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# EXECUTIVE SUMMARY

By the end of 2024, Abraj Energy Services has achieved a remarkable safety milestone: **three consecutive years without a single Lost Time Injury (LTI)** across its operations. This accomplishment underscores Abraj Energy Services' excellence in **Health, Safety, and Environment** practices. It demonstrates that unwavering commitment to safety can yield a zero-LTI outcome, even in the high-risk oil and gas sector. The key insights from this success include:





#### Safety as a Competitive Advantage

Achieving zero LTIs for three years showcases a strong safety culture that protects workers and improves operational reliability. It sets Abraj Energy Services apart in an industry where the average LTI rate is considerably higher.



#### Holistic HSE Strategy as a Blueprint

Abraj Energy Services' zero-LTI achievement is the result of a comprehensive HSE program - visible leadership, rigorous risk management, engaged workforce, ongoing training, and tech integration - which can serve as a model for peers aiming for "Goal Zero" incidents.

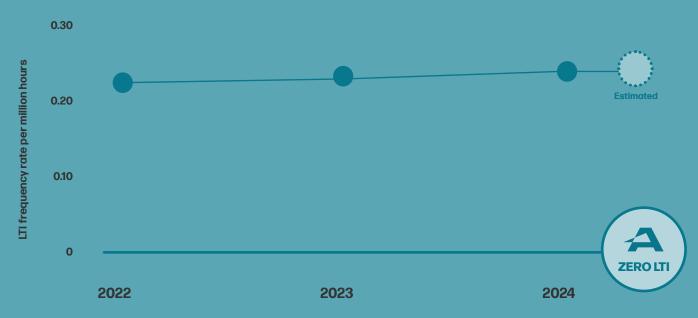
This white paper examines how Abraj Energy Services achieved its three-year LTI-free milestone, the broader significance for the oil and gas industry, and best practices for stakeholders to enhance safety performance and ensure that *each worker* returns home safely, *every time*.

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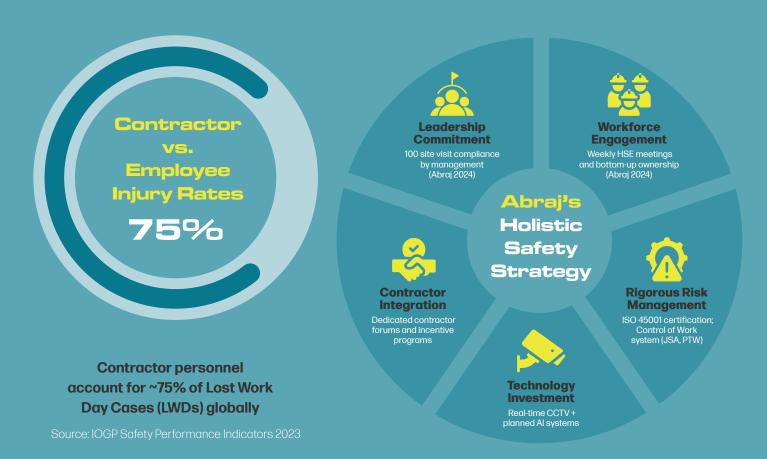
#### ABRAJ

#### LTI Rate Benchmark: Abraj vs. Industry

Abraj maintains zero LTI rate for +3 consecutive years, outperforming global benchmarks



Source: 2024–2018 Safety Performance Indicators Reports (iogp.org/safety-data-reports





## INTRODUCTION

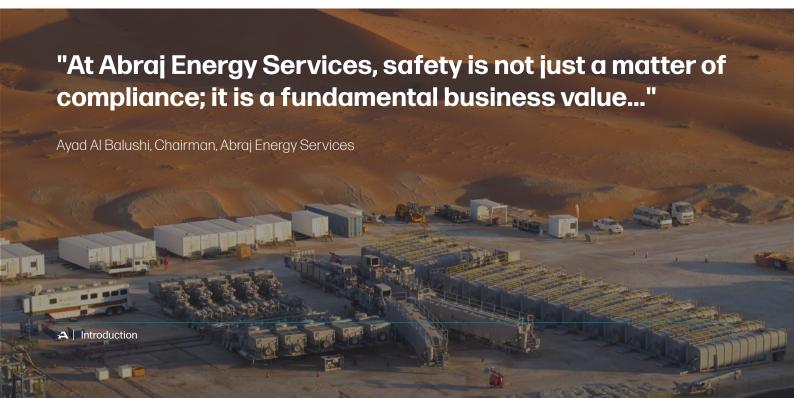
In the oil and gas industry, **HSE** performance is a critical indicator of operational excellence. A core HSE metric is **LTI** – a work-related injury or illness that results in an employee being unable to work for at least one full day or shift. Industry bodies often measure LTI frequency as the number of such injuries per a standard number of work hours (typically per 1,000,000 hours). Achieving an LTI-free record means operating without any injury-causing lost workdays – an ambitious goal in the oil and gas industry given its inherently hazardous operations.

For Abraj Energy Services, reaching a three-year LTI-free milestone is more than a safety statistic – it is tangible proof that **"zero harm"** is attainable even in challenging operational environments. This milestone is crucial for several reasons:

• Worker Well-Being: Every employee returned home safely during this LTI-free period (which we have sustained to the present day). In a sector that historically has higher injury and fatality rates than average, this is a significant human achievement.

- Operational Continuity: Avoiding LTIs directly translates into enhanced productivity, continuous operational efficiency and substantial cost savings.
- Regulatory Compliance & Reputation: Maintaining an excellent safety record that meets or exceeds regulatory requirements builds trust. It enhances Abraj Energy Services' reputation with clients, regulators, and insurers, potentially leading to competitive and financial benefits. It also fosters trust among employees, who know that management places a top priority on their safety and well-being.

In summary, Abraj Energy Services' three-year LTI-free achievement highlights the payoff of a relent-less focus on safety. The following sections provide context on industry safety challenges and standards, and explore how Abraj Energy Services overcame those challenges through a dedicated approach and finally outline lessons and recommendations for the broader industry.





## BACKGROUND & INDUSTRY CONTEXT

The oil and gas sector remains high risk, despite safety advancements. According to the International Association of Oil & Gas Producers (IOGP), the global upstream industry's LTI rate was about 0.22 per million hours worked in 2021. 2022 saw an increase in fatal injuries compared to the prior year, and by 2023, the LTI rate had risen to 0.24 per million hours worked, underscoring the challenging conditions oilfield workers face.

#### **Global Safety Standards and Regulations**

To address these challenges, companies adhere to stringent global safety standards:



#### ISO 45001

This international standard for occupational health and safety management provides a framework for risk identification, worker participation, and continuous improvement. Companies certified to ISO 45001, such as Abraj Energy Services, demonstrate robust processes to prevent incidents and protect workers proactively.



#### **Industry Initiatives**

Industry bodies like IOGP and the International Association of Drilling Contractors (IADC) promote best practices and benchmarking. Many oil and gas firms have internal programs (e.g., Goal Zero) aiming for zero incidents, reflecting a broader commitment to safety excellence.

Within this landscape, Abraj Energy Services' safety performance has been a standout. The company operates a robust fleet of 30 units and has maintained an impeccable <u>safety record</u>. Notably, multiple units have gone several years without LTIs, demonstrating consistency across operations. Such consistency is rare – while many companies celebrate short-term safety wins, sustaining a company-wide zero-LTI streak for multiple years is extraordinary.

This context underlines the significance of Abraj Energy Services' achievement and sets the stage for examining how it was accomplished.

# CHALLENGES IN ACHIEVING ZERO LTIS

Achieving sustained zero LTIs involves overcoming multiple inherent industry challenges:

#### Hazardous Operation

Drilling, Workover & Well Services operations involve heavy machinery, high pressures, flammable hydrocarbons, and complex procedures. Even with safeguards, any lapse in safety can result in serious incidents. Constant exposure to machinery, pressures, and hazardous substances means zero margin for error.

#### Human & Organizational Factors

A large proportion of incidents stem from human error. Studies suggest that human factors contribute to over 70% of incidents industry-wide. Fatigue or rushing to meet deadlines can lead to lapses in judgment or rule-breaking. Overcoming these tendencies and maintaining strict adherence to safety procedures remains a significant challenge.

#### Environmental & Logistical Risks

Operations often take place in remote or harsh environments (desert, extreme weather) that amplify safety risks and can complicate emergency response.

#### Contractor Management

Oil and gas projects rely heavily on contractors. Aligning contractors with the operator's safety culture is crucial yet challenging. Contractors may have varying safety maturity, and they account for a significant share of injuries (IOGP data shows around 75% of lost workday cases in 2023 involved contractor personnel). One weak link can break an LTI-free streak, emphasizing that oversight and integration are vital.

#### Sustaining Vigilance

Conversely, sustained success can breed complacency. Maintaining constant vigilance and abiding by rules remains critical.

These challenges underscore the remarkable nature of sustaining zero LTIs over multiple years. Successfully addressing them requires a comprehensive approach focused on continuous vigilance and proactive risk management – areas where Abraj Energy Services has excelled. The company's multifaceted strategy provides a practical model for industry peers striving to achieve similar safety milestones.



# ABRAJ ENERGY SERVICES' APPROACH

Abraj Energy Services implemented a proactive, 360-degree approach to safety, focusing on culture, people, processes, and technology. This renewed emphasis was prompted by a significant incident four years earlier when a crew member suffered a fall, sustaining severe injuries. As one of the company's Safety Supervisors explained:

"Four years ago, we had a serious incident where one of the rig crew fell from about 3.5 meters and received multiple injuries... he remained in the hospital for a period of time. Incident causes and learnings were communicated to the entire organization, and we took several actions based on the investigation."





Key elements of the subsequent HSE strategy are outlined below.

### Leadership Commitment & Safety Culture

**Management Commitment:** Safety at Abraj Energy Services is driven directly from the top. HSE advisors report independently to HSE Team Leads at Headquarters, who report to the HSE Manager. The HSE Manager directly reports to the CEO. This independence from operational reporting lines ensures unbiased escalation of safety concerns. The company considers HSE as its "license to operate," reinforcing that safety is not just a compliance measure but a fundamental business value.

Other specific leadership initiatives include:

- Dedicated management site visits: In 2024, Abraj Energy Services management completed visits to all locations (over 30 sites), achieving 100% compliance. These visits ensure leadership visibility and active engagement with safety concerns.
- **CCTV Monitoring Center Initiative**: The company established a **real-time monitoring hub** that streams live footage from all rigs, workover, well services, and base, enabling immediate intervention in unsafe situations.
- Beyond Regulatory Requirements: Many of these initiatives, including the CCTV Monitoring center (Abraj Eyes), dedicated resources, and others, exceed contractual safety obligations, positioning Abraj ahead of industry norms and going beyond to ensure strong HSE practices.





#### **Workforce Engagement and Empowerment:**

Abraj Energy Services involves its workforce in every step of the safety process. Regular training and engagement programs are conducted to enhance focus on accountability, ensuring safety ownership at all levels. Employees are fully empowered to intervene and stop any unsafe task. Active weekly HSE engagement with all units and regular toolbox talks give workers a voice in identifying hazards and solutions. High employee engagement has a

proven impact on safety outcomes. Organizations with engaged employees have roughly 48% fewer safety incidents, and Abraj Energy Services' experience reflects this. The company fosters a sense of ownership by recognizing safe behavior and by ensuring each person understands their role in the safety chain. This bottom-up involvement means potential issues are spotted and resolved on the frontlines, often before they escalate.

Abraj Energy Services actively engages its workforce through:

- Dedicated engagement sessions: The company conducts role-specific safety forums (unit managers, HSE advisors, drivers, journey managers & supervisors) to address unique safety concerns at various operational levels. As an Abraj Energy Services HSE Advisor explained:
- "During the weekly safety review meetings, we always ask, 'This at-risk behavior happened, so how can we arrest this behavior and make sure the job is done safely?' Based on those discussions, we then take action."

- Quarterly contractor safety forums: Contractors are integrated into Abraj Energy Services' safety culture through structured meetings where Abraj reviews safety KPIs, shares best practices, and discusses industry incidents.
- Incentive programs: High-performing contractors are rewarded for superior safety performance, encouraging compliance and participation in HSE initiatives.

This approach fosters a **sense of shared responsibility**, ensuring both employees and contractors contribute to a unified safety culture.





Robust HSE Management Systems: Underpinning this culture is a formal safety management system aligned with ISO 45001 standards. Abraj Energy Services conducts thorough risk assessments for all operations. The company has a well-defined Control of Work system, which includes Risk Assessments, Job Safety Analysis (JSA), and Permit to Work (PTW) systems that ensure high-risk activities are conducted safely. Every task is analyzed for hazards, and mitigating controls are put in place. The company sets HSE objectives and tracks performance, updating plans based on lessons learned. Well-developed Annual HSE plans provide guidance for safety actions

and ensure alignment with safety goals across the company throughout the year. Regular audits and inspections, both internal and external, ensure that procedures are followed in the field. Self-verification and safety inspections are carried out as per plan to ensure compliance and identify areas for improvement. Any incidents or near-misses are rigorously investigated for root causes, with lessons shared across the organization. This systematic approach leaves little to chance; safety is managed with the same discipline as productivity or cost, rather than being left to reactive measures.

**Technology and Innovation in Safety:** Abraj Energy Services leverages technology to enhance safety oversight. Technology serves as a cornerstone of the company's proactive safety strategy. Key innovations include:



- CCTV Monitoring Center: The system plays a critical role in identifying potential hazards and risks across sites in real time. By monitoring high-risk areas, it enables rapid response and preventive action, supporting a safer work environment for all teams.
- Al-Powered Safety Interventions: Abraj Energy Services, in partnership with an external Al firm, is in the process of developing a system that can automatically detect at-risk behaviors and alert teams before incidents occur.
- Red Zone Monitoring: Al-based systems now trigger automatic alarms when personnel enter hazardous zones, reducing the risk of injury.
- Wearable Safety Tech: The company uses driver fatigue monitors, enhancing real-time safety measures for drivers.

By leveraging **AI, predictive analytics, and real-time monitoring**, Abraj Energy Services is shifting from reactive to predictive safety management.



Training and Competency Development: Intensive training supports all of Abraj Energy Services' procedures and expectations. Every employee receives comprehensive HSE instruction, starting with orientations that cover the company's safety values and specific job hazards. This is reinforced through regular refresher courses and emergency drills, ensuring everyone remains well-prepared to manage and respond to potential incidents. The company ensures employees are not only aware of safety protocols, but are also highly competent in safe work practic-

es and emergency response. Contractors similarly undergo safety orientation and must adhere to the same standards, ensuring a uniform safety competency on sites. Abraj Energy Services also conducts weekly safety meetings, along with monthly and annual HSE performance review meetings, to monitor safety performance and address issues promptly. By investing in continuous learning – and even developing future HSE leaders through specialized programs – the company continues to build a workforce capable of proactively managing safety.



Abraj Energy Services' commitment to real-time monitoring and intervention has resulted in numerous **incident preventions**:

CCTV as an incident prevention tool: Before implementation, workers frequently stepped out of safety baskets to reach areas at height, risking serious injuries and fatalities. Real-time monitoring and intervention can now correct and prevent such behaviors, eliminating falls and serious injuries. To maximize the benefit of the CCTV monitoring system, the company holds weekly safety review meetings using real footage. Each week, HSE leaders and crews jointly review several recent CCTV clips showing at-risk behaviors.

This open discussion forum, conducted via video conference linking site teams and the head office, allows everyone to analyze why unsafe acts happen and how to prevent them. The team then agrees on corrective measures – whether it's additional training, an engineering change, or a new tool – to 'arrest the behavior' before it leads to an incident.

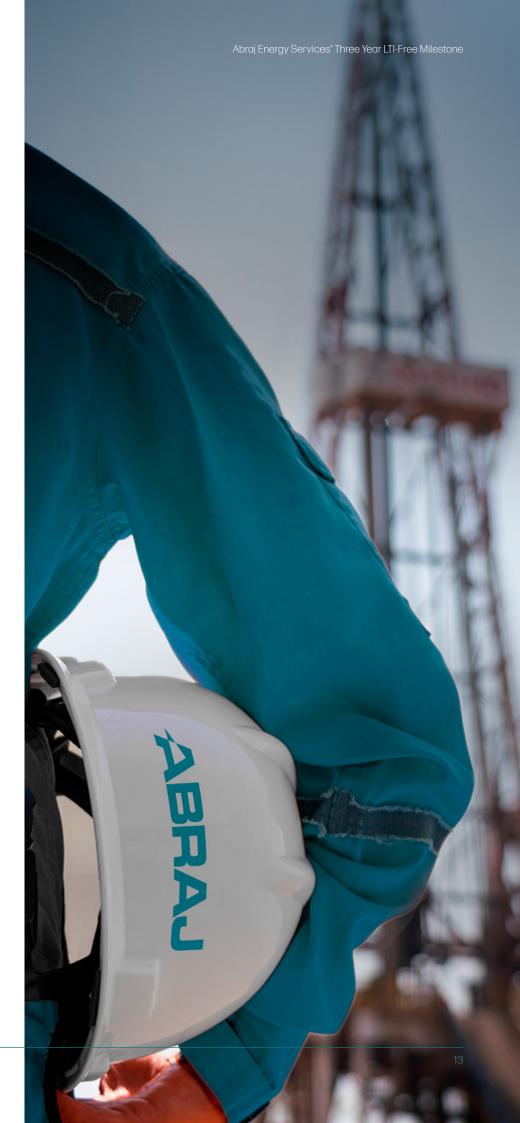
 Contractor Safety Initiatives: Abraj Energy Services encourages contractors to share best practices quarterly. The most effective initiatives are integrated across all sites, improving overall safety standards.



These proactive interventions reinforce a culture of vigilance and continuous improvement.

Through these combined efforts - leadership, engagement, systems, technology, and training - Abraj Energy Services has built a resilient safety framework. It addresses both the human and technical aspects of risk, creating multiple layers of defense against incidents. This holistic approach directly enabled the company's three-year streak of zero LTIs.

While this three-year milestone is a remarkable company-wide achievement, it is essential to note that within the company, several individual units have gone a decade or more without a recorded incident. This can be credited to the combination of rigorous daily safety meetings, strict adherence to safety checklists, a proactive reporting culture, detailed supervision, and a proactive maintenance program. Supervisors on these rigs have made safety a daily conversation, emphasizing each day's specific risks and reminders before work begins. The teams have also taken initiative in flagging and fixing potential hazards - for example, if machinery shows any irregularity, they address it before it could cause an issue. This combination of strong on-site leadership, an empowered crew, and preventive maintenance has resulted in zero LTIs and low NPT (non-productive time) on specific units over multiple years.





## CONCLUSION

Abraj Energy Services' three-year LTI-free milestone demonstrates that **sustained safety excellence is achievable** in oil and gas when leadership, people, processes, and technology work in concert. This result is not just a statistic – it represents lives protected and operations kept on track. The key lesson is that outstanding safety performance comes from proactive risk management and a culture that never lets its guard down. Moving forward, company leadership remains vigilant in ensuring continued success. Its achievement not only sets a benchmark for peers but also raises the bar internally to strive for a fourth LTI-free year and beyond.



Abraj Energy Services' story should inspire industry stakeholders to renew their focus on safety:



#### Oil & Gas Companies

Assess your own HSE culture and practice against this benchmark. Strengthening leadership engagement, worker involvement, and technology adoption. Set ambitious safety goals (e.g., zero LTIs) and follow a clear plan to achieve them. By implementing a similar holistic approach, companies can significantly reduce incidents and move toward an injury-free workplace.



#### **Industry Bodies & Regulators**

Promote the sharing of safety best practices across companies and continue to enforce high standards. By encouraging widespread adoption of proven programs and advanced safety technologies, these stakeholders can help drive the entire sector toward zero harm.

Ultimately, achieving and sustaining zero LTI is the cornerstone of a safe oil and gas industry. By embracing the lessons from Abraj Energy Services' success and committing to continuous improvement, the industry can move closer to a future where every worker, on every job, comes home safely every time.

For more information, please visit our website

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