



SUSTAINABILITY REPORT

at the forefront of
Sustainable Development

2018

covering
2016-2017
activities



This report is dedicated to the memory of our corporate Founders whose inspirational family values and ethics anchor and guide our Sustainability path.

CCC supports the United Nations 17 Sustainable Development Goals



SUSTAINABILITY
REPORT 2018

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Image from **Dave Gardner**
Rolling Green Hills

OUR COMMITMENT

As a leading international construction company, we play a role in promoting long term sustainable value. We understand that CCC's ability to grow and prosper depends on the existence of prosperous economies, inclusive societies and a sustainable natural environment.

CCC's sustainability strategy is based on the pillars of sustainable development: Economy, Environment and Society. Guided by CCC's distinctive culture the company manifests its long-term commitment on the basis of responsible growth and respect towards people and the environment.

This report reflects upon our operations for the years 2016 and 2017. It includes CCC's efforts to reduce the environmental impacts of projects, safeguard employees' well-being and develop their capabilities, enhance business transparency and promote community engagement.

We are advocates of the global sustainability agenda and support the realization of the Paris Climate Change Agreement and the United Nations Development Goals: two landmark agreements aiming to protect the planet, end poverty and ensure prosperity for all. Across this report we highlight CCC's contribution to the UN Sustainable Development Goals (SDGs). This report has been prepared in accordance with the GRI Standards-Core of the Global Reporting Initiative (GRI).



Message from the

PRESIDENT, ENGINEERING & CONSTRUCTION

Dear Stakeholders,

I am very pleased to present to you CCC's fourth Sustainability Report covering activities of the period 2016-2017.

In the last report, we proudly classified our Sustainability journey as an institutionalized success that has gone beyond being just a well-intended corporate responsibility initiative launched back in 2011 into a maturing corporate core practice cognizant of the 17 UN Sustainable Development Goals (SDGs).

In this report we are proud to declare Sustainability now even more entrenched into the CCC work ethos.

Good progress has been made on quantitatively measurable environmental topics like renewable energy, carbon footprint reduction, recycling and efficient use of scarce natural resources. For these, we rely on documented business cases and approaches to demonstrate and encourage greater adoption. Our key performance indicators (KPIs) reflect substantial progress. We continue to honor our solemn duty in protecting the environment.

A safe working environment is a top priority. Our HSE record remains impressive with very low Lost Time Accidents against a challenging load of around 808 million man-hours (2016-2017 combined), an indicator of our stringent attention to safety practices and regulations.



Good Governance with integral Risk Management, Transparency, Ethics and Anti-Corruption drive our work methods and procedures.

Social Responsibility and philanthropy truly reflect our soft side and are fuelled by the energy of the owners and employees, particularly the younger generation, who are finding our work inspirational that forms a dialogue enhancing bridge with the local communities.

Our culture of developing our human resources thrives. This next cycle we intend to increase our intake of women in all enabling ranks. We want to be among the lead in gender balance in the MENA region.

Regarding our achievements of the last two years, we highlight that:

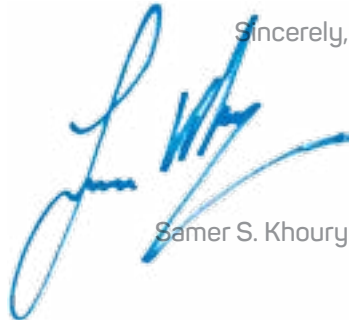
- **9.8%** of carbon footprint was reduced
- **26%** of on-site water consumption was sourced from recycled water content
- **42%** of construction waste was reused or recycled

Our efforts in Sustainability have been recognized. We have gained the accolades below at the recent MENA Green Building Awards:

- Green Contractor of the Year
- Sustainability Training Initiative of the Year
- Green Public Building of the Year Award for the Palestinian Museum that CCC constructed

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), the U.S. Green Building Council (USGBC), the Pearl Initiative and GBC Health.

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

Sincerely,

Samer S. Khoury



CCC provides global solutions across multiple industries and market segments

CCC Athens Office

GROUP PROFILE

Consolidated Contractors Group is a globally diversified company specializing in engineering and construction. Better known as Consolidated Contractors Company (CCC). It was founded in 1952 when the late Kamel Abdul-Rahman, the late Hasib Sabagh and the late Said Khoury joined forces to create one of the first Arab construction companies. Today, it is the largest engineering and construction company in the Middle East and ranks among the top 25 international contractors.

Our core business is construction services across the EPC value chain. However, we also capture all aspects of the Engineering, Procurement & Construction (EPC) chain value, starting with Feasibility Studies into Design, Procurement, Construction, Commissioning, Operations and Maintenance as well as Project Development (BOT, BOO, PPP) for:

- Oil & Gas Projects
- Petrochemical Projects
- Pipelines
- Offshore Construction Works
- Environmental Projects
- Buildings
- Roads and Infrastructure
- Metro Projects
- Power & Water Projects
- Renewable Energy
- Heavy Civil and Marine
- Dams, Harbors & Airports



Our specialty is the construction of projects in the remotest locations across the globe. We carry out projects and activities in locations worldwide, from the Middle East crossing Africa and reaching Australia and Papua New Guinea.

Through market and geographical diversification, CCC offers, in addition to our core business, a wide range of services and assistance in multiple market segments such as Oil & Gas Exploration, Mining and Real Estate Development.

Our diversified workforce currently consists of 182,000 personnel embodying over 50 different nationalities. CCC has been successful in the highly competitive construction industry by drawing on the unique experience, skills and knowledge of all the members of the organization. Through nearly seven decades of growth, our substantial experience and the inter-organizational support has firmly entrenched CCC as a major competitor in the construction world.

CCC is a family company with a unique culture and set of values



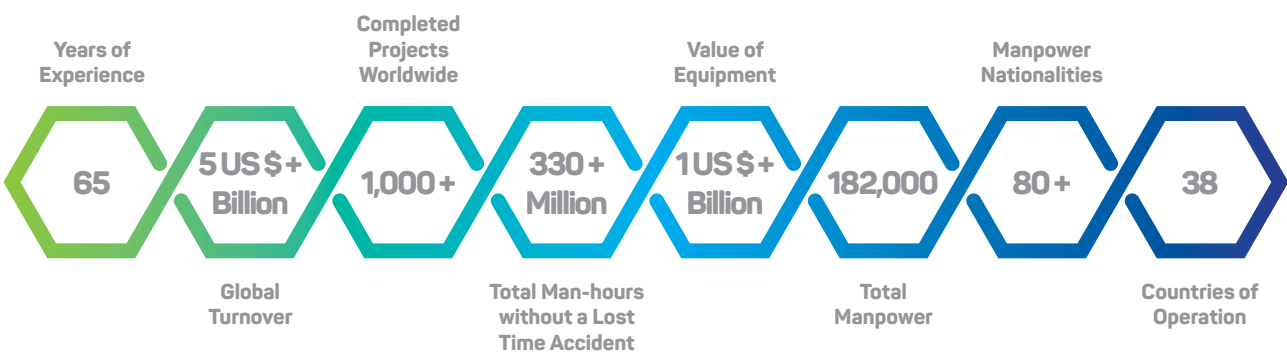
CCC is a family company with a unique culture and set of values and traditions which have withstood time. CCC (which has always remained in private ownership) is renowned as a family company and has continuously preserved a distinct set of family values embodying honesty, loyalty, transparency and hard work.

EUROPE	AFRICA		AMERICA	
Greece	Morocco	Mauritania	Equatorial Guinea	USA
Italy	Algeria	Senegal	Namibia	Grenada
United Kingdom	Tunisia	Mozambique	Botswana	OCEANIA
Azerbaijan	Egypt	Nigeria	CARIBBEAN	Australia
Russia	Egypt	Nigeria	Saint Lucia	
ASIA				
Lebanon	Iraq	Bahrain	Turkmenistan	Thailand
Palestine	Saudi Arabia	Qatar	Kazakhstan	Malaysia
Jordan	Yemen	UAE	Pakistan	China
	Kuwait	Oman	India	

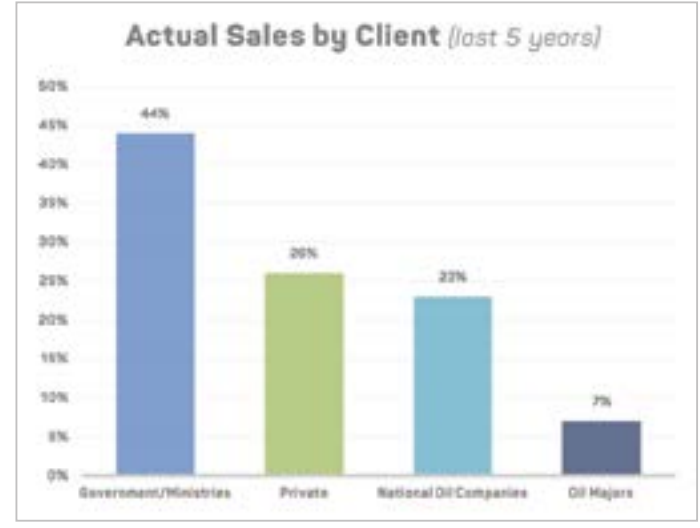
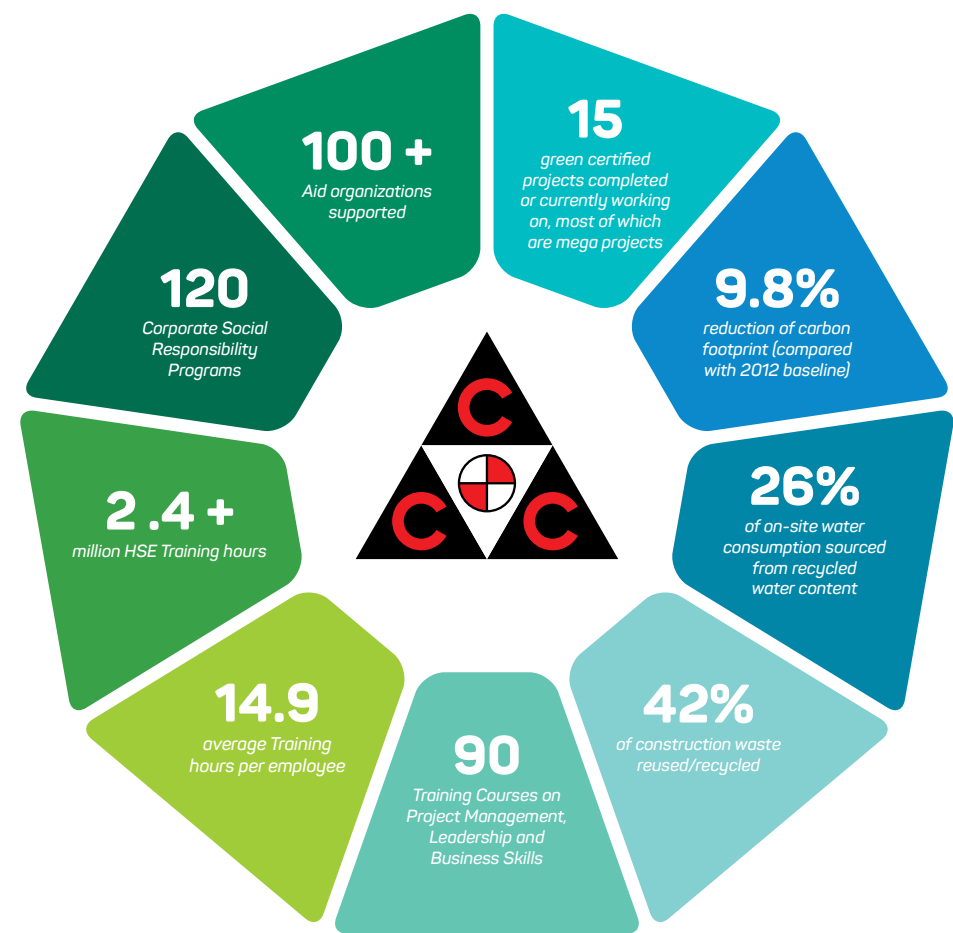


(as at end 2017)

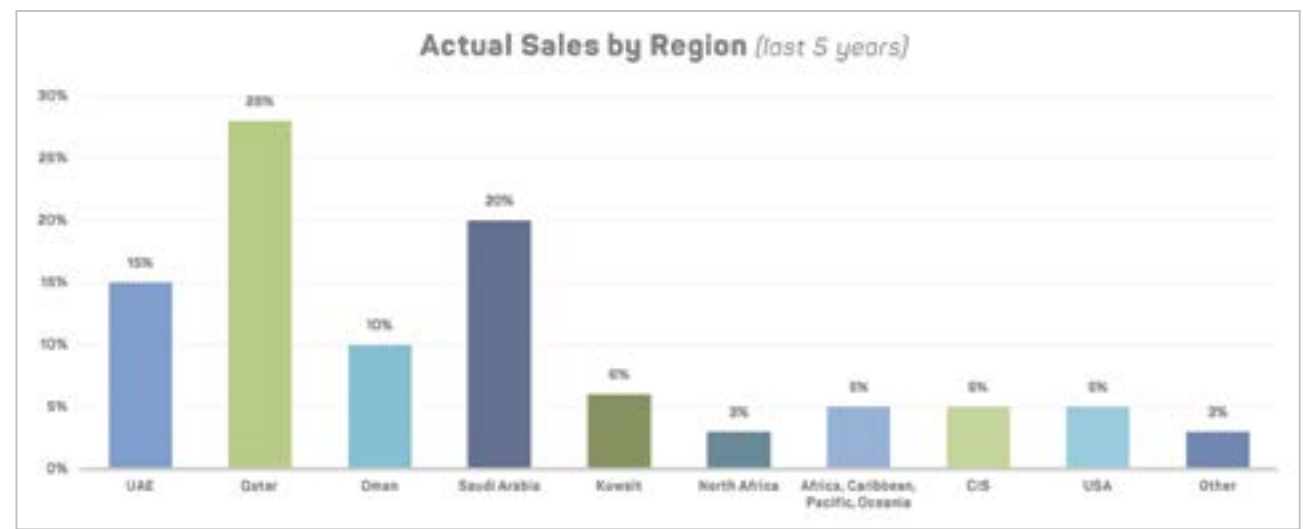
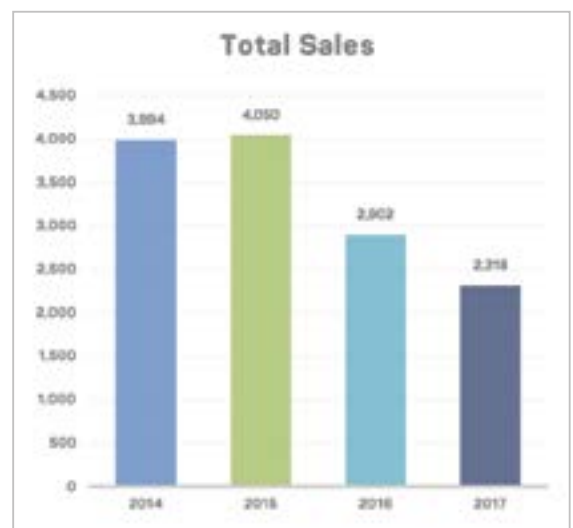
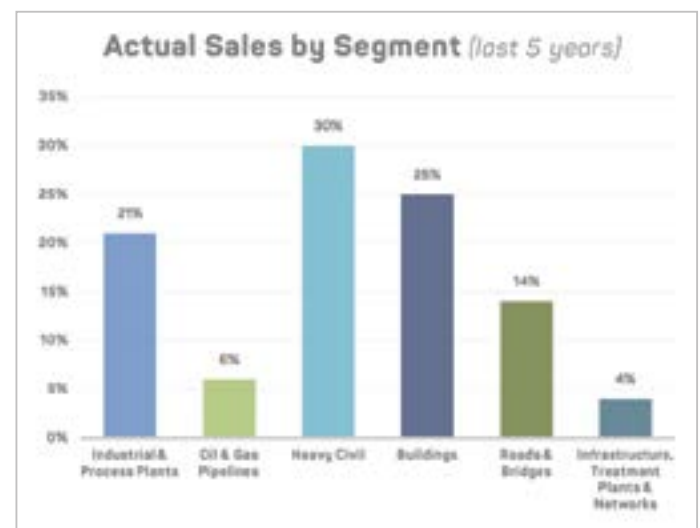
KEY FACTS & FIGURES



SUSTAINABILITY SNAPSHOT



FINANCIAL HIGHLIGHTS



VARIOUS PROJECTS



Opera House
Dubai



Landmark Tower
Abu Dhabi



Sidra Medical & Research Centre
Qatar



Karachaganak Main Works
Kazakhstan

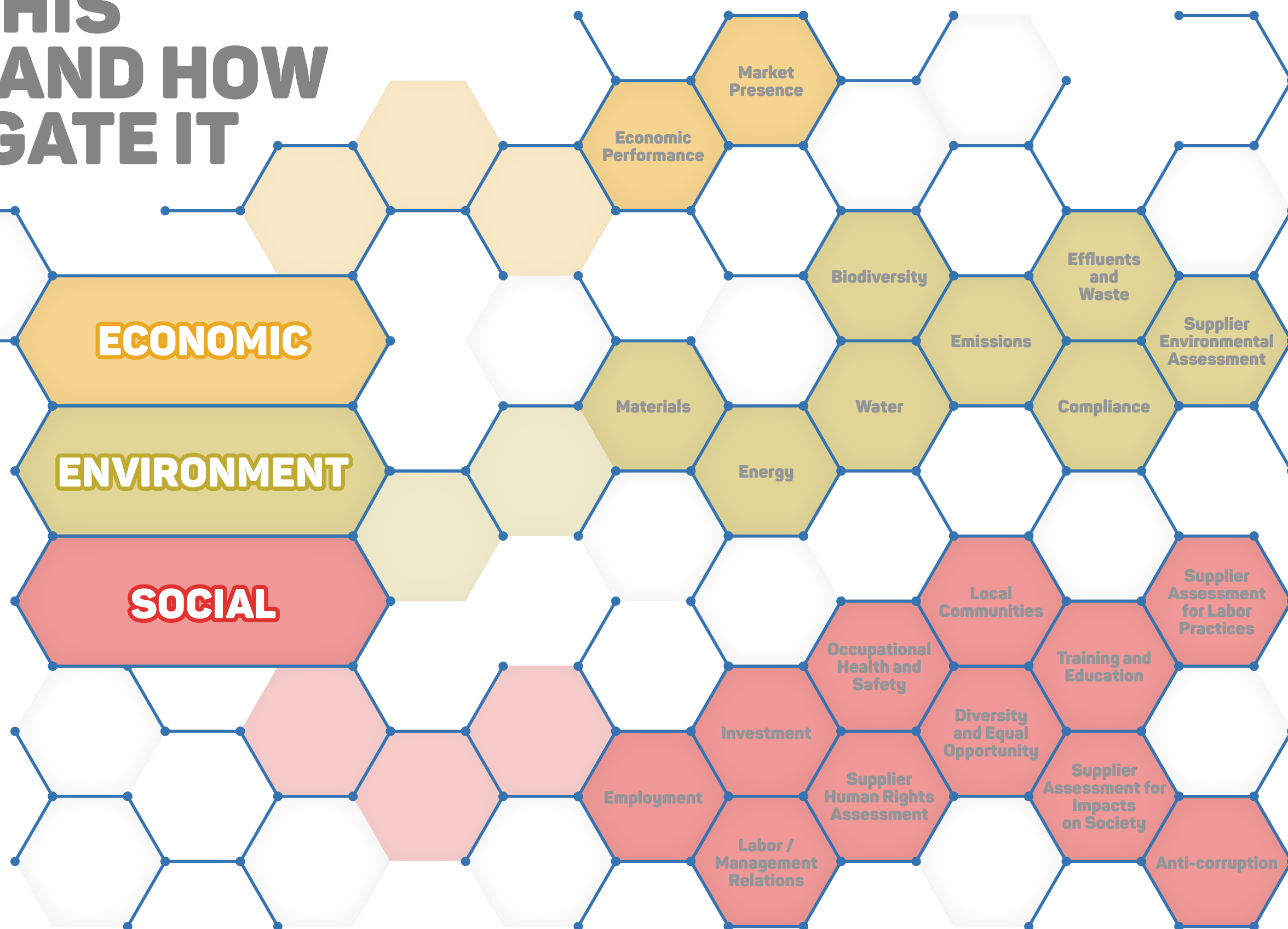


As-Samra Wastewater Treatment Plant
Jordan



Dukhan Highway
Qatar

ABOUT THIS REPORT AND HOW TO NAVIGATE IT



This Sustainability Report covers CCC's activities that have been identified as being significant to our business and stakeholders. We report on how we manage these material aspects and focus on the years 2016 and 2017. We are convinced that by managing these aspects properly CCC's successful and sustainable future is safeguarded.

To define report content CCC considered company culture, mission and values as well as stakeholders' interests. CCC's stakeholders include clients, employees, shareholders/owners, business partners, governments, industry organizations, civil society and local communities. We listen closely to our stakeholders and aim to create and distribute value as appropriate to them. Our online platforms, feedback channels, everyday business activities and surveys are a few of the ways we engage with our stakeholders.

GROUP SUSTAINABILITY

2016-17 Activities Overview

- Attended World Future Energy Summit (Abu Dhabi)
- Participated in the World Economic Forum Annual Meeting (Davos, Switzerland)
- Developed Sustainability Awareness Campaign
- Issued **Sustainability Objectives 2017**- One Stop Information Sheet
- Launched 1st Annual Sustainability Competition
- Developed solar off-grid system
- Named Green Contractor of Year at the MENA Green Building Awards
- Won Sustainability Training Initiative of the Year Award at the MENA Green Building Awards
- Aligned CCC Sustainability Objectives with UN 17 Sustainable Development Goals
- Developed fourth sustainability report in accordance with the GRI Sustainability Reporting Standards (Core Option)



Sustainability in CCC has become a corporate and economic advantage with proven business cases and a heightened sense of responsibility

Green Solutions Provider

CCC has extensive experience in green building mega projects. Across the MENA region, CCC has completed six certified green building projects and is currently managing nine major projects aiming for certification. These are:

- CCC Oman Head Office building
- Lusail Multipurpose Hall, Qatar
- Palestinian Museum, Palestine
- Abu Dhabi International Airport: Midfield Terminal Building in Abu Dhabi, UAE
- Opera Grand Tower, Dubai, UAE
- City Centre Almaza, Egypt
- Abu Dhabi Plaza (mixed-use development), Kazakhstan
- Riyadh Metro, Saudi Arabia
- Msheireb Downtown Doha, Qatar
- Al Zahia City Centre, UAE
- Mall of Oman, Oman

Measuring and Reporting Performance

CCC has established procedures to monitor and disclose sustainability performance. We have been diligently tracking our sustainability impact and contributions since 2012. Our sustainability key performance indicators (KPI's) are grounded upon internationally recognized standards (Global Reporting Initiative (GRI), UN Global Compact). Specifically for capturing carbon emissions, our approach also follows the greenhouse gas protocol standards for the Carbon Footprint Inventory. CCC's sustainability activities, measurements and progress in achieving targets are published in our standardized sustainability reports. In 2015, following the launch of the Sustainable Development Goals (SDGs) and the call for stronger engagement from corporations, we wanted to understand how CCC can push the sustainability agenda forward. Guided by the SDG Compass¹ CCC's previous sustainability report (activities for 2014-15) reflected how CCC's operations contribute to the achievement of the Global Goals.

¹ A tool developed by the UN Global Compact, the World Business Council for Sustainable Development and the GRI.

CCC's SUSTAINABILITY OBJECTIVES

At CCC, we define sustainability as the Triple Bottom Line - economic growth, social responsibility and environmental protection.

We aim to integrate sustainability in all our business activities guided by CCC's Sustainability Policy and the specific commitments it encompasses. As an international construction organization, our activities have a direct impact on communities, ecologies and economies. We recognize our responsibility towards our stakeholders and aim to create opportunities for shared value. We promote sustainability through improved corporate governance, rigorous and transparent reporting of environmental metrics, minimizing environmental impacts, creating a safe and motivating workplace, conducting business ethically, respecting human rights and building long-term partnerships.

The United Nations Sustainable Development Goals (SDGs) are a set of universal goals and targets that came into force in 2016. Adopted by 193 Member States of the United Nations these goals provide a framework to make the world more prosperous, inclusive and sustainable. The SDGs represent an unique opportunity for corporations such as CCC to mainstream their own sustainability goals with global issues such as poverty, education, gender equality, water and energy use, climate change and sustainable economic growth.



Photo from pixabay.com



We strive to align CCC's sustainability priorities with the global sustainability agendas

Environment

- Use energy & resources efficiently
- Minimize emissions
- Reduce water consumption
- Minimize waste and implement recycling
- Use sustainable materials and renewable energy
- Protect biodiversity



At CCC we are align the SDGs with our sustainability objectives and strategy. CCC is a proud supporter of the global goals and is contributing towards them in several ways such as aligning sustainability priorities with the relevant SDGs and sharing our sustainability performance publicly based on the GRI Standards.

The following table links the Sustainable Development Goals (SDGs) with CCC's sustainability objectives.

Economy

- Build and maintain a robust and enduring business
- Employ local resources (employees, subcontractors, materials)
- Promote innovative thinking and practices
- Integrate Risk Management into our operations



Society

- Comply with the law
- Ensure customer satisfaction
- Commit to conduct business ethically
- Invest in employee training
- Good community relations
- Promote diversity and equal opportunities
- Respect human rights



SUPPLY CHAIN SUSTAINABILITY

For CCC to successfully manage sustainability impacts including economic, environmental, social and governance issues it is necessary to ensure that our suppliers and subcontractors are following suit. There is a growing need for vendors to recognize their responsibility to safeguard the environment and nurture positive relations with their workers and local communities.

CCC's supply chain sustainability strategy aims to:

- lower business risk (such as reputational, regulatory and security)
- 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



Photo by Gavin Heller
Moraine Lake, Canada



During 2016-17, CCC continued engaging with our supply chain partners to address sustainability related subjects and encouraged them to improve their performance. An increasing number of CCC suppliers and subcontractors are being screened for their compliance with business conduct principles, some of which are specifically related to their impacts on the environment and society including safety, labour practices and human rights. The table below indicates specific targets and reported results:

We endeavour to embed sustainability when engaging with suppliers and subcontractors

Targets and Achievements

INDICATOR	TARGET	REPORTED	
		2016	2017
Percentage of new suppliers that were screened using environmental criteria	30%	22%	31%
New suppliers that were screened using social criteria (issues related to: labour practices, health and safety, human rights etc.)	30%	25%	47%



Innovation, advanced thinking and flexibility have always been the main drives behind CCC's success

CCC Core Values

INNOVATION

CCC has successfully maintained its position as one of the leaders in the engineering and construction industry by innovating both externally and internally. CCC's culture of innovation drives better, faster and leaner business results activating good sustainability impacts.

Digital Project Control Strategy

From early on CCC incorporated digitalization in the design and construction process of its projects. Since CCC's first BIM success story a decade ago - the Ritz Carlton Hotel in Doha, Qatar - numerous complex projects have been completed using BIM 3D modelling. At CCC we recognize the vital role of BIM in a digitalized construction industry and through our BIM centres we provide services across the project life-cycle. Currently, we are taking the use of BIM to the next level by capitalizing on our experience with projects such as the Abu Dhabi's airport. We are identifying this next step as BIM-based project control strategy. CCC is breaking new ground and is using BIM to apply Advance Work Packaging (AWP) and divide the construction project into several construction work packages (CWP) organized by location. Via this methodology, CCC can predict difficulties and address them in a timely manner. With information integration and stakeholders' collaboration throughout a project's life-cycle, construction becomes faster, safer, less wasteful and more cost-effective.



Off-Grid Solar Systems

CCC's Net Zero Energy Mobile Cabin

As part of CCC's "Innovation and Research and Development Initiative" launched in 2017, we began looking into various innovative sustainable options. Ensuring efficient and reliable methods of cooling has always been a priority for CCC and we have consistently made use of the high solar energy potential in the MENA region. This time we focused on developing off-grid solar-powered accommodation units for the CCC workforce. Considering CCC's remote project areas, the proposal of off-grid renewable energy systems is more than strategic. A team of resourceful engineers in Oman successfully developed a 100% solar powered off-grid mobile cabin. The prototype utilized solar photovoltaic modules, inverters and lithium ion batteries to provide a consistent energy ecosystem that combines efficient LED lights and appliances. Energy is provided day and night, as the excess generated power is fed into the battery storage to support the demand during the evening hours. This energy self-sufficient mobile cabin is an innovative off-grid solution and just the first step of CCC's strategy on renewable energy and battery technologies.

3D Printing

Although still at an early stage of development, 3D printing is expected to have a disruptive impact on the construction industry. Provided companies can take control of the technological and financial challenges, 3D printing can transform the productivity and time-line of construction. With CCC's long standing practice of exploiting digital technologies, looking into 3D printing is a natural outcome for us. We are optimistic that in the future 3D printing could become a common element of the construction process and could potentially even help address the growing crisis of affordable housing in the MENA region. CCC is currently completing a pilot project using 3D printing technology. The project scope comprises the design and build of a demo unit (approximately 80m²) and the objective is to demonstrate the capabilities of 3D printing technology. This pilot project will be managed through the collaboration between a technology provider and a general contractor. It will be conducted utilizing innovative 3D printing technology that uses a robotic arm machinery. The demo unit constructed will be fully furnished, connected to the utilities, approved by local authorities and ready for occupancy.

No matter where our operations take us, CCC supports the local economies and communities

Vocational Training Center, Oman

CREATING LOCAL VALUE

In every country in which we operate, and as part of our Core Values, we strive to add value by applying a comprehensive local content strategy. We try our best to go beyond what is stipulated contractually to contribute to the development of our host countries by supporting local recruitment, building regional business relations, procuring local materials and transferring expertise.

We consistently give a high percentage of work to the local work force, not only to satisfy the countries' labour laws, but to stay true to our ethos of encouraging and improving these communities. We also enhance the country's local content through focusing on training local personnel in various areas. CCC's long standing practice of Vocational Training Centres develops skilled workers capable of improving their quality of life, financial status, health care, the education of their children, and overall well-being. CCC projects acquire materials and consumables from local markets; by

this the company creates job opportunities for local manpower. Subsequently, this improves the social welfare and boosts the economy of the locality and the GDP of the country as a whole. CCC also contributes to the local social welfare of the communities where it executes its projects by assessing the needs and working with key personnel to satisfy them. For instance, the company contributes to local schools, roads, hospitals, etc. either through voluntary work or by financing some of these development plans that help to facilitate the company's operations as well.

Above all, we create enduring and sustainable value by building infrastructure that supports the economic and social development of our host regions.





16.6 MW Solar Photovoltaic (PV) Power Plants, Mauritania



Supporting Mauritania

Energy & Economic Diversification Strategy

Mauritania is located in sub-Saharan Africa where access to electricity is scarce. The electricity grid in Mauritania is powered mostly by expensive diesel generators and a limited share of the population has access to electricity with the rural population being significantly energy deprived. The Mauritanian government is aiming to reduce this and promote local socio-economic development through the adoption of renewable energy. CCC contributed to Mauritania's clean energy capacity by delivering² eight (8) solar energy projects. The rural PV parks (with a total capacity of 16.6MW) supply up to 30% of the electricity demands of the eight remote communities (Boulénour, El Chami, Atar, Akjoujt, Beni Chab, Aleg, Boutilimit and Ajoune). It is noteworthy that none of these communities are currently connected to the national grid. CCC used state of the art solar technology including top tier solar modules and inverters that are controlled by a sophisticated control system (fuel save control system). This allows the maximum penetration and use of solar power and reduces the energy produced from the diesel generator sets that are working together with the solar plant (Hybrid Solar).

² CCC's scope was Engineering, Procurement & Construction and Testing

Assisting Botswana in Addressing Water Shortage

In our 23 year long presence in Botswana, CCC has contributed in addressing the country's serious water supply challenges. Although water reservoirs exist in the country's northeast, demands are growing in the southeast near the capital Gaborone due to population growth and thriving mining activities, a major driver of the local economy.

As a solution a major water infrastructure project was launched: the North South Carrier Water Project (NSC), broken down into three main phases and smaller projects. CCC's involvement in delivering this large-scale project began in the mid 90's and is ongoing. Under Phase 1 a 361-kilometer pipeline carried water from the Letsibogo dam to Gaborone. In Phase 2 (still ongoing) the pipeline is being duplicated to transfer water from the Dikgatlong dam. CCC was also responsible for integrating additional well-fields with the NSC as part of an emergency, fast track scheme to mitigate the water crisis in Gaborone.

Local hiring is part of CCC's ethos. At Pump Station 4.1, another CCC project linked to the NSC system, Ronald Boiditswe manages the Document



Control Department. This is his personal experience with CCC: ***I joined the CCC family in 2001, after completing my National Craft Certificate in Computer Studies. Working in different departments such as Plant, Administration and Document Control I have gained in-depth knowledge about CCC's processes. I received software training on the in-house document management system (VBC Dashboard) and a data analysis software (ATLAS). I am very proud to be a member of the CCC family as I feel supported in work related matters and other aspects of life. For example, I am encouraged to exercise regularly through playing soccer.***



North South Carrier 2 Water Transfer, Botswana



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 place particular significance on assessing our environmental data, such as energy use, carbon emissions, water consumption, waste production and material use. Environmental responsibility is an integral part of our operations and in line with the MENA region's environmental challenges, we apply programs to mitigate our impact focused on sustainable resource management and energy use. Also, as a leading contractor we are increasingly concentrating on the principles of sustainable construction and have established a strong track record in the execution of green building projects.

Related Sustainable Development Goals



Our Climate Commitment

We have set ambitious goals to reduce CCC's operational greenhouse gas emissions:

Since 2012, CCC has reduced operational greenhouse gas emissions by nearly 272,049 metric tons of CO₂ equivalents.

ENERGY AND CO₂ EMISSIONS

CCC Energy Management

At CCC we continue enforcing our energy management program, part of which is the rigorous collection of our energy data and greenhouse gas emissions. During our construction operations we always strive to apply practices that help us in reducing our energy consumption and carbon footprint.

When we carry out our business activities, we aim to take into consideration the UN SDG's. Reflecting upon Sustainable Development Goal #7 "Ensure access to affordable, reliable, sustainable and modern energy for all" CCC is committed to reducing its carbon footprint by implementing best practices in all our projects. Specifically, our approach is to:

- assist in ensuring universal access to affordable, reliable and modern energy services, by fostering solid long-term relationships with our clients to build sustainable power plants (SDG 7 Target 7.1)
- increase substantially the share of renewable energy as a source of power for our projects (SDG 7 Target 7.2)
- double the global rate of improvement in energy efficiency (SDG 7 Target 7.3)



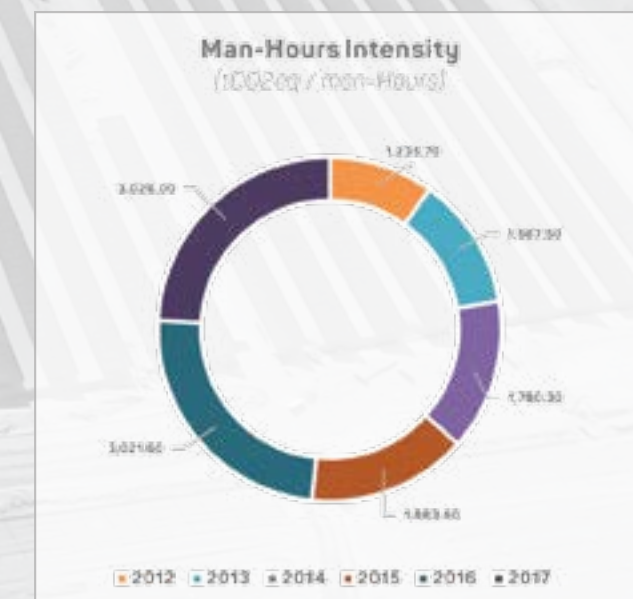
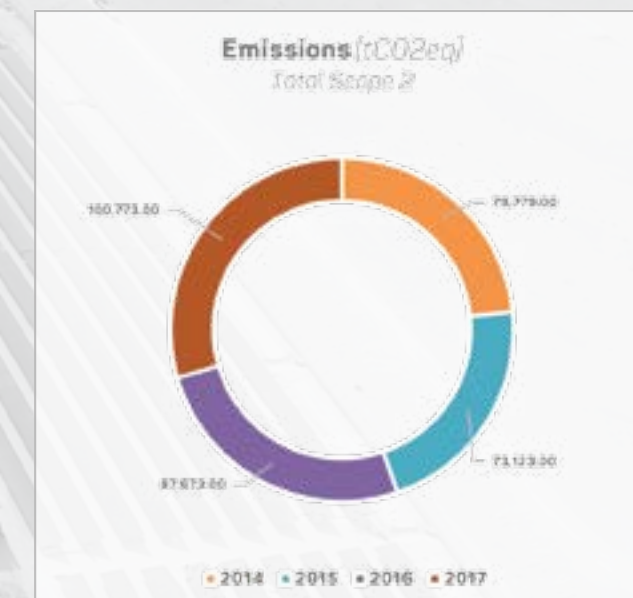
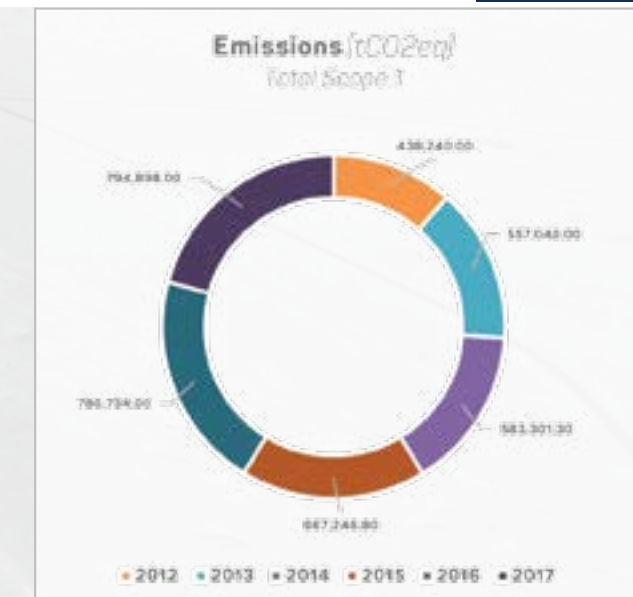
DEWA 13 MW Solar Power Plant, Dubai



GHG Inventory Methodology

CCC's greenhouse gas (GHG) emissions inventory process follows the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol (a corporate accounting and reporting standard). Additionally, we adhere to the emission factors for grid electricity published by local governments within the countries we operate.

CCC reports GHG emissions in Scopes 1 and 2 from sources over which we have operational control. Selected Scope 3 emissions are also reported. Our GHG inventory includes data pertaining to individual projects, camps and the vehicle fleet we use for our operations. We collect data for our own recording and reporting purposes. Due to the nature of the construction industry the total number of project sites changes during the course of the reporting year. We report our carbon intensity based on the man hours worked.



GHG PROTOCOL

Gas Emissions (CO₂, SF6, CH4, N2O, HFCs, PFCs)



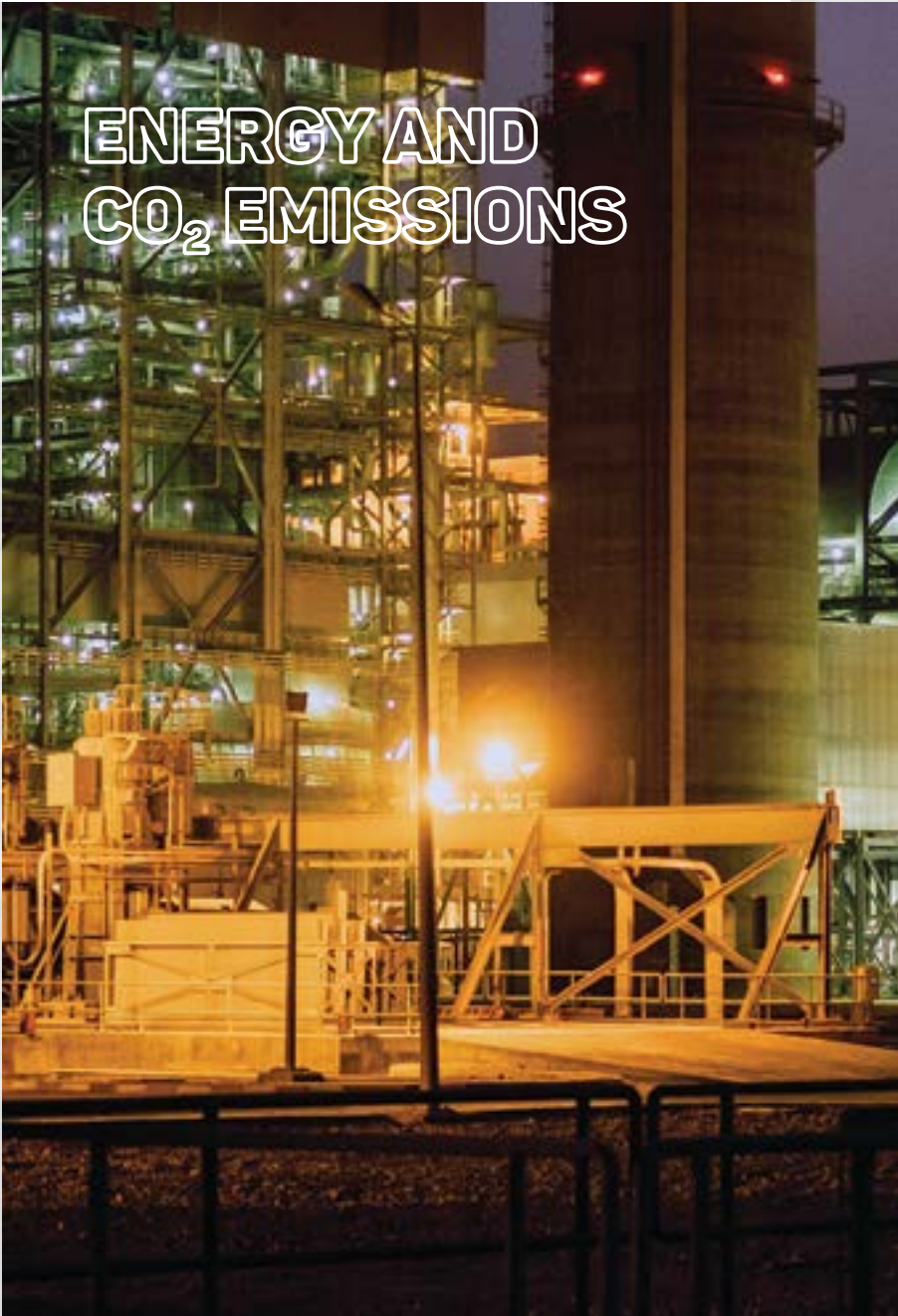
- Fuel combustion
 - On-site equipment/fleet use
- Electricity purchased
- Business travel
 - Supply chain

Greenhouse Gas and Energy Inventory Process

To collect the necessary inventory data, CCC has developed a Fuel Management System. An Advanced Fuel Dispensing System (AFDS) is applied to collect data from all sites. The GHG inventory database allows each site to enter the quantity of fuel used (by fuel type and the unit of measure) based on its own fuel combustion records, as well as data on emissions of other GHGs. The software system calculates the emissions, in metric tons of CO₂ equivalents.



Ain El Sakhna Power Plant, Units 1 & 2, Egypt



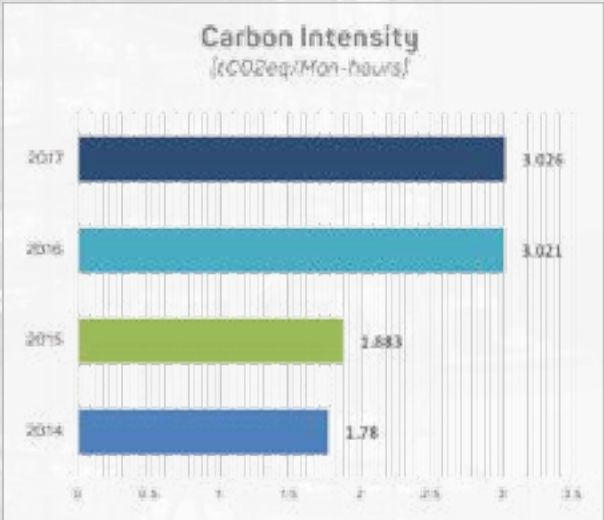
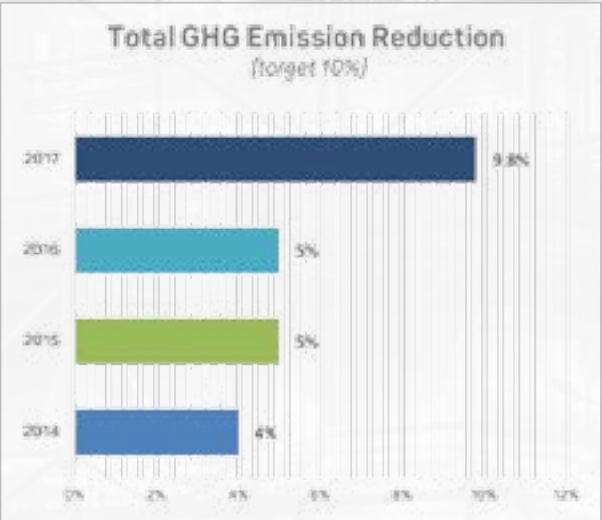
GHG Data Baseline

CCC has established a baseline year for measuring progress towards achieving CCC's GHG emissions reduction commitments. Because of the detailed GHG inventory records established in 2012, this year was selected as a baseline year for our goal setting approach.

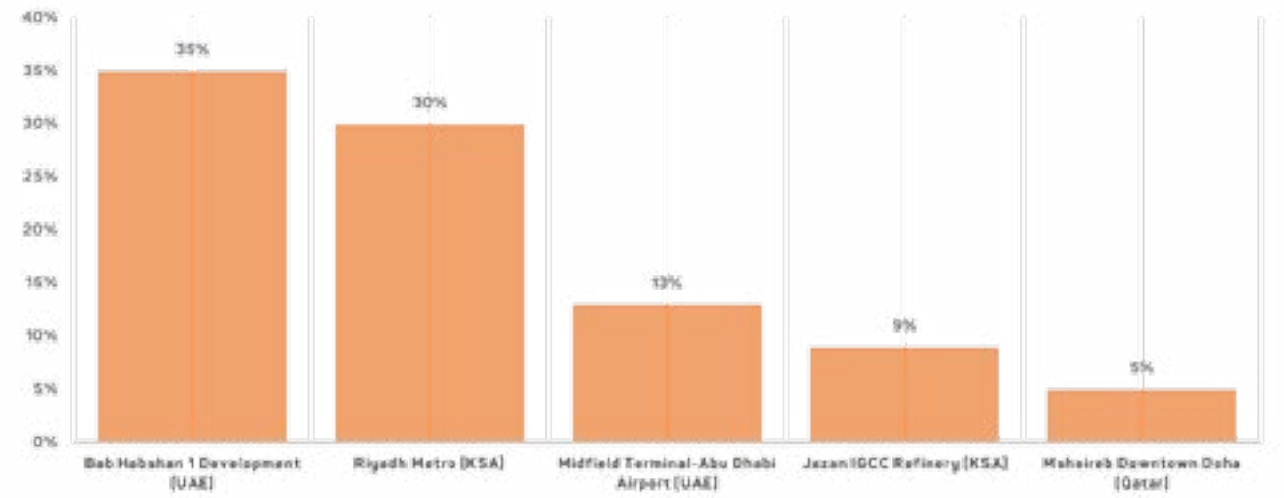
Quality Assurance

We continue to work towards increasing the accuracy of our GHG inventory. CCC has developed guidance data tools that also include the updated emission factors for grid electricity per each country of operation. Additionally, training is provided on the inventory process and the use of the Fuel Management System. We perform data quality reviews on the GHG inventories, including comparisons of GHG emissions across years and projects, to identify and understand the reasons for significant differences (if any).

Our Performance



2017 Project Specific - GHG Reduction Results



Fuel Management

What gets measured can be managed

Over the years, fuel has been and still is the true blood stream for any operating construction site. It is a prime necessity for all construction activities but highly difficult to control. Fuel becomes the tip of iceberg for cost recovery caused indirectly from overconsumption, leaks and inappropriate reporting and analysis of such recurring incidents..

As a general rule, one-third of the total ownership and operating costs for the majority of construction equipment is fuel related. Unfortunately, in most construction companies, it is the least managed piece of the jigsaw puzzle.

For these reasons, we recognize that within CCC it is imperative to acknowledge the following minimum considerations:

- buy and use the right fuel
- store and handle fuel correctly and safely by establishing proper control procedures
- track the fuel usage by individual machine

Ain El Sokhna Power Plant, Units 1 & 2, Egypt

ENERGY AND CO₂ EMISSIONS

At CCC we understand that the advantages and pay-backs for tracking fuel usage through a management program are many:

- save a large amount of money in a relatively easy and fast way
- accurately evaluate and compare different machine makes and models
- compare different operators and different operations
- determine low and inefficient equipment utilization and reduce idle times
- use the hourly fuel consumption information for accurate rate calculations
- use the fuel consumption as a basis for severity-based oil changes and maintenance
- detect losses and thefts
- prove to all concerned the benefits of high level control of a costly and very volatile commodity and minimize the number of untrained victims

Recently, CCC has started investing in different fuel management programs and systems such as “Fuel Guard”. With this system, fuel management becomes more autonomous over any existing infrastructure to deliver the ultimate smart self-fuelling system that impeccably maximizes stock control, distribution and reconciliation with near-real-time transparency to the logistics of delivery that is secured with RFID3 ring style clamps on all operating equipment to assure lock-in authorization.

Wet Stock Management

**All in-One
Maintain
Monitor
Measure
Control**

Fuel Management System Evolution

At CCC we understand that the advantages and paybacks for tracking fuel usage through a management program are many:

HGL		HGL		Date	
DAILY GROSS CONSUMPTION REPORT					
VOLUME		DATE		TIME	
PLANT #	WELL #	WELL NAME	QTY (GAL)	QTY (M3)	QTY (M3)
915-041119	27197	2689	0.40	0.40	0.40
516-011113	68919	1835401	28	28	28
915-041118	83438	12117	10	10	10
518-011112	98603	4045	27	27	27
515-211114	81871	023695	30	30	30
913-031113	68858	026674	12	12	12
915-041116	16593	34361	07	07	07
913-031116	75381	11177			
915-041113	41365	05080			
512-101119	47031	93547			
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From **Pen and Paper & Data re-entry**
to **Live Output**

Consolidated Contractors Company

HOME | REPORT(OLD) | REPORT | CUSTOMER(OLD) | CUSTOMER | LOGIN

Main Report Page

Date From: 30 Oct 2014 To: 30 Nov 2014 Customer ID: Site ID: [Previous](#) [Generate Report](#)

Customer ID	Customer Name	Customer Tag	Date Time	Site ID	Aut
6	BHOG PETROL	5300K550219	11/4/2014 9:13:58 AM	PS2	41.74
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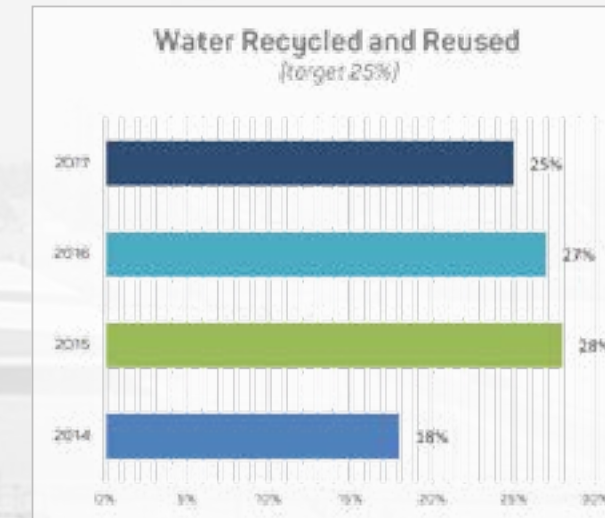
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Customer ID	Customer Name	Customer Tag	Date Time	Site ID
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6	09/01/01/004H TOYOTA COROLLA # 21608	5300K554067	10/30/2014 3:13:18 PM	PS2

Sharjah Sewage Treatment Works, UAE



Our Performance



WATER AND WASTE WATER MANAGEMENT

At CCC we strive to align our business approach with the SDG goals, reflecting upon Goal 6 "Ensure availability and sustainable management of water and sanitation for all": we address water scarcity through our Water and Waste Water Management program. We aim to reduce our water footprint by implementing best practices to ensure the proper management of potable water on site. Specifically our approach is to:

- substantially increase water-use efficiency (SDG 6 Target 6.4)
- protect and restore water-related ecosystems by using wastewater treatment, recycling and reuse technologies (SDG 6 Target 6.6a)

Sewage treatment plants have been installed on various project sites in order to recycle and treat the discharged water and reduce overall potable water consumption. The treated water is used for the following applications on sites:

- irrigation purposes
- duct management
- toilet flushing
- concrete curing (upon client's approval)

2017 Project Specific - Water Recycled Results

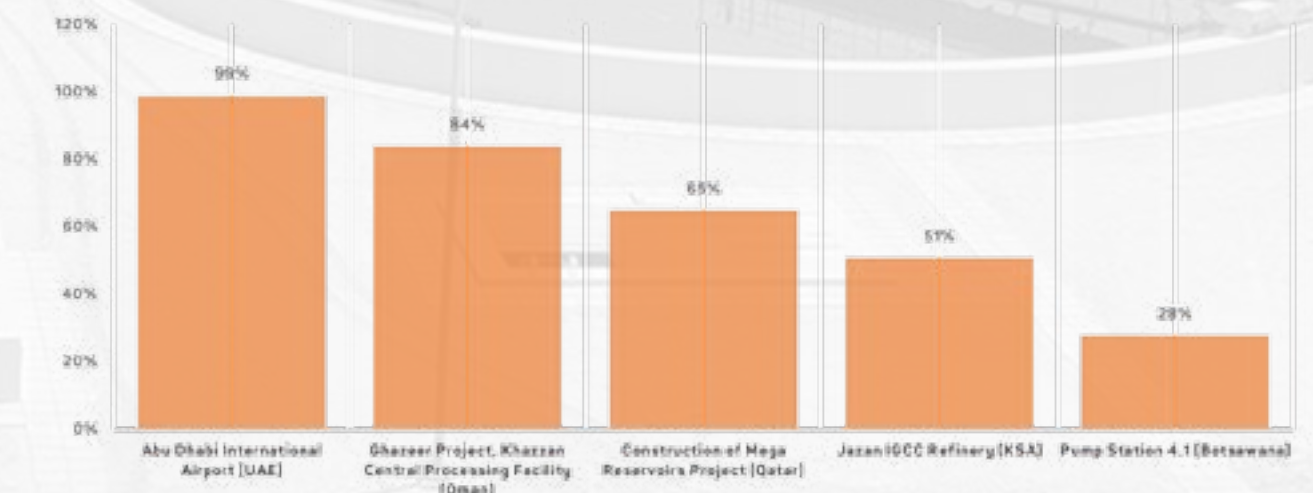


Photo from stock.adobe.com

WASTE MANAGEMENT

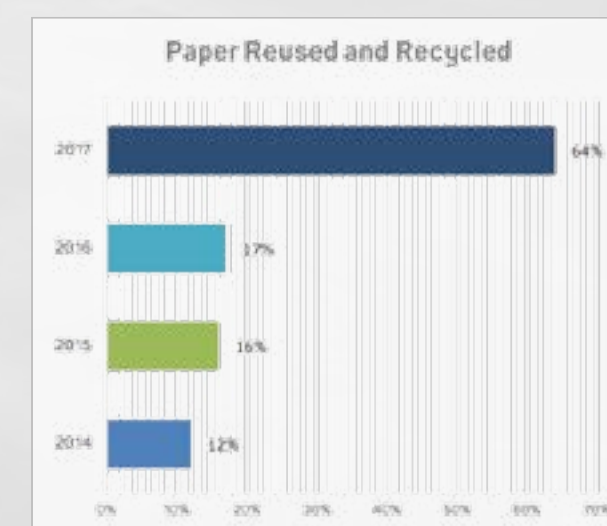
The amount of construction waste we produce is directly linked to the number of buildings and sites we manage. CCC's construction waste management approach is to:

- reduce the waste generated
- reuse materials and products
- recycle as much as possible
- send to landfill as a last option

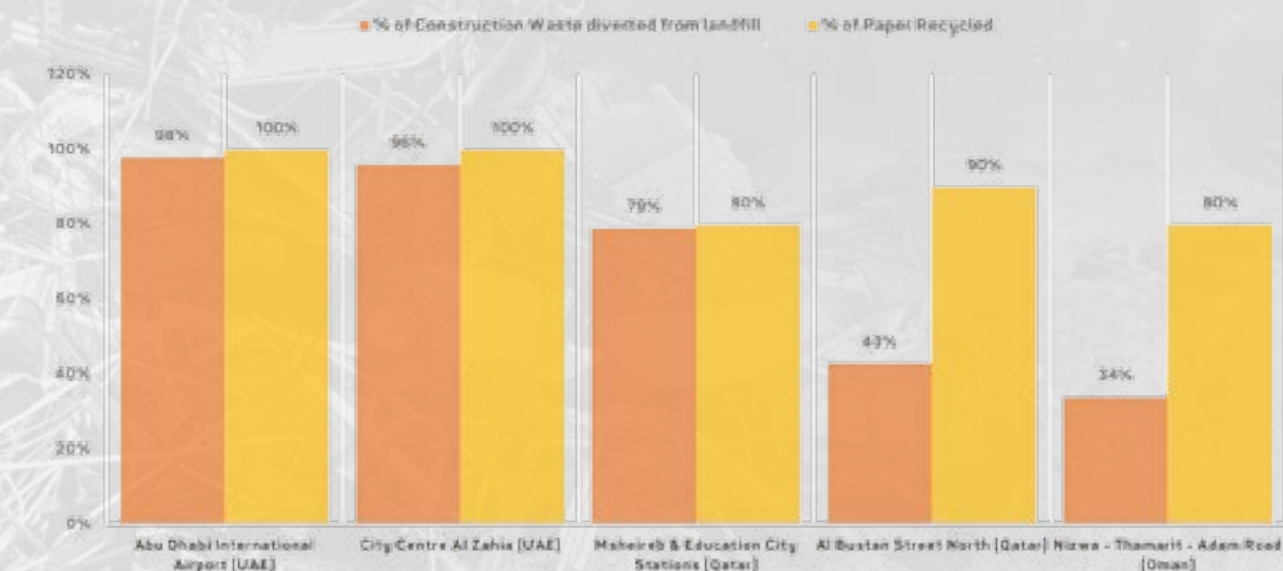
In 2017, we set a target that 30% of our construction waste should be diverted away from landfill. To help our project and site teams achieve this goal, we adopt lean principles and tools obtained from our experience in green building. Utilizing CCC's knowledge management platform (Fanous) reliable and secure information is shared on the possible ways of integrating sustainable waste management into standard operational practices. For example, the specific recommendations are communicated to address waste prevention:

- employ accurate cutting procedures and quantity take-offs to reduce construction waste
- perform all cutting, shaping and testing in a central location
- use pre-assembled rebar cages when possible to reduce on-site rebar waste
- develop a Site Construction Waste Management Plan
- utilize excess concrete for parking stops, jersey barriers, etc
- use soil from site excavation for landscaping, agricultural and residential fill
- reuse and recycle rebar and form ties

Our Performance



2017 Project Specific - Waste Management Results



Construction Waste Management

CASE STUDY

Al-Zahia City Center (Sharjah, UAE)



CCC's careful planning and management has ensured that at least 95% of the project's construction waste can be recovered for reuse and recycling.

According to the project's LEED requirement, the objective is to reduce the waste directed to landfill by 75%. CCC's waste management strategy aims to exceed this project requirement.

CCC's strategy for efficiently recycling construction waste includes the actions below:

- construction Waste Management Plan (CWMP) development
- waste management requirements covered in site induction and toolbox meetings to ensure all involved parties are aware of site prerequisites
- clear signage placed on all waste collection units
- a LEED certified engineer performs periodic auditing for the implementation of waste management on site and reviews the waste recycling records
- a dedicated waste management supervisor monitors the waste management on-site, arranges for timely transfers to the recycling facility and ensures housekeeping staff attends periodic training on waste management induction

Project Information

Client

Majid Al Futaim Properties L.L.C.

Project

The project Al-Zahia City Center, is a retail mall developed to be a primary regional shopping and entertainment center in the Emirates of Sharjah - UAE. The project will be developed to achieve a GOLD rating based on LEED™ requirements.

Construction Contractor

Consolidated Contractors Company (CCC).

Target

Reuse and recycle at least 75% of the project's materials.

Result

By the end of 2017, 99.6% (12,535.18 tonnes) of the project's materials have been reused and/or recycled.

Recycling of Construction Waste

With the assistance of Beea'h (local recycling facility), CCC has achieved the following results up to now:

WASTE MATERIALS	REUSE AND RECYCLING		DISPOSAL	COMMENTS
TYPE	ON-SITE (TONNES)	OFF-SITE (TONNES)	OFF-SITE (TONNES)	
Cardboard		10.04		Packaging waste sent for recycling.
Paper		0.35		Office waste paper sent for recycling.
Timber		119.96		Timber off-cuts / pellets sent to recycling facility.
Plastic		27.62		Packaging waste sent for recycling.
Construction & demolition waste		2001.14		Concrete over-pours, bricks, tiles or pieces of broken concrete reused or sent to recycling facility.
Crushed concrete	10345.00			Cuts of pile caps, crushed and reused on site as a sub-base for temporary roads or backfilling material.
Steel		31.07		Excess reinforcing steel (not fit for reuse) sent to a recycling facility.
General Waste			49.08	General non-recyclable waste such as contaminated materials, sent to landfill.
Total Tonnes	10345.00	2190.18	49.08	
Percentage of Diverted Weight %	99.6%			

MATERIALS

Sustainable Material Management

CCC's approach is to use the most productive and sustainable (throughout their life cycles) materials and minimize the environmental impacts associated with using materials in construction activities. Our concept aims to achieve the following:

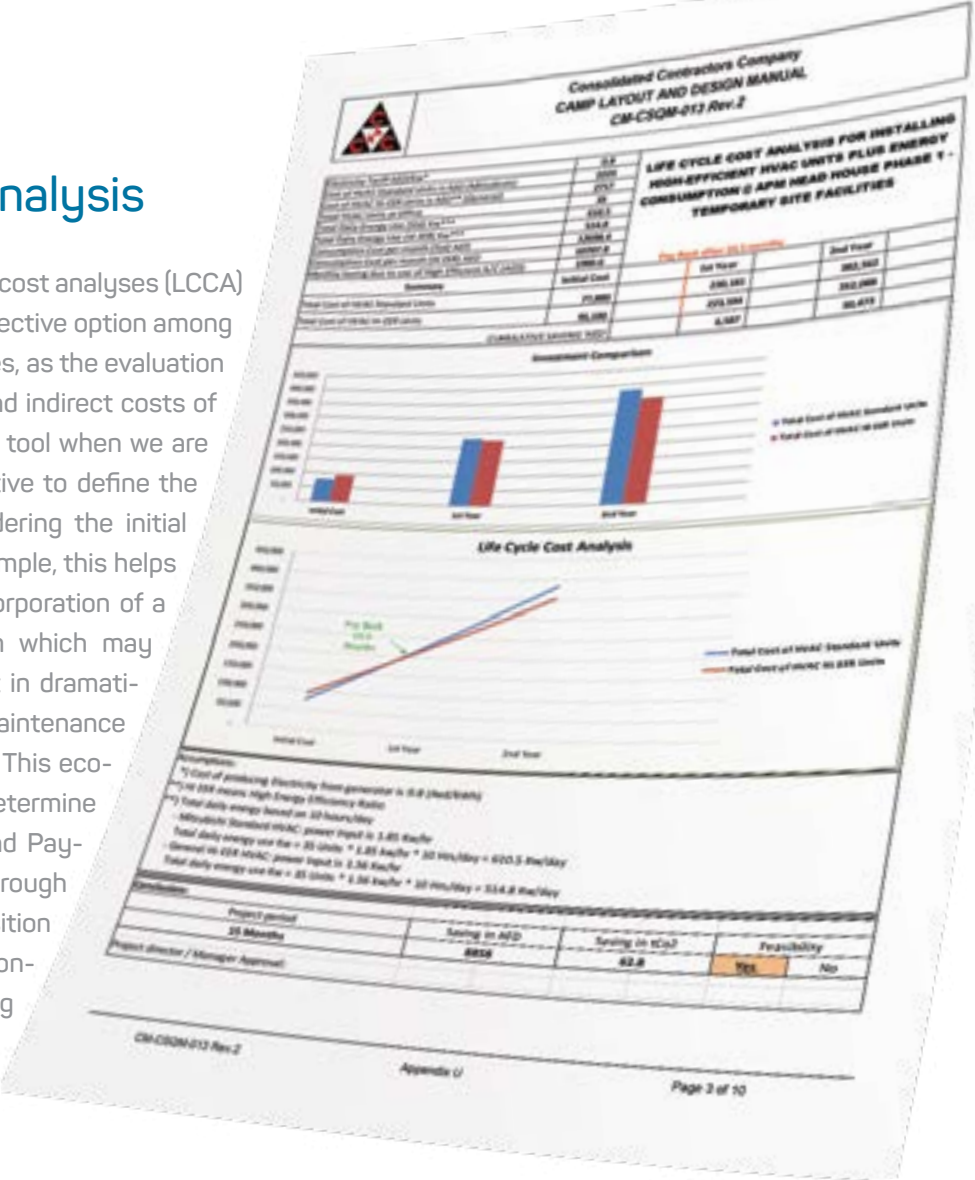
- reduce the use and depletion of finite raw materials and long-cycle renewable materials by encouraging the use of salvaged materials and materials with maximized recycled content
- reduce the amount of waste disposed to landfill
- use materials from local sources (products that are both harvested and manufactured locally) to support regional economies and reduce transportation needs
- support the forest ecosystems by using sustainably harvested timber products from certified forestry sources
- apply Life Cycle Cost Analysis when choosing products to help evaluate overall long term economic and environmental efficiency

Procurement Mechanism

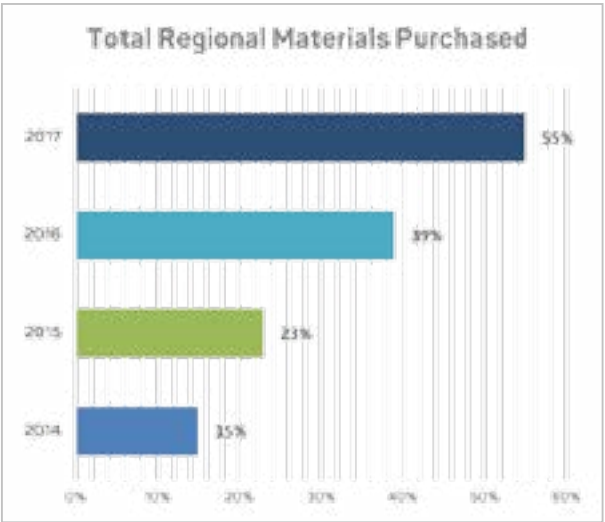
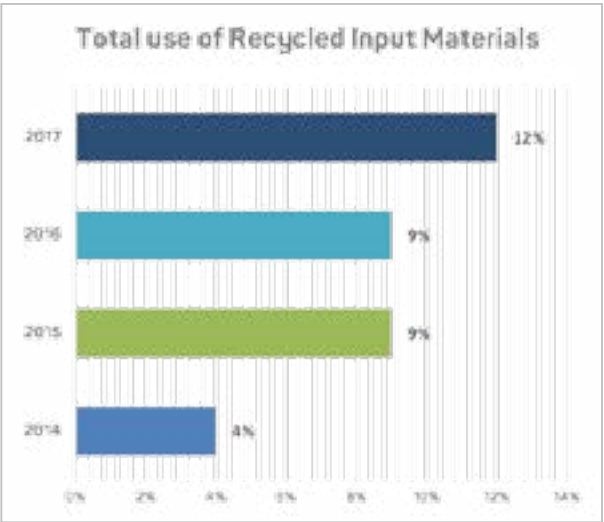
CCC's Sustainability Team provides guidance to all subcontractors and suppliers on the sustainable material requirements of projects. There is a specific procedure in place for material approvals to make sure all the materials delivered comply with CCC requirements. Suppliers are asked to complete the **"Sustainable Materials Questionnaire"** and provide supporting documentation. CCC maintains an internal material submittal flow path to ensure that all materials go through the Sustainability Team for review. This confirms compliance with requirements and facilitates a tracking process of the materials.

Life Cycle Cost Analysis

At CCC, we carry out life-cycle cost analyses (LCCA) to determine the most cost effective option among different competing alternatives, as the evaluation takes into account all direct and indirect costs of building materials. We use this tool when we are implementing any green initiative to define the maximized net savings considering the initial and operating costs. As an example, this helps us determine whether the incorporation of a high efficiency HVAC system which may increase initial cost, but result in dramatically reduced operating and maintenance costs, is cost-effective or not. This economic analysis enables us to determine the Internal Rate of Return and Pay-back Period measures. Also, through this assessment we are in a position to better understand the environmental impacts by calculating the total CO₂ savings and effectively make a valid investment decision.



Our Performance



2017 Project Specific - Material Management Results

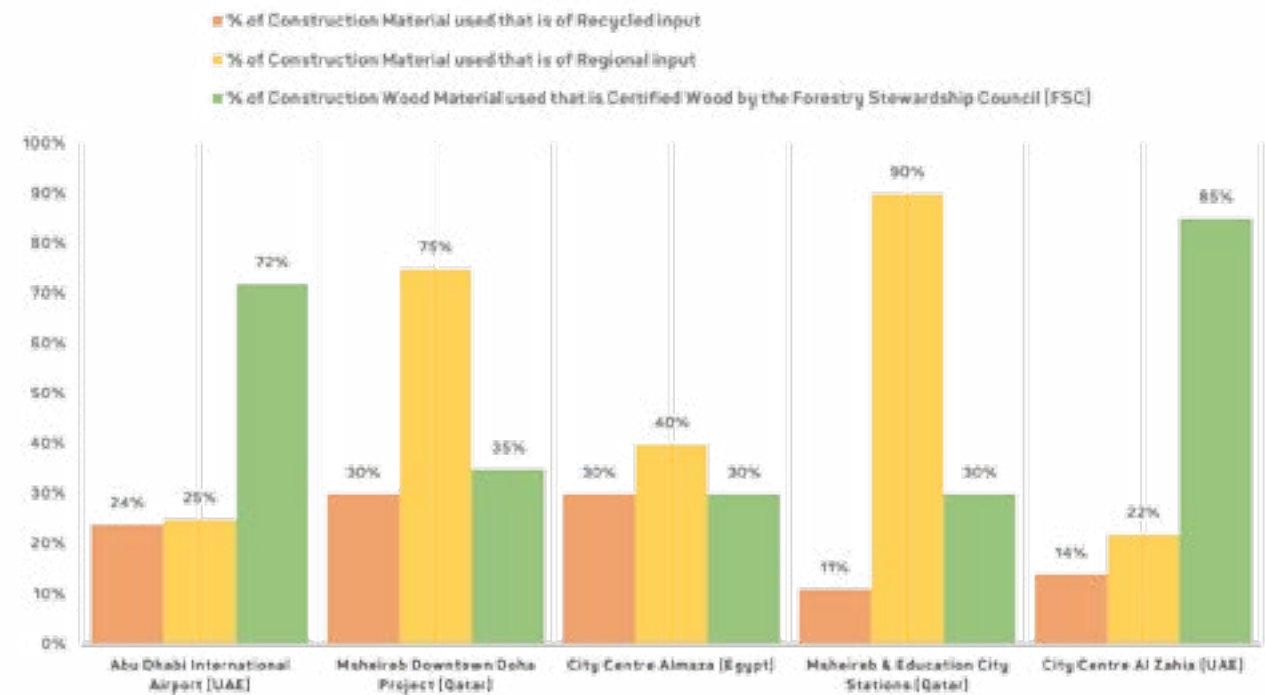


Photo by Daniel Peckham
Arashiyama Bamboo Forest in Sagano, Kyoto, Japan

BIODIVERSITY

CCC understands that biological diversity (biodiversity) is key to sustaining all life on the planet and the future of humanity. Construction projects can potentially have a negative effect on plants and wildlife. For this reason, we recognize our role in protecting biodiversity and minimizing ecological damage. At CCC, biodiversity management is integrated in our business through environmental procedures applicable to all activities and locations as well as specific project and/or site management plans.

We strive to align our business approach with the UN SDGs. Taking under consideration SDG # 15 "Life on Land" (specifically 15.3), CCC is committed to address the threats posed on biodiversity. Generally, our approach to reduce natural habitat degradation and end the loss of biodiversity follows the activities below:

- promote the conservation of nature (during the construction period)
- ecological restoration (upon completion of our activities)
- landscape schemes to create habitats as part of our projects and/or camps

Overall, our construction works impact the natural habitat through site clearance, vegetation removal and the establishment of permanent facilities. In some instances impacts may also include: noise from construction, habitat fragmentation and disturbance of migratory routes. When working in ecologically important areas the primary mitigation measure is avoidance based on any available pre-construction surveys, establishment of buffer zones and installation of exclusion fencing. Our activities are often situated close to ecologically important habitats, in which case the significant locations are identified before the construction activities begin. We also take particular notice in protecting ecologically sensitive habitats declared as such by responsible authorities or based on Environmental Impact Assessments (EIA).

We believe that managing biodiversity in a responsible way not only safeguards nature and the future of mankind but also benefits CCC's business by building trust among stakeholders and reducing risk. Some recent examples of how CCC integrates biodiversity values into project operations are described in the following pages.



Doha Metro Project

At the Doha Metro project in Qatar numerous trees were located within the work-site. To avoid imposing needless damage, the decision was to remove and replant them. Following a meticulous plan to ensure their survival a total of 42 plants (palm trees, mangrove shrubs and acacias) were replanted.



JSRU/SARU Camp

In this camp in Saudi Arabia, since mobilization approximately 4,500 plants have been planted. The plants selected are suitable for the harsh desert conditions and limited availability of irrigation water. The local CCC team reports that apart from sustaining a healthy ecosystem these plants provide significant protection from frequent sand storms.



Hamad International Airport Project

In Qatar around 100 trees were positioned in the pipeline ROW (right of way) of this CCC project. In cooperation with the Ministry of Municipality and Environment and under the coordination of a local agricultural company the plants were removed and replanted. The vast majority of them were rare native plants (sidr, samar and awsag) and therefore it was significant to save them.

Jebel Ali Camp Achievements

The annual water saving is 5,533,984 gallon/year with 52.7% water use reduction compared to the baseline design

Offset 834 tons of CO₂ emissions

Photo from stock.adobe.com



Jebel Ali Camp, UAE

When CCC management decided to expand the accommodation facilities of an existing company-owned labour camp in Jebel Ali (Dubai, UAE) it was an opportunity to integrate sustainable principles in the design and build process. The expansion included additional buildings designed to accommodate 1,264 users in different sections. The buildings consist of 3 stories with a floor area of 11,440 m² and 192 rooms. They are equipped with free Wi-Fi, central satellite dish and an external gym area.

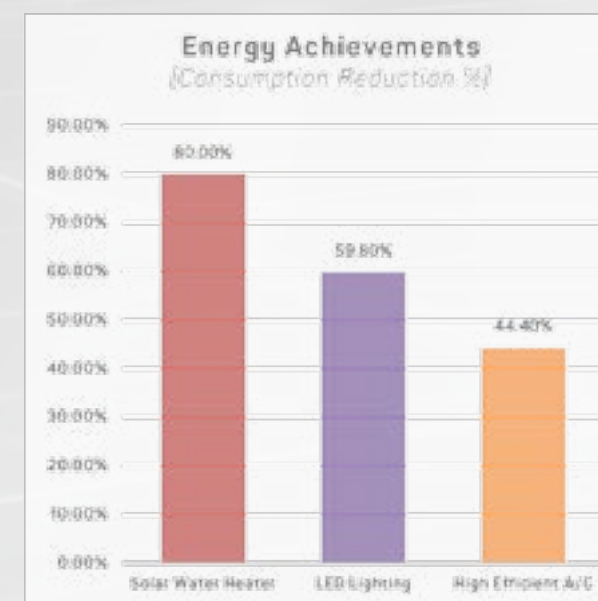
Starting with the design, the approach was to develop high efficiency buildings and apply green construction practices. As a result, all bulk materials were locally sourced including the green concrete and insulated pre-cast concrete building envelope as well as the finishing materials. Regarding site operations, a construction waste management program was applied and diligent efforts were made to minimize overall waste. Also, low volatile organic compound (VOC) emitting materials were used to improve indoor air quality (IAQ) and promote occupants' comfort. To enable the procedure and keep track, a sustainability design checklist was prepared for all incorporated measures. Additionally, high performance construction details were designed to be achieved by CCC's skilled labour.

Moreover, to reduce the water consumption and energy intensity the following were installed:

- high efficiency HVAC system (consisting of four outdoor units and seventy indoor units)
- efficient LED light fixtures
- motion sensors for the corridor lights
- low energy appliances
- solar water heater system
- programmable thermostats to control indoor temperature
- low flow fixtures

SUSTAINABILITY INTEGRATION

CCC had made its first formal internal commitments towards sustainability in 2012, by far a lead position in the MENA region. By 2015, we had established a number of policies concentrating on embedding sustainability within our organization's culture. During 2016-2017, we took bold actions to further integrate sustainability across our business operations.



SUSTAINABILITY COMPETITION

In 2017 we launched our first annual internal Sustainability Competition, aiming to further integrate sustainability across CCC. The target was to recognize best implemented sustainable practices that showcase innovative, cost effective and exemplary measures carried out throughout our company locations and incentivize the winners with significant awards to spur further innovation. We envision that acknowledging best practices and innovation will manifest a positive impact across CCC.



The evaluation process focused on the efficacy of implemented initiatives in delivering sustainability objectives and savings in energy, water and greenhouse emissions, clearly supported by facts and figures. Several submissions were made by CCC teams from various locations (Egypt, Kazakhstan, Qatar and Saudi Arabia) presenting various practical sustainability success stories.

The competition granted the winners and their projects prestigious prizes and broad recognition across the group for their best practices. The teams involved in the winning activity were dispatched to famous green topics conferences to scout out more such innovative solutions. These specialized conferences were:

- 50th Waste Expo, Las Vegas, USA
- Symposium on Urban Mining and Circular Economy, Bergamo, Italy
- World Waste to Energy and Recourses Summit, London, UK
- Smarter E Europe, Munich, Germany



The best practices captured from the competition process and the cutting edge international conferences were shared and disseminated throughout CCC. This was done with the intention of keeping Sustainability at high momentum within the organization and catalysing innovative ideas and strategies applicable to CCC and the Engineering space.



The criteria set for evaluating the entries considered all three dimensions of sustainable development - environmental, economic and societal. As a result, submissions were expected to demonstrate applications under the categories below:

- Energy Efficiency
- Water Efficiency
- Waste Management
- Transportation Management
- Renewable Energy
- Economic, Behavioural and Environmental Impacts



CCC SUSTAINABILITY INITIATIVES

In CCC we encourage our teams to use sustainable practices. This way not only do projects benefit but they also contribute towards achieving CCC's sustainable targets on an organizational level.

Renewable Energy

Using renewable energy such as solar to generate power is our main strategy in reducing our carbon footprint.

Zero Net Energy Mobile Cabin *Oman*

A solar powered mobile cabin was developed to support power demands at offices and camps such as air-condition units, lights and IT material. Using an existing cabin as a basis the project team carried out several modifications to transform it into the PV powered cabin it had envisioned. This initiative yields time and cost savings for construction projects in remote areas. Apart from generating electricity with no associated air pollution emissions, the cabin has been developed with a holistic environmentally friendly approach. The ecological footprint is decreased through the reuse of resources and the use of materials containing low CO₂ emissions.



CCC is planning to build 5 additional cabins, in addition to the existing one: each cabin will help us offset 115 tons of CO₂ emissions per year.

PV Power Plant (PV/Diesel Hybrid System) *UAE*

This PV installation generates an average of 450 megawatt-hours per year and minimizes CCC's carbon footprint by offsetting 16,056 tons of CO₂ emissions annually. It was installed at CCC's Habshan camp in January 2014 with the objective of reducing the electrical energy consumed by camp facilities.



PV Panel *Qatar*

At Water Mega Reservoir project a small PV panel was installed to generate clean energy for the site equipment.



Solar Lights *Saudi Arabia*

At Jasan Refinery Utility (JRUP) camp 24 Solar LED light poles help us offset 14 tons of CO₂ emissions per year. Also, solar powered luminaries are used for inner street lighting and all solar panels are equipped with a motion detector. At Orouba camp, with 93 PV lighting sets that provide outdoor lighting we offset 21.6 tons of CO₂ emissions annually.



Energy Efficiency

High efficiency heating and cooling equipment, appliances and lighting models are key components of our strategy to effectively manage energy consumption and achieve emissions reductions.

HVAC Equipment and Appliances

Qatar, Saudi Arabia, UAE

High star certified products such as air-conditioners, refrigerators and washing machines help us offset around 600 tons of CO₂ emissions per year.



LED Lights

Qatar, Saudi Arabia

Energy efficient and cost effective lighting products enable us to offset 130 tons of CO₂ emissions annually.



CCC SUSTAINABILITY INITIATIVES



Water and Waste Water Management

High-efficiency plumbing fixtures and water treatment plants are at the core of our strategy to reduce our water consumption.

Treatment Systems

Qatar, Saudi Arabia, Kazakhstan

Reverse osmosis water treatment systems and sewage treatment plants help us manage our fresh-water demand.



Plumbing Fixtures

Qatar, Saudi Arabia, Kazakhstan

Water saving fittings for efficient flow control.



Waste and Material Management

Our main goal is to effectively manage waste and materials.

Advanced Formwork System

A PVC DUO panel system for the boundary wall is used instead of a conventional shutter. This helps save 2250m² of marine plywood and wooden timber.



Construction Waste Reuse and Recycling

Concrete crushers allow us to produce aggregates, which are used in building temporary access roads or mixing the road sub-base materials and bedding for electrical trenches. As a result, 10,000m³ of waste concrete has been reused and 30 tons of CO₂ emissions are offset per year by eliminating the transportation of construction waste to landfill. Concrete waste is also reused for the cradles, paving blocks, kerb-stone for pathways and other internal use pre-cast items.

SUSTAINABILITY AWARDS AND RECOGNITION

Green Contractor of the Year

CCC received the award for “Contractor of the Year” at the MENA Green Building Awards. The awards were organized by the Emirates Green Building Council (EmiratesGBC) in partnership with JordanGBC and LebanonGBC and supported by WorldGBC. The awards honor organizations for their innovative and outstanding sustainable building practices. CCC received this award for being a contractor whose achievements and priorities align with improving the sustainability of the built environment. Also, in recognition of demonstrating high green standards on project sites and across the company, with adherence to national and international regulations and codes.

Sustainability Training Initiative of the Year

CCC won this award for internally promoting an advanced understanding of sustainability issues relevant to the construction industry. The awards were held by Emirates Green Building Council and endorsed by the World Green Building Council in partnership with the Green Building Councils in the MENA region. The highlights of our awareness efforts (CCC’s Sustainability webinar series and the Sustainability Competition) not only encourage sustainable behavior but have helped in establishing an in-house resource for sustainable best practices. Also, CCC was praised for sponsoring Green Building certification programs to create a pool of qualified Green Building professionals.

Green Public Building of the Year, Palestinian Museum

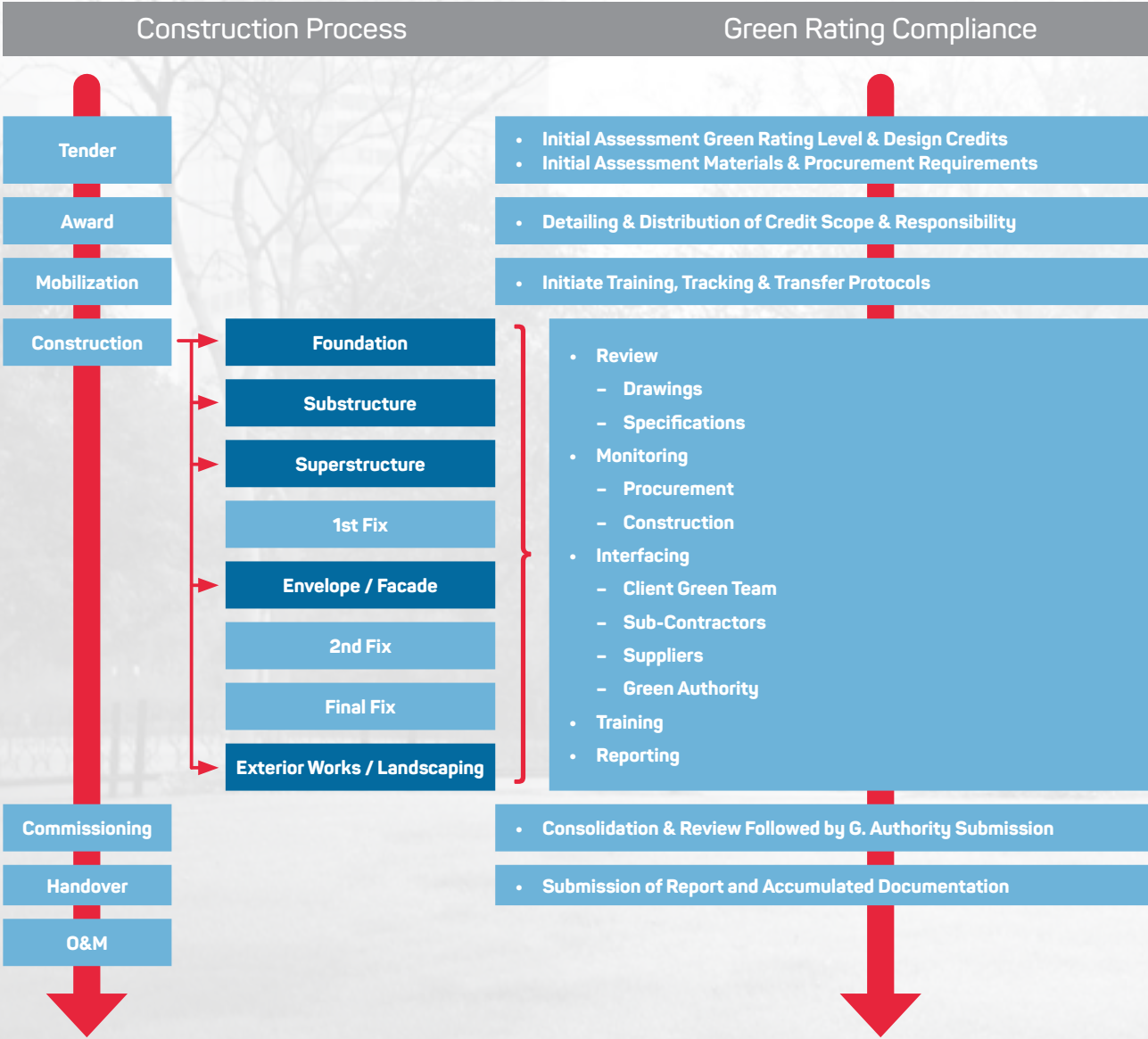
CCC constructed this modern historical museum dedicated to preserving and commemorating the Palestinian heritage. The accolade was awarded by the Emirates Green Building Council and endorsed by the World Green Building Council in cooperation with the MENA region’s Green Building Councils. The Palestinian Museum is Palestine’s first green building and was awarded the LEED Gold certificate, presenting an example of long-term sustainability in accordance to internationally benchmarked standards.



GREEN CONSTRUCTION

Our Approach

CCC's approach towards achieving compliance with any green building rating system (LEED, GSAS, ESTIDAMA, DMGBR, etc.) is primarily based on a consolidated coordination, documentation effort and periodic verification of credits 'achieved to date'. Our specific approach, depicted in figure below, links the construction process to the activities required to comply with the green rating requirements and foreseen credits.



Phase 1 Tender

The contractor's' early awareness about the intended green building rating certification and credits ensures that the proposed construction methodologies and materials to be procured are fully aligned with the rating targets.

Phase 2 Award

A Green Rating kick-off meeting is organized to confirm green rating requirements, define scopes and responsibilities and discuss documentation, system specifications and any training requirements. Training may be required to ensure that all involved parties have a common understanding of the green building rating requirements and process.

Phase 3 Mobilization

At this stage, the project implements a green rating tracking and reporting infrastructure. Also, we develop training schemes for rating engagements and deliverables. Our strategy is to facilitate a series of initial review meetings with subcontractors, to ensure that each function understands the green building process. The Sustainability Engineer is responsible for reviewing the project-specific green rating approach, addressing coordination or constructability challenges related to achieving the credits and educating relevant personnel on the documentation requirements.



GREEN CONSTRUCTION

Phase 4 Construction

During Construction a continuous process of review, monitoring, interfacing, training and reporting takes place. The Sustainability Engineer works closely with Project Engineers and Subcontractors to guarantee construction submittals are compiled, per the requirements of the LEED reference guide. Depending on the targeted LEED credits, applying best practices may be essential. For example, under indoor air quality actions may include: proper sequencing, protecting ductwork from particulates, changing filters during HVAC operation, etc. Also, credits for construction waste management may require maximizing the amount of waste that is recycled or managed for reuse.

Phase 5 Commissioning

CCC compiles the documentation of the construction-related credits of the LEED rating review at the end of construction or shortly after handover. This allows for the inclusion of results from commissioning activities and building flush-out.

Phase 6 Handover

CCC's responsibility consists of preparing the required documentation and submitting it to the Client. Generally, the final submission to the Green Authority is usually coordinated by the Client or Architect via an online application.

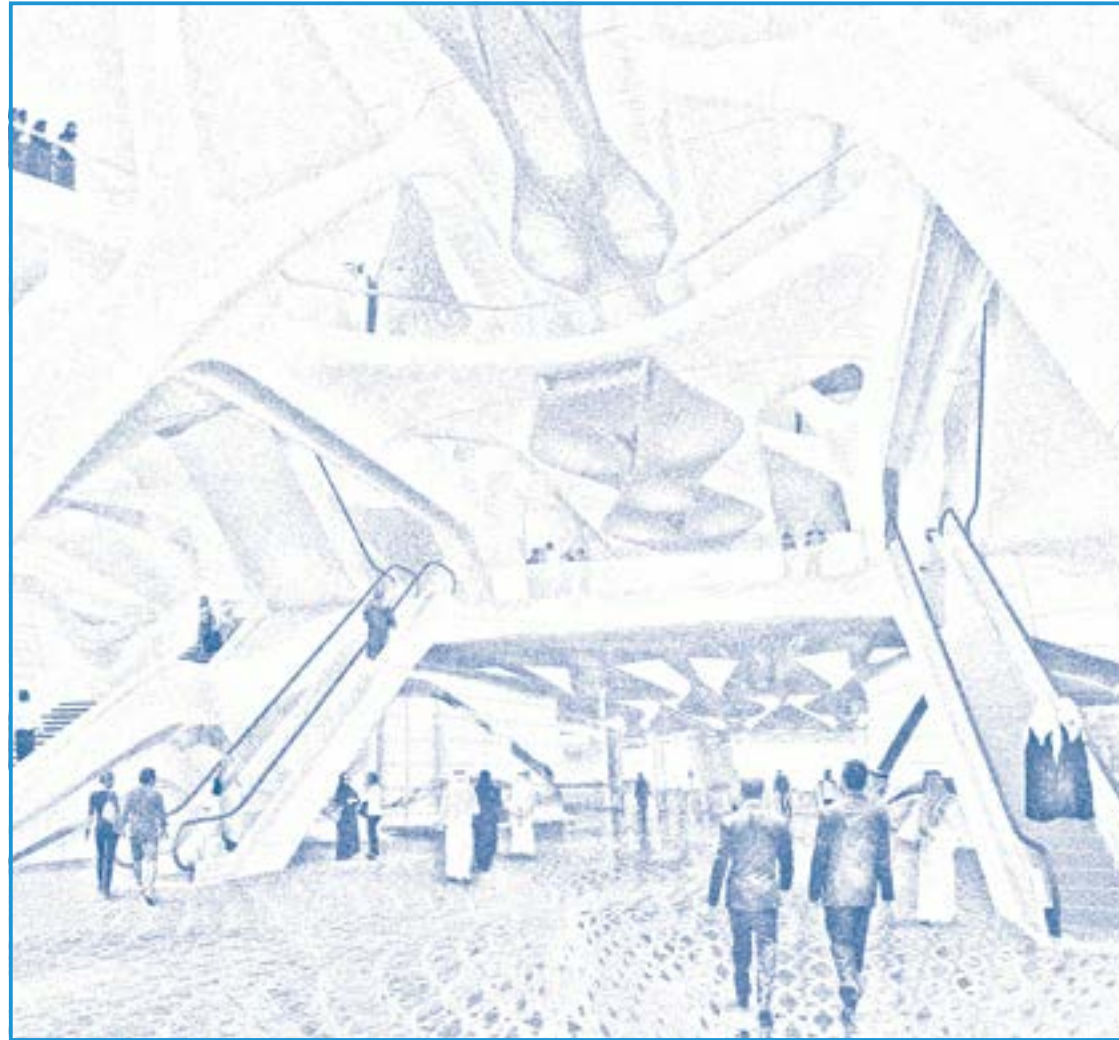
Our Experience

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 recourse-conserving use, environmentally friendly materials and efficient energy management. Our projects below set benchmarks for their green design and construction features:

No.	Project Name	Location	Client	Project Phase	
				Design	Construction
Projects Completed					
1	LMH Project <i>(Multipurpose Hall at Lusail Sports Club)</i>	Qatar - Doha	Qatar Olympic Committee	3-Stars GSAS <i>(Certified)</i>	4-Stars GSAS <i>(Certified)</i>
2	Princess Nora University Project <i>(PNU Academic Campus Part-1 & 2)</i>	KSA - Riyadh	Ministry of Finance	LEED Gold <i>(Certified)</i>	LEED Gold <i>(Certified)</i>
3	CCC Head Office Building	Oman - Muscat	CCC	LEED Certified <i>(Certified)</i>	LEED Certified <i>(Certified)</i>
4	Palestinian Museum	Palestine - Birzeit	The Welfare Association	LEED Silver <i>(Certified)</i>	LEED Gold <i>(Certified)</i>
5	New Port Project <i>Container terminal Project (CT - 1)</i>	Qatar	New Port Project Steering Committee NPP	GSAS 3-Stars <i>(Certified)</i>	GSAS 3-Stars <i>(Certified)</i>
6	CCC KIZAD Logistic Facility	UAE - Abu-Dhabi	CCC	ESTIDAMA 1 - Pearl <i>(Certified)</i>	ESTIDAMA 1 - Pearl <i>(Certified)</i>
Projects Under Construction					
1	Abu Dhabi Plaza <i>(Mixed-use Development)</i>	Kazakhstan - Astana	Aldar Properties PJSC.	LEED Silver <i>(Certified)</i>	Target LEED Silver <i>(In-Progress)</i>
2	Abu Dhabi International Airport <i>Midfield Terminal Building</i>	UAE - Abu-Dhabi	Abu-Dhabi Airports Co. (ADAC)	ESTIDAMA 3 - Pearl <i>(Certified)</i>	Target ESTIDAMA 3 - Pearl <i>(In-Progress)</i>
3	Riyadh Metro <i>Lines 1 & 2</i>	KSA - Riyadh	Arriyadh Development Authority (ADA)	LEED Silver <i>(Certified)</i>	Target LEED Silver <i>(In-Progress)</i>
4	Automated People Mover Head House <i>Phase 1</i>	UAE - Abu-Dhabi	Abu-Dhabi Airports Co. (ADAC)	ESTIDAMA 1 - Pearl <i>(Certified)</i>	Target ESTIDAMA 1 - Pearl <i>(In-Progress)</i>
5	City Centre Almaza	Egypt - Cairo	Majid Al Futtaim Properties Egypt	LEED Silver <i>(Certified)</i>	Target LEED Silver <i>(In-Progress)</i>
6	Opera Grand Tower	UAE - Dubai	EMAAR PROPERITES PJSC	DMGBR <i>(Certified)</i>	Target DMGBR <i>(In-Progress)</i>
7	Msheireb Downtown Doha <i>Phase 4</i>	Qatar - Doha	MSHEIREB PROPERITES	LEED Gold <i>(Certified)</i>	Target LEED Gold <i>(In-Progress)</i>
8	Al Zahia City Centre	UAE - Sharjah	Majid Al Futtaim Properties	LEED Gold <i>(Certified)</i>	Target LEED Gold <i>(In-Progress)</i>
9	Mall of Oman, Package 2 <i>Main Works</i>	Oman - Muscat	Majid Al Futtaim Properties	LEED Gold <i>(Certified)</i>	Target LEED Gold <i>(In-Progress)</i>



GREEN PROJECTS



RIYADH METRO PROJECT



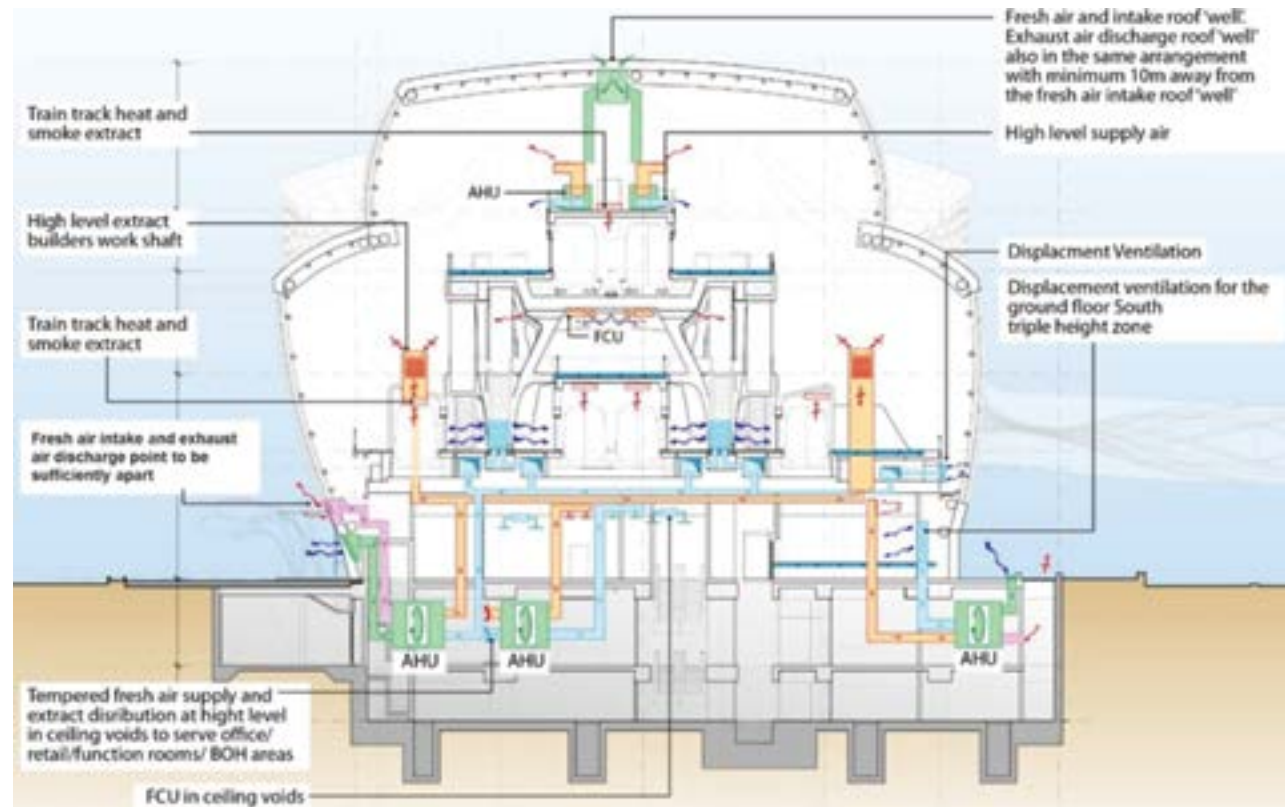
Energy & Water Conservation at KAFD Station

BACS Consortium (Bechtel, Almajani, CCC and Siemens) is responsible for the Design, Procurement and Building of Line 1 and Line 2 of the Riyadh Metro Project in Saudi Arabia. King Abdullah Financial District (KAFD) Station is located within the King Abdullah Financial District in the north of Riyadh. The station, designed by Zaha Hadid Architects, is an iconic building located at the intersections of Lines 1, 4 and 6 of the metro network. KAFD Station features 6 floor levels, 2 below-grade and 4 above-grade, totalling a built up area of 491,053 ft² (45,620.317 m²). The station has multiple elevated connections for pedestrians to adjacent buildings. KAFD Station is pursuing LEED-2009 Certification and is aspiring for a Silver rating.



GREEN
PROJECTS

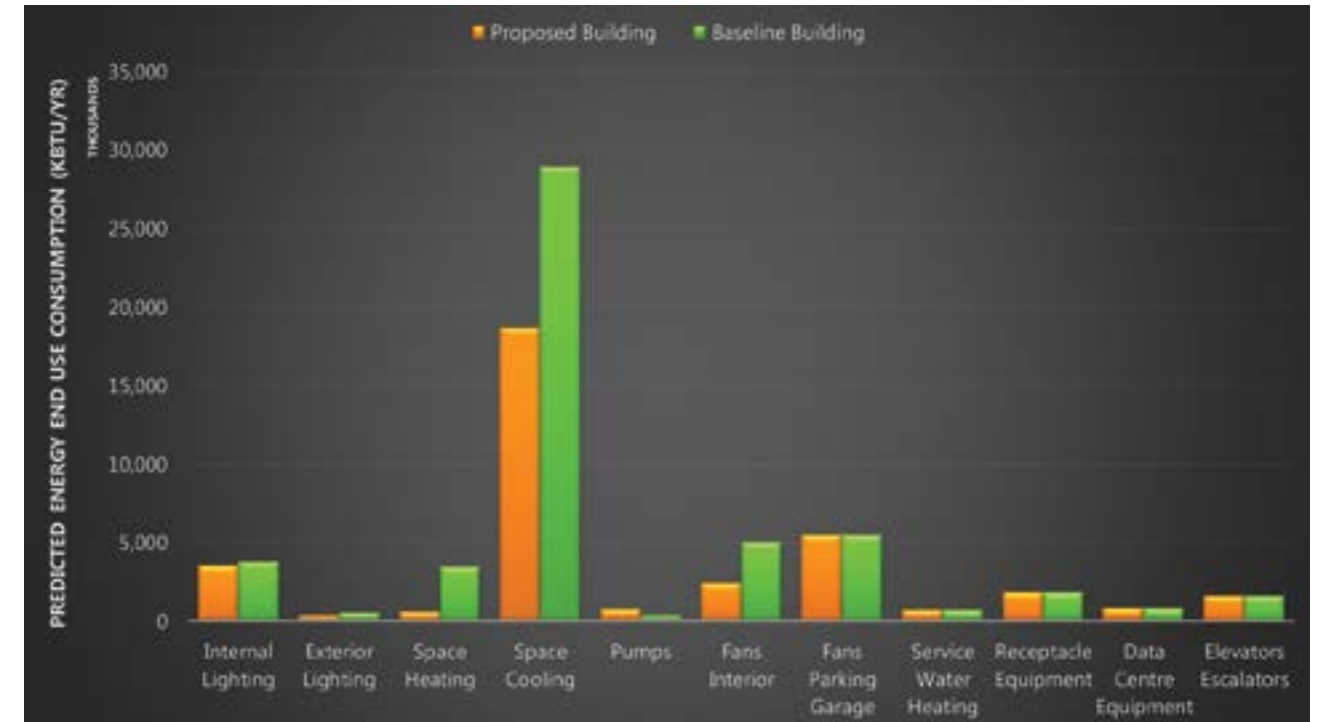
The design benefits from the optimization between solar shading, daylighting and solar gain, and benefits further from an envelope comprising high performance building fabric and high performance fenestration assembly and glass. These passive architectural measures coupled with active measures resulted in energy savings of 30.44 % for the building, which corresponds to a cost savings of 34.96 % and gained the project 12 credit-points. The building receives its supply of cooling water from a District Cooling plant through a set of high-effectiveness Plate Heat-Exchangers. The Energy Efficiency and Water Conservation measures incorporated into the proposed building design are shown below:



WAP Station - HVAC System Layout Schematic

Energy Efficiency

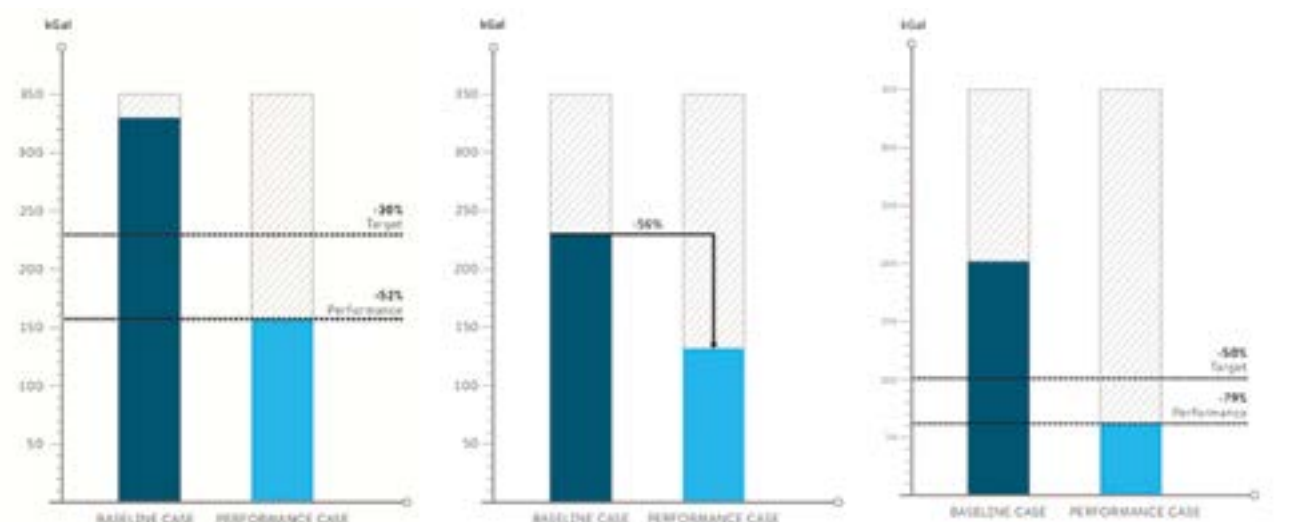
1. Above-Grade Wall Assembly: Insulated R-35 GRC Opaque Cladding and Diagrid GRC Wall System; Assembly U-Value - 0.06 Btu/hr-ft²F (0.35 W/m²K).
2. Roof Assembly: Insulated R-35 c.i. Opaque Cladding GRC Roof System; Assembly U-Value - 0.0601 Btu/hr-ft²F (0.3412 W/m²K).
3. Fenestration SHGC: Solar Heat Gain Coefficient; Assembly SHGC - 0.23 (G-Value - 0.23).
4. Fenestration Assembly: Insulated Glazing Unit; Assembly U-Value - 0.2500.
5. Btu/hr-ft²F Diagrid (1.41 W/m²K) and 0.2992 Btu/hr-ft²F Podium (1.69 W/m²K).
6. Demand Control Ventilation: During occupied periods when the AHUs are running, the system modulates the relief air dampers and the outside and return air streams to maintain CO₂ concentrations levels in occupied areas between 800-1,000 ppm.
7. Displacement Ventilation: takes advantage of thermal stratification to enhance occupants comfort.
8. Air-side Energy Recovery: 65% effectiveness for the enthalpy wheel.
9. Air-side Energy Economizer: Night-time Cooling.



Water Conservation

- Water consumption reduced by 52 % over baseline standards (EPA 1992) by specifying low-flow fixtures.
- The project features a graywater system that treats waste water from wash basins, showers and ablution units; and the treated water is then used for toilet flushing. The graywater system has a collection capacity of 332.4 kGal, annually.
- Dual flush toilets along with the graywater system reduce the potable water for sewage conveyance by 79%.

With such a good design performance in water consumption, we are targeting to earn 2 extra credit-points under the Regional Priority category.



Egypt

CITY CENTRE ALMAZA

Majid Al Futtain Properties Egypt (MAFP Egypt) is developing a 126,658m² convenient sub regional centre as a retail destination, designated as Almaza City Centre. The 147,845m² site is located inside the ring road between the relatively affluent Heliopolis and Nasr City districts of Cairo at the intersection of the Suez Road and Auto-strad Road to be a five-minute drive from City Stars. The commercial retail centre planned to house various tenants is seeking to achieve Leadership in Energy and Environmental Design (LEED) Certification with the United States Green Building Council (USGBC).

The project is targeting silver certification; however, the client is aiming to achieve gold certificate. CCC has succeed in achieving 4 points of LEED scope, in addition to 6 points in public transportation with which the project will achieve the Gold certificate instead of the Silver.



CCC has achieved 4 points over LEED scope, in addition to 6 points in public transportation which will gain the project a LEED Gold certificate rather than a Silver Certificate

Water Efficiency

Permanent Building:

- Water consumption reduced by more than 20% over baseline standards (EPA Act 1992) by specifying low flow fixtures.
- Proposing landscaping that doesn't require a permanent irrigation system (additional credits were secured for this).
- Reductions in municipal water and wastewater systems up to 40% from design (further credits were acquired for this).

Project Offices:

- On-site water treatment system treats water and converts it into drinking water that meets standards for potable water. Municipality water supply point is connected to the project's installed water treatment station where it undergoes 5 stages of filtering followed by 3 stages of ultraviolet ray filtration.



LEED Evaluation & Scoring Sheet: Construction Site and Project Offices

Energy Efficiency

Permanent Building:

- Achieved power consumption savings below the design values via all lighting fixtures.
- All roofing materials are intended to comply with solar reflectance index (SRI) to reduce heat transfer and in sequence HVAC power consumption.
- Secured a 12% improvement of the proposed building performance rating (compared to baseline).
- Sensors installed to monitor building ventilation and CO₂ content will reduce carbon emissions.
- Refrigerants are selected to eliminate compounds' emissions that contribute to ozone depletion and climate change.

Project Offices:

- LED lights in 50% of project offices.

CITY
CENTRE
ALMAZA

Waste Management

- 80% of waste is recycled
- Detailed waste management plan covers construction, municipal and medical waste.

Transportation Management

Permanent Building:

- Originally, the alternative transportation credit wasn't targeted by the project's LEED consultant. However, CCC prepared a relevant plan highlighting the project's proximity to public transport and the potential to achieve this credit.

Project Offices:

- A comprehensive bus schedule comprised of 16 buses is available for the total number of employees.

Renewable Energy

Construction Site:

- CCC is working with the client to use on-site renewable energy through solar panels.

Project Offices:

- The purchase of a solar heater is being considered.

Qatar

MSHEIREB DOWNTOWN DOHA

Phase 4

Msheireb Downtown Doha Phase 4 includes ten LEED buildings with mixed use community infrastructure on previously developed urban infill site in Doha, Qatar. The site has immediate access to existing infrastructure, such as roadways and alternative transportation opportunities. The scope includes external hardscape works and public realm linking to the Msheireb Metro station.





MSHEIREB DOWNTOWN DOHA



The project certification consists of LEED New Construction and LEED Core & Shell rating system. It is intended to achieve the LEED Gold rating level for all buildings. The following summarizes how the certification requirements are being handled by CCC's project team and any relevant results (current and anticipated):

Sustainable Sites:

- Implementation of a construction activity pollution prevention plan to reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.
- Storm water discharge to the municipal system after passing through sand filters will eliminate 80% of total suspended solids (TSS) from water.
- 222 permanent bicycle storage units will be provided to encourage bicycle use across the project.
- 1,648 parking spaces are considered as low emitting and fuel efficient spaces to promote sustainable transportation.

Water:

- 52% of landscape water consumption reduced from baseline by selecting native plant species and efficient irrigation systems.
- 46% of domestic water consumption reduced by ultra-efficient water fixtures.
- Condensate recovery is used for toilet flushing and irrigation to ensure higher levels of potable water savings.



Energy:

- LED lighting has secured significant savings and reduced cooling demand.
- The project's 75% of hot water demand is supplied by solar hot water.
- 1% of total building energy consumption is provided through solar PV panels.

Materials and Resources:

- More than 75% of construction waste diversion is targeted.
- The project is equipped with an automatic waste collection system.
- More than 20% of construction materials are recycled.
- More than 50% of wood is certified by the Forest Stewardship Council (FSC)
- No mercury lighting is used.

Indoor Air Quality (IAQ)

- CO₂ sensor used to monitor indoor air quality.
- All liquid applied products are VOC¹ compliant.
- All the flooring, ceiling and wall systems are appropriately certified as green products.
- The comfort and well-being of construction workers is promoted (SMACNA² IAQ Guidelines are adopted and strictly followed in site).
- More than 90% of building occupants will have access to outdoor views from all occupiable spaces.
- More than 90% of building occupants have individual lighting controls.
- Motion sensors are installed in common areas.
- Residential spaces supplied with more than 30% of fresh air ventilation.

¹ Volatile organic compounds

² Sheet Metal and Air Conditioning Contractors' National Association



Photo from **Matt Champlin**
Nile River, Egypt

SOCIAL

A fundamental component of CCC's business is our profound commitment to providing a safe and healthy workplace, to 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.

Related Sustainable Development Goals



HEALTH, SAFETY & ENVIRONMENT

(HSE)

Protecting the health and safety of our employees is our primary goal. This is a continuous mission and CCC is working to remain a leader in safety in the construction industry.

CCC has made Health and Safety a priority for many years now and we remain determined to constantly enhance our safety strategy and provide the best protection for our staff. Our HSE strategy is demonstrated through the role of the Corporate HSE Department (HSE Group). CCC's HSE Group offers support, direction, guidance and solutions to all CCC projects, monitors HSE implementation and evaluates the performance of all operations and projects globally.

We commit to safe practices in all our operations and in everyday actions.

We have a duty of care for the health and safety of our employees and for those we serve.

We believe safety is a "mindset" and an integral part of our decision making.

We believe safety is a "core" value.



HSE MANAGEMENT SYSTEM

CCC's HSE management system aims to provide the framework and tools to manage evolving HSE issues quickly and easily while meeting the high standard of HSE performance and expectations of both the client and regulatory authorities. It also serves to ensure that a safe and healthy work environment is provided to our employees, avoiding injury to any person, damage to equipment or property or any harm to the environment as a result of company activities.

Since 2004 the HSE Group has developed an internationally recognized and certified HSE Management System (OHSAS 18001) that meets the needs of the ever changing HSE standards across operation operations.

CCC's integrated management system is internationally certified for compliance with ISO 14001:2015 Environmental Management and OHSAS 18001:2007 Occupational Health and Safety Management.

HSE PERFORMANCE

CCC continuously works towards a world-class HSE performance by measuring and compiling internationally recognized HSE performance indicators that are categorized as leading or lagging. These figures are comprehensive statistics and data covering all the divisions of CCC operations (civil, mechanical, and pipeline projects) worldwide. The numbers generated each year help us set specific and strategic targets to be achieved the following year. Our HSE Leading and Lagging Indicators are traditional safety metrics. They are used to indicate progress towards compliance with HSE targets and provide the information that helps evaluate the overall effectiveness of CCC’s HSE performance. Specifically, they capture:

- **Leading Indicators:** Proactive efforts to identify issues and actions needed to prevent a future event that could result in injury or property damage.
- **Lagging Indicators:** Measure CCC’s incidents in the form of past accident statistics.

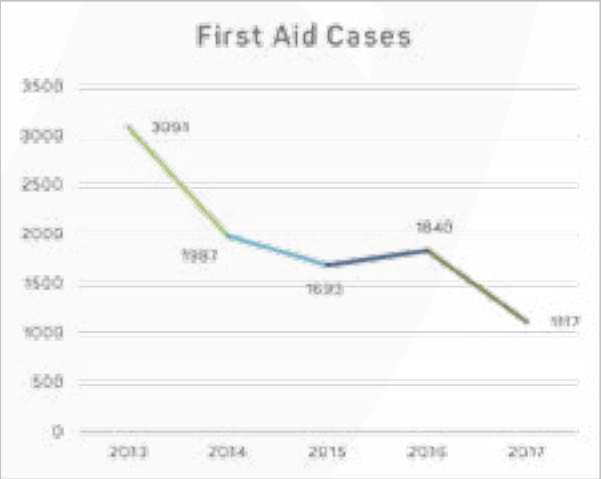
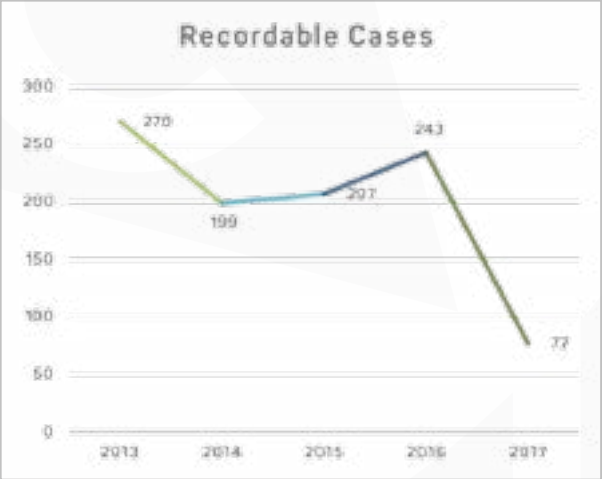
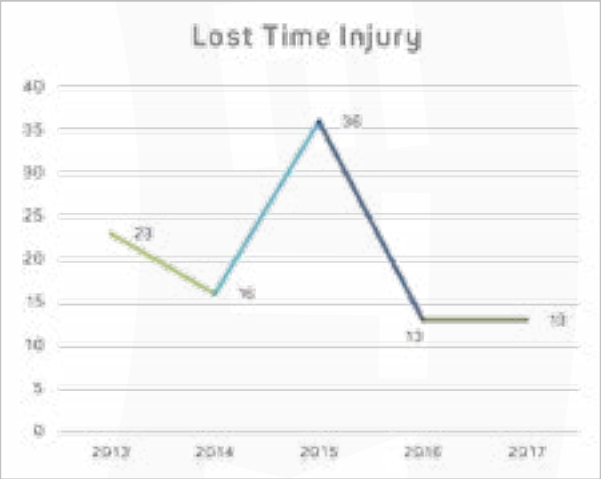
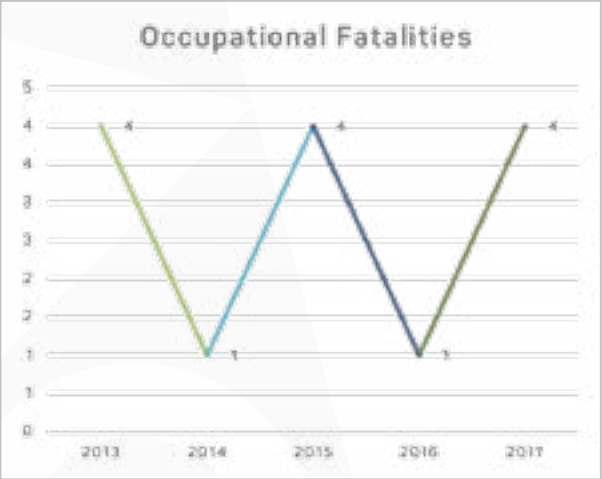


After a downward trend in fatalities in 2016, 2017 has seen an increase in fatalities. This is a “red flag” for CCC top management as they are concerned about the safety of each and every employee. Senior management believes that nothing is more precious than human life and well-being. In 2016, one (1) work related occupational fatality occurred and in 2017 a total of four (4). In reviewing the fatalities and Lost Time Injuries, each and every one was 100% preventable. As a result, a strategic HSE improvement plan has been developed to enhance HSE performance at all projects and areas of operations.

Leading HSE Indicators

DESCRIPTION	2016	2017
Safety Meetings at CCC Projects	8,804	6,600
HSE Training Man-hours (hours)	1,415,464	2,424,242
HSE Training Achieved from Target %	66.70%	76.28%
HSE Audits	19	17
Incident Investigation	17	14
Injury rate	0.10	0.05
Lost day rate	0.01	0.01
HSE Inspections (safety site walk-throughs)	197,167	61,838
Near Miss Reported from CCC Projects	14,404	9,370
IVMS Installation	4130 (out of 5,848)	2,960 (out of 4,340)

Lagging HSE Indicators



HSE ENHANCING THE SAFETY CULTURE

CCC is adamant about creating a safe workplace. We strive to accomplish this by forging a work culture that focuses on shared accountability, leadership and effective risk management. We also believe that good safety performance is a result of both individual and group effort. Everyone can influence a safer outcome by behaving in a way that shows we care for each other.

CCC enhances a culture of safety among the workforce through genuine management commitment, fair leadership, HSE training, effective multi-level communication, consultation and worker competence. Also, continuous improvement is accomplished through studying and analyzing recognized safety culture indicators such as accident rates, feedback and compliance with safety requirements.

We always stress:

"HSE is Everybody's Business"

CCC increases employee engagement to improve their attitude toward safety. For example, in 2017 we focused heavily on IIF (incident injury free) programs. These IIF programs are carried out with the personal commitment from all management levels to achieve the ultimate goal where employees are responsible not only for their own safety but for the wellbeing of their co-workers.



HSE "WORLD CLASS" HSE TRAINING

We place Health and Safety training at the center of our attention. Through our training programs we strive to enhance the capability of our employees across all levels, to execute their tasks in a safe, reliable, responsible and efficient manner.

13

**Average HSE Training Hours
per individual across CCC's
Manpower in 2017**

CCC currently provides in-house HSE training courses to all CCC personnel (project and office based) including:

- NEBOSH International General Certificate (IGC)
- OSHA training (options between 10 and 30 hours)
- HSE leadership courses for all levels of management and supervision
- Train the Trainer
- Incident Investigation Course
- Injury record keeping and classification course for key management, safety and medical staff
- Fire safety and fire warden training
- Risk Assessment Course for HSE staff, management and engineers
- Hazard Identification Course for all levels of management and supervision
- First Aid/CPR/AED (Adult/Pediatric) Level 3
- H2S and Breathing Apparatus



HSE ROAD SAFETY

78%

**Average IVMS Activation in
Vehicles**

(2016-17)

With more than 10,000 vehicles positioned at our projects in 2016 and 2017, a substantial portion of CCC employees drive vehicles as part of their jobs. Consequently, road safety has been identified as one of the main safety risks on CCC project sites. At CCC we address these risks by following rigorous road safety standards, training, journey management and disciplinary actions.

We also use In-Vehicle Monitoring System (IVMS) to help us improve our driving behaviour by providing details on drivers' performance. We monitor information such as vehicle movement and location and actions linked to speeding, harsh braking, sharp acceleration, engine idling and use of seat belts. Monitoring these parameters helps us understand safe driving performance and keeps our drivers safe. To promote road safety an internal requirement was issued to install the IVMS on all vehicles.

CCC's HSE Group has exerted a great deal of effort to ensure projects comply with IVMS. Apart from installing IVMS on all vehicles, projects are expected to submit an event summary report analyzing findings. Road and vehicle safety has been improving over the years indicating that the use of IVMS promotes driver behavior and safety.



WE SUPPORT

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 labor laws
- Adhering to stringent OH&S directives and procedures tailored to our projects
- Promoting diversity and fair employment opportunities



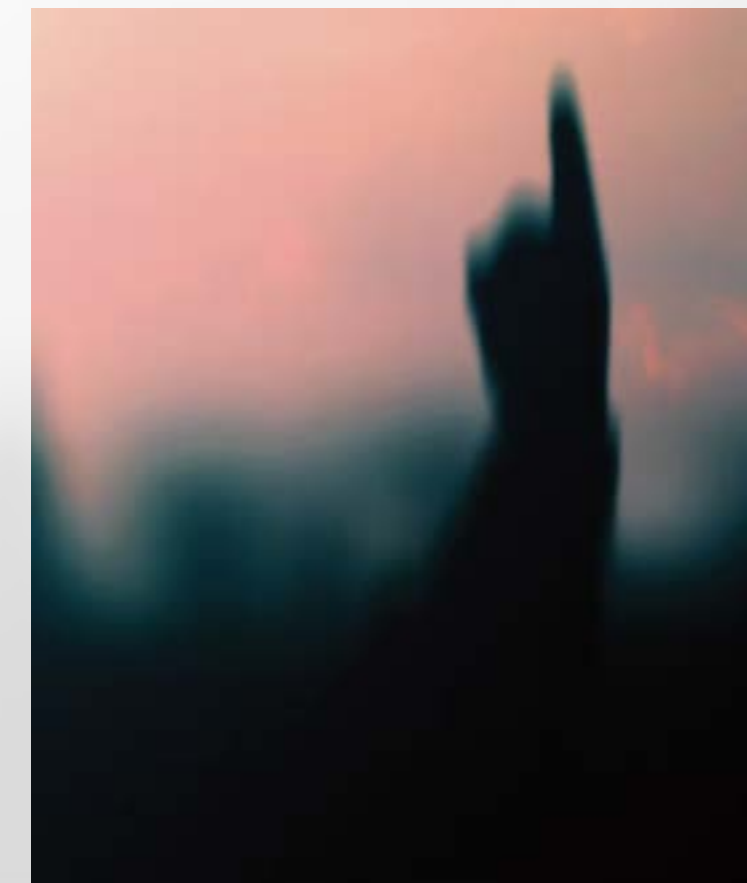
Photo from stock.adobe.com

RESPECTING INTERNATIONALLY PROCLAIMED HUMAN RIGHTS

Honouring our commitment to respect and support Human Rights starts from investigating our corporate impact on human rights issues. Understanding first what the salient human rights to our industry and the different locations where we operate are, allows us to examine our practices and establish suitable corporate responses.

Several ICESCR¹ Articles such as the "Right to enjoy just and favourable conditions of work" and the "Right to an Adequate Standard of Living", which incorporates the "Right to Adequate Housing", "Right to Food" and "Right to Water" are salient human rights for CCC. As a company that provides housing, food and water to our workforce we can impact directly, positively or negatively, on the enjoyment of these rights. Work safety is relevant to two of the most fundamental human rights, ICCPR's² Article 6 "Right to Life" and ICESCR's Article 12 "Right to Health" in that inadequate standards of occupational health and safety resulting in danger or loss of life to workers or others along our supply chain, may directly harm the right to have one's life protected.

CCC ensures that adequate arrangements are in place to safeguard the health, safety and welfare of all employees in its projects and operations. CCC also ensures it is in full compliance with all client HSE and Welfare requirements as well as all local regulations and international best practices that aim to protect and preserve the dignity of workers.



¹ International Covenant on Economic, Social and Cultural Rights

² International Covenant on Civil and Political Rights



HUMAN RIGHTS

CCC continuously strives to maintain an open door policy which encourages constant access of staff to their superiors to voice their opinions and concerns. This is facilitated through offices located in the camps and suggestion boxes at area offices. CCC advocates open communication and dialogue with our employees. With reference to this, we have highlighted here a relevant success story from our activities in Oman:

Aisha joined CCC Oman in 2005 and is working in the Logistics Department, while Wafa joined CCC Oman in 2008 and is working in the Public Relations Department. They have something in common: their willingness to serve and improve their community, besides their love for charity work. They started in 2014 with the idea of having an employee representation body for CCC Omani workers and they worked hard, as volunteers, to achieve this target as they succeeded to register the group in 2015 with 400 members in one year. Both Wafa and Aisha are in the CCC Oman employee representation group administration and both have been recognized and honored by the General Federation of Oman Trade Unions. They managed to successfully surpass significant difficulties: CCC projects are scattered inside the Sultanate, while modern means of communication such as emails are not available to the majority of workers. This left only one arduous option: after the formation of the association there were frequent field visits and direct communication with the workers in specifically organized team-building events designed to attract the biggest possible participation.

FOSTERING SOCIAL DIALOGUE

The association addresses worker issues related to labor law and work regulations in the company, offering a necessary grieving mechanism and access to effective remedy of the workers concerns. The process is formal and transparent as minutes of the regular meetings between members of the Union's governing body and the company's management are sent to the General Union of workers of the Sultanate. There is no doubt that the establishment of the CCC trade union in Oman did not happen in a vacuum; favorable conditions were prevalent by virtue of the Omani Labor Law which were fully developed by the senior management of the company with the aim of creating a stable and welcoming work environment and a meaningful partnership between management and employees. We have found that the establishment of this employee representation body has offered to our workers the possibility to reduce significant stressors and harness their full potential at work contributing to their wellbeing and overall health.

CCC Oman employee representation body meeting.



An event honoring the female members of the association on the occasion of Omani Women's Day.



Awarding ceremony in cooperation with CCC Oman management and the employee representation body.



HUMAN RIGHTS

SCREENING BUSINESS PARTNERS

Wanting to address the risk of having our business partners expose us to human rights violations we have developed and started using a "Suppliers and Subcontractors Sustainability Assessment Form". The scope of the assessment form is appropriately wide, spanning a wide range of indicators that reflect human rights, accommodation, health and safety, labor practices, environmental management and bribery and corruption. By introducing an assessment of our suppliers and subcontractors, we have increased our confidence in our capacity to avoid being complicit in human rights abuses.

Consolidated Contractors Company
Suppliers & Subcontractors Sustainability
Self-Assessment Form

Doc. ID: CCC-SUS-FRM-SCA-001
Revision No. 08
Revision Date:
Page 2 of 3

Category	Indicator	Description	Assessment			Comments & Evidence	Rating	CCC Comments	
			Yes	No	N/A				
3.1 Labor Practices	3.1.1 Employment practices	Do you abide with the legal requirements of local laws (e.g. medical insurance and benefits)?							
	3.1.2 Health and Safety	Does the company have a certified health and safety policy in place, that addresses fire protection, first-aid, accident?							
	3.1.3 Wages and Compensation	Does the company have a system in place that ensures that employees understand their employment conditions, including the terms of their payments prior to entering into employment? Does the company provide employees with regular written information (e.g. Pay slips) showing how their pay is calculated, including basic, overtime, other benefits/bonuses and deductions? Does the company demonstrate compliance with national laws on the payments it makes to its employees for standard time, overtime, and employment benefits?							
	3.1.4 Disciplinary Practices	Does the company have a written Code of Conduct for its employees, which it also enforces? Does the company have a procedure in place to ensure employees are free from physical or verbal abuse, or other harassment or threats, or any other forms of intimidation?							
	3.1.5 Working Hours	Do workers have a mechanism to express grievances? Does the company have a guideline to comply with national laws on the working hours of its employees?							
	3.1.6 Training and Education	Does the company have records to demonstrate compliance with national laws on the overtime hours of its employees? Does the company have Training Programs for employees and records to?							
	3.1.7 Company Provided Accommodation	Does the company provide all employees with a safe and healthy living environment in company provided accommodation? Do all employees who reside in dormitories have access to clean toilet facilities, running water, safe drinking water, sanitary cooking facilities, and adequate private showers? Does the company provide appropriate health and safety information and equipment to employees who live in the accommodation facility?							
	3.2 Human Rights	3.2.1 Child Labor	Does the company have a written Child Labor Policy stating that it will not employ workers below the legal minimum age for employment? The policy should comply with the national laws and conforms with the UN Convention on the Rights of the Child, ILO Convention No 182, on the Worst Forms of Child Labor and ILO Convention No 138, on the Minimum Age of Admission to Employment and Work. Does Management verify the age of workers and establish maximum age restrictions for relevant work categories, paying particular attention to hazardous work?						
		3.2.2 Discrimination	Does the company regularly monitor its business to ensure that no child labor is used? Does the company have a written procedure stating that its employees are treated free from all negative discrimination?						
		3.2.3 Training	Does the company have a training program addressing awareness on aspects of Human Rights - Core Values?						

Consolidated Contractors Company

Photo from sheekh.co.ba



HUMAN RESOURCES

(HR)

CCC's employees - our social capital - are a major pillar of our success and commitment to sustainability. For without our human factor, we would not have been the same unique company we are. The human factor plays an intrinsic role in our culture and business operations. Our long established family culture defines our uniqueness and stimulates continuous attraction of talented and highly qualified individuals of all nationalities. Our family culture creates a connection of loyalty and belonging between the company and the employees. It is this prevailing family atmosphere that inevitably leads to an exciting, vibrant and dynamic working environment, transcending our company's geographical spread.

HR OUR GLOBAL WORKFORCE

CCC continued to grow in 2016 and 2017 despite the less than encouraging environment and crises surrounding it. It was one of the few companies in the Middle East which continued to recruit, train and develop human resources.

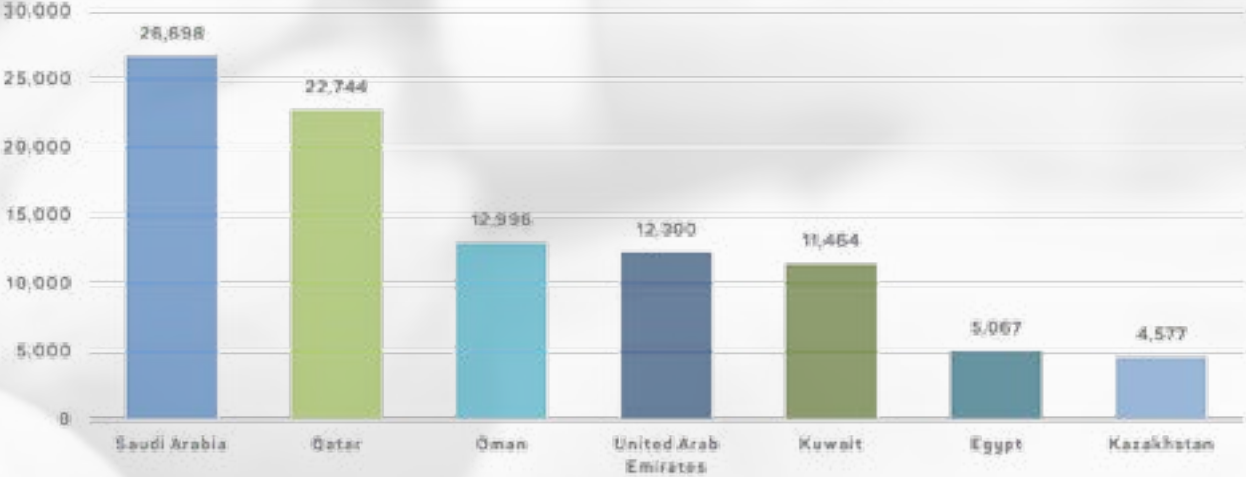
At the end of 2017 CCC's direct personnel was 102,351 with staff consisting of 18,295 and daily employees 84,056. Contracted workers through subcontractors were approximately 43,000. The countries which had the highest hires were Saudi Arabia, Kuwait, Qatar and the UAE. The same locations with the addition of Egypt and Kazakhstan also retain the majority of CCC personnel (staff and daily employees) reflecting the projects CCC is constructing in these countries.



HR STATISTICS

HUMAN RESOURCES

Personnel
Top Countries



New Hires
Top Countries

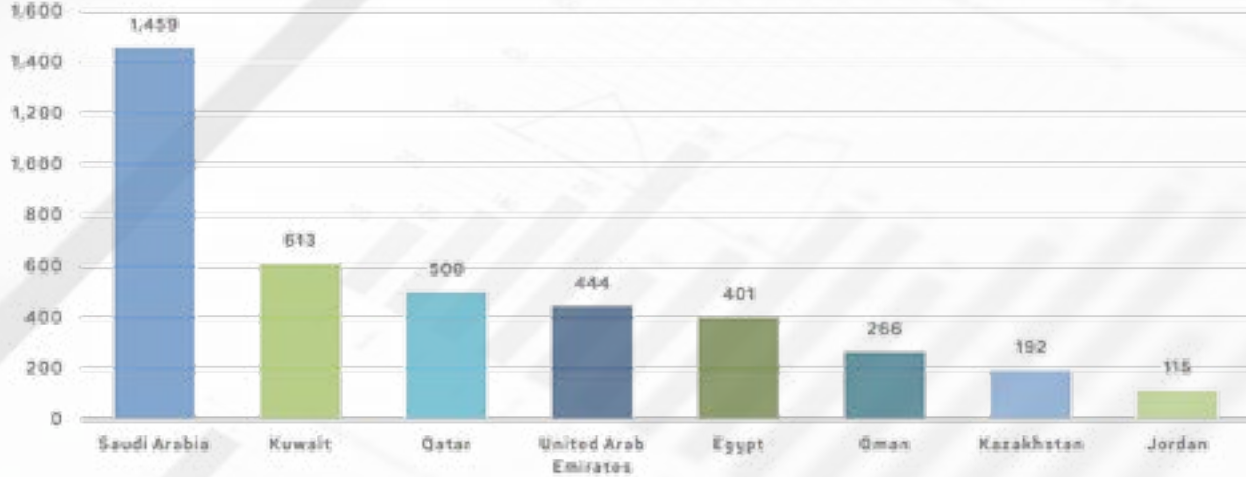
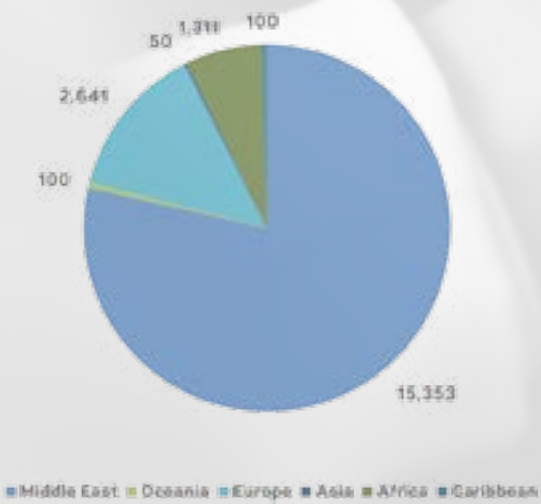


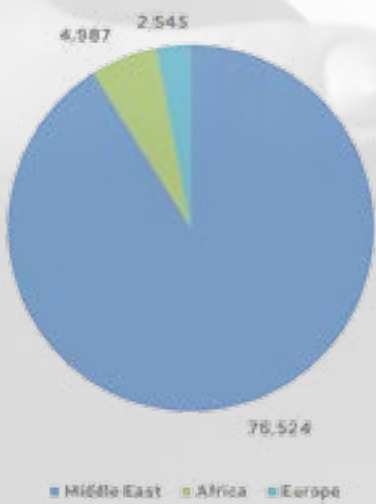
Photo from storyblocks.com



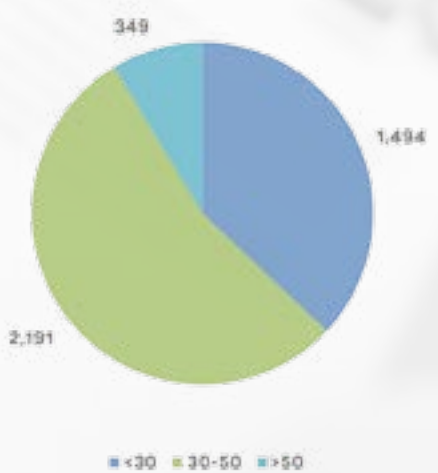
Staff by Region



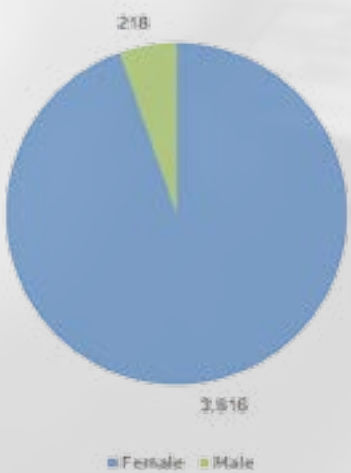
Daily Employees by Region



New Hires
per Age Group



New Hires
per Gender



CCC is EFE's Founding Employer Partner, and was the first company to hire EFE graduates over ten years ago



HR ADDRESSING YOUTH UNEMPLOYMENT AND THE SKILLS GAP

With 67 million unemployed youth, the MENA region is the world's largest pool of untapped human capital. The root cause for this lies in the education system. There is a dramatic mismatch between the skills taught in regional educational institutions and the requirements of the labor market.

Education For Employment (EFE) is an NGO that stepped in to bridge this gap. It creates job opportunities for unemployed youth by providing demand-driven training programs that link them to the world of work. CCC's partnership with EFE begun more than a decade ago with the launch of a Mini-MBA program in Palestine. Upon completion, CCC hired the program's graduates and became EFE's Founding Employer Partner.



CCC's involvement in EFE's training programs has created a customized workforce development scheme opening job opportunities for participants. From the perspective of a potential employer, CCC works closely with EFE to ensure the training programs are driven by market demands. In Jordan, Palestine, Tunisia and Yemen several CCC-EFE training programs have been launched to teach unemployed youth the specifics of construction management, planning, quality assurance, budget controls and land surveying. Over the years CCC has hired EFE alumni in roles ranging from construction managers, to land surveyors and accountants.

HUMAN RESOURCES

Ghada Saoudi is a prime example of how effective CCC's partnership with EFE is in preparing youth for entry to the labor market.

Education was always a priority in my family. In 2012, I graduated as the youngest engineer in Tunisia with a degree in Automation and Electrical Engineering and six months later, I received a masters degree in Automation and Intelligent Techniques with honors. In 2017, I got my PhD diploma in Electrical Engineering with high honors. In Tunisia, unemployment is a

Photo from stock.adobe.com



My duties focused on the project site overseeing progress and resolving construction issues. I collaborated with the Mechanical, Electrical & Plumbing (MEP) Manager and Senior Engineers on site supervision. I also coordinated with all the subcontractors for the integration of different systems.

I have had different roles which have taken me to the CCC's office in Athens, Greece. Currently, I work as an Estimation Engineer with the Electro-mechanical Department where I work on procurement and estimation, with a focus on renewable energy opportunities.

Looking back on these five years' of experience, working with CCC has offered me opportunities to succeed and the confidence to handle challenges. CCC has demonstrated courageous faith in the abilities of the younger generation: my success and the achievements of other young graduates is a vindication of this faith.

reality for many young people. I was fortunate that three months after graduating I enrolled in a training program prepared by CCC and the University of Colorado. In 2013 I joined CCC as a site engineer on the project of Sheikh Khalifa Bin Zayed Al Nahyan Specialized Hospital in Morocco. My first day was one of the most memorable days at work. Immediately, I felt welcomed and part of the team. I was given responsibilities and suitable guidance by senior engineers and directors. I had the opportunity to learn a lot, experience new things and demonstrate my capabilities in a male dominated environment. On site, I was not treated differently and gender was not an issue.



46%
of the Vocational Training
Center graduates in Kazakhstan
were employed by CCC



HR VOCATIONAL TRAINING IN KAZAKHSTAN



For years now, we have been concentrating on vocational training in the various countries we function. Our vision is to foster technical skills among the local workforce and build a competent manpower for our projects. This approach (of training a national workforce based on international construction standards) creates actual job placements for the local manpower. We strive to develop the capacities of trainees for an enduring career and not just teach them traditional skills to meet immediate market requirements. CCC's construction expertise (covering mechanical, civil, instrumentation and electrical) and the fact that we often partner with accredited institutions, guarantees the high quality of the training curriculum offered at our industry specific centers.

CCC's comprehensive
experience in vocational training
develops professional industry
workers for lifelong careers

Our most recent training center was established in Atyrau, Kazakhstan at the beginning of 2017. Considering our 20 year presence in the country, the objective was to invest in the new generation and offer local youth the opportunity for an interesting career in CCC's oil and gas projects in Kazakhstan. In partnership with APEC Petro-Technic, a regional educational institution focusing on training in the oil and gas industry, CCC is training artisans and craftsmen (carpenters, welders, pipe fitters, fabricators and scaffolders). As in all of our centers, the training provided concentrates on safety awareness and the latest industry techniques. All the courses delivered are in accordance with applicable local and international standards, including the major oil and gas companies operating in Kazakhstan. The training duration varies between two to four months and successful graduates receive two kinds of qualifications (a national and international diploma). Drawing from our vast experience, the training is conducted by qualified instructors and in modern facilities tailored to the needs of the various technical trades.



HR TRAINING AND DEVELOPMENT

CCC employees are its assets and the organization is committed to their training and development. CCC has always regarded training to be of utmost importance for its staff, and has strived to always go one step further. CCC's training programs fall under three main categories:

1. **Technical and Project Management:** courses on project management skills such as planning, scheduling, risk, quality, and so on.
2. **Leadership Development:** covering topics such as motivation, negotiations, teamwork, and so on.
3. **Business Program:** including subjects such as communications, accounting, Human Resources, contracts and procurement.

During 2016 and 2017, despite the global industry difficulties, CCC's HR Department continued to provide training to the employees with an average of two days training per year. These efforts came as a result of the belief in the importance of ingraining knowledge and competencies in our employees to raise their motivation and improve their productivity.

90
Training courses completed during 2016-17

Technical and Project Management Trainings 2016-17

- Audit & Fraud Investigation
- Bridges Engineering & Construction
- Concrete Issues & Civil Best Practices
- Construction Planning and Scheduling
- Cranes, Rigging, & Heavy Lifts
- Equipment Installation, Structural Steel & Productivity
- Formwork for Buildings & Infrastructure
- Green Buildings
- High-rise Buildings
- Hydro-Testing & Pre-Commissioning
- ISO 9001-2015
- Project Management Professional
- Quality Management
- Risk Management
- Safety Leadership & Incident Investigation
- Time Management & Managing Stress at the Workplace
- Value Engineering
- Quality Management

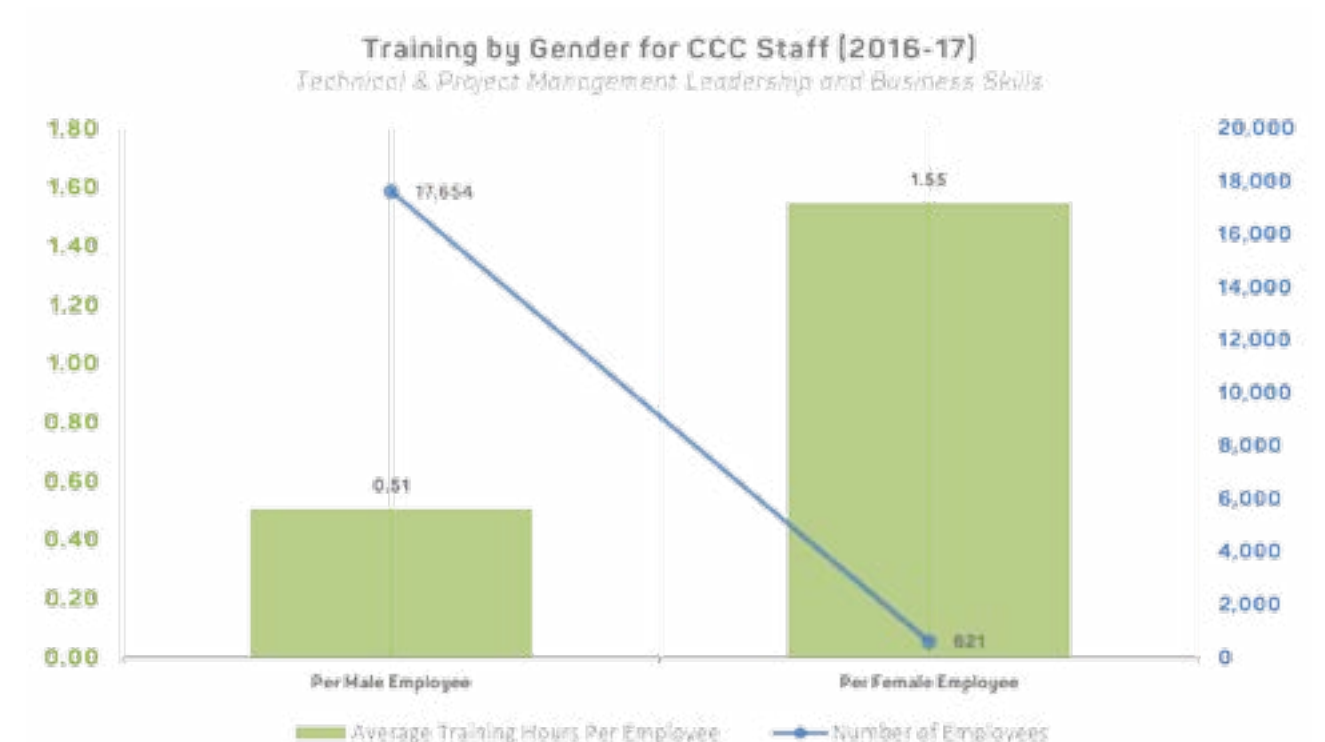
Leadership Training 2017

- Influence & Presentation
- Leadership (Fundamentals)
- Leadership (Advanced)
- Performance & Motivation

Business Skills Training 2017

- Public Speaking & Presentation Skills
- Communications Skills
- Motivation, Delegation & Team Building
- Negotiation Skills

HUMAN RESOURCES



HUMAN RESOURCES



"We have been aiming to develop our staff on leadership issues since they are so critical to the success of our projects and for CCC's growth... what we observed was that most of our employees are so eager to learn new methods, new concepts and new ways of thinking and even external trainers make the same observations... CCC's talents are immense and they are in need of just bringing them in some cases to the surface..."

Salma A. Shawa
PhD, SR HR Specialist, Training



In 2017, **Lina Loggisti** (Senior Architect) joined the High Fliers' Program, a CCC development program for future leaders which includes mentoring and expanding professional assignments. This is her personal experience:

My area of expertise covers the process from the design concept stage until the final product in terms of engineering. Currently, my main major responsibility has been to carry out the duties of the Engineering Manager in CCC's The Hills Project (HDBP), Dubai.



In 2017, I was selected to join CCC's High Fliers Program, a fascinating scheme that prepares an individual to take upon managerial tasks, through training that evolves around emotional intelligence and finances. It is an eye-opening procedure after which the way one sees interpersonal relationships, dynamics and potential are altered forever.

Regarding my career advancement, the program drives my development by reminding me to always be humble. There is a general misconception about what the role of a manager is. People perceive a manager as someone that sits in a big office, gives orders, and if these orders are not followed, then punishment follows. In reality, however, a manager's duty is (or at least should be) to establish goals and create the circumstances for the team to deliver as expected; lead by example; inspire; keep the team engaged; listen; be fair; take all responsibility and give all of the credit. If I had to define the meaning of "manager", it would be "to be of service". And being of service is humbleness in its purest form.

HR

SUSTAINABILITY EDUCATION

Enhancing employees' sustainability knowledge and skills is essential in achieving CCC's goals. As a result, a knowledge framework has been established to promote greater sustainability understanding, drive behavior change among CCC employees and provide them with valuable skills.

Green Building Training

"CCC are committed to green building and sustainability training. We believe providing this specialized education to CCC staff will help improve our ability to deliver green building solutions to our clients and leave a reduced environmental footprint. CCC's Training Department has taken concrete steps towards promoting a sustainability culture and making sure that our people have both awareness and competence of building green projects. In 2010; we started a progressive training scheme that has enabled our staff to gain up-to-date knowledge, best practices and lessons learned through the various channels mentioned below."

Dr. Manar Shami
Manager, Training Department



Training Courses: Biannual events are conducted on a one-day and two-day basis in UAE, Qatar, Saudi Arabia, and Greece. Several hundred employees at CCC have attended this training over the past several years.

Certification/Accreditation: Special training is provided to help staff attain Green Building accreditation: by the USGBC or certifications applicable to specific geographical areas such as the Estidama for Abu Dhabi and GSAS for Qatar. CCC currently has over 45 members of staff at CCC who hold their accreditation as a result of this training.

Expert Speakers: The Training Department cooperates with internal Green subject matter experts as well as external speakers such as LEEDING GREEN in Canada.

Knowledge Base: An in-house capability has been developed to train staff on the various aspects of green buildings such as energy efficiency, water conservation, waste management, air quality and innovation. We maintain a library of resources from the USGBC as well other organizations and professional entities.



HR WEBINARS

During 2016 and 2017, we continued conducting sustainability themed webinars, featuring experts who shared with CCC their insights on solutions related to the construction industry. All webinars are recorded and posted on CCC's Knowledge Management platform "Fanous" for all interested users to better understand the content.

The latest topics presented include:

1. LEED Workshop for Contractors.
2. Economics of Renewable Energy: The Shams Ma'an' Solar Project.
3. Eco-friendly Construction Methods.
4. Environmental Solutions for Food Waste.
5. 3D Printer Technology for Affordable Housing.
6. Circular Economy.
7. Sustainable Construction.
8. High Efficiency HVAC Units.



HUMAN RESOURCES

HR GREEN BUILDING EXPERTS

CCC's sponsored Green Building certification program covers all types of credentials. Employees traditionally pursue the qualifications below:

- Green Building Certification LEED (LEED AP & LEED GA) by USGBC
- Global Sustainability Assessment System (GSAS) by Gulf Organization for Research and Development
- Pearl Qualified Professional (PQP) by Abu Dhabi Urban Planning Council
- WELL Building Standard Professional (WELL APs) by the International WELL Building Institute (IWBI)
- Sa'fat Certified Engineers by Dubai Municipality

151%
Increase of CCC employees
accredited with a Green
certification

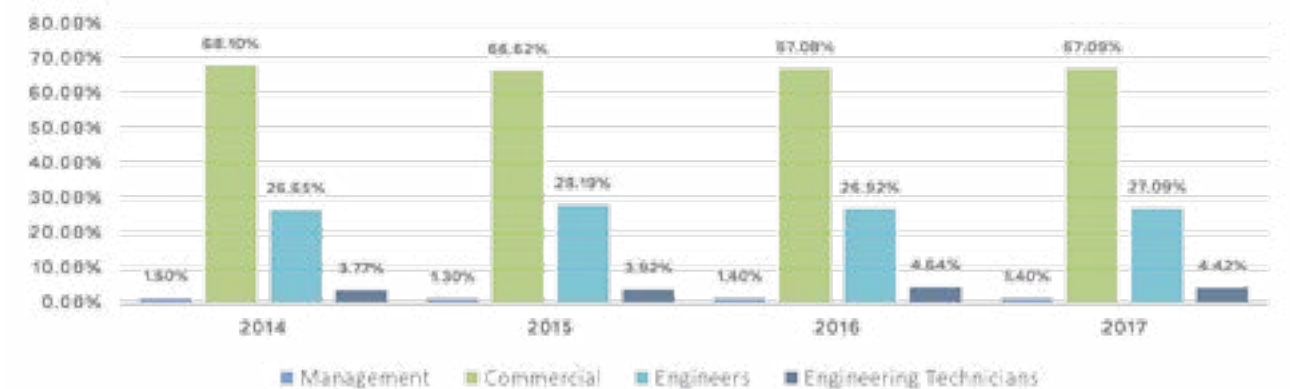
HR HOW WOMEN ARE REPRESENTED IN CCC

We remain committed to expanding employment opportunities for women in CCC as we realize the value this creates in maintaining CCC's diverse workforce culture. Admittedly, the cultural context of the countries where our main operations are centred and the nature of the construction industry limits the possibility of increased female presence in our staff.

Over the years, there has been a steady increase in the number of women engineers and commercial professionals such as personnel and accountants joining the company. Societal norms and culture are significant and as a result in countries where women are active in the workforce CCC's female labour force participation rate has risen.

Even though the international construction market is being hit hard and international manpower is feeling the impact, one can observe that within CCC, women's participation in all employment categories has remained relatively steady. Moreover, in 2017 women joined the High Fliers Program of high potential employees trained to become managers. Also, in Corporate Social Responsibility committees and Sustainability committees, women have been very proactive. The growing participation and visibility of women in CCC signifies a positive trend.

Distribution of Women Employees per Employment Category



At CCC we realize that providing opportunities and significant roles to women is work in progress and further actions are required to achieve this, but we are committed to promoting the empowerment of women. At the end of 2017, to foster the gender equality dialogue internally, CCC's Bulletin focused on women's empowerment and their participation in the workforce. The objective was to highlight the value of a more diverse workplace and emphasize women's contributions. At the moment and with the management's support affirmative actions are being planned to enhance opportunities for CCC women and specifically increase the numbers of women engineers.



Photo from depositphotos.com



GOVERNANCE

CCC activities are overseen by 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" state 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.

Related Sustainable Development Goals



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 organization 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.

CORPORATE VALUES

More than 65 years of corporate history and culture started with a refugee family fleeing for their safety from Palestine holding onto their most precious portable possession any person can salvage from a lost home: time-tested human values.

The greater CCC family and its corporate ethical standards of business integrity culture have their origin in the personal values of the company founders. Whether on a conscious or subconscious level, the founders inevitably impressed their own set of beliefs on their corporate creation.

We are proud to emphasize that our company culture is not only exceptional, but also vital to CCC's continuous progress and resilience. Since its founding, CCC has experienced expansion in both numerical and geographical terms. The decisive factor throughout the past seven decades manifests itself in the unique family culture that defines CCC. The distinctive culture embedded in CCC is based on our "Core Values, Guiding Principles & Code of Practice."

CCC'S VALUES & PRINCIPLES

1. Integrity, Honesty & Reliability
2. Trust, Transparency & Humility
3. Sense of Belonging & Harmony for all Company Employees
4. Fairness to all Stakeholders
5. We Respect Hierarchy & Accountability
6. We Aim To Be Second To None in All We Do
7. Protecting Human Life Is Our Goal
8. We Encourage Innovation
9. We Nourish Long-Term Relationships
10. Our Staff Is Our Greatest Asset
11. Commitment to Preserve the CCC Family Culture
12. Commitment to the Community
13. Commitment to the Environment
14. Commitment towards Anti-Corruption
15. Commitment to Change for the Better
16. Appreciation of our Staff
17. Commitment to The Development of Future Generations

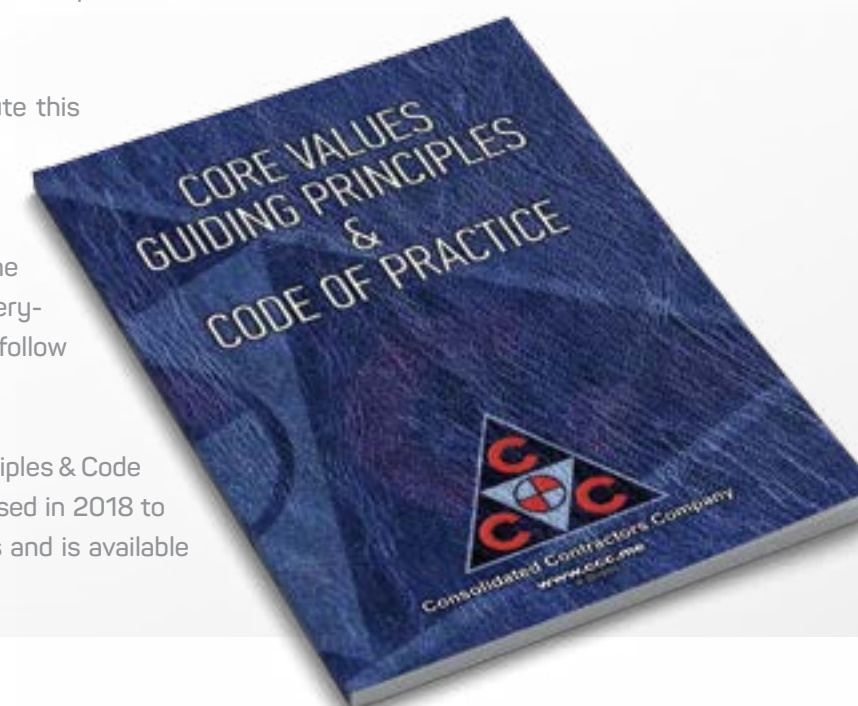
As a unified foundation to our core values and principles, our code of practice was developed. Our corporate culture has evolved over the years and is defined by an uncompromising commitment to CCC's "Core Values, Guiding Principles & Code of Practice". CCC's code of practice emphasizes how all activities must be performed to the highest ethical standards with honesty, integrity and in full compliance with the law.

CCC undertakes to fully distribute this code of practice among its employees and provide regular training on our ethics policy and procedures, and inform about the ethical values and behaviour everyone is expected to diligently follow throughout their employment.

CCC's "Core Values, Guiding Principles & Code of Practice" booklet is being revised in 2018 to include Whistleblowing Channels and is available in English and Arabic.

We trust that our faithful adherence to all these 17 Core Values & Guiding Principles along with a conscientious rejection of all practices that contradict them, can ensure CCC's profitable growth in the years to come and continue to add value to the communities where CCC is serving.

Respect of the code of practice by every CCC employee is of the highest importance to maintain CCC's reputation and to ensure its continuous success and profitability. Every member of the CCC family will follow and adhere to the CCC code of practice. Employees are subject to disciplinary action, including termination, for violations of our policies.



Ethics and Anti-Corruption

CCC'S ETHICS AND ANTI-CORRUPTION PROGRAM (EACP)

Since the creation of the CCC Group just under 70 years ago, 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. To maintain this ethical foundation that was gifted to us by our founders, ethics compliance has always been the way our business is conducted.

The purpose of CCC's Ethics and Anti-Corruption Program (EACP) is to support the global fight against corruption and to comply with the world's anti-corruption standards in our business operations. Our corporate approach against anti-corruption is straightforward and in full compliance with our EACP.



GOVERNANCE



CCC's EACP initial version was launched more than a decade ago. Since then it has been revised several times to capture the updated and more stringent anti-corruption and bribery laws and legislations that come into place. It is of prime importance to ensure the currency and compliance of our EACP in accordance with global standards including the US Foreign Corrupt Practices Act 1977 (FCPA), the UK's Bribery Act 2010 and the OECD Convention. Compliance with CCC's Ethics & Anti-Corruption Program (EACP) is a mandatory requirement across CCC.

Additionally, we pledge our support in the battle against corruption through our commitment towards the following:

- 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

Photo from shutterstock.com



TRAINING AND COMMUNICATION

In continuation of our compliance with CCC's EACP, it is mandatory to ensure that the appropriate training is provided to all relevant employees. Therefore, EACP workshops and online training programs are conducted to train all of our employees who are susceptible to exposure to be fully aware of the requirements and commitments of our EACP.

Communication and training on the EACP is continually monitored by senior management to ensure our strict compliance with its terms and clauses.

During 2016 and 2017, the in-person Ethics & Anti-Corruption workshops continued with several courses organized in the UAE, Kazakhstan, Greece and Oman. Specifically for Oman, in 2017, further to the standard EACP workshop a "Train the Trainer" class was carried out as a pilot program. In this case, participants were trained on the commitments and implementation of CCC's EACP and simultaneously acquired the knowledge and learnt how to teach others about the program.



EACP Workshop in Oman

Furthermore, as part on CCC's Technical training schedule, courses on "Audit & Fraud Investigation" were delivered in Qatar and Saudi Arabia. This course provides a widespread overview of the changing perspectives on fraud and draws attention to CCC's EACP and Whistleblowing procedure. CCC also continued conducting an online training course to enhance employees' awareness, particularly targeting new recruits.

CCC'S TRAINING PRACTICES FOR RESPONSIBLE GLOBAL CITIZENS

Ethics and Anti-Corruption Workshops

Delivers an advanced understanding of CCC's EACP policies and procedures.

Ethics and Anti-Corruption Online Training

An interactive course on CCC's EACP including descriptions, explanations, examples, questions and answers. A personalized Certificate of Completion is provided.

Audit and Fraud Investigation Courses

A comprehensive overview of the new trends in fraud and managing risks. Enhances awareness on CCC's related policies and procedures (EACP and Whistleblowing).



In early 2018, CCC launched an updated online training course transferring knowledge through the Internet reaching targeted audiences in all countries in which we have operations with PDF links to our policies, procedures and code of conduct, as well as certificates awarded for successfully completing the training course. This training was followed up with a refresher online course in July 2018.

GOVERNANCE



EACP Workshop in Kazakhstan

The advantages of online training are many but most importantly it is the convenience and flexibility of reaching a great number of employees in a short period of time and other equally important aspects such as progress monitoring and control. Overall, from the initial launch of CCC's EACP training approximately 7,000 employees have received training (either online, in-person or both).

To further spread awareness of our EACP, a Compliance Officer has been appointed in every area of operation reporting to the Corporate Ethics Compliance Officer to help monitor and ensure that the EACP is fully implemented in their area.

Finally, a solid top-level commitment to EACP compliance is conveyed through internal communications. The President, Engineering & Construction makes periodic video recorded messages that are distributed across CCC focusing on EACP as well as HSE, Security, Team, Communications, Efficiency, Quality and Excellence.



WHISTLEBLOWING

The Whistleblowing and Reporting Procedure is one of the main topics covered in CCC's Ethics and Anti-Corruption Program (EACP). Whistleblowing is encouraged and reporting channels are advertised and displayed across CCC and is translated into all the main languages of the multinational workforce and the countries in which we operate.

The procedure encourages an open line of communication for the employees to convey any questions or concerns they might have. To ensure objective consideration of whistleblowing reports, all reporting channels (online, email, mail or fax) fully protect the anonymity of reporters.



RISK MANAGEMENT

Taking risks within the Engineering & Construction Industry is an inherent part of doing business. All of our projects are complex undertakings that have to be completed against challenging requirements and constraints, thereby requiring constant risk assessment and analysis to ensure we maintain our leading position.

With expanding operations and increasingly complex projects stretching across new geographical areas, we continuously strive to enhance CCC's risk management framework. Our dedicated effort has resulted in a standardized structured approach to cover risk assessment and analysis of all our projects and corporate activities. 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. Ultimately, the risk management strategy we apply enhances our corporate governance by strengthening our board's oversight and improving overall decision making.

COMMUNITY

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

Related Sustainable Development Goals



CORPORATE SOCIAL RESPONSIBILITY

(CSR)

Completed around **120** CSR programs

Established partnerships with **100+** aid organizations globally

The sense of giving is rooted in CCC's corporate beliefs and values. Nowadays, our Corporate Social Responsibility Initiative (CSR) undertakes the role of "Corporate Citizenship". We aim to invest in programs that we believe can make a positive impact in the places where we operate.

Around the world, CCC undertakes many actions, programs and partnerships that positively affect our stakeholders under four main domains:

- supporting local communities,
- environmental responsibility,
- education, and
- in-house programs for CCC employees.



Photo from chort

(CSR)

SUPPORTING LOCAL COMMUNITIES

World Women's Day Program

United Arab Emirates

In the United Arab Emirates (UAE), CSR partnered with the Dar Al Ber Society and the Global Food Banking Network to organize a World Women's Day program in Dubai. This innovative program targeted Asian females with low paid jobs and women working in cleaning companies to whom the concept of World Women's Day is unheard of.

The program was supported by local authorities in Dubai as it reflects their vision of developing Dubai into a happy city where all segments of the working class can live well. It is the authorities' aspiration to improve the satisfaction and overall well-being of blue collar workers.

More than **175** women participated in the program which included talks on hygiene and legal obligations as well as an interactive health care lecture given by a medical officer to highlight various common health issues among working women.



3al Autostrad Event

Lebanon

In coordination with the NGO Human Wire, a charity project was organized for a Syrian refugee camp. Funds were raised to provide families with necessary supplies and recreational activities were prepared for the children.



Supporting the battle against Breast Cancer

Greece, Palestine

With CCC's contribution the Bank of Palestine organized a program to raise funds for breast cancer patients and spread awareness in Palestine on the early detection of this disease. In total, more than 2,072 attendees participated in workshops on early breast cancer detection. In Greece, CCC is proud to be among the very few organizations that has been supporting the Greek Race for the Cure continuously since 2008. The Greek Race for the Cure is organized annually to raise funds for research and awareness about breast cancer.



Annual Winter Clothing Drive

Jordan

"Share the Warmth" was the slogan used for a winter clothing drive coordinated in Jordan, and which engaged employees to donate blankets, toys, books, shoes and nonperishable foods. The items donated went to needy families through a local reputable NGO entitled: 'Mobadaret Fa3l Khair' which implements charitable initiatives.



(CSR) ENVIRONMENTAL RESPONSIBILITY

Mangrove Forests to Eradicate Carbon Dioxid

United Arab Emirates

UAE CSR supported a research program undertaken by Sheikh Zayed University to study the potential of mangrove forests to eradicate carbon dioxide from the atmosphere.

The research program is being undertaken by the College of Sustainability Sciences and Humanities Department at Sheikh Zayed University. CCC's support includes manpower, equipment and transportation for the research team from the university to survey the mangrove forests on Sadiyat Island, Eastern Mangroves and other thick mangrove forests of the UAE.

The research program is part of the UAE's efforts to reduce the carbon deposit in the country and to create a road map for a low carbon and climate-resilient future for the nation.



Community Cleanup Campaign

Saudi Arabia

CCC in cooperation with its clients Hitachi and Saudi Aramco, initiated an environmental awareness campaign in the form of a community cleanup drive along the corniche road and seaside at Baysh City, in Jazan. This campaign engaged 160 CCC volunteers comprising of different nationalities.



(CSR) EDUCATION

Partnership with Sheikh Zayed University

United Arab Emirates

A Memorandum of Understanding was signed between CCC and Sheikh Zayed University to build a framework of collaboration on educational initiatives. Possible collaboration includes contribution to university courses, student internships and participation in specific studies or development projects.



Awareness for Water and Energy Conservation

Qatar

An educational awareness campaign was organized at local schools on the theme of water and energy conservation. As part of this campaign, pictorial and informative booklets were distributed to elementary and secondary school students of all the independent schools in Qatar (public schools for boys and girls). CCC volunteer engineers from the Civil, Mechanical and Engineering Departments actively contributed to this campaign and delivered interactive presentations for the students.



(CSR) IN-HOUSE PROGRAMS FOR CCC EMPLOYEES

Language Classes

As part of promoting the personal and professional development of all members of the CCC family, English classes were organized at CCC's camp in Jebel Ali (UAE) where 110 blue-collar workers were enrolled in a one year program. Also in Kazakhstan, classes were set up for the local staff to improve their English language skills in general and especially in the context of the workplace.



Sports Activities

CCC is committed to the health and well-being of all employees. Frequent corporate sport events is one of the ways CCC's well-being strategy is realized.



Football Championship (Oman)



Lower Fars Project Basketball Tournament (Kuwait)



Al Mouj Muscat Marathon (Oman)



Al Mouj Muscat Marathon (Oman)

Visit to Vavrona Habitat

Greece

On the occasion of the European Day for Natura 2000, CSR Athens organized a visit to Vavrona (Attica). The short trip gave participants the chance to familiarize themselves with a precious habitat (that is environmentally significant) and visit the interesting archaeological site and museum. CCC teamed up with the Hellenic Ornithological Society (a Greek NGO devoted to the protection of birds) to better appreciate the importance of the habitat of the Vavrona Wetland. CCC employees were taken on a tour of the unique wetland and then climbed to the observation point and looked for birds through telescopes.



Dialogue in the Dark

Greece

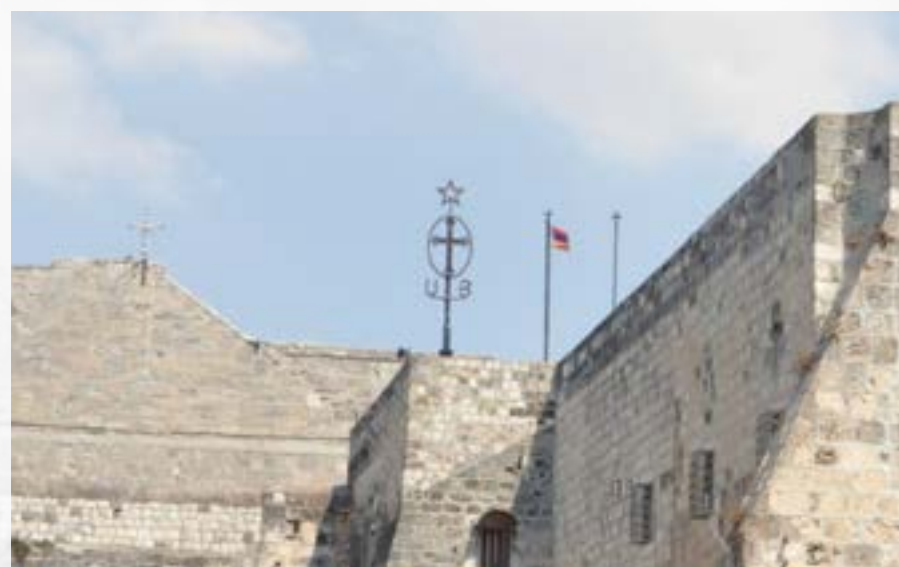
On the occasion of The United Nations (UN) International Day for Persons with Disabilities, CCC coordinated a visit to an organization named **Dialogue in the Dark**. The trip was organized to raise awareness about disability issues and highlight the benefits of an inclusive and accessible society for all. The visit served as a completely unique and life-altering experience where visitors were led by unsighted guides in small groups through specially designed darkened rooms.



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 is 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.

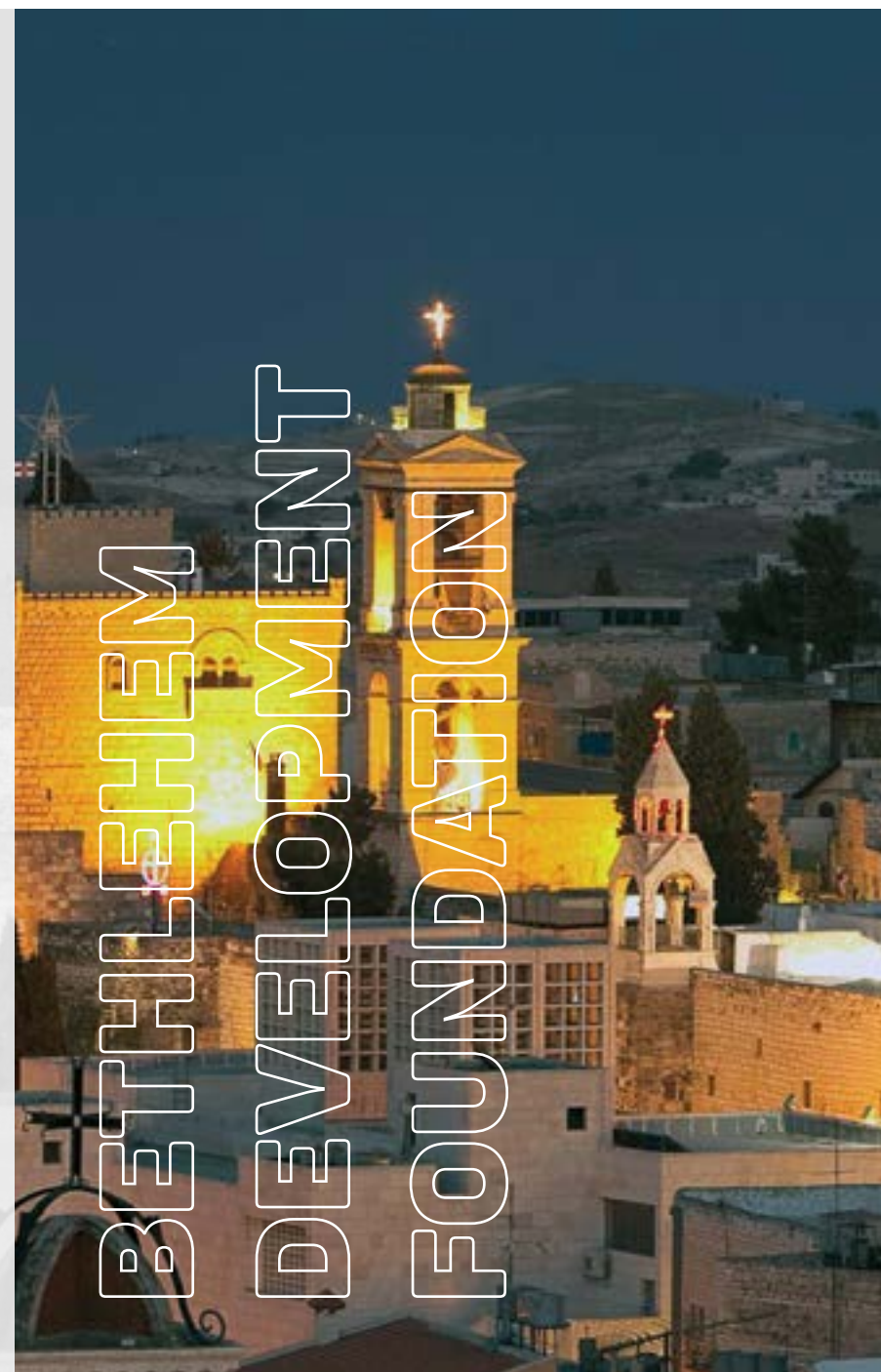


The Bethlehem Development Foundation (BDF) is currently completing its fifth year of operation, moving closer to realizing its core vision to regenerate and revitalize the Bethlehem Governorate into a vibrant international destination. Since its establishment in May 2012, the Bethlehem Development Foundation 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 centre for pilgrims.



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

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



Over the years BDF has made 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.



During 2016 and 2017, the foundation further supported the Palestinian government in the management of the much-lauded restoration of the Nativity Church in Bethlehem City, assisted with the refurbishment of Manger Square; built playgrounds; improved a local sports centre; established a small museum and financed a strategic solid waste management plan for the area. Future long-term plans include: a small shopping centre and car park; a solar power station and a small hotel.



BETHLEHEM DEVELOPMENT FOUNDATION

HIGHLIGHTS



Church of Nativity Restoration



Church of Nativity Restoration



Manger Square Refurbishment



Solid Waste Management Project



Al Salam (Peace) Children's Park in Beit Jala



Appendix I

GRI CONTENT INDEX



This report has been prepared in accordance with the GRI Standards: Core Option.

The UN's 17 Sustainable Development Goals (SDGs) will be achieved by 2030 through concerted action by both the public and private sector in all countries. The following table links the SDGs to the relevant indicators and disclosures of the GRI Standards contained in CCC's Sustainability Report 2016-17.

The report was submitted for the SDG Mapping Service, and GRI confirms that the SDGs are correctly mapped against the GRI Standards and that these disclosures are easily traceable in the report.

GRI Standard	Disclosure		Page Or Direct Answer	Omission	Relevant Sustainable Development Goal
GRI 101: Foundation					
General Disclosures					
GRI 102: General Disclosures 2016	Organisational Profile				
	102-1	Name Of The Organization	6-7		
	102-2	Activities, Brands, Products, And Services	6-7		
	102-3	Location Of Headquarters	6-7		
	102-4	Location Of Operations	6-7		
	102-5	Ownership And Legal Form	6-7		
	102-6	Markets Served	6-7		
	102-7	Scale Of The Organization	8-9		
	102-8	Information On Employees And Other Workers	89, Human Resources: Our Global Workforce 90, Human Resources: HR Statistics		Goal 8
	102-9	Supply Chain	16-17		
	102-10	Significant Changes To The Organization And Its Supply Chain	16-17		
	102-11	Precautionary Principle Or Approach	113		
	102-12	External Initiatives	134		
	102-13	Membership Of Associations	134		
	Strategy				
	102-14	Statement From Senior Decision-Maker	4-5		
	102-15	Key Impacts, Risks And Opportunities	2-3, 4-5		
	Ethics And Integrity				
	GRI 102-16	Values, Principles, Standards, And Norms Of Behaviour	106-107, Governance: Corporate Values, Ccc's Values & Principles		Goal 16
	Governance				
	102-18	Governance Structure	106		
	Stakeholder Engagement				
	102-40	List Of Stakeholder Groups			
	102-41	Collective Bargaining Agreements	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. With regards to collective bargaining there are various corporate arrangements in full compliance with the labor and employment laws wherever we operate. Specifically, the percentage of employees covered by collective bargaining agreements in CCC's major countries of operation are: Oman & Kazakhstan: 100% of local manpower. Qatar, United Arab Emirates & Saudi Arabia: 0%, no collective bargaining agreements entered according to prevalent laws. Kuwait & Egypt: 0%, collective bargaining not binding.	Information unavailable We currently report percentages of employees covered by bargaining agreements in countries with our major operational presence and not in all countries.	Goal 8
	GRI 102-42	Identifying And Selecting Stakeholders	24-25		
	GRI 102-43	Approach To Stakeholder Engagement	24-25		
	GRI 102-44	Key Topics And Concerns Raised	24-25		

Appendix I

GRI CONTENT INDEX

GRI Standard	Disclosure		Page Or Direct Answer	Omission	Relevant Sustainable Development Goal
Gri 101: Foundation					
General Disclosures					
GRI 102: General Disclosures 2016	Reporting Practice				
	GRI 102-45	Entities Included In The Consolidated Financial Statements.	Financial Statements Cover: Consolidated Contractors Group. Sustainability Report Does Not Include Associate Companies Such As National Petroleum Construction Company (NPCC) And ACWa Services Ltd.		
	GRI 102-46	Defining Report Content And Topic Boundaries	24-25		
	GRI 102-47	List Of Material Topics	24-25		
	GRI 102-48	Restatements Of Information	No Restatements		
	GRI 102-49	Changes In Reporting	No Significant Changes		
	GRI 102-50	Reporting Period	2016-2017		
	GRI 102-51	Date Of Most Recent Report	Issued September 2016		
	GRI 102-52	Reporting Cycle	Our Cycle Is Bi-Annual.		
	GRI 102-53	Contact Point For Questions Regarding The Report	Please Share Your Feedback With Samir Thabet, Sustainability Manager, Email: Sthabet@ccc.ae		
	GRI 102-54	Claims Of Reporting In Accordance With The GRI Standards	This Report Has Been Prepared In Accordance With The GRI Standards: Core Option.		
	GRI 102-55	GRI Content Index	130		
	GRI 102-56	External Assurance	CCC's Sustainability Report Was Not Reviewed By A Third Party Agency.		

GRI Standard	Disclosure		Page Or Direct Answer	Omission	Relevant Sustainable Development Goal
GRI 200: Economic					
	Economic Performance				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 201: Economic Performance 2016	201-1	Direct Economic Value Generated And Distributed	8-9, Group Profile: Key Facts & Figures, Financial Highlights 23, Group Sustainability Overview: Creating Local Value 116-123, Community: CSR		Goal 2, 5, 7, 8, 9
	Anti-Corruption				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 205: Anti-Corruption 2016	205-2	Communication And Training On Anti-Corruption Policies And Procedures	110-111, Governance: Training And Communication		Goal 16



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GRI Standard	Disclosure		Page Or Direct Answer	Omission	Relevant Sustainable Development Goal
GRI 300: Environmental					
	Materials				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 301: Materials 2016	301-1 *	Materials Used By Weight Or Volume	In 2017, 11 Reporting Projects Consumed 267,654 Ton Of Materials		Goal 8, 12
	301-2	Recycled Input Materials Used	40, Environment: Materials		Goal 8, 12
	Energy				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 302: Energy 2016	302-1	Energy Consumption Within The Organisation	29, Environment: Energy And CO ₂ Emissions		Goal 7, 8, 12, 13
	302-3	Energy Intensity	29, Environment: Energy And CO ₂ Emissions		Goal 7, 8, 12, 13
	302-4	Reduction Of Energy Consumption	31, Environment: Energy And CO ₂ Emissions		Goal 7, 8, 12, 13
	Water				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 303: Water 2016	303-1 *	Water Withdrawal By Source	In 2017, 12 Reporting Projects Consumed 499.3 Million Cubic Meter Of Water	Information unavailable CCC is improving existing systems and resources to collect the global data currently unavailable. We aim to disclose the relevant information in the next reporting cycle.	Goal 6
	303-3	Water Recycled And Reused	35, Environment: Water And Waste Water Management		Goal 6, 8, 12
	Biodiversity				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 304: Biodiversity 2016	304-2	Significant Impacts Of Activities, Products And Services On Biodiversity	43, Environment: Biodiversity		Goal 6, 14, 15
	Emissions				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG Emissions	29, Environment: Energy And CO ₂ Emissions		Goal 3, 12, 13, 14, 15
	305-2	Energy Indirect (Scope 2) GHG Emissions	29, Environment: Energy And CO ₂ Emissions		Goal 3, 12, 13, 14, 15
	305-4	GHG Emissions Intensity	31, Environment: Energy And CO ₂ Emissions		Goal 13, 14, 15
	305-5	Reduction Of GHG Emissions	31, Environment: Energy And CO ₂ Emissions		Goal 13, 14, 15
	Effluents And Waste				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 306: Effluents and Waste 2016	306-1 *	Total Water Discharge By Quality And Destination	In 2017, 12 Reported Projects Discharge 3.9 Million Cubic Meter Of Water, 1.1 Million Cubic Meter Treated Via The STP's Available In The Projects.		Goal 3, 6, 12, 14
	306-2	Waste By Type And Disposal Method	36-39, Environment: Waste Management		Goal 3, 6, 12
	Supplier Environmental Assessment				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 308: Supplier Environmental Assessment 2016	308-1	New Suppliers That Were Screened Using Environmental Criteria	17, Group Sustainability Overview: Supply Chain Sustainability		

* Partial Disclosure

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GRI Standard	Disclosure		Page Or Direct Answer	Omission	Relevant Sustainable Development Goal
GRI 300: Social					
	Employment				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 401: Employment 2016	401-1	Total Number And Rates Of New Employee Hires And Employee Turnover By Age Group, Gender And Region	91, Human Resources: HR Statistics		Goal 5, 8
	Employment				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 402: Labor/ Management Relations 2016	402-1	Minimum Notice Periods Regarding Operational Changes	30 Days		Goal 8
	Occupational Health and Safety				
GRI 403: Occupational Health and Safety	403-2	Types Of Injury And Rates Of Injury, Occupational Diseases, Lost Days, And Absenteeism, And Number Of Work Related Fatalities	79, Health, Safety & Environment: HSE Performance, Lagging HSE Indicators		Goal 3, 8
	Training and Education				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 404: Training and Education 2016	404-1	Average Hours Of Training Per Year Per Employee	96-97, Human Resources: Training and Development		Goal 4, 5, 8
	Diversity and Equal Opportunity				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
	Human Rights Assessment				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 412: Human Rights Assessment 2016	412-2	Employee Training On Human Rights Policies And Procedures	82-83, Human Rights		
	Local Communities				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 413: Local Communities 2016	413-1	Operations With Local Community Engagement, Impact Assessments, And Development Programmes	116-123, Community: CSR		
	Supplier Social Assessment				
GRI 103: Management Approach 2016	103-1 103-2 103-3	Management Approach			
GRI 414: Supplier Social Assessment 2016	414-1	New Suppliers That Were Screened Using Social Criteria	19, Group Sustainability Overview: Supply Chain Sustainability		Goal 8, 16



Appendix II

Strategic Initiatives and Memberships

EXTERNAL INITIATIVES	SUPPORTED SINCE
United Nations Global Compact (UNGC)	2001
United Nations Sustainable Development Goals	2015
World Economic Forum - Partnering Against Corruption Initiative (PACI)	2005
The Pearl Initiative	2010
Transparency International	2012
The Global Reporting Initiative	2012
European Network for Construction Companies Research and Development (ENCORD)	2011
U.S. Green Building Council (USGBC)	2015
Greenhouse Gas Protocol	2015
Education for Employment (EFE)	2007
Global Business Coalition against HIV, AIDS, Malaria & Tuberculosis	2010

Membership of Associations

- International Pipeline & Offshore Contractors Association - USA (IPLOCA)
- American Society of Heating, Refrigerating, and Air Conditioning Engineers
- World Safety Organization (WSO)
- Institution of Occupation Safety & Health (IOSH)
- British Safety Council (BSC)
- American Society of Safety Engineers, Kuwait Chapter & Gulf Coast Chapter (ASSE)
- Emirates Safety Group (ESG)

Credits

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