

Reconciliation Activities to Support the Development of Blue & Green Revolutions

IPLOCA Corporate Social Responsibility Awards 2023



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BRIEF OVERVIEW

All pipeline industries and other sectors are running on fossil fuels and leaving a significant amount of carbon footprints with every activity. These emissions are affecting common people in both direct and indirect aspects. We understand it is our corporate social responsibility to compensate for those impacts on society.

M. Al Barghash Trading & Co.Ltd (MBTC) understands the social responsibilities of every corporate and its own. MBTC starts the mission to compensate for its environmental impacts by initiating social-Environmental awareness campaigns which include tree plantations in public areas, schools, seashore cleaning, and spreading awareness among the public too. All the initiatives are welcomed and funded by the owners, and they participated directly in all events to show their own commitment to CSR.

Saudi Arabia is the country that produces the highest amount of oil and gas sources. MBTC is one of the prime contractors of Saudi Aramco in Saudi Arabia. As we all know, Saudi Arabia is the hottest country, creating a need for refrigeration and air conditioning. Also, the remote area travels and long-distance travels of public and pipeline industry companies demand a huge amount of usage of cars and other heavy vehicles. These make unimaginable carbon emissions and greenhouse gas emissions. To control climate change and environmental depletion we need several strategies to control it. So MBTC decided to fund and conduct tree plantations in its own facilities, and public schools with awareness sessions. Also, MBTC did seashore cleanings with public awareness sessions to protect against marine pollution.

Until now, MBTC planted more than (1000+) ten thousand plants (Nov 2021 – Feb 2023) in its own facilities and in public schools (during 2023 – 2030, the planted trees will absorb approximately 1617 tons of CO2 and generate 8790 tons of O2). Environmental awareness is given to 150+ school children and 500+ public people through different campaigns. Through future green campaigns trees planted and green grass lawns arranged inside the school campus with a water irrigation system. The full fund is allotted by the MBTC only. We trust that along with us, public support, and other contractors, support is vital to make a big change. We think, we did it and doing it in the right way as we planned. As this is the long run, we had a plan to plant 100000 trees within 2030 and we will spread awareness to a minimum of 500000 public people.

Through these corporate social initiatives, our company is officially appreciated by Saudi Aramco and the Ministry of Education, KSA. Our client shared the initiatives with other 50+ contractors as a benchmark and recommended them to implement the same for large-scale action. The implementations require small funds, and the above-mentioned initiatives are adoptable by all companies in the pipeline industry.

These long-termly planned voluntary activities and campaigns will reduce global warming, and climate change issues and will protect the environment which is a vital current need of world and local people.

These are the facts that triggered us to think our initiatives are worthy to submit for the IPLOCA Corporate social responsibility awards 2023.



BUSINESS PROFILE

M.Al-Barghash Trading & Contracting Company Limited (MBTC) was established in the year 1976 in the Eastern Province of Saudi Arabia, more than 47 years of successful, innovative, and continuous operation in all weather.

MBTC is a leading Engineering, Procurement, and Construction Company operating on a large scale (Water, Oil & Gas Pipeline, as well as wellheads, and works) and other onshore works.

In Saudi Arabia, we are rated as one of the best contractors, known for providing quality and committed construction services. We employ a multi-national, multi-discipline workforce of more than 2400 employees which includes Managers, Engineers, Professionals, Supervisors, foremen, and various craftsmen.

Our Quality Management System is certified to ISO 9001:2015 and acknowledged to manage construction and maintenance of pipelines, and related facilities. Our Environmental Management System is certified to ISO 14001:2015 and Our Occupational Health and Safety Management System is certified to ISO 45001:2018.

We are a regular member of the International Pipeline & Offshore Contractors Association (IPLOCA) since 2018.



Our Mandates are:

- Engineering, Procurement & Construction works on a large scale for Gas, Oil & Water pipelines.
- Rehabilitation of Oil & Gas, Power, Desalination, and Sewage Water Pipelines.
- Wellhead, Flow lines, Trunk lines & Remote Header construction for water, oil & gas wells of Maintain potential projects.
- Industrial Plant Maintenance Services.

FINDINGS

In Saudi Arabia, the main process of oil extraction adds to an increase in poor air quality through the emission of large volumes of carbon dioxide (Co2), greenhouse gases, and other harmful gases. Including other pipeline industries directly and indirectly MBTC also contributes to air pollution during the execution of our pipeline projects.

The major resources of Saudi Arabia are oil and gas. To produce, refine, and transport natural gas and crude oil, pipeline industries contribute almost a full part of the contribution. These large number of



projects demands high numbers of pipeline industry-related contractors with the ability to carry out the activities with many heavy machines, vehicles, heavy equipment, and dangerous emissive activities.

As per the climate scorecard, Saudi Arabia gets nearly all its electricity generated by natural gas (61%) and crude oil (39%) in 2020.



As urban areas need more and more desalinated water, Saudi Arabia's urbanization increases ground, water, and air pollution. Unfortunately, the desalination process is inefficient and emits a significant amount of "greenhouse gases".

Expatriate immigration increases the local population. Regardless of the population in Saudi Arabia, and around the world, all seashore areas and marine conditions are affected by pollution in terms of plastics and other harmful items. Plastics and harmful items producing affecting microbes in the ocean which affect the food chain and sustainability.



SOLUTIONS

With the current trend and technology, it is not possible to eliminate all carbon-emitting activities. In pipeline industries, our project activities still demand transportation and heavy machinery operations on a large scale. Running operations by utilizing 100% renewable energy and net zero emissions are not possible in a short-term period. By understanding that MBTC seeks other optional opportunities to improve the quality of the environment. So, we considered the reconciliation activities as a voluntary mission for the public in terms of tree plantations, marine pollution control, and spreading awareness among the public and in schools.

As MBTC committed to its corporate social responsibilities and as compensation, our company decided to go on a tree plantation mission and Beach clean-up programs. Because tree planting and Beach cleaning were widely acknowledged as one of the most enjoyable and environmentally friendly activities. Moreover, Trees provide numerous long-term and short-term advantages.

MBTC recognizes that one of the most serious issues in the current state is the devaluation of trees. So, our company has decided to make Saudi Arabia (East province) region greener and better.

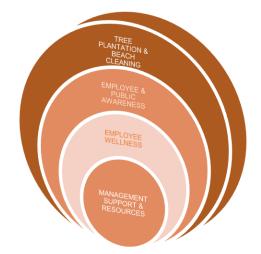
In MBTC's thoughts, everyone should be aware of the importance of tree planting and should motivate and encourage others to do the same. For the action, we prepared an action plan to



conduct a series of social-environmental campaigns which aim to spread awareness among our own employees, and the public. Today's children are tomorrow's generation. We trust, demonstrating the tree plantations and teaching them the need for plantations and current environmental issues among the school kids will make a better chain reaction in present and future eras.

As per the plan, successfully we conducted tree plantation campaigns in our own facilities and in public schools accompanying public and school children. And, conducted beach clean-up drives.

As a result of the above-mentioned campaigns,



- Within the period of Nov 2021 Jan 2023, we planted and maintained more than 10000 plants in our own facilities and public school.
- We conducted a FUTURE GREEN CAMPAIGN in Bilal Bin Ribha public School, Saudi Arabia. In this campaign, we planted trees and arranged a lawn park set up inside the school campus with a water irrigation system and maintenance arrangements.
- Along with demonstrations of tree plantations, Environmental protection awareness sessions were conducted for more than 150+ school students, and surprise gifts were provided to all kids to motivate them on the theme of environmental protection.
- By Beach clean-up drive campaigns, more than 500kgs of plastic and other harmful wastes were collected from Half-moon Beach, Al-Khobar, Saudi Arabia. In the campaign, the public people voluntarily participated, and awareness sessions were conducted for them.
- Employee wellness events and sports tournaments conducted for all employees. Employees got refreshed mentally and physically by the events and entertaining events during the Ramadan holidays. Employee wellness is vital for all implementations of the organization.
- All these social-environmental campaigns were fully funded by MBTC and all campaign's top management, CEO, and owners participated and showed their CSR commitments.
- As an all-campaign output, photographs, key information, and achievements were compiled as a presentation and shared with the client. Our client representatives shared the initiatives with other 50+ contractors and recommended them initiate the same themes of initiatives.

IMPLEMENTATION

To be in line with the organization's corporate social responsivities, MBTC's Corporate team and HSE department planned several social environmental campaigns as initiatives to voluntarily involve in the process of Improving the Quality of Life of the People Impacted by Pipeline Industry Work.

The initiative ideas were discussed in the meetings and all the ideas were happily accepted by chairpersons and CEO, fully funded for implementation.



As an output, within a period of Nov 2021 to Apr 2023, we conducted four social-environmental campaigns and one employee wellness sports tournament with the direct support and participation of the business owners of the company, the CEO, the General Manager, and corporate and departmental managers.

Through this implementation, we collected more than 500kgs of waste from the beach, we planted more than 10000 trees, other than 2400 MBTC employees we spread awareness among more than 500 public people and 150+ school children. The Saudi Aramco executives acknowledged the MBTC's Social-Environmental initiatives and encouraged more than 50+ other pipeline contractors to adopt MBTC's initiative ideas for large-scale results.

The initiatives are appreciated and got recognized by Saudi Aramco for demonstrating corporate social responsibility. To successfully accomplish the Future Green campaign by involving the school children in public school, the Ministry of Education (KSA) highly appreciated and issued an award to the company for showing corporate social responsibility through the initiative.

CSR Initiative campaign 1: Clean-up drive campaign (at Half-moon Beach, Al-Khobar, KSA)

- On 5th Nov 2021, Beach Clean-up Drive Campaign" was conducted at Half-Moon Beach, Al Khobar, Saudi Arabia.
- Fully funded by MBTC for all direct costs and indirect costs for conducting a campaign, manpower inclusion for participation, and other supporting activities
- Including business owners and all levels of management personnel, 120+ MBTC employees who participated in beach cleaning activity. All 2400 employees were communicated with





objectives of the campaign through posters and bulletin board notices. Direct participants are provided with certifications.

- Received a great support from the public and the Ministry of Sports, KSA. Voluntarily more than 300+ public people voluntarily participated in the cleaning activity.
- More than 500kgs of waste collected which includes plastic, rubber, clothes, metal, wood, etc.
- Environmental awareness sessions conducted for MBTC employees and public people on the beach area.
- Water samples were collected and tested before and after a beach clean-up drive campaign. We noted significant improvement in the conservation of marine microbes in Halfmoon Beach.
- Saudi Aramco shared the initiatives with other contractors and recommended them to adopt the initiative.



CSR Initiative campaign 2: Each one, Plant one Campaign (at MBTC Project Support Complex, KSA)

- On 11th Dec 2021, "Each one, Plant one Campaign" was conducted in MBTC's project Support complex campus.
- Fully funded by MBTC for all direct costs and indirect costs for conducting a campaign, purchasing trees, plantation and maintenance activities, manpower inclusion for participation, and other supporting activities
- Including business owners and all levels of management personnel, more than 130 MBTC employees participated in tree plantation activity. All 2400 employees were communicated with objectives of the campaign through posters, edocuments, and bulletin board notices.
- 500 trees were planted by MBTC employees on the day of the campaign and totally 3500+ Trees were planted on campus. The maintenance and plantation in contracted to specialized vendor.



The desert area becomes greener now. Trees with medicinal values were planted.



Saudi Aramco appreciated and shared the initiatives with other contractors and recommended them to benchmark the initiative for large-scale implementation.

CSR Initiative campaign 3: Future Green Campaign (at Bilal Bin Ribah School, Al-Hofuf, KSA)

- As a mission towards 10 schools, On 18th Jan 2023, the "Future Green Campaign" was conducted in Bilal Bin Ribah School, Al-Hofuf, KSA. School management discussed and happily accepted the request of MBTC to conduct the campaign and make a green lawn in their campus.
- Fully funded by MBTC for all direct costs and indirect costs for conducting a campaign, purchasing trees, lawn works, plantation and maintenance activities, manpower inclusion for participation, gifts to children, and other supporting activities





Including business owners and all levels of management personnel, more than 100 MBTC employees participated in tree plantation activity.

Including 150+ school children and their parents, school staff, and local public people participated and enjoyed the campaign. Also. MBTC's senior personnel management invited representatives of the Ministry of Education and Saudi Aramco representatives. MOE representatives and Aramco representatives participated happily on the day of the campaign. Environmental protection-related awareness sessions emphasizing the tree plantation are conducted by MBTC to all participants.



- HETC encouraged the kids and participants with gifts and souvenirs (plant saplings).
- All school kids have taken a pledge to create a green and sustainable future by signing the pledge board.
- All 2400 employees have communicated the objectives of the campaign through posters, edocuments, and bulletin board notices.
- 100+ trees were planted by school children and MBTC employees. The plantations, and maintenance of lawns and trees are contracted to specialized vendors.
- 4 The school becomes greenish.
- Saudi Aramco appreciated and shared the initiatives with other contractors and recommended them to benchmark the initiative for large-scale implementation.



CSR Initiative campaign 4: Haradh Tree Plantation Campaign (at MBTC new Camp Facility, Haradh, KSA)

On 24th Jan 2023, the "Haradh Tree Plantation Campaign" was conducted in MBTC's new camp facilities in Haradh.

븆 Fully funded by MBTC for all direct costs and indirect costs for conducting a campaign,

purchasing trees, plantation and maintenance activities, manpower inclusion for participation, and other supporting activities.

- Including business owners and all levels of management personnel, more than a hundred MBTC employees participated in tree plantation activity.
- 500 trees were planted inside the campus by MBTC employees.





ACHIEVEMENTS

ACHIEVEMENTS OF THREE TREE PLANTATION CAMPAIGN INITIATIVES which includes Each one plant one campaign, Future Green Campaign and Haradh tree plantation campaign., its target to reduce the negative environmental consequences of MBTC and its pipeline construction, resulting in the benefits listed below.,

Reduces CO2 and Improves O2



- Over the course of its life, each tree absorbs CO2 from the atmosphere and stores it in its wood. This process removes CO2 from the atmosphere and release O2, and the longer the trees can grow and live, it creates more positive impacts to the eco systems.
- MBTC planted 10,000 trees in a short period of time from 2021 to 2023. During their first seven years (up to 2030) of life, the planted trees will absorb approximately 1617 tons of CO2 and generate 8790 tons of O2.

Increased Awareness



- All the MBTC employees got awareness on need of environmental protection and tree plantation through direct awareness sessions and different communication mediums
- □ 150+ School children educated to plant trees for sustainable future.

Increased Recognition & Reputation



- MBTC recognized and appreciated by Saudi Aramco for successful completion of these events. And Saudi Aramco representatives shared and advises the other contractors to adopt the ideas for large scale results.
- Ministry of education issued an award for successfully completed a Future Green campaign and for spreading awareness among 150+ children of Bilal Bin Ribah School.

Flora and Fauna Formation



This tree plantation campaign has been enriched the biodiversity, creating sustainable ecosystems. Trees also provide safe shelter, food and nesting opportunities for a variety of wildlife.

Protect the Ozone Layer



□ MBTC has planted a tree and its major aid was reducing the ozone layer pollution largely as Co2 is the most common greenhouse gas.



Conserve Energy



This tree plantation campaign was conserve energy through cooling in the hotter months and providing a wind break during winter. As a result, fewer fossil fuels are used to generate electricity for cooling and heating.

Soil and Ground Erosion Reduction



- Planting trees has many positive effects, including reducing soil erosion and protecting soil fertility: trees intercept and store runoff, reducing the volume of runoff. Moreover, tree roots, leaf litter, and vegetative cover stabilize the soil surface, preventing erosion and its consequences.
- □ Reducing the sandstorm pollutions within the facility.

Improve the Water Quality



Roots, tree litter, and vegetative groundcover beneath trees can slow runoff travel, resulting in lower concentration times than associated with bare earth or impervious surfaces, and thus lower peak runoff rates. Furthermore, they provide filtration and vegetative uptake of contaminants, thereby improving water quality.

Medicinal Tree Plantation



MBTC has planted more medicinal plants throughout company project facilities sites at Saudi Arabia (Eastern Provence), including Indian Jujube, Neem, Hibiscus, Pongame oil tree, Tanner cassia, Avartaki, and Date palm. Some human diseases are treated by these plants, including jaundice, inflammation, ulcers, malaria, skin allergies, and prevent the cancer (recent scientific references are given below).





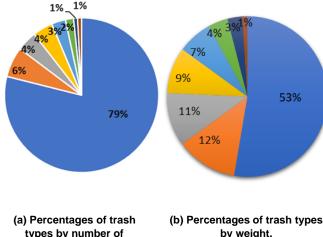
ACHIEVEMENTS OF BEACH CLEAN-UP DRIVE CAMPAIGN INITIATIVES

- Collected 500kg of trashes (wastes) and covered around 4km area.
- Volunteers from Ministry of Sports and Public were actively Participated.
- HETC got an appreciation from Onshore Maintain Potential Project Division (OMPPD), Saudi Aramco.



Scientific achievements for beach cleaning

In this beach clean-up campaign, to identify the types of pollution were followed by standard procedure (Portman and Brennan, 2017).



Items	Weight (%)	Numbers (%)
Plastic	53	79
Rubber	12	6
Cloth	11	4
Paper	9	4
Wood	7	3
Metal	4	2
Glass	3	1
Medical	1	1



(b) Percentages of trash types by weight.

(c) Table insert presents actual percentages

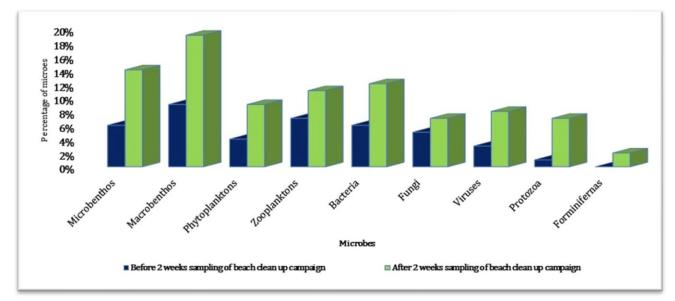
Marine Microbial Enumeration of Beach Water & Sediment

- Beach water and sediment samples were collected twice, before and after a two-week • beach cleanup campaign and samples were transported to a laboratory at 4 degrees Ce
- Enumeration of bacteria and fungi from beach samples (Karthik et al., 2022). •
- Enumeration of planktons from beach water samples (Wetzel and Likens, 2000).
- Enumeration of benthos from beach sediment samples (Roegner et al, 2021). •

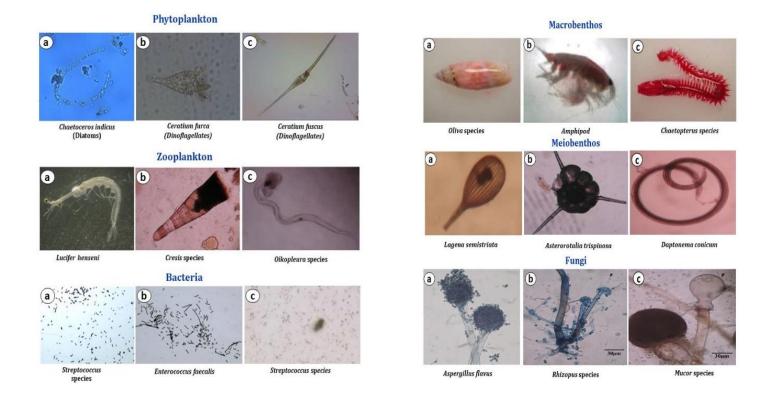


• Microbial colonies were identified based on morphological features and micro-graphed under the light microscope (Leica DM1000) (Karthikeyan et al., 2015).

Improvement in Microbes: Water samples were collected and tested before and after a beach clean-up drive campaign. We noted significant improvement in the conservation of marine microbes in Halfmoon Beach.



Microscopical Imageries of marine microbes in beach cleanup campaign





LONG-TERM PLANNING

- According to the SDG 2030 Agenda, which includes 17 Sustainable Development Goals (SDGs) developed by the United Nations Department of Economic and Social Affairs Disability. The agenda's main goal was to emphasize a holistic approach to achieving sustainable development for all.
- MBTC has done the beach cleaning, tree planting, and wellness tournament demonstrated with a big goal: to benefit blue and green ecosystems, and the animals and people who live in it, contributed to the achievement of 12 of the 17 Sustainable Development Goals.



As the long run we planned to

- Maintain & monitor all trees that we planted
- ∔ Plant 100000 trees within 2030
- 4 Plant a tree in 10+ schools and educate school kids who are our future generations.
- 4 Conduct more clean-up drive campaigns to develop marine pollution.
- 븆 spread awareness to a minimum of 500000 public people.



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