that any project we complete positively affects the society and environment around us.**



# CSR International

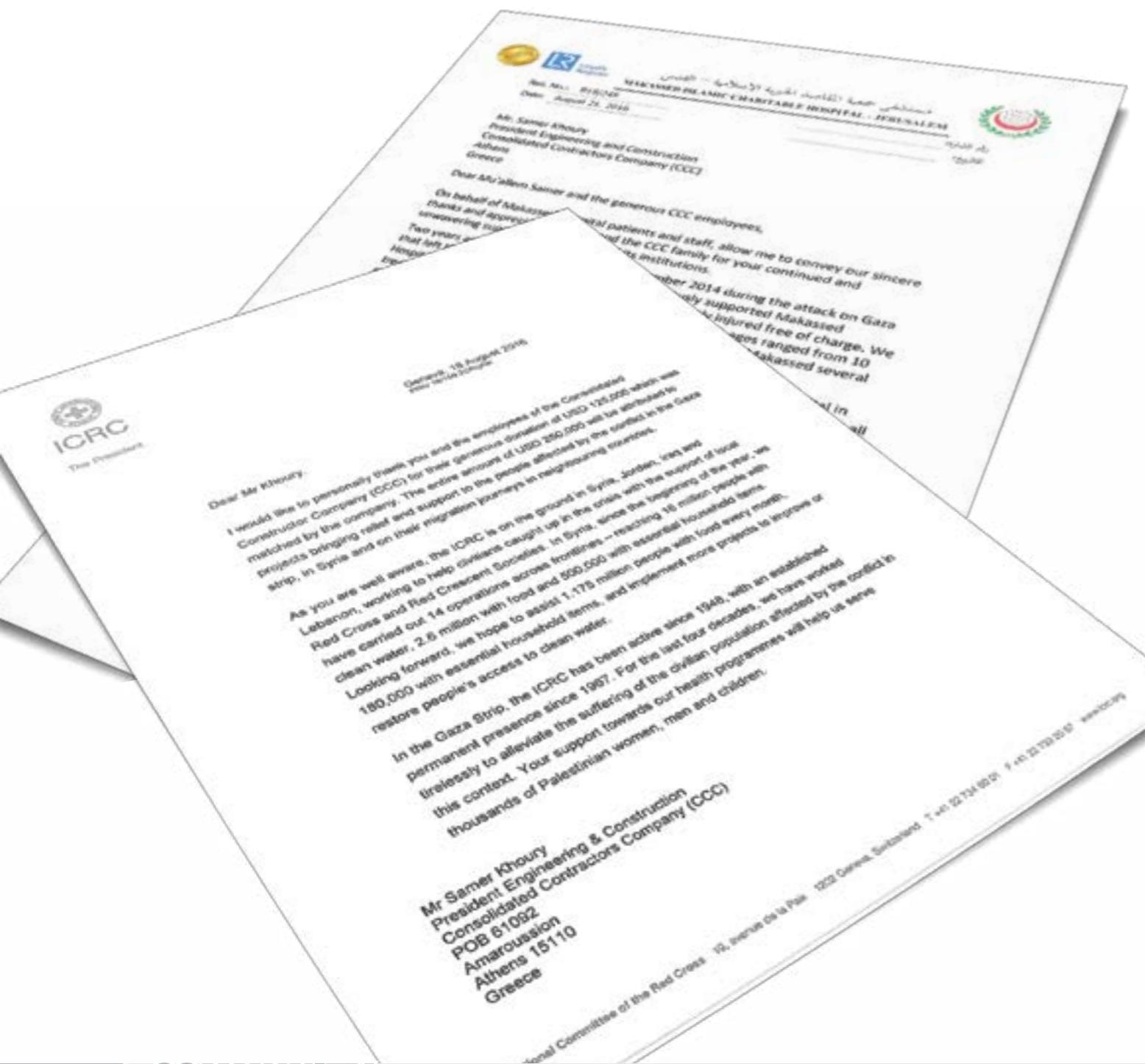
## Highlights

### The Middle East

#### GAZA & SYRIA

Supporting Healthcare in Conflict-affected areas

A humanitarian aid campaign was launched, to help alleviate the suffering of the people of Gaza and the Syrian refugees. CCC Group and employees jointly leveraged resources to support the International Red Cross Committee (IRCC), Al-Makassed Hospital and the United Nations Refugee & Works Agency (UNRWA).



#### EGYPT

First Aid Training

A three-day awareness course organized by the Egyptian Red Crescent was held for CCC employees. Upon completion attendees were given a certificate signifying their achievement.



#### IRAQ

Addressing Poverty and Hunger Issues

CCC distributed non-perishable food packages before the Holy Month of Ramadan to in-need members of the local community.



#### KUWAIT

Beach Clean-up

CCC partnered with the American Society of Safety Engineers (Kuwait Chapter) to clean-up Mahboula Beach.



#### PALESTINE

Providing School Supplies

CCC offered pupils of the southern area and Gaza city school provisions such as bags, notebooks and pencils for the new academic year.



## CSR INTERNATIONAL HIGHLIGHTS

## CSR INTERNATIONAL HIGHLIGHTS

### **QATAR**

Promoting a Diverse and Healthy Culture

Fostering an inclusive work environment and encouraging workers to take care of their physical health is of core-value importance to CCC. Celebrations for a range of religions, cultural and entertaining programs, as well as sport activities are regularly organized.



### **SAUDI ARABIA**

Job Fairs and Career Days

These exciting functions are an opportunity to engage with students and help them learn about the construction industry through hands-on activities and conversations with CCC's professionals.



### **QATAR**

Coastal Clean-up

Under the auspices of industrial cities at Messaeed and Ras Laffan, CCC steadily participates in such campaigns targeting marine life preservation and cleaner oceans.



### **UAE**

Environmental Ambassadors

CCC joined this volunteer network formulated by the Environment Agency- Abu Dhabi to raise awareness about environmental issues. Through community engagement initiatives we are reaching out to the public to address challenges related to climate change, water, energy, and waste.



### **UAE**

Business Innovation Camp

We partnered with the "Innovation and Entrepreneurship Centre" of Abu Dhabi University and the NGO INAZ to conduct a workshop for empowering college students in their final year.



### **UAE**

Caring for People with Special Needs

Al Noor Foundation is a training center providing high quality services to the special needs community in Dubai. CCC generously contributed towards the annual fundraising program "Hope for Children" which in total raised AED 800.000.



### **UAE**

Sustainable Bus Stops

With CCC's technical expertise, university students developed fully functional sustainable bus-stops from reused materials. This inspirational initiative involving the young generation in sustainable development efforts was launched by the Dubai Carbon in collaboration with Dubai Electricity and Water Authority (DEWA).



### **UAE**

"Together for a Better Future" Campaign

Being a member of the Dubai Chamber Sustainability Network, CCC took part in this campaign advocating for a happier workplace for immigrant workers. CCC's labor force participated in various programs: one-to-one mentoring to help quit smoking, financial literacy sessions to effectively manage savings and talent contests.



## CSR INTERNATIONAL HIGHLIGHTS

## CSR INTERNATIONAL HIGHLIGHTS

**Asia****KAZAKHSTAN**

Upgrading Facilities at Children's Institutions

In various cities and villages of Kazakhstan CCC offered furniture and computers to centers for underprivileged children.

**Africa****TANZANIA**

Improving Access to Health Services

"Basic Needs Foundation - Tanzania" is an NGO working to address shortfalls in access to quality healthcare and support for the mentally ill. CCC helped this NGO by donating a vehicle and covering administrative costs.

**Europe****GREECE**

Theater Art for Children

CCC joined forces with local charity association "Friends of the Child" to offer children meaningful theatrical experiences. Such activities encourage reading and help improve academic performance.

**GREECE**

Parenting and Seminars Support Groups

An initiative focusing on the well-being and work-life balance of employees and their families. The informative, thought provoking and interactive sessions comprised of small groups and were directed by established professionals.

**Europe****GREECE**

Response to Refugee Crisis

In light of the ongoing refugee crisis and its profound impact on Greece, CCC partnered with several local NGO's to help with the provision of shelter, food, water and other basic necessities.

**GREECE**

Reforestation in Parnitha Mountain

In the event of UN's International Day of Forests (21st March) CCC employees planted more than 1,000 baby firs at the heart of the Parnitha National Park.

**GREECE**

Students Volunteering Week

The teenage volunteers, undertook a variety of assignments and participated in social awareness events and team building projects. The voluntary work consisted of preparing food baskets, painting and planting trees.





Palestine, Olive Grove



## Bethlehem Development Foundation

A Model for Large Scale  
Community Development  
Intervention

Established by the late Said T. Khoury CCC's Co-founder, the Foundation is the implementation arm of the Bethlehem Development Initiative. Its purpose being to transform Bethlehem into a vibrant international and spiritual destination with a sustainable economy and infrastructure, in order to make it more accommodating to the needs of its current residents, pilgrims and tourists.

**"This initiative shall be planted in the heart of Bethlehem and its roots shall dig deep into the soil permanently reinstating peace and tranquility throughout the land".**

*The Late Said. T. Khoury,  
Founder of BDF*



## Overview

The Bethlehem Development Foundation (BDF) is currently sealing its third year of operation, moving closer to realizing its core vision to regenerate and revitalize the Bethlehem Governorate into a vibrant international destination. Since its establishment in May 2012, the Bethlehem Development Foundation has been keen on achieving its mission to create a sustainable economy and infrastructure for Bethlehem, enabling this Holy City to sparkle as a peaceful beacon and unique spiritual center for the world for pilgrims.



Throughout 2014 and 2015, BDF has utilized great efforts to build fruitful cooperation bridges with local governmental units, donor agencies and international bodies. The Foundation is constantly progressing through three identified set tracks; private sector investments, public infrastructure projects and philanthropic schemes. The objective is to realize our goals of achieving a pipeline of sustainable projects to enable further economic growth, development and prosperity throughout the Governorate.



## Highlights

### Church of Nativity in Bethlehem City

First phase of the restoration works are advancing. Currently, BDF is managing the wall mosaic and plaster works through the donation of the Arab Fund for Economic and Social Development (AFESD).



### Manger Square

Entire square and all facades and roofs of nearby municipal buildings have undergone vast enhancements in terms of restoration, landscaping, greening and lighting. The square's revitalization includes decorating surroundings during Christmas season.



# Highlights

## Omar Ibn Al-Khattab Mosque

Restoration works have improved the state of the restrooms and utilities, made possible through donation from CCC employees and Bank of Palestine.



## Community Sports Centers and Playgrounds

Open spaces are being developed for the Cities of Doha, Beit Jala, Beit Sahour and Al Khader/ Artas area, through the Said Khoury Donation to Bethlehem Governorate.

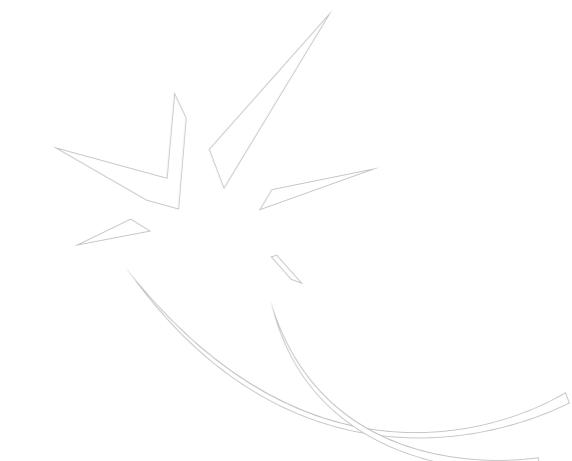


## Solid Waste Management Project

This project (donated by the Arab Monetary Fund) for the Bethlehem Governorate is currently in progress. The master plan until year 2034 is complete, construction of the Central Maintenance/ Administration Facility is concluded, solid waste vehicles have been procured and supply contracts are in place for the importation of collection containers.

## Solid Waste Awareness Campaigns

To improve citizen behavior in relation to garbage disposal awareness campaigns entitled "Towards a cleaner and more beautiful environment in the Bethlehem Governorate" were conducted.



# Highlights

## Raising Public Awareness around BDF

A showcase was created to introduce and promote the BDF vision, endeavors and future projects. The Chairman of the Board of Trustees Mr. Samer S. Khoury, President Engineering and Construction of Consolidated Contractors Group, opened the BDF Exhibition donated by the Bank of Palestine in their regional headquarters.



## Athletic, Cultural and Religious Activities

Further to the Christmas celebrations (decorations, parade and carol signing) BDF consistently sponsors various other occasions such as marathon races and art festivals.



## Engaging with Local Governmental and Business Institutions

BDF participates in workshops and committees addressing issues such as: tourism, local economy, employment for people with special needs, transportation and urban planning.

# Appendix I

## GRI Content Index



Our report has been prepared "in accordance" with GRI's G4 Sustainability Reporting Guidelines 'Core option'. The below Content Index indicates the reported disclosures, the location of information in this report and if external assurance has been sought. Embracing a holistic approach towards sustainable development, GRI Indicators have been mapped against relevant UN's Sustainable Development Goals (SDG's).

The Global Reporting Initiative (GRI) is a network-based organization that developed the world's most widely used voluntary sustainability reporting framework. CCC is reporting on the metrics that we consider material. CCC has chosen to voluntarily report on our sustainability performance and has established procedures to track and/or approximate, evaluate and disclose the relevant data.

GENERAL STANDARD DISCLOSURES				
General Standard Disclosures	Location of Disclosure / Direct Answer	Omissions	External Assurance	Disclosure Linkage with Sustainable Development Goals (SDGs)
<b>Strategy and Analysis</b>				
<b>G4-1</b>	p. 4-5, Message from the President Engineering & Construction			
<b>G4-3</b>	p. 6, Group Profile			
<b>G4-4</b>	p. 6-8, Group Profile			
<b>G4-5</b>	p. 9, Group Profile			
<b>G4-6</b>	p. 9, Group Profile			
<b>G4-7</b>	p. 6, Group Profile			
<b>G4-8</b>	p. 7-9, Group Profile p. 12-13, Projects per Segment			
<b>G4-9</b>	p. 10-11, Group Profile: Key Facts & Figures, Financial Highlights			
<b>G4-10</b>	p. 10, Group Profile: Key Facts & Figures p. 68-77, Social: Human Resources			
<b>G4-11</b>	0% CCC advocates constant and effective communication between all levels of staff which is supported by the open channels that are in place. CCC has established rigorous policies and welfare communities defining the living and working conditions of its workforce and ensuring a fair, respectable and equitable working environment.			
<b>G4-12</b>	p. 16, Group Profile: Supply Chain Sustainability			
<b>G4-13</b>	No noteworthy changes			
<b>G4-14</b>	p. 20-27, Environment p. 81, Governance: Risk Management			
<b>G4-15</b>	p. 106, Appendix II			
<b>G4-16</b>	p. 106, Appendix II			
<b>Identified Material Aspects and Boundaries</b>				
<b>G4-17</b>	The sustainability report covers the performance of CCC Group only. Associate companies such as Morganti and National Petroleum Construction Company (NPCC) have been excluded.			
<b>G4-18</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-19</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-20</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-21</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-22</b>	No restatements			
<b>G4-23</b>	No significant changes			
<b>Stakeholder Engagement</b>				
<b>G4-24</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-25</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-26</b>	p. 18-19, About this Report and How to Navigate it			
<b>G4-27</b>	p. 18-19, About this Report and How to Navigate it			

General Standard Disclosures	Location of Disclosure / Direct Answer	Omissions	External Assurance	Disclosure Linkage with Sustainable Development Goals (SDGs)
<b>Report Profile</b>				
<b>G4-28</b>	2014-2015			
<b>G4-29</b>	Issued December 2014			
<b>G4-30</b>	Our reporting cycle is bi-annual			
<b>G4-31</b>	Please share your feedback with Samir Thabet, Sustainability Manager, Email: Sthabet@ccc.ae			
<b>G4-32</b>	<ul style="list-style-type: none"> <li>• G4 Core Guidelines</li> <li>• GRI Content Index</li> <li>• No external assurance was sought for this report</li> </ul>			
<b>G4-33</b>	CCC's Sustainability Report was not reviewed by a third party agency.			
<b>Governance</b>				
<b>G4-34</b>	p. 78-80, Governance: Corporate Structure & Values			
<b>Ethics and Integrity</b>				
<b>G4-56</b>	p. 78-80, Governance: Corporate Structure & Values			
<b>SPECIFIC STANDARD DISCLOSURES</b>				
DMA and Indicators	Location of Disclosure / Direct Answer	Omissions	External Assurance	Disclosure Linkage with Sustainable Development Goals (SDGs)
<b>CATEGORY: Economic</b>				
<b>ASPECT: Economic Performance</b>				
<b>G4-DMA</b>	p. 3, Our Commitment			
<b>G4-EC1</b>	<p>p. 10-11, Group Profile: Key Facts &amp; Figures, Financial Highlights</p> <p>p. 17, Creating Local Value</p> <p>p. 88-93, Community: CSR International Highlights</p> <p>p. 97-101, Community: Bethlehem Development Foundation</p>			<p>2. Zero Hunger - Infrastructure Investments</p> <p>8. Decent Work and Economic Growth - Economic Performance</p>
<b>ASPECT: Market Presence</b>				
<b>G4-DMA</b>	<p>p. 58, Social</p> <p>p. 68-71, Social: Human Resources</p>			
<b>G4-EC5</b>	CCC conducts market analysis and aims to offer remuneration packages which exceed the minimum wage. Data comparing standard entry level wage and local minimum wage are currently unavailable.			The details of CCC's entry level compensation are deemed confidential and therefore not disclosed.
<b>CATEGORY: Environmental</b>				
<b>ASPECT: Materials</b>				
<b>G4-DMA</b>	<p>p. 20, Environment</p> <p>p. 34-35, Environment Materials</p> <p>p. 39-43, Environment: Sustainability Initiatives</p>			
<b>G4-EN1</b>	p. 34-35, Environment Materials			
<b>G4-EN2</b>	<p>p. 34-35, Environment Materials</p> <p>p. 39, 43, Environment: Sustainability Initiatives</p> <p>p. 50-57, Green Construction &amp; Projects</p>			<p>8. Decent Work and Economic Growth - Materials Efficiency</p> <p>12. Responsible Consumption and Production - Materials Efficiency/recycling</p>
<b>ASPECT: Energy</b>				
<b>G4-DMA</b>	<p>p. 20, Environment</p> <p>p. 22-27, Environment: Energy Efficiency &amp; CO<sub>2</sub> Emissions</p> <p>p. 39-43, Environment: Sustainability Initiatives</p>			
<b>G4-EN3</b>	p. 22-27, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			
<b>G4-EN4</b>	p. 22-27, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			
<b>G4-EN5</b>	p. 22-23, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			
<b>G4-EN6</b>	<p>p. 22-23, Environment: Energy Efficiency &amp; CO<sub>2</sub> Emissions</p> <p>p. 39-42, Environment: Sustainability Initiatives</p> <p>p. 50-57, Green Construction &amp; Projects</p>			<p>7. Affordable and Clean Energy - Energy Efficiency</p> <p>8. Decent Work and Economic Growth - Energy Efficiency</p> <p>12. Responsible Consumption and Production - Energy Efficiency</p> <p>13. Climate Action - Energy Efficiency</p>

SPECIFIC STANDARD DISCLOSURES				
DMA and Indicators	Page Number, Location / Direct Answer	Omissions	External Assurance	Disclosure Linkage with Sustainable Development Goals (SDGs)
<b>ASPECT: Water</b>				
G4-DMA	p. 20, Environment p. 28-29, Environment: Water & Wastewater Management p. 39-43, Environment: Sustainability Initiatives			
G4-EN8	p. 28-29, Environment: Water & Wastewater Management			
G4-EN10	p. 28-29, Environment: Water & Wastewater Management p. 39, 43, Environment: Sustainability Initiatives p. 50-57, Green Construction & Projects			<b>6.</b> Clean Water and Sanitation - Water Recycling and Reuse <b>12.</b> Responsible Consumption and Production - Water efficiency
<b>ASPECT: Biodiversity</b>				
G4-DMA	p. 20, Environment p. 36-37, Environment: Biodiversity			
G4-EN12	p. 36-37, Environment: Biodiversity			<b>15.</b> Life on Land - Natural Habitat Degradation
<b>ASPECT: Emissions</b>				
G4-DMA	p. 20, Environment p. 22-27, Environment: Energy Efficiency & CO <sub>2</sub> Emissions p. 39-43, Environment: Sustainability Initiatives			
G4-EN15	p. 22-23, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			<b>13.</b> Climate Action - GHG Emissions
G4-EN16	p. 22-27, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			
G4-EN17	p. 22-27, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			
G4-EN18	p. 22-23, Environment: Energy Efficiency & CO <sub>2</sub> Emissions			<b>14.</b> Life below water - Ocean acidification
G4-EN19	p. 22-23, Environment: Energy Efficiency & CO <sub>2</sub> Emissions p. 39-42, Environment: Sustainability Initiatives			<b>15.</b> Life on Land - Forest degradation
<b>ASPECT: Effluents and Waste</b>				
G4-DMA	p. 20, Environment p. 28-35, Environment: Water & Wastewater Management, Waste Management p. 39-43, Environment: Sustainability Initiatives			
G4-EN22	p. 28-29, Environment: Water & Wastewater Management			
G4-EN23	p. 30-31, Environment: Waste Management p. 39, 43, Environment: Sustainability Initiatives			<b>3.</b> Good Health and Wellbeing - Waste <b>12.</b> Responsible Consumption and Production - Waste
<b>ASPECT: Compliance</b>				
G4-DMA	p. 15, Group Profile: CCC Sustainability Policy			
G4-EN24	No significant monetary or other sanctions were imposed for non-compliance.			<b>3.</b> Good Health and Wellbeing- Spills <b>6.</b> Clean Water and Sanitation- Water related Ecosystems and Biodiversity
<b>ASPECT: Supplier Environmental Assessment</b>				
G4-DMA	p. 16, Group Profile: Supply Chain Sustainability			
G4-EN32	p. 16, Group Profile: Supply Chain Sustainability			
<b>CATEGORY: Social</b>				
<b>SUB-CATEGORY: Labor Practices and Decent Work</b>				
<b>ASPECT: Diversity and Equal Opportunity</b>				
G4-DMA	p. 68-77, Social: Human Resources			
G4-LA1	p. 68, Social: Human Resources - Our Global Workforce			<b>8.</b> Decent Work and Economic Growth - Employment
<b>ASPECT: Management Relations</b>				
G4-DMA	p. 58, Social p. 68-77, Social: Human Resources			
G4-LA4	30 days			<b>8.</b> Decent Work and Economic Growth - Labor / management relations

SPECIFIC STANDARD DISCLOSURES				
DMA and Indicators	Page Number, Location / Direct Answer	Omissions	External Assurance	Disclosure Linkage with Sustainable Development Goals (SDGs)
<b>ASPECT: Occupational Health and Safety</b>				
G4-DMA	p. 60-65, Social: Health and Safety			
G4-LA6	p. 62-63, Social: Health and Safety-HSE Performance & Statistics			<b>3.</b> Good Health and Wellbeing - Occupational health and safety <b>8.</b> Decent Work and Economic Growth-Occupational Health and Safety
<b>ASPECT: Training and Education</b>				
G4-DMA	p. 72-75, Social: Human Resources-Training & Development			
G4-LA9	p. 10, Group Profile: Sustainability Snapshot p. 72-75, Social: Human Resources-Training & Development			<b>4.</b> Quality Education - Employee Training and Education <b>8.</b> Decent Work and Economic Growth - Employee Training and Education
<b>ASPECT: Diversity and Equal Opportunity</b>				
G4-DMA	p. 15, Group Profile: CCC Sustainability Policy			
G4-LA12	p. 76-77, Social: Human Resources-Women Representation			<b>5.</b> Gender Equality - Gender Equality
<b>ASPECT: Supplier For Assessment Labor Practices</b>				
G4-DMA	p. 16, Group Profile: Supply Chain Sustainability			
G4-LA14	p. 16, Group Profile: Supply Chain Sustainability			<b>8.</b> Decent Work and Economic Growth - Labor Practices in the supply chain <b>16.</b> Peace, Justice and Strong Institutions-Workplace Violence and Harassment
<b>SUB-CATEGORY: Human Rights</b>				
<b>ASPECT: Investment</b>				
G4-DMA	p. 66-67, Human Rights			
G4-HR2	p. 66-67, Human Rights			
<b>ASPECT: Supplier Human Rights Assessment</b>				
G4-DMA	p. 16, Group Profile: Supply Chain Sustainability			
G4-HR10	p. 16, Group Profile: Supply Chain Sustainability			
<b>SUB-CATEGORY: Society</b>				
<b>ASPECT: Local Communities</b>				
G4-DMA	p. 84-101, Community			
G4-S01	p. 84-101, Community			
<b>ASPECT: Anti-corruption</b>				
G4-DMA	p. 82-83, Ethics & Anti-corruption			
G4-S04	p. 82-83, Ethics & Anti-corruption			<b>16.</b> Peace, Justice and Strong Institutions - Anti-corruption
<b>ASPECT: Supplier Assessment for Impacts on Society</b>				
G4-DMA	p. 16, Group Profile: Supply Chain Sustainability			
G4-S09	p. 16, Group Profile: Supply Chain Sustainability			

## Appendix II

### External Commitments to Strategic Organizations and Initiatives

1. United Nations Global Compact (UNGC)
2. Pearl Initiative
3. Transparency International
4. World Economic Forum
5. U.S. Green Building Council (USGBC)
6. European Network for Construction Companies Research and Development (ENCORD)
7. International Pipeline & Offshore Contractors Association - USA (IPLOCA)
8. American Society of Heating, Refrigerating, and Air Conditioning Engineers - Complete
9. World Safety Organization (WSO)
10. Institution of Occupation Safety & Health (IOSH)
11. British Safety Council (BSC)
12. American Society of Safety Engineers, Kuwait Chapter & Gulf Coast Chapter (ASSE)
13. Emirates Safety Group (ESG)
14. Emirates Environmental Group (EEG)
15. Environment Agency- Abu Dhabi
16. Dubai Chamber Sustainability Network
17. Global Business Coalition against HIV, AIDS, Malaria & Tuberculosis (GBC)
18. The Disaster Resource Networks (DRN)

## Appendix III

### Glossary

<b>BDF</b>	Bethlehem Development Foundation
<b>BI</b>	Business Intelligence
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>CECD</b>	Corporate Ethics Compliance Department
<b>EACP</b>	Ethics & Anti-Corruption Program
<b>FEA</b>	Emirates Energy Award
<b>EMS</b>	Environmental Management System
<b>FSC</b>	Forest Stewardship Council
<b>GHG</b>	Greenhouse Gas
<b>GORD</b>	Gulf Organization for Research and Development
<b>GSAS</b>	Global Sustainability Assessment System
<b>HAS</b>	Hassib Sabbagh Academy
<b>HSE</b>	Health, Safety and Environment
<b>ISO</b>	International Organization for Standardization
<b>IVMS</b>	Installation Vehicle Monitoring System
<b>KSA</b>	Kingdom of Saudi Arabia
<b>KM</b>	Knowledge Management
<b>LEED</b>	Leadership in Energy & Environmental Design
<b>M3</b>	Cubic Meter
<b>MENA</b>	Middle East & North Africa
<b>MTB</b>	Midfield Terminal Building-Abu Dhabi International Airport
<b>MBR</b>	Membrane bioreactor
<b>NEBOSH</b>	National Examination Board in Occupational Safety and Health
<b>OH</b>	Occupational Health
<b>OH&amp;S</b>	Occupational Health & Safety
<b>OHSAS</b>	Occupation Health and Safety Assessment Series
<b>OSHA</b>	Occupational Safety & Health Administration
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>TSE</b>	Treated Sewage Effluent
<b>UAE</b>	United Arab Emirates
<b>UN</b>	United Nations
<b>USGBC</b>	U.S. Green Building Council
<b>VOC</b>	Volatile organic compounds

# Sustainability **Credits**

The compilation of the Sustainability report is a concerted team effort stemming from various disciplines. A special thanks goes to our colleagues listed below for their efforts and commitment towards the making of this report.

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<b>Basma Alhusseini</b>	<i>Urban and Environmental Planner</i>
<b>Suhayl Shami</b>	<i>Manager - Corporate Planning &amp; Monitoring</i>
<b>Eliana Peridakis</b>	<i>Head of PQ &amp; Marketing Support</i>
<b>Yannis Yannoulis</b>	<i>SR Marketing Assistant (Graphics)</i>
<b>Marina Tsepas</b>	<i>Marketing Assistant</i>
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