



CONSOLIDATED CONTRACTORS COMPANY

ANNUAL COMMUNICATION ON PROGRESS REPORT 2018



The family company
that cares.



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CORPORATE PROFILE

Consolidated Contractors Company (CCC) is a leading contracting company formed in 1952 and incorporated under the laws of Lebanon. The managing office is presently located in Athens, Greece.

In more than 60 years of operation, CCC has grown to become a company transcending geographical and cultural borders with a distinctive competence for challenging projects and remote areas. CCC currently operates in 40 countries across 5 continents and it is the largest construction company in Gulf Cooperation Countries and ranks among the top 25 international contractors, building some of the most challenging and complex facilities.

Drawing on its long and successful experience, CCC which has always remained in private ownership with a family culture, can provide a full range of projects services, from Project Development, through detailed Engineering, Procurement and Construction, to Start-Up, Operation and Maintenance pertaining to the following:

- Buildings and Civil Engineering Works
- Oil and Gas, and Water Pipelines
- Oil and Gas, and Petrochemical Plants and Refineries
- Power Plants
- Marine Works
- Offshore Installations
- Maintenance of Mechanical Installations and Underwater Structures



STATEMENT OF CONTINUED SUPPORT

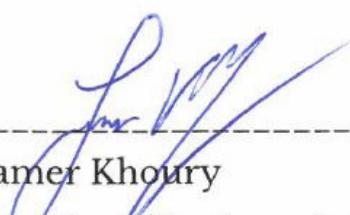
Management Commitment to Corporate Social Responsibility and UN Global Compact

I am pleased to confirm that the Consolidated Contractors Company (CCC) supports the United Nations Global Compact and its 10 principles, with respect to Human Rights, Labor, Environment, and Anti-corruption. CCC is committed to integrating those principles into our daily operations, strategies, and policies and procedures.

Since its founding, CCC's approach towards its stakeholders is based on core values and principles of integrity, transparency, accountability, business fairness, and ethical behavior which are expressed in its Core Values, Guiding Principles and Code of Practice and Ethics and the Anti-Corruption Program Manuals. We believe that by instituting a culture of integrity within the company and with our partners, clients, subcontractors, suppliers and society at large is the way to flourish and succeed on the long-term.

CCC is committed to carrying out its projects in an environmentally friendly manner by reducing the environmental burden as per its Sustainability Policy Statement, and conducting its business in a manner that will benefit the local and global communities. CCC is committed to giving back to society by carrying out social development initiatives based on the needs of the communities where CCC conducts its business and in line with the UN Social Development Goals.

I am pleased that our Company remains dedicated in its commitment to contribute to the global effort for human and labor rights, environmental protection, and anti-corruption measures, and I will ensure that CCC continues to advance the principles in everything we do.



Samer Khoury
President (Engineering and Construction)



WE SUPPORT

THE UN GLOBAL COMPACT'S TEN PRINCIPLES

Brief support statement

As part of the requirements of the UN Global Compact's Initiative, submission of an annual Communication on Progress report is needed. CCC has approached this response in relation to the following four key areas – Human Rights, Labor, Environment and Anti-Corruption.

CCC's ongoing commitments display constant focus on core values and principles such as the development and growth of staff on all levels, the sense of belonging and harmony for all manpower, continuous propagation of innovation, sustainable commitments to the environment and anti-corruption ideals as well as the utmost respect of cultural identities on company projects.

This report was created and developed by a select task-force composed of staff stemming from diverse departments such as human resources, renewable energies and innovative solutions, construction support and development, health and safety and corporate social responsibility.

The objective of this task-force is to examine and assess the sustainability impact of the company across all facets of its operations. Meetings are held every month in order to conduct discussions and assessments of various parameters in order to constantly filter information that will eventually be utilized to compile the report using the contribution and input on all members of this task-force.



INTRODUCTION

In CCC we closely follow the global discussion and developments in CSR and Sustainability. We realize that the UN's Sustainable Development Goals (SDGs) for 2030 expect private businesses to play a major role in global issues and that previous models of demonstrating corporate social responsibility through philanthropy and charity have been unable to eradicate the root causes that made philanthropy and charity necessary in the first place.

We recognize that our responsibility towards society is ultimately demonstrated by the way we go about performing our main business activities. We comprehend that our social license to operate comes from integrating social and environmental considerations into all aspects of business operations, as well as into relationships with stakeholders such as employees, suppliers, clients (in the B2B context we operate), end users of our projects, and local communities.

We appreciate that CSR policy functions as a self-regulatory mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards and international norms in Human Rights, Labor Standards, the Environment and Anti-Corruption.

Labor Rights are widely understood as Human Rights, Environmental Degradation and Global Warming have created climate refugees, while the negative footprint of corruption on Human Rights has been substantiated beyond doubt. The injunctions of Global Compact's 10 principles are designed to safeguard and respect fundamental Human Rights from the business world.

The GC's principles are in accordance with CCC's core values as established by our founders, which place paramount importance on respecting and supporting human rights, and this greatly facilitates the alignment of our business practices with civil society's demands and supports our strong commitment to doing good in the world.



HUMAN RIGHTS

UN GC Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.

Honoring our commitment to respect and support human rights starts from investigating our corporate impact on human rights issues. Measuring our performance against our social performance goals using the GRI Sustainability Reporting framework permits us to swiftly act upon and constantly improving those metrics and preventing or mitigating potential impacts.

As a company that provides housing, food and water for its workers on many project sites in various parts of the world, CCC follows and gives attention to the safety, and occupational health of its workers. CCC insures that its procedures regarding these are in line with human rights articles, such as:

- Article 6 the “Right to Life” of the International Covenant on Civil and Political Rights,
- Article 12 the “Right to Health” of the International Covenant on Economic, Social and Cultural Rights (ICESCR),
- Article 7 of ICESCR, the “Right to enjoy just and favorable conditions of work”, and
- Article 11 the “Right to an Adequate Standard of Living”, which incorporates the “Right to Adequate Housing”, the “Right to Food” and the “Right to Water” which are salient human rights for CCC.

CCC firmly believes that dignified living and working conditions including improved standards of health, safety and welfare are essential to unlocking human potential and indispensable to its mission of raising the quality of life for all its employees and stakeholders. CCC always ensures that adequate arrangements are in place to safeguard the health, safety and welfare of all employees in its projects and operations.



Health and Wellbeing of Employees

CCC recognizes that quality welfare facilities are essential to achieve Target Zero Harm goal and helping our clients to build a better and more sustainable world. CCC strives to be 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 throughout the entire service cycle which includes recruitment, mobilization, living and working conditions.

CCC achievement of “world class” welfare management is demonstrated through several themes and practices:

- CCC ensures the availability of potable water, sanitary facilities (toilets and washrooms) and welfare facilities (rest facilities, protection from sun/rain and changing rooms) throughout the project sites and during all working hours.
- CCC provides the workers with a high standard accommodation, catering and recreational facilities, easing the harshness of living in remote locations. We ensure that all workers have access to proper relaxation and rest which is fundamental in maintaining safety as tiredness or exhaustion have been proven to be major contributors to LTIs.
- CCC offers in-camp entertainment facilities.
- CCC ensures that all its workers shall be compensated on time for all efforts exerted in the execution of the work and never deprived from any entitlements for benefits or subsidies in full compliance with the Client HSE requirements as well as CCC's HR procedures.
- CCC ensures that adequate medical and emergency facilities are operated within the project facilities and that all labor laws governing health and medical treatment for workers are fully enforced on our construction sites.

CCC's welfare arrangements and accommodation are of high standard and well regarded by its clients as CCC has implemented the clear guidelines and procedures stipulated in the Corporate Camp Sanitation and Hygiene Manuals as well as in our Welfare Management Plan and Health Management Plan.

The above-mentioned plans define the specifications and procedures of Camp and Welfare in our company. Pertinent standardized procedures that detail our action plans include:

- Camp hygiene
- Pest control
- Welfare specification



- Catering
- Food safety
- Potable water
- Camp medical facilities
- Indoor and outdoor recreation facilities
- Camp services

Our relevant manuals also address Food Handling and Preparation:

- Food hygiene training
- Duties of food handlers
- Routine inspection and reporting
- Cleaning temperature control
- Kitchen cleanliness
- Refrigerators and cold stores
- Freezers
- Defrosting
- Cold buffet display units
- Dry goods store
- Mess area cleanliness

Medical/Health Culture

CCC has made great strides in introducing the concept of a “Culture of Health” at its projects and areas of operation. The HSE Group well realizes that the main approach to excellence is through an empowered workforce that achieves and sustains optimal levels of health and well-being. One of the main tools in achieving this is raising awareness of occupational health hazards by assessing associated risks and promoting actions to improve employees’ general health.

CCC’s “Culture of Health” initiative aims at the creation of a working environment where employee health and safety is valued, supported and promoted through workplace health programs, policies, benefits, and environmental supports. Building a Culture of Health involves all levels of the organization and establishes the workplace health program as a routine part of business operations aligned with overall business goals.

A Wellness Lifestyle is a positive lifestyle for achieving wellness. The target is for our employees to be in good enough shape to do what they like without difficulty, to manage stress without being overcome by it, to understand food as a healthy pleasure and not a daily obsession, to maintain physical activity and exercise as an integral part of our week.



To achieve the above goals, CCC has a Health / Medical Policy that might be concisely outlined as follows:

1. Prevention:

- Weekly occupational health and hygiene inspections (including catering facilities food safety inspections and audits).
- Monthly water tests.
- 100% of CCC staff must be appropriately vaccinated.
- 100% of CCC staff must be screened and their “medical fitness to work certificates” must be up to date.
- 1% of CCC staff in safety-sensitive positions undergoes random testing for alcohol on a weekly basis.
- Zero tolerance alcohol and drugs policy.
- 100% of CCC staff is trained in first aid.
- 2% of CCC staff is trained in advanced first aid.

2. Health Reporting:

- Zero occupational illnesses and injuries policy.
- Zero infectious diseases policy.
- Health report is submitted to top management on a monthly basis.

3. Health Management:

- Weekly medical equipment maintenance checks.
- Monthly medical emergency drill.

4. Health promotion:

- Weekly health awareness sessions.

The above is achieved through proper implementation and full compliance with CCC Health / Medical Procedures like:” Medical Fitness to Work, Pre and Post Employment Medical Examinations”; “Influenza Management Procedure”; “HIV/AIDS Management Procedure”; “Human Resources HIV/AIDS Procedure”; “Malaria Management Procedure”; “Medical Case Management Procedure”; “Medical Emergency Evacuation Procedure”; “Management of Sexually Transmitted Diseases (STDs) Procedure”; “First Aid and Medical Facilities Procedure” and others.

Please see **Appendix 1** for various photos showing an example of CCC's accommodation, recreation, and health facilities in one of its Camps.



Wellness Program

In line with our commitment to CCC Family Culture and our continuous efforts to establish a strong bond with each and every employee, CCC initiated the “Wellness Program”. It was launched to explore ideas aiming at improving the welfare of CCC employees, to ensure healthy lives and promote well-being for every one of its employees.

Wellness programs include activities such as company-sponsored exercises, weight-loss competitions, educational seminars, tobacco-cessation programs and health screenings that are designed to help employees eat better, lose weight and improve their overall physical health. Employees can benefit from wellness programs through lower health insurance premiums, decreased out-of-pocket medical expenditures and an increased sense of well-being.

Worker Welfare Plan

CCC has established a Worker’s Welfare Plan that focuses on the well-being of every employee. The implementation of this plan plays an essential role to the successful delivery of our projects by inviting and retaining the right people. Eventually, it will enhance the efficiency and quality of the work and will result in better HSE performance.

CCC Social and Welfare Arrangements are always of a high standard and well regarded by our clients. CCC has implemented comprehensive guidelines and sets of procedures stipulated in the Corporate Occupational Health Management Plan and Workers Welfare Adherence Plan.

The above-mentioned plans define the minimum criteria, specifications and procedures of employees’ health and medical requirements, as well as camp and welfare related aspects.

CCC believes that there is direct correlation between the productivity and harmony on site with the contentment of workers. CCC shall ensure that provision of adequate maintenance of welfare facilities that fully complies with the minimum requirements of the Client, and these are:

- Protection from the weather and adverse environmental effects of wind, rain and extreme temperatures for site personnel
- Mid-day rest facilities for all site personnel in the immediate area:
- Facilities to allow consumption of food protected from environmental elements
- Supply of drinking and fresh water for workers
- Hand washing and toilet facilities for work crews



- Emergency first aid equipment and trauma packs
- Drinking water will be provided in hygienic water containers delivered by dedicated trucks to all work sites
- Chemical toilets will be provided during the mobilization stage. They will be continuously cleaned and maintained during the working hours. They will be relocated to suit the site requirements
- Provide appropriate messing, housing, working and living conditions for laborers as and in accordance with the minimum requirements of the Client and CCC.
- Provide all transportation as required
- Provide necessary medical facilities (Please see [Appendix 2](#) for photographs of medical facilities)
- Catering, food will be prepared according the culture and nationality of workers
- News sheets with news from home countries will be printed weekly
- At recreation facilities, videos and music are provided for all nationalities
- Sporting and recreational competitions with its incentive awards will be encouraged between different nationality and groups to facilitate healthy relationships amongst all employees.

HSE Awards and Achievements

CCC excellence in construction is accompanied by an equivalent excellence in the preservation of Health, Safety, and Environment. CCC is highly concerned with the health and safety of its employees, and extremely values the environment in which it operates, and strives relentlessly to protect it.

In this regard, CCC has obtained various awards for the outstanding HSE Performance and job well done in protecting our employees' health and wellbeing of not being hurt or injured during the constructions and operations of the projects. The HSE milestones and millions of hours free of lost time injuries are the best proof and reflection for CCC commitments towards its employees' health and wellbeing as well as protecting and preserving the surrounding environment.

As an example, CCC in Qatar was awarded the **Best Company in Qatar for Occupational Health Award** in April 2018. The award selection committee that selected CCC as its winner includes engineers from the Ministry of Administrative Development, Labor and Social Affairs (ADLSA), the Public Works Authority (ASHGHAL) and is chaired by the Vice President of Qatar's Chamber of Commerce. Competing for the award were all registered companies in Qatar. One can only begin to grasp the importance of this award after taking into consideration the vast construction activity that is currently taking place in Qatar in the preparations for the 2022 World Cup.



This activity is not only centered on building new stadiums, but extends to massive and complex infrastructure projects many of which are executed by CCC.

The award was presented by the Minister of Administrative Development, Labor and Social Affairs HE Dr. Issa Bin Saad Al Jafali Al Nuaimi and HE Mr. Muhammed Bin Ahmed Bin Towar Al Kuwari; Vice President of Qatar Chamber of Commerce, and was received on behalf of CCC by Mr. Oussama El Jerbi, Qatar Area Managing Director.

The Award was presented during the opening ceremony of the Second Conference for Occupational Safety and Health that coincided with the International Labor Organization's World Safety and Health Day. In attendance were high level executives from the private and public sectors in the State of Qatar. This Award comes in the wake of recent Health and Safety achievements by CCC Projects in Qatar that were recognized by CCC Clients and the Ministry.

(Please see [Appendix 3](#) for photographs of the Award Ceremony)

While it is critical that safety is maintained at the forefront and throughout all what we do, occupational health is its enabler. Any successful HSE management system should have an effective occupational health component. The occupational health programs implemented on the projects in Qatar involves strict compliance with the country laws, the various clients' requirements, and CCC's HSE Management System requirements. It includes the following key elements:

- Establishing licensed site based medical facilities that provides treatment to the workforce maned 24 hours, 7 days a week by qualified medical staff.
- 100% post-employment and pre-deployment medical screening for all workers and staff to ensure medical fitness and establish a baseline.
- Periodic medical screening as part of the health surveillance for all the critical-to-safety positions on the project including welders, scaffolders, riggers, drivers, operators, personnel using breathing apparatus and others as identified by the project specific risk assessment (Examples include workers inside special confined spaces and personnel assigned for handling chemicals).
- Establishing audiometric baselines for workers exposed to high noise activities and introducing adequate engineering and administrative controls.
- Noise and dust monitoring on weekly basis.
- Ergonomics and monitoring (examples include work benches, manual handling training and selection of power tools with ergonomic design).
- Working in confined space programs. This includes continuous monitoring of atmospheric gases to ensure the safety of the air quality for entrants.
- Fit testing for workers using respirators.
- Comprehensive, site specific heat stress prevention plans.
- Radiation protection plans for those workers carrying out NDE works.



- Welfare facilities provided for the workers at the work locations that are maintained in good working conditions (sufficient and close to work location toilets, rest shelters, drinking water stations, cool down rooms and first aid stations).
- Monthly health education programs run by the projects' HSE and medical teams whereby health educational topics are discussed with the workers to raise awareness. Examples include: diet control (for hypertensive and diabetic patients), health precautions for working in hot weather, importance of exercise, importance of health monitoring and surveillance among others.
- The Projects also utilize the weekly mass toolbox talks to disseminate frequent messages about occupational health to the workforce.

The programs are frequently audited by various clients and have always been commended for being thorough and in most cases exceeding expectations.

Another example of CCC's attention for its employees welfare, is the site for the Water Mega Reservoir Project which has been recognized by the Qatar General Electricity and Water Corporation (Kahramaa) as a role model. Other contractors working on the Water Mega Reservoirs Program for Kahramaa have been invited by the Client to CCC's site to learn about the occupational health program being implemented. The Water Mega Reservoirs Project – Package A achieved more than 29 million safe man-hours, and Package C achieved more than 26.5 million safe man-hours.

(Please see [Appendix 4](#))

Another example is the Msheireb Doha Downtown– Phase 4 (MDP4) project that was commended by the MADLSA inspectors for its occupational health program implementation. MDP4 Project achieved more than 15 million man-hours safely. In addition, some of the HSE Staff in Qatar have been recognized by clients for their contributions to the occupational health programs implementation on projects.

The Award came as a recognition of all those efforts demonstrating that CCC's commitment to the health, safety and the overall well-being of its workers is an unwavering one.

For more HSE Awards please see [Appendix 5](#)



Understanding the importance of ethical sourcing we intend to explore our company's relevant practices further in the immediate future.

**Please see
Appendix 6-
Supplier
Subcontractor
Sustainability
Assessment.**





LABOUR

UN GC Principle 3: The support of freedom of association and the recognition of the right to collective bargaining.

CCC employees' performance objectives are fully aligned with the company's goals. All staff have clear areas of accountability and understand how each job impacts business results. Regular check-ins take place between employees and their line managers to align execution and to allow managers to observe and develop their teams. Open, timely and constant feedback is key to a strong performance culture which is facilitated through the annual performance appraisal system as well as the employee satisfaction & wellness initiative questionnaire.

UN GC Principle 4: The elimination of all forced and compulsory labour.

As a devoted upholder of the United Nations Universal Declaration of Human Rights (UDHR) CCC adheres to the international labor laws of each country and provides its staff with the relevant and applicable compensation.

UN GC Principle 5: The effective abolition of child labor.

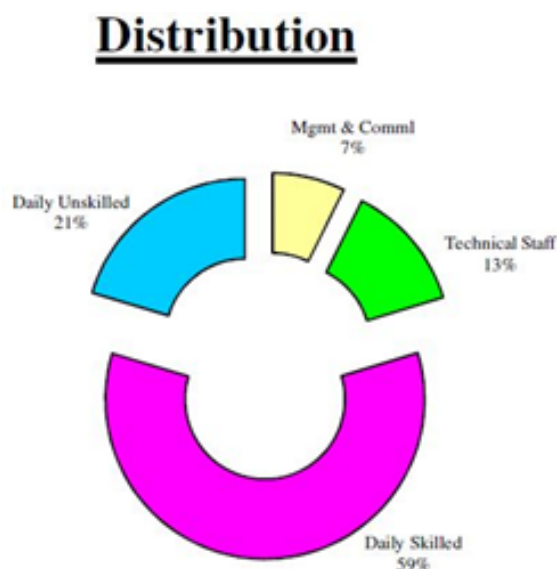
CCC is adamant in the international directives of not employing persons below 18 years old at all projects, areas and offices. This notion has been a core ideal and procedure of the company since its inception.

UN GC Principle 6: The elimination of discrimination in respect of employment and occupation.

At end 2018, the company employed over 108,000 staff from over 85 nationalities around the world, showcasing a 9 percent reduction compared to the end of the previous year. This was predominantly due to projects reaching finalization and handing over to clients and to a lesser extent, releasing extra manpower that was not needed in certain areas. The reduction was observed across a multitude of disciplines including commercial and technical staff as well as total daily employees.



The distribution of work force for 2018 is shown below:



Similar trends are observed in the male/female ratios in areas of operation where social setups allow for female employment, in a total of 15 countries in Europe, MENA and CIS regions.

2018 was once again a slow year due to the fact that not many new projects were awarded to the company and that had an immediate effect on manpower trends, as the company “recycled” existing staff members in vacancies that opened rather than commence sourcing new staff. It is the company’s aim to commit to retaining as many staff members as possible on board to keep ongoing projects viable and to be delivered in a timely fashion. Staff that may have been released are kept on record for reemployment upon new project awards.

CCC consistently invests in improving existing programs and approaches when it comes to leadership development, staff engagement and training using current practices and adopting new schemes. The wide range of technical and leadership training programs are tailor made to disciplines that are utilized in the company and are updated on an annual basis to include new and improved trends, ideals and information.



ENVIRONMENT

UN GC Principle 7: Businesses should support a precautionary approach to environmental challenges.

Sustainability Education

Enhancing employees' sustainability knowledge and skills is essential in fulfilling our commitment towards the environment. 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. Our approach to sustainability education is diverse and thorough. It encompasses an awareness outlook as well as a more focused perspective offering practical tools on embedding sustainability in everyday activities. In all cases, the underlining notion is to integrate sustainability in our construction operations.

Below are some examples of how CCC's workforce becomes equipped with the necessary skills and encouragement for the consistent application of environmental responsibility throughout the company:

Green Building Experts

Training in green building standards is high on our agenda. For this reason we either organize relevant in-house introductory training or assist in covering the exam fees for specialized courses. The sponsored certification program we have developed apart from improving employees' professional development also increases CCC's expertise and domain knowledge in sustainable construction.

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

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

Webinars

During 2018, we continued conducting sustainability themed webinars. These webinars are training opportunities, featuring market leading experts who share with CCC their insights on sustainable solutions related to the construction industry. All webinars are recorded and upon completion posted online on CCC's Knowledge Management platform "Fanous" for all interested users to better understand the content.

The latest topics presented include:

- LEED Workshop for Contractors
- Economics of Renewable Energy: The Shams Ma'an' solar project
- Eco-friendly Construction Methods
- Environmental Solutions for Food Waste
- 3D Printer Technology for Affordable Housing
- Circular Economy
- Sustainable Construction
- High Efficiency HVAC units



Sustainability Competition

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 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 below categories:

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

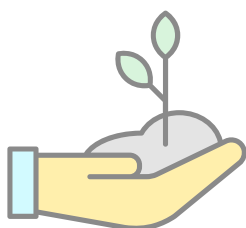
The evaluation process focused on the efficacy of implemented initiatives in delivering sustainability objectives and savings in energy, water and greenhouse emissions, clearly supported by facts and figures. Several submissions were made by CCC teams from various locations (Egypt, Kazakhstan, Qatar 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 for more such innovative solutions. These specialized conferences were:

- 50th Waste Expo 2018, Las Vegas, USA
- Urban Mining and Circular Economy Symposium, 2018, Italy
- World Waste to Energy and Recourses Summit 2018, London, UK
- Smarter E Europe 2018, Munich, Germany
- Water Technology and Environmental Control (WATEC) Exhibition & Conference 2018, Italy.

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 catalyzing innovative ideas and strategies applicable to CCC and the Engineering space.

The table below presets the environmental and financial benefits achieved as part of the competition:



Water conserved	155,000 m3
Electricity savings	300,000 Kw
Emissions reduced	20,000 Co2 emissions tons
Financial gains	1,3 \$ Million



Sustainability Training Initiative of the Year

The confirmation for our achievements typically comes from the outside. CCC has participated in many open international sustainability competitions and has been repeatedly recognized and awarded several prestigious awards.

Specifically in recognition of CCC's clear commitment to the sustainability skills of their workforce, we were awarded the Sustainability Training Initiative of the Year at the MENA Green Building Awards 2018. 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. Our sustainability education efforts 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.



CCC Executives receiving the Award on behalf of CCC



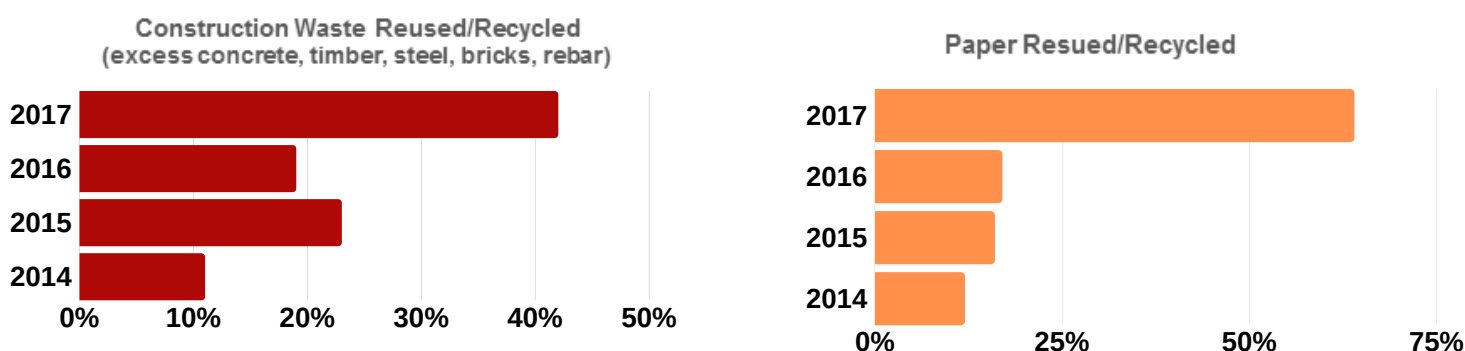
UN GC Principle 8: Undertake initiatives to promote greater environmental responsibility.

Construction Waste Management

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Project Specific – Waste Management Results

PROJECT NAME	% of Construction Waste diverted from landfill	% of Paper Recycled
Abu Dhabi International Airport (UAE)	98%	100%
City Centre Al Zahia (UAE)	96%	100%
Msheireb & Education City Stations (Qatar)	79%	80%
Al Bustan Street North (Qatar)	43%	90%
Nizwa - Thamarit - Adam Road	34%	80%



Case Study

Al-Zahia City Center Project (Sharjah, UAE)

CCC's careful planning and management has ensured that a major portion of the projects' construction waste is 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 has targeted to exceed this project requirement.

Recycling of Construction Waste

With the assistance of a local recycling facility, CCC achieved the following results by the end of 2017

Information:

Project:

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

Target:

Reuse and recycle at least 75% of the projects materials.

Result

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

Construction Contractor:

Consolidated Contractor Company (CCC)

Client:

Majid Al Futaim Properties L.L.C.

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%			



UN GC Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

Capitalizing on our Green Building expertise, culture of innovation and experience in proven sustainability business cases we focus on adopting environmentally friendly technologies. We apply a combination of responsible material procurement, advanced technology use and community engagement to alleviate our projects' environmental impacts. Examples of the technologies applied include on-site sewage treatment systems, solar-powered systems and energy efficiency infrastructures (AC units, appliances, LED lighting).

For evaluating these technologies, the approach we follow in CCC is to examine the life cycle parameters. We apply life cycle cost analysis tools to assess the economic and environmental benefits and then decide on the feasibility. Considering the trade-offs between capital and operating costs and environmental factors we invest accordingly.

Our specific and measurable actions minimize our environmental impacts, as an indication of our latest reporting cycle, 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



Wastewater treatment plant (Saudi Arabia)



PV solar lights (Saudi Arabia)



Case Study

Jebel Ali Camp, UAE

When CCC's management decided to expand the accommodation facilities of an existing company-owned labor 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 precast 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 labor.

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

- High efficiency HVAC system (consists of four outdoor units and seventy indoor units).
- Efficient LED Light fixtures
- Motion sensors for the corridor lights
- Low energy appliances
- Solar Water Heater
- Programmable thermostats to control indoor temperature
- Low flow fixtures at toilets and kitchen

Water Savings	
Consumption reduction %	Annual saving (gallons)
52.7% (compared to the baseline design)	5,533,984

Energy Savings			CO2 Emissions Offset
Item	Consumption Reduction %	Annual Saving Energy (KW)	834 tons of CO2
Solar Water Heater	80%	197,100.00	
LED Lighting	60%	186,062.40	
High Efficient A/C	45%	505,923.20	



ANTI-CORRUPTION

UN GC Principle 10: The promotion and adoption of initiatives to counter all forms of corruption, including extortion and bribery.

The following information outlines the development and progress of activities related to the Company's Ethics Compliance Program:

- CCC's Ethics Compliance Program was developed and launched as a Quality Management Procedure at the end of 2008. The Quality Management Procedure QMP-MOA-029 was subsequently revised, re-issued and distributed in February 2018. Implementation of the Ethics Compliance Program is mandatory to all the areas, projects, employees and external parties (external parties include: subcontractors, suppliers, vendors, distributors, accountants, lawyers, agents, consultants, joint venture/consortium partners) who should all adhere to strict ethics compliance and enforcement of the procedure's terms and directives.
- CCC's Ethics Compliance Program is based on the Company's "Core Values, Guiding Principles and Code of Practice" which was revised in April 2018. In addition, Ethics Compliance Program complies with the Company's existing Procedures as detailed in the context of the Program.
- Bearing on the ongoing global changes applicable to compliance laws and regulations, revisions of EACP were issued in 2014 (Revision 2), 2016 (Revision 3) and 2018 (Revision 4) to meet the respective changes.
- In line with the requirements of the Ethics Compliance Program, periodical reviews have to be conducted to ensure the currency of the Program. In November 2018, Ernst & Young were commissioned to undertake this review which was completed and the report was submitted to Management. Other reviews are in the works for 2019.
- In line with the Ethics Compliance Program, ongoing training workshops and face-to-face awareness sessions are regularly conducted to senior staff in positions of authority and those who are exposed to compliance situations. Completion Certificates are issued to each participant, copies of which are filed in their respective personal files with HR Department.
- From 2014 till today, close to 450 Senior Staff have been trained by a Certified Ethics and Anti-Corruption Compliance Trainer.



- In order to expose the highest possible number of employees to the Ethics Compliance Program, two Online Ethics and Anti-Corruption e-Learning Program were developed and launched in 2018 in cooperation with two International Specialist Consultants (Idox Compliance and Pohlmann and Company) that was tailored specially for CCC. 6,500 Employees were invited to participate in the training with more than 90% of employees completing both training programs and receiving their individual completion certificates, copies of which automatically were sent to their respective personal files with HR Department.
- Both the Classroom Training Workshops (introductory, advanced and refreshers) and the Online Training Program are ongoing.
- Induction Training Course: A strong set of values is integral to the long-term success of CCC. Ethics Compliance Induction Training is provided as part of the induction process for all employees on new projects and for periodically refreshing employees' memories at all locations. The purpose of this Compliance Induction Training course is to provide employees with the main aspects of CCC's Ethics and Anti-Corruption Program. The Compliance Induction training covers the following topics; CCC Ethics Statement and President's Statement, the Compliance Team composition at all CCC Areas/Projects, Whistleblowing Channels, Gifts and Entertainment, CCC Core Values, Guiding Principles & Code of Practice Booklet, Ethics and Anti-Corruption Program Procedure.
- Survey Training: CCC promotes high standards of business behavior, and in order to achieve our goals we have developed an Ethics Training course presented in the form of a survey questionnaire. The Ethics Survey Questionnaire consists of a few simple questions that can be completed in a relatively short period of time and revives employees memories of our existing code of conduct, procedures, whistleblowing channels and other main elements of our Ethics Compliance Program.
- Revised and re-issued the Subcontractors Procedure (QMP-GEN-012-Subcontracting) to include a section on monitoring of third parties after carrying out a due diligence and after signing a contract. Monitoring, after the initial due diligence, enables management to continually review third parties for adherence to CCC Ethics compliance Program.



- The “General Risk Register” and “Risk Manual” were revised to expand the “Compliance Risks; Bribery, Corruption, Fraud, Theft” section and to add a new section covering “Child Labour, Compulsory Forced Labour, Slavery and Human Trafficking” that addresses the requirements of the UK Modern Slavery Act 2015. The new register was distributed for immediate implementation in all CCC projects worldwide.
- A Vendors’ Online Registration Portal was developed and launched using IBM Maximo system. Third parties are able register and fill out a compliance due diligence form online. The term “Vendor” includes Subcontractors, Suppliers, Vendors, Distributors and other third parties.



Tone from the Top

CCC Founders and Senior Management have set the “tone at the top” through a visible and active leadership commitment to zero tolerance for corruption in all its forms. A few of their long term commitments and support are demonstrated by being members and supporters of the following international organizations:



United Nations
Global Compact

One of the
first 50
members to
join the launch
of the
Compact in
2001.



Founding
member &
active
participant of
the Forum
since 2004.



Founding
member of the
Initiative when
launched in 2011,
active participant
and board
member of the
Founding
Committee.



CCC's BULLETIN

Corporate Social
Responsibility &
Sustainability

News Section

January - December 2018



1st Quarter 2018

Issue 125

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Quarterly Magazine of Consolidated Contractors Company



Trends in
Project Development
& Finance



“To Do Well, You Need To Do Good.”

The What and the Why of Corporate Social Responsibility (CSR)

CORPORATE SOCIAL RESPONSIBILITY

“CSR....Simply because we Care” is not just a catchy slogan, but a genuine belief, translated into real action by CCC. Throughout the history of the company and even before the concept of Corporate Social Responsibility (CSR) became popular in the business world, CCC’s philanthropy was embedded in the founders’ beliefs and values. To them, as to the 92% of people who believe that business success should be measured by more than profit¹, it was and still is a conscious effort to give back to society. Maximizing the company’s profits always came in second to human development, employee wellbeing and social investment in the communities where CCC conducts its business.

While there is no universal definition of Corporate Social Responsibility (CSR), the World Business Council for Sustainable Development described it as “the business contribution to sustainable economic development”. Indeed, CSR is a broad concept used to describe a company’s efforts to improve society. These efforts range from donating funds to charities to implementing environmentally-friendly policies in the workplace. According to statistics from Double the Donation Research, corporations donated \$17.8 billion to charities last year, 55% of consumers are willing to pay more for products from socially responsible companies, and 93% of the world’s largest 250 companies now publish annual CSR Reports. Despite the fact that some critics have described CSR as a fad, a type of public relations tool, these statistics indicate that CSR has become a vital component for succeeding in our ever changing business world.

Furthermore, in the global business world, stakeholders, in the general sense of the word, are becoming highly attuned as to whether a business is socially responsible, as they prefer to be associated with companies who engage in programmes and projects that have a positive effect on communities. A company’s ability to practice social responsibility can be the difference between a potential client choosing CCC over a competitor. To give an example, according to the Nielsen Global Survey on Corporate Social Responsibility “55% of global online consumers across 60 countries say they are willing to pay more for products and services provided by companies that are committed to positive social and environmental impact.” Accordingly, effective CSR can improve a company’s operations, cut costs, make it competitive with other peer companies, and boost employee morale. It has been shown that companies with an active and effective CSR policy enhances employees’ engagement and assists companies to attract and keep



qualified personnel. More than two-thirds (67%) of respondents in Nielsen’s third annual global online survey on Corporate Social Responsibility say they prefer to work for a socially responsible company. Employees have also been shown to be more engaged and to perform better when

"To Do Well, You Need To Do Good." The What and the Why of Corporate Social Responsibility (CSR)

they feel good about their company's CSR involvement. According to a study by Society for Human Resources Management, companies with strong sustainability programmes had 55% better morale, 43% more efficient businesses processes, 43% stronger public image and 38% better employee loyalty.

The benefits for employees themselves are equally important. When employees contribute their time to worthy causes and engage in beneficial social activities, such as skill-based volunteering projects, they develop professionally and personally by furthering their technical expertise, and enhancing their intrapersonal skills. Participants in volunteering programmes report that leadership, innovation, communication, collaboration and teamwork are some of the main skills developed and most importantly volunteering gave them a sense of purpose and pride.

After carrying out a thorough review of 21 companies' CSR activities selected from Engineering New Records' (ENR) 2017 top 250 contractors, the following similarities were apparent. The majority of companies:

1. Have a giving strategy or a CSR policy framework in place.
2. Invested largely in impactful projects versus philanthropic donations.
3. Have built successful relationships with grass root non-governmental organizations with whom they cooperate to implement CSR activities, and
4. Publicized their CSR projects on their website which includes a press section where they post their press releases.

Their CSR projects ranged from water safety, climate change, to education, skill development and employment creation, and in some cases even bringing electricity to villages. For example, Bechtel rated number five on ENR's list focuses its CSR on access to clean water and disease prevention. In its effort to prevent water-borne illnesses in Weledi Village in Ethiopia, the company cooperated with Engineers without Borders to build latrines and hand-washing stations at the public marketplace. The project will impact nearly 10,000 people as the latrines will enable market vendors to keep their stores open longer, increasing their income to support their families. Another example is Samsung Engineering & Construction Group's flagship programme called "Samsung Villages". Through this programme, a team of the company's staff was directly engaged in building five villages in

South Korea, Indonesia, India and Vietnam. The employee volunteers dug foundations, stacked bricks and applied coats of paint by hand to build safe and clean homes and schools with working restrooms and running water.

At CCC, the management's commitment to making social responsibility a core component of CCC's operations is by itself one of the described prerequisites for improving the company's corporate responsibility practices and succeeding at it. CCC's corporate giving strategy as envisioned from the top is to improve the social and economic livelihood of marginalized and underprivileged communities. Its strategy and community development will include financial support for impactful projects and in-kind contribution in the form of volunteerism.

The decision to establish a CSR Department at CCC underpins the CCC founders' belief in "to do well you need to do good". The mission of the CSR Department is to build on CCC's philanthropic culture and promote it within the company, improve the welfare of its employees and enhance the long term economic and social sustainability of communities where CCC conducts its business. With focus on themes of crucial importance such as **1.** Education (formal and vocational training); **2.** science, technology and innovation; **3.** Health, and **4.** Humanitarian aid and relief, CSR plans to assess the needs of marginalized communities in which CCC operates, and build partnerships with local, public and private institutions to design, plan, and implement impactful projects that address those needs.

Internally, CSR plans to inform, motivate and engage employees in addressing challenges and societal needs, as well as encourage the culture of giving and volunteerism among CCC staff. In achieving its mission, CSR will look to the support of its volunteer CSR Lead Coordinators in the CCC project areas, and the CSR Committee.

There is a long road ahead of us to reach our destination and to see our positive social impact, but the vision of bringing a smile to a refugee child, or improving the livelihoods of vulnerable families makes it worth taking the trip. The way to improving the living conditions of needy people and to addressing inequalities is when more and more individuals and corporations and NGOs join together and embrace giving as the normal thing to do.



Contribution to CSR Initiative

CCC Staff are encouraged to come up with ideas and activities related to CCC's CSR Initiatives including **Going Green** and community involvement events. Please send your ideas, initiatives and achievements to "CSR-CCC" email address csr@ccc.net.

JORDAN

Train the Trainers in Advanced Welding Technology

A training course in Advanced Welding Technology was offered to 19 trainers of the government owned Vocational Training Corporation. The course ran for 65 hours and it featured training on:

1. Gas tungsten arc welding - bead weld - straight line - free weld on 6mm thickness plate.
2. Pipe welding technical knowledge - 6g position - gas tungsten arc welding - penetration technology.
3. Gas tungsten arc welding external weld 5g position (pipe diameter 2").
4. Gas tungsten arc welding butt weld and penetration and hot pass.
5. Shielded metal arc welding 3g position - external weld on 8mm plate.
6. Shielded metal arc welding and gas tungsten arc welding - butt weld - 6" pipe 6g position.

The course was delivered in Sahab Training Center by our trainers Mohammad Abu Atieh, Ziad Daraghmeh (Welding Trainers) and Mahmoud Al Zeirini (Safety Officer) under the supervision of Radwan Al Shammas (Training Supervisor).



Al Mouj Muscat Marathon 2018

Oman



For the second consecutive year CCC participated in the Muscat Marathon, but this year more effort was put into its organization.

Although the usual closing date for registration was 31 December 2017, we started the registration for the marathon ahead of time in order to give a longer period of time for the employees to enroll. The end of October 2017 was the registration deadline we set in order to give enough time to start the training of the runners for the race. 35 staff members registered for the race and they started training every Friday under the supervision of Stephan Mueller, the Area Contract Manager who is also an experienced long distance runner. Special T-shirts were made and distributed to the running participants.

The Marathon Day was set for 19 January 2018 and 35 employees participated. While only one of the CCC team members ran the full marathon, four ran the half marathon, 14 members participated in the 5km and 16 members in the 10km races. All the team members completed the races with good results, considering that for some this was their first experience of the kind. Everybody in the team enjoyed the event and expressed their interest in participating again the following year.

The positive outcome of employees' participation in the marathon race is that they continued to meet every Friday for a morning run, which is in line with our goal to encourage employees to follow a healthy life style.

The table shows the First place results.

1st Place	Event	Location
Stefan Mueller	Full Marathon	AMO
Ahmed Nigm	Half Marathon	RHOP
Hussein Taha	10K	MOO
Ali Khalfan	5K	RHOP



American University of Sharjah (AUS) Visit to Project Site



As part of CCC's Sustainability and Corporate Social Responsibility Programme, we are glad to inform you of the Al Zahia City Center Project's latest initiative which we carried out on the project site.

On Thursday, 15 February 2018 we received a delegation of civil engineering undergraduate students and three professors from the American University of Sharjah. Their visit was part of CCC's ongoing community outreach programme, the aim being to introduce them to our project, show the progress so far, explain the structure works and how this development will benefit the community and the surroundings.

In the presence of our client (MAF) and consultant (K&A) we started the programme by welcoming the visitors. Samer Haddad, Project Director, gave a speech and then a video about CCC's core business, principles and methods was shown. Subsequently, the MAF Civil Project Manager gave a presentation addressing the project scope of work, stakeholders and project details.

Our guests were given a site visit to the project to observe the structure works that include piles, pile caps, beams, hollow-core slabs, rafts and columns. The visit ended with a question and answer session, refreshments were served and the attendees were thanked for their visit.



CCC's First Annual Sustainability Competition Results

In August 2017, CCC's first annual Sustainability Competition was launched, striving to further promote sustainable behaviour across operations. The target was to encourage the implementation of internal best practices and recognize efficient and cost effective measures carried out at offices, projects and camps.

The submissions made by the CCC teams included various practical sustainability success stories, as shown in Table 1.

#	NAME	COUNTRY	CATEGORY
1	Bausher Waste Water (Madinat Sultan Qaboos)	Oman	Project
2	City Center Almaza	Egypt	Project
3	EPIC for Hamad International Airport Jet A1 Supply (JSPP)	Qatar	Project
4	Jazan Integrated Gasification Combined Cycle -Sulfur Recovery Unit (JIGCC-SRU) Camp	KSA	Camp
5	Jazan Refinery Utility (JRUP) Camp	KSA	Camp
6	Kazakhstan Camp	Kazakhstan	Camp
7	PEO Camp	Qatar	Camp
8	Riyadh Metro Project Camps	KSA	Camp
9	Water Mega Reservoir (WMR-C)	Qatar	Project

Table 1 - Project and Camp Participants

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 following categories:

- Energy Efficiency.
- Water Efficiency.
- Waste Management.
- Transportation Management.
- Renewable Energy.
- Economic, Behavioral & Environmental Impacts.

Additional significant evaluation criteria included:

- The use of facts and figures to support environmental reductions.
- Indication of financial savings (ideally through analysis such as a lifecycle cost assessment).
- Plans for the continuous improvement of applied initiatives.

Based on these criteria, the winners are as shown in Table 2.

CAMP CATEGORY	COUNTRY	SCORE (%)	RANK
Jazan Integrated Gasification Combined Cycle -Sulfur Re-covey Unit (JIGCC-SRU) Camp	KSA	87.2	1st
Riyadh Metro Project Camps	KSA	86	2nd
Kazakhstan Camp	Kazakhstan	70.2	3rd

PROJECT CATEGORY	COUNTRY	SCORE (%)	RANK
Water Mega Reservoir Project (WMR-C)	Qatar	73	1st
Bausher Waste Water (Madinat Sultan Qaboos)	Oman	57	2nd

Table 2 - Winning Projects and Camps

CCC's First Annual Sustainability Competition Results

FIRST PLACE-WINNING CAMP JIGCC-SRU (KSA)	FIRST PLACE-WINNING PROJECT WMR-C (QATAR)
Initiatives	Initiatives
Energy Efficient A/C Units Solar Water Heater System Solar Street Lights LED Lights	Water Dewatering water for dust control
Water Pressure Reducing Valves Reverse Osmosis Water Treatment Plant Efficient Laundry Equipment	Materials Advanced formwork system (technopolymer-based instead of plywood)
Sewage Sewage Treatment Plant Adjustment of Toilet Flush	Waste Reuse of construction waste Recycling
Estimated Annual Savings of 900,000 USD	Estimated Annual Savings of 400,000 USD

Table 3 - Estimated Annual Savings (per participants' calculations)

The winners' allocated prizes are participation in the following prestigious conferences:

Camps:

- JIGCC-SRU Camp: 50th Waste Expo, 23-26 April 2018, Las Vegas, USA.
- Riyadh Metro Project Camps: Greenbuild Europe, 16-18 April 2018, Berlin, Germany.
- Kazakhstan Camp: SUM 2018/4th Symposium on Urban Mining and Circular Economy, 21-23 May 2018, Bergamo, Italy.

Projects:

- Water Mega Reservoir Project (WMR-C): World Waste to Energy and Recourses Summit, 23-24 May 2018, London, UK.
- Madinat Sultan Qaboos (® Bausher Wastewater): Intersolar Europe, 19-20 June 2018, Munich, Germany.

These specialized conferences are training opportunities, offering the winning teams exposure to trends that CCC can capitalize on. With the intention to keep sustainability at high momentum within the organization, the above conventions will help to spur innovative ideas and best practice strategies applicable to CCC.



CCC's First Annual Sustainability Competition Results

SUSTAINABILITY



WMR-C Project - Advanced formwork system



JIGCC-SRU Camp-Sewage treatment plant



JIGCC-SRU Camp-Sewage treatment plant (Control)



RJIGCC-SRU Camp-Reverse Osmosis Water Treatment Plant



Bausher Waste Water (MSQ) Project-S. Al Jayyousi, H. Al Masri and the Off-grid Solar Cabin



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bulletin

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Transition from
Wellness to Wellbeing
In the Corporate Environment



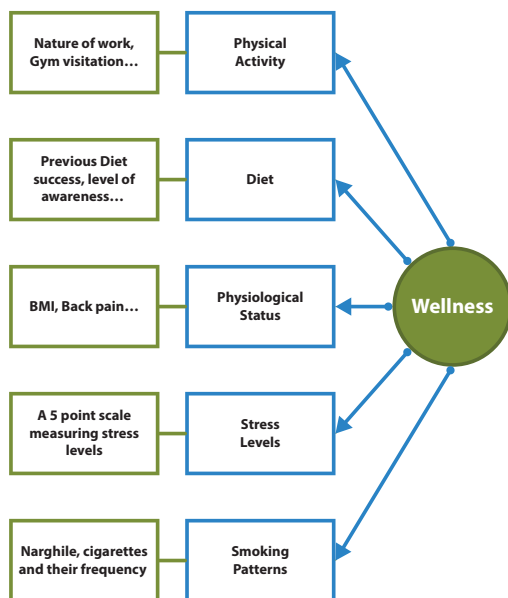
Measuring Wellness in CCC

As per CCC's Employee Wellness Initiative, this year a new section covering the employees' wellness was introduced in the annual employee satisfaction survey. The goal of this new section (i.e. survey) is to capture the "wellness" status of our employees across our operation areas in order to identify any shortfalls and to provide the needed information and statistics for tailoring the CCC wellness program.

Measuring the Unmeasured: How to Measure "Wellness" Across CCC

In social sciences, "wellness" is a typical unmeasured concept similar to "satisfaction" or "quality of life" which means there is no perfect or direct measure to fully capture such concepts, yet we can develop a set of questions that will collectively lead to measuring "wellness", and this is exactly what we did in CCC.

Multiple questions measuring stress levels, physical activity, physiological status, smoking patterns, stress levels and diet were developed and presented to 8500 employees through our in-house surveying system iSurvey through which we got a remarkable 72% response rate. The illustration explains how those questions captured the "wellness" of our employees.



All of the above contribute to wellness in different ways, depending on the individual and his/her environment, but by grouping the results based on age, location and other demographics they gave us enough insights on the status for each country and age group. Those analytics will pave the way for designing strategies and programs to enhance CCC's employee wellness.

Interpreting the Results: So Are We Well?

Yes we are, but there is a lot of room for improvement! Based on the individual's height and weight, the Body Mass Index (BMI) is calculated. The results for the BMI were mostly good, meaning the BMI scores fall within the normal ranges, with the exception of a few projects where the average employee has the status of underweight or obese.

Aside from weight, our locations with the highest smoking percentages have been identified. Possible campaigns to reduce smoking may take place at those locations in order to improve the employees' health, but it is worth mentioning that even CCC's highest smoking percentages were way less than the publicly listed national smoking percentages in those locations!

The stress which our employees face while performing their duties and during their daily life, is an important factor affecting the employee's wellbeing as well as his/her productivity. According to the results of the survey, the majority (90%) of the respondents reported having various levels of stress, with 1/5 reporting serious levels of stress. A positive relationship was found linking stress and smoking, having a high level of stress was found to cause a smoker to smoke a higher quantity of cigarettes per day.

Most of the respondents reported having little to no lower back pain. Moreover, the majority of those who filled the survey declared they exercise at least once a week. Last, a good portion of the respondents show general awareness regarding diet and healthy eating, where 2/5 declared they are following / have followed a diet.

Re-Measure and Quantify: So We Put a Wellness Program in Place, but What Will Be the Impact?

As the wellness survey will be conducted annually, we will be able to compare results across time. Accordingly, we have tailored the analysis to capture such changes and identify positive or negative trends, that is to say that after the next round of data collection we will be able to pinpoint and quantify the impact of the wellness programs on each of the influencing constructs (refer to the illustration) and measure its success. Such feedback will play an integral role in designing and redesigning the wellness program in CCC.

CCC Moving from Wellness to Well-being

FEATURE

While wellness has a long history in the workplace, only recently have organizations begun to consider the whole picture which is termed "Holistic Ergonomics". By incorporating the physical, mental and social aspects of work, this results in organizations moving towards workplace strategies that focus on the overall well-being of their employees. (footnote1)

Consolidated Contractors Company (CCC) is now, more than ever, planning to invest in their employees' well-being. Supporting our people and creating happy, healthy and engaged employees, is what CCC aims to do with its workplaces and practices. It's all about our people and supporting an ecosystem that enhances our employees' wellbeing which will in turn positively benefit our organizational structure.

Since 1948 the World Health Organization has defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".

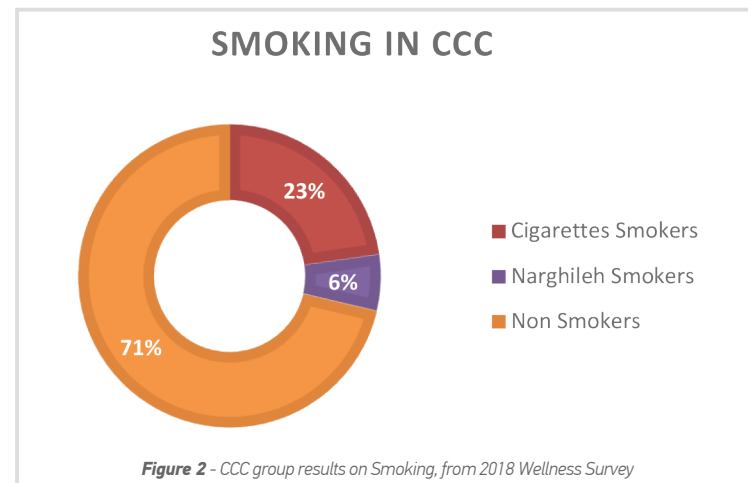
Our first step towards this direction was measuring our employees' health and physical wellbeing through the "Employee Satisfaction Survey 2018" which included a section specifically on 'Employee Wellness'. The survey was completed by approximately 70% of CCC employees; the questions included addressed health, diet, stress, smoking habits and exercise frequency.

CCC Smoking Habits

Situation and trends:

One person dies every six seconds from a tobacco related disease; that is ten people per minute. Equally alarming is that more than 600,000 non-smokers die each year from secondhand smoke worldwide.

Many people do not realize the negative impacts smoking has on our overall well-being. Smoking not only disrupts our physical health, but it also negatively affects our emotional, environmental, financial, intellectual, occupational, social and spiritual health.



WORKPLACE STRATEGY IN EMPLOYEE WELL-BEING

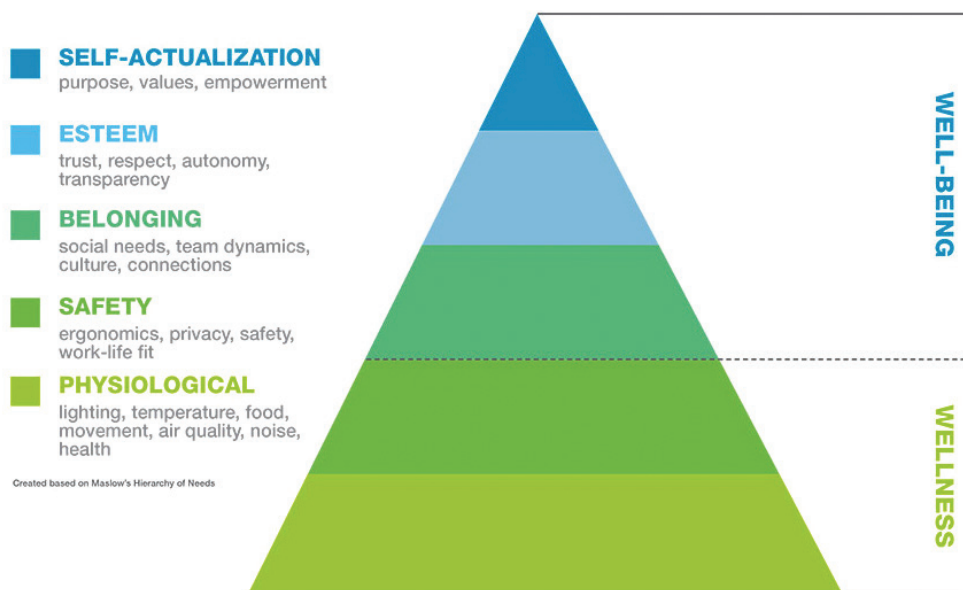


Figure 1 - Workplace Strategy in Employee Well-Being ¹

CCC Moving from Wellness to Well-being

Smokers often report that cigarettes help relieve feelings of stress. However, did you know that the stress levels of adult smokers are higher than those of nonsmokers? Adolescent smokers report increasing levels of stress as they develop regular patterns of smoking. Smoking cessation has been proven to reduce stress; far from acting as an aid for mood control, nicotine dependency seems to exacerbate and intensify mood swings and stress.

CCC's survey results indicate that approximately one fifth of employees are cigarette smokers with the majority being in their 20's (Figure 1). CCC is currently looking into ways to establish smoke-free policies and offer plans to support our people in their journey towards greater happiness and enhanced well-being.

CCC Stress Levels

Situation and trends:

It has been long established that our minds and bodies are closely connected. Now, research has found that the way we think about stress could add decades to our lives. Research from Harvard University has found that viewing stress as helpful rather than harmful can improve performance and reverse the physical changes caused by stress.

Researchers found that those who reported experiencing high stress levels and who also believed that stress negatively affected their health had a 43% increase risk of premature death. On the other hand, those who experienced high stress and didn't believe it to be harmful were at the lowest risk of dying, even compared to people who didn't experience high levels of stress.

Stress alone isn't dangerous, but perceiving it to be is critical. Researchers from the University of California have found that some stress is good for you, as it keeps the brain more alert and improves performance. During times of physical or psychological stress, oxytocin is released, which influences the social centers of the brain, encouraging you to connect with other people and strengthens relationships. During times of stress, oxytocin acts as a natural anti-inflammatory: it helps blood vessels stay relaxed and it helps heart cells heal from any damage done to them by stress. Under certain conditions, short term stress prepares the immune system for assault from environmental stressors such as wounds, medical procedures, infection, vaccination, or a hard fought stint on a sports field.

Our CCC survey results have shown that the majority of respondents have reported having various levels of stress. CCC is now studying future plans to help employees better manage their stress. Stress management tools we are researching include a combination of mindfulness and meditation, healthy living, goal mapping and approaches in establishing work/life balance.

CCC's Physiological Status

Situation and trends:

Worldwide, at least 2.8 million people die each year as a result of being overweight or obese. Being overweight and obese can lead to adverse metabolic effects on blood pressure, cholesterol, triglycerides and insulin resistance. Risks of coronary heart disease, ischemic stroke and type 2 diabetes mellitus increase steadily with increasing body mass index (BMI). Raised BMI also increases the risk of cancer of the breast, colon, prostate, endometrium, kidney and gall bladder. To achieve optimum health, the median BMI for an adult population should be in the range of 21 to 23 kg/m². On a positive note, our CCC survey results that the majority of our staff fall under the healthy normal weight bracket and the majority of CCC employees report having no pain to little lower back pain (Figure 2).

BACK PAIN IN CCC

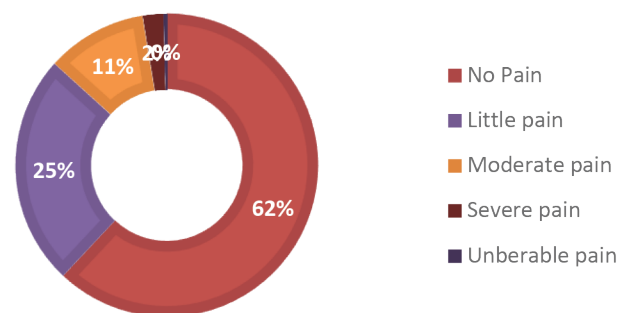


Figure 3 - CCC group results on Back pain, from 2018 Wellness Survey

On a CCC group level, CCC is currently researching methods to achieve optimal wellness for our staff worldwide. CCC has always promoted health and wellbeing through its sports activities, awareness campaigns and training courses and intends to intensify these activities to achieve optimal wellness to well-being.

¹<https://www.knoll.com/knollnewsdetail/moving-from-wellness-to-well-being-infographic>

Prevention & Treatment

“An ounce of prevention is worth a pound of cure” is an old saying which holds true in daily life and is applicable in almost every field.

FEATURE

Prevention is always better than cure, if we know that something might become dangerous with time, then it is better to halt the danger by combating it now. We used to hear this from our parents and grandparents and we are saying this to our children and grandchildren. We must not give our problems a chance to grow. Better work now and take precaution instead of fixing the damage in the future.

A student must study every day not only during exams. Ignoring studying in the early stages leads to very hard work during exams and to risking one's success.

When it comes to **health**, we should immediately seek medical advice if there are certain visible symptoms of a disease, before getting diagnosed with that disease. There have been many cancer cases where the patient did not take his health seriously and later on with further deterioration of his health, he comes to know that he is suffering from cancer and is at the second or third stage. Had he been to the doctor earlier and diagnosed with his disease then he could have been easily cured in the first stage. Even in the case of other diseases early detection helps in taking better preventive measures. Thinking that the disease will cure itself or avoiding a visit to the doctor may result in an increase of the problem and expenses and may even endanger your life.

We can take precautionary methods by choosing a healthy diet and making it a point to exercise regularly. Regular exercise and good nutritious food will make us less prone to diseases, and will also result in a healthy heart, mind and body.

Preventive measures taken in work areas also lessen the intensity of suffering. Wise men always use this formula for success: they never wait for the deadline to come near to start their work, instead they finish their work before the deadline. This gives them time to solve any unseen problem that might occur during the process of their work. No man is perfect: we all make mistakes. But with the help of a preventive act one can avoid many disasters, complexities, confusion and destruction.

Health Maintenance & Disease Prevention

Preventive medicine can be categorized as primary, secondary, or tertiary.

Primary prevention aims to remove or reduce disease risk factors (e.g., immunization, giving up or not starting smoking). Secondary prevention techniques promote early detection of disease or precursor states (e.g., routine cervical Papanicolaou screening to detect carcinoma or dysplasia of the cervix). Tertiary prevention measures are aimed at limiting the impact of established disease (e.g., partial mastectomy and radiation therapy to remove and control breast cancer).

Tables 1-1 and 1-2 give leading causes of death in the United States and estimates of deaths from preventable causes. (Numbers given in the thousands).

Table 1-1

CATEGORY	ESTIMATE
All causes	2,472,699
Diseases of the heart	617,527
Malignant neoplasms	566,137
Chronic lower respiratory diseases	141,075
Cerebrovascular diseases	133,750
Accidents (unintentional injuries)	121,207
Alzheimer disease	82,476
Diabetes mellitus	70,601
Influenza and pneumonia	56,335
Nephritis, nephrotic syndrome, and nephrosis	48,283
Septicemia	35,961

Source: National Center for Health Statistics 2010

Many effective preventive services are underutilized, and few adults receive all of the most strongly recommended services. The three highest-ranking services in terms of potential health benefits and cost-effectiveness include discussing aspirin use with high-risk adults, tobacco-use screening and brief interventions, and immunizing children. Other high-ranking services with data with substantial room for improvement in utilization are screening adults aged 50 and older for colorectal cancer, immunizing adults aged 65 and older against pneumococcal disease, and screening young women for Chlamydia.

Prevention & Treatment

Table 1-2

RISK FACTOR	MALE (95% CI)	FEMALE (95% CI)	BOTH SEXES (95% CI)
Tobacco Smoking	248 (226-269)	219 (196-244)	467 (436-500)
High Blood Pressure	164 (153-175)	231 (213-249)	395 (372-414)
Overweight–Obesity (High BMI)	114 (95-128)	102 (80-119)	216 (188-237)
Physical Inactivity	88 (72-105)	103 (80-128)	191 (164-222)
High blood glucose	102 (80-122)	89 (69-108)	190 (163-217)
High LDL cholesterol	60 (42-70)	53 (44-59)	113 (94-124)
High dietary salt (sodium)	49 (46-51)	54 (50-57)	102 (97-107)
Low dietary omega-3 fatty acids (seafood)	45 (37-52)	39 (31-47)	84 (72-96)
High dietary trans fatty acids	46 (33-58)	35 (23-46)	82 (63-97)
Alcohol use	45 (32-49)	20 (17-22)	64 (51-69)
Low intake of fruits and vegetables	33 (23-45)	24 (15-36)	58 (44-74)
Low dietary polyunsaturated fatty acids (in replacement of saturated fatty acids)	9 (6-12)	6 (3-9)	15 (11-20)

Prevention of Infectious Diseases

Much of the decline in the incidence and fatality rates of infectious diseases is attributable to public health measures—especially immunization, improved sanitation and better nutrition. Immunization remains the best means of preventing many infectious diseases. Recommended immunization schedules for children and adolescents can be found online at www.cdc.gov/vaccines/rec/schedules.

Substantial vaccine-preventable morbidity and mortality continue to occur among adults from vaccine-preventable diseases, such as hepatitis A, hepatitis B, influenza and pneumococcal infections. Strategies to enhance vaccinations include increasing community demand for vaccinations; enhancing access to vaccination services; and provider- or system-based interventions, such as reminder systems.

Prevention of Cardiovascular Disease

Cardiovascular diseases, including coronary heart disease (CHD) and stroke, represent two of the most important causes of morbidity and mortality. Several risk factors increase the risk for coronary disease and stroke. These risk factors can be divided into those that are modifiable (e.g., lipid disorders, hypertension, cigarette smoking) and those that are not (e.g., gender, age, family history of early coronary disease). Impressive declines in age-specific mortality rates from heart disease and stroke have been achieved in all age groups during the past two decades, in large part through improvement of modifiable risk factors: reductions in cigarette smoking, improvements in lipid levels, and more aggressive detection and treatment of hypertension. Key recommendations for cardiovascular prevention are shown in Table 1-3.

Table 1-3: Prevention Cardiovascular Diseases

PREVENTION METHOD	RECOMMENDATION
Screening for abdominal aortic aneurysm	<p>Recommends one-time screening for abdominal aortic aneurysm (AAA) by ultrasonography in men aged 65 to 75 who have ever smoked. (B)</p> <p>No recommendation for or against screening for AAA in men aged 65 to 75 who have never smoked. (C)</p> <p>Recommends against routine screening for AAA in women. (D)</p>
Aspirin use	<p>Recommends the use of aspirin for men age 45 to 79 years when the potential benefit due to a reduction in myocardial infarctions outweighs the potential harm due to an increase in gastrointestinal hemorrhage. (A)</p> <p>Recommends the use of aspirin for women age 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage. (A)</p> <p>Current evidence is insufficient to assess the balance of benefits and harms of aspirin for cardiovascular disease prevention in men and women 80 years or older. (I)</p> <p>Recommends against the use of aspirin for stroke prevention in women younger than 55 years and for myocardial infarction prevention in men younger than 45.</p>
Blood pressure screening	Recommends screening for high blood pressure in adults aged 18 and older. (A)
Serum lipid screening	<p>Strongly recommends screening men aged 35 and older for lipid disorders. (A)</p> <p>Recommends screening men aged 20 to 35 for lipid disorders if they are at increased risk for coronary heart disease. (B)</p> <p>Strongly recommends screening women aged 45 and older for lipid disorders if they are at increased risk for coronary heart disease. (A)</p> <p>Recommends screening women aged 20 to 45 for lipid disorders if they are at increased risk for coronary heart disease. (B)</p> <p>No recommendation for or against routine screening for lipid disorders in men aged 20 to 35, or in women aged 20 and older who are not at increased risk for coronary heart disease. (C)</p>
Counseling about healthy diet	<p>Evidence is insufficient to recommend for or against routine behavioral counseling to promote a healthy diet in unselected patients in primary care settings. (I)</p> <p>Recommends intensive behavioral dietary counseling for adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease. Intensive counseling can be delivered by primary care clinicians or by referral to other specialists, such as nutritionists or dietitians. (B)</p>
Screening for diabetes	<p>Recommends screening for type 2 diabetes in asymptomatic adults with sustained blood pressure (either treated or untreated) > 135/80 mm Hg. (B)</p> <p>Current evidence is insufficient to assess the balance of benefits and harms of screening for type 2 diabetes in asymptomatic adults with blood pressure of 135/80 mm Hg or lower. (I)</p>
Counseling to promote physical activity	Evidence is insufficient to recommend for or against behavioral counseling in primary care settings to promote physical activity. (I)
Screening for smoking and counseling to promote cessation	Recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. (A)

Prevention & Treatment

Abdominal Aortic Aneurysm

One-time screening for abdominal aortic aneurysm (AAA) by ultrasonography in men aged 65-75 years is associated with a significant reduction in AAA-related mortality. Women do not appear to benefit from screening, and most of the benefit in men appears to accrue among current or former smokers. Recent analyses suggest that screening men aged 65 years and older is highly cost-effective.

Cigarette Smoking

Cigarette smoking remains the most important cause of preventable morbidity and early mortality. In 2000, there were an estimated 4.8 million premature deaths in the world attributable to smoking, 2.4 million in developing countries and 2 million in industrialized countries. More than three-quarters (3.8 million) of these deaths were in men.

The leading causes of death from smoking were cardiovascular diseases (1.7 million deaths), chronic obstructive pulmonary disease (COPD) (1 million deaths), and lung cancer (0.9 million deaths). Cigarettes are responsible for one in every four deaths in the world. Fortunately, smoking rates are declining worldwide.

Nicotine is highly addictive, raises brain levels of dopamine, and produces withdrawal symptoms on discontinuation. Smokers die 5-8 years earlier than never-smokers. They have twice the risk of fatal heart disease, 10 times the risk of lung cancer, and several times the risk of cancers of the mouth, throat, esophagus, pancreas, kidney, bladder and cervix; a twofold to threefold higher incidence of stroke and peptic ulcers (which heal less well than in nonsmokers); a twofold to fourfold greater risk of fractures of the hip, wrist, and vertebrae; four times the risk of invasive pneumococcal disease; and a twofold increase in cataracts. Smoking has also been associated with increased risk of leukemia, of colon and prostate cancers, of breast cancer in postmenopausal women, osteoporosis and Alzheimer disease.

Both active smoking and passive smoking are associated with deterioration of the elastic properties of the aorta (increasing the risk of aortic aneurysm) and with progression of carotid artery atherosclerosis. The children of smokers have lower birth weights, are more likely to be mentally retarded, have more frequent respiratory infections and less efficient pulmonary function, have higher incidence of chronic ear infections than children of nonsmokers, and are more likely to become smokers themselves.

Table 1-4. Actions and strategies for the primary care clinician to help patients quit smoking.

ACTION	STRATEGIES FOR IMPLEMENTATION
Step 1. Ask-Systematically Identify All Tobacco Users at Every	
Implement an office-wide system that ensures that for every patient at every clinic visit, tobacco-use status is queried and documented ¹	Expand the vital signs to include tobacco use. Data should be collected by the health care team. The action should be implemented using preprinted progress note paper that includes the expanded vital signs, a vital signs stamp or, for computerized records, an item assessing tobacco-use status. Alternatives to the vital signs stamp are to place tobacco-use status stickers on all patients' charts or to indicate smoking status using computerized reminder systems.
Step 2. Advise - Strongly Urge All Smokers to Quit	
In a clear, strong, and personalized manner, urge every smoker to quit	Advice should be Clear: "I think it is important for you to quit smoking now, and I will help you. Cutting down while you are ill is not enough." Strong: "As your clinician, I need you to know that quitting smoking is the most important thing you can do to protect your current and future health." Personalized: Tie smoking to current health or illness and/or the social and economic costs of tobacco use, motivational level/readiness to quit, and the impact of smoking on children and others in the household. Encourage clinic staff to reinforce the cessation message and support the patient's quit attempt.
Step 3. Attempt-Identify Smokers Willing to Make a Quit Attempt	
Ask every smoker if he or she is willing to make a quit attempt at this time	If the patient is willing to make a quit attempt at this time, provide assistance (see step 4). If the patient prefers a more intensive treatment or the clinician believes more intensive treatment is appropriate, refer the patient to interventions administered by a smoking cessation specialist and follow up with him or her regarding quitting (see step 5). If the patient clearly states he or she is not willing to make a quit attempt at this time, provide a motivational intervention.
Step 4. Assist-Aid the Patient in Quitting	
A. Help the patient with a quit plan	Set a quit date. Ideally, the quit date should be within 2 weeks, taking patient preference into account. Help the patient prepare for quitting. The patient must: Inform family, friends, and coworkers of quitting and request understanding and support. Prepare the environment by removing cigarettes from it. Prior to quitting, the patient should avoid smoking in places where he or she spends a lot of time (eg, home, car). Review previous quit attempts. What helped? What led to relapse? Anticipate challenges to the planned quit attempt, particularly during the critical first few weeks.
B. Encourage nicotine replacement therapy except in special circumstances	Encourage the use of the nicotine patch or nicotine gum therapy for smoking cessation
C. Give key advice on successful quitting	Abstinence: Total abstinence is essential. Not even a single puff after the quit date. Alcohol: Drinking alcohol is highly associated with relapse. Those who stop smoking should review their alcohol use and consider limiting or abstaining from alcohol use during the quit process. Other smokers in the household: The presence of other smokers in the household, particularly a spouse, is associated with lower success rates. Patients should consider quitting with their significant others and/or developing specific plans to maintain abstinence in a household where others still smoke.
D. Provide supplementary materials	Source: Federal agencies, including the National Cancer Institute and the Agency for Health Care Policy and Research; nonprofit agencies (American Cancer Society, American Lung Association, American Heart Association); or local or state health departments. Selection concerns: The material must be culturally, racially, educationally, and age appropriate for the patient. Location: Readily available in every clinic office.

Prevention & Treatment

Smoking cessation reduces the risks of death and of myocardial infarction in people with coronary artery disease; lessens the risk of stroke; slows the rate of progression of carotid atherosclerosis; and is associated with improvement of chronic obstructive pulmonary disease (COPD) symptoms. On average, women smokers who quit smoking by age 35 add about 3 years to their life expectancy, and men add more than 2 years to theirs. Smoking cessation can increase life expectancy even for those who stop after the age of 65.

Although tobacco use constitutes the most serious common medical problem, it is undertreated. Almost 40% of smokers attempt to quit each year, but only 4% are successful. Persons whose doctors advise them to quit are 1.6 times as likely to attempt quitting. Over 70% of smokers see a physician each year, but only 20% of them receive any medical quitting advice or assistance. Factors associated with successful cessation include having a rule against smoking in the home, being older, and having greater education. Several effective interventions are available to promote smoking cessation, including counseling, pharmacotherapy, and combinations of the two. The five steps for helping smokers quit are summarized in Table 1-4 and the common elements of supportive smoking treatments in Table 1-5.

Table 1-5. Common elements of supportive smoking treatments.

COMPONENT	EXAMPLES
Encouragement of the patient in the quit attempt	Note that effective cessation treatments are now available. Note that half the people who have ever smoked have now quit. Communicate belief in the patient's ability to quit.
Communication of caring and concern	Ask how the patient feels about quitting. Directly express concern and a willingness to help. Be open to the patient's expression of fears of quitting, difficulties experienced, and ambivalent feelings.
Encouragement of the patient to talk about the quitting process	Ask about: Reasons that the patient wants to quit. Difficulties encountered while quitting. Success the patient has achieved. Concerns or worries about quitting.
Provision of basic information about smoking and successful quitting	Inform the patient about: The nature and time course of withdrawal. The addictive nature of smoking. The fact that any smoking (even a single puff) increases the likelihood of full relapse.

CCC, Winner of the Best Company in Qatar for Occupational Health

FEATURE

On the 28 April 2018, CCC was awarded the “Best Company in Occupational Health in Qatar”. The award selection committee that chose CCC as its winner combines engineers from the Ministry (ADLSA), the Public Works Authority (ASHGHAL) and is chaired by the Vice President of the Qatar Chamber of Commerce. Competing for the award were registered companies in Qatar.

The award was presented by the Minister of Administrative Development, Labour and Social Affairs HE Dr Issa Bin Saad Al Jafali Al Nuaimi and HE Muhammed Bin Ahmed Bin Towar Al Kuwari Vice President of the Qatar Chamber of Commerce and was received by Oussama El Jerbi, Qatar Area Managing Director, on behalf of CCC.

The award was presented during the opening ceremony of the Second Conference for Occupational Safety and Health that coincided with the International Labour Organization’s World Safety and Health Day. In attendance were high level executives from the private and public sectors in the State of Qatar. This award comes in the wake of recent health and safety achievements by CCC projects in Qatar that were recognised by CCC’s clients and the ministry.

While it is critical that safety is maintained at the forefront and throughout all that we do,



occupational health is its enabler. Any successful HSE management system should have an effective occupational health component. The occupational health programmes implemented on the projects in Qatar involve strict compliance with the country laws, the various clients’ requirements and the CCC HSE Management System requirements. It includes the following key elements:

- Establishing licensed site based medical facilities that provide treatment to the workforce, manned 24 hours, 7 days a week by qualified medical staff.
- 100% post-employment and pre-deployment medical screening for all workers and staff to ensure medical fitness and establish a baseline.
- Periodic medical screening as part of the health surveillance for all the critical-to-safety



CCC, Winner of the Best Company in Qatar for Occupational Health

positions on the project including welders, scaffolders, riggers, drivers, operators, personnel using breathing apparatus and others as identified by the project specific risk assessment. (Examples include workers inside special confined spaces and personnel assigned to handling chemicals).

- Establishing audiometric baselines for workers exposed to high noise activities and introducing adequate engineering and administrative controls.
- Noise and dust monitoring on a weekly basis.
- Ergonomics and monitoring. (Examples include work benches, manual handling training and selection of power tools with ergonomic design).
- Working in confined space programmes. This includes continuous monitoring of atmospheric gases to ensure the safety of the air quality for entrants.
- Fit testing for workers using respirators.
- Comprehensive, site specific heat stress prevention plans.
- Radiation protection plans for those workers carrying out NDE works.
- Welfare facilities provided for the workers at the work locations that are maintained in good working conditions (sufficient and close to work location toilets, rest shelters, drinking water stations, cool down rooms and first aid stations).
- Monthly health education programmes run by the projects' HSE and medical teams whereby health educational topics are discussed with the workers to raise awareness. Examples include: diet control (for hypertensive and diabetic patients), health precautions for working in hot weather, the importance of exercise, the importance of health monitoring and surveillance, among others.
- The projects also utilize the weekly mass

toolbox talks to disseminate frequent messages about occupational health to the workforce.

The programmes are frequently audited by various clients and have always been commended for being thorough and in most cases exceeding expectations.



As an example, the CCC site for the Water Mega Reservoir Project has been recognised by Kahramaa (the Electricity and Water authority in Qatar) as a role model. Other contractors working on the Water Mega Reservoirs Programme for Kahramaa have been invited by the client to CCC's site to learn about the occupational health programme being implemented. The Water Mega Reservoirs - Package A Project achieved more than 29 million safe man-hours and Package C achieved more than 26.5 million safe man-hours.

Another example is the Msheireb Doha Downtown - Phase 4 (MDP4) Project that was commended by the MADLSA inspectors for its occupational health programme implementation. MDP4 Project achieved more than 15 million man-hours safely. In addition, some of the HSE Staff in Qatar have been recognised by clients for their contributions to the occupational health programmes implementation on projects.

The award came as recognition of all those efforts demonstrating that CCC's commitment to the health, safety and the overall wellbeing of its workers is an unwavering one.

Jazan Projects Employee Wellness Programme

Jazan IGCC Project - SARU (PKG 1) & JSRU (PKG 2)

FEATURE

Introduction

Wellness is the integration, balance and harmony of mind, body, spirit and emotions where the whole is always greater than the sum of the parts for optimal health. In some cultures the focus on wellness tends to place the greatest importance on physical health, because this is the easiest to measure. Yet, by ignoring one or more of the other components we do a great injustice to our overall well-being. Simply stated, we compromise our quality of life.

Unsound and risky advice on different dimensions of wellness, especially on diet and exercise are aplenty on social media. There is growing concern that too many people are opting for the current buzz on social media and are not after scientific thinking and advice. From crazy diets to risky gym routines, the web is awash with pseudo experts offering advice with potentially dangerous consequences. Everybody is concerned about their health and searches for the right means of achieving wellness. However, seeking professional advice is not always feasible for the vast majority of us given the modern mode of living.

Definition of Wellness

Wellness is “an active process of becoming aware of and learning to make choices (healthy choices)”, says Wellness Proposals, an independent wellness consultant. Wellness means more than simply not being ill; it focuses on keeping your body in good condition so it runs more efficiently and you stay well longer. True wellness is proactive; recognize that you have mental, physical and social needs to operate at top functionality.

Definition of a Wellness Programme

A wellness programme is any programme implemented by an employer to improve the health of its labour force. A good wellness programme also helps individual employees overcome specific health-related issues. You can provide mandatory staff training, employee seminars or even operate through a third-party provider with a range of programmes. Often, employers are willing to foot the bill because health and wellness directly affect productivity and profits.



Jazan Projects Employee Wellness Programme



Why Should We Care About Wellness?

Wellness programmes include activities such as company-sponsored exercises, weight-loss competitions, educational seminars, tobacco-cessation programmes and so on, and health screenings that are designed to help employees eat better, lose weight and improve their overall physical health. Employees can benefit from wellness programmes through lower health insurance premiums, decreased out-of-pocket medical expenditures and an increased sense of well-being. Besides the moral obligations and social responsibility, there is proven ROI for businesses in terms of reduced healthcare costs, market differentiation and higher employee productivity and retention.

Employee Health and Wellness Programme “Fitness”

Company-sponsored fitness programmes encourage employees to live more active lifestyles. Some programmes involve on-site fitness instructors and trainers that conduct fitness classes before or after work hours or during the lunch break. Other programmes partner the company with a local fitness facility



wherein employees receive large discounts on membership and services. A fit workforce can result in improved job satisfaction and a feeling of well-being among workers. These programmes often include a nutritional advice component where employees have periodic access to a registered dietitian. A dietitian can design a nutritional programme that helps employees more effectively achieve fitness goals.

Employee Health and Wellness Programme “Weight Loss”

Obesity causes lower productivity and higher absenteeism in the work place. Because of its link to diseases, such as cardiovascular disease, hypertension and joint pain, employee wellness programmes focusing on weight loss have become a popular addition to the benefits package of many businesses. These programmes consist of counsellors and registered dietitians who advise employees on the best nutrition strategy and exercise programme for them. Some have an online component where participants can track their progress and receive confidential feedback and support. Employees learn how to plan menus and choose foods that augment their efforts to lose weight rather than hinder them. People with normal weight and good nutrition reduces the health care costs of a business and increase overall productivity.

Employee Health and Wellness Programmes

1. Arranging outdoor games tournaments among the employees.
2. Health awareness weekly classes by the clinic doctor.
3. Employee regular health and fitness check-ups by camp clinic.
4. Open areas for jogging and running.
5. Gymnasium for the project employees.
6. World Diabetes Day - 14 November.

Wellness Telegrams from the Construction Site

FEATURE

Preamble

As per CCC policy and of our Regional Manager, and in support of the welfare of our employees on the TGPC EPC03-1151 Project in Algeria, the site management arranged for a wellness programme on site, and a specialist dietitian/trainer was brought to site for one week to perform a body mass index test for selected heavy weight staff and labourers, followed by a tailored training programme and a diet menu.

The specialist visited the site on a weekly basis over a period of three months in order to monitor and support the workforce who joined the wellness programme.

A group of 30 staff and labourers was therefore created and divided into subgroups of 10 employees to attend the programme on a daily basis throughout three training sessions from 7 to 10pm.

Trainer Identification

- **Name:** Ismail
- **Family Name:** Boumasaoud
- **Profession:** Police and Self Defense Trainer
- **Qualifications:** A former world champion in mixed martial arts who has won several Algerian tournaments in Kickboxing and Brazilian Jujitsu

Fitness Programme

- **Sunday, 18 February 2018:** Muscle formation for 45'
- **Monday, 19 February 2018:** Cardio + burn fat for 45'
- **Tuesday, 20 February 2018:** Jump movements + flexibility + fat burning for 45'
- **Wednesday, 21 February 2018:** The speed of the cardio is 45'
- **Thursday, 22 February 2018:** Build muscle for 45'
- **Friday, 23 February 2018:** Cardio + fat burning + flexibility movements 45'



Employees during the training sessions.

Wellness Telegrams from the Construction Site

Diet

A cup of warm water first thing in the morning.

The First Meal

- 05 egg whites; 50g oats; a cup of skimmed milk; a green apple.

The Second Meal

- 150g scallops; a green apple.

The Third Meal

- 200g rice; 250g scallops; salad.

The Fourth Meal

- Five egg whites; tuna tray; a green apple.

The Fifth Meal

- 250g of purified vegetables; 200g scallops.

Note: 4-5 liters of drinking water per day.

Healthy food

At the beginning of the week, each member receives his share of oats, skimmed milk and apple.

And the remaining meals are prepared specifically for the programme members and distributed on time.

FEATURE



Employees during the training sessions.



Employees during the last training session with the specialist.

CCC Volunteering Program



I ask you all to sit back and think how happy you were when you helped someone in need or when you visited a sick person in a hospital or when you simply gave a kind smile to a suffering soul.

CCC is starting this Volunteering Program with a set of policy and procedures to try and encourage our workforce to do more volunteer work in an organized and more efficient way. In turn, CCC will provide both the necessary time and resources.

Some of the programs we have chaired in Greece and other CCC areas of operation are:

- Youth Training
- Refugee Assistance
- Innovation
- Restoration
- Hygiene
- Forest Cleaning and Reforestation.

I urge you all to be part of this initiative. As a wise man once said: "Those who are happiest are those who do most for others".

Please find below the Facebook links to our two newly launched CSR projects in Greece and Lebanon:

Inclusion of Refugee Children through Art Education; Everyone together at the Museum – Greece

<https://www.facebook.com/ConsolidatedContractorsCo/photos/rpp.271063176673225/541370299642510/?type=3@theater>

Photography Training; Building a Better Future for Palestinian Youth – Lebanon

<https://www.facebook.com/ConsolidatedContractorsCo/posts/533897763723097>

This is also to let you know that the inauguration of CCC's Pilot Volunteer Program is taking place in Athens on October 19, 2018.

In addition we are in the process of developing two new CSR projects one for the MENA and the Gulf Region and one for Africa (Mozambique).

R. NASSER

CSR News

Contribution to CSR Initiative

CCC's corporate giving strategy is to improve the social and economic livelihood of marginalized and underprivileged communities. CCC staff are welcome to suggest activities that are in line with CSR's theme priorities: **1)** education (formal and vocational training); **2)** science, technology and innovation; **3)** health; **4)** humanitarian aid and relief. CSR can be contacted via email at csr@ccc.net.

CSR HAS A NEW LOGO & SLOGAN

The new logo and slogan represent CCC's genuine belief in caring and giving back to society and to its employees. Throughout the history of the Company, CCC's philanthropy has been embedded in the founders' beliefs and values. To them, business success was measured by more than growth and profits and always came in second to employee wellbeing and social investment in the communities where CCC conducts its business.

The new CSR logo and slogan stem from CCC's core values, the human element of caring, team building, communication, and the connection between CCC and communities.

KAZAKHSTAN

CCC donated 1 million Tenge to the Gymnastics Federation in Atyrau which was used to buy special gymnastic swimsuits for the regional team. The head of the gymnastics federation in Atyrau was deeply grateful to Hisham Kawash and CCC for their donation.



CCC & Its Staff Help the Poor & the Disabled



CORPORATE SOCIAL RESPONSIBILITY

OMAN

During Ramadan, CCC Oman in coordination with “Ithar for Volunteering” and “Basmat Amal” associations organized a fundraising campaign to collect donations from employees. 30 CCC volunteers purchased, packed and labeled the boxes of food supplies before distributing them to 513 needy families living in different neighborhoods of Muscat. Through this successful initiative the 30 volunteers spent in total 237 volunteering hours and had the opportunity to establish relationships with the charitable societies for upcoming events.



GREECE

Spring Cleaning and Much More: the CSR Team in cooperation with ‘Desmos’ organized a second food and clothing drive in the beginning of June under the theme “Spring Cleaning and Much More”. Through this successful initiative all the donations provided much needed assistance to vulnerable groups and welfare organizations that are in a time of great need. CCC staff donated summer clothing, non-perishable food, cleaning supplies and baby equipment and food. All the donated goods were distributed by Desmos to certified organizations and institutions.



KAZAKHSTAN

During the month of Ramadan, CCC with the help of Atyrau Association for Disabled People organized a charity event for pensioners, disabled and low-income inhabitants of the Atyrau region. The first part of charity event took place on 18 May, in Balykshy city, where CCC Deputy Director Amin Mushtaha and Executive Director Ryskali Sisatov gave 75 vouchers worth 1,125,000 KZT to people who are in great need. The second part of the event took place on 26 May in Qulsary city, where an additional 75 vouchers were given to poor people. With these vouchers many people had the opportunity to purchase basic supplies such as milk, meat, rice, and so on from a local grocery store.

The charity event was covered by the media for local newspapers and local national channels. An article in “The Caspian Commune” newspaper stated that Consolidated Contracting Engineering & Procurement SAL – Offshore was one of the first companies that responded to the request and provided such tangible support immediately. Furthermore, this charity event was posted on Instagram, where several people were able to express their great appreciation.



Cultural Diversification & Tolerance in Kazakhstan



The core values of CCC were highlighted during a staff Iftar in Kazakhstan which was held and attended by Samer Khoury and Hisham Kawash.

The Head Imam of Atyrau Imanghali Mosque and Head Priest of Atyrau Church were also invited. During the gathering, the Imam spoke about the meaning of fasting, the strong bond between God and his followers, and the importance of unity of the human race despite their cultural, racial and religious differences.

The Head Priest of Atyrau Orthodox Church advised the audience to have tolerance towards other religions and to learn to respect representatives of other faiths.

The concluding speech was delivered by Samer Khoury who talked about CCC's values and gave his best wishes.

The gathering encouraged team spirit among the employees while the management talked about the bright and positive perspectives of CCC's future. The mission of the Iftar gathering was to embrace cultural diversification, tolerance and respect of other religions and opinions and to motivate staff to reach the goals and the objectives of CCC.

W. ARAFEH

Employee Appreciation in Oman



During Labour Day, 1 May 2018, Bassam Addada, Oman Area Managing Director, sponsored an annual celebration to honour and acknowledge CCC's appreciation of 27 outstanding employees for the year 2017.

The recognition comes as an appreciation of the company's management for the efforts exerted by these employees during the past year in various administrative and technical departments of the company.

Engineer Bassam said:

"This recognition stems from the management's keenness to recognize outstanding employees and appreciation for their efforts to provide the best services and urge them to exert more diligence to improve the level of service."

He stressed the importance of developing the skills of the Omani staff to enable them to take more leadership positions.

Engineer Bassam Addada honoured the employees with certificates of appreciation for their efforts in various aspects of professional practices.



December 2018

Issue 127

bulletin

Quarterly Magazine of Consolidated Contractors Company

Health, Safety & Environment
Honoring CCC's Commitment to People & Nature

Introduction

Health, Safety & Environment



The ultimate goal for CCC is to be recognized as the best contractor in the Middle East in terms of HSE performance and ultimately, in the world. Our employees and stakeholders not only support this goal but have high expectations that we will achieve it and we are determined not to disappoint them or ourselves.

Our HSE Management System continues to be certified and accredited by Bureau Veritas to the OHSAS 18001 (soon to become ISO 45001) and ISO 14001 Environmental Standard. These are very important and prestigious certifications for CCC and were acquired after the great efforts of the CCC HSE Corporate Department (HSE Group).

The HSE Group is diversified, multi-disciplined and engages in a wide range of activities. The group is based in Abu Dhabi and offers professional HSE support, direction, guidance, solutions and assistance to all CCC projects and operations worldwide.

Project support and coordination service is an important contribution to the HSE Group. We are involved from the project tender stage all the way through to project closeout. Services provided include tender clarifications, developing project HSE management policies and procedures, providing training modules, audits, investigations, temporary site support, newsletters, quarterly safety campaigns, posters and many other value-added services.

The HSE Group has met and often exceeded the expectations of clients, projects, other CCC departments, and operating companies by the continuous evolving of its services and placing a strong emphasis on internationally accepted professional HSE standards to ensure a safer and healthier work environment for all CCC employees and all CCC projects. The HSE Group remains highly flexible in order to meet the needs and requests of clients, projects and senior management.

The strong reputation that has been earned by the HSE Group is due to a professionally equipped and capable staff who are knowledgeable and experienced in successfully supporting projects and internal departments within CCC to their satisfaction. This is further enhanced by the innovative ideas of senior management who strive to create awareness and ensure CCC stays competitive as the business environment changes worldwide.

We strive to keep CCC on top as a leading HSE organization. Our goals and expectations for CCC in terms of HSE performance is that of continuous improvement with the goal of having the highest standards and expectations in the construction industry. Our clients, employees and other stakeholders not only expect this but deserve it as well.



Ensuring CCC's Excellence through Monitoring

Our company operates in some of the fastest developing regions in the world. In recent years, Africa and the Middle East have seen an impressive development in infrastructure, technology and welfare. As far as competitiveness goes, organizations and clients are stricter on safety and demanding the full implementation of Health, Safety and Environment standards at a level that could never be imagined a few years ago.

Contrary to past notions, in this new world HSE is no more a cost, but an important investment if a construction company wants to keep doing business. Continuously improving HSE to international levels of excellence will help our company achieve even greater positions among the world's biggest operators.

Besides the benefits of economic development, there are social and environmental costs to such a rapid change. Regulatory measures, with particular respect to HSE and sustainability, have advanced equally as fast to prevent negative and lasting impacts in the communities CCC operates.

A surprising amount of investment has been made in HSE legislation in the Middle East and Africa. Each country has its own keystone environmental and health and safety laws. These laws provide the purpose and institutional framework for all subsequent legislation which in turn provide the executive regulations necessary for implementation. Supported by the growth in the oil and gas sector, industry and infrastructure has expanded rapidly, requiring companies to act accordingly and introduce a full range of HSE legislation covering such things as: hazardous waste disposal, air and water quality standards, equipment safety and hazardous chemicals.

HSE has become a critical business issue, but this field is still relatively new and continuing to evolve. It is important to note that a recent drop in worldwide oil prices has obliged some businesses to look for financing and projects are increasingly turning to international banks for funding. With international financing come stringent requirements with regard to HSE as a condition of investment. Thus, the need for international investment will continue to play a role in strengthening HSE performance in the region.

An international organization requires recognition and CCC's HSE management system is certified by ISO, the International Organization for Standardization, proudly holding the certifications on Environment (14001:2015 Environmental Management System) and Health and Safety (OHSAS 18001:2007 Occupational Health and Safety Management Systems) awarded by Bureau Veritas (BV).

In order to ensure CCC is up to date with the continuous improvement demanded by ISO and BV and to provide a safe workplace for our employees, CCC has developed strong, safe work procedures for all its projects world-wide and monitors their implementation on every work site. Regular safety audits are carried out to ensure compliance with the client's requirements, laws, regulations and international standards.

Audit findings can also include how an organization can remediate potential threats to direct employees and subcontractors. When an organization follows through on the findings of a safety audit, the workplace will be safer, and there will be a reduced likelihood of worker injury, illness and death.

How Does CCC Do It?

A systematic approach is a vital ingredient for a safety audit process. CCC's PP701 Health, Safety and Environment Management Plan outlines the following components:

Internal HSE Audits

Internal HSE audits are carried out by the project HSE manager in order to evaluate the implementation and effectiveness of the HSE management plan, policy and procedures and recommended corrective actions.

Corporate Group HSE Audits

Are carried out by an HSE Group corporate representative in order to evaluate the effectiveness of the Health, Safety & Environment Plan and Procedures and their implementation in line with corporate HSE minimum expectations. In addition, the audit evaluates the implementation of any HSE action plans or HSE recommendations proposed by the Corporate HSE Group. These are conducted on a scheduled basis in normal conditions, while it will be more frequently upon special circumstances, such as low training records, increasing incident rates, exceeding target goals (a red flag condition) lost time or fatality incidents or reaching unacceptable KPI – Key Project Indicators. Analysis of collected data from regular inspections and audits is used to generate weekly HSE reports used for feedback and discussion with management to identify trends and initiate improvements.

Third Party Audit

When a certification audit is conducted at the project, the project management and the HSE Department are obligated to facilitate the audit and to close all findings resulting from the certification audit. Objective evidence to prove the closure of the finding is sent to the Corporate HSE Group in a timely manner and will be forwarded to the certification body.

Cold-Eye Review (CER)

The HSE Group adopted the Cold-Eye Review (CER) process as one of the methodologies for proactive monitoring on projects. CER involves a visit by the HSE Group to a project in order to identify shortfalls in compliance with the management system and recommended preventive measures based on the observations at an early stage of the project (preparedness or initial phase) or whenever requested by a client or another shareholder representative with the objective to boost or improve the project's HSE performance.

Here are some reasons why we conduct regular safety audits:

- To determine if safety and health programs and procedures are working.
- To verify that employees and management are engaged in safety programs.
- To verify that processes are in compliance with company policies and regulations.
- To verify compliance with applicable standards (i.e. OSHA, HSE Executive and so on) or best practices.
- To determine if the project is documenting safety and health program activities properly.
- To discover and manage potential hazards.
- To evaluate the effectiveness of existing management controls.
- To check the workplace overall safety.
- To check the equipment safety.
- To evaluate the adequacy of supervisors' and employees' safety training and performance.

Wherever there's smoke...

Although by definition an accident or incident can be described as an "unexpected" event, it actually sends 'smoke signals'.

Through auditing activities, an HSE professional is able to make use of 'trend analyses' over repetitive problems (findings) to identify where and when a certain type of accident is most likely to occur. Then, it will be his responsibility to advise the project management to take quick and efficient actions to eliminate or control such hazards.

Safety audit and inspections have been shown to reduce the number of accidents, so it is something that benefits most employers. It's recommended that we are proactive with safety, rather than waiting for accidents to happen without notice or indication.

The health and safety needs of a small or large business can change over time and it is important that audits are carried out on a regular basis. This will ensure the continued welfare, health and safety of employees within an organization, via the systematic appraisal of on-site procedures and processes. An audit will find specific areas in which improvements need to be made for the benefit of a business and its employees, and help companies to comply with legal duties and promote wellbeing.

Why is it Important?

Once you have health and safety procedures in place, there may be the temptation to think that you have done all you need to and that your business is set for the future. However, an audit is important and essential because it will help to:

- Reduce the risk of personal traumas or injuries.
- Prevent material loss.
- Promote employee morale.
- Ensure customer confidence.

What are the Other Benefits?

Credentials: a contractor bidding for clients or looking into new business will find that the majority of companies expect to have proper health and safety procedures in place. Having high standards of HSE in the industry will ultimately benefit its business goals.

Save money: A health and safety audit provides a calculated analysis of procedures and provides fact-based changes to be implemented. This saves time and money on what may be little more than second guesses about procedures and benefit areas such as employee sick leave.

Law abiding: There are different regulations and laws in place to ensure safety within different industries. If the contractor is not abiding by these laws, it can lead to projects getting in trouble with the authorities or possibly being shut down by authorities.

Avoiding any kind of incident that may lead to disastrous accident, illness and loss should be the top most priority of any business. To achieve this, audits shall be carried out to regularly check the documented safety measures are in place to protect all employees from harm.

Our Numbers and Results

Due to its oversized dimension and dynamics, it would be hard to get to an accurate number of internal HSE inspections carried out by CCC HSE officers and supervision in our projects. However, an approximate figure could easily get to 50,000 internal HSE inspections conducted annually.

On a corporate level, with a considerable number of construction projects world-wide, making sure they all abide by the company's expectations toward HSE takes a lot of effort to put together a one-team approach to verify their compliance to the established policies. Senior management are encouraged to commit themselves to the process and play an important role in the development of the company's HSE culture. Projects are selected based on priorities such as KPIs, critical path, serious incidents or shareholders concerns.

In 2017 alone, the CCC HSE Group conducted 25 corporate audits, CER and investigations in 21 projects in 7 different countries. This makes a total of 258 corporate audits, CER and investigations conducted since early 2011.

These activities have helped the company maintain the HSE international certifications (ISO) and CCC's position among international construction key-players.

HSE Project Site Support Visits



One of the most important HSE Group responsibilities is to ensure the continual development and improvement of HSE programs and performance at CCC projects. The HSE group provides high quality HSE support, direction, guidance, assistance and solutions in terms of project visits, meeting with project management, project staff and the client in addition to making sure that competent and qualified HSE personnel are provided who are capable of addressing and helping to solve project HSE site issues.

The HSE group also supports projects by providing interim HSE managers, specialized HSE training programs, HSE audits, Cold Eye Reviews, incident investigation, project mobilization phase support, development of project specific HSE procedures, and so on.

Interim HSE Manager

The HSE provides an interim HSE manager based on the project management request, client request or both. During the visit the corporate HSE representative acts as project HSE manager and performs all HSE roles and responsibilities until a permanent HSE manager joins the project. He conducts daily site HSE inspections and participates in the management walkthroughs, meetings with the client's HSE team and discusses with them the project HSE concerns, the HSE challenges on site, the HSE requirements and ways of improving the safety culture on the project. In addition, regular meetings with the CCC project management team and HSE staff are held during these visits to discuss site issues and plans for improving the overall project HSE performance and compliance.

HSE Training Support

The CCC HSE Group provides world class HSE Training and Certification courses. The following in-house HSE training courses are provided to any CCC project that requests such training.

- NEBOSH International General Certificate (IGC).
- OSHA 10 and 30 hour training.
- HSE leadership and management training for all levels of management and supervision.
- Train the Trainer.
- Incident investigation training.
- Injury record keeping and classification training for key management, safety and medical staff.
- Fire safety and fire warden training.
- Risk assessment training for HSE staff, managers and engineers.
- Hazard identification training for all levels of supervision.
- First Aid/CPR/AED (Adult/Pediatric) Level 3.
- H2S & Breathing Apparatus.

HSE Audits

HSE auditing is a proactive and structured process of collecting information on the efficiency, effectiveness, implementation and compliance with the HSE Management System. It determines whether activities and the related outcomes are in compliance with the HSE policies and procedures with the goal of achieving organization HSE objectives and goals.

Not only does auditing evaluate the overall implementation of the HSE management system, it also helps examine the integrity, consistency and applicability of the HSE plan and procedures and determine if it achieves the desired HSE results.

Audits and other HSE surveys are proactively conducted before accidents and incidents with the goal of preventing them from occurring. The process aids in identifying high risks that have the potential to lead to serious accidents resulting in property damage, harm to the environment, harm to the public, personal injury or death.

The HSE Group has competent and well trained HSE lead auditors that conduct numerous audits on CCC projects and operations worldwide. HSE auditors schedule audits for all projects and the frequency depends on the project complexity, scope, client requirements, number of incidents, last HSE audit and other relevant factors. The goal is to audit every active project at least once per year.

Audits and surveys contribute significantly to identifying major HSE nonconformities, HSE shortfalls and areas for improvement. The audit and survey process provides valuable information to enable the HSE Group to address HSE shortcomings, improve HSE performance with the ultimate goal of protecting people and assets from serious incidents.

Following each HSE Audit, a dedicated team analyzes the audit findings utilizing a trend analysis tool that highlights frequent and repetitive HSE shortcomings. This information is in turn used to develop HSE drives, improve training, develop safety alerts and information, lessons learned, and so on.

HSE Incident Investigation

Incident investigation is a reactive process that is initiated after the occurrence of incidents or injuries. Incident investigation is a thorough analysis of the events, actions and work processes that resulted in the incident or injury in order to determine root causes, contributing factors and where the breakdown in the HSE management system occurred.

An effective investigation requires a methodical, structured approach to information gathering, evaluation and analysis. The findings of the investigation will form the basis of an action plan to prevent the accident or incident from reoccurring and improving the overall management of risks.

The desired outcome is to provide an accurate description of the accident, identify direct and underlying (root) causes and remedial actions (corrective measures) that prevent recurrence of similar events.

Conducting HSE investigations provides a deeper understanding of the risks associated with work activities, highlight where breakdowns in the safety management system occurred, why existing control measures failed and the contributing factors leading to the undesirable events: this is very important and vital for developing and refining HSE risk management systems.

HSE Group investigators carry out HSE investigation after the occurrence of serious accidents including fatalities, lost time incidents, property damage, and so on. The investigator is dispatched immediately to the project site to gather and analyze information, identify implemented risk control measures, identify possible solutions, corrective actions and develop an action plan that will prevent or avoid recurrence.

In 2016, the HSE Group launched the HSE Investigation Team Initiative requiring all projects to allocate and train personnel as key HSE investigators to tackle HSE investigations for lost time incidents, near misses and medical treatment cases that occur on their respective projects. The initiative was successfully implemented and resulted in active involvement of the construction team helping to promote HSE ownership and accountability for the various disciplines on CCC projects.

The HSE Group is continually engaged in efforts to prevent and reduce work related incidents and injuries. Outcomes of accident and incident investigations will be effectively communicated to all projects and areas of operations.

HSE Project Site Support Visits

Following each investigation, the HSE Group generates and distributes HSE Alerts that share lessons learned and corrective actions. These are sent to all projects worldwide to increase awareness and strengthen HSE compliance among the CCC workforce.

The common concerns and the areas of improvement noticed during HSE support visits which need proper and adequate attention from the project management and projects HSE teams could be summarized as below:

1. HSE Planning

Proper and adequate HSE Planning (3 weeks to 3 months look ahead planning), to identify and prepare in advance for the HSE resources and requirements for future scheduled project activities so they are conducted in a safe manner with proper coordination with project planning team.

2. Hazard Identification

- a. The activity risk assessment is completed and method statement prepared with participation of the construction team and HSE team to ensure all activity hazards are properly identified and adequate control measures are in place.
- b. All subcontractors are required to complete risk assessments and method statements for their activities and these must be reviewed by the concerned CCC team.
- c. The Safety Observation Card (SOC) or similar process should be implemented on each project to encourage identification of unsafe actions and unsafe conditions and also enhance the construction team's hazard identification skills.
- d. Construction supervisors and workers should be involved in the SOC and the hazard identification process. SOC can be a criteria upon which they may be eligible to receive a safety award.
- e. Utilizing the Safety Observation Register (SOR) to log all observations (including observations from safety observation cards, site management walkthrough observations, camp & food safety inspections, internal audits, client inspections, client audits, and so on) will categorize hazards based on location, group, activity, potential injury, and so on. Such trend analysis will provide a strong indication of the risks and worker behavior on site and assist in identifying preventative actions based on specific locations, activities and groups to avoid incidents and facilitate decisions regarding improvement of risk control and the HSE management System.
- f. Complete the monthly project trend analysis which will help to achieve the goal of being "Proactive" in eliminating hazards and eliminating unsafe acts and conditions before incidents occur as well as being a good benchmarking tool.

3. HSE Communication

Effective "Communication" is an important part of the HSE Management System to facilitate safe construction operations

- a. Job Safety Task Instruction (JSTI)
 - The main objective of the JSTI is to identify potential hazards and Control Measures associated with each step of the task and communicate that information to workers. It should be delivered prior to the commencement of any task by the activity foreman or charge hand or at any time of the day should a new task begin.
 - Supervisors who deliver the JSTI should be competent to do so. They should understand the language, the content of the JSTI and establish two way communication with their workers.
 - The HSE training team shall provide a JSTI training course to all site supervisors (Site Engineers, FM, CH) to instruct them on how to deliver effective JSTI's.
- b. Toolbox Talks (TBT)
 - It shall be prepared weekly by the HSE Manager and shall address a specific safety topic to the entire workforce. It shall be delivered on a weekly basis by a competent person in charge (Supervisor, Foremen, Charge Hand, and so on).
 - It addresses the repetitive and identified hazards utilizing the trend analysis developed from the safety observation register to foster a pro-active HSE attitude and take appropriate measures to prevent incidents.

HSE Project Site Support Visits

- c. **Weekly Safety Supervisory Management Meeting (SSMM)**
In this meeting the HSE Manager shall present HSE statistics, trend analysis, important hazards identified during the week, preventive measures that are needed to be taken, Safety Alerts, Safety control measures for coming activities, Lessons learned from incident-Investigations, Good Practices and Initiatives, and all HSE issues necessary to be discussed.
- d. **Weekly Charge-Hand Meeting (CH-Meeting)**
Every Engineer, Superintendent and Section Head shall meet on a weekly basis with their own line supervisors (FM and CH) to communicate HSE Issues that are discussed during the Weekly Supervisory Safety Management Meeting. The HSE Manager or Safety officer shall attend, monitor and report on the meeting for evaluation and continual improvement.
- e. **Weekly Safety-Officers Meeting**
The HSE Manager shall meet with his Safety Officers and Staff members in order to update and discuss with them the performance of the department and the recent safety issues on the project.

4. HSE Officers Support

- a. Improve their performance through coaching, training, monitoring and continual assessment of their performance.
- b. Weekly Safety-Officer Meeting shall be conducted through which the HSE Manager meets with all HSE staff to update them and discuss any pressing HSE issues.
- c. Provide a clear roles and responsibilities to all safety staff.
- d. Provide a Special HSE Induction for Safety Officers .
- e. Develop specific "Daily Checklist for Safety Officer" to check their assigned areas to ensure that basic safety control measures are in place.
- f. Safety Officers shall be encouraged to use their authority to stop work in case of dangerous unsafe acts, unsafe conditions or IDLH (Immediately Dangerous to Life and Health) situations.
- g. Safety officers shall be required to use the SOC system to identify and report all hazards in their prospective areas. They shall be responsible and accountable for identifying and reporting all hazards in their assigned areas.
- h. The HSE Manager, deputy and senior safety staff shall support safety officers and support their decisions and findings.

5. Accountability for HSE Performance

- a. An accountability process toward safety shall be enhanced focusing on two major concepts which shall be implemented by project management and supervisors.
 - Senior Management (project director, manager, construction managers, engineers, section heads, line supervisors, foremen and charge hands) are RESPONSIBLE and ACCOUNTABLE for the safety of their crews and activities and will be held accountable for safety violations committed at their work location or by employees in their workforce.
 - Safety Performance is a fundamental criteria used in performance evaluation, promotion and bonus process for personnel at all levels. (Managers, Engineers & Supervisors)
- b. Project senior management shall communicate the ACCOUNTABILITY process by focusing on the two concepts that managers and supervisors are responsible and accountable for the safety of their workers and safety performance is a fundamental criteria of their evaluation and promotions.
- c. A statement of accountability may be developed and signed by all project management team members and supervisors and submitted to HSE Department

6. Safety Management Walkthrough (SMW)

- a. The SMW shall be conducted on weekly basis with participation of
 - Project Director, Project manager, project HSE manager, Site Construction Managers site Construction Engineers and HSE officers .
- b. The SMW shall cover all site and project facilities and the team may be divided in order to cover all locations.
- c. The SMW shall be documented and the findings shall be follow up and closed on time.

7. Supervision Improvement on Site

- a. All site activities should be conducted in presence of the activity site supervisor otherwise the activity will be suspended (for the safety of workers)
- b. The site supervisors and line management (F/M & C/H) shall show adequate visibility on site
- c. The site supervisor shall conducted a daily JSA /JSTI and sign the attendance sheet.
- d. Supervisors and engineers shall lead by example using the proper and required PPE to encourage workers and to create a proactive safety culture and work safely
- e. Proper and adequate participation in the safety observation cards (SOC) by line management
- f. Every construction crew in each area shall improve the safety on site by providing barricades, accesses, housekeeping, de-nailing, and so on
- g. The best crew in the area may be receive an award to motivate safe behavior with (safety certificates, cards, money, and so on) and their names and photos will be posted on the safety boards including the site foremen and charge hands.
- h. The site supervisors and line management shall attend HSE training courses identified by the HSE training team related to their site activities

8. HSE Training program

- a. A project specific "Training Matrix" shall be prepared to specify the training courses required to each target group of the workforce.
- b. A "Training Schedule" shall be prepared and announced to the workforce so personnel can plan their training based on the schedule.
- c. A "Training Register" shall be developed to keep records of HSE Training for personnel and to keep records of all HSE Training Activities.

9. Incentive Scheme

- a. Implementation of a generous incentive scheme to reward those who show strong commitment to Safety.
- b. Candidates for safety awards shall be selected fairly and based on good safety performance. Candidates may be selected by construction supervisors, project management team members and HSE officers.
- c. Safety incentives can include the following categories:
 - The Driver of the month based on the IVMS monthly report
 - The best SOC (Safety Observation card) for the month
 - The best JSTI for the month
 - The Safety Officer of the month
 - The best TBT for the month
 - The best Near Miss for the month
- d. Publicize the winners of safety awards and incentive schemes through meetings, TBT's and safety bulletin boards in order to raise safety awareness and to discourage future violations.
- e. One of the most important concepts of an incentive program is to reward the actions that you want repeated by the workforce.

10. Disciplinary Action

Disciplinary action should be used as a last resort and it needs to be implemented after careful thought and it should be implemented consistently, fairly and to all levels of workers.

- a. Disciplinary action is usually a four step process starting with a verbal warning, then a written warning, then a salary deduction and finally termination. Disciplinary action is not reserved on for workers who may commit willful safety violations but also toward their supervisors, line supervisors (CH & FM), engineers and managers as they are accountable for the safety and the behavior of their crews.
- b. Disciplinary action may be necessary for individuals and supervisors of all levels based on the results of incident investigation that indicate violations or shortcuts to safety procedures.
- c. Publicized disciplinary actions taken through meetings, TBT's and safety bulletin boards in order to raise safety awareness and to prevent future violations.
- d. Implement disciplinary action for drivers and machinery operators who willfully violate traffic and vehicle safety regulations. The monthly IVMS report must be used to spot driving violations in addition to site monitoring.

Does Safety Cost Money?

FEATURE

Do Not Pay More Money, Pay More Attention and Commitment to Improve Safety

The good news is that good safety performance does not cost any additional money. We need to **PAY** more **ATTENTION** and **COMMITMENT** rather than to pay more money to achieve better safety records and performance. Do not believe the false slogan “Safety Costs Money” which is used frequently by some individuals as an excuse for poor safety performance and who do tend not to study safety problems objectively. Such a slogan is not based on fair and scientific analysis and it is used as a quick ineffective solution for safety failure.

We can never succeed in improving safety performance if we believe and stick to such incorrect sayings as “Safety Costs Money” because it implies the attitude of a blaming-culture (safety versus construction), pointing fingers, the incapacity to solve problems professionally and objectively, the absence of a vision and strategic thoughts and a serious misunderstanding of the whole concept and the nature of the construction business.

“Money can neither solve all problems in life nor can it solve safety challenges on site” is the true or what it seems to be the true theory based on experience and fair-minded judgment. Based on field experiments and objective studies of the recent audits, incident investigations, site visits and Cold Eye Reviews, the lack of resources has never been a root cause of any incident which has occurred on CCC sites for the last four years. Very few NCRs (nonconformities) and observations have been issued because of a lack of resources and if it was a concern, it is mostly not using the resources which are already there, such as not wearing the personnel protective equipment (PPE) although it is provided and available and not using the grinder guard; not because grinders do not have guards, it is only because workers remove the guard for comfort and due to complacency.

The issue is not a lack of resources; rather it is poor management and ineffective usage of the existing resources.

It is important that we clarify and eliminate this misconception, that safety costs money, so that failure in safety cannot be easily and falsely justified. Elimination of this slapdash slogan will guide us to work in the right direction instead of pouring money in the wrong direction. It will help us look objectively and scientifically for the true root causes of incidents and the reasons for poor safety records and performance.



Looking at the results of investigations and audits, the most common root causes of incidents and most common issues and non-conformities are listed below. Such root causes and NCRs have formed a trend-type pattern and they are too repetitive that they have become strategic issues; therefore, they must be seriously considered and resolved strategically by senior management and all levels of CCC employees.

The most common root causes of incidents and safety NCRs are the following:

1. **Poor site line supervision especially (charge-hand and foremen):** fortunately, most if not all our CCC senior and middle management including project managers, construction managers and project engineers indicate serious concern and commitment to safety but unfortunately such awareness and commitment does not trickle down to our site line supervisors especially the charge-hand who is the most important man to achieve the goal of better safety as he is in direct contact with our main target which is the workforce on site. There is an obvious and serious gap between the senior management and line supervisors in terms of level of commitment, realizing the importance of safety and sharing the vision.
2. **Poor sense of accountability** of most employees, especially engineers and site line supervisors; charge-hands, foremen and therefore of the workforce.
3. **Poor enforcement** by engineers and supervisors of safety issues which leads to carelessness and complacency.
4. **Subcontractors:** lack of control, poor monitoring and ineffective integration.

Does Safety Cost Money?



5. **Poor hazard identification and reporting process:** safety officers do not report hazards adequately and construction crews are not effectively involved in the hazard reporting process. Efficient and accurate hazard identification and reporting is the first step to solve problems, and it would ensure that the effort made is in the right direction.
6. **Poor Hazard Communication:** The RA (Risk Assessment) and MS (Method Statement) which are mostly available at the projects and for which substantial time and effort made by the engineers to develop, usually are not communicated or poorly communicated to the workforce. The JSTI (Job Safety Task Instruction) which has been recently developed as a simple form of the RA is still poorly communicated to the workforce.
7. **Poor hazard rectification and follow up process.**
8. **Poor performance of safety officers** due to incompetence, poor monitoring and lack of support.

Two facts could be concluded based on the root causes and safety concerns listed above:

1. A lack of resources is not proven to be a root cause of incidents or even among the top 10 safety failings. This may guide us to set up our priorities and work in the right direction to improve our safety records and performance.
2. Resolving and rectifying these repetitive root causes and strategic safety issues do not require any additional cost. To examine if spending more money would solve these issues, we would ask the following basic questions:

- a. Do we need to spend more money, or what does it take to have a worker wear his safety glasses and gloves when they are already there in his pockets or thrown next to him?
- b. Does it cost more money, or what does it take to improve our site line supervision? How much does it cost if our engineers and supervisors stay closer to their workers and spend more time on site monitoring production, quality and safety performance as well?
- c. Does it cost more money, or what does it take to place barricade which is already in stacks around a crane and lifting operation to stop workers from working under hanging loads?
- d. Does it cost more money, and how much if yes, when we start to enhance the sense of accountability among managers, engineers, supervisors and safety personnel by implementing disciplinary action toward safety violations and rewarding good safety practices?
- e. Does it cost more money, or how many minutes does it take to instruct our workers to perform good housekeeping and provide safe access to their work places?
- f. Does it cost more money, or what does it take to assess and improve the performance of the safety officer who identifies and reports an average of only two unsafe observations per day (10 working hours)? How much more money does it cost if we encourage construction supervisors to participate in hazard reporting?
- g. Does it cost more money, or what does it take for our project management and engineers to focus more on foremen and charge-hands to share awareness with them and bring their level of safety commitment up to expectations?
- h. Does it cost more money, or what does it take to monitor and supervise subcontractors more closely on site and integrate them in safety meetings, walkthroughs and all elements of the HSE management system?
- i. Does it cost more money, or how many minutes does it take to deliver the JSTI or the content of the RA to workers every morning? Effective Tool Box Talk or JSTI not only improves safety performance but also it enhances job planning, encourages closer relationship between workers and their supervisors and contributes to better quality and higher productivity.

The Importance of HSE Training

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In the early years of HSE there were safety laws, standards, requirements, policies, and so on but there were no requirements for training. How could employees be expected to follow laws, standards and procedures without a full understanding of what those laws, standards and procedures contained or what to do to comply with the requirements? There is a reason people attend school from a young age through early adulthood. Education enables us to understand how things work, how to be successful and how to interact with others. HSE training is no different as it teaches us how to perform our work safely, use tools and equipment safely, protect ourselves and others around us, protect the public and the environment and identify hazards or hazardous conditions.

Let's take one of the earliest set of regulations associated with workplace safety, the United States Occupational Safety and Health Administration (OSHA). Signed into law in December of 1970, OSHA 1910 General Industry safety standards went into effect in March of 1971. Industry received these standards with mixed reactions. Many felt the government should not be involved in how people do their jobs or how companies instruct people to do their jobs. Others felt it was a necessary step to

reduce the high number of fatalities and injuries occurring on worksites all across America. When the first standards were written, none of them said anything about mandatory training on how to comply with the standard. It was assumed that companies would do that because it made sense but in reality training was only seen as an additional cost, so very little training was conducted.

As time passed, numerous work-related tragedies occurred and when OSHA investigated, one of the key findings was almost always a lack of training or understanding of policies, procedures, requirements and how to comply with them. As a result, OSHA began revising their standards and today almost every OSHA standard has a mandatory requirement for awareness training for anyone performing work that is affected by that standard. OSHA has even advanced to the point where they now have an OSHA training institute with resources available for awareness training on the standards.

Another important lesson that occurred as time passed was the realization that there were specific industries that had unique hazards and tasks associated with them. As a result, three additional standards were created to address those industries. The first was Part 1926 aimed



The Importance of HSE Training

exclusively at the construction industry and it was introduced in 1993. This was followed by standards specific to the maritime and agricultural industries. These newer standards all have awareness training requirements incorporated into them.

During this period of time employers also learned that training is an important part of the HSE management system and contributes significantly to good HSE performance and a strong HSE culture. Many studies concerning the benefits of training have all come to basically the same conclusions – a well trained workforce is a safer workforce. The same studies also emphasized that training in fact saves money versus costing money. Training improves HSE performance, creates a strong positive feeling about the work environment, which results in increased productivity. Today companies strongly support HSE training not because it is a requirement but because they have seen the positive results and enjoyed the benefits.

On the other hand, companies have also learned some very hard lessons related to HSE and training. During past economic downturns many companies have chosen to significantly reduce or even eliminate training programs and cut back on safety as well. It is no surprise that companies who chose this path very quickly saw an increase in incidents, injuries, near misses and a decrease in morale among employees. Those who stayed the course and continued to provide training and emphasize HSE not only maintained a high level of performance but were much more successful winning new contracts than those companies that chose to save money by cutting training. In fact some companies did not survive because their HSE performance was so weak that they could not get enough work.

Training is crucial for organizational development and success. It is beneficial to both employers and employees. An employee will become safer, more efficient and more productive if he is well trained.

What exactly constitutes training? Training can take place in many ways. The most common is the classroom and is much more formal. The use of videos, visual aids, hands on, discussion, problem solving, interaction, larger numbers, and so on makes the classroom a much more useful format. However, training can also take place on the work site. A supervisor stopping work that is being done in an unsafe manner and showing the workers the correct way to do it is a form of training. Tool box talks, job safety task instructions, reviewing a method statement, and so on are all forms of training. Hands-on

training is very effective in that the student can actually be shown how to do something and then demonstrate that he has learned the task properly. Sharing lessons learned from past incidents is a form of training. Essentially anything that helps improve an employee's knowledge, skill and attitude in terms of HSE can be considered training. HSE training is the process of enhancing the skills, capabilities and knowledge of employees for doing a particular job in terms of how to do it safely. Some common ways that HSE training can occur are as follows:

- Classroom
- On The Job
- Mentoring / Coaching
- Situational
- Seminars / Conferences
- Cross Training / Job Rotation
- Hands On
- Lessons Learned
- Tool Box Talks / Job Safety Task Instruction (JSTI).

Training is given for one or more of four important reasons:

1. New candidates who join an organization are given training. This training familiarizes them with the organizational mission, vision, rules, regulations and work conditions.
2. Existing employees are trained to refresh and enhance their knowledge.
3. If any updates or changes take place in technology, training is given to cope with those changes such as purchasing new equipment, changes in production technique, changes in work processes, and so on.
4. When promotion and career growth become important, training is given to prepare employees for higher levels of responsibility.

Advantages of Training

According to numerous studies and insurance company records, the following benefits result from quality HSE training:

1. **Improves morale of employees.** Training helps the employee in terms of job security and job satisfaction. The more satisfied the employee is and the higher his morale, the more he will contribute to organizational success and employee absenteeism and turnover will be lower.
2. **Less supervision.** A well trained employee will be familiar with and understand his job and need less supervision. Thus, there will be less waste of time and effort.
3. **Fewer accidents.** Errors are likely to occur if employees lack knowledge and skills required for doing a particular job. The more

The Importance of HSE Training

trained an employee is the less the chances of having work accidents and the more proficient the employee becomes.

4. **Chances of promotion.** Employees acquire skills and efficiency during training. They become more eligible for promotion and an asset for the organization.
5. **Increased productivity.** Training improves efficiency and productivity of employees. Well trained employees show both quantity and quality performance resulting in less waste of time, money and resources.

Objectives of Employee Training Programs

1. To prepare employees to meet the varying and challenging needs of the job and organization.
2. To provide knowledge and skills to new entrants and to help them to perform their role and job well.
3. To coach employees for more complex and higher level jobs.
4. To teach employees new and innovative ways and techniques of performing job.

Benefits of Trained Employees

Training is an important tool for employee development. Training is becoming increasingly important because of rapid changes in the internal and external organizational environment. The importance and benefits of trained personnel towards organizational development are:

1. Trained employees do not require tight control and supervision as they are well aware of how to perform a job.
2. Trained employees are higher performers by making optimum utilization of the materials, tools, equipment and other resources provided to them.
3. Trained employees minimize waste of resources and work efficiently and effectively.
4. Training makes employees more committed to an organization as the employees are provided with growth, advancement and learning opportunities.
5. Training develops proficient, skilled and responsible employees for complex and higher level tasks.
6. Trained employees adjust to the job better and absenteeism and turnover is lower.
7. Trained employees produce quality and quantity output.
8. Trained employees enable the organization to face competition from rival firms.
9. Trained employees can respond and adapt well to changing technology.

10. Trained employees become more proficient and their earning potential increases.
11. Trained employees have fewer accidents and incidents.
12. Trained employees improve the safety culture in the organization.
13. Trained employees will not take shortcuts.
14. Trained employees watch out for one other.
15. Trained employees more readily communicate concerns and ideas for improvement.

Reasons Training Is Not Conducted

- Perceived to slow down production.
- Perceived as unimportant.
- No understanding of the benefits.
- Fear of employees leaving for a better job after they are trained.
- Perceived as an unnecessary cost.
- Too time consuming.
- No provision of resources
- Lack of management support

Consequences of No Training

- Poor HSE performance.
- Increased Injuries and incidents.
- Increased turnover.
- Lower productivity
- Increased absenteeism.
- Shortcuts taken.
- Weak HSE culture.
- Poor HSE communication and feedback.

Why HSE Training Fails

- No management support.
- Unqualified trainers.
- Failure to customize training modules.
- Failure to update training modules.
- Poor training skills.
- No performance based training.
- No evaluation of training effectiveness.
- Lack of consistency.
- Get it over with approach.

Different Learning Styles

One of the most important aspects of training is to recognize the learning styles of employees. Research says there are three main learning styles and the challenge for those developing training materials is to try and address all three as there is very likely to be a mix in each training session. The three main learning styles are "Auditory", "Visual" and "Kinesthetic". Here is a brief description of each learning style.

The Importance of HSE Training

1. **Auditory** learners often talk to themselves and they may move their lips and read out loud. They may have difficulty with reading a writing task and they often do better talking to a colleague and hearing what was said. To address this learning style a brief explanation of the material to be covered is needed, questions during the course of the training is necessary, small groups work well (brainstorming) and at the end a brief review of the main points of the training.
2. **Visual** learners like to learn through written language such as reading and writing tasks. They remember what has been written down. They pay attention to the instructor, watch them closely and write down important information. They like charts, videos, demonstrations and other visual materials. They can easily visualize faces and places but using their imagination and seldom get lost in new surroundings. To address this learning style the use of graphs, charts, videos and other visual aids is important. Use role playing exercises, outlines, concept maps, flow charts, agendas, handouts and pads for taking notes and minimize potential distractions.
3. **Kinesthetic** learners need to touch things and move around. They tend to lose concentration if there is little or no external stimulation or movement. They will often take notes during training just to be able to move their hands. When reading they like to skim the material initially (get the big picture first) and then focus on the details. They typically use color high-lighters and take notes by drawing pictures, sketches, diagrams, and so on. To address this learning style, include activities, use color to emphasize key points, incorporate frequent stretch breaks, helps them visualize complex tasks or incorporate hands-on exercises during the training.

Training in CCC

Training in CCC has become increasingly important with significant emphasis from senior management over the last several years. Numerous memos and emails have been issued to projects emphasizing the importance of HSE training to enhance HSE knowledge, reduce incidents and develop competent workers.



The Importance of HSE Training

Not only has HSE training become increasingly important internally but the past four to five years have seen a significant increase in the emphasis on HSE training from clients. Almost every tender we evaluate now have very specific requirements for HSE training. With a robust internal HSE training program, it makes it much easier for CCC to comply with client HSE training requirements.

Another challenge is the increase in requirements from clients to utilize third party HSE training for some types of training, particularly in the past two years. There could be a number of reasons for this including easier for the client to manage training, clients' training requirements are consistently presented to all contractors, easy to maintain records, and so on. However, the bottom line question is whether or not paying the high cost for a third party HSE training results in better HSE training. The opinions are split in terms of whether you get a better product from a third party versus an in-house program that provides the same level if not better quality HSE training. It may be easier for the client to manage in terms of consistent content, records, and so on but usually third party training is a very packaged or generic approach and HSE often has very specific activities associated with the training that is done. It is much more effective to provide HSE training specific to the activities occurring on the project versus a generic approach. Also, having knowledgeable instructors within the company is much more effective and adds to the company's credibility in the eyes of its employees.

In terms of specific types of training that have been developed internally in CCC in order to avoid the cost of third party training, the following training programs are now offered internally:

- Internally approved provider for the NEBOSH International General Certificate.
- OSHA 10 hour and 30 hour courses.
- H2S (Hydrogen Sulfide) safety awareness and H2S train the trainer.
- Safety Management & Leadership.
- Incident Investigation.
- Hazard Awareness & Risk Management.
- Lead Auditor.
- Fire Warden & Fire Safety.
- Safety Workshops & Safety Goal Setting.



- Train the Trainer.
- In addition to the above courses, the following are under development and planned to be available in 2019:
 - HSE staff development course.
 - ISO 45001 awareness (this is taking the place of the existing OHSAS 18001).

By request, projects can be assisted in developing specific HSE training programs to address a specific need or to avoid utilizing a third party. Both of these have been done on numerous occasions in the past few years.



The Importance of HSE Training

A quick look at training statistics for CCC in 2016, 2017 and 2018 reveals the following:

2016

- 76 CCC staff attended the NEBOSH IGC course for the first time and all 76 total sat for the examination.
- 56 CCC staff completed the OSHA 10 hour training.
- 109 CCC staff completed the OSHA 30 hour training.
- 46 CCC staff completed Safety Management & Leadership training.
- 93 CCC staff completed H2S (Hydrogen Sulfide) Safety Awareness training.
- HSE Project Training Man-hours = 1,510,611 (79 active projects) (94% of goal).

2017

- 22 CCC staff attended the NEBOSH IGC course for the first time and 48 total sat for the examination including new students and retest students.
- 417 CCC staff completed the OSHA 10 hour training.
- 107 completed the OSHA 30 hour training in 2017.
- 61 CCC staff completed Safety Management & Leadership training.
- 61 CCC staff completed Hazard Awareness training.
- 51 CCC staff completed Risk Assessment training.
- 58 CCC staff completed Incident Investigation training.
- 20 CCC staff completed H2S (Hydrogen Sulfide) Safety Awareness training.
- HSE Project Training Man-hours = 2,424,242 (76 active projects) (>100% of goal).

2018

- 42 CCC staff attended the NEBOSH IGC course for the first time and 48 total sat for the examination including new students and retest students.
- 140 CCC staff completed the OSHA 10 hour training.
- 337 CCC staff completed Safety Management & Leadership training.
- 76 CCC staff completed Hazard Awareness training.
- 80 CCC staff completed Risk Assessment training.
- 58 CCC staff completed Incident Investigation training.
- 20 CCC staff completed Train the Trainer training.
- 23 CCC staff completed Injury Classification training.
- 38 CCC staff completed Fire Warden and Fire Safety training.
- HSE Projects Training Man-hours = 1,843,146 (65 active projects) (100% of goal).

As competition increases, the importance of HSE training cannot be overemphasized. Maintaining a robust training program will always result in numerous benefits including being more competitive. Make HSE training a priority in your department or on your project in order to create a strong safety culture with knowledgeable, competent, safe and productive employees.

If you think training is expensive, try ignorance!

IPLOCA HSE Award Participation

FEATURE

It is with great pleasure we feature the **IPLOCA 2018 Environmental Award** CCC received for its innovation in Sustainability and Eco-friendly Initiatives. The Portable Power Cabin initiative was the latest innovation that CCC created in-house from recyclable materials to set up a solar energy system that generates clean energy and an alternative source of power at CCC projects in remote areas.

The idea was to use solar technology and recyclable eco-friendly material to set up a mobile cabin that is used as part of site establishment activities to power communication and mobile equipment for offices and camps. It is fully equipped, furnished and used with high availability, efficiency and dependability as offices on project sites.

The initiative was given the name **CCC's Go-Green 100 % Off-Grid Portable Power Cabin** using an existing cabin as a basis where several modifications to transform it into a power cabin were performed. The modifications and adjustments included:

- Dismantle wood from the original cabin to clean and reuse.
- Remove chemical paint.
- Weld battery boxes and PV module frame mounts.
- Prepare and place cellulose insulation.
- Paint.
- Install PV modules.
- Experiment with external design options.

The efforts made as well as the generous resources provided by the project management and the sustainability team resulted in an idea whirling around the minds of employees becoming a reality and enabled scrap materials to be recycled in a very efficient way.

The outcome was very impressive and the energy produced from one unit was sufficient to power the office appliances, ventilation and lighting.



A portable power cabin is an efficient tool that CCC seeks to implement and utilize on newly awarded projects, especially in remote areas. Not only will it save the excessive use of fuel powered generators but will also save a lot of time required for power and energy units to be transferred to the work locations. The time needed to mobilize an office, set up electrical connections and energize the office from a generator will be saved as the cabin can generate its own needed energy.

The concept was presented at the IPLOCA Annual Convention in September 2018 and was well accepted and admired by IPLOCA members and for which the selection committee decided to award CCC as a leading organization in preserving the environment and providing sustainable solutions for smooth operations and projects execution.

It's worth mentioning that the IPLOCA environmental award in 2018 was not the first for CCC. CCC has received six awards since 2012 in recognition of its vital role in innovative health, safety, technology, project execution excellence and sustainability solutions.

CCC's efforts have resulted in the IPLOCA awards since 2012 as shown in the photographs.

The initiative emphasizes CCC's visible commitment to the sustainability requirements of minimizing our carbon footprint and emissions to the environment.

The CCC Corporate HSE Group is constantly looking for and reviewing new concepts in technology, sustainability and safety to assist CCC in operating in a diligent, professional and responsible manner consistent with world-class companies and aligned with its stated HSE business goals and policy.

CCC senior management's true commitment is demonstrated through their visibility in HSE and sustainability conferences, resource allocation,



IPLOCA HSE Award Participation

incentive programs and recognition for those that put forth innovative ideas as well as their review and follow up on implementing innovative work programs across CCC projects worldwide.

CCC is looking forward to expanding the initiatives and transferring best practices and successful innovations to all areas of operations. CCC will remain a leading company in preserving the environment, maintaining the health and wellbeing of its people and advancing sustainability.

Despite restrictions posed by the current market fluctuations in the construction industry, CCC will always allocate the required resources, incentives, budgets, manpower, technology and facilities for creativity, innovation and improvement.

FEATURE



2016 Excellence in Project Execution Award Winners

McConnell Dowell Constructors (Aust) Pty Ltd and Consolidated Contracting Company Australia Pty Ltd (CCC) JV, represented by Mark Barrows and Zahi Ghanous, for the Australia Pacific LNG Pipelines Project, one of the largest, longest, and most complex pipelines constructed in Australia.



2018 Environmental Award Winners

The Environmental Award Selection Committee awarded Consolidated Contractors Group S.A.L., represented by Najib Khoury, for their Go-Green 100% Portable Power Cabin.

Partnering Against Corruption Initiative (PACI) Community Fall Meeting

USA



The World Economic Forum (WEF) based in Switzerland is an International Organization for Public-Private Cooperation. The forum engages political, business and other leaders of society to shape global, regional and industry agendas with the aim of improving the state of the world.

Every year, WEF brings together top business leaders, international political leaders, economists, journalists and celebrities for up to four days to discuss the most serious issues facing the world.

The organization also provides a platform for its members in sector-specific initiatives. One such initiative, of which CCC is a founding member, is the Partnering Against Corruption Initiative (PACI).

In an effort to combat corruption, PACI was launched by CEOs from the engineering and construction industries and from energy, metals and mining industries during the annual meeting that was held in Davos in January 2004. Presently, approximately 140 top companies are members of the PACI initiative. PACI has become the prime business channel on transparency and anti-corruption.

CCC participated in PACI's Fall Meeting, which took place on November 6, 2018 in New York, USA. The meeting, held under the Chatham House Rule, focused on:

- Sharing insights on the latest political and economic challenges that are influencing the global anti-corruption agenda and exploring new strategies and challenges for breaking the corruption cycle as the world moves to a new global architecture.
- Exploring how does the risk of corruption influences investment decisions and the role of decision makers in promoting improvements in anti-corruption and collective actions.
- Solutions to the most pressing challenges on the global anti-corruption agenda key steps for rebuilding trust and integrity into the system.
- The Fourth Industrial Revolution - the threats to integrity posed by technology and how digital solutions can be used to expose and deter corruption.
- Exploring challenges and collaborative international approaches to anti-corruption within the shifting global environment.

WORLD ECONOMIC FORUM

Speakers included:

- Neil Bruce, President and Chief Executive Officer, SNC-Lavalin, Canada.
- David Cruickshank, Global Chairman, Deloitte, United Kingdom.
- John Scudder, Vice President, Chief Ethics and Compliance Officer-Latin America, Walmart, Inc., USA.
- Ian Gorst, Minister for External Relations, Government of Jersey, United Kingdom.
- Tarek Helou, Assistant Chief, FCPA Unit, Fraud Section, Criminal Division, USA.

Participants included:

- BT Group
- Citibank
- Consolidated Contractors Company
- Dell Technologies
- Deloitte
- Fluor Corporation
- Glencore International
- HSBC Holdings
- Nokia Corporation
- PwC
- Siemens
- SNC-Lavalin Group
- SNC-Lavalin Group
- Telefonaktiebolaget LM Ericsson
- The Coca-Cola Company
- Total
- Transparency International
- Walmart.

AREA NEWS



D. NTALACHANI

Race for the Cure

Athens, Greece

Contribution to CSR Initiative

CCC staff are encouraged to come up with ideas and activities related to CCC's CSR initiatives including Going Green and community involvement events. Please send your ideas, initiatives and achievements to the CSR-CCC email address csr@ccc.net.

On October 7, 2018, ninety-six CCC employees participated in the Race for the Cure event which took place in the centre of Athens. The annual race was organized by the Hellenic Association of Women with Breast Cancer "Alma Zois" in collaboration with the Susan G. Komen Organization. CCC has been one of the sponsors of the event since 2009, and its employees have been participating since then. The race is one of the most popular races for breast cancer awareness in Europe and is the largest sports event with a social purpose in Greece, bringing together more than 150,000 participants throughout the history of the event. The goal is to raise awareness about early detection methods and guidelines for safety as well as to raise funds for the implementation of programs by Alma Zois.



R. NASSER

CCC Launches its Volunteering Program

On October 19, 2018 CCC launched its Volunteer Program at an event held at its premises in Athens. The program aims to engage employees in volunteering activities that support and address issues that impact the quality of life of disadvantaged people. In support of CCC's commitment to serve those in need, the newly issued volunteering policy provides employees with 20 hours of time off work to use in providing their expertise, talent and time to help a worthy cause, or in the betterment of life conditions of the needy.

The launching ceremony was attended by CCC employees and various NGOs such as Amnesty International and Doctors of the World among

several others which were invited to display their work and their volunteering activities and mingle with staff members.

During his speech, Mr. Samer Khoury, CCC's Engineering & Construction Chair, said: "CCC's corporate and family values are based on three pillars: integrity, sincerity, and humility. The best definition of humility is to help our fellow human beings through volunteering. Recently, I have endorsed a new volunteering policy to encourage everyone who wants to volunteer. The company's Volunteer Program serves as a basis for CCC's commitment to improving people's quality of life and to ensure that the core values of CCC align with a balance between improving the company's



CCC Launches its Volunteering Program



business and improving the quality of life of its workforce, families, communities and societies where we operate. “

Ms. Rosie Nasser, CCC's Corporate Social Responsibility Consultant, spoke at the event, stressing that:

“CCC's humanitarian giving started even before the concept of Corporate Social Responsibility became a thing in the corporate world, in good times and bad times; CCC never stopped giving back and contributing to the communities in which it conducts its business. Its contributions range from building a house for a disadvantaged family in Botswana, to empowerment and capacity building of youth and women in Lebanon, Jordan and Palestine, and to establishing vocational training programs and centers in Kazakhstan, Saudi Arabia, Oman and Jordan. In Greece, CCC's efforts range from reconstructing a playground for a day care nursery in Kypseli, to providing relief assistance after the earthquake of Kefallonia, to the delivery of sleeping bags to the refugees at Eleona Camp.” She went on to add that

“CCC's Volunteer Program in Athens aims to contribute to the socio-economic development of Greece and to use time and talent in many

areas such as education, health, environmental sustainability, human rights, poverty reduction, refugees and vulnerable groups in general.”

In Athens, the CSR Department will be collaborating with Ethelon to carry out a selection of group volunteering activities which include beach cleaning, school restoration, STEM Education for school students, preparation of hygiene kits for socially vulnerable groups, and restoration of public spaces. All these actions address one or more of the 17 Sustainable Development Goals of the United Nations. The 17 Goals adopt a holistic approach and respond to the global challenges we face, including poverty, inequality, environmental degradation, prosperity, quality education and sustainable cities.

Kostapanos Milliresis, General Manager and Co-Founder of Ethelon talked about the important role that businesses should play in the social sphere and the importance of CCC's initiative. He said:

“It is our great pleasure to participate in and support CCC's Volunteer Program. It is very important to see such big companies as CCC offering their employees the opportunity to play an active role in society. To dedicate one's own time to the needs of one's fellow human beings is also the reason for the existence of Ethelon, so that all this will to offer will have the greatest impact.”

The program will be run and managed by the Corporate Social Responsibility (CSR) Department whose role is to facilitate and organize the volunteering process and support the employees by disseminating group or individual volunteering activities and matching their talents and expertise with appropriate volunteering jobs.





Breast Cancer Mobile Clinic in the West Bank of Palestine

Over the last two years CCC in cooperation with the Bank of Palestine has been committed to supporting this project in order to serve Palestinian ladies living in hard-to-reach areas. CCC supports many wellness programs that operate among different countries.

On Thursday 27 September, 2018 Dunya Women's Cancer Clinic officially launched the mobile clinic for early detection of breast cancer: this event came following two years of efforts and process of preparing and supporting.

The breast cancer mobile clinic will reach ladies cut off from access to health checkups. For many ladies, this mobile clinic may be their only source of health care.



The pink mobile clinic is equipped with new technologies to detect this disease in its early stages and follow up the progress of the treatment later in coordination with the Ministry of Health. The success of this initiative keeps growing despite the difficult circumstances we live in.



R. NASSER

Photography Training

Building a Better Future for Palestinian Youth

In partnership with Zakira, the Image Festival Association, CCC launched a capacity building project for Palestinian youth of Ain el Helweh Refugee Camp in Lebanon.

The project's objective is to provide nine-month professional photography and videography training and career development programs for Palestinians aged between 15 and 18 years. The goal is to empower them with a skill, a professional tool that they can employ in

prospective careers like commercial photography (studio, events photography, wedding photography, portraits, documentaries, and photojournalism).

The young people will be requested to choose a topic of their interest to photograph, and the project will be concluded in July 2019 with a photography exhibition featuring their best images and photographic skills learned.



Visual Art Training for Refugee Children



On October 1, 2018 the CSR Department in cooperation with the Museum of Cycladic Art in Greece launched a program that aims to bring together refugee children with Greek speaking students to attend visual art training workshops on how to use the Cypro-Minoan language as a common code of communication through art. The project will bring together children from different nationalities and backgrounds to work together, intermingle and enhance their creativity.

Samer Khoury, President, Engineering & Construction, said:

"We actively support the societies in which we operate and especially vulnerable groups. As a model of social responsibility, we in CCC consider it necessary to give the next generation the opportunity to start an amazing journey of knowledge and art. Thanks go to the Museum of Cycladic Art, which gives us the opportunity to become a facilitator of the Everyone, together at the Museum program. The program is particularly important as it provides children with the platform to exercise their fundamental right to self-expression through art and to have the opportunity to communicate and interact without discrimination and stereotypes."

The on-going program will be implemented in three cycles, each cycle will include five workshops and will bring together 20 children - 10 Greek students and 10 refugee children, aged 13-18. Children will learn how to use ideograms to write words and sentences in their own language. Then they will use this newly learned language to communicate with each other. The program aspires to provide the necessary



platform for the smooth integration of refugee children into the Greek society, to enhance their creativity and communication skills, and to help them develop relationships with other children. The program will be completed in June 2019 with an exhibition showcasing the children's works of art.





CCC Volunteers Restore Agias Eleousis Square in Maroussi Athens

CORPORATE SOCIAL RESPONSIBILITY

On October 26, 2018, Samer Khoury and around 40 CCC employees and their families volunteered to restore Agias Eleousis Square by painting the walls, artistically designing images on park benches and planting flowers.

The volunteers worked in three groups, the first group worked on painting the walls and waste baskets, the second group planted flowers and the third group restored the park benches using special material.

The aim of the action is to protect public spaces of the urban environment by promoting sustainable development and green areas within the city. Following the completion of the first action of the program, Mr. Khoury, said:

"I am very happy to have participated today, inaugurating the first action of our Volunteer Program in Greece. By faithfully serving the principles and values of the company, our contribution to the local communities we live in is our priority."



Wildfires in Athens

Volunteerism in Emergency Situations



The tragedy of the Greek fires all began on Monday, July 23, 2018 when the first fire alarm sounded in Kineti, a town about an hour west of Athens. Later on, the authorities received calls reporting flames near Rafina, east of the capital. Just about an hour later, the wildfire had reached Neos Voutzas, to the northeast, and then, powered by strong winds, it moved fast down the hill to the seaside town of Mati where the biggest tragedy happened.

Greeks a couple of days later were still piecing together one of the nation's worst disasters in recent memory. Many scattered fires had broken out in a very short span and spread with a fatal velocity. Suspicion of arson combined with grief and recrimination shattered the Greeks as they went through the ruins of fires that killed at least 91 people and burned thousands of homes.

Almost immediately after the fires, many volunteers stepped forward to help those affected. Dozens of people, mostly teenagers and young adults, queued patiently to register for volunteering duties to help out pack into boxes food, water, medicines, clothes, shoes, hygiene products, and so on. Many schools, town halls, gyms and many other places were open for people

to drop off whatever supplies they thought would be helpful for those affected by the fires.

One of the many non-governmental organizations (NGOs) which were taking part in providing their help was the Scouts Club founded in Kifissia (a northern suburb of Athens). Scouts Club is an NGO whose mission is to contribute to the education of young people through a system of values helping build a better world where they develop as individuals and play a vital role in society.

On Thursday, July 27 with the help of CCC employees Bruce Richardson, Pavlos Kamitsakis, Darryl Goringe and Vanessa Manoura, the Scouts Club helped to transfer hundreds of boxes which contained water bottles, baby wipes, clothes, shoes, food, medicine, food for animals, and much more. These boxes were loaded into two trucks in which we all helped whether it was bringing the boxes outside from the storage room, helping pass them in the "chain line" we had created, lifting them into the two trucks and finally wrapping the area where the boxes were stored in the truck with a cloth to prevent anything falling off or in case of rain when transported to Nea Makri.

Finally, when the boxes were taken to Nea Makri many volunteers who had followed the truck with their cars helped unload the boxes off the trucks.

The experience was extraordinary. Everyone was friendly, cooperative, and there was a lot of team work. The feeling at the end after helping for a cause was beyond words. You really feel like you have contributed to a cause and you can't help but smile when you say "I too helped in the wildfires of Attica". We all should at least take part in one volunteering event, if not only for the experience, but most importantly to help for a cause. For those who want their children to take part in any of the Scouts Club's causes and events, the organization's address is Charilaou Trikoupi Street 73, Kifissia.



The Center for the Disabled Reopens its Doors



CORPORATE SOCIAL RESPONSIBILITY



A cooperation agreement for the reopening of the Center for Creative Activities for People with Disabilities of the Municipality of Maroussi (KDAP-AMEA) was signed between the Municipality of Maroussi (a northern suburb of Athens) and CCC. This cooperation will ensure that people with disabilities continue to receive the care they need for the year 2019.

Taking into consideration the need for our fellow citizens who suffer from disabilities to be creative and active members of our society, both parties agreed to re-operate the premises located at Zinonos Eleatou Street, where the municipality's center for the disabled is located. CCC's support will go towards operational costs and the employment needs of the required staff, namely:

- a social worker who will be in charge of the creative engagement of the children and young people with disabilities, by developing personal or group activities.
- a special educator who will ensure the individual education of children with disabilities on self-care issues and the training of their family members in the appropriate treatment of their specialized care needs.

During the signing ceremony of the cooperation agreement by the Mayor of Maroussi George Patoulis and CCC's President of Human Resources Suheil Sabbagh, Mr. Patoulis said:

"In order to offer equal access to entertainment, creative expression and engagement for all our fellow citizens, we are cooperating with the productive forces of our city who share the same social sensitivity with us, in order to re-operate the care home for people with disabilities in our city".

The signing of the cooperation agreement was attended by the General Secretary of the Municipality of Maroussi, George Didaskalou.

Blood Donation in Abu Dhabi



On December 5, 2018 56 employees of EPSO, CCC Underwater and CCC Area and Project staff braved the needles to save lives.

At least 56 blood bags were collected during the blood donation day organized by EPSO in partnership with the Abu Dhabi Blood Bank, Sheikh Khalifa Medical City. For the fifth time in a row, CCC received a certificate of appreciation for its continuous support of this life saving initiative from the Abu Dhabi Blood Bank.



Abu Dhabi Blood Bank

Certificate of Appreciation

Is Here by Awarded to

Consolidated Contractors Company (CCC)

In recognition of your valuable contribution to

Abu Dhabi Blood Bank and the Community

Abu Dhabi Blood Bank Director



Date: December 5, 2018



STEM Course for Refugee Children at Athens Office



On December 19, 2018 CCC volunteers provided Science, Technology, Math and Engineering (STEM) education to 26 refugee children aged between 6 and 12 years old from Elefsina Refugee Camp.

This volunteering activity took place at CCC's premises in Athens and was organized by the CSR Department, Ethelon and the International Organization for Migration. STEM education is based on the idea of educating students in four specific disciplines - science, technology, engineering and mathematics - in an interdisciplinary and applied approach, rather than teaching the four disciplines as separate and disconnected subjects.

Before the volunteering activity, the CCC volunteers attended a 3 hour training course delivered by professional trainers from the World Robot Olympiad Association; a non-profit organization which promotes robotics in STEM education for children and develops their creativity and problem solving. Naim Trabelsi, one of CCC's ambassador volunteers who participated said:

"The training made us realize how through brick building and coding such education can refine talents and skills of kids in complex problem solving, critical thinking, creativity and even project management."

The children were taught the basic steps of robotics, and that each construction has "artificial intelligence" that is the product of students' algorithmic thinking and is realized through a digital program, which they drew themselves on a touch screen of a wireless tablet connected to the robotic structure.



CCC's Sustainability Competition

Winners' Feedback

In late 2017 CCC launched its first annual Sustainability Competition, aiming to further integrate sustainability within our organization's culture. 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 important green topics conferences to scout out for more such innovative solutions. The winners of the competition contributed their feedback on the conferences attended in a brief commentary:

Omar Abdel Qader and Ziad Abu Sharar

- *Jazan Integrated Gasification Combined Cycle - Sulfur Recovery Unit (JIGCC-SRU) Saudi Arabia - Camp Category*
- *WasteExpo 2018, Las Vegas, Nevada, USA, April 23-26.*

WasteExpo's conference program was a valuable professional development opportunity. The education and training we received as participants sharpened our skills and has enabled us to better perform our work. WasteExpo's conference program was unparalleled.

We attended several presentations and visited various booths investigating products or ideas that would suit the needs of sustainable camp operations. We made contact with exhibitors focusing on recycling: machinery, waste control and transportation solutions. These topics were on the top of our agenda, since they are major concerns in camp operations.

Through our discussions with exhibitors, we realized that CCC's waste management and recycling practices are in accordance with the global approach of the field, the only difference being the use of large scale modernized facilities which are non-applicable in our areas of operation.



Abeer Afshi and Aravind Narayan

- *Riyadh Metro Project, Saudi Arabia - Camp Category*
- *Water Technology and Environmental Control Exhibition @ Conference 2018*
- *Cremona, Italy - October 24-27.*

We attended this conference as a prize for winning (2nd place) of the 2017 CCC Sustainability Competition.

This year's conference topics included: sustainable agriculture, drug pollution and chemicals, water transportation and storage, waste management and more. The exhibition featured specialty water products, water technologies and innovations covering multiple applications, including desalination, water distribution, water management and wastewater treatment.

Water today is a critical resource since many of the water systems that keep ecosystems thriving and feed a growing human population have become stressed, and the concept of a "Water Footprint" is becoming an important parameter in the industry. Such exposure/experience introduces CCC employees to the latest water technologies and innovations, hence enhancing the company's knowledge base in water-use efficiency and its applications on projects, camps and offices.



CCC's Sustainability Competition - Winners' Feedback

Khaled Hamaideh and Sharif Abdelrazeq

- *Kazakhstan Area Camp Category*
- *Urban Mining and Circular Economy Symposium, 2018*
- *Bergamo, Italy, May 21 - 23*

The convention was a valuable experience that focused on the theoretical and educational aspects of a "Circular Economy" (a methodology developed to maximize the utility function of raw materials and increase their life cycle) and "Urban Mining" (a process assuring full utilization and maximum reuse of the product prior to disposing to landfill).

Being the only representatives from the construction industry we made a point of highlighting our experiences to help connect research and theoretical concepts with real-life examples and application.

The two day intensive sessions were wrapped up with a workshop and a technical tour allowing us to better understand the practical aspects of adopting circular economy and urban mining approaches. We visited the facility of Viscolube a company active in refining used lubricant oil regeneration to produce high quality regenerated base oil, group I+ and II+, and industrial waste solvent recovery and valorization.

In thinking how urban mining and circular economy correlates with CCC's business, some examples are:

- Cost saving through material efficiency.
- Procurement teams can identify suppliers who provide circular economy solutions.
- Through Building Information Modeling (BIM) and advanced technologies waste is reduced during construction.
- CCC can leverage this knowledge in the estimation process through employing value engineering.

Talal Mhanna and Nabil Gaaya

- *Water Mega Reservoir project*
- *Package C, Qatar - Project Category*
- *Waste to Energy and Resources Summit 2018*
- *London, UK, May 23-24*

The summit we attended was very informative, hosting waste-to-energy industry leaders from all around the world who provided insights and a comprehensive outlook on the current affairs of this emerging industry. Overall, the waste to energy and resources industry has a bright future.



Opening Session of the Urban Mining and Circular Economy Symposium, 2018



Site Visit at the Viscolube Oil Refining Facility



CCC's Sustainability Competition - Winners' Feedback

The world will continue to produce waste and although regulations, policies as well as technologies will reduce the amount of waste being produced, a significant portion of waste will not have a final destination other than landfills or incineration.

This waste with a relatively high calorific value exists in enormous amounts particularly in oceans around the world. With technological advancements that allow treating inert fly ash and other gaseous emissions, waste to energy resources seem a likely solution. This would mean a new market and more future projects for CCC.

Another opportunity for CCC is to start considering the potential for investing in a waste to energy modularized (power) plant that can be moved around projects, the same way an asphalt plant or a concrete batching plant is set up. It can for example serve a main power house for a project's main facilities.

Saif Jayyousi

- *Bausher Waste Water (Madinat Sultan Qaboos), Oman - Project Category*
- *Smarter-E Europe 2018*
- *Munich, Germany, June 19-22*

The convention I attended took a comprehensive approach to the topics relevant to the energy world. Cross-sector energy solutions and technologies were presented focusing on generation, storage distribution and use of energy and how these aspects interact.



Smarter E-Europe included a series of different events. I focused on Intersolar Europe and EES Europe since they were more applicable to CCC construction activities. Intersolar Europe focuses on photovoltaic, solar thermal and solar power plants. It has become the most important industry platform for manufacturers, suppliers and distributors in the global solar industry. EES Europe presents innovative battery technologies and future-oriented solutions for storing renewable energies.

The exhibition is considered as one of the world's leading exhibition series for the solar industry hosting more than 1,177 exhibitors from 155 countries. Through my exhibition tour it was made clear that all manufacturers are aiming to increase the output and efficiency of solar panels while compacting the frame size. Several techniques are used such as the bifacial panels that produce solar power from both sides of the panels. Also, the simplicity, availability and affordability of PV systems have increased the market demand for photovoltaics.

In summary, my findings from attending the Smarter E Europe are below:

- Major manufacturers, investors and suppliers are joining the renewable energy industry which reflects future growth in the sector.
- Governments globally support renewable energy. More funding is provided for solar plants installation, development and R & D.
- In the exhibition, lithium-ion battery technology was the visitors' main attraction compared to other storage solutions. This indicates an increased number of off-grid installations in the future due to the affordability, durability and reliability of lithium-ion batteries.



APPENDIXES

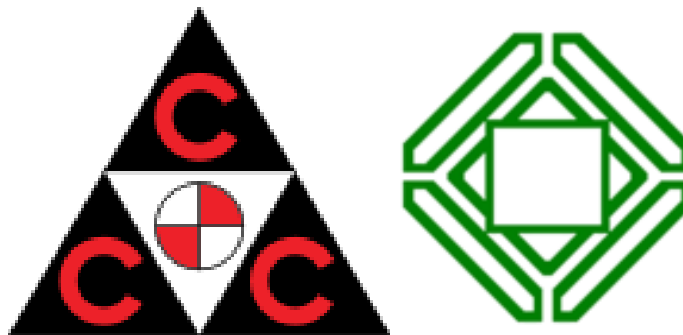
Appendix 1

Photographs from representative CCC accommodation camps
that showcase our care towards the well-being of our
employees.

PEO CAMP

CCC RENTED BUILDINGS

IN DOHA



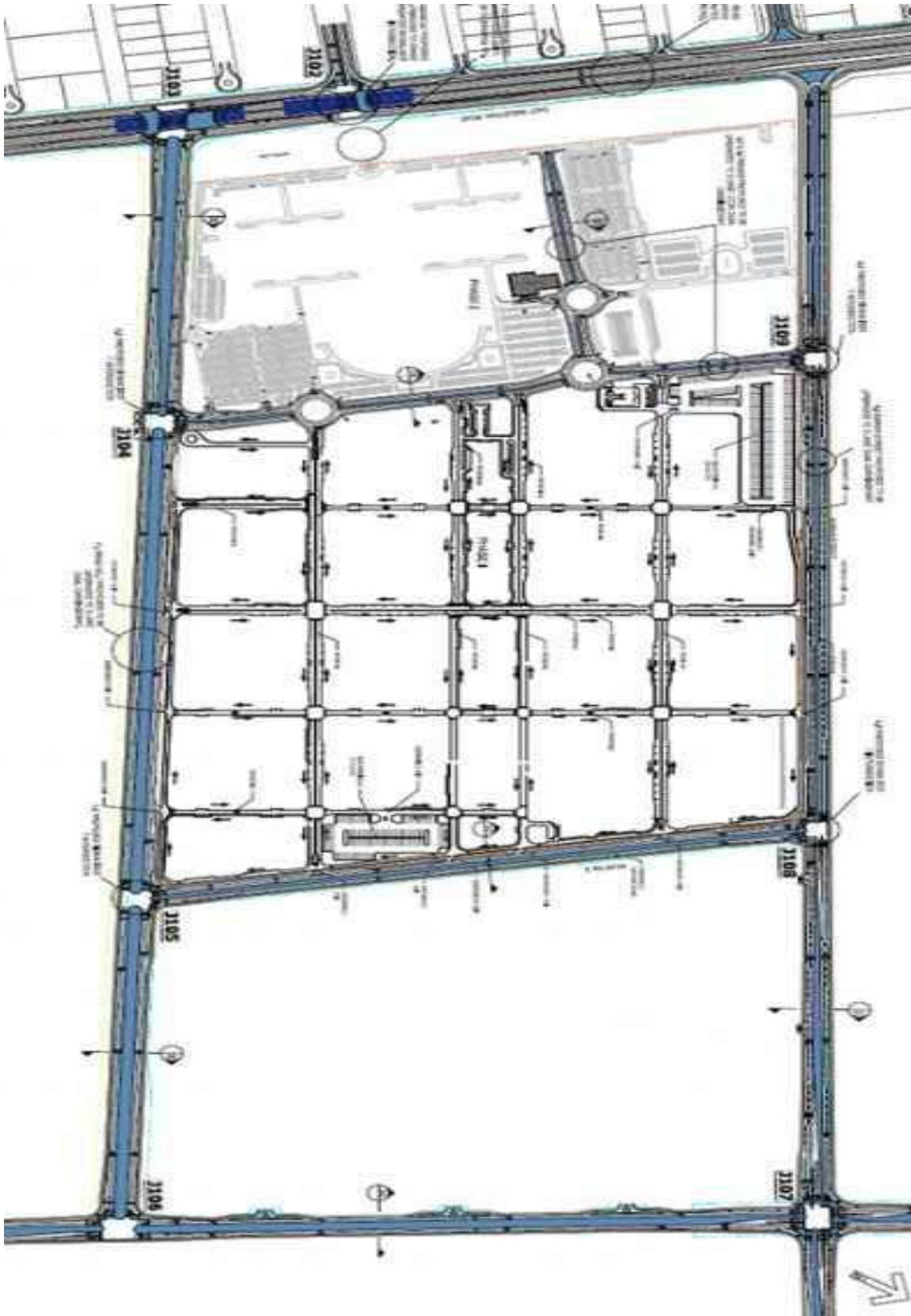
REAL ESTATE



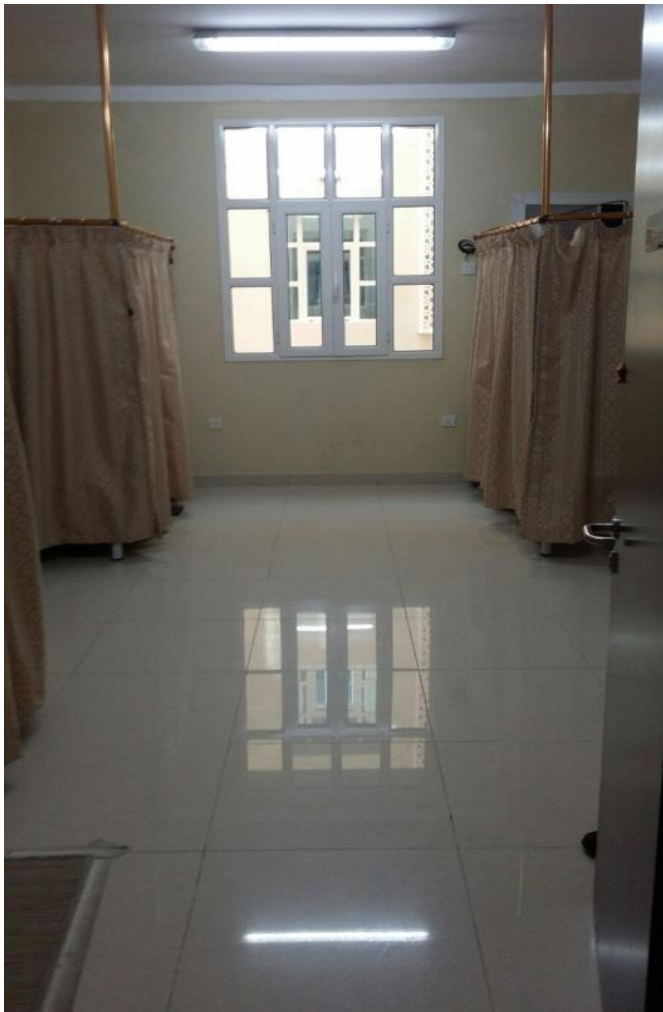
OVERVIEW



CAMP ROAD MAP



ACCOMMODATION (ROOMS & ABLUTIONS)





PARKING



MESS HALLS





GREENERY AREA







INDOOR RECREATION & TV HALL





OUTDOOR RECREATION

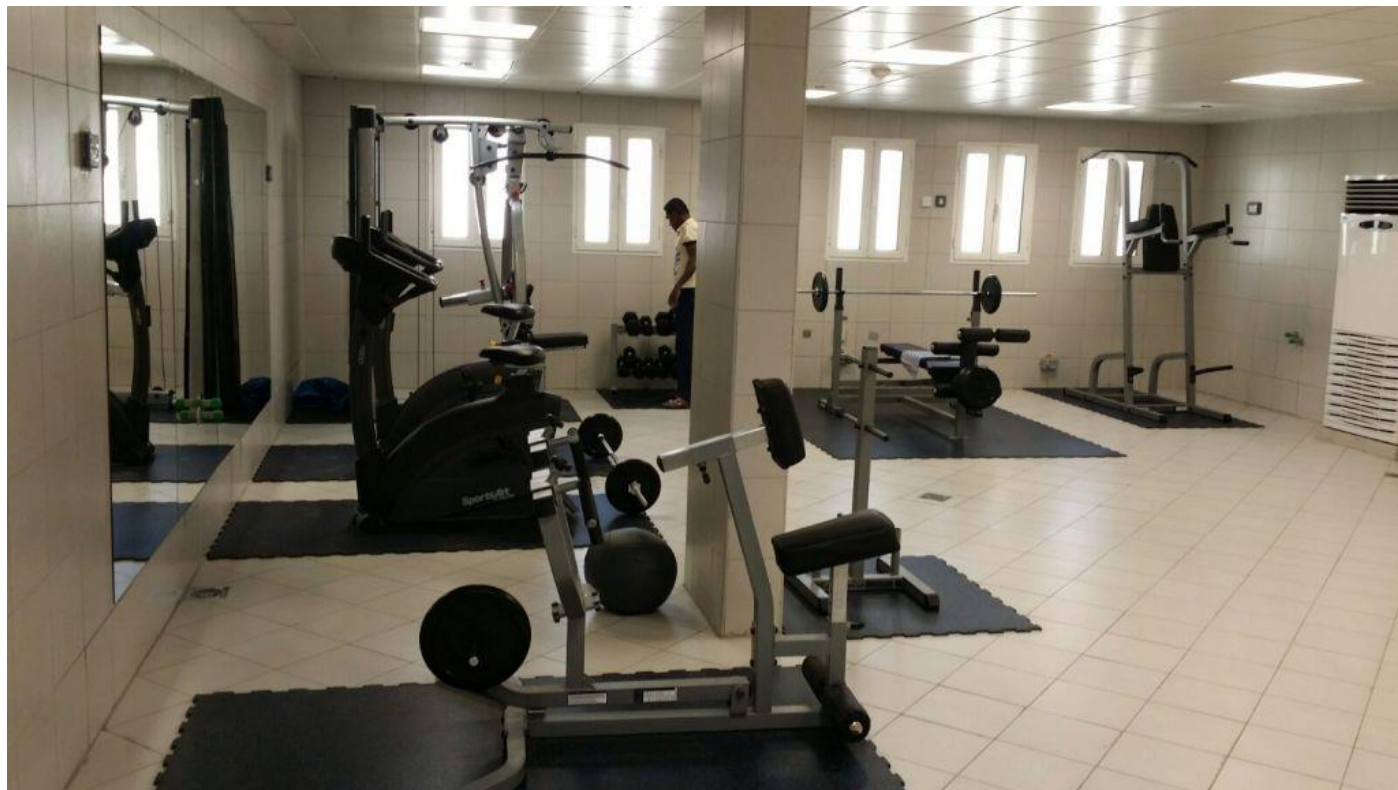




WIFI INTERNET CAFÉ



GYMNASIUM



SOCIAL ROOM



MEDICAL





LAUNDRY (OUT SOURCED – 3RD PARTY)

MAGIC LAUNDRY BY NAAAS



MOSQUE



SECURITY

MINISTRY OF INTERIOR BLDG. (CID)



LINKED WITH MAIN POLICE STATION





DESIGNATED SMOKING AREA



ACTIVITIES & EVENTS

CRICKET (SPONSORED BY NAAAS)



QSL & SC WORKERS CUP 2019



EID AL FITR 2019 MUSICAL CONCERT



EID AL ADHA 2018 MUSICAL CONCERT



QATAR NATIONAL DAY 2018 (PARADE)





BETTER CONNECTION PROGRAM BY (MOTC, ICT & ROTA)



QATAR NATIONAL SPORTS DAY 2019

CONSOLIDATED CONTRACTORS GROUP (CCG) /
TAYSEER CONTRACTING COMPANY (TCC)



Qatar National Sports Day



Tuesday February 12th 2019

LABOR CITY
PEO NAAAS COMPOUND

CCC Sports activities / Tournaments Photos Achieved During Qatar Nationals Sports Day



CAROMS



CHESS



TABLE TENNIS



BABY FOOT



BILLIARDS



VOLLEY BALL



KABADDI



TUG OF WAR



MARATHON



RETAIL



TELEPHONE KIOSK



NATIONAL / INTERNATIONAL MEDIA & FIFA

The following below photos were taken during FIFA visit



FIFA & PEO plus journalist, visitors were gathered upon their arrivals to labor city.



Visit conducted by 200 FIFA & PEO visitors while surveying PEO COMPOUND VIA CCC buildings in labor city.



Visitors while checking rooms & buildings internally



Visitors while questioning workers about their own satisfaction



CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP



WIRELESS INTERNET / Wi-Fi OPEN AREAS



RECREATIONS





CONSOLIDATED CONTRACTORS GROUP S.A.L.

(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP

RECREATIONS



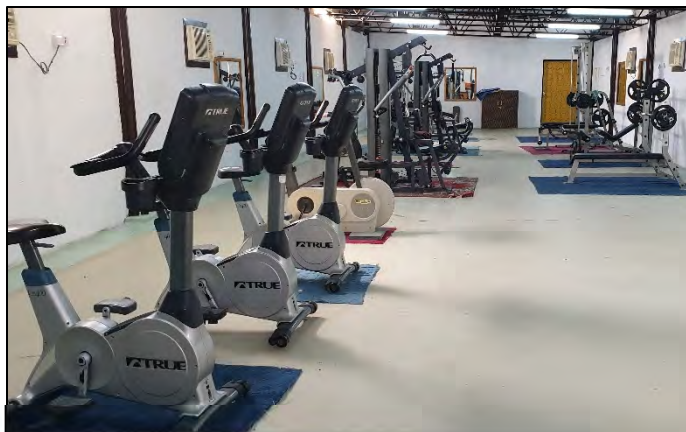


CONSOLIDATED CONTRACTORS GROUP S.A.L.

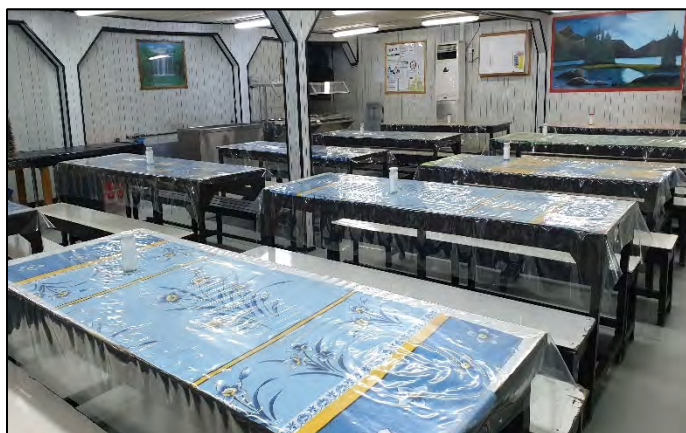
(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP

GYM



MESSING FACILITIES





CONSOLIDATED CONTRACTORS GROUP S.A.L.

(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP

MOSQUES & PRAYING ROOMS

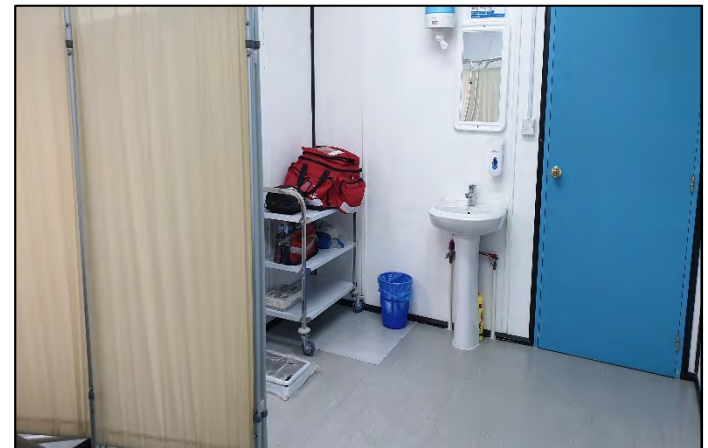




CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP

FIRST-AID UNIT



MULTI PURPOSE PLAYGROUNDS





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP

LAUNDRY SERVICES



STORES



ACTIVITIES





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SHEEHANIYA CAMP





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR
SHEEHANIYA CAMP





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

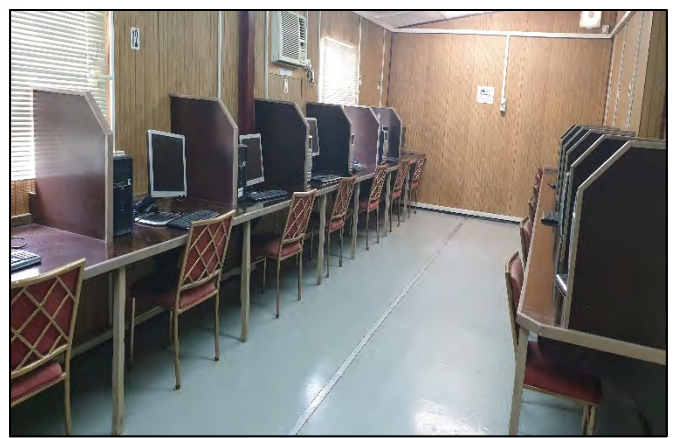
SIMAISMA CAMP



WIRELESS INTERNET / Wi-Fi OPEN AREAS



INTERNET CAFÉ (STAFF & WORKERS)





CONSOLIDATED CONTRACTORS GROUP S.A.L.

(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP

RECREATIONS





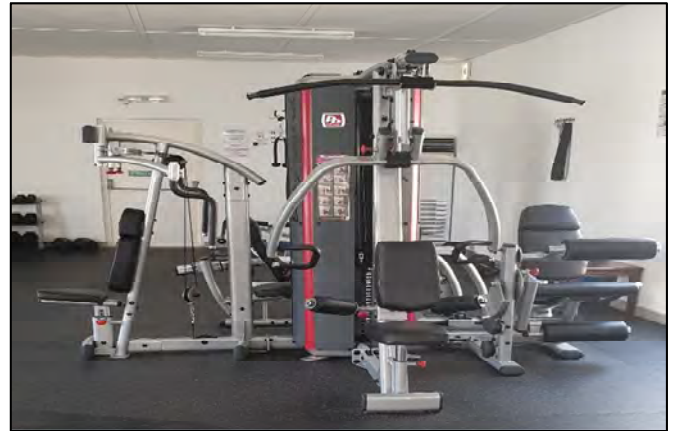
CONSOLIDATED CONTRACTORS GROUP S.A.L.

(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP



GYM





CONSOLIDATED CONTRACTORS GROUP S.A.L.

(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP

MESSING FACILITIES





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP

MOSQUES & PRAYING ROOMS





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP

FIRST-AID UNIT



MULTI PURPOSE PLAYGROUNDS



LAUNDRY SERVICES





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP

STORES



ACTIVITIES





CONSOLIDATED CONTRACTORS GROUP S.A.L.
(OFFSHORE) (CCC) - QATAR

SIMAISMA CAMP





Appendix 2



Worker Welfare Plan - Medical Facilities & Muster Point



Appendix 3



CCC was awarded the “Best Company in Occupational Health in Qatar”.

Appendix 4



CCC site for the Water Mega Reservoir Project has been recognised by Kahramaa (the Electricity and Water authority in Qatar) as a role model



Appendix 5

HSE Awards



Future Growth Project Recognition Award Certificate

**Presented to
Consolidated Contracting Engineering and
Procurement Company (CCEP)**

In recognition of 10,000,000 manhours worked without
a Lost Time Injury on TCO FGP.

**FGP / WPMP appreciates your effort in adding
value to the Project**

**Jim Ierubino and Charles Jacobs
3GP Project Manager**

**Mike Reed and Shane Gwinnutt
3GP Construction Manager**

March 2018

© Tengizchevroil 2018



Certificate of Appreciation

This certificate is awarded to

CONSOLIDATED CONTRACTORS COMPANY (C.C.C.)

The Management of Jazan IGCC Projects Department- Gasification Package, is presenting this SAFE DRIVING CERTIFICATE to CCC in recognition to the commitment and contribution, to have ZERO Motor Vehicle Accident during the period between February 2018 to January 2019.

Given on February 2019.


Jarallah M. Yami, Project Manager
Jizan IGCC - Gasification Division

شهادة شكر وتقدير

Appreciation and Recognition Certificate

Environmental & Sustainability Award 2018


Abu Dhabi Airports Management extends their sincere
thanks and appreciation to

تتقدم إدارة مطارات أبوظبي بخالص الشكر والتقدير
إلى

Consolidated Contractors Company



Abdulla Al Dharif
VP - HSE & Security



Sulaiman Al Siksek
Chief Programs Officer

شهادة شكر وتقدير Appreciation and Recognition Certificate

December 2018

Abu Dhabi Airports Management extends their
sincere thanks and appreciation to

تتقدم إدارة مطارات أبوظبي بخالص الشكر والتقدير
إلى

Consolidated Contractors Company

For your highly recognized Health & Safety
culture performance

لأداء التقييم الثقافي للصحة والسلامة من ألكم



Abdulla Al Dharif
VP - HSE & Security



Sulaiman Al Siksek
Chief Programs Officer



Recognition for achieving 3 million Man hours without Lost Time Incident

This certificate is presented to:

Al Ghandi & Consolidated Contractors International Company LLC on Opera Grand Project

for successfully outstanding

**Health, Safety and Environmental awareness whilst working on the
Emaar Boulevard Towers Program, Downtown Burj Khalifa, Dubai**

Given this day of January 15th, 2018



James Marsh
Program Director

Sean Lee
Senior Project Manager

Dimitri Fiorini
HSE Manager



September Golden Helmet Award

This certificate is presented to:

Al Ghandi & Consolidates Contractors International Company LLC on Opera Grand Residence

for successfully outstanding
**Health, Safety and Environmental awareness whilst working on the
Emaar Boulevard Towers Program, Downtown Burj Khalifa, Dubai**

Given this day of 11th October 2018



Leo Solomon
Senior Project Manager

Dimitri Fiorini
HSE Manager





Appendix 6

Supplier Subcontractor Sustainability Assessment



Category	Indicator	Description	Assessment			Comments & Evidence	Score	CCC Comments
			Yes	No	N/A			
1. Company Management	1.1 General	Does the company have a management person responsible for Sustainability? If Yes, please provide name & e-mail.	Yes					
		Does the company publish a Sustainability Report / Corporate Social Responsibility (CSR) Report? If yes, please provide web link or copy of the report.			N/A			
2. ENVIRONMENT	2.1 Environmental Management	Does the company have a defined Environmental Management System, including (Recycling, Waste, and Hazardous Materials Management)?	YES					
		Does the company have a written Environmental Policy with objectives that identify the environmental impacts of the business?	YES					
		Is there a training program for employees regarding Environmental Awareness?	YES					
	2.2 GHG & Energy Usage	Does the company have programs to conserve Energy & Fuel?			N/A			
		Does the company have Energy, Fuel & Greenhouse Gas Emissions Reporting Programs in place?	YES					
	2.3 Water	Does the company have programs to conserve water and reuse/recycle water?			N/A			
		Does the company have water consumption reporting programs in place?	YES					
	2.4 Materials	Does the company have Procurement Plans identifying the use of Green Products (recyclable, reusable, non-toxic, bio-degradable, and post-consumer recycled materials) and locally manufactured products?			N/A			
	2.5 Waste	Does the company have research and awareness about identifying Green Products (recyclable, reusable, non-toxic, bio-degradable, and post-consumer recycled materials)?		NO				
	2.6 Green Solutions	Does the company have a proven experience in using and implementing green solutions in sites & camps (examples in either: renewable energy, energy efficiency, water conservation, or waste management)?		NO				



Consolidated Contractors Company
Suppliers & Subcontractors Sustainability Assessment
Form

Doc. ID: CCC-SUS-FRM-SCA-001
Revision No. 00
Revision Date:
Page 2 of 3

		Indicator	Description	Assessment			Comments & Evidence	Rating	CCC Comments
				Yes	No	N/A			
3. SOCIAL	3.1 Labor Practices	3.1.1 Employment practices	Do you abide with the legal requirements of local quota hire, medical insurance, and benefits regulations?	YES					
		3.1.2 Health and Safety	Does the company have a certified Health and Safety Policy in place, that addresses fire protection, first-aid, relevant training and recording work related accidents?	YES					
		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?	Yes					
			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?	Yes					
			Does the company demonstrate compliance with national laws on the payments it makes to its employees for standard time, overtime, and employment benefits?	Yes					
		3.1.4 Disciplinary Practices	Does the company have a written Code of Conduct for its employees, which it also enforces?	Yes					
			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?	Yes					
			Do workers have a mechanism to express grievances?						
		3.1.5 Working Hours	Does the company have a guideline to comply with national laws on the working hours of its employees?	Yes					
			Does the company have records to demonstrate compliance with national laws on the overtime hours of its employees?	Yes					
		3.1.6 Training and Education	Does the company has Training Programs for employees and records it?	Yes					
		3.1.7 Company Provided Accommodation	Does the company provide all employees with a safe and healthy living environment in company provided accommodation?	Yes					
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?	Yes								
Does the company provide appropriate health and safety information and equipment to employees who live in the accommodation facility?	Yes								

Category		Indicator	Description	Assessment			Comments & Evidence	Rating	CCC Comments
				Yes	No	N/A			
3. SOCIAL	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.		No				
			Does Management verify the age of workers and establish minimum age restrictions for relevant work categories, paying particular attention to hazardous work?	Yes					
			Does the company regularly monitor its business to ensure that no child labor is used?	Yes					
		3.2.2 Discrimination	Does the company have a written procedure stating that its employees are treated free from all negative discrimination?	Yes					
		3.2.3 Training	Does the company a training program addressing awareness on aspects of Human Rights - Core Values?	Yes					
	3.3 Society	3.3.1 Local Communities	Evidence for Community Investments &Engagement Programs (scholarships, sponsorships, donations, philanthropy, and habitat projection & restoration etc.)			N/A			
			Evidence of hiring of locally based supply chain (suppliers & subcontractors)			N/A			
		3.3.2 Individual Conduct (Bribery & Corruption)	Does the company have a written policy stating that it will not tolerate bribery and corruption and will not accept improper offers of payments to or from its employees or agents?	Yes					
			Does the company have a system in place that ensures its employees understand its policy against bribery and corruption?	Yes					
		3.3.3 Compliance	Has your company ever been cited for non-compliance (Fines & Sanctions) of an environmental, safety or ethical issue (within the last three years)? If yes, please describe. (5 points for clean record, 0 points otherwise)		No				