



AhBe Global Ltd

(Energy & Technology Excellence Company)

CORPORATE BROCHURE & CAPABILITIES

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INTRODUCTION

Mission	To deliver more value-based technology solutions at less cost, and safely.
Vision	Build sustainable shareholder value and contribute to building a better world.
Values	These core values influence the way we deliver technology solutions to stakeholders (Q-TRELICH): • Quality • Teamwork • Respect • Excellence • Learner mindset • Integrity • Continuous improvement • Honesty

Expect More from AhBe Global Ltd.

AhBe Global is an Energy and Technology excellence. Our company has 3 Business Units – Engineering, Procurement & Construction (EPC); Integrated Facilities Management (IFM); and HSSE, New Energies, Risk Assessment & Management (HRAM). In each of these units, We PARTNER to provide SOLUTIONS and deliver VALUE to clients worldwide.

AhBe Global Integrated Services was founded in 2010 as a niche business to fulfill the increasing needs of the Oil, Gas, LNG, Government, and private sector clients. As a multi-disciplinary energy and technology company, we focus on secure and value-adding technology services including Engineering life cycle project delivery, Asset and Facilities value protection and Risk (HSSE &SP) Management including Training of Personnel, Resourcing and Assurance.



AhBe GiS is registered in Nigeria under CAMAC requirements and has affiliation with sister companies in North America and Africa, with regular staff and consultants located across the world and drawn upon at short notice to support global projects. Our overhead is low and is reflected in our profile and charges to clients. Our range of services is supported for the duration of any contract arrangement viz availability technical and competent workforce, provision of machineries for civil and infrastructure works and for necessary project financial support up to USD 500 million lines of credit at any time. We sign technical and consultancy partnership agreements on a case-by-case basis. Our memorandums of understanding (MoUs) outline our service level agreement (SLA) and commitment to clients and stakeholders.

*We deliver solutions with measurable value you can depend upon ...*and you know precisely how integrated Innovation and Technology development business help your bottom line. We develop 'Value Generation Plan (VGP)' that quantifies how we enhance your key business results. We align your VGP with your company vision and integrate with your strategic objectives. We will work with you to suggest and deliver projects that help you meet your expectation. We also monitor and manage all facets of your activities and report in detail how each one is interconnected and helps to:

- Improve efficiency & productivity
- Optimize critical equipment life, reliability and performance
- Reduce waste & Save cost
- Improve regulatory compliance and company reputation

QUALITY MANAGEMENT

AhBe Global is certified to ISO 9001 Quality Management System. We deliver solutions with measurable value, and we integrate Innovation and Technology development to mitigate value erosion. AhBe Global develops a 'Value Generation Plan (VGP)' that is used to quantify value added to businesses.

Our VGP will be aligned with client company vision and strategic objectives. We monitor and manage all facets of your activities and report in detail how each one is interconnected and helps to:

- Improve efficiency & productivity.
- Optimize critical equipment life, reliability, and performance.
- Reduce waste & Save cost.
- Improve regulatory compliance and company reputation.

OUR PARTNERS



Reference for completed works:



OUR SERVICES

EPC: ENGINEERING, PROCUREMENT & CONSTRUCTION



Engineering Design



Procurement & Supplies



Construction – Civil, Pipeline, Tanks, Water Treatment Plants



Mechanical & Maintenance



Electrical & Instrumentation



Decommissioning & Abandonment

EPC: Engineering, Procurement & Construction

Engineering Design

Our Engineering Design services include:

1. **Conceptualization and Ideation:** We embrace the power of ideas. We start with comprehensive brainstorming and conceptualization, where we work hand in hand with clients to refine and crystallize their visions into actionable concepts.
2. **Mechanical and Product Design:** Innovation often rests on the foundation of mechanical prowess. Our engineers specialize in designing products and mechanical systems that push the boundaries of functionality and aesthetics, while ensuring manufacturability, durability, and cost-effectiveness.
3. **Electrical and Electronics Design:** AhBe Global excels in shaping intricate electrical and electronics designs. We generate intelligent, energy-efficient systems that range from circuit designs to complex control systems.
4. **Structural and Civil Engineering:** Our expertise extends to the creation of resilient and efficient structures. From architectural wonders to critical infrastructure, AhBe Global provides structural and civil engineering designs that blend form and function seamlessly.
5. **Sustainability and Innovation:** We are dedicated to designing solutions that prioritize sustainability and eco-friendliness. We integrate innovative materials and techniques to minimize ecological impact.

Why Choose AhBe Global?

1. **Collaborative Expertise:** Our multidisciplinary team brings together experts from various fields, fostering collaboration that leads to holistic and comprehensive design solutions.
2. **Client-Centric Approach:** We understand that each client's needs are unique. AhBe Global is committed to active listening, understanding client aspirations, and tailoring designs that align with the specific needs of our clients and surpass expectations.
3. **Cutting-edge Tools:** Our adoption of the latest technologies ensures that our design services remain at the forefront of innovation, guaranteeing designs that are efficient, future-proof, and aligned with industry trends.
4. **End-to-End Solutions:** From conceptualization to implementation, AhBe Global offers a full spectrum of design services. Our involvement throughout the design-to-production journey guarantees a seamless and successful execution.

AhBe Global's Engineering Design services epitomize the perfect blend of imagination and practicality. With a mission to craft solutions that drive progress and inspire awe, we invite you to partner with us in turning your boldest ideas into engineering marvels that define the future.

Construction – Civil, Pipeline, Tanks, Water Treatment Plants, etc.

Prevention of Scale, Corrosion and Fouling

Scale formation, corrosion and fouling problems and their predicted reflection on the performance of oil, gas and LNG operations are

known worldwide. The poor management or lack of preventative measures can cost industries significant downtime and financial losses.

We use models to predict the fate and effects of such problems on the performance of production plants, and we simulate scale, corrosion, and fouling problems to help the design and frontend engineer adopt preventative measures. The main kinds of scales are those associated with CaSO_4 , $\text{Mg}(\text{OH})_2$ and CaCO_3 , but also SRBs, H_2S and CO_2 .



We work with expert consultants worldwide to apply a combination of controls including:

- Frontend design to engineer out the problem.
- Rust, Oxide, Scale, and Corrosion Remover Fluids
- Inspection, testing, investigation, and cleaning
- Use of inhibitors, coating, etc.

Water, effluent & wastewater Management

We provide detailed and comprehensive services in the following areas:

- water production including boreholes and deep wells,
- water filtration,
- water separation,
- water clarification,
- wastewater treatment and recycling.

We offer pre- or post-cast water tanks and components. We can install real-time online analyzers and we treat for trace and heavy metals. Our products are of highest quality and guaranteed to meet national potable and wastewater treatment requirements.



Our custom-made made water wells and treatment facilities are recommended for annual testing for nitrates and coliform bacteria. Additionally, we offer 'on cause' testing if there is suspicion of a problem or if there is an apparent warning sign.

Water clarification is an essential step in a water or wastewater treatment process. The purpose is to remove suspended solids through gravity separation or settling. The product is a clarified liquid effluent.

We adopt a 3-stage approach include a primary, secondary, and tertiary clarification. The first determines the appropriate technology needed to meet treatment requirements. Second, the finely divided suspended particulates in surface water repel each other since the surfaces are negatively charged. The process of coagulation then results in the neutralization of the charged particles and form flocs. Finally, the water is clarified.

Clarification is an essential step in a water or wastewater treatment process to remove suspended solids through gravity settling, providing a clarified liquid effluent. The health benefits of quality potable water cannot be over emphasized. Any investment in water treatment and management is a good investment for the future. A health workforce is critical to the business and saves cost.

Manufacturing, chemical, and associated oil and gas industries face peculiar challenges with their wastewater management. In addition to meeting their individual process specifications, to maintain product quality, most regional and national governments also set a discharge limit for receiving environments. Together with our technical partners, we offer the following services to meet your needs e.g. total solutions and a complete line of liquid phase and vapor phase granular activated carbon (GAC) adsorption systems and equipment including:

- Liquid Phase Adsorber Systems and Equipment
- Vapor Phase Adsorber Systems and Equipment
- Liquid & Vapor Activated Carbon Drum Filter Units
- Used Activated Carbon Adsorber Systems and Equipment
- Activated Carbon Adsorber Integrated Systems
- Ancillary Equipment for Adsorbers

With both standard and custom drum capabilities, we build our activated carbon equipment to suit your specific needs. This

includes offering complementary equipment and services, spent media management programs, particulate filtration, integrated systems, and equipment rental programs.

The Oil, gas and LNG industries have specific needs for effluent treatment to meet regional and national effluent discharge limits. We adopt innovative chemistries, monitoring, control systems, and expert support for your effluent treatment challenges to meet the varying needs of customers.

Mechanical & Maintenance

Our Service includes:

Holistic Approach: Beyond the traditional corrective maintenance i.e., break-fix model, we integrate predictive and preventive maintenance strategies to ensure that equipment and machinery function optimally, minimizing downtime and maximizing productivity.

Advanced Analytics: Leveraging the power of data, our team harnesses advanced analytics and machine learning to predict maintenance needs accurately. This proactive approach identifies potential issues before they escalate into major problems, resulting in significant cost savings for clients.

Remote Monitoring: AhBe Global shines by providing remote monitoring capabilities. Real-time monitoring of equipment performance and health allows for timely interventions, minimizing disruptions to operations and enhancing overall efficiency.

Tailored Solutions: We understand that every industry and business have unique mechanical requirements. Therefore, our services are customized to cater to specific needs. Whether it's manufacturing, energy, transportation, or any other sector, we partner with our

clients to develop solutions to align seamlessly with their operational demands.

Skilled Workforce: AhBe Global boasts a highly skilled workforce comprising mechanical engineers, data analysts, and technicians. Their expertise is not only in maintaining and repairing machinery but also in optimizing processes, thereby contributing to long-term operational excellence.

Innovation at the Core: Striving to be at the forefront of technological innovation, AhBe Global continually invests in research and development. This ensures that our Mechanical & Maintenance services evolve with the times, integrating the latest breakthroughs to benefit our clients.

The Impact:

1. **Enhanced Productivity:** Reduced downtimes and optimized machinery performance translate into enhanced productivity and higher output for businesses.
2. **Cost Efficiency:** Predictive maintenance strategies curtail unplanned downtime, thus minimizing revenue loss and repair costs.
3. **Operational Reliability:** Businesses can rely on AhBe Global's expertise to keep their mechanical systems running reliably, thereby fostering trust among stakeholders.
4. **Safety First:** Regular maintenance not only enhances performance but also ensures the safety of employees by preventing potential equipment malfunctions.

5. **Environmental Responsibility:** Well-maintained machinery often consumes less energy and resources, aligning with sustainable and eco-friendly practices.
6. **Strategic Focus:** By entrusting their mechanical and maintenance needs to AhBe Global, businesses can divert their focus from routine maintenance to strategic initiatives that drive growth.

Our Mechanical & Maintenance service has effectively evolved to a strategic advantage, with our dedication to technological advancement, skilled workforce, and customer-centric approach.

Electrical & Instrumentation

Key service offerings include:

1. **Design and Engineering:** AhBe Global engineers collaborate with clients to design customized E&I systems that align with their specific requirements and industry standards. This includes creating detailed electrical layouts, instrumentation diagrams, and control system architecture to ensure optimal performance and safety.
2. **Installation and Commissioning:** AhBe Global technicians handle installation and commissioning, seamlessly integrating equipment, instruments, and controls into existing infrastructures. We conduct testing and quality checks to ensure systems are operational and compliant with industry regulations.
3. **Maintenance and Repair:** AhBe Global engineers handle post-installation support services e.g., regular inspections, preventive maintenance, and prompt repairs, to minimize downtime and extend the lifespan of the systems.

4. **Automation and Control Systems:** AhBe Global specializes in designing advanced automation and control systems that enhance process efficiency and reduce human intervention. These systems enable real-time monitoring, data collection, and remote control, fostering safer and more efficient operations.
5. **Safety and Compliance:** E&I systems in industries like oil and gas are subject to stringent safety and regulatory standards. AhBe Global ensures that all systems are designed, installed, and maintained in compliance with relevant industry regulations to guarantee the safety of personnel and assets.

Value Proposition:

AhBe Global's E&I services provide a range of tangible benefits to its clients:

- **Enhanced Efficiency:** Streamlined processes and optimized systems lead to improved operational efficiency, reduced downtime, and increased productivity.
- **Risk Mitigation:** Rigorous adherence to safety standards and comprehensive testing help mitigate operational risks and ensure a secure working environment.
- **Innovation:** AhBe Global's incorporation of cutting-edge technologies allows clients to stay at the forefront of industry advancements, fostering innovation and competitiveness.
- **Cost Savings:** Well-designed and maintained systems lead to reduced maintenance costs, minimized energy consumption, and improved resource utilization.
- **Expertise:** With a team of skilled engineers and technicians, AhBe Global offers unparalleled expertise in E&I, providing clients with top-notch solutions and support.

In an era where industries are driven by technology and efficiency, AhBe Global's Electrical & Instrumentation services provide innovation and reliability. Through a holistic approach that covers design, installation, maintenance, and compliance, AhBe Global aids businesses to achieve optimal performance, safety, and sustainability within their operations. As industries evolve, AhBe Global remains a trusted partner in the journey towards operational excellence.

Decommissioning & Abandonment

Well Abandonment and Plugging solutions – Well & Rigless entry.

Issues:

The key to a successful well plugging and rig less well abandonment is the use of seals that will secure the well long after the abandonment is complete, reducing corporate liability and potential environmental impact. Traditionally elastomer and cement plugs have been used with varying degrees of success and reliability. Due to their material construction, they may deteriorate over time, particularly in corrosive environments. Conventional bridge plugs also have very small expansion ratios, limiting their use to wells with restrictions. High expansion plugs, such as inflatable packers, don't possess the differential pressure capabilities required for many oil well abandonments, nor do they provide a gas tight seal.

Solutions:

With our patented Wel-lok M2M™ technology, we have developed multiple tools for use in plugging and abandonment of oil and gas wells. These tools are known as the Wel-lok M2M TS™ (Tubing Seal) and Wel-lok M2M MXD™ (Maximum Drift). Both tools offer higher expansion ratios than conventional bridge plugs and higher differential pressure ratings than inflatable packers, all while

providing a V0 rated, gas tight seal that cement cannot provide. Though their designs are different, the proven BiSN technology behind them is the same.

Facilities, pipeline & flowline (Oil & Gas) abandonment solutions

The oil, gas and LNG industry are growing exponentially as demand for energy increases worldwide. Activities in well-abandonment, facilities, pipeline, and platform-decommissioning operations will increase simultaneously.

Pipeline decommissioning and abandonment are conducted for two main reasons: A pipeline has reached the end of its useful lifespan and further use is no longer economically viable. The oil and gas reserves it serves has been exhausted and as such, there is no longer a product for conveyance. Same may be the case for facilities. Technically sound well-abandonment practices are essential for long-term environmental protection, especially as regulations become more stringent and complex. Although advanced technologies and techniques bring new meaning to the “permanent” aspects of abandonment work, operators seek to minimize abandonment and decommissioning costs because these expenses are not recouped.

Procurement & Supplies – Supply Chain Management

We organize a custom-made supply chain management that delivers systematic procurement, operations management, and logistics end-to-end.

A.1. Equipment hires – We hire and deploy cranes, payloaders, earth moving vehicles, trucks, tugs, barges, crew boats, vessels,

dredgers, pipeline cleaning and inspection materials such as pigs and remote cleaners on request.

A.2. Original Equipment Manufacturers (OEM): We liaise with the Nigerian Content Development Board to obtain Nigerian Content Equipment Certificate (renewed on a yearly basis) ; we represent OEMs by arrangement with clients, and we engage OEMs to procure and deliver from original sources with appropriate warranties and maintenance support over the life cycle of assets. Some potential OEMs targeted (outcome based on opportunities) are.

- Valves, Pipes, Fittings and Flanges:
 - Bonney Forge; TY Valve; Tyco Valves and controls; Cosmosteel MRC
- Rotating Equipment and Aftermarket
 - AnsaldoThomassen; ITT/Goulds Pumps; Sulzer Pumps; Flowserve; IR Ingersoll Rand.
- Instrumentation & Automation
 - Endress + Hauser; Emerson; Honeywell; Swagelok; Yokogawa;
- Others include Dan-Lock Bolt and Gasket; Frames; Enerflex; ODS Metering System; Twister Supersonic gas solutions; Capstone microturbines.

A.3. Pipe load out from storage/coating plant to site: We provide pipe load out storage prior to load out to project sites. We coordinate the deployment of Pipe Tracking System that will allow the client to validate line pipe inventory online, real time across the globe. This system tool is available for onshore/offshore pipeline project team. The tool enables teams to manage, design and engineer the offshore pipeline construction process with assurance of what inventory is located at the pipe yard facility. Our system can generate a wide range of detailed reports that gives the construction team quick information of materials shipped,

quarantined and remaining pipe at the pipe yard facility. We can also manage.

- Load Out Pipe Inventory Management
- Load Out Manifest Report Generation
- Web Based Reporting Technology
- Barcode Scanning
- Anode Inventory Management
- Spool Fabrication Inventory Management
- Buckle Arrestor Pipe Management
- Pipe Inspection Technology

A.4. Carbon steel and flow lines – Required for hook up of existing wells in brown fields or new wells in green fields. These are usually long lead items and always on the critical path of project delivery. We liaise with OEMs to make life easier for clients.

A.5. Compressors – Build to process at least 1.0 bcf/d of gas and 100 Mbbl/day. Install liquid stabilization systems (LP separators and surge vessels) to allow for delivery of LP off gas and/or associated gas via reciprocating compression, for liquid off take. Booster compressors required to guarantee long term continuous gas off take.

IFM: INTEGRATED FACILITIES MANAGEMENT (IFM)



Asset Management & Maintenance

We work with organizations to develop surveillance protocols, improve existing systems and/or develop state of art alternatives.



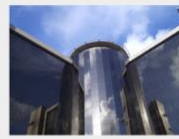
Infrastructure Security & Safety

Our infrastructure facility management solutions aim to help companies run at maximum efficiency.



Resourcing & Manning

We provide human capital support, competence assessment & development to safeguard your assets and improve your bottom line.



Property Management

Our property management team handles operation, control, maintenance, and oversight of physical property and management of land area.

IFM: Integrated Facilities Management (IFM)

Our integrated facilities management and production maintenance solutions aim to help companies run at maximum efficiency. We manage public and private infrastructure, facilities, assets, etc. We stay on budget, automate scheduled maintenance tasks, and improve efficiency and value through advancement in functionality and safety.

- Facilities & Asset maintenance/management.
- Residential and commercial property maintenance management.
- Security services.
- Relocation services and expatriate support (on a case-by-case basis).

Why is Integrated Facilities Management important?

- Single team management and/or outsourcing increases organizational productivity.
- Improve total cost of ownership through a well-designed asset management program.
- Cost saving/reduction via lowering of operating costs related to manpower and materials.
- Seamless tracking of assets data, costs and generate value-driven action.
- Drive HSSE compliance in accordance with regional, national, and applicable regulatory controls .
- Optimize space and asset utility.
- Achieve long-term business growth using technology options, best practices, and technical specialists.
- Extend facility and asset lifetime and implement top quartile planning and scheduling to drive prioritization and efficiencies.

Facilities & Asset Maintenance/Management

The condition of your facilities and assets are evident before the integrity begins to deteriorate. Recognizing the early warnings and adapting your integrity surveillance and maintenance management system will reduce downtime, maximize availability, reduce wastages, and save cost.

At AhBe Global we develop surveillance protocols, improve existing maintenance management systems, and deploy state of art custom-made alternatives, including first level maintenance intervention in the form of help desk and onsite support and second level maintenance management that brings our state of art equipment and personnel to your facilities.

Property Management

In the dynamic world of real estate, property management plays a pivotal role in ensuring the smooth operation, maintenance, and value appreciation of real estate assets. At AhBe Global, we offer comprehensive residential and commercial property management services that cater to the diverse needs of property owners, investors, and tenants.

We focus on efficiency, transparency, and maximizing returns, designed to alleviate the complexities of property ownership and provide peace of mind to clients.

Service Offerings:

1. **Maintenance and Repairs:** Property maintenance is essential for preserving the aesthetic appeal, functionality, and value of properties. AhBe Global takes a proactive stance on maintenance, conducting regular inspections, addressing repair

needs promptly, and coordinating with skilled contractors to ensure the property remains in excellent condition.

2. **Legal Compliance:** Navigating legal regulations and compliance requirements can be intricate, but we excel in this domain. AhBe Global ensures that properties adhere to local housing laws, building codes, and regulations, mitigating potential legal pitfalls.
3. **Facilities & Asset Enhancement:** With an eye on long-term value appreciation, we advise property owners on enhancement strategies, such as renovations, landscaping improvements, and energy-efficient upgrades that can boost property value and attract quality tenants.

Technology Integration: AhBe Global leverages cutting-edge property management technology to streamline operations, enhance transparency, and provide real-time updates to clients. An online portal allows property owners to access maintenance logs, empowering them with the information they need to make informed decisions.

AhBe Global's property management services are more than just a convenience; they are a strategic investment in the success of real estate assets. By offering a holistic suite of services, AhBe Global enables property owners to enjoy the benefits of property ownership without the associated stress. With a proven track record of excellence, AhBe Global stands as a trusted partner in optimizing property performance and ensuring enduring value in a competitive real estate landscape.

Infrastructure Security & Safety Management

The security and safety of critical infrastructure e.g., industrial plants, transportation networks, and communication hubs has

never been greater. AhBe Global, will address the immediate security and safety needs of infrastructure and focus on proactive mitigation measures to mitigate potential threats.

Service Overview:

1. **Threat Assessment and Risk Management:** AhBe Global's team of experts begins by conducting a thorough assessment of the client's infrastructure. This includes identifying vulnerabilities, potential threats, and weak points in the existing security setup. By understanding the specific risks associated with the infrastructure, we can tailor its solutions to provide the highest level of protection.
2. **Advanced Surveillance Systems:** The service includes the installation of state-of-the-art surveillance systems that utilize AI-powered cameras, sensors, and monitoring software. These systems continuously monitor the infrastructure, detecting unusual activities, unauthorized access, and potential security breaches. Real-time alerts are generated, allowing immediate response to any potential threats.
3. **Access Control and Authentication:** AhBe Global implements stringent access control measures to prevent unauthorized personnel from entering critical areas. Biometric authentication, smart card systems, and facial recognition technology ensure that only authorized individuals have access to sensitive locations.
4. **Cybersecurity Integration:** In an era of digital connectivity, cybersecurity is a crucial component of infrastructure security. AhBe Global's service includes cybersecurity protocols that safeguard against cyber threats, including hacking attempts, malware, and data breaches. Continuous monitoring and

updates to security systems ensure resilience against evolving cyber risks.

5. **Emergency Response Planning:** Preparing for emergencies is essential in maintaining the safety and functionality of infrastructure. We develop comprehensive emergency response plans that outline procedures for various scenarios, including natural disasters, accidents, and security breaches. Regular drills and simulations are conducted to ensure that personnel are well-prepared to handle unexpected situations.
6. **Continuous Monitoring and Analysis:** Our services don't stop at implementation. Continuous monitoring, analysis of security data, and regular updates to security protocols are integral to our approach. This ensures that security measures remain effective in the face of changing threats and evolving technologies.

Benefits:

1. **Comprehensive Protection:** Clients can rest assured that their critical infrastructure is protected from a wide range of physical and digital threats.
2. **Proactive Prevention:** By identifying vulnerabilities and implementing proactive security measures, AhBe Global helps prevent potential incidents before they occur.
3. **Expertise:** The service leverages AhBe Global's expertise in security technology and risk management, providing clients with access to top-tier professionals in the field.
4. **Scalability:** The service is scalable and adaptable to various types of infrastructure, from small facilities to complex networks.

5. **Peace of Mind:** With our comprehensive approach, clients can focus on their core operations, knowing that their infrastructure security and safety needs are being expertly managed.

AhBe Global's Infrastructure Security & Safety service reflects a commitment to safeguarding critical infrastructure in an increasingly interconnected world. This service encompasses a range of features designed to address various security and safety concerns and ensure the uninterrupted operation of vital systems. We offer innovative solutions that empower organizations to thrive without compromising security.

Resourcing & Manning – Personnel & Capabilities

AhBe Global Resourcing and Manning team provides human capital support, competence assessment, development and assurance that is geared towards safeguarding your assets and improving your bottom line.

Temporary staffing and manning:

We offer a variety of flexible solutions to meet your specific needs e.g., contingency, time-based, space-based, or skill-based options from various spectrums, from consultants through to temporary employee, based on your varying real-time staffing requirements.

Permanent staffing and manning:

We target and attracts a variety of candidates across a wide range of industry sectors suited to your specific demands. We expertly source and recruit the right people to fit your working environment and corporate culture. We identify candidates that will seamlessly assimilate your culture and become valuable assets to your organization long term.

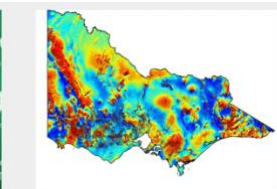
Managed services:

We provide a full range of Turnkey solutions to meet the specific needs and demands of our top of the range clients. We can offer full guarantee of quality and timely delivery within an agreed budget, with our excellent internal technically trained pool of resources, that are logistically placed within projects on a needs basis per project requirements.

Bespoke staffing & manning services:

We offer bespoke staffing and manning solutions to meet the specific needs of some clients. We can work with customers onsite, remotely or from home. We can align within customer overall staffing and budgetary recruitment spend. Additionally, we can also offer solutions to be part of, develop, or solely be an external HR team. We can work with you to OUTSOURCE your staffing and recruitment needs to our team of experts, to cut down on cost significantly. We comply with national, regional regulatory and legal requirements including local content mandate and specifications.

H-RAM: HSSE, RISK ASSESSMENT & MGT (RAM) & RENEWABLE/NEW ENERGIES.

 HSSE Mgmt, Safety Leadership, Process Safety & Reliability We offer services to meet your requirements for assets & projects including role of casual labour at work sites, frontline staff, critical leaders, supervisors & management.	 Emergencies, Crisis & Business Continuity Management Our team proposes state of the art procedures and plans that clarify the 'what, why and how' of incident preparedness and response management systems.	 Innovation in Airborne Surveying, Gravity & Magnetic Interpretation AhBe Global will, upon client request, solicit and work with expert consultants worldwide to offer a complete airborne magnetic and gravity surveying to the oil & gas and minerals industry.
 Remediation Technology We tender services for the remediation of contaminated ecosystems. We can deploy a simultaneous process on any project depending on the peculiarities and demands.	 Climate Change & Carbon Footprint AhBe Global provides tools and solutions involved in managing carbon emissions associated with a business, including its activities, products, and services.	 Organizational & Team Effectiveness We render Governance and Repurposing services which include resetting baseline, zero basing, and working with teams to achieve top quartile performance.

H-RAM: HSSE, Risk Assessment & Mgt (RAM) & Renewable/New Energies.

HSSE, Safety Leadership, Technical/Process Safety & Reliability

Our services.

- Safety Leadership (transformation) Program.
- HSSE management systems (HSE MS) & HSSE & SP Control Framework (HSSE & SP CF) development, implementation, assurance, and certification to external ISO standards.
- Technical Safety Engineering support, Process Safety Review & Assurance, Technical (Safety) Reliability requirements for assets and projects.
- Emergency Response Management, Crisis Management and Business Continuity Plan.
- Standard operating procedures (SOPs)
- Incident investigation – root cause analysis and causal learning
- HSE Case & Management of change documentation and operationalization including Major Accident Hazard (MAH) and as low as reasonably practicable (ALARP) assessment and mitigation.
- Contractor HSSE Assessment.
- Logistic route map and risk assessment.
- HSSE Competence assessment, development, and assurance
- Technical Safety Assessment e.g. SHEPHARD, Fire Release Explosion & Dispersion (FRED), Hazard Identification & Operability Studies (HAZID & HAZOP), Simultaneous Operations (SIMOP), Quantitative Risk Assessment (QRA), Logistics Infrastructure and Resource Assessment (LIRA), Escape, Evacuation and Rescue Analysis (EERA), TR Impairment Assessment (TRIA), Emergency Systems Survivability Analysis

(ESSA), Dropped object analysis (DROP), Occupied Building Risk Assessment (OBRA) & Pre Incident Planning Assessment (PIPA).

- Environmental Assessment and Studies e.g. Environmental Impact Assessment (EIA), Environment, Social performance, and Health Impact Assessment (ESHIA), Soil & groundwater Investigation, Biodiversity Assessment & Planning (BAP), Conservation areas management e.g. nature parks or reserved areas, Seeding and Revegetation program, Physico-chemical and biological Remediation.
- HSSE training including Environmental compliance monitoring and enforcement, Environmental Impact Assessment, Hazardous waste management, E' waste management, soil and ground water investigation, biodiversity, safety supervision, HSSE risk assessment and management, incident investigation and learning, causal learning investigation model, auditing in a technical environmental, HSSE MS and control framework audit, etc.

Emergency Response Management, Crisis Management and Business Continuity Management

We encourage the outsourcing of your emergency response, crisis management and business continuity management to Ahbe Global.



Emergencies:

We document procedures and create plans that clarify the 'what, why and how' of incident preparedness and response management systems, and help organizations distinguish between events, incidents, emergencies, crisis, and business continuity. We define the triggers for escalation; establish individual and team roles, responsibilities, and accountabilities; train and test the processes for effectiveness and sustainability.

We provided several companies with the framework for:

- Preparedness and Response objectives.
- Activity and location description.
- Response centers and equipment inventory.
- Capabilities and competence development and assurance for all cadres of core and non-core team members.
- Response tools and equipment maintenance.
- Assurance and After-Action Reviews (AAR)

Crisis & Disasters:

We prepare crisis management objectives, framework and credible scenarios and recommend the 'Resolve Methodology' for adoption and implementation.

Our Crisis Management framework include:

- Definition of roles and responsibilities and accountabilities.
- Information management protocol.
- Communication systems including call meeting, notification, and log warnings.
- List of relevant stakeholders and contacts details.

- Credible scenarios and escalation triggers.
- Training, reviews, and assurance

Business continuity:

Business continuity whenever required, can be challenging. The planning of a back of office equipped with all the essentials to keep the business running in severe abnormal situations is difficult for obvious financial reasons.

We define a minimum scope of your business and establish the trigger points for escalation, and we propose scenarios under which BCP can be activated. We can conduct Damage Assessment and propose business recovery steps. We also monitor the fallback office, and we work with you to restore operations to normalcy.

Remediation Technology

We deploy simultaneous Mechanical, Physico – Chemical and Biological remediation processes *in-situ* or *ex-situ* in land farming or naturally attenuated sites, depending on site peculiarities and client demands. Our team of consultants have coordinated more than 30 soil, ground water investigations and ecosystem remediation projects.

Our Approach:

Soil remediation involves categorizing all potentially contaminated sites into 2 classes and 5 sub classes as follows:

Classes:

- Soil Pollution (hard land or swamp)
- Water Pollution (free flowing or inter tidal)

Subclasses:

- Hard oil

- Sludge (accessible or non-accessible),
- Free product,
- Polluted sand with low concentrations,
- Groundwater contamination

Above for guidance only – experience/judgement is proprietary.

To obtain field experience and proof of success of proposed methodology, we start our project with:

- Use risk-based assessment criteria to prioritize contaminated sites and prepare an assessment standard e.g. risk to people, communities, environment, and reputation/public nuisance.
- Develop remediation protocol including an agreement on what must be done and what constitutes a clean/remediated site.
- Apply proven remediation tools and techniques .
- Agree on independent certification/assurance.
- Provide guarantee for one season.

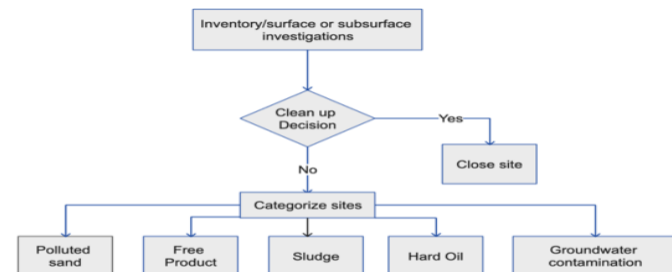


Fig 1. Clean up decision tree:

- more than 1 to 5 m3 liquid free product?
- more than 100-250 m3 free product?
- more than 25 to 50 m3 soil above 5000 mg/kg TPH?
- more than 20% of 400 m2 covered with degraded HCs?

Bioremediation

We conduct initial tests to obtain proof of concept before applying appropriate microbial remediation techniques. For example, waxy oils with high aromatic fractions and high Sulphur content will degrade very slowly compared to non-waxy crudes and in some swamp location where accessibility is an issue, microbial seeding and improving natural attenuation via organic fertilization may be the preferred option.

In some cases, the oil may be caked as a result of stagnation over several years, degradation will be very minimal i.e. the light volatile fractions have been degraded and only the relatively slow to degrade aromatics are left. The preferred remedial action in such situations would be to initially remove as much recoverable soft/sludge/fluid contamination as possible to a land farm, while the caked portion is stabilized by mixing cement/sand to a level that oil is fixed to inert material out of location.

We can group our best approaches into:

- Hard oil – Adopt Bioremediation treatment by ploughing and ensuring adequate mixture of oxygen, water and nutrients. Any caked non degradable portion can be fixed as inert material.
- Sludge – Excavate first and then treat by bioremediation, followed with layering using Ecolayer.
- Free product – Recover from water or swamp environments, then excavate and treat by bioremediation, followed with layering using Ecolayer.
- Polluted sand with low concentrations can be remediated by sand wash, Eco layer and/or treatment by bioremediation.
- Groundwater contamination – Preferred option is natural attenuation if low concentration of contaminants is detected followed by in-situ remediation or ex-situ remediation if concentration of contaminants is high.

- Aqueous environment is best treated via use of dispersant and/or demulsifiers to change from oil in water phase to water in oil phase and thereafter apply bioremediation.

Contamination that can be excavated will be treated in a land-farm, provided that the area is not impeded by low water table. Two options exist for this; either to directly remediate at the contaminated zones or via removal and transport to a central land farm. The latter option is preferred as it allows the land farming to be better controlled and the works can be executed more efficiently, with progress very visible and measurable.



Before Remediation



During remediation



During remediation



Carbon Footprint Assessment/Reduction & Climate Change Management

The energy transition to renewables and achieving a balance of energy mix is more critical now than ever. The energy Trilemma is real.

International, national, and local oil and Gas companies are powering the energy transition by using technologies to move from fossil fuels to renewables energy options. The energy transition will reduce energy-related greenhouse gas emissions through various forms of decarbonization. The drivers for these are both international and local e.g., the signatories to the Kyoto protocol, the Paris accord and the currently adopted COP26.

The challenges of adoption and compliance are enormous. At the company levels, the short-term economic cost is severe and there are no clear directives to achieve the short- and long-term goals of compliance. Therefore, the institution of a carbon and energy management system to achieve sustainability may be lacking.

Data-Driven insights for Energy efficiency and sustainability

Companies are transforming operations to support a mix of assets, to enable effective and quicker decision-making and environmental responsibility, including the use of high-speed communications, smart devices that generate virtual and real-time data. In most companies, these quantum data can be put into good use to understand across board energy sources, to forecast demand, and supply. Making sense of these data remains a challenge and that's where Ahbe Global is involved and provides guidance in calculating footprints and establishing management systems.

Smarter connected sites

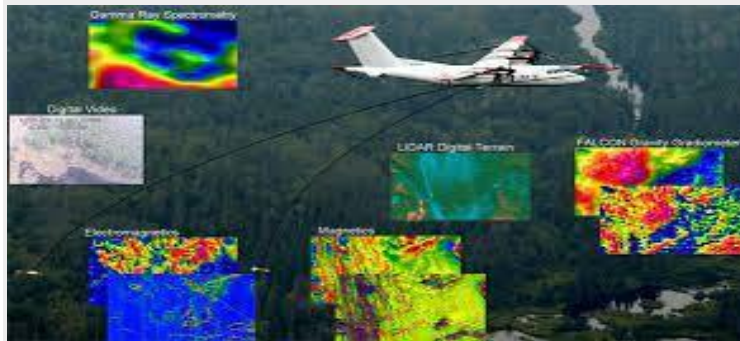
IoT and other predictive analytics can provide users with quicker, smooth, and effective management solutions of the connected assets. Ahbe Global conducts a two-stage assessment to determine the asset components and establish a management system that can be monitored and improved to achieve compliance. Our 4-step approach involves Energy utilization, asset/site uptime, virtual access, and sustainability.

Our Carbon and Energy management is the process of managing the carbon emissions associated with a business. Carbon management applies to a wide variety of business activities, products, and services and can vary depending on the size of the business. The hierarchy of management includes elimination, reduction and offset. The components of our management system are carbon governance, carbon operation, carbon emission tracking and reporting, and carbon engagement and disclosure.

New - Innovation in Airborne Surveying, Gravity & Magnetic Interpretation

Innovation in airborne surveying, gravity, and magnetic interpretation has revolutionized the field of geophysics and exploration. These cutting-edge advancements have significantly improved our ability to study the Earth's subsurface, leading to better resource exploration, geologic mapping, and environmental monitoring.

We offer a complete airborne magnetic and gravity surveying to the oil & gas and minerals industry. Airborne Gravity Survey and gravity gradiometry (AGG) surveys provide information regarding the mass distribution of the subsurface through the measurement of gravity vector spatial derivatives. Our partners and consultants have experience in surveying design, QC, and processing of magnetic/gravity data worldwide.



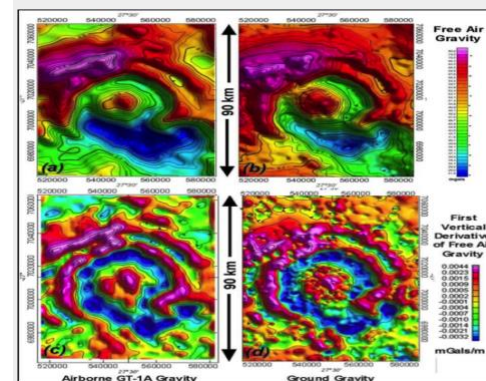
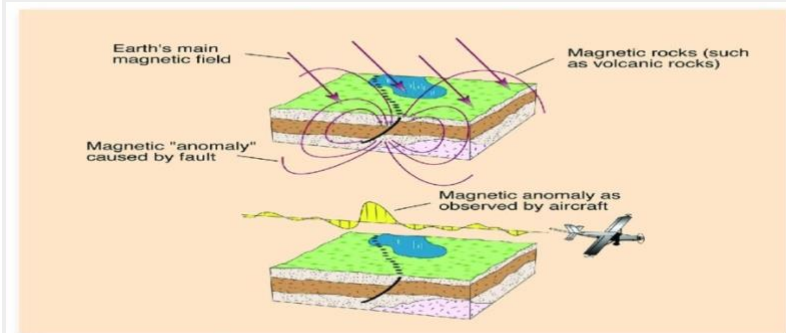
Airborne gravity gradiometry survey

We generate detailed 3-dimensional images from quantitative analysis of magnetic and gravity data of the basement surface. We can coordinate 2-D and 3-D modelling of salt and crustal features.

The science and technology exist to relate existing oil and gas fields to basement structure, basement fracturing or basement movement along pre-existing zones of weakness. This innovative information concerning the basement can prove invaluable in understanding the development of local petroleum systems. It's

cheap and its valuable. The range of gravity and magnetic interpretation services include.

- 2-D and 3-D Forward & Inverse Modelling
- Magnetic / Gravity Data Reduction / Processing
- Magnetic / Gravity Survey Layout and QC
- Depth to Basement Mapping
- Salt Imaging
- Sedimentary Source Analysis
- Qualitative Enhancement Mapping and Digitizing



Organizational & Team Effectiveness - Governance & Repurposing Model

Our Governance and Repurposing Tm team provides services to companies at the cusp defaulting on the delivery of value to shareholders, non-compliance with regulations, etc. These defaults can be traced to systemic weaknesses.

Company 'A' recorded repeated misses on financial targets resulting in the firing of the CEO by board and replacement with a new CEO and Company 'B' had repeated significant safety incidents (3 fatalities and 4 lost time injuries and 2 significant environmental incidents resulting in frontline staff unease, community complaints and shareholder intervention.

Our company was called to explore the causal factors and recommend sustainable improvements in each of the two scenarios above. If you are faced with similar challenges, we recommend that you resist the urge to RESTRUCTURE your organization but instead, call on us assess your organization, the systems, and processes in place versus the people and challenges, and make recommendations.



Our model follows a 3-step approach and if we are unable to deliver you get a refund on your investment in our company.

- Listen, Learn and Lead

Sit in room with the top management in one of their routine meetings and listen to the conversation, understand the organizations current realities (point A) and establish the organizations desired future state (point B). Thereafter, we map the companies risk profile, the stakeholders and their expectation and we prepare a transformation map with staircases from point A to B with clear timeline and accountabilities. We can work the issues directly or as consultants on part time. Either way regular performance reviews and recovery is critical to success.

CONTACT US

Email: info@ahbeglobal.com

Website: www.Ahbeglobal.com

For general inquiries or assistance with [our services](#), please contact us. We'd love to hear from you!

- Facebook
- Twitter
- Instagram
- LinkedIn
- Google

Let's work together.