





Introduction

‘Experienced and reliable with a local presence and proven track record’

Introduction

Overview

GlobalTech is a multi-disciplinary engineering consultancy offering the full range of high-end specialist engineering consulting services. GlobalTech has a wealth of experience in the management of projects both large and small, no matter how complex. A byword for diligence and reliability, we have successfully executed more than 300 projects across the Gulf region and wider Middle East.

Each of our diverse specialist services is provided by an autonomous division of GlobalTech. These divisions function independently, incorporating their own teams of highly skilled engineers and technicians – overseen by vastly experienced Section Heads and Project Managers.



GlobalTech specializes in:

- Environmental Impact Assessments
- Safety Audits & Risk Assessments
- Security Risk Assessments and Audits
- Sustainability and Green Building Design
- Green Building Certification and Facilitation
- Energy Management
- Building Commissioning

‘Established in 2004, successfully completed more than 300 projects...’

Divisions

Green Building
Commissioning
Environment
Safety
Security





Introduction

Multi-disciplinary engineering solutions with a practical approach

Introduction

A clear understanding of, and familiarity with, all local & regional regulatory requirements is an essential prerequisite of GlobalTech's work. This knowledge, allied to a strong technical background embracing the most up-to-date international trends and standards, has driven GlobalTech's growth and reputation as a consultancy dedicated to the delivery of specialist engineering solutions.

GlobalTech is currently engaged in a number of small and medium-to-large industrial projects. These include infrastructure developments and buildings ranging from warehouses, villas, commercial and residential blocks... to hotels, hospitals,

complex high rise towers and challenging man-made islands.

GlobalTech is committed to the fulfillment of all client requirements via the highest levels of customer service and a bespoke approach to every single task and project.

GlobalTech's specially-developed work methods deliver practical and optimized solutions which serve the immediate needs of the business community while ensuring strict regulatory compliance and timely progress. GlobalTech is pre-qualified, recognized and approved by local and regional government regulatory authorities, master developers and international organizations.

Highly skilled engineers and technicians – vastly experienced management



Clients / Projects

EMAAR PROPERTIES

DUBAI PROPERTIES

SAMA DUBAI

EMPOWER

DUBAI CHAMBER OF COMMERCE & INDUSTRY

AL MAKTOUM INTERNATIONAL AIRPORT - JEBEL ALI

DUBAI SILICON OASIS

UAE MINISTRY OF ENVIRONMENT & WATER, DUBAI

TAWEELAH A2-POWER & DESALINATION PLANT, ABU DHABI

INTERNATIONAL MEDIA PRODUCTION ZONE - IMPZ



GlobalTech
Safety & Environmental Consultancy



Introduction

‘Protecting clients from costly delays and legal challenges’

Introduction

Commitment

GlobalTech strives to minimize adverse environmental effects, gain public support and secure regulatory approval for projects – thereby protecting our clients from costly delays and legal challenges.

We are committed to the highest professional and ethical standards and have demonstrated our ability to strike a realistic and practical balance which serves the needs of project and community alike.

Infrastructure

The company infrastructure of GlobalTech has been finely honed to best serve the client. Because of the specialist nature of our services, each requires a unique approach and different in-house facilities.

To accommodate these diverse requirements, enhance efficiency and staff development, the company is now constituted into specialist divisions that function as independent units under the umbrella of the main Global Tech management.

‘In-house capabilities with profound technical and local regulatory knowledge’



Clients / Projects

DUGAS
DUBAI OUTLET MALL
BASF-ELASTOGRAN KANOO
METITO
BELHASA SIX CONSTRUCT
AI SAFOOH TRANSIT-‘DUBAI RTA TRAM’
BELHASA DRIVING CENTER
AL TAJIR GLASS INDUSTRIES
GALADARI ENGINEERING
READY MIX BETON





Introduction

Personal and prioritized attention towards every project

Introduction Mission

We are committed to providing practical solutions that foster economic growth and industrial progress while holding true to the principles of sustainable use of the Earth's resources and maintenance of a safe, secure and healthy environment.

Goal

To become the pre-eminent company offering multi-disciplinary Environmental, Sustainability & Green Building Design and Building Commissioning Services to the region.



Vision

Our vision is to be the most innovative and responsive consultancy providing Environmental, Health, Safety and Security Services which address the complex challenges facing business and industry in the Gulf and Middle East.



Clients / Projects

CONMIX LTD.
SHUWEIHAT CMS INTERNATIONAL POWER CO
UNION COOPERATIVE SOCIETY
ENGINEERING CONTRACTING CO. LLC
AL ROSTAMANI
DANUBE BUILDING MATERIALS FZCO
HEPWORTH P.M.E
BAFCO TRADING
SIKA UAE LLC
GOLTENS CO





Green Building

‘ This is the way the world is going ’

Green Building

Sustainability & Green Building Consultancy

Green Building, also known as green construction or sustainable building, is the practice of creating structures using processes which are environmentally responsible and resource-efficient throughout a building's life-cycle – from siting to design, construction, operation, maintenance, renovation and deconstruction. This practice addresses the classical building design concerns of economy, utility, durability and comfort.

GlobalTech has extensive experience and local knowledge of the engineering challenges, having developed precise methods that bridge the gap between international standards, proven methods and practices.



Benefits of Green Building

Environmental Benefits

- Enhances and protects eco-systems and encourages biodiversity
- Improves air and water quality
- Reduces solid waste
- Conserves natural resources

Economic Benefits

- Saves energy and water
- Reduces operating costs
- Enhances asset value and profits
- Improves employee productivity and satisfaction
- Optimizes life-cycle economic performance

Health & Community Benefits

- Improved air, thermal and acoustic environments
- Enhanced occupant comfort and health
- Less strain on local infrastructure
- Improved quality of life
- Reduced greenhouse gas emissions



First Existing LEED Certified Green Building in the Middle East - A Global Tech Project



Green Building

‘It's not about the materials, instruments and modern technology, It's about how you interact with the natural world’

Green Building

Sustainable Master Planning & Management for Large Residential & Mixed Use Facilities

We specialize in feasibility studies undertaken to incorporate sustainable concepts into building design at an early stage. The focus is on harmonizing infrastructure planning with green building principles and requirements. This involves addressing technical, local and regional challenges in addition to the facilities management and operational requirements of a project. GlobalTech is currently engaged in a number of remote and isolated projects including the development of artificial islands.



Green Building Consulting

We help clients to achieve various levels of Green Building certification across their property portfolios, educating the project team to understand Green Building requirements and providing the technical assistance needed to incorporate these requirements into the building design. We also guide the design team in selection of the appropriate materials, systems & equipment for a building as per green building requirements. GlobalTech is familiar with both local and international certification systems and guidelines, including: LEED, DGNB, GRIHA, BREEAM, Green Star, WESDOM, DEWA, DM and Estidama. GlobalTech has facilitated a wide variety of certified projects throughout the region.

Facade & Envelope Design Facilities

We specialize in optimization of facade performance through the design of shading devices, eco-glass specifications and other facade design options which allow PV panels and associated green technologies to interface with building envelope design. We also undertake design review to optimize daylight and energy consumption in accordance with international standards.





Green Building

‘Sustainable and healthy living, a healthy environment – and healthy savings’

Green Building

High Performance Green Building Design Analysis

We carry out building Thermal Performance analysis, Building Form and Orientation analysis, CFD Simulations for complicated building spaces and ventilated facades, Solar Shading and Daylight analysis and Views analysis. We develop design strategies and detailed design reports and simulate building energy systems using state-of-the-art softwares and technologies.

Sustainable Materials & Resource Management

GlobalTech undertakes Lifecycle assessments, examines Recycling and Re-use opportunities and advises on sustainable interiors and the selection of building materials.



Indoor Environmental Quality Assessment & Management

Air Quality assessments, Compliance Reviews with respect to international and local standards, Day Lighting and Artificial Lighting simulation, Ventilation and Thermal Comfort analysis, Volatile Organic Compounds and Acoustics assessments.

Energy Audits & Simulations

HVAC and electrical systems analysis in accordance with international and local standards, building energy simulation, lighting simulation, peak energy demand simulations and modeling, renewable energy alternatives analysis and cost benefit analysis, policy implementation strategies, advice on building intelligent systems and BMS.

Water Audit & Innovative Conservation Methods

Metering, rain water harvesting opportunities, wastewater disposal and re-use opportunities, innovative systems design and sanitary fixtures selections.



Commissioning

‘Reduced operating costs, increased efficiency and marketability’

Commissioning

Commissioning is a systematic process of ensuring that all systems and components of a building or industrial plant are designed, installed, tested, operated and maintained according to precise Owner's Project Requirements, with due importance given to the efficient operation of the systems.

GlobalTech adopts a customized building commissioning process to verify that all the building systems are designed and functionally tested to deliver a high performance building that operates as an efficient integrated system. GlobalTech has extensive experience in Green Building Certification Commissioning for New Construction as well as for Existing Buildings. Our experience and expertise helps us guide our clients towards the development of sustainable and high-performance buildings



which reduce the operating costs, are healthier for occupants and less damaging to the environment. It also helps the projects achieve the Fundamental & Enhanced Commissioning Credits in several rating systems. We are currently involved in the commissioning of existing and new construction projects including individual houses, apartments, warehouses, industrial buildings, hospitals and commercial and residential buildings, as well as high rise towers across the region.

New Construction / Core & Shell Building Commissioning

Efficient commissioning methods can substantially improve a building's design, construction/ installation and operational procedures and practices. Additionally, efficient commissioning measures reduce operating costs, enhance the building's marketability, increase worker productivity and reduce the potential health risks associated with indoor air quality problems.

For New Construction projects, GlobalTech adopts project-specific commissioning procedures as per the following phases of project implementation.



Commissioning

‘ Lower maintenance costs and reduced downtime ’

Commissioning Phases

- **Pre-Design Phase:** Understanding of Owner's Project Requirements & Basis of Design considered for the project.
- **Design Phase:** Technical review of design documents and defining contractor's responsibilities for the construction phase.
- **Construction Phase:** Verify technical submittals and installation of equipments on-site.
- **Post-Occupancy Phase:** Verify the actual performance of equipment in comparison to design standards.

GlobalTech has hands-on experience in preparing the Commissioning-related documentation and uploading same on the online portals.



Existing Building Commissioning

GlobalTech has improvised a systematic investigation process for improving and optimizing an existing building's O&M as detailed below:

- Review and verify as-built drawings relating to the Systems
- Conduct site audits to analyze systems operation
- Develop Retro-Commissioning Plan customized to the project requirements
- Analyze and recommend cost feasible options to implement energy saving measures
- Compile & submit relevant documents to earn certification credits or points

Existing Building Commissioning, also known as Retro Commissioning, usually for energy consuming systems such as:

- Heating, Ventilation & Air-Conditioning System & related controls
- Lighting system & related controls
- Building Management Systems

Commissioning Benefits

The benefits resulting from commissioning include:

- Lower energy & maintenance costs due to efficient system operation
- Safer & more comfortable indoor environment
- Enhanced occupant comfort
- Reduced equipment down time
- Reduced payback period for system costs





Environment

‘Securing project approvals while protecting the environment’

Environment

Environmental Engineering

Environmental Engineering is a multi-disciplinary specialized engineering field that integrates physical and biological sciences including physics, chemistry, biology, soil science, geology, geography and architecture. It then applies these to the study of the environment and the solving of environmental problems. Environmental Engineering provides an integrated, quantitative and inter-disciplinary approach to the study of environmental systems.

Compliance Consulting

In compliance consulting, we ensure that our clients maintain an appropriate measure of compliance with local and international environmental regulations and guidelines.



Environmental Impact Statement / Assessment

An Environmental Impact Statement (EIS) identifies the environmental impacts of a development's action and analyzes a broad set of parameters including biodiversity, environmental noise, water pollution, air pollution, traffic, geotechnical risks, visual impacts, public safety and hazardous substance issues.

An Environmental Impact Assessment (EIA) is a more comprehensive study of the possible impact - positive or negative - that a proposed project may have on the environment. These include wider natural, social and economic aspects as well as the parameters highlighted in the EIS.

GlobalTech specializes in assessing and providing practical and feasible solutions to mitigate any adverse impacts wherever necessary. Our extensive technical knowledge, planning expertise and legislative acumen also enables us to provide integrated planning and Environmental Impact Assessment (EIA) services to both the private and public sectors.



Environment

‘ Preventing pollution is not an option. It’s a legal necessity and good business ’

Environment

Environmental Site Assessment

An Environmental Site Assessment or Due Diligence is an assessment which identifies potential or existing environmental contamination liabilities of an industrial or real estate project.

GlobalTech specializes in both Phase 1 & 2 ESA and has the experience and resources to assess potential soil contamination, groundwater quality, surface water quality and issues related to hazardous substances. This includes definition of any chemical residues within structures; identification of possible asbestos in building materials; inventory of hazardous substances stored or used on site; assessment of mold and mildew, and evaluation of other indoor air quality parameters. We also undertake actual sampling of soil, air,



groundwater and/or building materials as per local and international standards – in addition to more detailed investigations involving chemical analysis for hazardous substances and/or petroleum hydrocarbons.

Air Quality & Noise Management Services

Air Dispersion Modeling: Performed to estimate or predict the concentration of air pollutants or toxins emitted from sources such as industrial plants, vehicular traffic or accidental chemical releases.

Air Quality Monitoring: Conducted in order to ascertain the concentration levels of various pollutants and to compare these levels against the environmental standards laid down by the regulatory authority.

Noise Modeling: Undertaken to estimate the noise exposure levels in an area, especially one with a number of noise/vibration sources. The objective is to implement corrective measures which achieve compliance with the existing noise regulatory standards.

Noise Monitoring: Designed to observe noise levels at a location caused by vibrating sources and ascertain whether these noise levels are compliant with the noise level standards set by the environmental regulatory authority.



Environment

‘Caring for the environment is like caring for our children. It’s not a burden – it’s the right thing to do’

Environment Air Quality Services

- Air Quality Monitoring
- Indoor Air Quality
- Emission Testing
- Air Quality Modeling
- Air Quality Management Studies
- Environmental Compliance & Permitting
- Design, Supervision & Commissioning of Air Pollution Control Systems
- Emission Inventory & Hazardous Air Pollutants Survey
- Air Pollution Health Effects & Epidemiological Studies



Hazardous Waste

- Identification & Characterization
- Feasibility Study of Hazardous Waste Facilities
- Environmental Risk Assessment
- Soil Contamination & Modeling
- Emergency Management Plans
- Medical Waste Disposal Management Plan

Specialty Environmental Studies

- GIS Analysis
- Biological Studies
- Feasibility Studies
- Water Quality Studies
- Master Plan Development
- Planning & Zoning Studies
- Sustainable Planning and Development
- Urban Planning & Development
- Emergency Response Preparedness Plans

Waste Management

- Material Balance Studies for Process Industries
- Waste Audits & Minimization Plans
- Waste Sampling & Analysis
- Preparation of Integrated Solid Waste Management Reports
- Cost Benefit Analysis of Waste Disposal Scheme
- Preparing Waste Profile Documents



GlobalTech
Safety & Environmental Consultancy



Safety

‘Sound health and safety management and successful business performance are complementary’

Safety

GlobalTech provides a wide range of leading Risk Management consulting solutions in Occupational Health and Safety, Human Performance Improvement, Major Hazards and Emergency Management, Construction and Equipment Skills, Offshore and Maritime Training and Fire Safety and Emergency Response.

Occupational Health & Safety Management (OHSM)

Designed to help our clients develop a framework for OHSM that allows for consistent identification and control of health and safety risks; fosters a duty-of-care culture and employee wellbeing; reduces the potential for accidents and complies with relevant statutory requirements, while continually improving its OHSM performance.



To facilitate this process, GlobalTech takes a structured approach to benchmark a client's organization-wide HSE performance and practices, in order to conform to internationally accepted standards

- HSE Management System Development and Implementation
- Site-Specific HSE Plans
- Method Statements
- Safe Work Procedures
- Design of Workplace Safety Systems
- Critical Task Analysis
- Project turnkey HSE Site Management & Consultation

Hazard Identification & Risk Assessments

GlobalTech performs qualitative and quantitative risk assessment studies over a wide spectrum of exposures – from discrete pure-risk exposures to initial baseline assessments in accordance with recognized codes of practices and standards. Some of the more common tools, techniques and aids we employ include:

- Risk Mapping / Risk Profiling & Risk Registers
- Fire Risk Assessments (PAS 79 & NFPA)
- Hazard and Operability Study (HAZOPs)
- Fault and Event tree modeling
- Failure Mode Effects Analysis (FMEA)
- Cost Benefit Analysis and Stress Testing
- Security and Vulnerability Assessments
- Structured 'What If' Analysis
- Visualization Techniques & Cause-and-Effect Diagrams



GlobalTech
Safety & Environmental Consultancy



Safety

‘Knowing and managing your risks provides increased opportunities for business success’

Safety

Business Continuity & Crisis Management (BCCM)

A wide variety of sudden disruptions – internal as well as external – may threaten an organization’s future survival and operability. These present challenges often far beyond the standard emergency response plan for specific events such as fire etc.

GlobalTech takes a holistic approach to BCCM that identifies potential impacts throughout an organization and provides a framework to defend against them. This builds an organization-wide resilience and “effective response” capacity to safeguard the organization’s interests, key stakeholders, reputation, brand and value-creating activities.



- A thorough review of the organization through Business Impact Assessment
- Identifying business critical operations
- Establish Maximum Tolerable Period of Disruption and Recovery Time Objectives
- Defining appropriate BCCM strategies
- Developing appropriate response plans, media plans, communication protocols
- Embedding BCCM principles & practices through awareness and training
- Design & facilitation of simulation exercises.

Auditing & Gap Analysis

The need for ongoing assurance over the effectiveness of Risk Management practices and HSE Management Systems is critical. GlobalTech is ideally placed to undertake a range of HSE auditing and gap analysis for organizations.

- Legal Compliance Audits
- Gap Analysis for conformance to international standards
- Issue-Specific Appraisals & Engineering Reviews, specifically during Project Design & Commissioning phases, Operational Change Management, Hazard Installations
- Perception & HSE Culture Surveys
- HSE Due Diligence
- HSE Training Needs Assessment



Safety

‘ Good safety ensures uninterrupted function when the unexpected happens ’

Safety

Accident Investigation

The successful investigation and analysis of workplace accidents is essential in loss prevention. In identifying the causal factors of incidents and accidents back through the complex interactions that lead up to an adverse event, GlobalTech deploys several modalities and investigative techniques that explicitly identify root causes such as:

- Domino Sequence of Events
- Human Factor Analysis
- Epidemiological Factor Analysis
- Fault Tree Analysis (FTA)
- Management Oversight & Risk Tree (MORT)
- Event Root Cause Analysis
- Technique of Operations Review (TOR)



Our root cause analysis approach is simply designed to help describe what happened during a particular incident; to determine how it happened and to understand why it happened.

Training

Besides the common sense fact that a well-trained workforce is more likely to be conscientious about safety, there are legal and ethical reasons for providing HSE training to staff. GlobalTech's training methods are learner-focused and outcome-oriented. Our carefully-developed training resources are designed to encourage participation, and consist of participant course material, interactive multi-media aids, practical simulations and interactive peer-group sessions.

Our Solutions Include the Following Training

- Modern Safety Management
- Introduction to Health, Safety & Environment
- Hazard Identification & Risk Assessment
- Incident/Accident Investigation
- Construction Safety Management
- Introduction to OHSAS
- Fire Prevention and Protection
- Basic Fire Awareness & Fire Fighting
- Health & Safety Awareness and Induction
- Toolbox Talks
- Safe Use of Machinery
- Electrical Safety
- Hazardous Substances
- Manual Handling





Security

“Protecting people, property, assets and reputation”

Security

Security Consulting

GlobalTech delivers Security Consultancy expertise to Industrial, Governmental, Residential and Commercial sectors via a range of services designed to meet complex and sensitive security challenges. We maintain the highest standards while providing cost-effective services and solutions.

Our experienced consultants clearly understand the requirements of architects, owners, safety directors and facilities managers. We know only too well that security goes far beyond the obvious and can impact on business continuity and customer confidence.

That's why GlobalTech is dedicated to 'total security' – protecting people, property, assets and reputation.



Security Risk Management

Our experienced consultants specialize in the evaluation of Security Risks leading to solutions that are compatible with the requirements of the facility and it's architects/engineers, managers, insurance carriers, facilities management and owners.

- Security Risk Assessment
- Security Vulnerability Assessments
- Risk Mitigation
- Blast and Impact Analysis
- Security Audits
- Threat Analysis
- Security Planning
- Review & formation of Policies & Procedures

Crisis Management

GlobalTech conducts detailed damage assessments and works closely with our clients to develop and implement business continuity plans, recovery plans and step-by-step procedures to ensure damage containment and the speediest possible return to normal operations.

Building Systems Integration

We specialize in the integration of security systems with other diverse building systems to achieve code, performance, economic, service and operational objectives.



GlobalTech
Safety & Environmental Consultancy



Security

‘Our business is letting you go about your business in a safe and secure environment’

Security Counter Terrorism

GlobalTech offers specialist impact effect analysis as a precursor to effective and proven countermeasures against terrorism in all its forms. Based on long regional experience and variances, these most critical services fall under the umbrella of our Risk Management operations.

Communication, Information & Networking

We provide a wide range of solutions in the fields of authentication and access control, data loss prevention, encryption and key management, compliance, security information management and fraud prevention.



Security Technology

We are constantly working for our clients to define, design, develop, procure and oversee the implementation, testing and commissioning of all electronic security systems:

- Access Control Systems
- Closed Circuit Television Systems
- Integrated Security / Fire Systems
- Intruder Detection Systems
- Perimeter Intrusion and Fencing Systems
- Secure Compounds and Safes
- Asset Tagging Systems
- BOQ issuing
- Bid Evaluations and Negotiations
- Manual Preparations
- Documentation of Security Systems and procedures
- Systems Commissioning and Testing

Control Rooms & Command Center Design

GlobalTech designs (from floor to ceiling) control rooms and command centers which not only adopt the best international standards but also factor in all the ergonomic and human-error factors which can affect the efficiency of such critical ‘nerve centers’.

Training

We provide exhaustive training and guidance for the correct operation of security equipment and services.

GlobalTech believes that on-site training of personnel is the most vital element of any security design or installation.



