

#becomeoneteam

Company Overview

GENERAL PRESENTATION

March 2024

KCA Deutag is a leading international drilling, engineering and technology company working onshore and offshore with a focus on safety, quality and operational performance.

#enhancethebrand

www.kcadeutag.com

KCA DEUTAG

Delivering safe, effective, trouble-free operations

Best in class people, systems and processes to deliver 'certainty of outcome' on drilling services



131
land rigs

29
offshore contracts

3
facilities

Services, engineering & technology embrace energy transition opportunities

country operations
26

~10,500
colleagues

>50
nationalities

\$1.2bn
Revenue 2022

With over 130 years of experience, KCA Deutag is a leading drilling, engineering and technology company working onshore and offshore with a focus on safety, quality and operational performance.



Integrated business model

From rig design and manufacture through to drilling operations and energy transition infrastructure

Offshore Drilling

Asset-lite business with long term earnings visibility through a solid contract backlog in key markets and strong international customer relationships

Leading global platform operator on 29 offshore contracting in UK, Norway, Azerbaijan, Canada and Angola



Land drilling

Safe & high quality international driller with a fleet of 131 land rigs across the core active Middle East market and key markets in Africa, Latin America and Europe

Present in key markets with low break-even oil price environments, strong outlook with a solid backlog



Kenera

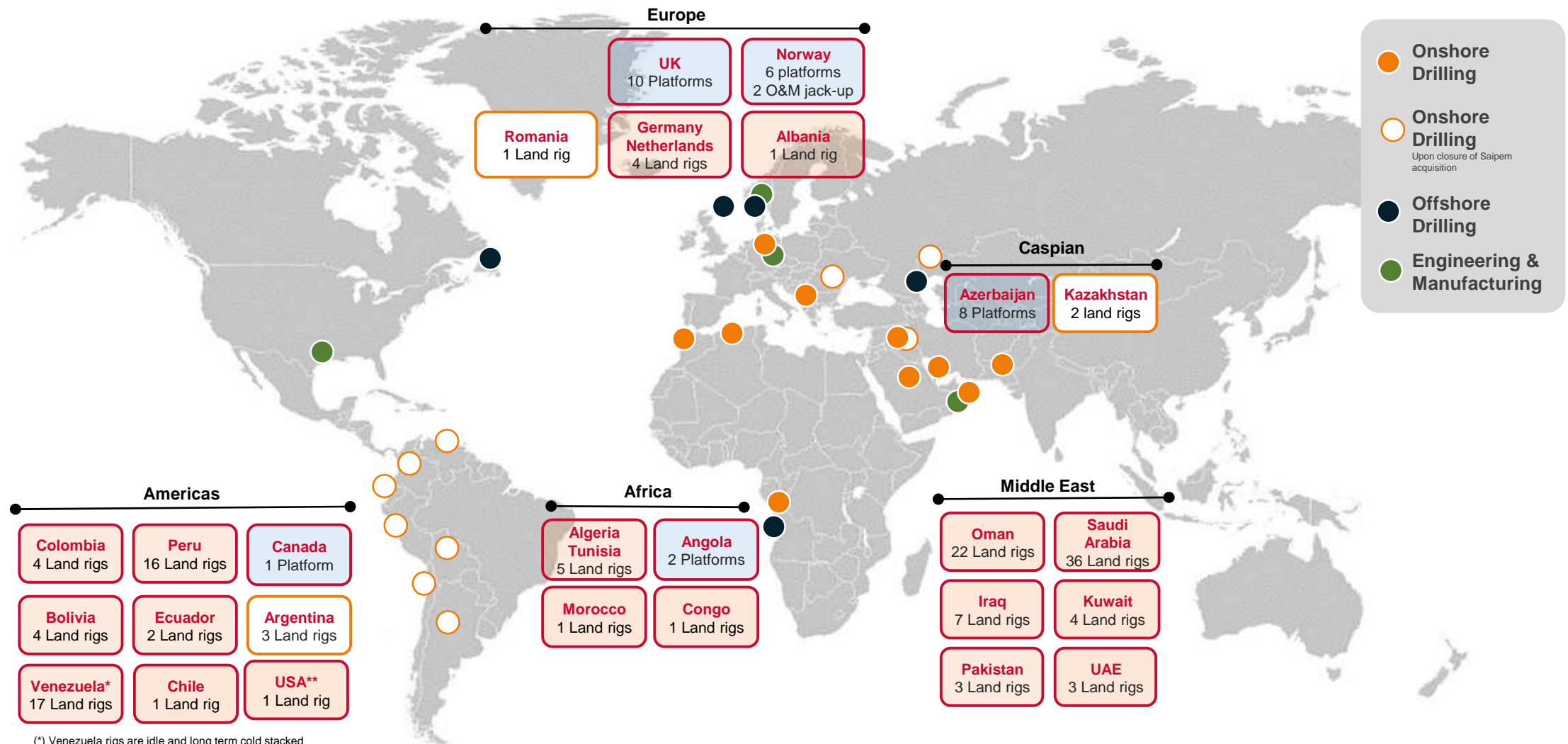
Kenera combines Bentec/RDS to leverage Group DNA to expand offering in core oilfield markets and actively play our role in the energy transition markets

3 Facilities: Bad Bentheim in Germany, Nizwa in Oman and Dammam in Saudi Arabia



Customer centric culture and consistently high operational performance

Geographical footprint currently across 25 countries and growing to 28 upon closure of the Saipem acquisition



(*) Venezuela rigs are idle and long term cold stacked
 (**) 1x Latin America rig being refurbished in Houston

KCA Deutag land drilling rig fleet

Split by country and rig size

Area	Country	Heavy Duty Rigs											Medium Duty Rigs						Light Rigs				KCAD Rigs	Saipem *	Combined on closing			
		3,000 HP				2,000HP							1,500HP			1,250-900HP			800-500HP									
Middle East	Oman	T-51				T-91 T-92	T-93 T-94		T-95 T-78	T-867 T-889			T-849	T-858	T-859	T-895 T-896	T-897 T-898	T-899	T-66	T-826 T-853	T-872 T-801			22		22		
	Saudi Arabia					T-901 T-902 T-907 T-915	T-914 T-101 T-102 T-701	T-702 T-302 T-303 T-520	T-532 T-559 T-565 T-546	T-551 T-569 T-568 T-592	T-598 T-514 T-515 T-517	T-562 T-570 T-571 T-572 T-574	T-216 T-218 T-217	T-529 T-564	T-591 T-594										36		36	
	Iraq (S)					T-80	T-601	T-210					T-840	T-841											7		7	
	Iraq (N)					T-63								T-221												7		7
	Kuwait	T-82	T-83	T-813	T-846																					4		4
	Pakistan	T-202				T-75	T-72																			3		3
	UAE	T-264	T-247											T-201												3		3
Africa	Algeria/Tunisa						T-211	T-212					T-220	T-222	T-223											5		5
	Congo, Morocco												T-293								CW					2		2
Europe	DE, NE, AL					T-207	T-203	T-700	T-46					T-208												5		5
	Romania																									1		1
Latin America	Colombia	T-618	T-657	T-661									T-645													4		4
	Peru***					T-412	T-415	T-410	T-421				T-423 T-424	T-426 T-632						T-615 T-416	T-313 T-414	T-408 T-314	T-115 T-413		16		16	
	Argentina													T-633	T-430	T-629										3		3
	Bolivia	T-427	T-409			T-663															T-419					4		4
	Ecuador					T-624	T-420																			2		2
	Chile													T-633												1		1
Venezuela**	T-654	T-689	T-631		T-620	T-363	T-411	T-637	T-642	T-643			T-625	T-669		T-602	T-614	T-628	T-627	T-1	T-630				17		17	
ROW	Kazakhstan																									2		2
Sub-Total:		16				62							27			10			16				131	6	137			
Under construction		-				-							-			T-146	T-147	T-144	T-145	-				4	-	4		
Total:		16				62							27			14			16				135	6	141			

KCA Deutag offshore division drilling contracts

Fixed platforms and jack-ups

Location	Customer	Number of rigs under contract	Estimated Operating Strings	Asset / Field
Azerbaijan	BP	8	6	Platforms: Chirag, Central Azeri, West Azeri, East Azeri, DWG, Shah Deniz, West Chirag, ACE
Canada	ExxonMobil	1	1	Platform: Hebron
UK	Harbour Energy	1	0	Platform: Britannia
	CNR International	3	1	Platforms: Ninian (2), Tiffany
	EnQuest	3	2	Platforms: Heather, Thistle, Magnus
	CNOOC	1	1	Platform: Scott
	TotalEnergies	2	2	Platforms: Alwyn, Dunbar
Norway	Var Energi	1	1	Platforms: Ringhorne
	Equinor	5	4	Platforms: Oseberg B, C, East and South; Kvitebjorn
		2	2	Jack-Ups: CAT-J (Equinor owned)
Angola	ExxonMobil	2	1	Platforms: Kizomba A, B
Grand Total:		29	20	

KCA Deutag management structure

Executive Team



General Counsel
Alaina Ramsay



Chief Financial Officer
Neil Gilchrist



**Senior Vice President
HR & Shared Services**
Sarah Walters



President Offshore
Ole Maier



Chief Executive Officer
Joseph Elkhoury



**Group Head HSSE &
Operational Integrity**
Thorbjørn Anhøj



President, Land Drilling
Simon Drew



Senior Vice President Kenera
Gordon Ronaldson



Vice President Services
Omar Moussa

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Safety and operational performance

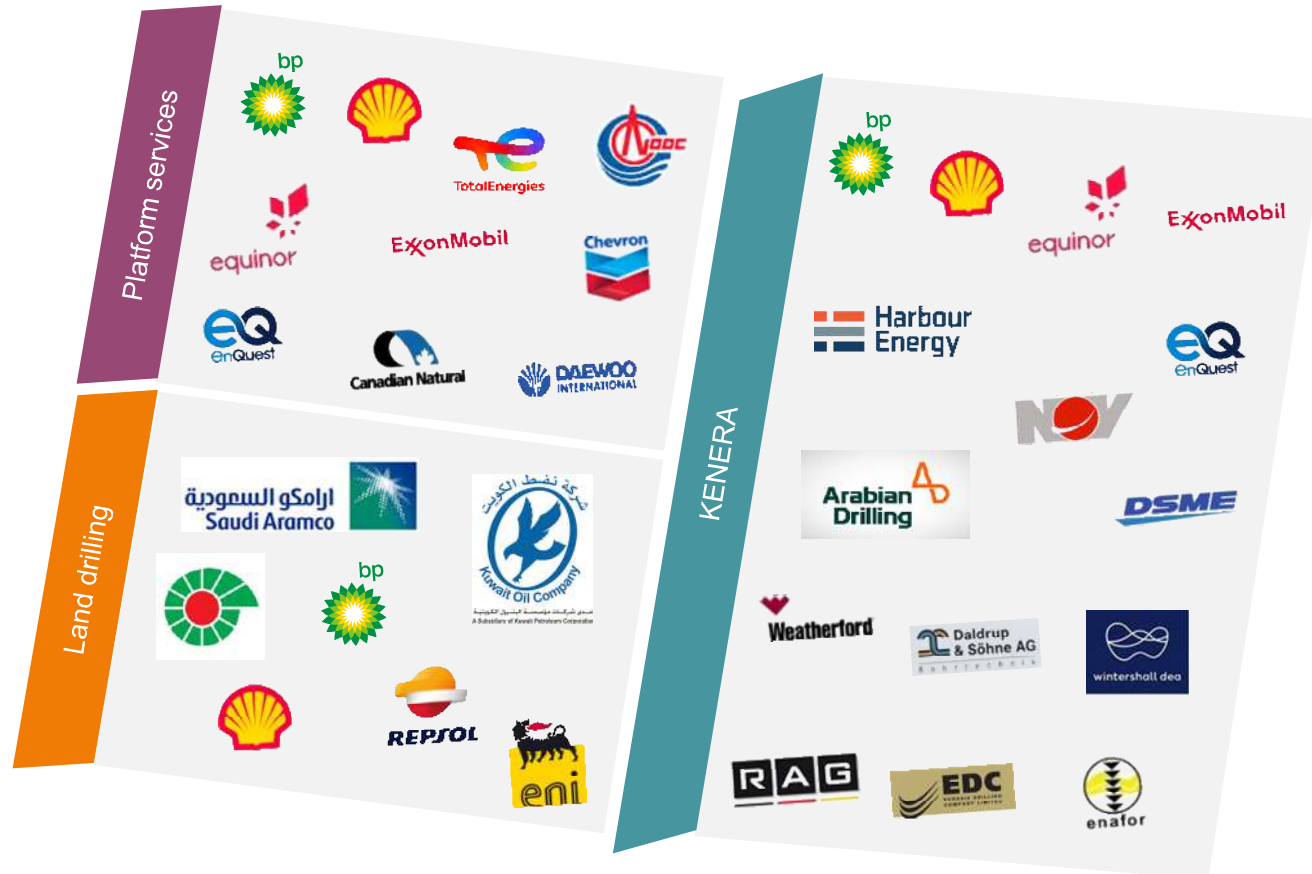
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KCA DEUTAG

Track record of high performance

A unique offering. From rig design and manufacture through to drilling operations

Good performance = Good customer relationships = Repeat business



- **DRIVE TO ZERO** - focus to have an incident free operations; where nobody gets hurt and we don't harm the environment
- **ONE TEAM WAY** - delivers outstanding safety performance* (12-month rolling TRIR at the end of 2023 was 0.25) and non-productive time (2.00% in 2023 across the whole fleet)
- **+veDRILL™** technology products offer outstanding long-term efficiencies
- **TRACK RECORD** - More than a 130 year of experience working across 31 countries

Track record of repeat business across all divisions

* These are full calendar year figures. The year-to-date (YTD) HSE performance is on page 15

KCA Deutag Core Values

Built around our Culture of Care and the Sustainability strategy pillars



W	Wellbeing	Health, Safety, Diversity, Wellness, Employee Welfare
E	Excellence	Exceed Expectations, Safety, Service, Quality, Innovation
C	Customer Centricity	Service Delivery, Solutions, Innovation, Partner of choice
A	Agility	Affordability, Proactive Collaboration, Adaptability, Learning
R	Returns	Financial Discipline, Controls, Profitable Growth, Value
E	Energy Transition	Energy Innovation, Sustainability, Security, Affordability

“No-one Gets Hurt”

Safety is fundamental to KCA Deutag

Our priority is incident free operations; where nobody gets hurt and we don't harm the environment

DRIVE TO ZERO.

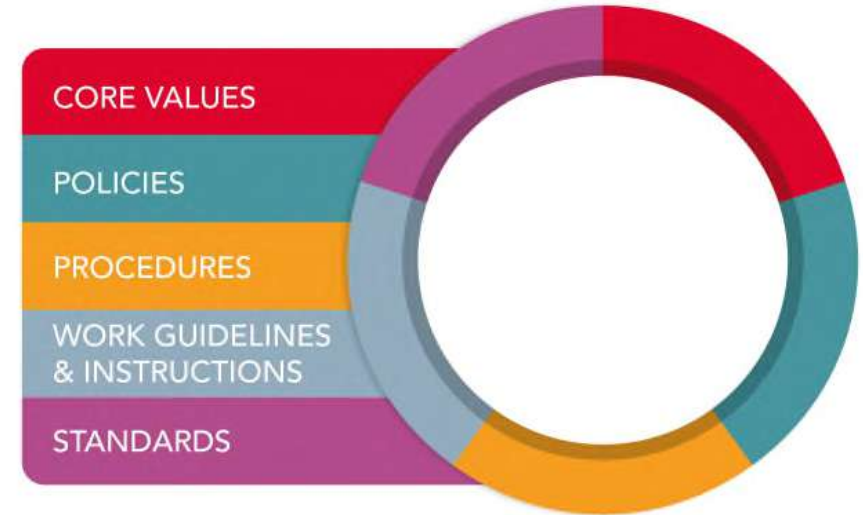
These beliefs are visible through our HSE Policy and WW HSE Standards:

- We routinely deliver best in class performance and are widely recognised for delivering safe operations
- Our behavioural safety programs are focused on reducing all incidents, recordable or not, to zero
- We believe that maintaining a competent and motivated work force is key to eliminating all incidents
- Our front line safety tools are simple and fit for purpose

Our #OneTeamWay

Our “**#OneTeamWay**” is the combination of World Wide Standards, tried and tested policies and procedures, pragmatic work guidelines and core values that help us deliver safe, effective, trouble-free operations. It governs how we behave as colleagues and as a company.

It ensures we operate safely, succeed globally and our customers enjoy a world class service.



Our building blocks for success

- Understanding and working together with our customers (starting safe & finishing strong)
- Recruitment, Induction
- Behavioural Framework
- Safety Leadership
- Fit for Purpose Tools & Systems (Procedures & Work Guidelines) enabled through procedural discipline

Sustainability

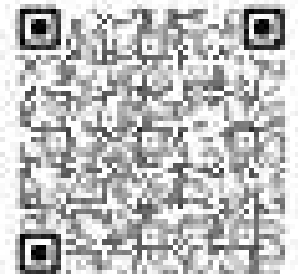
A culture of care for a sustainable business

Some of our concrete Environmental Sustainability actions

1. Defined scope 1, 2 and 3 emissions for the Group
2. Deploying own battery energy storage system
3. Installing real-time Carbon Emission Monitoring technology
4. Delivering an emission reduction project for Equinor that is part of their long-term net-zero 2050 strategy
5. Verifying that fuel additives reduce the expected CO2 before deploying into the wider land drilling fleet
6. Discussing the deployment of a hybrid solar-diesel system to power rig camps (expected 35% CO2 reduction)



The KCA Deutag 2022 Sustainability Report is at the following link:



Strong management systems

Some examples

Operational Integrity Management Procedural Discipline

Prevention (i.e. barriers) | HAZARD | Top Event | Mitigation (i.e. recovery measures)

Crew actions - practices | Planning & design | Equipment systems | Maintenance & repair | Operational practices | Crew actions

Management and HSE Systems Policies, WW Standards and Procedure within the KCAD Operational Management system (KOMS)

KOMS

WELL CONTROL Golden Rules

Human Factors – Behavioural Framework

Health & Safety | Environmental Awareness | Sustainable Growth | Business Integrity | Working at Height

Maintenance System

- Detailed action plans developed to reduce NPT
- Document key focus areas;
- Competent people
- Compliance with Planned Maintenance activities
- Clear identification of Critical Spares
- Adherence to the Major Operational Failure procedure

Strategy to Reduce Non-Productive Time (NPT)

Right people, right place – some of our recent successes

Critical to success is the recruitment and retention of the right people



T-853 in Oman surpassed 12 years without Lost Time Injury. We conducted integrating our business safety and management processes inductions. Oman colleagues received two outstanding Safety Performance Awards at the IADC- rig T51 was chosen as the onshore rig with the longest period of uninterrupted operation without a recordable incident and rig T872 was selected for the rig with the best TRIR in the South Arab Peninsula region.



Our North Sea team won the IADC awards for 'The Safest Jack-Up Driller under 1 mil man-hours in 2022', and for the 'The Safest Platform Driller in 2022'.



The KCA Deutag, Equinor and SLB teams in Norway were recognised for their exceptional well delivery performance on Equinor's Kvitebjørn A-16 B

Rig T898 in Oman has been awarded 'Best Land Rig of the Year', from all the land rigs operated by Shell worldwide. The award reflected the crew's exceptional performance surpassing performance indicators on HSE, operational performance, as well as training and development of our people.



The ACE platform started operations. Our work on the project started with design and engineering and continued through the fabrication and commissioning of the rig as well as operational preparation and readiness before spud.

A ceremony at Kenera's IDTEC facility in Nizwa, held for Petroleum Development Oman (PDO) commemorated the inauguration of the first rig made in Oman



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The team celebrated one year since the Saipem acquisition. This event emphasised the value placed on their addition to the group

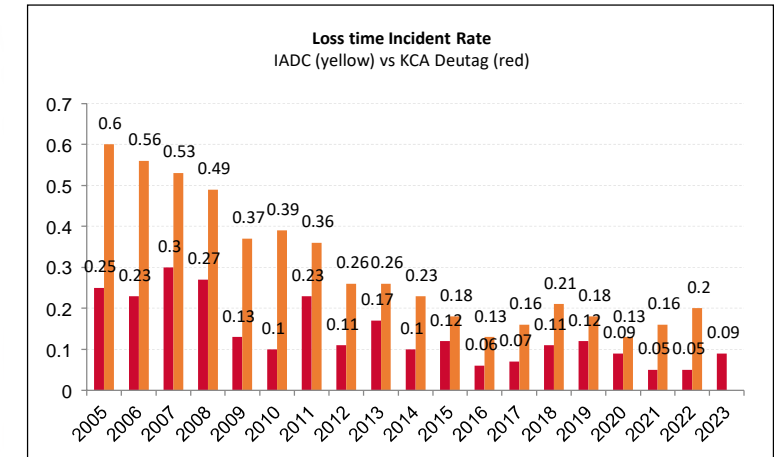
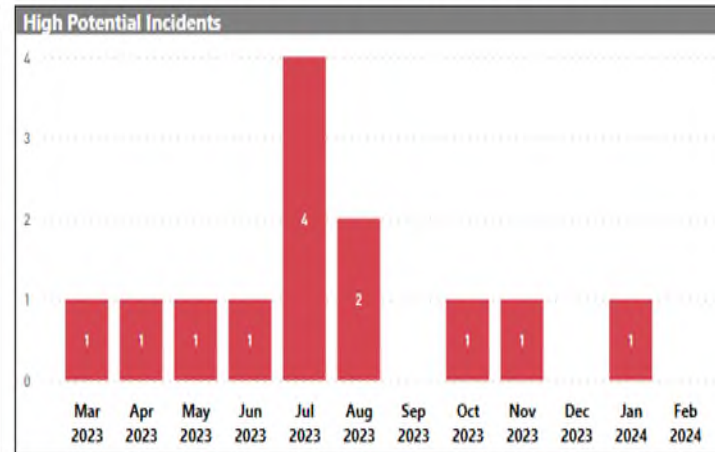
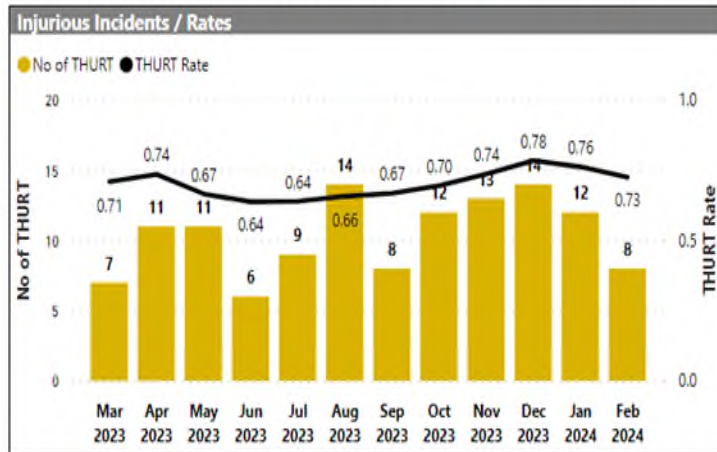
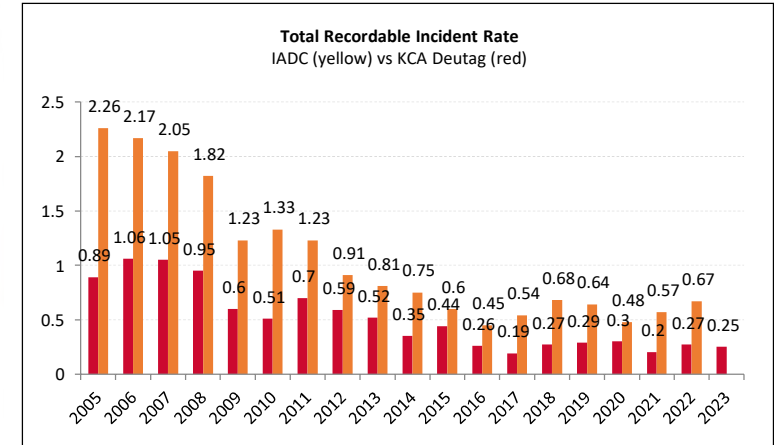
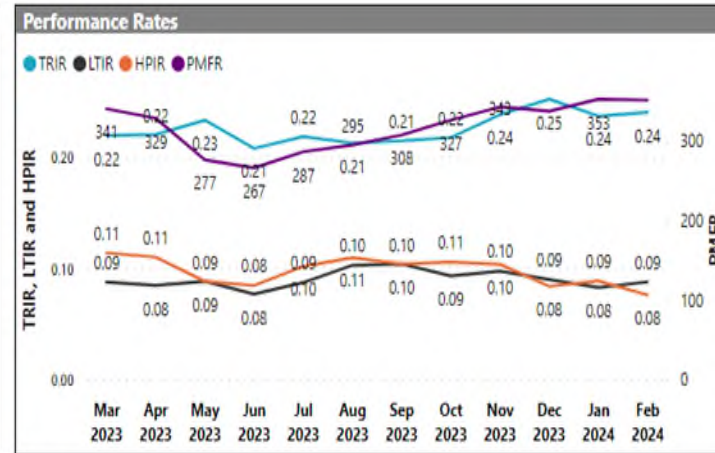
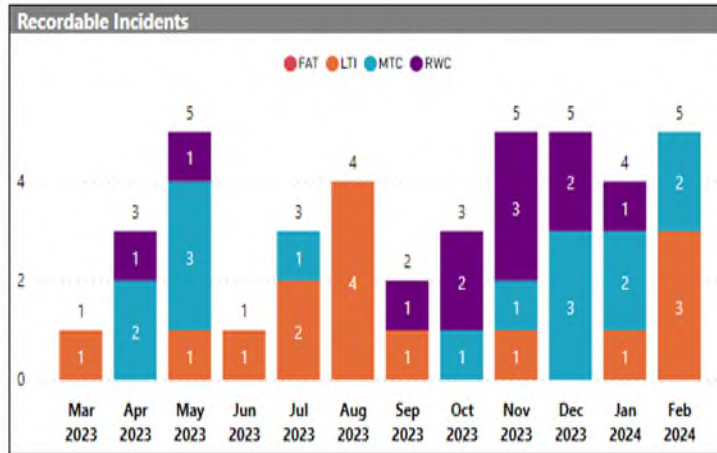


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KCA Deutag Safety Statistics

12-month rolling – KCA Deutag Stand Alone

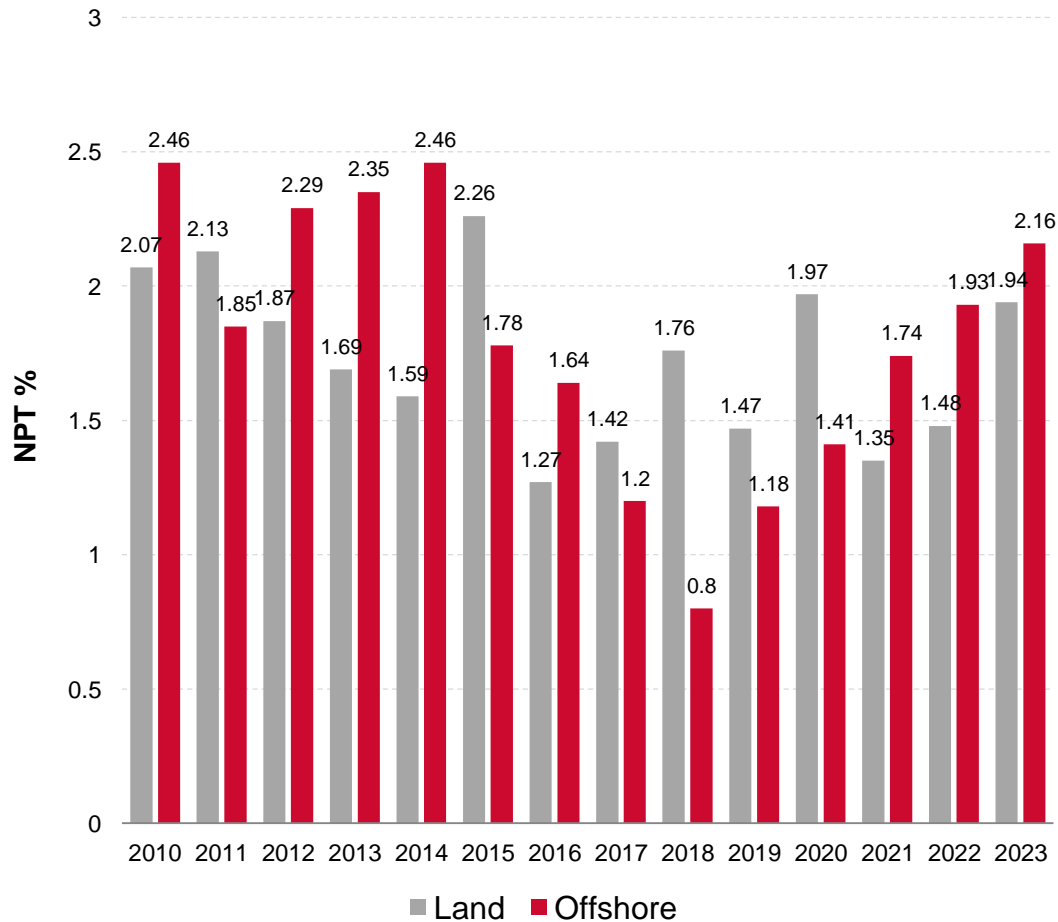
Annual Comparison vs Industry



Note: Figures per 200,000 man-hours; TRIR and LTIR figures are calculated per 200,000 man-hours; Note: IADC 2022 figures will be officially published late 1Q23

Non-productive time and how do we learn from it

2010-2023 (full calendar year figures)



KCA Deutag uses Performance Improvement Investigations (PIIs) to learn from:

- Events not classified as MOF (major operational failure) but that still generate NPT
- Identified near miss, good catch or good performance events

It allows us to capture learnings so we continually evaluate, learn and share knowledge















A Well of Innovation - KCA Deutag Group Technology Offering

While we are known for our safety and operational efficiency, the high value technology and innovation we apply to our equipment and drilling operations offer outstanding long-term efficiencies – meaning tangible time and financial savings. It's this well of innovation that means choosing KCA Deutag offers you hard dollar value benefits, both today and in the future.



Technology & digitalisation solutions delivering value

Market leading technology product range

Technology Offering	Products	What it does	Proven Experience; Proven Value ⁽¹⁾
 <p>+veDRILL™ TurnRight</p>	<ul style="list-style-type: none"> • <i>opti</i>TORQUE • <i>opti</i>PUMP • <i>opti</i>SLIDE • <i>opti</i>DRILL • <i>opti</i>GEN 	<p>Software</p> <p>Improves drilling efficiency</p> <p>Increases time on bottom</p> <p>Reducing downhole problems</p>	<ul style="list-style-type: none"> • 82% of wells below AFE • 8% more time on bottom • 20% ROP improvement 
 <p>+veDRILL™ Enhance</p>	<ul style="list-style-type: none"> • CheckIt App • Active Monitoring App • eTRIC App • Inspections app • Rig Actions app • Alerts app 	<p>Digital approach</p> <p>Addresses the human factor element</p> <p>Enhances procedural compliance</p>	<ul style="list-style-type: none"> • Eliminates manual paperwork • 30 minutes per day less reporting • Wells drilled 4 days faster 
 <p>+veDRILL™ Maintain</p>	<ul style="list-style-type: none"> • <i>rig</i>CARE • Condition Based Monitoring 	<p>Improves equipment troubleshooting, overhaul and replacement schedules</p>	<ul style="list-style-type: none"> • 70% of service issues solved remotely • Reduces NPT • Enables predictive maintenance 
 <p>+veDRILL™ Insight</p>	<ul style="list-style-type: none"> • AI-enabled Drilling Activity Reports • Data dashboards • Animation & Simulation • Scan2ISO 	<p>Latest analytics tools</p> <p>Evaluates and analyses performance</p> <p>Drives continuous improvement</p>	<ul style="list-style-type: none"> • 34% improvement in tripping speeds • 22 days saved on rig moves 
 <p>+veDRILL™ Konnect</p>	<ul style="list-style-type: none"> • Data & video (CCTV) to remote locations • Red Zone Monitoring • Remote control 	<p>State of the art digital technology enables consistent data stamp across data and video, accessible anywhere</p> <p>Improves rig floor safety</p> <p>Progress towards further equipment automation</p>	<ul style="list-style-type: none"> • Compression technology that allows remote live video transmission at 50kb/sec per camera • AI camera technology to distinguish machine and human movement 
 <p>+veDRILL™ CleanRig</p>	<ul style="list-style-type: none"> • CO2 Emission Monitoring • Baseline Emissions • Real-time monitoring • CO2 Emission Reduction • Battery Energy Storage System • Engineering and equipment for emission reduction • <i>opti</i>GEN 	<p>Unrivalled offering to reduce greenhouse gas emissions</p> <p>Combines operational and equipment manufacturing expertise</p> <p>Applicable for drilling rigs and other industrial environments</p>	<ul style="list-style-type: none"> • Reduction of diesel consumption between 15-20% • Installation of equipment that reduces CO2 by 2000 ton/year and NOx by 300 ton/year on jack-up rigs 

World class drilling and engineering training

Our DART® training service supports KCA Deutag internal capability development and it is also open for external use

DART®

DART® uses computer-generated 3D graphics, real-time simulation and sound effects to create a realistic and engaging training experience. It covers various aspects of drilling activities including Accredited Well Control Courses, Surface and Downhole Equipment and Operations

Customers and crews training with DART® benefit from :

- A cost-effective alternative to on-the-rig training
- No risk to personnel or the environment
- Improved HSE performance through enhanced competence
- Improved productivity and efficiency
- Elimination of unplanned well events
- A reduction in non-productive time



The ultimate objective is to help prevent, or at least reduce, the downtime suffered during rig start-ups or when drilling non-standard wells.

DART® is the registered trade mark of KCA Deutag Drilling Group Limited, an international drilling and engineering group. All rights reserved

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Onshore Operations

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KCA DEUTAG

KCA Deutag Onshore Drilling

Safe, effective and trouble free land drilling operations

KCA Deutag has been drilling onshore wells for more than 130 years. Currently, the company has a fleet of 131 land rigs in the Eastern Hemisphere, predominantly in Middle East, North Africa Latin America and Europe.

Recent significant achievements:

PDO (Oman)

- Up to 12-year drilling contract with Petroleum Development Oman (PDO) worth >\$550 million
- KCA Deutag to invest ca. \$100 million to build, with high in-country value (40%), four new highly automated rigs

SAIPEM

- KCA Deutag signed a Sale and Purchase agreement to acquire the onshore drilling business of Saipem.
- Upon closure, KCA Deutag will be on course to become the tenth largest land rig contractor in the world

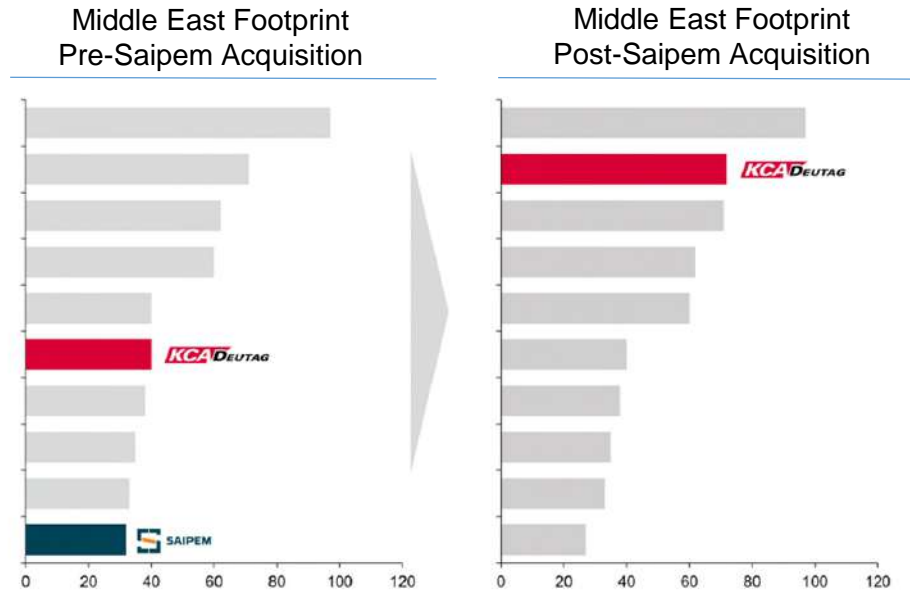
Onshore drilling



The impact of the Saipem acquisition

Strengthen the areas of geographical focus

The Middle East is a key region of focus for our onshore drilling operations. This market is projected to be one of the key markets for drilling contractors in the coming years, with utilization levels expected to increase. The agreement to acquire Saipem onshore drilling business positions KCA Deutag well to address this market. The deal adds more than 70 rigs across the Middle East and Latin America.



Middle East & North Africa (MENA)
The Middle East is the core market for KCA Deutag land drilling. In that region, we currently operate more than 70 rigs, predominantly in Oman and Saudi Arabia. KCA Deutag is the second largest contractor by rig fleet in the region. Algeria is our current market in Africa having had strong presence in Libya and Nigeria for many years.

Continental Europe
Currently focusing in Germany, The Netherlands and Albania. Previously worked in Poland, Portugal, Turkey, France, UK, Spain, Sweden. In these geographies we target shale gas, geothermal and conventional oil and gas projects.

Latin America
The addition of Latin American operations will provide significant geographical expansion to KCA Deutag operations adding a hub in Peru from where drilling in Argentina, Bolivia, Colombia and Ecuador will be managed

Consistent world class onshore drilling performance

Land Drilling Business Unit

Shell Rig of the Year



Rig T-898 won the Rig of the Year award based on the crew's exceptional performance, surpassing indicators on HSE, operational efficiency, as well as training and development of our people.

In 4Q23, several KCA Deutag rigs were top on the Shell global ranking

80 rigs work globally for Shell. Ranking below denotes position out of 80 rigs.

Rig Name	Total Performance Factor	4 year trend	Global Rank
T898	1.96		# 1 out of 80
T849	1.80		# 9 out of 80
T-51	1.76		# 12 out of 80
T801	1.74		# 15 out of 80
T826	1.72		# 19 out of 80
T899	1.69		# 22 out of 80

Operational Performance – full year 2023

- A total of 160 wells have been completed across 19 countries and 18 customers for a total of 405,000 operating hours. On average, each of these wells have been completed 6.65 days earlier than planned.
- A total of 251 rig moves have been completed across 67.7 kms saving an average of 0.05 days (0.60%) versus the plan, per rig move.



Record breaking well for BP in Oman

In the Khazzan field, the T95 team safely delivered the fastest well ever, 36.1 days from spud to rig release



“This is world class operational performance”



Measuring real-time carbon emissions

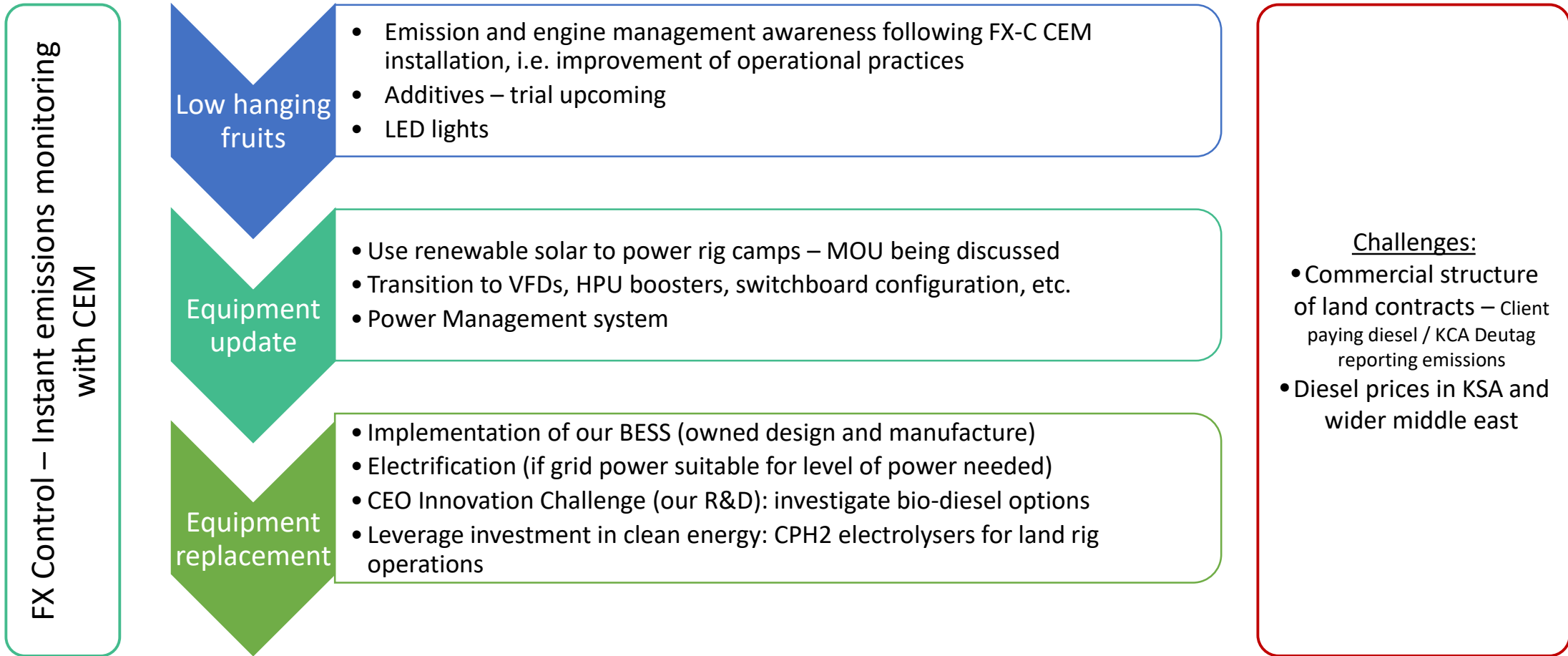
FX-Control, our Supervisory Control and Data Acquisition System, has Carbon Emission Monitoring (FX-CEM) module which enables real-time measurements of CO2 emissions from individual diesel engines. We have equipped one of the rigs that is working for Neptune Energy with this module



Decarbonisation of land rigs

Step plan to zero green house gas emissions

#drivetozero



IADC Competence Assurance Accreditation

KCA Deutag Land Drilling

Competence is a mix of skills, knowledge & attitude and the ability to apply these in the workplace.

- KCA Deutag Land Business Unit has developed a set of World Wide Competence Standards for Drill crew Personnel. Assessment Packs have also been developed for all key positions
- Our Competence System is approved by the International Association of Drilling Contractors (IADC). This accreditation was the first ever awarded to an Onshore Drilling Contractor



Certificate of Accreditation

KCADEUTAG DRILLING LIMITED LAND & OFFSHORE RIGS

has met the criteria established by the International Association of Drilling Contractors for the Competence Assurance Accreditation Program and is hereby awarded position based accreditation with 26 positions.

OPERATIONAL REGION:

Africa/Asia/Europe/Kazakhstan/Middle East/Russia/UK-Offshore

ISSUED BY:

A handwritten signature in black ink, appearing to read "Kristin Ward".

KRISTIN WARD
ACCREDITATION COORDINATOR

A handwritten signature in black ink, appearing to read "Brooke Polk".

BROOKE POLK
VICE PRESIDENT - ACCREDITATION OPERATIONS

PROGRAM NUMBER: 00133117

ACCREDITATION DATE: 24 April 2015

EXPIRATION DATE: 30 April 2023




Rig manufacture and drilling operations

From rig design, through rig construction and drilling operations in Oman

Contract to manufacture and operate 5 newbuild rigs for 5 years (with 3x1 year extension options) in the Khazzan field.

Results Achieved

- Each rig had an average of 2.82% non-productive time (NPT) during the initial 10-months of operations and an average of 2.14% NPT thereafter.
- The 2016 drilling performance delivered 14 out of 17 planned wells drilled ahead of time - this saved a total of 196 rig days to the client. LTIR of 0.2 and TRIR of 0.7 (per 200,000 manhours worked).
- The 2017 programme included 18 wells. They were drilled 14.5% below AFE with a total rig NPT of 1.22% and 2 first aid cases across all 5 rigs.
- Two of the 5 rigs were demobilised from the project in 2018 and 2019 as the drilling programme was progressing ahead of time. In that period and keeping a consistent safety performance, the team completed more than 80% of the wells ahead of time.
- In the Khazzan field, the T95 team safely delivered the fastest well ever, 36.1 days from spud to rig release




Operating safely, succeeding globally.

Rig manufacture and drilling operations

From rig design, through rig construction and drilling operations in Oman

Project Overview

KCA Deutag has been working in Oman for over 50 years. In 2014, the company announced the award of a contract to manufacture and operate 5 newbuild rigs for 5 years (with 3x 1 year extension options) on the Khazzan field. Beside the technical specifications, one of the major challenges was to deliver the Omani local content requirements during rig construction and operations.



Services Provided

From the very early stages BP, KCA Deutag & Bentec held several rig design sessions to discuss and agree the rig technical specification. Thereafter, the rig manufacturing process started with a HAZID workshop facilitated by Lloyds Register and attended by the parties. The masts, substructures and other main drilling equipment were designed and fabricated in Germany; the mud system fabrication and the overall assembly was executed at the Bentec facility in Oman. At the construction yard, all equipment and systems were independently tested and a 3rd party completed a DROPS inspection and installation acceptance during rig pre-commissioning. The final commissioning stage included an extensive test runs on the major equipment and high/low pressure systems. Once at the field, the rigs went through a similar series of testing to ensure they were operational ready to proceed with BP's Integrated Acceptance Testing. Once rigs were accepted by BP they went operational in Khazzan field under the KCA Deutag Oman management.



Transformative innovations in drilling

Pioneering newbuild rigs in Oman

10-year contract from Petroleum Development Oman (PDO) for the construction and provision of four highly automated rigs.

Results Achieved

- Strong emphasis on safety, environmental sustainability, and energy optimization, the rigs aimed to reduce flat times by 25%, improve drilling performance, and achieve full electric grid capability.
- 40% of the investment spent on local suppliers and the workforce comprising 92% Omani nationals. The initiative included training and upskilling programs, a summer internship partnership with Omani universities, and a focus on creating opportunities for skilled jobs.
- The successful spudding of the first well underscored the project's efficiency and the company's dedication to safe and reliable operations, reinforcing its strong partnership with PDO.

CASE STUDY

Transformative innovations in drilling

Pioneering newbuild rigs in Oman

Project overview

KCA Deutag secured a 10-year contract from Petroleum Development Oman (PDO) for the construction and provision of four highly automated rigs within the Sultanate of Oman. Valued at approximately \$550 million, the project aimed to introduce cutting-edge safety, automation, and mechanization features. With an investment of around \$100 million, the initiative focused on building these rigs locally, marking a significant milestone in the company's commitment to PDO and the Omani economy.

Services provided

Designed and constructed by KCA Deutag's Kenera business unit at the International Drilling Technology Co. (IDTEC) facility in Nizwa, Oman, the 1250rig rigs were tailored for safe, efficient, and sustainable drilling operations. The project emphasized digitalization, utilizing the latest technologies, including a central operating system, cyber drilling chair (Synapse), and bespoke software enhancing remote operations. Other safety and mechanization features included a ground-level pipehandling system, hydraulic mast and top drive locking, automated pipehandling, lay down/pick up doubles, mechanized catwalk machine, and a remote-operated Bortec Iron Roughneck. The project's in-country value (ICV) was highlighted by significant investment in subcontracting work to Omani SMEs, contributing to economic growth and the establishment of IDTEC as an API-licensed rig structure manufacturer.

"KCA Deutag's rig construction project in Oman exemplifies a successful integration of cutting-edge technology, safety measures, and local economic development, showcasing the company's commitment to long-term sustainability and excellence in drilling operations."

Results achieved

The delivery of the first rig marked the commencement of drilling operations. With a strong emphasis on safety, environmental sustainability, and energy optimization, the rigs aimed to reduce flat times by 25%, improve drilling performance, and achieve full electric grid capability.

KCA Deutag's commitment to ICV was evident, with approximately 40% of the investment spent on local suppliers and the workforce comprising 92% Omani nationals. The initiative included training and upskilling programs, a summer internship partnership with Omani universities, and a focus on creating opportunities for skilled jobs.

The successful spudding of the first well underscored the project's efficiency and the company's dedication to safe and reliable operations, reinforcing its strong partnership with PDO.



Spudding of the first well on its first location

#enhancethebrand



#becomeoneteam

Offshore Operations

#enhancethebrand

KCA DEUTAG

KCA Deutag Offshore Drilling

Safe, effective and trouble free operations in fixed platforms and third party-owned jack-ups

For the last 40 years, offshore shallow water drilling services have been a core business. The company currently has 27 offshore fixed platform rigs and two 3rd party-owned MODUs under contract in the North Sea, the Caspian Sea, Eastern Canada, West Africa, etc

Recent significant achievements:

Equinor CAT-J
(Norway)

- Four years engineering and construction support in Korea for 2x CJ-70s
- Early O&M involvement for crew training and familiarization
- After 4 years in operation, the rigs have drilled more than 50 wells recording an average rig NPT of 2% and a TRIR of 0.68 (over 200,000 man-hours)

ACE (Azerbaijan)

- Front end engineering, detail design, construction support, hook-up/commissions and rig start-up
- The first 30" conductor was picked up on 24th October 2023. Another 3 x conductors followed
- Top hole Diverter drilling commenced on 04th of December with few equipment issues since in operations began

Offshore drilling



Consistent world class platform drilling performance

Offshore Business Unit

Working for Equinor in Norway



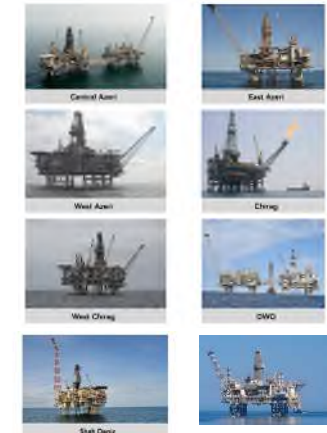
- All three Oseberg platforms are fully integrated at IO Level 3
 - The model creates a ‘one team’ approach amongst all service companies
 - Emphasis on multi-skilling and a leaner offshore core team
 - KCA Deutag delivering tasks that have traditionally been undertaken by others
- Currently working towards IO level 4. In addition, deploying latest automation technologies, for example: simultaneous drilling and stand building, a fully automated system with no personnel in the red zone
- On Askepott and Askeladden KCA Deutag is running ADC = Automated drilling control
- The #OneTeam approach (KCA Deutag, Equinor and SLB) completed the Equinor’s Kvitebjørn A-16 B well 43 days ahead of schedule. As part of this achievement, the team drilled the longest open hole section ever delivered from a fixed platform in Norway (3851 m) and it also flawlessly achieved an ROP of 28.8 m/hr in the 12 ¼" section without having any issues with stringers, tool failures, or equipment failures.



More than 1 million meters drilling across 8 fixed platforms for BP in Azerbaijan

In 2023, we enabled more than \$9m in cost savings for the customer and contributed to more than 72 rig-days saved

“This is world class operational performance”
BP President, Azerbaijan



ACE

ExxonMobil

Working in Canada

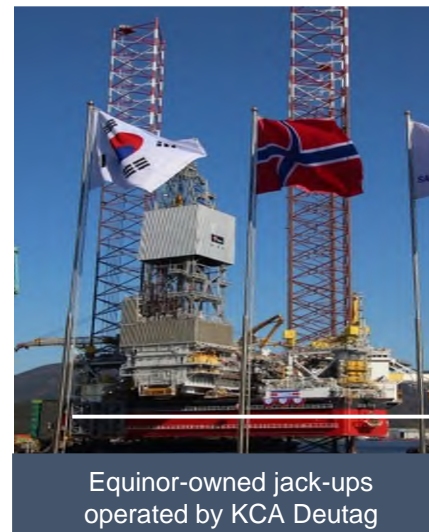
- On the Hebron platform, KCA Deutag involvement went from the FEED (front end engineering design) stage and all the way through to drilling operations. First oil delivered ahead of schedule
- After 60 months in operation
 - The rig has not reported any recordable incident
 - It has drilled more than 30 wells
 - The average rig non-productive time has been 1.25%



UK and Norway

Platform Drilling Operations

- KCA Deutag is committed to the North Sea
- In the UK sector, we currently operate platform drilling rigs for: CNRI, Harbour Energy, EnQuest, Total and CNOOC. In the Norwegian sector, we operate for Equinor and Var Energi
- In Norway, we also operate 2 harsh environment third-party owned jack-ups for Equinor. This is a contract for up to 20 years that started in 2013 – see case study
- The focus, particularly in North Sea fixed platform, is on multi-skilling drilling operations and an integrated engineering approach that achieves cost effective solutions for rig upgrade projects and/or P&A campaigns



Azerbaijan

Platform Drilling Operations

- KCA Deutag has been in Azerbaijan more than 23 years. During this period, the team reached a significant milestone of one million metres drilled across all platforms.
- We have been responsible for conceptual and detailed design of the 8 BP/AGC platform drilling facilities working in the country
- Turan Drilling & Engineering: In July 2018, an agreement was signed to form a Joint Venture that will target existing and future drilling and engineering opportunities in the Caspian
- Our team is made of over 800 people, more than 75% are Azeri nationals
- In October 2023, the ACE rig started operations.
This achievement is the culmination of teamwork from across the business, starting with the design and engineering work carried out by our Kenera engineering team to the fabrication and commissioning of the rig in Azerbaijan which began in July 2019. The whole operation from cutting of steel to operations was performed without LTI and on time/on budget.



Operations for ExxonMobil: Eastern Canada & Angola

Platform Drilling Operations

Kizomba A and B Platforms for ExxonMobil

- One drilling crew worked across both platforms for the period between 2014-2016
- Undertook a significant rig reactivation programme from 2020 that enabled the rig to resume drilling operations in 2Q22



Hebron Platform for ExxonMobil

- Involved in Front End Engineering Design (2011), Detailed Design (2012-2013), Construction Supervision (2014-2016) and rig start-up (2017). The involvement of an operations team from the early engineering stages and the addition of the drill crew at the last stage of construction meant, respectively, value delivered by addressing operability issues during rig design and experience with the rig's functionality prior to start-up
- Drilling operations ongoing

Delivering a successful rig start-up for ACE

A Triumph of Collaboration, Innovation and Engineering Excellence in Azerbaijan's Energy Landscape

Services provided

- Kenera led the engineering design and provided oversight during the 20 million man-hours of Azerbaijan-based construction.
- The Turan Drilling and Engineering team mobilised during fabrication to achieve rig crew training and familiarisation.

Results Achieved

- After 6 years in project stage, the ACE rig was commissioned. It started-up in the safest and most efficient manner.
- The successful pick-up and running of the first 30" conductor joint showcased the dedication and expertise of the entire project team.
- Operated by Turan Drilling and Engineering, a KCAD Deutag JV, the ACE platform actively drills with active focus on operational performance and safety.

KCA DEUTAG

Azeri Central East Project Chronicles

Case Study: A Triumph of Collaboration, Innovation and Engineering Excellence in Azerbaijan's Energy Landscape

Project Overview


The \$6 billion ACE project is a crucial milestone in the development of the ACE field. It features a 48-slot platform located in 140 meters water depth, designed to produce up to 300 million barrels over its lifetime. The facility has a 1,100,000lbs hook-load integrated drilling rig with an HPS-03-1000 topdrive, 3x 1600hp mud-pumps for a 7500psi mud system, a 18-3/4" 10K BOP and 95 ft drill pipe setback storage.

Services Provided

Kenera, the engineering group within KCA Deutag, played a crucial role delivering the ACE platform. Our team completed the drilling facility Detail Design after winning a competitive FEED phase. The rig design involved approximately 75 personnel who led various disciplines throughout the project, including design reviews, HAZOP, HAZID, and other crucial processes. The transition to remote working during COVID-19 showcased adaptability in project management, ensuring minimal disruption.

Rig construction faced challenges, but success prevailed. Our team provided construction oversight during the Azerbaijan-based fabrication activities that required more than 20 million man-hours.

Turan Drilling and Engineering, KCA Deutag's drilling operations JV in Azerbaijan, began its involvement in the project by mobilizing a Rig Manager and a Maintenance Superintendent during the early fabrication stages to plan for personnel, maintenance, and operational procedures. The rest of the Turan Drilling team were subsequently onboarded in stages, ensuring full rig familiarization before start-up. The drilling rig crew played a crucial role during hook-up and commissioning through heavy involvement in CoW permits, ensuring a seamless transition through System Handover.



Drilling crew during the start-up

Results Achieved

With the start of drilling operations, the ACE platform achieved a significant milestone. The successful pick-up and running of the first 30" conductor joint showcased the dedication and expertise of the entire project team, marking the culmination of design, engineering, and rig commissioning efforts. Operated by Turan Drilling and Engineering, a KCAD Deutag JV, the ACE platform actively drills with focus on operational performance and safety.

Drilling operations on two Equinor jack-ups


Case Study: CAT-J rigs for the Gullfaks and Oseberg fields

Services Provided

- Contract for the construction support, start-up preparation, drilling operations and maintenance for these two rigs
- Contract for 8 years with the option to extend by 4 further periods of 3 years

Results Achieved

- KCA Deutag supported three years of engineering and construction work at the yard
- We successfully delivered crew familiarisation, training and all Acknowledgment of Compliance (AoC) requirements on time
- After 5 years in operation, the rigs have drilled and completed more than 77 wells




Drilling operations on two Equinor jack-ups

Case Study: CAT-J rigs for the Gullfaks and Oseberg fields

Project Overview


Equinor, as the operator of the Gullfaks and Oseberg fields in the Norwegian Continental Shelf, decided to tender for the construction and operation of two high-spec / harsh environment jack-ups which would be owned by the field license holders and operated/ maintained by a drilling contractor. This strategy was chosen in order to ensure strategic rig supply for these fields given the identified long-term drilling requirements.



Services Provided

KCA Deutag won the contract for the construction support, start-up preparation, drilling operations and maintenance for these two rigs. It is a \$2.2bn contract for 8 years with the option to extend by 4 further periods of 3 years. KCA Deutag provided operations input into engineering design and supported the construction of the rigs at the Samsung Heavy Industries yard in Korea.

Upon sail-away and arrival in Norway, KCA Deutag was responsible for ensuring that Acknowledgement of Compliance (AoC) was granted by the Norwegian Petroleum Safety Authority within the established timeframe. AoC is the primary rig acceptance criteria and the main milestone in the whole rig-build project.



Results Achieved

KCA Deutag successfully delivered crew familiarisation, training and all AoC requirements within schedule. Askeladden obtained AoC 22 days ahead of schedule while Askepott was the first rig ever to obtain AoC before being offloaded from the heavy lift vessel.

After 60 months in operation, the rigs have drilled and completed more than 77 wells.

Drilling Operations Input into Design

Case Study: Hebron offshore project, East Canada

Services Provided

- KCA Deutag has been involved in the Hebron project through FEED, detail design and rig fabrication while continuing to define the operating & maintenance procedures in preparation for rig start-up and subsequent drilling operations

Results Achieved

- KCA Deutag played a pivotal role during rig engineering and construction
- We delivered a safe, effective and trouble free rig start-up
- First oil took place ahead of schedule in November 2017.
- After 60 months in operation, the rig has not reported any recordable incident. It has drilled more than 30 wells. The average rig non-productive time has been 1.25%

KCA DEUTAG

Drilling Operations Input into Design

Case Study: Hebron offshore project, East Canada

Project Overview

Hebron is an offshore East Canada project operated by ExxonMobil in partnership with Chevron, Suncor Energy, Statoil and Nalcor. **ExxonMobil**

The field development concept is a concrete gravity structure in 92m water depth. It will be a 95m tall facility with 52 well slots producing 150,000 barrels of oil per day.

Services Provided

RDS, the engineering division of KCA Deutag, has been involved in the Hebron project through FEED, detail design and rig fabrication. Subcontracted to Worley Parsons, our engineering team designed the drilling facilities to operate through snow, ice and temperatures below -20C. The majority of the scope was engineered and constructed in Newfoundland utilising local talent and benefiting the community.

A Rig Manager, Toolpusher and Maintenance Supervisor joined the FEED team. Adding to a team of discipline rig design engineers, their role was to ensure drilling operations input from the early project stages. As the engineering work progressed into detail design, the rig superintendent joined the project after spending time in our Azerbaijan platform operations. Thereafter, KCA Deutag's role included the provision of drilling operations input into construction and commissioning while continuing to define the operating and maintenance procedures. This continued until the delivery of full rig readiness, with the platform on location and ready to commence operations.



Results Achieved

Involvement from an operations team during early engineering stages and the addition of the drill crew at the last stage of construction meant, respectively, value delivered by addressing operability issues during rig design and experience with the rig's functionality prior to start-up.

After 60 months in operation the rig had not reported any recordable incident while completing more than 30 wells with an average rig non-productive time of 1.25%

Plug & Abandon in the North Sea

Case Study: Murchison and Ninian North decommissioning

Project Overview

- Delivered well P&A services on 57 wells for CNR International. The work took place on the Murchison and Ninian North platforms

Results Achieved

- The team reduced by 50% the time taken to P&A a well - 33 wells in Murchison on 31.5 days per well and then 24 wells in Ninian North on 15 days per well. During this time, the team did not experience any safety incident
- The Ninian North campaign finished 86 days ahead of the original schedule using 20% less POB through collaborative multi-skilling
- This work earned KCA Deutag the award for the UK Rig of the Year (2015), the IADC Award in 2014 for “Best Safety Performance of an Individual Unit” (Murchison), the SPE Offshore Achievements Award for Collaboration (2018) and the OGUK Award for Excellence in Decommissioning (2018)



KCA DEUTAG
Operating safely, succeeding globally

Plug & Abandon in the North Sea
Case Study: Murchison and Ninian North decommissioning

Project Overview

KCA Deutag delivered well P&A campaigns on the Murchison and Ninian North platforms for CNR International. The objective was to decommission 57 wells. A team of specialists from CNRI drilling department was in charge of planning and overseeing the operations. KCA Deutag, working collaborative with Weatherford, was in charge of executing the work.



CNR International

Services Provided

Prior to the commencement of P&A operations, both rigs had to be operational and fit-for-purpose. The rig reactivation scopes, delivered by KCA Deutag drilling and maintenance crew, ensured that all equipment was safely rebuilt, tested and certified in line with CNRI, KCA Deutag and industry requirements.

The P&A work was a collaboration between KCA Deutag, Weatherford and CNRI. Through the whole contract, all parties were fully engaged during the planning, decision making and work execution phases.

On a well-by-well basis, the operation involved the placement of a bottom cement plug through a rigless operation. Later, utilising the platform rig, two subsequent cement plugs were set followed by the cutting and recovery of the surface casing string and conductors.

The drilling crew was made up of a multi skilled personnel who was also responsible for fishing, tubular running and casing pin/out operations.



Results Achieved

The team did not experience any safety incident over the course of the two campaigns. They also managed to reduce by 50% the time taken to P&A a well. A hydrocarbon free environment was established in Murchison when 33 wells were successfully plugged and abandoned on 31.5 days per well on average. The remaining 24 Ninian North wells were completed on 15 days each (average). Overall, the Ninian North campaign finished 86 days ahead of the original schedule. A 20% POB reduction was also achieved through collaborative multi-skilling of personnel.

An effective and collaborative team approach was the key enabler for success. The crew's philosophy centred around safe and effective operations that continuously sought to find new and more efficient ways of carrying out a task while diligently recording and applying lessons learned. This way of working earned KCA Deutag the award for the UK Rig of the Year (2015), the IADC Award in 2014 for “Best Safety Performance of an Individual Unit” (Murchison), the SPE Offshore Achievements Award for Collaboration (2018) and the OGUK Award for Excellence in Decommissioning (2018).

#becomeoneteam

Kenera

#enhancethebrand

KCA DEUTAG

Collaboration between services, engineering & technology and manufacturing



SERVICES

- Repair and maintenance of equipment - focus in the Middle East
- Develop service offering for Energy Transition



TECHNOLOGY & ENGINEERING

- Comprehensive engineering service at every stage in the design, construction or modification of drilling, offshore and energy transition infrastructure
 - Conceptual engineering
 - Engineering design
 - Construction/commissioning support
- Develops technology for the oilfield and renewable energy markets

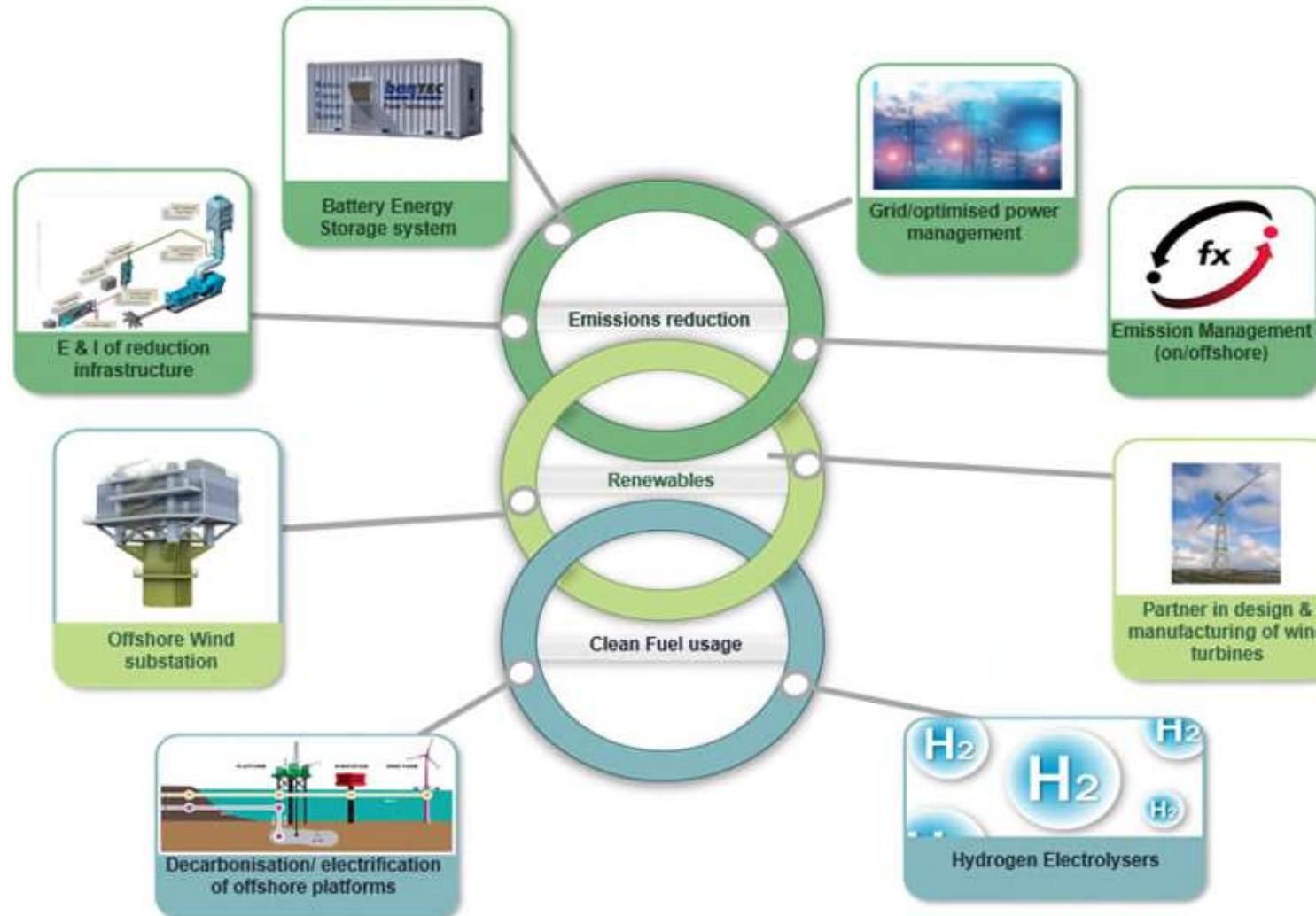


MANUFACTURING

- Leading manufacturer of equipment with plant locations in Germany and Oman
 - Manufacture of complete rigs and/or major drilling equipment (mechanical and electrical)
 - Manufacture of energy transition infrastructure, currently focused in wind turbines
 - After sales service



Examples of the areas of work that we are pursuing



Growing Energy Transition Offering

Emissions reduction



Battery Energy Storage System (“BESS”)



Emission Reduction Infrastructure



Grid optimised power management



Emission Management (on/offshore)

Renewables



Offshore wind substation



Partner in design & manufacturing of wind turbines

Clean Fuels



Decarbonisation / electrification of offshore platforms



Hydrogen Electrolysers

Battery energy storage system (BESS)



- Kenera has developed its own containerised BESS unit to replace a minimum of one generator set
- Offers a power management solution enabling rigs to run efficiently – reducing engine runtime, diesel usage and carbon footprint
- Battery capacity is up to 1400kWh

Drilling rig electrification



- An electrified rig can be run mostly “peak less” - no peak loads on generator sets
- 20% reduction in CO₂, 25% reduction in NOX emissions and 20% reduction in fuel consumption
- Reduced rig noise

Membrane free electrolyser



- Access to market leading technology collaboration with CPH2
- Patented membrane free stack with proprietary heat exchanger utilizing cryogenic separation
- Creates highly pure hydrogen (99.999%) and medical grade oxygen

Kenera Energy Optimisation – Equinor Cat J MODU's

Energy optimisation objective:

- Reduce emission and energy consumption through optimisation of existing systems. Expected to reduce CO2 by 2000 ton/year and NOx by 300 ton/year

Details:

- Energy optimisation project for our client, Equinor on two CJ-70 jack-ups operating in the Norwegian North Sea.
- The project is part of Equinor's long-term low emissions strategy for 2050
- Kenera will deliver the project through the engineering and installation of a series of carbon-reduction technologies starting April 2022 and lasting 12-month
- The project include
 - Apply Selective Catalytic Reduction (SCR) to main diesel generator exhausts to reduce NOX
 - Installation of an “ECO booster” on the ring line & BOP handling HPU's to reduce power consumption
 - Replacement of DOL starters with VFD's (22 No.) to reduce motor running hours & power consumption

“This is an exciting project for Kenera, working with Equinor to support their environmental goals and seeking carbon-free sources of energy to help play our role in the energy transition.”



Equinor's Askeladd and Askepott Cat J Jack-ups were built for Gullfaks and Oseberg fields (Norwegian North Sea) in 2017. Kenera supported design through construction and commissioning to O&M.

NOX	70-80% reduction
HPU energy consumption	60% reduction
Aux. energy consumption (22 consumers)	30-40% reduction

Kenera Battery Energy Storage System (BESS)

- Kenera has developed its own containerized BESS unit
- Using a BESS unit supports the achievement of environmental targets and it saves costs
- Battery capacity: up to 1400kWh
- On a hybrid heavy land rig, the expectation is that the BESS unit could replace one generator, making the rest of the genset run in the efficient part of their operating curve reducing diesel consumption, CO2 emissions & NOX emissions.

CO2 Emissions	20% reduction
Diesel fuel consumption	20% reduction
Noise emissions	25% reduction
NOX emissions	25% reduction
Maintenance/ overhauls	32% reduction

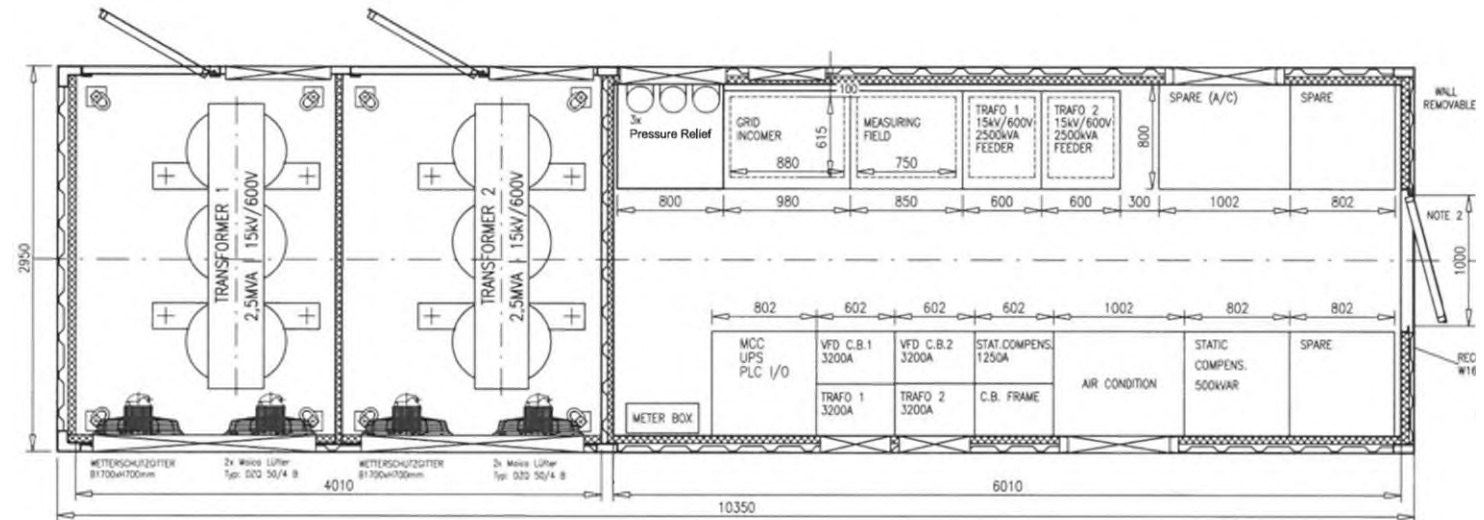


Kenera Grid Power Supply Technology

- Replace diesel-generators by a grid container
- Connect the rig to the local highline supply
- Run the rig fully electric
- Avoid all diesel and diesel-transport costs, all CO₂ and NOx emissions and significantly reduce noise emissions

- Grid Transformer Container

- Typical dimensions (LxWxH): ~10.5m x 3m x 3m
- Environmental conditions desert: -10 to +55°C
- Environmental conditions arctic: -45 to +40°C



Kenera Offshore Substation Offering



Basic Designs:

- Initially developed 200 MW OSS concept (monopile)
- Engaged with global Developer (since 2019) on layout, cost and BOQ
- HV Equipment manufacturers participated in internal design review process
- Kenera OSS designs developed to DnVGL-ST-0145
- 200, 350, 600, 760 & 1000 MW OSS Designs

Primary Equipment partners:

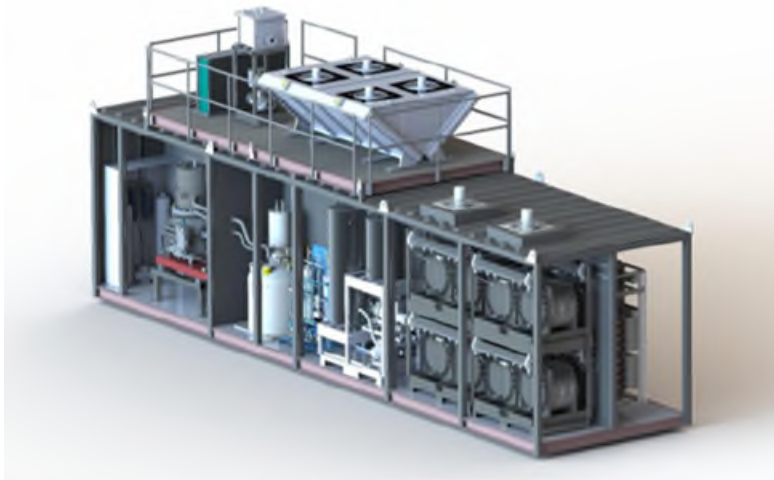
- Schneider Electric: Formalising alliance with Schneider Electric.
- Hitachi-ABB: Good relationship with Hitachi-ABB who positively supported Kenera's OSS RFI submissions and ITT preparation for a Taiwanese opportunity.

Fabrication:

- European Yard: Formalising UK & Ireland alliance with EPC yard with extensive OSS delivery track record.
- Far Eastern Yard: Collaborated since 2018 with this low cost fabrication yard with substation track record.

Participation in the hydrogen value chain

- 10-year agreement to manufacture and supply Membrane-Free Electrolysers™ that use Clean Power Hydrogen (CPH2) technology
- The Membrane-Free Electrolyser™ is a disruptive technology in the hydrogen space
- Firsts units to be built in Germany from early 2023
- Ability to sell across Europe and exclusive technology licence across the Middle East



Technology		Membrane Free	
Company		CPH2	CPH2
Product		MFE220	MFE440
Stack size	MW	0.125	0.125
System size assumed	MW	1	2
Stack cost	\$/kW	130	90
System cost	\$/kW	960	770
Stack efficiency	%	74-80	74-80
System start efficiency	%	57	62
System average efficiency	%	57	62
Degradation	%/1000h	0.00	0.00
Stack lifetime	years	25*	25*
Hydrogen purity	%	99.999%	99.999%
Oxygen purity	%	99.5% (Medical Grade)	99.5% (Medical Grade)
LCOH	\$/kg H2	2.80	2.29

What differentiates KCA Deutag?

Leading drilling, engineering and technology company



SAFE, RELIABLE AND EFFICIENT OPERATIONS

INTEGRATED TECHNOLOGY DIFFERENTIATION

STRONG INTERNATIONAL FOOTPRINT

LEADING PRESENCE IN MIDDLE EAST

ENERGY TRANSITION WITH KENERA

BLUE CHIP CUSTOMER PORTFOLIO

12-MONTH ROLLING TRIR IN DECEMBER 2023 WAS 0.25

NPT OF 2.00% IN 2023 ACROSS THE WHOLE FLEET

Our **OneTeamWay** is more than a corporate philosophy. It's a genuine sense of passion for and pride in what we do, an honesty and reliability that we and our customers value – and the respect we have for one another, embodied in the Core Values of our Group.

We're proud of our people and grateful for the experience, wisdom and enthusiasm they bring to our business – and to that of our customers.