

# POWERING KUWAIT'S ENERGY TRANSITION

Sustainability Report  
2024



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**Under the leadership of His Highness Sheikh Mishal Al-Ahmad Al-Jaber Al-Sabah, Kuwait is entering a decisive phase in its national transformation.**

The country is strengthening its commitment to a future where economic resilience, environmental sustainability, and human development advance hand in hand. Guided by Kuwait Vision 2035, this transformation aims to elevate Kuwait into a competitive, diversified, and innovation-driven nation—supported by robust institutions, world-class infrastructure, and a thriving private sector.

The national agenda sets out clear ambitions for developing human capital, enabling transparent and effective governance, and nurturing a business environment that rewards innovation and operational excellence. The vision also reinforces Kuwait's commitment to environmental stewardship—ensuring that natural resources are safeguarded and managed wisely for generations to come.

**At KDF, we are proud to contribute to this national journey.**

As one of Kuwait's longstanding industrial players, KDF is actively strengthening operational sustainability, enhancing efficiency across departments, and nurturing local Kuwaiti talent into every dimension of our work. Our efforts reflect our belief that business performance and environmental responsibility must evolve together.

"Kuwait's future depends on building a diversified, productive and sustainable economy—one that protects our resources, strengthens our institutions, and safeguards the welfare of future generations."

**His Highness the Amir Sheikh Mishal Al-Ahmad Al-Jaber Al-Sabah**







**Strategic  
Alignment with  
Kuwait Vision**

**2035**

**&**

**Kuwait's  
Fourth Master  
Plan**

**2040**

KDF's sustainability approach is closely aligned with Kuwait's national development agenda.

Kuwait Vision 2035 sets the strategic direction for economic diversification, environmental responsibility, and human capital development. Complementing this, Kuwait's Fourth Master Plan 2040 provides a long-range framework for physical, industrial, and environmental development.

As a long-standing industrial player in Kuwait, at KDF, we embed sustainability in the way we plan, operate, and improve across departments. We see sustainability as integral to performance, resilience, and national value creation—contributing to the country's transformation while delivering lasting benefits for our stakeholders and communities.

# MESSAGE FROM THE CHAIRMAN



At Kuwait Drilling Fluids, our purpose has always been clear: to help build Kuwait's success story through excellence, innovation, and integrity. Today, that purpose is expanding.

Over the past year, sustainability has evolved from a guiding value into a performance priority across our operations and governance. Since the release of our first report, we have seen meaningful progress: improved energy efficiency in logistics and blending, strengthened traceability and waste reduction in our laboratories, 100% water reuse in our major operations, and a deeper focus on supplier engagement. Across departments, sustainability is being operationalized with rigor—not simply to comply, but to lead responsibly.

For the Board, this transformation is strategic. As custodians of KDF's long-term resilience, we now review sustainability metrics alongside financial indicators. We view ESG not as an obligation, but as a framework that strengthens risk management, reduces operational costs, enhances trust, and positions us competitively within the evolving energy landscape.

Just as important as the numbers is the human story behind them. Our people — powered also by a new generation of Kuwaitis joining us — are embracing a higher standard of responsibility, performance, and pride. Across the Organization, teams are adapting to new expectations and approaching their work with a renewed sense of purpose. As our leadership sets a more ambitious sustainability direction, our people are rising with it. This collective mindset is how we advance together.

We are deeply proud to be a Kuwaiti company: sourcing locally, investing in national talent, and building the technical and operational foundations that enable sustainable performance. Yet we also recognize that our journey is just beginning. The world is changing, and so must we—guided by agility, ambition, and accountability.

This report reflects our conviction that sustainability is not separate from growth, but essential to it. On behalf of the Board, I extend my gratitude to every KDF employee, partner, and client who has contributed to this progress. Together, we are not only supporting Kuwait's present—we are helping shape its future.

*Abdulaziz Alaradi*



When we launched our first sustainability report, we took a critical step forward — not only in measuring our environmental and social impact but in declaring that KDF is ready to lead responsibly. With this second edition, we go further.

Today, sustainability is no longer an external commitment — it is becoming part of our DNA. Across our operations, departments have stepped up to ask: “How can we deliver higher performance while reducing waste, emissions, and risk?” These efforts are already showing results — from our fuel efficiency improvements in logistics and optimized mill and blending operations, to our renewed safety protocols and circular lab practices.

Our strategic focus has been guided by three principles:

Embedding ESG across our operations, accelerating innovation, and creating local value. These are not isolated goals — they are interlinked, and together they power our ambition to lead responsibly, compete effectively, and grow sustainably.

This year, we’ve expanded our emissions coverage from Scope 1 and 2 to also begin preparing our value chain for future Scope 3 engagement. We’re not doing this alone — our suppliers and partners are a vital part of our sustainability journey. By aligning expectations, sharing knowledge, and building joint accountability, we are helping each other become stronger, more agile, and future-ready.

Sustainability is not a destination; it is a system and systems must be built. Based on that we are institutionalizing sustainability through policies, governance frameworks, and digital reporting tools — not as formalities, but as drivers of better decisions, consistent performance, and long-term value creation.

As a Kuwaiti company, our commitment to local sourcing, manufacturing, and talent development remains firm. We are proud to contribute to Kuwait’s sustainable energy leadership and national resilience.

I would like to thank our clients, partners, and KDF teams for contributing to this progress. The journey ahead is long, but we are moving forward with clarity, discipline, and conviction.

At KDF, we see sustainability as a competitive advantage. Our responsibility now is to turn this belief into measurable environmental, economic, and social impact. Let this report reflect not only what we have achieved, but the future we are building, together.

*Abdullah Alaradi*

# MESSAGE FROM THE CEO





# About **Kuwait** **Drilling Fluids**

Kuwait Drilling Fluids (KDF) is a Kuwait-born company shaping the future of drilling fluids and oilfield solutions across the nation's energy sector. Established in 1966, with over 60 years of experience, KDF stands among Kuwait's oldest and most trusted oilfield service providers. From the very beginning, our purpose has been clear: to serve Kuwait with home-grown capabilities, technical depth, and long-term reliability. Over decades of continuous evolution, KDF has become a strategic partner to the country's exploration and production ecosystem, supporting upstream resilience, efficiency, and environmental responsibility.

Through our focus on innovation, operational excellence, and in-country value creation, KDF continues to strengthen Kuwait's energy sector with solutions designed for long-term national impact. Each part of our footprint reflects our commitment to building local capability, nurturing Kuwaiti talent, and providing consistent, high-performance support to Kuwait's oil and gas operations.





# Our Vision

To lead Kuwait's energy future by creating value, driving national progress, and delivering innovative, sustainable oilfield solutions.

# Our Mission

To empower Kuwait's energy sector with high-performance, technology-driven, and locally rooted solutions — built on integrity, sustainability, and operational excellence

*"As we look ahead, we see sustainability as a powerful platform for growth and transformation within the energy sector. It will guide our innovations, unlocking new opportunities for KDF to lead by example, inspire progress, and create positive impact across the industry."*

CEO

Abdullah Alaradi



# Foundation of **Our Legacy**

KDF's strategy is anchored in growth, innovation, integrity and national impact. These pillars shape our operations and guide our ambitions across the energy value chain.

## Our **Core Values**

We Value  
**Excellence**

We Value  
**Our Partners in Success**

We Value  
**Sustainability**

**Integrity** is the infrastructure of our values. We uphold the highest standards of Integrity, and we inspire others to do the right thing.





# Awards & Recognitions

Kuwait Drilling Fluids & Oil Services (KDF) has received multiple national, regional, and international awards in recognition of its excellence in manufacturing, innovation, quality, health & safety, and operational performance.

## A Legacy of Excellence

KDF's dedication to quality, safety, and responsible practices has earned us multiple certifications and awards.



Joint Operations  
HSE Partnership  
Award



Arab Quality  
Award



AMPP Chapter  
Award



Gulf Forum for  
Electricity and Water  
Conservation Award



ASSP GCC HSE  
Excellence Award: Gold  
for Driving Management



ASSP GCC HSE  
Excellence Award: Silver  
For HSE Excellence



MIDDLE EAST & NORTH AFRICA  
STEVIE AWARDS  
الشرق الأوسط وأفريقيا  
Middle East & North  
Africa Stevie® Awards

Stevie  
Gold Award



KOC HSE  
CEO Award



Distinguished  
Manufacturer Award  
– Gulf Expo (Qatar)



Standard:  
ISO 14001:2015



Standard:  
ISO 9001:2015



Standard:  
ISO 45001:2018



His Highness  
the Amir of Kuwait Award  
for Distinguished Manufacturers

# Sustainability The KDF Way

In our second Sustainability Report, Kuwait Drilling Fluids builds on its shift from commitment to integration—embedding environmental, social, and governance (ESG) practices into day-to-day operations across departments. This year, Sustainability is a shared responsibility—embedded within departments, championed by team leaders, and aligned with compliance, efficiency, and business growth objectives.

This operational integration reflects the company's broader strategy: creating in-country value through localization, driving efficiency through innovation and R&D, and delivering long-term impact through sustainability and operational excellence. From reducing waste and emissions to strengthening traceability and improving energy use, the focus is on building a resilient, future-ready organization.



**Health & Safety****100%**

OHS training coverage

**Workforce Diversity****20+**

Nationalities across operations

**Waste Reduction****12%**

Reduction in used oil waste

**Learning & Development****7,994**

Training hours delivered

**Safety Performance****Zero**

Recordable incidents at mud plants

**Water Stewardship****100%**

Water reused in production

**Board Governance****100%**

Governance training completion

**Ethical Conduct****100%**

Code of conduct training completion

**Operational Innovation****24**

Real-time client field laboratories

**Risk Management****189**Operational risks managed  
30% improvement in closure performance

# Sustainability in 2024



# Blending Operations

## Turning Raw Inputs into Field-Ready Fluids

The Blending Department plays a central role in KDF's operations by transforming raw materials into high-performance drilling fluids. It acts as the final link in the production chain before dispatch, overseeing a complex series of processes—from raw material handling and blending, to quality control and packaging. By managing blending tanks, batching protocols, and production timelines, the department ensures that finished fluids meet client-specific requirements and are delivered on time.

## Streamlining High-Volume Production

The blending process is driven by daily and monthly production plans based on forecasted demand. Raw material pick lists are generated through the ERP system, enabling controlled transfer from storage to the blending area, where materials are weighed and verified prior to charging.

All blending tanks are cleaned before each batch using water or solvents depending on product type, with waste safely routed to wastewater tanks or solvent recovery systems. Blending is conducted under defined operating parameters, with QC samples taken for each batch. Approved products proceed to packaging, while non-conforming batches undergo corrective action or rejection, with all activities recorded in a Daily Production Report.





## Sustainability in the Everyday

**Reduced Reblend Frequency:** Thanks to clearer batching parameters and tighter QC integration, fewer batches required rework, translating to less energy and resource waste.

**Improved Production Planning:** Better forecasting and scheduling reduced idle time for tanks and personnel, improving overall resource efficiency.

**Material Optimization:** Through closer alignment with PT and Procurement teams, the department reduced overuse of raw materials and improved first-pass batch success rates.

**Wastewater and Solvent Handling:** Enhanced cleaning protocols ensured safer waste diversion and minimized cross-contamination, contributing to environmental compliance.

## Building for Tomorrow

Expand cross-functional collaboration with Procurement, Logistics, and QC to ensure seamless production-to-delivery workflows.

Introduce more robust planning tools and dashboards to monitor tank utilization and output rates.

Enhance team capability to handle new product formulations and adjust to field demands with agility.

## Sustainability Wins

Maintained high production output while reducing rework through improved batch planning and QC integration.

Optimized use of raw materials through better coordination and forecasting.

Minimized operational waste by improving cleaning and handling protocols.

Strengthened blending as a key sustainability touchpoint through enhanced process discipline and efficiency.



# Lab & Testing

## From Compliance to Innovation: A Strategic Enabler of Quality, Risk Reduction, and Sustainability

KDF's Lab & Testing Department plays a vital role in ensuring product quality, field performance, and operational integrity across the drilling fluids value chain. With 24 field labs operating in real time at client sites and a centralized laboratory managing quality assurance and R&D, the department serves as both a compliance checkpoint and a platform for technical innovation.

By providing full lifecycle traceability—from raw material to field application—lab operations strengthen client trust, product consistency, and environmental responsibility.

## Real-Time Monitoring and Field Performance

In 2024, the department maintained **24 operational field labs** embedded at client sites. These mobile units conduct real-time testing of drilling fluids during operations, ensuring specifications are met and corrective actions are taken promptly. This rapid response capability reduces downtime, improves field performance, and minimizes operational risk.

At the same time, the centralized lab continued to test all batches prior to dispatch and verify post-use returns where applicable, forming a closed-loop quality assurance system.

## Traceability and Digital Data Systems

KDF's lab processes offer end-to-end traceability, capturing batch-level data that links raw materials to their field performance outcomes. This capability—rare in the industry—forms a strong foundation for governance, quality control, and future digital applications.

All data from lab testing is recorded digitally, tagged by batch and product type. This creates a ready-to-use dataset that can be leveraged across reporting, operational decision-making, and client audits.





## Sustainability in the Everyday

While often viewed as a cost center, KDF's lab operations demonstrate measurable sustainability contributions:

**Risk Mitigation as Prevention:** Field testing helps avoid costly failures, fluid loss, or delays—translating to a reduced environmental footprint per job.

**Green Chemistry Practices:** Waste from lab activities is carefully segregated and disposed of, while certain residual chemicals are reprocessed and reused where safe to do so.

**Data for Smart Decisions:** Digitized testing outcomes are helping optimize formulations, reduce overuse of additives, and improve batch quality—leading to more efficient material usage.

## Building for Tomorrow

With a strong digital foundation and growing emphasis on product innovation, the department is now looking ahead:

**AI-Driven Insights:** With structured datasets already in place, KDF is exploring applications of AI for predictive quality alerts, anomaly detection, and trend forecasting.

**Innovation in Formulations:** The lab is positioned to test and validate next-gen fluids, including bio-based and lower-impact alternatives.

**Governance and ESG Reporting:** Lab traceability and batch testing protocols can support ESG audit-readiness, ISO certification, and client transparency requirements.



# Mill Production

## Strengthening Quality, Efficiency & Operational Sustainability

### Transforming Production Through Process Optimization

**Machine Modifications for Higher Output:** Engineering-led upgrades to machinery (including the Gelsomite unit) improved product flow and reduced stoppages, resulting in smoother throughput and fewer operational pauses.

**Precision Bagging Improvements:** Enhancements to the big-bag filling line, including load cells and automated filling parameters, enabled more accurate packaging and reduced rework.

**Designing the Fifth Mill:** KDF's newest mill incorporates learnings from prior units — including SCADA integration, optimized pumps, improved coating, and metal detection systems — to deliver more controlled production with lower

### Sustainability in the Everyday

**Energy Management Awareness:** Room-level monitoring of electricity use provides early visibility into major consumption drivers. Although machine-level sensors are not yet implemented, theoretical data is being used to guide efficiency discussions.

**Dust Control & Material Recovery:** Dust release — most visible in the raw ore milling zone — is increasingly treated as a material loss and safety concern. Re-bagging practices in designated exterior zones help reduce workspace exposure and recover product where feasible.

**Safer Work Environment:** Ventilation systems and PPE use, including ear protection during high-noise stages, continue to support safe operations.





## Building for Tomorrow

**Energy Efficiency KPIs:** Establishing a tracked metric for electricity consumption per ton processed (kWh/ton) will help optimize both environmental performance and cost.

**Digitized Maintenance Logging:** Moving from reactive maintenance to structured preventive logging will support reliability and reduce over-consumption of energy and spare parts.

**Predictive Maintenance Potential:** With future integration of operational data (e.g., temperature, vibration, energy draw), predictive tools could be deployed to anticipate failures before they occur, reducing downtime and material loss.

**Upstream + Downstream Integration:** Better linkages between milling and blending will support clearer cost allocation and improve traceability of performance impacts across departments.

## Sustainability Wins

Delivered mechanical upgrades that improved throughput and reduced maintenance-related downtime

Enhanced filling line accuracy through automation upgrades, reducing packaging losses

Reduced dust exposure in high-activity zones through procedural and design improvements

Initiated energy-mapping and maintenance-logging efforts to support future efficiency KPIs



# Warehousing

## The Backbone of Inventory Discipline and Material Flow

KDF's Warehousing Department ensures the organized, safe, and efficient management of critical materials across the company's operational footprint. The department handles material receipt, storage, issue, transfer, and return, playing a pivotal role in maintaining continuity between factory operations, production, client dispatches, and other departments.

## Building Operational Discipline

Ensuring all stock movements are recorded via GRNs, transfer, and issue documentation through Microsoft Dynamics ERP.

Practicing First-In-First-Out (FIFO) and First-Expired-First-Out (FEFO) protocols across all sites to minimize waste and ensure material quality.

Coordinating with cross-functional teams via regular review meetings and structured communication for demand forecasting, stock alignment, and material traceability.

## Sustainability in the Everyday

**Manual Stock Reviews to Reduce Waste:** Expired or unused materials are identified through monthly manual stock reviews, minimizing write-offs and environmental impact.

**Improved Storage Infrastructure:** Shaded storage and secondary containment facilities were upgraded across all warehouses, particularly for sensitive or hazardous materials.

**Electric Forklift Introduction:** The new Energy Tech Yard warehouse will incorporate electric forklifts to reduce emissions and fuel use.

**HSE Collaboration:** Close coordination with the HSE team has ensured improved safety protocols and compliance with environmental best practices.





## Building for Tomorrow

**Digital System Enhancement:** Plans are underway to either enhance the existing ERP or introduce a WMS in the future, improving automation, real-time visibility, and tracking.

**Sustainable Innovations in Transit & Storage:** The team is assessing the use of solar lighting for open storage zones and route optimization between sites to lower fuel consumption.

**Reusable Packaging Materials:** Efforts are ongoing to expand the use of reusable pallets and packaging to reduce material waste.

**Sustainability Dashboards:** Development of internal dashboards is being considered to monitor material movements and stock aging for data-driven ESG reporting.

## Sustainability Wins

Implemented FIFO/FEFO protocols across all warehouse locations to ensure material quality and reduce waste.

Upgraded infrastructure for safer, more compliant storage of sensitive materials.

Introduced electric forklifts in new warehouses to reduce emissions.

Actively evaluating ERP enhancement and digital tools for future sustainability performance tracking.



# Mud Plant Operations

## The Engine Room of Custom Blending and Service Delivery

KDF's Mud Plant Operations form the backbone of the company's custom blending, storage, and field service delivery. These operations are conducted through **two fully equipped mud plants located in North Kuwait (NKMP) and the Burgan area**, supporting seamless coordination between production, logistics, and on-site servicing. The mud plants manage a critical range of activities, from pre-blend raw material handling to post-blend dispatch and delivery to drilling locations.

With a combined capacity of **52,000 bbl** of liquid capacity and **4,000 MT** of dry storage capacity, the mud plants are designed to support both large-scale and time-sensitive client requirements. Operations are governed by strict HSE, inventory control, and logistics coordination protocols, ensuring reliability, operational resilience, and consistent service quality across remote field locations.

## Expansion and Operational Reinforcement

New blending tanks, doubling liquid blending capacity for faster turnaround times.

Dust collector systems to minimize airborne particulate emissions during dry blending.

Improved warehousing infrastructure, enhancing storage hygiene and accessibility.

Upgraded workflows for material flow, increasing productivity and reducing handling risks.





## Building for Tomorrow

**Digitalization of Mud Tracking Reports:** The team prepares daily mud tracking reports across all active rigs, currently managed manually. Efforts are underway to streamline and digitize this process for improved real-time traceability and reporting.

**Sustainable Expansion Planning:** The new Energy Tech Yard plant is being developed with a focus on safety, efficiency, and lower environmental impact.

**Infrastructure as Service Differentiator:** By investing in clean, efficient, and responsive plant infrastructure, KDF is enhancing its service reliability and strengthening competitive advantage in a client-driven market.

## Sustainability Wins

Doubled liquid blending capacity through infrastructure expansion at Energy Tech Yard.

Introduced dust collector systems to improve air quality and reduce particulate emissions.

Maintained a zero-incident safety record across operational plants.

Strengthened logistics coordination, reducing carbon impact from plant-to-site operations.



# Logistics

## Driving Sustainability at the Heart of Operations

The Logistics Department serves as the **heartbeat of KDF's daily operations**, ensuring seamless coordination between the blending plant, factory, and remote drilling sites. With responsibilities spanning **fleet management, delivery schedules, inventory distribution, and interdepartmental coordination**, the team plays a pivotal role in delivering the right materials to the right locations—on time, every time.

This department operates at a high level of complexity. At peak demand, logistics teams manage up to **48 trips per day** to support just-in-time delivery to well sites. The team's scope also includes maintenance, route planning, and fuel management across a growing fleet that expanded from **11 to 25 trucks in 2023**.

## Scaling Sustainably: From Fleet Growth to Operational Excellence

In 2024, KDF's logistics team expanded its fleet from **11 to 25 trucks** and doubled its driver base to **56 personnel**, targeting over 70 drivers by the end of the year. But this growth wasn't just about scale—it was about efficiency. The department increased its average trips per truck from **1.3 to over 3 per day**, thanks to better planning, routing, and real-time optimization.

## Scaling Sustainability in Everyday Operations

**Fuel Efficiency Gains:** Through regular maintenance, driver training, and route optimization, the department achieved a notable improvement in fuel efficiency—from 1.6 and 2.21 km/litre—representing significant reductions in diesel use and carbon emissions.

**Predictive and Demand-Driven Delivery Models:** The team began transitioning from static delivery schedules to more demand-driven logistics, reducing unnecessary trips and aligning transport operations with real-time consumption patterns at client sites.

**Fleet Expansion with Sustainability in Focus:** With the fleet doubling in size, sustainability planning was embedded into procurement discussions, including considerations for future electrification and alternative transport solutions.

**Data-Driven Optimization:** Leveraging operational data, the team is moving towards digital dashboards that will further optimize dispatching, reduce idle time, and plan for just-in-time delivery windows.





## Building for Tomorrow

Electric Prime Movers as a viable alternative for parts of the delivery chain.

AI-based dispatching and fuel optimization systems that can further reduce environmental impact while improving cost efficiency.

Integrated tracking systems to monitor sustainability performance at the vehicle and route level.

## Sustainability Wins

Achieved a **77% improvement in fuel efficiency** through better planning and vehicle maintenance.

Reduced emissions and operational waste through **optimized trip planning**.

Embedded sustainability into **fleet expansion planning** and **logistics digitization roadmaps**.



# Procurement

## Enabling Responsible Sourcing Across the Supply Chain

The Procurement Department plays a central role in supporting KDF's operational continuity and strategic growth, overseeing the acquisition of raw materials, chemicals, packaging, and outsourced services. The team liaises with over 60 vendors globally and locally, ensuring consistent supply while aligning with internal quality, safety, and delivery requirements.

Operating under a category-based structure (Drilling Chemicals, Industrial Chemicals, Packaging, Transport, General Services, and Equipment), the department manages the full sourcing lifecycle—from requirement planning and PO issuance to vendor communication and contract closure.

## Building Supplier Relationships and Market Intelligence

In 2023–24, the department strengthened its market intelligence and price-tracking capabilities. By monitoring benchmarks across international suppliers and ports, the team ensured competitive pricing and availability amid global disruptions. Strategic vendor development initiatives also continued, with supplier evaluation forms and performance scoring mechanisms helping improve transparency, response time, and consistency.

## Sustainability in the Everyday

Procurement's role in sustainability begins with supplier selection. In 2023–24, the team prioritized:

- ▶ **Local sourcing where feasible** to reduce emissions tied to transport.
- ▶ **Supplier due diligence** via audit documents, ISO certificates, and prequalification forms to improve ESG awareness and compliance.
- ▶ **Traceability of materials** through coordination with Warehousing and Lab teams, helping ensure full chain-of-custody records.

Additionally, packaging procurement included a growing share of reusable drums and IBCs, and all chemical purchases were subject to SDS verification to meet HSE protocols.





## Building for Tomorrow

As part of KDF's roadmap for supplier engagement and ESG integration, the department is working on:

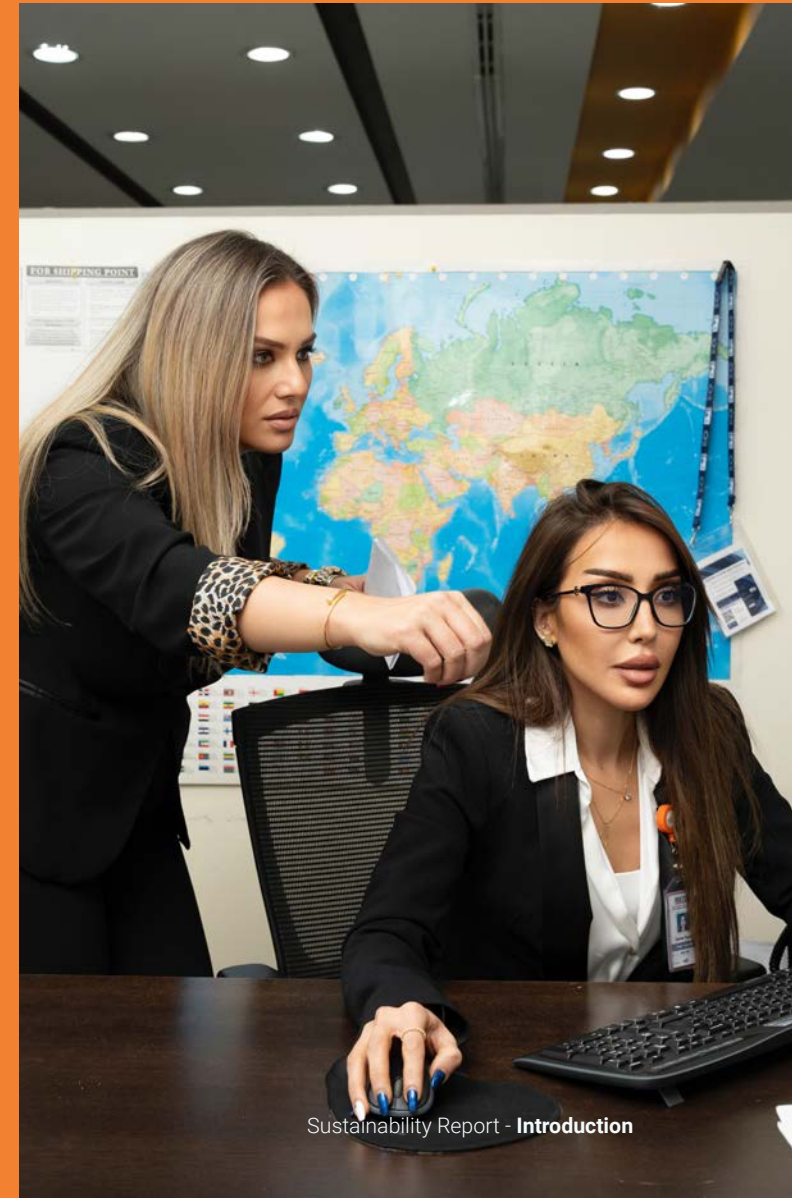
- ▶ Expanding the use of local and regional suppliers to align with Kuwait Vision 2035.
- ▶ Strengthening long-term contracts with suppliers who demonstrate alignment with sustainability goals.
- ▶ Exploring digital dashboards for real-time procurement visibility and sustainability tracking.

## Sustainability Wins

Engaged 60+ suppliers across six strategic categories, improving resilience and vendor diversification.

Strengthened supplier prequalification with a focus on safety, compliance, and quality documentation.

Prioritized local procurement to reduce emissions and support the Kuwaiti economy.



# Production Technologies

## Orchestrating Seamless Delivery from Plan to Field

The Production Technologies (PT) Department lies at the core of KDF's operations, managing the full lifecycle of the company's chemical solutions — from forecasting and tender support to blending, field application, and performance monitoring. The department acts as the central coordination hub, aligning commercial, technical, and operational priorities to ensure timely product delivery, specification adherence, and exceptional client service across all production chemistry lines.

In 2024, PT managed some of the highest operational volumes in recent years without a single client disruption — showcasing the department's agility, technical strength, and real-time responsiveness.

## Connecting Systems, People, and Performance

Weekly PT review meetings to align all key functions — blending, QC, logistics, commercial, and field support — on priorities and risk mitigation.

Enhanced ERP discipline for inventory tracking, production planning, and consumption reporting.

Formalized commercial workflows like forecasting cycles, tender support, and approvals for purchase orders and material requisition forms (MRFs).

Closer QC-Operations collaboration, introducing tighter batch release protocols and clearer testing alignment.

## Sustainability in the Everyday

Forecast accuracy improvements led to optimized stock consumption and reduced excess inventory.

Daily coordination between PT, Blending, and Logistics helped avoid delivery delays and last-minute rescheduling, lowering emissions from unnecessary transport cycles.

Field Chemical Optimization KPIs were tracked to reduce overuse, ensure dosage precision, and monitor product performance — delivering both environmental and financial value.





## Building for Tomorrow

Advancing cost and sustainability optimization across inventory management and field performance.

Strengthening commercial readiness through forecasting, pricing intelligence, and tender strategy.

Enhancing technical and field capabilities to ensure superior product performance and customer confidence.

Developing talent and role clarity to support the department's evolving responsibilities and leadership bench strength.

## Sustainability Wins

Ensured seamless delivery across high-volume operations with zero client disruption.

Introduced tighter planning frameworks and real-time operational visibility.

Improved chemical consumption efficiency through field monitoring and optimization.

Strengthened ERP and forecasting practices for more sustainable stock control and procurement.



# Service & Maintenance

## Ensuring Uptime, Efficiency, and Environmental Compliance

The Service & Maintenance (S&M) Department forms the operational backbone of KDF's value chain. Tasked with managing the availability, reliability, and safety of critical equipment — from heavy vehicles and mobile machinery to production lines and facility utilities — the department plays a pivotal role in enabling uninterrupted operations across Logistics and Production.

## Digitizing Maintenance, Strengthening Readiness

In 2024, the S&M Department achieved a significant operational leap by transitioning to a master asset list and application-driven maintenance system. This shift toward digitalized workflows yielded:

- ▶ **95% average completion rate** of maintenance work orders through the new application.
- ▶ **95% heavy equipment readiness**, ensuring near-continuous availability of critical assets.
- ▶ **88% mill operations readiness**, addressing a historically low-readiness challenge area.

## Sustainability in Daily Operations

S&M's role in sustainability goes beyond traditional maintenance:

- ▶ **Used Oil Reduction:** By switching to synthetic oil, the department cut used oil waste by 12%.
- ▶ **Tire Waste Reduction:** A switch in tire brands reduced material waste and cost simultaneously.
- ▶ **Local Repairs:** Major parts for the mill and rig move operations were repaired in-house, reducing replacement waste and improving turnaround.

Together, these measures demonstrate how operational excellence can drive both environmental and financial benefits.





## Building for Tomorrow

Looking ahead, the S&M Department is setting its sights on:

- ▶ **Full digitalization** of all S&M activities and workflows.
- ▶ **Transitioning to electric-powered equipment** to reduce diesel dependency.
- ▶ **Enhancing waste management practices**, with a focus on circularity and compliance.

One notable initiative from 2024 includes the establishment of a **new vehicle washing facility** — not just for aesthetic value, but also to strengthen KDF's brand presence at client sites.

## Sustainability Wins

Achieved **95% completion** of all work orders through a digital application system.

Reduced **used oil waste by 12%** via transition to synthetic oils.

Lowered **tire waste and costs** through strategic procurement.

Repaired major mill and rig components in-house, minimizing waste and costs.

Built a new vehicle wash facility that enhances KDF's visual presence and brand pride.





# ENVIRONMENT



“Leading the way in  
environmental stewardship,  
advancing Net Zero for a  
synergized planet.”

# Materiality Assessment

Kuwait Drilling Fluids' materiality assessment defines the environmental, social, and governance (ESG) topics that are most relevant to the company's operations, stakeholders, and long-term sustainability objectives. These topics represent the areas where KDF can create the greatest impact—both through responsible business practices and through continuous improvement across its operations.

The materiality framework was established through internal consultations, leadership inputs, and a review of stakeholder expectations, industry benchmarks, and global sustainability standards. The outcome is a focused set of ESG priorities that reflect KDF's operational realities, regulatory environment, and commitment to responsible growth within Kuwait's energy sector.

The materiality matrix plots ESG topics based on their **impact on KDF's business** and their **importance to stakeholders**, providing a structured lens through which sustainability efforts are prioritized and reported. Each topic aligns with KDF's Environmental, Social, or Governance pillars, reflecting a holistic and integrated ESG approach.

# Key Materiality Topics

## Environmental

- ▶ Focus on Net Zero
- ▶ Circular Economy
- ▶ Water Conservation
- ▶ Transition Technologies and Innovation

## Social

- ▶ Health and Safety
- ▶ Talent, Training, and Leadership Development
- ▶ Employee Wellness
- ▶ Diversity, Equity, and Inclusion (DEI)
- ▶ Positive Community Impact

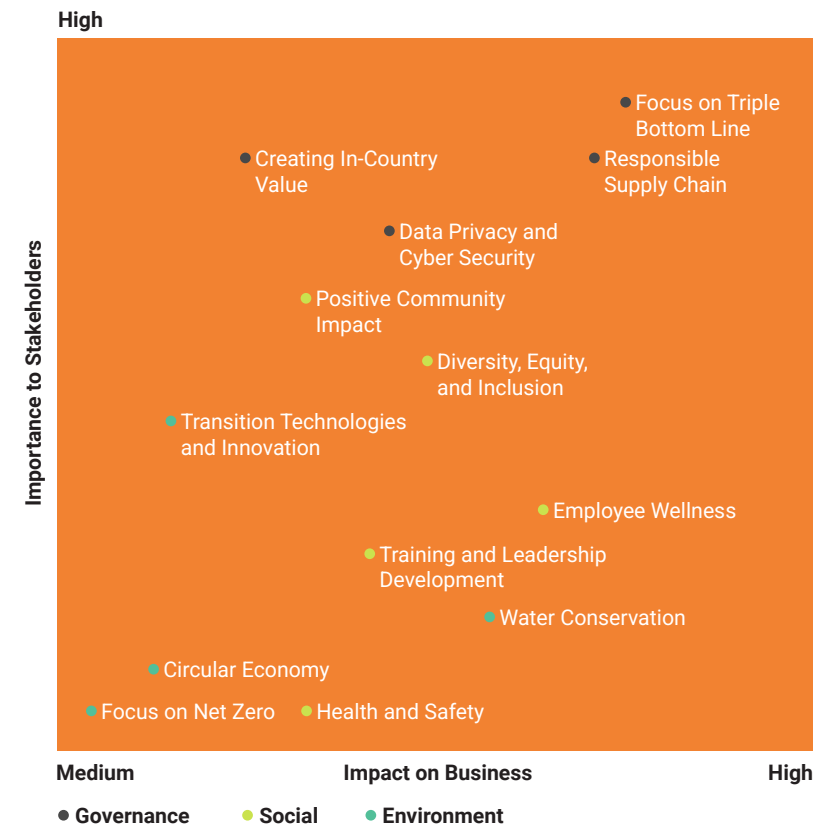
## Governance

- ▶ Responsible Supply Chain
- ▶ Data Privacy and Cyber Security



# Materiality Map

Sr. No.	ESG Pillar	Topic	Rank: Impact on Business	Rank: Importance to Stakeholders
1	Environmental	Focus on Net Zero	1	2
2	Environmental	Circular Economy	4	5
3	Environmental	Transition Technologies and Innovation	10	11
4	Environmental	Water Conservation	7	10
5	Social	Health and Safety	5	3
6	Social	Training and Leadership Development	6	4
7	Social	Employee Wellness	8	6
8	Social	Diversity, Equity, and Inclusion	12	8
9	Social	Positive Community Impact	9	7
10	Governance	Data Privacy and Cyber Security	11	9
11	Governance	Responsible Supply Chain	13	13
12	Governance	Focus on Triple Bottom Line	2	1
13	Governance	Creating In-Country Value	3	12



# Focus on Net Zero

## Our Key Ambitions

### The Sum of the Many

A review of KDF's 2024 activities revealed that, while capital-intensive initiatives deliver substantial sustainability impact, everyday operational decisions play an equally significant role.

By strengthening awareness and decision-making at all operational levels, KDF aims to reinforce its position as Kuwait's leading provider of sustainable solutions for oil excavation. Our ambition is to continue enhancing our capabilities to harness these initiatives for the benefit of the company, our people, and our stakeholders.

### Technology-Driven Sustainability

The development of new solutions with improved environmental performance

is generating new opportunities for KDF to serve its clients with a reduced carbon footprint.

KDF is actively focusing on identifying more sustainable components, solutions, and services that contribute to reducing the overall environmental footprint of its operations and offerings.

### Data-Driven Sustainability

All functions and managers are focused on improving environmental and social performance. KDF has now reached a stage where greater availability and quality of data are essential to drive continuous improvement.

Technologies such as machine learning, sensor-based monitoring,

and artificial intelligence are expected to play an important role in supporting progress toward KDF's zero-emissions ambition.

### Making the Right Choices

As sustainability becomes a core value at KDF, it is increasingly reflected in the evaluation of new projects and initiatives. The Board and the CEO remain committed to continuously strengthening decision-making criteria to ensure that KDF consistently makes the right choices in line with its sustainability objectives.

KDF has embarked on a journey of engineering-driven sustainability and is progressively integrating sustainability as a key performance metric across all functions. By engaging and enabling our people to embed sustainability into everyday work, projects, and strategic decision-making, we have significantly strengthened our pathway toward becoming a net-zero company.

This approach reflects KDF's belief that sustainability outcomes are driven by consistent, informed operational decisions made across the organization.





# Baseline



To ensure consistency, comparability, and accuracy in environmental performance tracking, **2024 has been established as the baseline year** for KDF's energy consumption and greenhouse gas (GHG) emissions. All data presented below is based on verified operational records and calculated using consistent SI units and emission factors.

## Energy Consumption

### Particulars

Current Year (2024)

**Total Scope 1 energy and activity data contributing to direct GHG emissions** (Includes activity data from kilometers driven, lubricants, waste oils, and refrigerants)

**2,098 tons**

**Total fuel consumption from non-renewable sources** (Diesel consumed for operations, fleet, generators, compressors, and forklifts)

**7,041 tons**

**Total electricity consumption (Scope 2)**

**7,118 MWh**

## GHG Emissions

### Particulars

Current Year  
(2024)

**Scope-1 (t CO<sub>2</sub>e)**

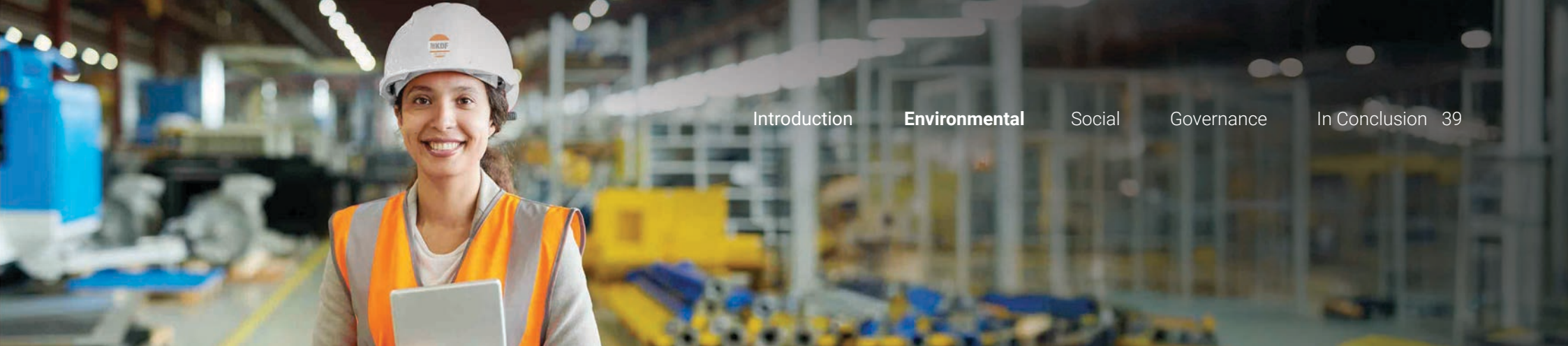
**23,214**

CO<sub>2</sub>e 2.54 kg / liter diesel

**Scope-2 (t CO<sub>2</sub>e)**

**5,994**

CO<sub>2</sub>e 0.842 kg / kWh



# Circular Economy

KDF is committed to embedding circular economy principles across its operations. By maximizing resource efficiency, reducing waste, and promoting the reuse and recycling of materials, KDF minimizes its environmental footprint while continuing to create value through responsible operational practices.

Circular economy considerations are integrated into production processes, asset management, and material use, supporting both environmental performance and operational efficiency.

## Waste Minimization

KDF's waste minimization strategy focuses on reducing waste at every stage of production. Through investments in advanced waste management technologies and partnerships with local recycling facilities, KDF has significantly reduced waste output across its operations.

In specific production processes, the company has achieved a **100% reusing rate for wastewater**, reinforcing its commitment to responsible waste handling and circular resource use.

## Resource Efficiency

KDF prioritizes resource efficiency by optimizing manufacturing processes and using sustainable materials wherever feasible. These efforts have contributed to measurable improvements in water and energy use efficiency across KDF's facilities.

## Product Lifecycle Extension

KDF's equipment and materials undergo regular maintenance and refurbishment to extend their operational lifecycle and reduce the need for new resources. This approach has played an important role in minimizing ecological impact and reducing waste generation.



# Water Conservation

Water is a vital resource, and operating in a **water-stressed region**, KDF recognises the importance of responsible water management across its operations. During the reporting period, water use was monitored through **monthly consumption records and billing data**, ensuring visibility and accountability. Through controlled operational practices and internal reuse, KDF continues to minimise freshwater dependency and avoid external water discharge.

## Water Use and Sources

During the reporting period, KDF withdrew approximately **22,454 m³ of water**, sourced entirely from **municipal supply**. All water used across operations was **fully reused within the system**, with **no external wastewater discharge**.

## Efficient Water Management Practices

Water management at KDF focuses on controlled use and internal reuse across facilities. Water consumption is reviewed through coordination between operational teams and the finance function, supporting responsible use and minimising losses across operations.

## Water Reuse

KDF actively monitors water use and reuse practices across operations, maintaining a **100% water reuse rate in production**, where water is fully utilised within operational workflows.

# We Achieved

## A 100% Water Reuse Rate of Mud Production\*\*

During the reporting period, KDF continued to operate with a **fully internal water-use model**, ensuring that water used in mud production is entirely reused within operations, with **no external discharge**.



# Transition Technologies & Innovation

At Kuwait Drilling Fluids (KDF), innovation lies at the core of our commitment to operational excellence and sustainability. Through cutting-edge technologies, we continue to pioneer advancements that enhance efficiency, reduce environmental impact, and drive progress in Kuwait's energy sector.

KDF is committed to advancing the transition to sustainable energy by investing in innovative technologies and solutions. By embracing transition technologies that reduce environmental impact, enhance efficiency, and support decarbonization efforts, we are contributing to a more sustainable future. Our focus on innovation enables KDF to remain competitive and responsible, meeting the evolving needs of the energy industry and supporting global sustainability goals.

## Encapsulated Scale and Corrosion Inhibitors

This innovative solution has redefined well maintenance by significantly reducing the frequency of chemical injections. With encapsulated inhibitors, injection intervals have extended from every few days to an impressive 6 to 9 months. A successful trial of this technology was conducted, and full implementation by KOC is under review.

## Triad Act Technology

A multifunctional chemical solution that combines viscosity reduction, inhibition, and scale inhibition in a single formulation. This technology minimizes chemical use and reduces transport requirements, contributing to operational efficiency and sustainability.

## Fast-Acting Demulsifier

Designed to improve separator efficiency in high water-cut conditions, this advanced demulsifier has been used successfully in Southeast Kuwait for over six years. It plays a crucial role in optimizing operational performance while minimizing downtime.

## Green Engineering Facility

KDF's state-of-the-art Green Engineering Facility represents a breakthrough in sustainable operations. The facility is dust-free and vapor-free, with efficient waste recycling systems and low energy consumption, exemplifying our commitment to environmental stewardship.

# Rheliant System

The Rheliant System is a new technology flat rheology system that aims to enhance drilling, maintains consistent rheological properties across a broad temperature range, in addition to Improving Equivalent Circulating Density (ECD) management. The system has been successfully utilized to drill the LH-0005 well. The system's ability to sustain solids with flat rheology technology enabled for better barite suspension and lower mud weight; therefore, lowering the number of trucks needed to haul barite to location which minimizes KDF's carbon footprint.

In addition to less treatments to the system as our losses have decreased by 34.7% which resulted in less flatbed trucks needed for this well.

# KLA Guard

High performance water base mud (KLA-GUARD) has been successfully utilized in drilling two wells, SA-1135 and SA-1136, by Group-II Drilling Team 21, on rig SP-28B. On Average, **25 vacuum tankers** are utilized per well in Kuwait. Utilizing our new technology water base systems such as KLA-GUARD reduces the amount of vacuum tankers needed from **25 to zero** which positively impacts the environment and minimizes our carbon footprint. Each well takes approximately one month to complete, so for every rig that drills around **11 to 12 wells per year**, KOC will save around **300 vacuum tanker loads yearly per rig**, which will positively impact the environment.

**This project resulted in a 76% reduction in CO<sub>2</sub> emissions.**





“Empowering economic resilience while contributing to a Net Zero future.”



# SOCIAL



# Social Engagement Directory 2024

KDF's social directory reflects our ongoing commitment to employee wellbeing, community engagement, industry collaboration, and national development. The directory captures key internal, external, and industry-led initiatives across 2024.



## 2024 | Social & Engagement Highlights

Category	Initiative / Event
<b>Community, Education &amp; Outreach</b>	<p>Iftar Saem</p> <p>UAS School Visit for STEM Awareness</p> <p>LEAP Internship Program</p> <p>Blood Donation Camp</p>
<b>Employee Engagement &amp; Well-Being</b>	<p>Celebrating Labor Day</p> <p>"Are You OK?" Sessions for Labor Workforce</p> <p>Internal HSE Award</p> <p>Mill Recognition</p> <p>Continuous Improvement Recognition</p>
<b>Training &amp; Capability Building</b>	<p><b>Training delivered: 7,402 hours</b></p> <p>Training topics included leadership development, risk and compliance, and safety management</p> <p>Training is enabled through the <b>**KDF Learning Hub**</b>, an inclusive platform accessible to all employees</p>
<b>Industry &amp; External Engagement</b>	<p>Participation in the 2nd Gulf Industrial Exhibition, Doha</p> <p>Awarded as a Distinguished Manufacturer at the Exhibition</p> <p>Sustainability &amp; Communications Manager – Panelist at HR Excellence Conference &amp; Awards Kuwait</p>
<b>Awards &amp; Recognition</b>	<p>Amir of Kuwait Award for Distinguished Manufacturers</p>





# Diversity, Equity & Inclusion (DEI)

At Kuwait Drilling Fluids (KDF), Diversity, Equity, and Inclusion are approached through **equitable systems, role-based governance, and merit-driven decision-making**, rather than standalone targets. The Company's focus is on ensuring **fair access to employment, development, and progression opportunities**, supported by standardized hiring practices, transparent salary grading, and consistent performance evaluation processes.

KDF applies an **equal-opportunity approach across recruitment, pay, development, and promotion**, with decisions based on role requirements, competence, and performance, irrespective of gender or nationality. Workforce diversity is monitored across functions and seniority levels, and outcomes related to hiring, progression, and retention are reviewed periodically by HR. The Company has prioritized establishing a **robust baseline and governance mechanisms** to ensure fair representation, pay equity, and a respectful, inclusive workplace.



## Current Gender Distribution of Employees by Seniority Level

Seniority Level	Male	Female
Entry-level positions	197	0
Mid-level positions	149	13
Senior-level positions	15	6
Executive-level positions	9	1
<b>Total</b>	<b>370</b>	<b>20</b>

## Projected Gender Diversity Milestones – 2030

Particulars	Male (%)	Female (%)
Entry-level positions	85%	15%
Mid-level positions	80%	20%
Senior-level positions	60%	40%
Executive-level positions	67%	33%
<b>Total</b>	<b>82%</b>	<b>18%</b>

# Kuwaitization & Local Talent Development

At KDF, we recognize that long-term sustainability is inseparable from the communities in which we operate. As a Kuwaiti industrial company, creating in-country value goes beyond economic contribution — it includes investing in people, skills, and future leadership within Kuwait.

Our approach to Kuwaitization focuses on building capability, nurturing talent, and creating meaningful career pathways for Kuwaiti professionals across our operations. Through targeted hiring, structured development programs, and exposure to technical and leadership roles, we aim to support the growth of a skilled national workforce that can contribute to both KDF's performance and the country's long-term development goals.





# Commitment to Diverse Representation

Kuwait Drilling Fluids (KDF) operates in a highly specialized, technically demanding sector that requires a diverse mix of skills, experience, and operational expertise. The Company's workforce reflects this reality, bringing together professionals from multiple national backgrounds across technical, operational, and corporate roles. This diversity supports knowledge transfer, operational resilience, and the consistent delivery of services across field, laboratory, and headquarters environments.

KDF's approach to diverse representation is grounded in **inclusive recruitment practices, equal-opportunity employment, and merit-based progression**, while also maintaining a strong focus on local employment and national talent development. Workforce composition is monitored across roles and seniority levels to ensure fair representation, compliance with local regulations, and alignment with long-term workforce planning objectives.

## Permanent Employees and Their Nationalities

Table: Nationality Mix of Permanent Employees (Current Year)

Region / Nationality	Number of Employees
Kuwaiti	30
India	118
Egypt	93
United States	2
United Kingdom	1
Other Nationalities	146
<b>Total</b>	<b>390</b>



# Equitable Opportunities for Advancement

Kuwait Drilling Fluids (KDF) is committed to providing equitable opportunities for advancement across its workforce by embedding fairness and consistency into its people processes. Career progression at KDF is guided by role-based requirements, performance outcomes, and demonstrated capability, rather than personal characteristics such as gender or nationality.

Advancement decisions are supported by standardized job descriptions, structured performance evaluations, and documented promotion criteria. Development needs and progression pathways are reviewed through performance appraisals, supervisor assessments, and workforce planning processes, ensuring that employees are assessed consistently and supported according to role readiness and business requirements. While formal succession planning and diversity-linked advancement targets are still evolving, KDF continues to strengthen the governance mechanisms that underpin transparent and merit-based progression.

## Inclusive Work Environment

KDF fosters an inclusive work environment through a combination of clear policies, behavioral standards, and structured grievance mechanisms that promote respect, dignity, and fairness across all levels of the organization. The Company maintains a zero-tolerance approach to discrimination, harassment, and unethical conduct, reinforced through its Code of Conduct, workplace policies, and Health, Safety & Environment (HSE) standards.

Employees are encouraged to raise concerns through established Right-to-be-Heard and grievance channels, which provide a formal process for reporting, investigation, response, and appeal. These mechanisms are supported by non-retaliation commitments and documented case management processes to ensure issues are handled fairly and transparently. Together, these measures contribute to a workplace culture where employees feel respected, supported, and able to perform effectively in both office-based and operational environments.





# Health, Safety & Environment (HSE) at KDF

KDF implements a structured HSE framework that integrates occupational health and safety, environmental management, and quality controls into day-to-day operations. Responsibilities for HSE are clearly defined across management and operational teams, supported by documented procedures, training programs, and regular monitoring.

The Company emphasizes hazard identification, risk assessment, incident reporting, and corrective actions as part of its continuous improvement approach. Safety-critical communications, toolbox talks, and on-site briefings are used to reinforce safe behaviors, particularly in operational and field-based environments. Environmental considerations, including waste handling, emissions control, and resource management, are addressed through established procedures and compliance with applicable regulations.

Together, these measures aim not only to reduce workplace risks and incidents, but also to strengthen operational discipline and stakeholder confidence in KDF's commitment to safe and responsible operations.

## HSE certifications

KDF's HSE management framework is supported by internationally recognized certifications that demonstrate alignment with established standards for quality, occupational health and safety, and environmental management:



### ISO 9001 – Quality Management System

Ensures consistent operational processes, quality control, and continuous improvement across services.



### ISO 45001 – Occupational Health & Safety Management System

Supports the systematic identification and management of workplace health and safety risks.



### ISO 14001 – Environmental Management System Provides a structured

approach to managing environmental impacts, regulatory compliance, and environmental performance.



## HSE Initiatives at KDF

Kuwait Drilling Fluids (KDF) continues to implement a set of Health, Safety & Environment (HSE) initiatives aimed at protecting employee well-being, strengthening operational safety, and supporting consistent performance across office, laboratory, warehouse, and field locations. These initiatives reflect KDF's ongoing commitment to maintaining safe working conditions, particularly in remote and operationally demanding environments, and are embedded within day-to-day operations rather than treated as standalone programs.

### Employee Well-Being & Remote Support

KDF provides essential services and support mechanisms to employees working in remote and high-intensity operational environments. These measures are designed to address both physical well-being and operational accessibility.

- ▶ **Catering and food services:** Provided at remote locations to ensure access to quality meals for employees working in challenging environments.
- ▶ **Remote and hardship allowances:** Extended to eligible employees operating in remote or high-risk locations to support well-being and retention.
- ▶ **Communication and accessibility:** Mobile phones and SIM cards are issued across operational levels to ensure reliable communication, safety coordination, and emergency responsiveness.

### Safety and Transportation Benefits

To support safe commuting and on-site mobility, KDF maintains transportation-related provisions that reduce safety risks associated with travel and site access.

- ▶ **Vehicle allowances:** Company vehicles are provided to employees in on-site and operational roles to support safe transportation.
- ▶ **Annual air ticket benefits:** Offered to eligible employees to support employee well-being, family connectivity, and workforce stability, particularly for senior and long-tenured staff.

### Comprehensive Health Insurance

KDF maintains health insurance coverage as a foundational component of employee welfare.

- ▶ **Self and family insurance benefits:** Health insurance coverage is provided to 100% of employees, with family insurance extended to an additional portion of the workforce, reinforcing KDF's commitment to holistic employee well-being.





## Our Commitment to Environmental Responsibility

KDF recognizes the environmental impact associated with oilfield services and manufacturing operations and remains committed to managing these impacts responsibly. The Company's environmental approach focuses on minimizing waste, controlling emissions, and ensuring compliance with applicable environmental regulations, supported by structured management systems and operational controls.

Environmental responsibility at KDF is integrated into operational planning and execution, with emphasis on prevention, monitoring, and continuous improvement rather than reactive measures.

### Waste Reduction Management

KDF continues to implement waste reduction practices aligned with circular economy principles, with a focus on minimizing waste generation, encouraging material reuse, and supporting responsible waste handling across operations. These practices contribute to reduced environmental footprint while supporting efficient resource use.

### Air Quality & Emissions Control

To safeguard employees and surrounding communities, KDF maintains air quality monitoring and emissions control measures, particularly in high-traffic and operational areas. Dust control and emissions management practices are implemented in line with regulatory requirements and operational risk assessments.

### Health, Safety & Environmental Standards Compliance

KDF's operations comply with established HSE and environmental standards through internal controls, audits, and permitting processes. Environmental and safety risks are systematically identified, assessed, and mitigated as part of routine operational oversight, ensuring compliance and continuous performance improvement.



# HSE Performance and Safety Outcomes

Kuwait Drilling Fluids (KDF) monitors Health, Safety & Environment (HSE) performance through defined indicators covering workplace injuries and occupational health and safety (OHS) training. These indicators provide visibility into safety outcomes across KDF's operational and non-operational workforce and support continuous improvement in risk management, training effectiveness, and compliance.

## Work-Related Injuries

### Work-related Injuries

Safety Incident / Numbers	Current Year (2024)	Past Year (2023)
Total recordable work-related injuries	1	5
Number of fatalities	0	0
High consequence work-related injury or ill health (excluding fatalities)	0	0

## Occupational Health & Safety Training

KDF provides occupational health and safety training to ensure employees and workers are aware of workplace hazards, safe operating procedures, and their responsibilities under KDF's HSE framework.

### Training on Occupational Health and Safety (Employees)

Gender	Total number of employees	Number of employees receiving OHS training	% of employees trained
Male	148	148	100%
Female	18	18	100%

### Training on Occupational Health and Safety (Workers)

Gender	Total number of employees	Number of employees receiving OHS training	% of employees trained
Male	205	205	100%
Female	0	NA	NA



# Training & Development

Kuwait Drilling Fluids (KDF) views training and development as a critical enabler of operational excellence, safety performance, and long-term workforce capability. The Company's approach to learning is designed to build both technical and behavioral competencies across office-based, laboratory, warehouse, and field roles, ensuring employees are equipped to perform safely, effectively, and in line with evolving business requirements.

Training initiatives at KDF are aligned with operational priorities, compliance requirements, and individual development needs. Through a combination of structured programs, on-the-job learning, and blended delivery formats, KDF supports continuous skill development across all levels of the organization.



## Training Overview

Indicator	Value
Total training hours delivered	7,994 hours
Average training hours per employee	20.4 hours
Training delivery scope	Organization-wide

## Training Focus Areas

Training programs delivered during the year addressed the following key areas:

- ▶ Leadership development
- ▶ Technical and operational training
- ▶ Health, Safety & Environment (HSE)
- ▶ Sustainability and waste management
- ▶ Quality and risk assessment
- ▶ Soft skills and organizational effectiveness
- ▶ Project management fundamentals
- ▶ Performance management, including KPI and KPO development

## KDF Learning Hub

KDF is committed to providing equal access to learning and development opportunities across the organization. To support this, KDF has established the KDF Learning Hub—a centralized learning platform accessible to all employees. The platform enables consistent access to training resources, supports blended learning approaches, and helps ensure that capability-building initiatives are delivered fairly and systematically across the workforce.

These include:

- ▶ Leadership development
- ▶ On-site toolbox talks and safety briefings
- ▶ Supervisor-led coaching and hands-on skills training
- ▶ In-person workshops and awareness sessions
- ▶ HSE campaigns and operational training cycles
- ▶ Training registers and attendance tracking for labor-based learning

## Identifying and Prioritizing Training Needs

Training needs at KDF are identified and prioritized through a structured capability-building and performance management process, informed by:

- ▶ Performance appraisals and individual development plans
- ▶ Supervisor assessments of technical and behavioral skill gaps
- ▶ Business and operational requirements
- ▶ Mandatory HSE, regulatory, and compliance training needs
- ▶ Learning utilization data and feedback
- ▶ Talent development and succession planning considerations

Training priorities are determined based on safety criticality, operational impact, and readiness to support new technologies, projects, or client requirements. are determined based on safety criticality, operational impact, and readiness to support new technologies, projects, or client requirements.





# Employee Wellness

At Kuwait Drilling Fluids (KDF), employee wellness is recognized as a critical component of workforce sustainability and operational performance. The Company's approach to wellness is designed to support employees' physical health, mental well-being, and work-life balance, particularly in the context of operational, field-based, and remote work environments.

Wellness initiatives at KDF are implemented through a combination of preventive health measures, awareness programs, supportive workplace practices, and engagement initiatives that contribute to a safe, respectful, and supportive work environment.

## Physical Health Programs

KDF supports employee physical well-being through preventive and workplace-focused health initiatives. These include access to preventive health screenings, ergonomics and workplace safety practices, and health awareness programs aimed at reducing occupational risks and supporting long-term health.

## Mental Health Support

Mental well-being at KDF is supported through a combination of awareness-based initiatives, respectful workplace practices, and access to support mechanisms embedded within the Company's people management processes.

During the year, mental health support was further strengthened through targeted initiatives, including **Organisation-wide "R U OK" Campaign in 3 languages**

**including blue-collar teams.** for both labor and office-based employees, and work-life balance sessions delivered across the organization.

## Work-Life Balance Initiatives

KDF supports work-life balance through workplace practices that consider operational requirements while responding to individual employee needs. Flexible arrangements are provided on a case-by-case basis with management approval, supported by leave policies and benefits aligned with local labor regulations.



## Employee Wellness Initiatives at KDF

Organisation-wide “R U OK” Campaign in 3 languages including blue-collar teams

Breathing Sessions for Blue Collars

Work-Life Balance Sessions / Mental Health Resources

Flexi Working Hours

Sexual Harassment Campaign in 3 Languages

DEI (Diversity, Equity, and Inclusion) Campaign

Preventive Health Screenings

Ergonomics and Workplace Safety

Smoking Cessation Programs

Recreational Regular Activities





# Positive Community Impact

Kuwait Drilling Fluids (KDF) recognizes its role as a responsible corporate citizen and is committed to contributing positively to the communities in which it operates. The Company's approach to community impact focuses on long-term value creation through education, skills development, employability, and responsible engagement aligned with national priorities.

Community initiatives at KDF are closely linked to workforce development, knowledge transfer, and local capacity building, reflecting a belief that sustainable community impact begins with enabling people to access skills, opportunities, and meaningful employment.



## Education & Skill Development

KDF supports education and skill development initiatives aimed at strengthening local talent pipelines and improving employability. These efforts include engagement with universities and technical institutions, early-career programs, internships, and structured graduate pathways such as the Leadership & Engineering Advancement Pathway (LEAP) and Kuwaitisation-focused hiring initiatives.

## Health and Well-being Initiatives in Communities

While KDF's primary health and well-being efforts are focused on its workforce, the Company also supports broader awareness around health, safety, and well-being through responsible workplace practices and engagement activities. These efforts reinforce a culture of prevention, safety awareness, and responsible behavior that extends beyond operational boundaries.

## Environmental Stewardship in Communities

KDF promotes environmental responsibility through operational practices that reduce environmental risk and support sustainable resource use. By embedding environmental controls, waste management practices, and emissions monitoring within its operations, KDF contributes indirectly to environmental protection in the communities it serves.

## Community-Focused Workforce Development Initiatives

As part of its contribution to local economic development and employability, KDF implements the following ongoing initiatives:

- ▶ University and technical school engagement
- ▶ Internship and apprenticeship programs
- ▶ Graduate development and early-career hiring pathways
- ▶ Employer branding and participation in job fairs
- ▶ Knowledge transfer through mentoring and on-the-job training
- ▶ Employee referral programs supporting local hiring
- ▶ Sharing knowledge by participating in industry conferences.

## Strategic Initiatives to Promote and Upskill Employees

- ▶ University and technical school partnerships
- ▶ Specialized staffing agency partnerships
- ▶ Internship programs for practical skill development
- ▶ Employer branding initiatives to support career growth
- ▶ Participation in job fairs and community outreach events
- ▶ Competitive compensation packages
- ▶ Unique employee benefits
- ▶ Employee referral programs
- ▶ Knowledge transfer programs
- ▶ Engagement in job fairs and community events
- ▶ LEAP Program (Leadership & Engineering Advancement Pathway)







# GOVERNANCE

# Leading KDF into a New Era of Sustainable Progress

Kuwait Drilling Fluids (KDF) is governed through a structured and well-defined governance framework that ensures effective oversight, accountability, and ethical decision-making across the organization. The Board of Directors provides strategic direction, oversees management performance, and ensures that business operations are conducted in line with applicable laws, internal policies, and the Company's long-term sustainability objectives.

The governance structure at KDF is designed to support sound risk management, transparency, and responsible leadership. Through regular Board meetings and management reporting, the Board maintains oversight of financial performance, operational integrity, health and safety, human capital, and environmental and social considerations.

KDF's leadership is committed to upholding high standards of corporate governance and fostering a culture of accountability that permeates all levels of the organization. This approach ensures that the interests of shareholders, employees, clients, and other stakeholders are safeguarded while enabling the Company to navigate industry challenges and pursue sustainable growth.



**Abdulaziz Alaradi**  
Board Chairman



**Ehab Alaradi**  
Board Vice Chairman



**Abdullah Alaradi**  
Board Director  
President & CEO



**Vincent Tourillon**  
Board Director



**Doruk Sargin**  
Board Director



**Blake Evans**  
Board Director



**Dr. Amr Kenawy**  
Executive Vice  
President –  
Operations & Business  
Development



**Mohammed  
Abdellatif**  
Executive Vice  
President –  
Commercial & Support  
Services



**Nout Alaradi**  
Vice President –  
Administration &  
Human Resources



**Hatem Elembaby**  
Vice President  
– Finance



# Responsible Supply Chain

Kuwait Drilling Fluids (KDF) is dedicated to building a responsible and resilient supply chain that aligns with its sustainability goals and ethical standards. During the reporting year, KDF began strengthening engagement with suppliers and extended value-chain partners to promote alignment with environmental, social, and governance (ESG) principles. This marks an important step toward integrating sustainability considerations across procurement and supplier relationships, while maintaining transparency, accountability, and operational continuity.

## Core Elements of Responsible Supply

### Sustainable Sourcing & Materials

KDF prioritizes the use of sustainable materials and resources, working with suppliers who share our commitment to minimizing environmental impact. Through sustainable sourcing practices, we reduce our ecological footprint and promote responsible resource use.

### Supplier Code of Conduct

Our Supplier Code of Conduct outlines KDF's expectations for ethical practices, labor standards, and environmental compliance. We collaborate with suppliers to uphold these standards, ensuring that our supply chain aligns with our values.

### Risk Management & Resilience

KDF proactively addresses supply chain risks by diversifying suppliers, ensuring compliance, and maintaining transparency. Our approach enhances supply chain resilience, reduces disruptions, and strengthens partnerships with trusted suppliers.



# Data Privacy & Cyber Security

At Kuwait Drilling Fluids (KDF), robust data protection and cyber security measures continue to be implemented to protect sensitive information and ensure business continuity. During the reporting year, KDF maintained its focus on strengthening internal controls, system resilience, and employee awareness to address evolving cyber risks and data protection requirements.

## Core Elements of Data Privacy & Cyber Security

### Rigorous Data Protection Protocols

KDF employs advanced data protection protocols that ensure all sensitive information is handled securely. Our data privacy policies align with industry standards, allowing us to uphold the confidentiality and integrity of our data.

### Cyber Security Infrastructure

To prevent unauthorized access and protect against cyber threats, KDF has developed a comprehensive cyber security infrastructure. This includes firewalls, encryption, multi-factor authentication, and a robust incident response plan.

### Mandatory Cybersecurity Training

KDF has established cybersecurity awareness and training as a mandatory compliance requirement for all employees. This program ensures that every team member is equipped with the knowledge to identify and mitigate potential threats.





# Goals & Initiatives for 2035

As Kuwait Drilling Fluids (KDF) continues its journey toward sustainability leadership, **2024** marks a critical year in advancing our environmental, operational, and innovation goals. Guided by our commitment to achieving **Net Zero by 2050**, we continue to focus on long-term, measurable initiatives that support responsible resource management, emissions reduction, and operational efficiency.

## Our 2025 Vision:

### Less is Better

Building on the successes of our “Less is Better” strategy, we aim to:

- ▶ **Achieve 100% water reuse in production processes**, ensuring a sustainable and efficient approach to water and resource management
- ▶ **Further reduce packaging emissions**, targeting a 33% decrease compared to previous baselines through expanded bulk delivery systems
- ▶ **Recycle 25% of all packaging materials**, promoting circularity across our supply chain

### Net Zero by 2050:

A Collective Commitment

Achieve:

- ▶ **100% water reuse** in production processes
- ▶ **33% reduction in packaging emissions**, targeting optimized packaging and delivery systems
- ▶ **25% recycling rate** of all packaging materials
- ▶ **33% reduction in Scope 1, 2, and 3 emissions by 2035**
- ▶ Progress toward **carbon-free packaging and delivery**

### Innovation in Every Process

KDF’s commitment to innovation ensures sustainability is embedded in every aspect of our value chain. In collaboration with partners and suppliers, our key focus areas include:

- ▶ Developing low-carbon products and packaging solutions to lead industry-wide transformation.
- ▶ Investing in circular economy practices to support material reuse, recycling, and reduction of environmental footprints.



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## Circularity as a Strategic Objective

KDF has initiated a comprehensive program for continuous improvement, with leadership at every level driving this agenda. By aligning our practices with circularity principles, we aim to:

- ▶ Reduce waste generation.
- ▶ Optimize resource use through innovative recycling programs.
- ▶ Strengthen partnerships that enhance value chain sustainability.







# Concluding with a Commitment to Change

As we conclude our second Sustainability Report, we do so with clarity and confidence in the direction we are taking. This report reflects a year in which sustainability has moved from intention to integration — shaping how we operate, how we make decisions, and how we prepare for the future.

What stands out most this year is not a single achievement, but the collective progress made across our organization. Sustainability is no longer driven by one function or initiative; it is increasingly embedded across operations, logistics, manufacturing, laboratories, and governance. Each department has played a role in strengthening performance while reducing risk, waste, and inefficiency.

This report also represents an important step in building durable systems. Through clearer policies, stronger governance, improved data quality, and structured reporting, we are laying the foundations for long-term accountability and continuous improvement. These systems will allow us to track what matters, learn faster, and respond more effectively as expectations evolve.

Our commitment extends beyond our own operations. As we look ahead, collaboration will be critical — with our employees, clients, suppliers, and partners. Sustainability is a shared responsibility, and progress depends on transparency, alignment, and trust across the value chain.

This report is not an endpoint. It is a reference point — marking how far we have come, and reinforcing our commitment to go further. With discipline, innovation, and purpose, we will continue building a business that delivers value today while preparing responsibly for tomorrow.

*Abdullah Alaradi*

“KDF: Building a legacy of ethical leadership, driving progress toward Net Zero.”



# Appendix – Methodologies & Disclosures

To ensure accuracy, consistency, and transparency, this section outlines the methodologies, frameworks, and standards used in compiling the data and metrics presented in this Sustainability Report. KDF adheres to globally recognized guidelines and is committed to openly sharing its approach to sustainability reporting.

## Data Collection & Methodology

Data for this report was gathered through KDF's internal systems, departmental records, operational logs, and partner-provided information. Inputs were collected across environmental, social, economic, and governance functions to ensure alignment with industry standards and internal controls.

Where relevant, data was consolidated through centralized reporting processes to improve consistency, traceability, and comparability across reporting periods.

## Calculation Methods

**Environmental Metrics:** Emissions, water usage, and waste-related metrics were calculated using internal operational data and recognized industry methodologies, including principles aligned

with the Greenhouse Gas (GHG) Protocol where applicable.

**Social Metrics:** Employee engagement, training hours, health and safety indicators, and community-related metrics were derived from internal HR systems, HSE records, and program participation logs.

**Governance Metrics:** Metrics related to local procurement, operational efficiency, governance structures, and compliance were based on financial records, procurement data, internal audits, and supplier assessments.

## Data Assurance

KDF is committed to strengthening data reliability and integrity. Internal reviews and cross-functional validation processes were conducted to ensure consistency and accuracy. Where feasible, data

has been reviewed against historical baselines and operational benchmarks. KDF continues to enhance its internal controls and reporting systems to support future third-party verification.

## Disclosure Standards

**Global Reporting Standards** This report aligns with internationally recognized reporting standards, including the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB), to support transparent, comparable, and decision-useful sustainability disclosures.

**Compliance with Local Regulations:** All metrics disclosed in this report comply with relevant Kuwaiti environmental, social, and governance regulations. KDF ensures adherence to applicable national laws, regulatory requirements, and industry standards across its operations.

# GRI Content Index: 2024 Reporting Year

GRI Standard	Disclosure	Suggested Applicability / Coverage	Disclosure Reference (Provisional)
GRI 2: General Disclosures			
2.1	Organizational details	Yes	2024 Sustainability Report, Page 9 – About Us Section
2.2	Entities included in the organization's sustainability reporting	Yes	Only 1 entity – Kuwait Drilling Fluids & Oil Services
2.7	Employees	Yes	2024 Sustainability Report, Pages 47-48 – Diversity, Equity and Inclusion
2.9	Governance structure and composition	Yes	2024 Sustainability Report, Page 62 – Governance
2.10	Nomination and selection of the highest governance body	Yes	2024 Sustainability Report, Page 62 – Governance
2.11	Chair of the highest governance body	Yes	2024 Sustainability Report, Page 62 – Governance
2.12	Role of the highest governance body in overseeing the management of impacts	Yes	2024 Sustainability Report, Page 62 – Governance
2.14	Role of the highest governance body in sustainability reporting	Yes	2024 Sustainability Report, Page 62 – Governance
2.22	Statement on sustainable development strategy	Yes	2024 Sustainability Report, Pages 13-14

## Material Topics

### GRI 3: Material Topics

3.1	Process to determine material topics	Yes	2024 Sustainability Report, Pages 35 – Materiality Assessment
3.2	List of material topics	Yes	2024 Sustainability Report, Pages 36 – Materiality Assessment



## Materials

### GRI 301: Materials 2016

301.2	Recycled input materials used	Yes	2024 Sustainability Report, Page 38 – Environment / Circular Economy
301.3	Reclaimed products and their packaging materials	Yes	2024 Sustainability Report, Page 14 – Environment / Circular Economy

## Energy

### GRI 302: Energy 2016

302.1	Energy consumption within the organization	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
302.2	Energy consumption outside of the organization	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
302.4	Reduction of energy consumption	Yes	2024 Sustainability Report, Page 38 – Energy Consumption

## Water and Effluents

### GRI 303: Water and Effluents 2018

303.1	Interactions with water as a shared resource	Yes	2024 Sustainability Report, Page 40 – Water Conservation
303.2	Management of water discharge-related impacts	Yes	2024 Sustainability Report, Page 40 – Water Conservation
303.3	Water withdrawal	Yes	2024 Sustainability Report, Page 41 – Water Conservation
303.4	Water discharge	Yes	2024 Sustainability Report, Page 41 – Water Conservation

## Emissions

### GRI 305: Emissions 2016

305.1	Direct (Scope 1) GHG emissions	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
305.2	Energy indirect (Scope 2) GHG emissions	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
305.5	Reduction of GHG emissions	Yes	2024 Sustainability Report, Page 38 – Energy Consumption

## Waste

### GRI 306: Waste 2020

306.1	Waste generation and significant waste-related impacts	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
306.2	Management of significant waste-related impacts	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
306.3	Waste generated	Yes	2024 Sustainability Report, Page 38 – Energy Consumption
306.4	Waste diverted from disposal	Yes	2024 Sustainability Report, Page 38 – Energy Consumption

## Employment

### GRI 401: Employment 2016

401.2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Yes	2024 Sustainability Report, Page 57-58 – Employee Wellness
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## Occupational Health and Safety

### GRI 403: Occupational Health and Safety 2018

403.1	Occupational health and safety management system	Yes	2024 Sustainability Report, Pages 52– Health, Safety and Environment
403.2	Hazard identification, risk assessment, and incident investigation	Yes	2024 Sustainability Report, Page 54 – Health, Safety and Environment
403.3	Occupational health services	Yes	2024 Sustainability Report, Page 53 – Health, Safety and Environment
403.5	Worker training on occupational health and safety	Yes	2024 Sustainability Report, Page 54 – Training and Development
403.6	Promotion of worker health	Yes	2024 Sustainability Report, Page 54 – Training and Development
403.8	Workers covered by an occupational health and safety management system	Yes	2024 Sustainability Report, Page 54 – Health, Safety and Environment

## Training and Education

### GRI 404: Training and Education 2016

404.1	Average hours of training per year per employee	Yes	2024 Sustainability Report, Page 55 – Training and Development
404.2	Programs for upgrading employee skills and transition assistance programs	Yes	2024 Sustainability Report, Page 55 – Training and Development
404.3	Percentage of employees receiving regular performance and career development reviews	Yes	2024 Sustainability Report, Page 55 – Training and Development

## Diversity and Equal Opportunity

GRI 405: Diversity and Equal Opportunity 2016

405.1	Diversity of governance bodies and employees	Yes	2024 Sustainability Report, Page 48 – Diversity, Equity and Inclusion
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## Security Practices

GRI 410 / GRI 418 (Contextual)

	Management of material topics (data privacy & security practices)	Yes	2024 Sustainability Report, Page 64 – Data Privacy and Cyber Security
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## Customer Health and Safety

GRI 416: Customer Health and Safety 2016

416.1	Assessment of the health and safety impacts of product and service categories	Yes	2024 Sustainability Report, Page 52 – Health, Safety and Environment
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Powering Kuwait's energy transition.



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