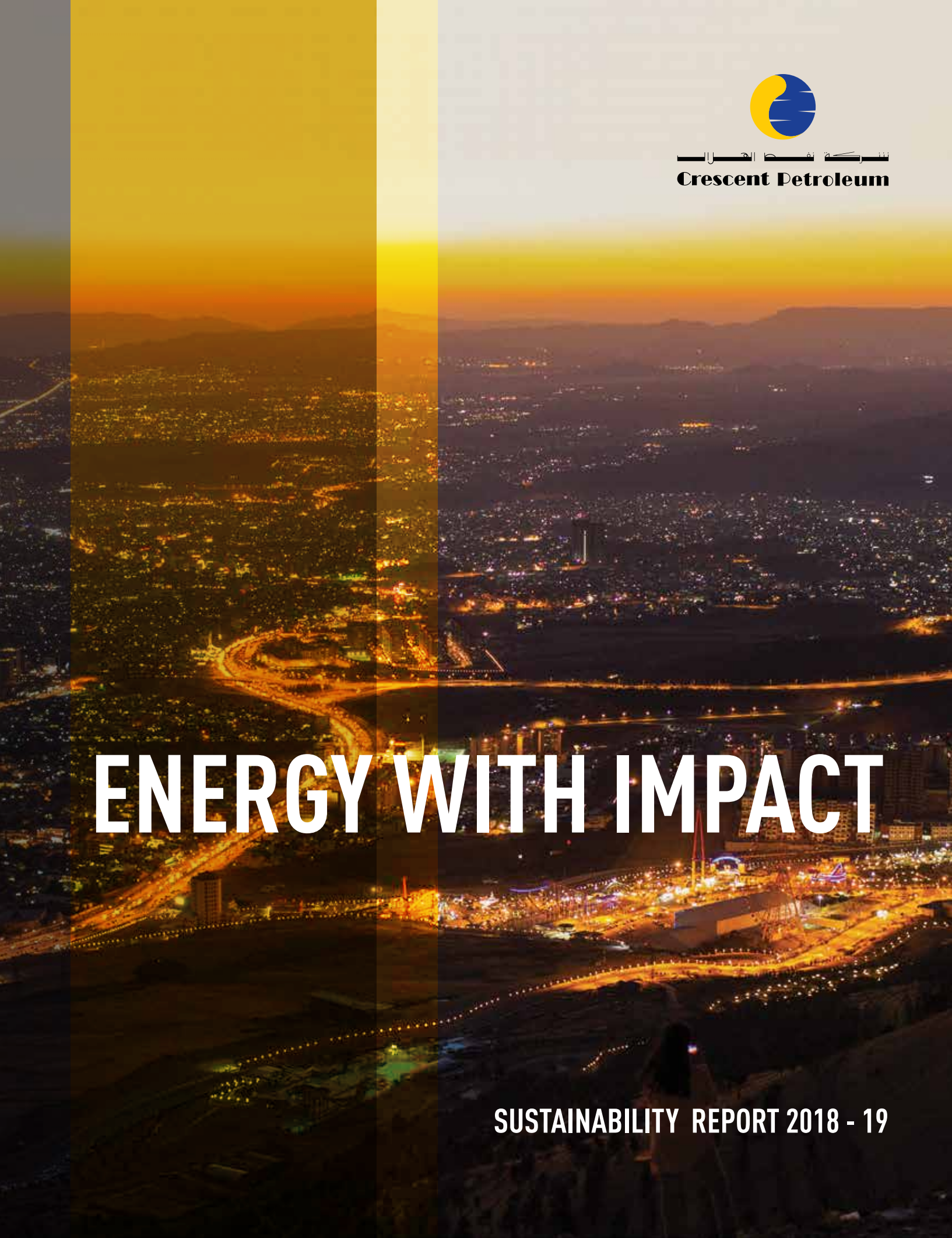


شركة نفط الهلال
Crescent Petroleum

ENERGY WITH IMPACT

SUSTAINABILITY REPORT 2018 - 19

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Sustainability is at the heart of our business

Crescent Petroleum is pleased to present its 2018-19 Sustainability Report, covering the period from 1 January to 31 December 2018. This is our fourth annual sustainability report, which outlines how our business strategy aligns with our sustainability considerations. This report highlights the progress in our sustainability journey to yield lasting social, economic, and environmental impact in the regions where we work and live.

This report is prepared in accordance with the "Global Reporting Initiative (GRI) Standards: Core option" and is aligned with the GRI's Oil and Gas Sector Supplement. It also describes how we seek to support the 17 Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda for Sustainable Development.

We identified the key material topics that impact our sustainability through stake holder consultations and a materiality assessment exercise, done in consultation with the management team. Each material topic is mapped against the relevant indicators from the GRI Standards, 2016.

This report has been externally assured by Ernst & Young Middle East as per ISAE 3000 standard for assurance of non-financial information, ensuring the accuracy and consistency of the reporting.

Our performance is defined by four pillars that underpin our sustainability approach. Based on our materiality assessment, these priority areas reflect the topics most relevant to our operations and our business:

- **Creating shared prosperity**
- **Building a resilient work culture**
- **Safeguarding our people**
- **Operating responsibly**

The information presented in this report is based on historical performance data as well as data for 2018. In some instances, data was calculated based on standard guidelines, assumptions, and methodologies. For example, data for greenhouse gas emissions is based on standard formulas and calculations.

The quantitative data highlighted in this report covers the period from 1 January 2018 to 31 December 2018, unless otherwise stated. The report also includes information on key strategic decisions and initiatives that commenced in 2018 and were formalised in 2019.

The reporting boundary includes the entirety of our operations in the United Arab Emirates (UAE), where we are based, and the Kurdistan Region of Iraq (KRI). The sustainability impact of our affiliate companies is considered out of the scope and boundary of this report, unless otherwise stated.

The principles of stakeholder inclusiveness, materiality, sustainability context, and completeness have been consistently followed to define the report content. We welcome feedback and suggestions regarding our sustainability journey at **cpsustainability@crescent.ae**.



The reporting boundary includes our operations in the United Arab Emirates and the Kurdistan Region of Iraq.

OUR MISSION

To creatively unlock the benefits of the region's energy resources and to have a transformative impact on the communities that we serve.

OUR VALUES

Ethics
We maintain integrity in all our business dealings, remaining honest, professional, and fair, even in the most difficult situations.

Enterprise
We pride ourselves on our creativity, agility, initiative, and can-do attitude. We are guided by resourcefulness, not red tape.

Responsibility
We are accountable for our actions and follow through on our commitments. We admit our mistakes and make sure we learn from them.

Safety consciousness
We adhere to strict safety standards. We anticipate and work to prevent risks before they materialise. We avoid actions that may endanger another person or adversely affect their health or well-being.

Courage
Our boundless ambition makes us passionate about undertaking new and daring projects. When put to the test, whether individually or as a team, we find solutions not excuses.

Care
We treat employees as family and are courteous and respectful towards one another. We embrace our social responsibility, committed to making the world a better place.

Energy drives social and economic growth, and its impact is transformational



We are enablers and we help solve some of the region's key energy challenges.



We are pleased to present the Crescent Petroleum Sustainability Report for 2018-19, *Energy with Impact*, which outlines our achievements across our core sustainability principles.

Since our start in 1971, Crescent Petroleum has leveraged its understanding of the Middle East to promote cleaner energy and social sustainability. We aim to be enablers who leverage our people, technology, and know-how to help solve some of the Middle East's key energy challenges for the betterment of the region and its people. That vision informs and focuses our sustainability efforts across our operations in the UAE, Iraq, and beyond.

A pillar of that effort is unlocking the potential of natural gas in the Middle East, where more than 42 per cent of the world's proven gas reserves lie, and Crescent Petroleum is proud to have played a pioneering role in the regional gas sector for over thirty years.

Through our partnerships with the Global Energy Summit in Abu Dhabi and the Middle East Energy Summit with the Royal Institute of International Affairs, Chatham House, in London, we have added our voice to the important global energy debate on sustainability from our region's perspective while allowing us to present positive practical solutions to some of the major energy challenges our region currently faces.

Another pillar is investing in our communities and our people. In 2018 we established Social Performance as a strategic driver for our business moving forward, and on the ground, we have supported causes and programmes that empower communities through better education and healthcare, as well as by providing direct support through delivery of water and electricity to surrounding communities.

Crescent Petroleum has grown and thrived through its people, who have always gone above and beyond what is expected of them. In turn, we continually invest in our staff through training programmes and wellness efforts to help them grow and lead.

We see a bright future for the Middle East region and its people despite all of today's challenges, we recognise that investing in Social Performance and the well-being of our communities and stakeholders is central to our future success.

We are therefore proud of the progress we have achieved so far, and are mindful that there is more to be done as we continue our sustainability journey. We hope you find this report insightful and helpful to understanding Crescent Petroleum and what drives us, and invite you to join us on our sustainability journey.

Majid Jafar
Chief Executive Officer

2018 PERFORMANCE HIGHLIGHTS

Delivering on our promise

Invested
USD 1.6 billion
in the KRI from 2007 to 2018.

Spent
61%
of procurement budget for production operations spent with local suppliers in the KRI* in 2018.

Empowering local talent:
84%
of our KRI workforce were local nationals.

Invested
USD 2.4 million
in local communities in 2018.

*For the purpose of this report, significant location of operation is Kurdistan Region of Iraq ("KRI") and all the procurement done in KRI is defined as local.

Empowering our teams

Empowering the youth: professionals aged 22 to 30 years represented
18%
of our 2018 workforce.

Providing stable employment:
90%
of our 2018 employees were on a permanent contract.

Empowering women:
86%
of our women employees received self-empowerment training.

Training for excellence:
29,987
training hours delivered in total.

Ensuring our teams' safety

Drove

2,227,321 km

during 2018 without any major accident

Maintained

Zero

LTI across production operations in 2018.

Reduced sick leave cases by

39%

at Khor Mor.

Our commitment to the environment

Recorded

Zero

major oil spills for 2018 building on 2017.

Recycled

998 kg

of e-waste in 2018.

Prevented

3.94 million

tonnes of CO_2 emissions in 2018 in the KRI by supporting its transition from diesel to natural gas.

Avoided

USD 2.99 billion

in social cost of carbon since 2008 till 2018.

The first and largest private upstream oil and gas company in the Middle East

Since our inception in Sharjah, UAE, in 1971, we have leveraged our understanding of the Middle East to promote cleaner energy and social sustainability. Today, we have operations in the UAE and the Kurdistan Region of Iraq (KRI), with offices in Baghdad, Erbil, Sulaymaniyah, and London in addition to our headquarters in Sharjah.

Crescent Petroleum is also the founding and largest shareholder in Dana Gas, a publicly listed private-sector natural gas company in the Middle East.

In 2007, Crescent Petroleum, together with Dana Gas, entered into agreement with the Kurdistan Regional Government (KRG), which provided title and exclusive rights to appraise, develop, produce, market, and sell petroleum, including natural gas domestically and for export, from the Khor Mor and Chemchemal fields in the KRI.

The agreement marked the start of the Kurdistan Gas Project, operated jointly by Crescent Petroleum and Dana Gas, and enabled the development of the KRI's gas extraction and production sector while reinforcing its socioeconomic development.

In a record 15 months from the start of construction, gas began flowing through newly built pipelines from Khor Mor to power plants in Chemchemal and Erbil. In the ensuing decade, the project has delivered reliable, affordable energy at scale to the KRI, making a considerable impact on the region's economy, society, and environment.

Capital investment in the project's infrastructure and day-to-day operations has sustained significant economic activity in the KRI. However, the Project's most significant economic contribution, by far, is the gas provided to fuel the KRI's electricity grid.

Our growth story in the KRI

2007

Crescent Petroleum, together with Dana Gas, enter into agreement with the KRG providing title and exclusive rights to appraise, develop, produce, market, and sell petroleum, including natural gas domestically and for export, from the Khor Mor and Chemchemal fields in the KRI.

2009

Pearl Petroleum is formed as a consortium with Dana Gas and Crescent Petroleum as major shareholders. OMV, MOL, and RWE subsequently join the consortium, with a ten per cent share each. Crescent Petroleum and Dana Gas operate the fields as Operator on behalf of Pearl Petroleum.

2017

Pearl Petroleum reaches a full and final settlement with the KRG of the arbitration between them, including committing to expand operations in the region.

Expansion plans include the multi-well drilling programme currently underway in both the Khor Mor and Chemchemal fields, as well as the installation of additional gas processing and liquids extraction facilities.



Capital investment in the gas project and operations have sustained significant economic activity in the KRI.

The electricity generated with gas not only fulfils the basic needs of the KRI's 5.9 million inhabitants, but it also powers activity in all sectors of the economy, including agriculture, industry, and commerce.

In August 2017, Crescent Petroleum and its partners in the Pearl Petroleum consortium reached a full and final settlement with the KRG of the arbitration between them, including receiving USD 1 billion from the KRG for past receivables and committing to expand their investment and operations in the region.

These expansion plans include a multi-well drilling programme in both the Khor Mor and Chemchemal fields, which began in 2018.

Meanwhile, a 30 per cent production increase from debottlenecking throughput at the Khor Mor plant, was brought on line in November 2018 increased total production to 106,000 barrels of oil equivalent (BOE) per day, making it the largest regional private-sector gas operation in Iraq today.

In 2018, Crescent Petroleum was awarded three concessions within federal Iraq for development of gas fields in Diyala province, Gilabat-Qumar and Khashim Ahmer-Injana, as well as the Khidr Al Mai exploration block in southern Iraq, promising to considerably expand the company's gas footprint in the country.

The concessions, which were initialled by the Ministry of Oil in 2018, are awaiting signature and ratification.

2018

Pearl Petroleum signs a 10-year Gas Sales Agreement with the KRG in January. Debottlenecking project results in over 30 per cent expansion in production from the Khor Mor plant; gas sales commence in late 2018.

Crescent Petroleum is awarded three concessions in the fifth bidding round in federal Iraq: Gilabat-Qumar and Khashim Ahmer-Injana in Diyala province and Khidr Al Mai in southern Iraq.

2019

Pearl Petroleum signs a 20-year Gas Sales Agreement with the KRG to meet increasing demand for electricity generation.



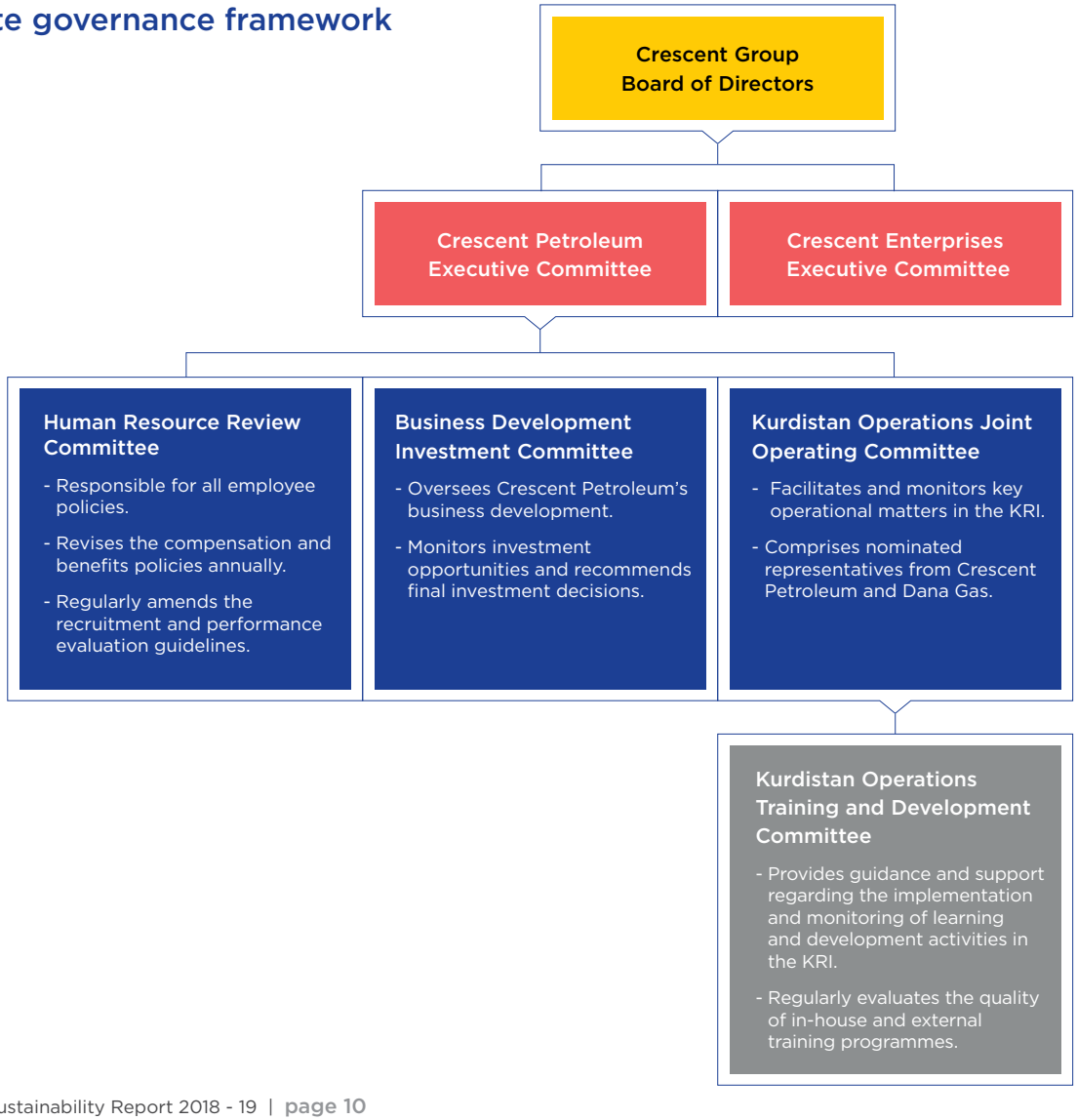
Best practices in corporate governance underpin all our operations

The Board convenes every quarter to review the company's strategy and evaluate its business, financial performance, and operational risks.

The Board has set up an Executive Committee (ExCom) which is responsible for strategic oversight, decision-making, reviewing strategic plan and mission, developing capital management guidelines, and setting company policies.

The Board also oversees the activities of Crescent Group's other subsidiary, Crescent Enterprises, a multinational company headquartered in the UAE. The company works globally through four core platforms: CE-Operates, CE-Invests, CE-Ventures, and CE-Creates; across numerous sectors, including ports and logistics, power and engineering, and food and beverages; and in verticals such as private equity, corporate venture capital, and business incubation.

Our corporate governance framework





Crescent Petroleum senior leadership

Hamid Jafar
Chairman [1]

Majid Jafar
Vice Chairman, Crescent Group
CEO, Crescent Petroleum [1, 2]

Badr Jafar
Managing Director, Crescent Group
President, Crescent Petroleum [1, 2]

Razan Jafar
Director [1, 2]

Neeraj Agrawal
Chief Financial Officer [1, 2]

Abdulla Al Qadi
Executive Director, Exploration and Production [2]

Ravi Kumar V
Executive Director, Corporate Affairs and Business Services [1, 2]

Mohammed Makkawi
Executive Director, Projects [2]

Drazen Petkovich
General Counsel and Executive Director, Legal [2]

Thomas Watts
Executive Director, Projects [2]

1 Crescent Group Board member
2 Crescent Petroleum Executive Committee member

"Crescent Petroleum's Executive Committee regularly examines and updates all company policies and procedures in light of best practices, market trends, and emerging regulations. This encourages every one of us to embed good governance in our daily business conduct, and also makes us accountable for our actions."

Rakesh Edavalath

Director, Supply Chain & Contracts, Sharjah





Sustainability and disciplined corporate governance are central to our business strategy

We consider ourselves a partner in progress across all our areas of operation, and at our core, we work for the betterment of our region and its people. We have therefore incorporated sustainability in all our strategic planning, long-term objectives, and day-to-day operations. This helps us to create lasting value for our business and our stakeholders.

We are committed to creating sustainable value for our stakeholders and to disclosing our annual sustainability performance as we contribute to the socioeconomic development of the UAE, the KRI, and the wider region.

Our first sustainability report in 2015 was published in accordance with the Global Reporting Initiative (GRI) Guidelines, capturing our achievements and disclosing our non-financial performance for the first time.

Since then, through continuous engagement with our internal stakeholders, we identified the following four sustainability priorities:



Creating shared prosperity



Building a resilient work culture



Safeguarding our people



Operating responsibly



In 2018, we embraced the concept of Social Performance as one of the key business objective.

These priorities underpin our sustainability reporting and focus our efforts in support of the United Nations 2030 Agenda for Sustainable Development.

2018 was a seminal year for Crescent Petroleum as we marked ten years of uninterrupted production in the KRI and launched a series of developments and expansion programmes that have considerably increased activities within the company.

The plant debottlenecking efforts, the new drilling programme, and a variety of related projects will expand our contribution to the economies in which we live and work.

In 2018, Crescent Petroleum also embraced the concept of Social Performance (SP) as a business function supporting business objectives by identifying and managing social risks to the ongoing viability of operations, projects, and the business as a whole.

The function also has a pivotal role in contributing to a more stable and conducive operating environment by creating meaningful engagement and consultation with the communities we serve, and supporting local economic and social development.

"Our annual sustainability reporting initiative has enabled us to formalise our environmental, social, and governance commitments. It guides our continuous efforts to improve and helps us set new standards across our operations. We strive to be at the forefront of corporate sustainability among oil and gas firms in the region."

Bernard de Wolff

Senior Director, Projects, Sharjah




PARKER DRILLING COMPANY
269

Our 2015-2018 sustainability journey

USD 208 million
local project expenditure in KRI

USD 38 million
worth of procurement orders placed to local suppliers

USD 9.51 million
spent on community initiatives

Less than **5%**
attrition rate

7,697,586 km
driven without any major accident

Zero
significant oil spills

731
trees saved by partnering with Shred-it and Bee'ah

1,548 kg
of e-waste collected

33.21 million
tonnes of avoided emissions from fuel replacement

USD 2.99 billion
in avoided social cost of carbon since inception
Increased proportion of local nationals in the KRI from 62% to 73%

12%
increase in procurement spending on local suppliers across production operations in the KRI

Highlights of our sustainability journey

	Sustainability report theme	Context	Key initiatives
2015	• Released our first sustainability report *Energizing Growth* in accordance with the GRI G4 reporting guidelines.	• Our operations provide energy security by ensuring a steady supply of natural gas to the KRI. • We helped stimulate socioeconomic development in the region and contributed to low-carbon transition of the region.	• Rolled out a campaign to strengthen safety and security protocols at KRI. • Introduced paper recycling in the UAE. • Launched Centre for Economic Growth, an Abu Dhabi-based collaboration between INSEAD and private-sector entities in the Middle East to promote youth employment and drive economic growth.
2016	• Released our sustainability report *Responsive and Resilient.* • Identified the four key priority areas as part of our sustainability framework.	• The report focuses on how we improved our resilience by responding to the challenges identified across the four priority areas.	• Expanded KPI reporting to include health, safety, and environmental performance. • Initiated *Second Step Cards*, a system to report near miss cases in the KRI. • Launched IMTEYAZ graduate programme in the UAE as well as a study leave policy and a mother and wellness policy. • Supported Global Shapers Initiative and WEF Future of Human Capital (Oil and Gas) working group. • Introduced paper and aluminum recycling in the UAE.
2017	• Released our sustainability report *Partnering for Prosperity* in accordance with GRI Standards.	• The report reflects our approach towards building long-term, mutually beneficial relationships with our stakeholders to create lasting, shared value.	• Finalised the implementation of *Second Step Cards.* • Developed an Asset Integrity Management System (AIMS) to identify Safety Critical Elements. • Partnered with Chatham House and AMAR International Charitable Foundation. • Promoted IT security by leveraging such technologies as Security Incident and Event Management (SIEM).
2018-19	• Our fourth sustainability report *Energy with Impact.* • Externally assured by Ernst & Young as per ISAE 3000 standard.	• The report showcases the impact of our decade of operations in the KRI, the projected benefits of our expansion plans, as well as the effect of our internal policies and community activities on our stakeholders in the UAE and in the KRI. • The report includes qualitative data on initiatives planned in 2018 and began execution in 2019.	• Conducted an impact assessment with PwC study quantifying our contribution to the socioeconomic growth of the KRI. • Undertook multiple studies to assess potential water conservation and reuse opportunities in the KRI. • Promoted women empowerment among staff members in the UAE and the KRI. • Repositioned our CSR function to become our Social Performance function. • Launched the 2018-2022 Community Action Programme (CAP), which features high-impact initiatives that seek to catalyse the KRI's sustainable development in line with the United Nations Sustainable Development Goals.

MATERIALITY ASSESSMENT

We conducted a materiality assessment for 2018 to identify key variables and topics with notable potential impact on our business, our reputation, and those that could influence our stakeholders.

We gathered teams from our various departments for in-depth meetings to identify the topics most relevant to our operations and rated their respective relevance (high, medium, or low).

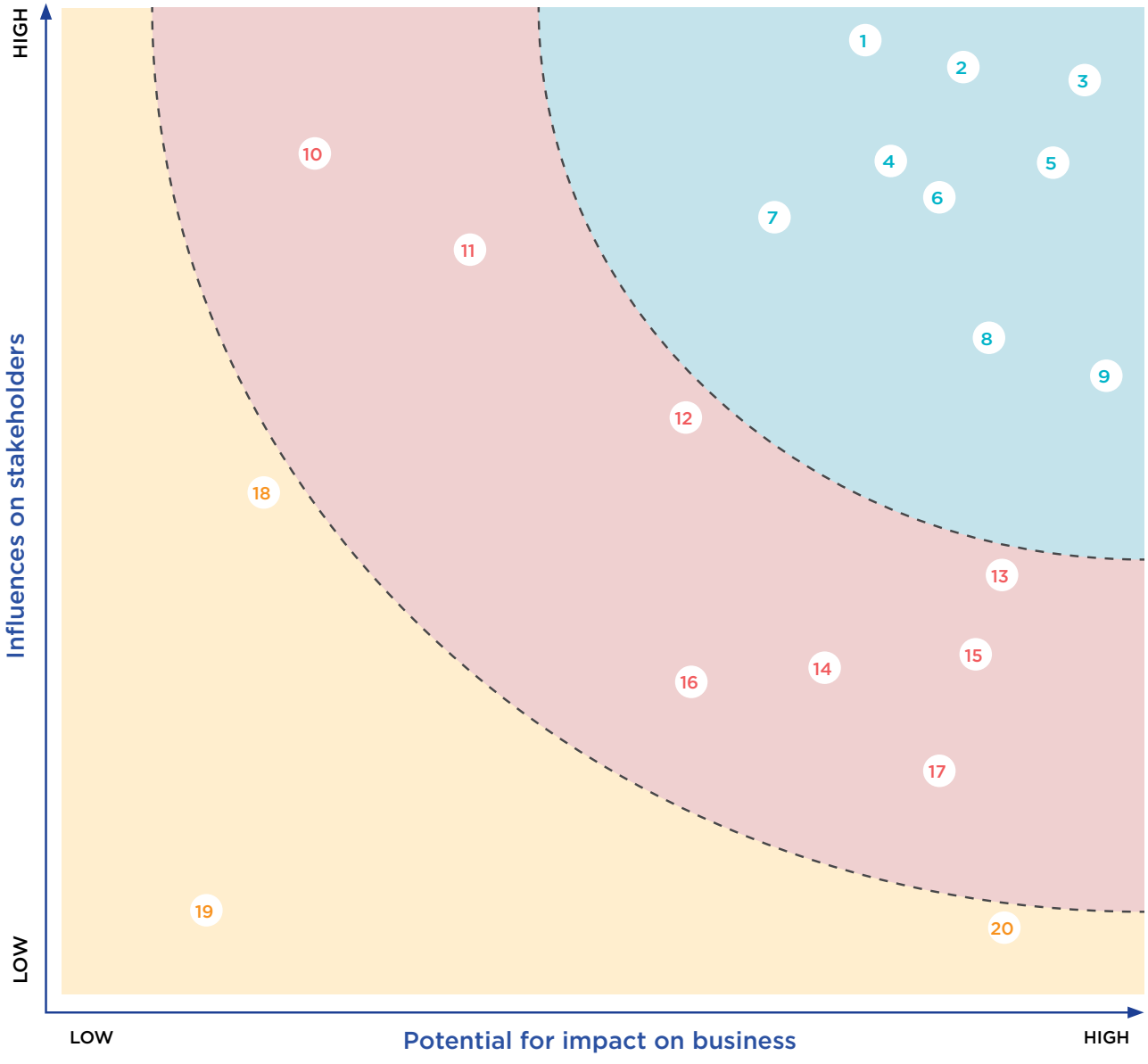
The materiality matrix encapsulates the outcomes of this exercise (see page 21).



Materiality assessment focuses on material topics with a high or medium relevance rating.

Materiality matrix

This report focuses on material topics with a high or medium relevance ratings as depicted in Layers 1 and 2 below.



LAYER 1	
1.	Transformation towards a clean energy market
2.	Occupational safety and security
3.	Process safety, asset integrity, and emergency
4.	Anti-corruption and bribery
5.	GHG emissions
6.	Engagement with local communities, social initiatives
7.	Compliance with regulations
8.	Information security
9.	Achieving financial targets, market presence

LAYER 2	
10.	Nationalisation and job creation
11.	Diversity and human rights
12.	Customer satisfaction, marketing
13.	Training and capacity building of employees
14.	Water and effluent management
15.	Energy use, energy efficiency
16.	Waste management
17.	Internal engagement and risk management

LAYER 3	
18.	Procurement practices
19.	Biodiversity
20.	R&D and innovation

"As we embark on significant expansion of our business, Social Performance enables us to deliver our social licence to operate, through structured and systematic engagement with our neighbours, communities, and key stakeholders; maximising our use of geographic information systems; enhancing our social performance standards; and delivering social investment and community support projects that make a difference."

Stuart Harrower

Corporate Head of HSSE, Sharjah





Alignment of priority areas, materiality, and the United Nations SDGs

In line with GRI requirements, the tables below map all material topics along with their rationale and topic boundary, and we have aligned them with our priority areas.

Priority area

Creating shared prosperity

SDGs



Stakeholder groups



Material topics	Rationale	
	Business perspective	Stakeholder perspective
Achieving financial targets	We are optimistic about the future of the region and its people, and see ourselves as enablers who leverage our people, technology, and know-how to solve some of the region's key problems.	Crescent Petroleum's financial performance directly impacts Crescent Petroleum's ability to invest in community initiatives.
Engagement with local communities, social initiatives	We see ourselves as a partner in progress across our areas of operation; at our core, we work for the betterment of this region and its people.	Commitment to the surrounding communities is critical to job creation, infrastructure development, and growing economic opportunities.
Transformation towards a cleaner energy market	Since our inception in 1971, we have leveraged our understanding of the Middle East to promote cleaner energy and social sustainability.	Access to affordable and clean energy is critical to economic development.
Nationalisation and job creation	We believe in harnessing the talent of local populations to help foster a thriving business as well as a more cohesive society.	Crescent Petroleum's continued investment in local talent and job creation is important to the economic development of the KRI.
Customer satisfaction, marketing	We focus extensively on serving our customers by promoting cleaner and reliable energy.	Customer satisfaction is critical to Crescent Petroleum's long-term business sustainability.

Priority area

Building a resilient work culture

SDGs



Stakeholder groups



Material topics	Rationale	
	Business perspective	Stakeholder perspective
Anti-corruption and bribery	As corruption risks are present in our areas of operation, it is important for us to remain vigilant and continuously enhance our policies and processes.	Crescent Petroleum's focus on anti-bribery initiatives is important as it helps promote the integrity of institutions.
Information security	Information security is one of the greatest risks to businesses today; we need to continuously improve our processes to mitigate threats.	Information security is necessary to preserve the confidentiality of organisational data.
Internal engagement and risk management	Our employees are our greatest assets and we seek to foster their competitiveness and compliance with all applicable laws and policies.	It is paramount to engage with internal stakeholders to identify and address their concerns.
Diversity and human rights	Our ethos and work culture promote embracing demographic and thinking diversity to enhance employee engagement and decision-making.	Crescent Petroleum's emphasis on diversity is critical as it helps ensure equal opportunities
Training and capacity building of employees	Crescent Petroleum has grown and thrived through its people, who have always gone above and beyond the call of duty. We therefore invest considerably in them to help them grow and lead, and gladly reward their commitment.	Training and capacity building are important as they help us develop our talent pool and enhance our competitiveness.

Priority area

Safeguarding our people

SDGs



Stakeholder groups



Material topics	Rationale	
	Business perspective	Stakeholder perspective
Process safety, asset integrity and emergency	Given the physical risks present in our areas of operation, we must prioritise asset integrity and security.	Ensuring zero fatalities and a safe working place are critical to the long-term success of the company.
Occupational safety and security (injury and illness incidents)	Operational safety and security are critical as they allow us to maintain uninterrupted operations and protect our employees.	Operational safety and security are critical to ensuring the health and safety of Crescent Petroleum's employees.

Priority area

Operating responsibly

SDGs



Stakeholder groups



Material topics	Rationale	
	Business perspective	Stakeholder perspective
Compliance with regulations	Operating responsibly is critical, as it helps us comply with all applicable government regulations.	Compliance ensures continuity of business operations, and in turn boosts the economic and environmental well-being of stakeholders.
Greenhouse gas emissions	As an energy company, GHG emissions are inextricably linked to our products and operations. We continuously strive to reduce our carbon footprint wherever we can.	Reduction of GHGs is vital to mitigate climate risks, which affect the business, community, and environment.
Waste management	We respect our environment and have put extensive initiatives in place to reduce waste generation and responsibly handle disposal.	Waste management is somewhat important from a resource availability perspective, but importance is quite low given the nature of Crescent Petroleum's operations.
Energy use, energy efficiency	We take our impact on the environment very seriously and emphasize the need to reduce our energy consumption across all our operations.	Efficient use of energy leads to improved economic performance.
Water and effluent management	Water is scarce in our countries of operation; however, our operations are not considered to be water-intensive.	Water is one of the most vulnerable resources to climate change, therefore efficient water management is important to Crescent Petroleum's sustainability efforts.

Crescent Petroleum's stakeholder groups



Industry partners



Government



Employees



Suppliers and contractors



Communities and NGOs

DELIVERING ON OUR PROMISE

USD 1.6 billion
invested in the KRI from 2007 to 2018.

61%
of procurement budget spent on local suppliers across production operations in the KRI in 2018.

Focus on empowering local talent:
84%
of our KRI workforce were local nationals.

USD 2.4 million
invested in local communities in 2018.

In 2018, we repositioned our CSR function to become our Social Performance function, supporting the delivery of business objectives by identifying and managing social risks to the ongoing viability of operations, projects, and the business as a whole.

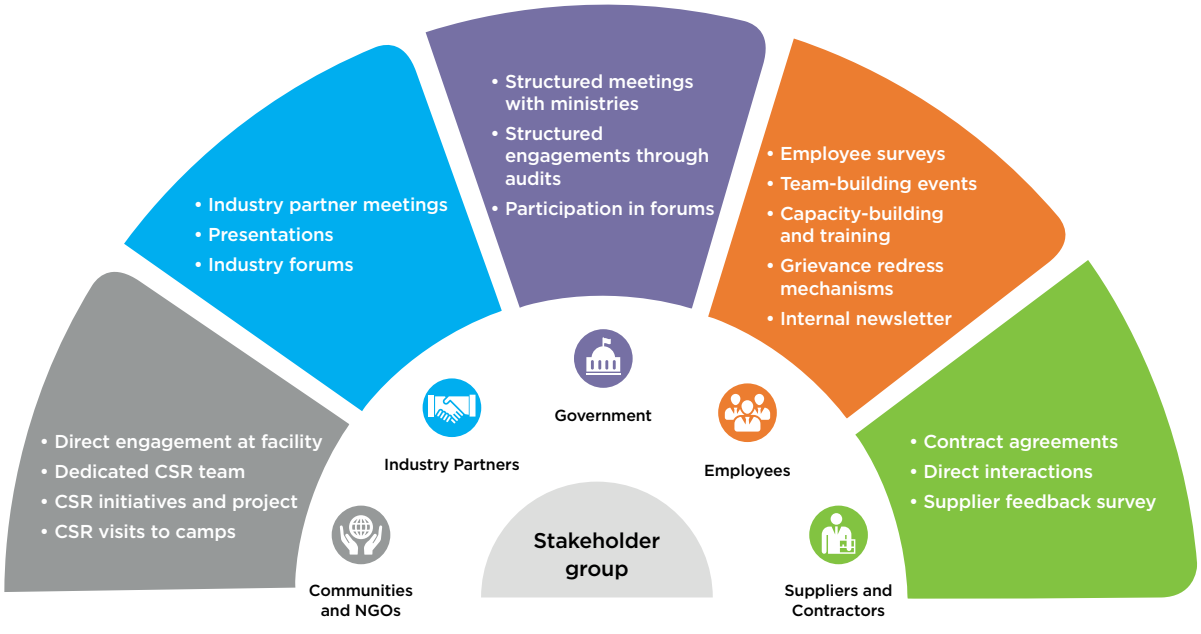
The function also has a key role in contributing to a more stable and conducive operating environment through meaningful engagement, consultation, and supporting local economic and social development.

The Social Performance function establishes and maintains active relationships with interested and affected stakeholders, avoids or minimises the negative impacts of our activities, and ultimately creates and delivers opportunities to maximise our impact on society.

We identify our stakeholders as all those people, organisations and communities that could impact or be impacted by our operations across the value chain.

Active, two-way engagement of stakeholders enables us to address their needs and expectations as we seek to mitigate the potential risks associated with our activities.

We engage with our stakeholders at the national, corporate, and project levels. The figure below illustrates our key stakeholder groups and our respective modes of engaging with them.



The most significant economic contribution by Crescent Petroleum results from the energy provided to power the KRI's electricity grid. The electricity generated through gas not only fulfils the basic needs of the KRI's inhabitants, but it also powers activity in all sectors of the economy, including agriculture, industry, and commerce.

Direct project benefits

To commemorate the first ten years of the Kurdistan Gas Project, we engaged international professional services firm PwC to conduct an impact assessment study quantifying our contribution to the socioeconomic growth of the KRI. The study highlighted impact of our operations through economic enrichment, community engagement, and the environmental benefits of substituting diesel with natural gas in the region. The study, issued in 2019, covered our impact from 2008 to 2017 and our estimated future contribution for the next ten years.



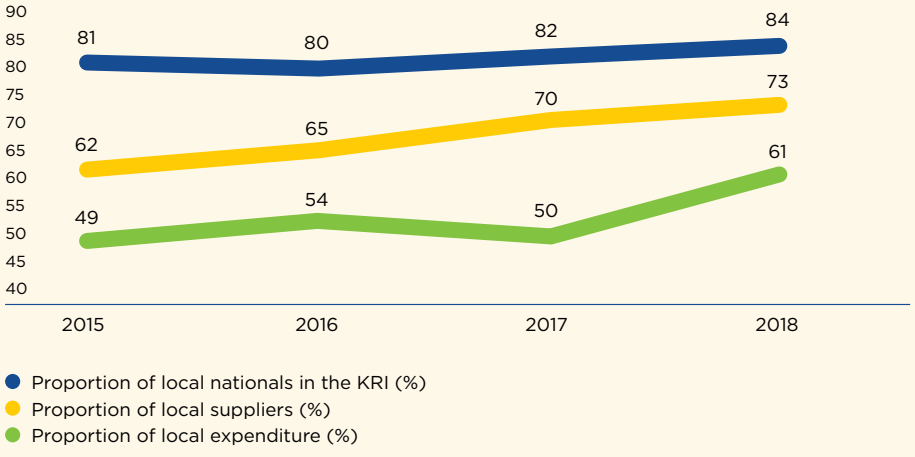
The estimated 5.9 million residents of the KRI now enjoy more reliable electricity service every day, powered by the gas produced by our operations. This has not only improved the quality of life for residents, but it has also helped fuel the KRI's economic growth.

PwC estimates that in 2017 the supply of gas produced from the Project contributed between USD 10.7 billion and USD 18.3 billion to the KRI's GDP by delivering reliable and affordable electricity to the region. This implies that economic growth over the past ten years would have been considerably lower without gas production from the Project.

In the course of operations, the Project generated 2,200 permanent jobs in 2017 and 20,000 temporary jobs during the construction phase, underscoring the direct economic impact it has had, particularly on local communities.

Over the past decade, the total investment in the KRI by Crescent Petroleum, together with its partners in the Pearl Petroleum consortium, has amounted to USD 1.6 billion. Over the next decade, that contribution will increase by USD 4.3 billion, further impacting the region's socio-economy and environment.

Local socioeconomic benefits



"Our support to local communities extends beyond providing access to reliable and affordable energy that powers households and businesses to include tailor-made community programmes and participation in local and international events that promote the socioeconomic development of the region."

Sherzad Hama Ali Mahmood

Social Performance Field Supervisor, Sulaymaniyah





Indirect project benefits

We continue to empower the region's youth, and equip them with transferable skills. For this, we have partnered with several educational institutions, non-profit organisations, and other private-sector entities to promote educational initiatives and vocational training.

We employ local citizens and local suppliers, wherever possible, in our endeavour to support local businesses. It is estimated that we have created 10,000 direct jobs and another 10,000 jobs throughout our supply chain in the KRI in our first decade of operation.



Seeking suppliers' feedback

In 2018, we conducted a supplier feedback survey to assess the efficacy of our internal processes of supply chain management. We shared the survey with over 200 suppliers and received mostly favourable responses; we also received suggestions for improvements, which we have considered for implementation. We remain committed to promote local suppliers where possible.

Empowering our communities

We aim at empowering the communities where we operate, and delivering lasting impact on daily life. In both the UAE and KRI, we dedicate our financial and human resources to promote better living conditions, increased access to healthcare and better health awareness, in addition to education, arts, and social inclusion.

In 2018 alone, we spent USD 2.4 million on our community activities.

Our 2018-22 Community Action Programme (CAP) includes high-impact initiatives that seek to catalyse the KRI's sustainable development in line with UN SDGs.

Our 2018 community initiatives in the UAE and the KRI

ART AND EDUCATION

- Supported six schools across the KRI.
- Distributed school supplies and backpacks to 690 students in the KRI.
- Sponsored the sixth edition of the Iraq Public Leadership Program (IPLP), a 16-day executive education programme led by the American University of Sharjah's Jafar Center for Executive Education.
- Sponsored advancement activities at American University of Sharjah.
- Sponsored a women's arts competition held by the Sharjah Ladies Club.

ELECTRICITY AND WATER

- Supplied over 8,000 litres of diesel to 13 villages for power generation.
- Provided energy access to Turka village by providing generators, fuel, operators, and infrastructure.
- Supplied 70,000 litres of potable water to Chemchemal and Shorsh residents.

HEALTH

- Supplied consumables to Shar Hospital and Emergency/Burn Hospital in Sulaymaniyah.
- Sponsored the Sharjah City for Humanitarian Services' conference '5% Within Frequency Range', to promote the inclusion of hearing impaired in society.
- Supported Friends of Cancer Patients in encouraging Sharjah-based youth to tackle paediatric cancers.

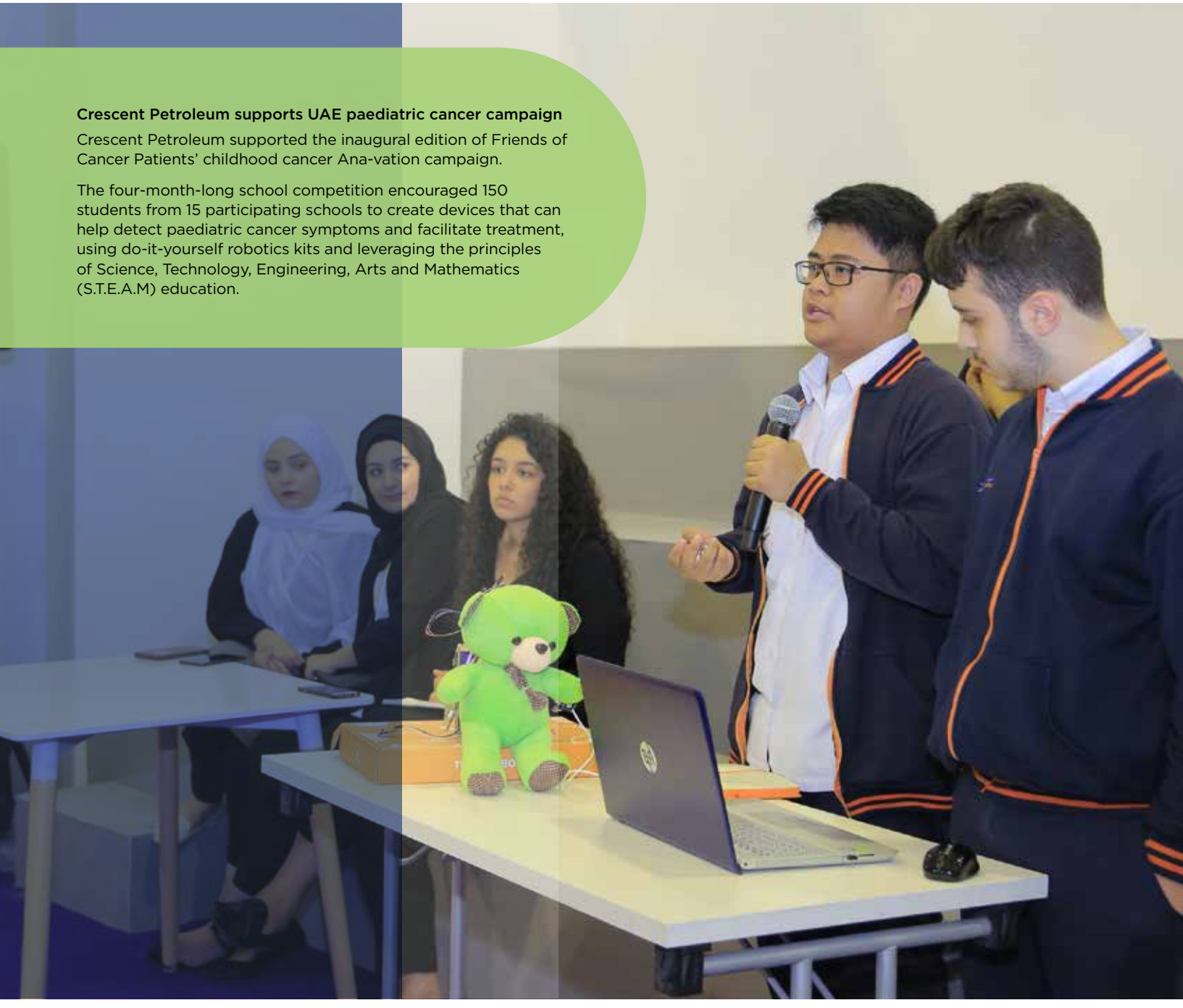
INCLUSION

- Constructed a bakery in the compound of Civil Development Organization to feed the disadvantaged and Internally Displaced People (IDPs) in Sulaymaniyah.
- Maintained funding for AMAR Foundation's primary healthcare centre and vocational training institute for IDPs in Khanke camp.
- Supported the Emirates Association of the Visually Impaired and Rashid Centre for the Disabled.
- Supported the UAE's first Rare Disease Day.

Crescent Petroleum supports UAE paediatric cancer campaign

Crescent Petroleum supported the inaugural edition of Friends of Cancer Patients' childhood cancer Ana-vation campaign.

The four-month-long school competition encouraged 150 students from 15 participating schools to create devices that can help detect paediatric cancer symptoms and facilitate treatment, using do-it-yourself robotics kits and leveraging the principles of Science, Technology, Engineering, Arts and Mathematics (S.T.E.A.M) education.



Promoting our region

We are optimistic about the long-term potential of our region and collaborate on numerous high-level international events that promote dialogue and research into the challenges faced by the people and the economies of the Middle East. These initiatives include the World Economic Forum, Chatham House's Middle East and North Africa (MENA) Energy Conference and Driving Economic Growth in the MENA Region Workshop, the Atlantic Council Global Energy Forum, the Seventh OPEC International Seminar, and Iraq Economic Development Summit.

Our support and participation in these events championed economic policy in the region, promoted the potential of natural gas in the region and highlighted investment opportunities in the energy sector.



Crescent Petroleum participates in the Iraq Economic Development Summit

Crescent Petroleum supported and participated in the second annual Iraq Economic Development Summit, titled *Iraq: A Leap Forward*, in Baghdad in December 2018.

The event explored the opportunities and challenges facing the various economic sectors in Iraq. Crescent Petroleum's Executive Director of Exploration and Production Abdulla Al-Qadi participated in a session "The Future Investment Landscape" and led high-level discussion at the event.

The event attracted more than 500 government officials, investors, and businesspeople from around the world.

We have also participated in career fairs such as the Rawanga Foras International Job Fair, the American University of Sharjah Career Fair, and the Harvard Business School Arab Career Fair to create better awareness in the region about employment opportunities in the company.

Engaging high school students in the KRI

In December 2018, our team in Erbil delivered a presentation about Crescent Petroleum and its operations to high school students at Hawler Private High School. We highlighted our contribution to the KRG's socioeconomic development as well as our growth plans and their projected impact on electricity availability and career prospects in oil and gas. The presentation furthered awareness of Crescent Petroleum and sought to build awareness of job prospects in the KRI.



Empowered teams help us deliver on our commitments

At Crescent Petroleum, we prize teamwork to achieve our business objectives.

We strive to build dynamic, synergistic teams that exhibit the five qualities defined by Google's Project Aristotle (2016)[1]: psychological safety, where team members feel safe to take interpersonal risks; dependability, where team members reliably complete their tasks on time; structure and clarity of job expectations; meaning; and impact.

We also value our nurturing work environment, which we foster through our selection process, core values, people policies, as well as our day-to-day practices. Not only does such an atmosphere helps us nurture psychological safety, but it also enables us to retain our talent.

In November 2018, we celebrated the tenth anniversary of production in the KRI in the presence of all our stakeholders, including our employees. We also distributed mementos to over 620 employees and contractors in recognition of their role in sustaining our operations.

Our annual performance management system encourages each team member to define their annual work goals in line with their personal values and in consultation with their line manager to set mutual job expectations as well as to find purpose through work.

We recognise the achievements of our team members and regularly share their successes through events, newsletters, and reports to build awareness and appreciation for the impact of their contributions.

Empowering the youth: professionals aged 22 to 30 years represented

18%

of our 2018 workforce.

Providing stable employment:

90%

of our 2018 employees were on a permanent contract.

Training for excellence:

29,987

training hours delivered in total in 2018.

Empowering women:

86%

of our women employees received self-empowerment training.

1. https://rework.withgoogle.com/print/guides/5721312655835136/

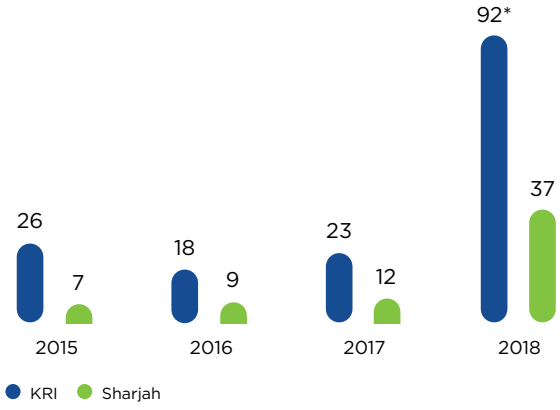
Selecting our people

To support our expansion plans, we have increased our talent pool in both the UAE and the KRI throughout 2018.

As we expand our operations, we strive to maintain a nurturing work culture by recruiting professionals who share our core values. We conduct thorough assessments to gain insights into a candidate's behaviour at the workplace.

Our talent acquisition team and hiring managers are trained to assess candidates' job fit while the tests that we administer allow us to objectively assess their cognitive ability and behavioural characteristics.

New employees hired by region (headcount)



*Includes 55 drilling consultants.

In 2018, we refined our employee selection process by introducing an ipsative personality profiling assessment, which helps us measure our candidates' behavioural preferences, personality, potential, and motivation.

Overview of our recruitment process

Requisition
- Creating a job description
- Defining competencies
- Raising a job requestion

Pre-screening
- Sourcing CVs
- Conducting telephonic interviews
- Reviewing and shortlisting relevant profiles

Assessment
- Basic skills test
- Cognitive ability test
- Personality profile analysis
- Role-based test

Selection
- Hiring manager's interviews
- Human Resources interview

Post-selection
- Reference checks
- Onboarding

We do not compromise on specific qualities in all our employees to ensure that they resonate with our corporate culture. These qualities are: empathy, conscientiousness, and teamwork skills. We emphasise these qualities throughout our onboarding programme and reemphasise them with the help of our employee handbook.



"I am fortunate to work in a technical work environment that enjoys high levels of both camaraderie and employee retention. This reflects the success of our company's character-focused recruitment process, balanced work culture, and teambuilding events."

Omed Ali

Senior Technical Assistant, Khor Mor



Investing in our people, embracing diversity

In 2018 and 2019, we reinforced our commitment to honing the potential of our women employees and offered self-empowerment workshops to our female staff in the UAE and the KRI.

We also offered first-aid training to all our UAE employees to empower them to maintain a safe environment both at work and at home. In addition, we provided a two-day introductory oil and gas industry seminar to our non-technical professionals across our headquarters to help them further familiarise themselves with our industry.

In the KRI, we offered year-round training for our staff across departments including: Operations, HSE, Maintenance, Security, and Camp Management Departments. We also provided our local employees with various English classes, in addition to supporting 14 employees to obtain certifications in their areas of specialisation. We provide relevant personnel with training on anti-corruption and bribery.

To better cater to our expanding workforce, we are enhancing our competence training and development capabilities by revising all our training curricula and have recently launched a dedicated training facility in Khor Mor, which includes five classrooms and administration offices.

Throughout our learning and development activities, we aim to instil a culture of lifelong learning and we support our employees across our areas of operation to pursue their education.



Promoting women's self-empowerment

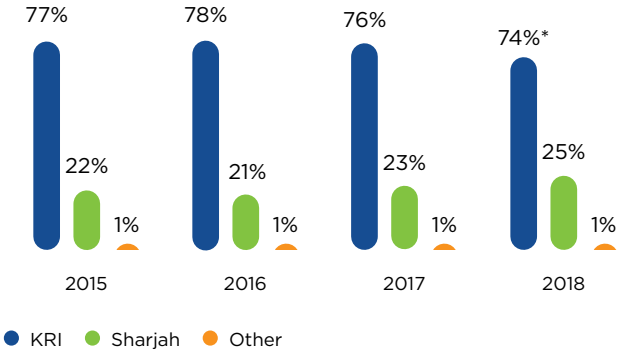
In the last quarter of 2018, our Learning and Development Department in collaboration with the Center for Executive and Professional Education at the American University of Sharjah held a two-day self-empowerment workshop for all our women staff.

The workshop introduced women employees to the concept of self-empowerment as well as various personality awareness tools. It also taught them how to leverage the three-factor framework to self-empowerment to catalyse their professional success.

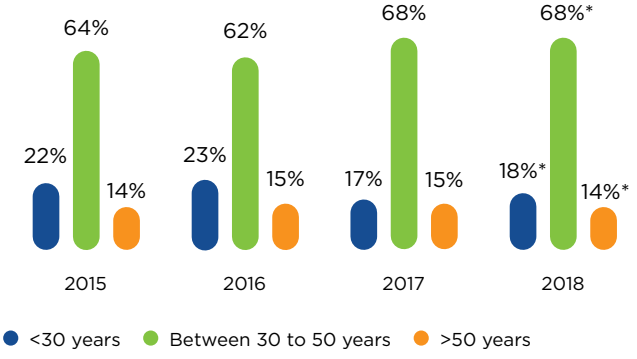
The workshop received an overwhelmingly positive feedback, prompting our Learning and Development Department to successfully hold a similar workshop for our KRI women staff in January 2019.

At Crescent Petroleum, we define diversity broadly to include personality, lifestyle, outlook, ability, work experience, nationality, religion, gender, marital status, and age. We aim to promote employee diversity through our recruitment and internship programmes.

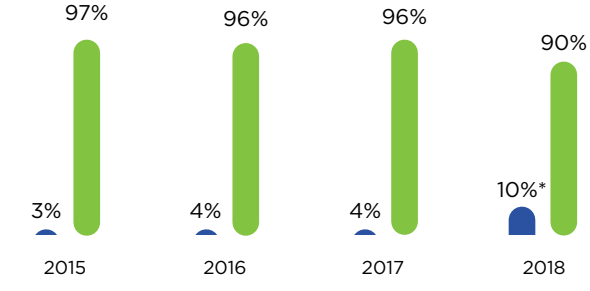
Employees by location (percentage)



Employees by age (percentage)



Employees by contract type (percentage)



*Includes drilling consultants

We increased our women representation rate in our UAE workforce to 25 per cent in 2018, up from 22 per cent from the previous year. We remain committed to empowering women across our counties of operation as their employment is key to promoting economic development and social cohesion.

We believe in the potential of young minds to drive much-needed change in the regional business landscape and strive to create meaningful opportunities for them across our organisation. Every year, we recruit and train students and fresh graduates across numerous functions of our company as part of our structured internship programme.

We nurture long-term relationships with our interns and offer full-time employment to the high-achievers.

Working with students and fresh graduates

We worked with interns across our Projects, Exploration and Production, Drilling, Business Processes and Systems, Legal, Information Technology, Administration, and Human Resources Departments in both the UAE and KRI in 2018.

We assign each intern to the function that best meets their interests and backgrounds before providing them with an employee mentor who tailor-makes their internship curriculum and regularly evaluates their progress.

We welcomed students and fresh graduates from over seven countries for a duration that varied from one to six months and have employed three of our 2018 interns for their talent and skill set.

In addition to helping us equip the youth with hands-on experience that enhances their employability, our internship programme enables us to benefit from new business perspectives while enhancing our leadership skills.





Safety of our employees and their families is our first priority

We drove
2,227,321 km
without any major road accidents.

Maintained
Zero
LTI across production operations.

Reduced sick leave cases by
39%
at Khor Mor.

We seek to operate in a safe and responsible environment by mitigating and controlling risk while promoting operational integrity and a culture that prizes safety.

We continually assess and monitor our risk exposure throughout our operations and strive to adapt to changing political, economic, legal, and social situations by maintaining close relationships with local governments and communities.

Across our operations, we have defined procedures for performing risk and threat assessments, allocating enough time to conduct these processes thoroughly.

Our HSE team is responsible for promoting safety, health, and environmental best practices across our areas of operation. In 2018, we expanded the team's capabilities by recruiting a Corporate Head of HSSE, an Exploration and Production HSE Lead, and onsite HSE personnel to support our drilling campaign.

Our man-hours in the KRI have increased by 85 per cent from 2017, reaching 2,695,908 in 2018 driven by our drilling activities and construction projects. The dramatic increase in activity represented a significant change in risk profile, which manifested in an increase in incident numbers during the year.

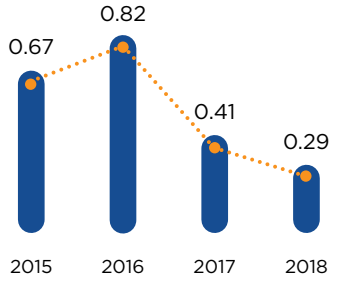
In our production operations, we saw further improvement in our Total Recordable Injury Frequency, with a 29 per cent reduction compared to last year. We were pleased to maintain Lost Time Injury-free production operations through 2018.

For HSE reporting, in addition to its own prescribed reporting procedures, the company follows the US-based Occupational Health and Safety (OSHA) Injury and Illness Record Keeping and Reporting Requirements.



Protecting our people

Total Recordable Injury Frequency* (Production operations)



The recommencement of drilling operations in the region proved challenging, with the start up of three rigs and the building of a comprehensive support organisation.

Tragically, one of our drilling contractor's staff died when a valve failed catastrophically during well control operations. We offered our full assistance to the drilling contractor in ensuring the family received all necessary support. The investigation into this tragic event remains underway in collaboration with the drilling contractor, and we remain determined to ensure that lessons from the accident are identified and acted upon to ensure that a similar event does not occur again.

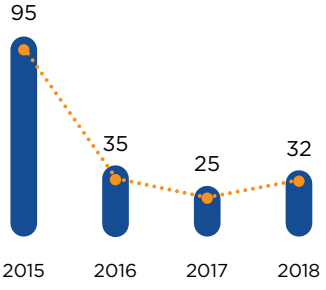
Our priorities in 2019 have been developed based on an analysis of underlying trends, learnings from prior incidents, and review of our forward programmes and the associated risks, with the further anticipated increase in activity in drilling operations and construction activities.

We have identified five priorities as follows:

- Improving Risk Management process and execution;
- Refreshing our Control of Work systems in readiness for expansion;
- Enhancing reporting and investigation with particular emphasis on near miss events and high potential incidents;
- Strengthening our Contractor Management process, from selection, through execution, to monitoring and review; and,
- Expanding our Land Transport Safety programme to incorporate expanding scope.

Near miss reporting increased slightly in 2018, and as we move forward in 2019, we are focusing on improving our near miss reporting and, in particular, learning from those events that have high potential of harm. We encourage open reporting of such near misses, as they provide lessons that can help us improve. This will drive our attention lower in the "safety triangle" enabling better identification of preventative measures that will reduce the likelihood of actual incidents and more serious events.

Near miss cases* (number)



*Our performance highlights reflect our indicators and operations in the KRI only.



"The health and safety of our staff is a business imperative that sits at the heart of every people initiative at Crescent Petroleum. Through our policies, training activities, and internal events, we consistently work to foster a culture of safety and to spread awareness on key health matters among all members of our staff."

Ravand Sarbast Abdullah

HR Officer, Erbil



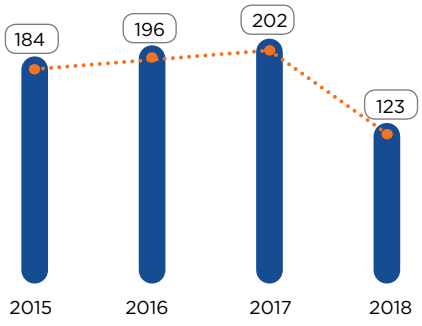
Key HSE achievements

Occupational health improvements

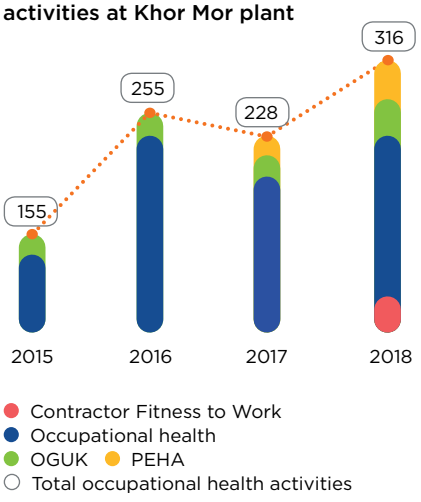
Our Khor Mor medical clinic has been serving our staff since the inception of our project and has expanded in line with our growing workforce.

Despite the increase in patient numbers that accompanied our increased activity in 2018, we were able to reduce the number of sick leave cases thanks to enhanced management and sick leave control systems.

Sick leave cases at Khor Mor plant



Occupational health assessment activities at Khor Mor plant



We have achieved this through increased focus on preventative health checks and screening activities, which help improve both health resilience and management of health issues in our workforce.

We believe this will be a significant contributor in reducing overall sick leave days in our local population in Kurdistan, which in 2018 stood at 976 days of sick leave in total. We aim for ongoing improvement and reduction going forward.

Land transport safety

Ensuring safer driving practices is crucial for our smooth operations in the KRI. To provide our drivers with timely assistance in case of emergency, we have equipped our personnel movement team vehicles with monitoring device Track24. We also regularly train all our drivers on leading practices.

Asset integrity

In 2018, we continued to develop the Asset Integrity Management System (AIMS) that we initiated in the previous year to identify Safety Critical Elements (SCEs), which are those systems whose failure could result in a major accident.

We conducted a formal verification of ten SCEs and plan on implementing the resulting recommendations by 2020 on a risk prioritised basis.

We also completed Written Schemes of Examination (WSEs) for all Safety Critical Elements and incorporated all assurance activities required by the WSEs into the maintenance management system.

Our incidents of loss of primary containment, in both processing plant and product transportation, rose from 8 in 2017 to 24 in 2018, reflecting the reintroduction of trucking operations for condensate following the closure of the condensate pipeline.

Trucking operations are handled by third parties directly on behalf of the regional government, and we are working with the authorities to improve the standard of the tanker fleet, as well as conducting quality checks on tankers prior to entry to our site for loading.

Reviewing our corrosion inhibition strategy

In 2018, we collaborated with consultants to review our corrosion inhibition strategy. An internal inspection of critical plant areas confirmed no evidence of internal corrosion, and helped us further appreciate the potential mechanisms of corrosion. Our current priority is to closely monitor process conditions for potential changes in corrosion risk.



Enhancing our management system

In 2019, we intend to conduct a comprehensive review of our Control of Work system and develop a Control of Work System Users Training Programme. This will enable us to ensure the smooth expansion of our operations and the development of our personnel.

To encompass the progress we have made, and incorporate the priorities we are pursuing as we expand the business, we are currently working with a consulting firm to develop and overarching Operational Management System (OMS). This will include the design and development of:

- An Operational Management System that facilitates the management of all activities across the value chain;
- Corporate HSSE&SP Management Standards to support the consistent implementation of HSSE and SP activities in the business; and,
- A Management System Roll-out Programme for the effective launch of the OMS.

Improving our emergency preparedness

In 2018, we held and completed 36 non-mobilisation emergency response exercises and 30 strategic simulation exercises to assess our emergency preparedness, in addition to conducting smaller scale drills to further ensure our readiness for various emergency scenarios.

We also conducted a Mass Casualty Incident (MCI) training session for our medical assistants in the KRI to help them practice and improve the response skills in the event of mass medical emergencies.

Implementing an ERP

In 2018, we initiated the adoption of an Enterprise Resource Planning (ERP) system, a process that will streamline our operations and reinforce connectivity among disparate departments.

We signed an agreement with SAP in late 2018 to be our ERP software vendor, and began implementation of SAP in early 2019 across the company.

IT security and network integrity

We regard our business information as a major asset and seek to protect it from leaks and misuse through Internet security campaigns and cybersecurity measures.

In 2018, we also introduced a vulnerability scanning solution to further reinforce our IT systems.

Advancing our IT security

Key IT security initiatives in 2018

- Implemented a vulnerability scanning solution to mitigate breach risks by identifying all vulnerable applications, websites, and systems and systematically reducing exposure.
- Our Security Incident and Event Management (SIEM) is monitored 24x7 by a security service provider.
- Upgraded the biometric access system in our UAE headquarters.
- Conducted monthly external security assessments for all critical vulnerabilities.
- Raised employees' awareness through regular newsletters, videos, and screensavers as well as by holding an Information Security Awareness campaign in the KRI.

"As our operations grow, network security has become a central business priority at Crescent Petroleum. Our team works to actively secure our networks and intellectual property across borders and over large distances, and the first line of defence remains to prepare our people to spot threats and block them before they enter the organisation."

Eleonor Cabatuan

Senior Systems Engineer, Sharjah



Our environmental stewardship is underpinned by our precautionary principle regarding the consumption of water and energy, air emissions, and the avoidance of waste and spills

Recorded
Zero
major oil spills for 2018 building on 2017.

Recycled
998 kg
of e-waste in 2018.

Prevented
3.94 million
tonnes of CO_2 emissions in 2018 in the KRI by supporting its transition from diesel to natural gas.

Avoided
USD 2.99 billion
in social cost of carbon since 2008 till 2018.



Energy consumption

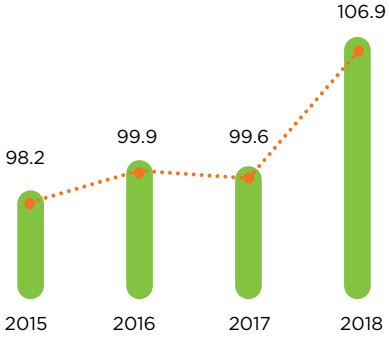
As we work to promote responsible energy use in the region, we are also dedicated to monitor our own energy consumption. The total energy we consumed in 2018 was 111.3 TJ, an increase from 2017 that reflects our expanding operations and activities.

We emphasise the need to further adopt energy-efficient practices as our operations are set to expand significantly in the coming years.

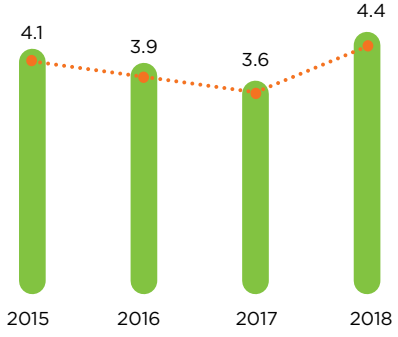
Our key energy efficiency initiatives for 2018 included:

- Improving the performance of our power generation package: This has resulted in improved driver combustion and thermal efficiency with commensurate improvements in emissions. The improvement is a factor of over 25 per cent. We are also installing gas regulators to further improve efficiency.
- Replacing our hot oil heaters: The new, higher efficiency hot oil heaters have lower unit emissions. This has resulted in reducing our nitrogen oxides emissions.

Direct energy use (TJ)



Indirect energy use (TJ)



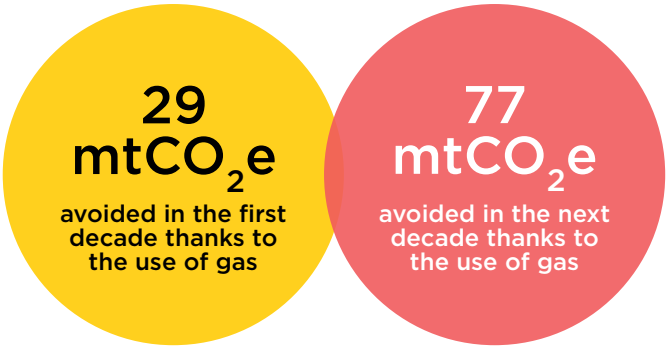
Measuring how we contribute to reducing GHG emissions

By supplying natural gas for generating the KRI's electricity, the use of the alternative, more carbon-emitting diesel, is avoided. This means that lower CO_2 emissions are released into the atmosphere, as the GHG footprint of natural gas is considerably lower than what the footprint would be if diesel were used instead. The avoided emissions also result in a lower social cost of carbon (SCC). The SCC is a measure of the economic harm from the impact of CO_2 emissions, expressed by assigning a monetary value to the total damages from emitting one metric tonne of carbon dioxide into the atmosphere.

To commemorate the ten-year anniversary of production in the Kurdistan Gas Project, Crescent Petroleum together with Dana Gas and the Pearl Petroleum consortium enlisted the help of international professional services firm PwC to lead an in-depth study to assess the socioeconomic benefits enabled by the Kurdistan Gas Project. PwC studied the impact of the Project in its first decade of operations and projected forward the future impacts based on the anticipated development of the Project over the next decade.

As part of this, PwC calculated the amount of greenhouse gas emissions avoided thanks to the natural gas that we produce. PwC calculated that the gross impact has been to avoid 29 million tonnes of CO_2 equivalent than if diesel were used for generation. More significantly, PwC estimated that over the next decade, our gas produced could help avoid up to 77 million tonnes of CO_2 equivalent.

Based on this methodology, the company has calculated the GHG savings for 2018 amounting to 3.94 million tonnes of CO_2. Full methodology for the calculation can be found in *The Kurdistan Gas Project Impact Assessment Report 2018: A ten-year look back and look ahead* on **http://www.kurdistangasproject.com/**



"Our company culture and policies make us mindful of the environment in which we live and conscious of the scarcity of natural resources on which we all depend. I am proud to work at a company that encourages employees to reduce their consumption of energy, water, and paper as well as to recycle, both at work and at home."

Bahra Lokman Saleh

Office Manager for Drilling Office, Sulaymaniyah

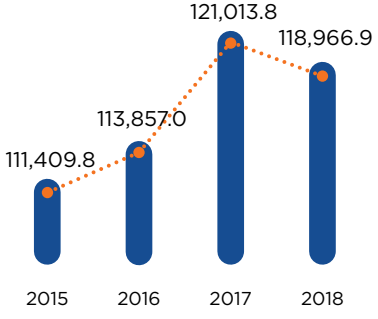


Emissions

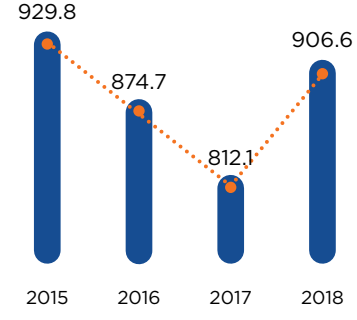
Our emissions consist primarily of flared gas, combustion of fuel gas in our LPG facility, and combustion fuels such as diesel and petrol used in local generators and pumps.

Our consumption of electricity from our headquarters and warehouse in the UAE is the only source of indirect emissions. Our GHG emission intensity is 3.76 $ktCO_2e$/mmboe for 2018, which has marginally reduced from the previous year.

Scope 1 emissions (tCO_2e)



Scope 2 emissions (tCO_2e)



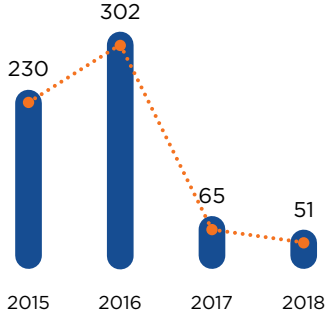
Flared gas

Since 2017, we have focused on improving our flaring system of hydrocarbon gas, which has led to considerably reduced volume of flared gas amounting to 50.70 MMscf/d in 2018.

We achieved this through continuous process optimisation and improved maintenance initiatives, and we also realised a portion of these gains with improved liquids recovery.

In 2018, we completed a debottlenecking project, which has improved plant reliability and consequently reduced events that historically resulted in non-routine flaring events.

Flared gas (MMscf/d)



Water

To mitigate our water footprint, we are committed to minimising our use of freshwater in favour of recycled water throughout our operations.

Our major source of water use is the testing and cooling phases of our operations. We withdrew 75,277 cubic metres of water in total in 2018.

In accordance with our water management procedures, we treat our produced water to reduce the content of oil and other contaminants before disposal or reuse.

Assessing our potential water reuse opportunities

In collaboration with specialist consultants, we undertook multiple studies in 2018 to assess available water sources in the KRI, the quality of water for domestic use at the Khor Mor site, and potential water conservation and reuse opportunities.

The University of Sulaymaniyah conducted a hydro-geologic review of the area and yield tests by the Chemist and Physicist Society of Kurdistan were completed on the water wells that supply water to both the Khor Mor site and the local villages. As we progress through 2019, recommendations for water management, conservation, and reuse will progress alongside planned expansion activities.



Waste

We are committed to preserve natural resources throughout our daily activities and adopt leading practices in the industry to manage our solid waste. The following table summarises the type and quantity of waste we generated in 2018, and our respective disposal methods.

Type of waste	Disposal method	Quantity generated (tonnes)			
		2015	2016	2017	2018
Hazardous waste					
Used filters, medical waste, fluorescent lights	Incineration	38.9	39.9	47.5	51
Batteries, e-waste	Recycling	16.5	20.6	18.5	26.9
Waste oil and lubricants	Sent to treatment facility for recycling or reuse	14.2	12.4	13.3	18.2
Others	Stored in skips onsite prior to removal for further treatment	17.2	21.5	36.5	8.4
Non-hazardous waste					
Paper, cardboard, discarded food and packaging, glass, kitchen waste	Sent to landfill by approved contractor	618.5	714.4	709.4	765.4
Tires, scrap metal, e-waste, wood, scrap wood, plastics	Stored onsite then sent for recycling by approved contractor	124.1	203.5	268.1	178.5

We first introduced e-waste recycling to our employees in the UAE in 2016. We regularly encourage them to dispose their unwanted or obsolete electric and electronic devices at the bin provided by our recycling partner EnviroServe, which is certified as per ISO 9001, ISO 14001, and OHSAS 18001 international standards.

In 2018, we recycled 12 tonnes of paper, which is equivalent of saving 203 trees.

There were no significant spills in our operations in 2018. We maintained our record of zero significant spills.



"We are conscious that sustainability is a journey and remain committed to investing in our culture, and learning and development programmes to further raise awareness of environmental, social, and governance matters. We believe that this is key to a more prosperous and inclusive future."

Nermin Mahhouk

Talent Acquisition Coordinator, Sharjah



UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

We endorse the United Nations 2030 Agenda for Sustainable Development and seek to align our operations and activities with the UN Sustainable Development Goals (SDGs).

SDGs	Why it matters	Highlights from our operations
SDG 1: No poverty 	Ending poverty requires universal social protection systems and targeted measures to reduce vulnerability to disasters, while addressing specific under-served geographic areas within each country.	Our total investment in the KRI region stands at USD 1.6 billion, benefiting local procurement and local employees. Our contribution to KRI's GDP up to 2017 is estimated to be between USD 10.7 billion to USD 18.3 billion.
SDG 3: Good health and well-being 	Promoting health well-being at all ages is essential to sustainable development.	We supplied consumables to Shar Hospital and Emergency/Burn Hospital in Sulaymaniyah.
SDG 4: Quality education 	Quality education is the cornerstone of sustainable development. In addition to improving the quality of life, access to inclusive education equips people with the tools required to solve some of world's current challenges.	We provided transportation to over 180 schoolchildren from 21 villages in the KRI. We appointed 13 teachers to teach new specialities at Qadir Karam schools. We distributed school supplies and backpacks to 690 students in the KRI. We sponsored the sixth edition of the Iraq Public Leadership Program (IPLP), a 16-day executive education programme held by the American University of Sharjah's Jafar Center for Executive Education. We sponsored advancement activities at American University of Sharjah.
SDG 5: Gender equality 	Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.	We are committed to retaining our women employees and actively invest in their career development. The female representation rate in our UAE workforce is 25 per cent.
SDG 6: Clean water and sanitation 	Water scarcity, poor water quality, and inadequate sanitation negatively impact food security, livelihood choices, and educational opportunities for disadvantaged families across the world.	We supplied 70,000 litres of potable water to the residents of Qadirkaramiakan and Peryadiakan towns in Shorsh and Chemchemal.
SDG 7: Affordable and clean energy 	Focusing on universal access to energy, increased energy efficiency, and the increased use of renewable energy is crucial to foster more inclusive societies as well as resilience to environmental issues.	Our natural gas production has enabled us to provide reliable and affordable energy to 5.9 residents in the KRI. We also provided access to energy in Turka village by supplying generators, fuel, operators, and infrastructure. Since June 2011, Crescent Petroleum and Dana Gas have provided complimentary, uninterrupted electricity to around 1,225 Qadir Karam residents, or up to 75 per cent of the population of the sub-district. We provide them with electricity from our Khor Mor LPG plant at an average power of 16,000 kWh per day.

SDGs	Why it matters	Highlights from our operations
SDG 8: Decent work and economic growth 	About half of the world's population lives on roughly USD 2 a day. Moreover, the global unemployment rate of 5.7 per cent and low wages in many professions pose a challenge to eradicating poverty, requiring us to rethink our economic and social policies.	We spent 61 per cent of our operating budget for procurement in 2018 on local suppliers. Empowering local talent: 84 per cent of our KRI workforce in 2018 were local nationals.
SDG 9: Industry, innovation, and infrastructure 	Investments in infrastructure–transport, irrigation, energy, and information and communication technology–are crucial to achieving sustainable development and empowering communities.	Our total investment in the KRI region stands at USD 1.6 billion till 2018.
SDG 11: Sustainable cities and communities 	Cities are hubs for ideas, commerce, culture, science, productivity, social development, and much more. Inclusive cities have enabled people to advance socially and economically.	Due to unavailability of electricity, many families deserted Qadir Karam. By supplying free and uninterrupted electricity Crescent Petroleum and Dana Gas helped in transforming Qadir Karam. This resulted in families returning to Qadir Karam and currently they represent around 50 per cent of the population.
SDG 12: Responsible consumption and production 	Sustainable consumption and production are about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all.	We have optimised the use of energy and water at our different operations.
SDG 13: Climate action 	Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities, and countries dearly today and even more tomorrow.	We avoided USD 2.99 billion in social cost of carbon since 2008 till 2018. We prevented 3.94 million tonnes of CO_2 emissions in 2018 in the KRI by supporting its transition from diesel to natural gas.
SDG 16: Peace, justice, and strong institutions 	One of the first steps towards protecting individual rights is the implementation of worldwide birth registration and the creation of more independent national human rights institutions around the world.	As corruption risks are high in our areas of operation, we remain vigilant and continuously seek to enhance our systems and processes.
SDG 17: Partnerships for the goals 	A successful sustainable development agenda requires partnerships between governments, the private sector, and civil society.	We closely engage with our stakeholder groups and address their key concerns on a frequent basis.

ASSURANCE STATEMENT



Independent Assurance Statement

18 June 2019

The Board of Directors and Management
Crescent Petroleum Company International Limited
Canon's Court, 22 Victoria Street
Hamilton HM12
Bermuda

The Crescent Petroleum 2018 Sustainability Report (the "Report") has been prepared by the management of Crescent Petroleum Company International Limited and its affiliates ("Crescent Petroleum" or "The Company"), who are responsible for the collection and presentation of the information reported. Our responsibility, in accordance with Crescent Petroleum management's instructions, is to provide a limited level of assurance on selected sustainability information presented in the Report. Our responsibility in performing our assurance activities is to the management of the Company only. We do not accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance as such on a third party may place the entirety of the Report at its own risk. This assurance statement should not be taken as a basis for interpreting the Company's overall sustainability performance, except for the aspects outlined in the scope below.

Scope of Assurance

The scope of our assurance covers the following:

- Data and information relating to the Company's sustainability performance for the period 1 January 2018 to 31 December 2018, specifically the sustainability performance indicators listed below for the Company's operations in Kurdistan Region of Iraq and Sharjah, UAE;

GRI Standard Disclosure	Description
204-01	Proportion of spending on local suppliers
403-02	Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities
405-01	Diversity of governance bodies and employees

- The Company's internal processes and controls relating to the collection and collation of above mentioned sustainability performance data.

Level of Assurance and Criteria used

This assurance engagement was planned and performed in accordance with International Federation of Accountants' International Standard for Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000). Our evidence gathering process was designed to obtain a 'limited' level of assurance as set out in ISAE 3000 for the purpose of devising our conclusions. The extent of evidence gathering procedures performed is less than that of a reasonable assurance engagement (such as a financial audit) and therefore a lower level of assurance is provided for the GRI standard aspects described under the scope of work.



Our Approach and Methodology

In order to understand the process used by the Company to ascertain key sustainability issues and impacts, we reviewed the Sustainability Reporting process and the documentation associated with the stakeholder engagement survey that was performed by the Company. Our assurance team also visited the Company's office in Sharjah (UAE) to review the selected topic-specific disclosures outlined in the *Scope of Assurance* above, and to review systems and processes for collecting, collating and reporting sustainability. Evidences in support of the selected claims made in the Report were reviewed and clarifications were sought where necessary.

Our key steps were as follows:

- Engagement with key selected personnel to understand existing processes and controls for related sustainability activities;
- Engagement with the Sustainability Team to understand the current status of sustainability activities.
- Review of selected topic-specific data as per GRI standards mentioned under scope of assurance for the specified locations.

Our Assurance Team

Our assurance team, comprising of multidisciplinary professionals, has been drawn from our MENA Climate Change and Sustainability Services Team, who have undertaken similar engagements with a number of other regional and global businesses.

Our Independence

This is the first year that Ernst & Young (Dubai) has provided independent assurance services in relation to Crescent Petroleum's sustainability disclosures. We have provided no other services relating to Crescent Petroleum's approach to sustainability disclosures.

Limitations of Assurance

The assurance scope excludes:

- Aspects of the Report and data/information other than those mentioned under the *Scope of Assurance*;
- The Company's statements that describe an expression of opinion, belief, aspiration, expectation and future intention; and
- Review of economic performance data and information, included in the Report.

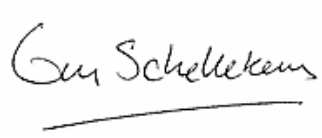
Observations

Our main observation and area of improvement on the Report is that currently, the approach adopted by Crescent Petroleum in recording sick day cases in Kurdistan Region does not follow GRI Standards requirements. Instead of reporting sick day cases, the company is encouraged to calculate and report the employee absentee rate (defined according to GRI as: measure of actual absentee days lost, expressed as a percentage of total days scheduled to be worked by workers for the same period) to comply with the GRI standards.

Our Conclusion

On the basis of our review and in accordance with the terms of reference for our work, nothing has come to our attention that would cause us not to believe that the Report presents the Company's material performance covering the key areas mentioned in the *Scope of Assurance* section above.

For Ernst & Young



Gus Schellekens
CCaSS Partner, MENA



ACRONYMS AND GLOSSARY

AIMS	Asset Integrity Management Systems
BOE	Barrels of oil equivalent
CAP	Community Action Programme
CEO	Chief Executive Officer
CO_2	Carbon dioxide
Control of Work	The integrated management of business-critical maintenance processes, which includes the systems, work procedures, risk assessments, documentation, records, and the standards that an organisation establishes to carry out maintenance work safely.
CSR	Corporate Social Responsibility
ERP	Enterprise Resource Planning
GDP	Gross Domestic Product
GHG	Greenhouse gases
GJ	Gigajoules
HSE	Health, Safety, and Environment
HSSE & SP	Corporate Health, Safety, Security, Environmental, and Social Performance Management System
Ipsative	Involving a measurement or scale calculated relative to a person's own performance or responses, rather than those of others.
IT	Information Technology
ISAE 3000	International Standards of Assurance Engagements
ISO	International Organisation for Standardisation
kg	Kilogramme
km	Kilometre
KPI	Key Performance Indicators
KRG	Kurdistan Regional Government
KRI	Kurdistan Region of Iraq
kWh	Kilowatt hour

Loss of primary containment	An unplanned or uncontrolled release of material from primary containment, including non-toxic and non-flammable materials (e.g., steam, hot condensate, nitrogen, compressed CO_2 or compressed air).
LTI	Loss Time Injury
LTIR	Loss Time Injury Rate
MCI	Mass Casualty Incident
MMscf	Million standard cubic feet
MMscf/d	Million standard cubic feet/day
NGO	Non-governmental organisation
OGUK	Oil & Gas UK
OHSAS	Occupational Health and Safety Assessment Series
OSHA	Occupational Safety and Health Administration
PEHA	Pre-Employment Health Assessment
PPE	Personal Protective Equipment
Primary containment	Main means of preventing leaks and spills using equipment in direct content with the oil or gas being stored or transported.
R&D	Research and development
SCEs	Safety Critical Equipment
SDG	Sustainable Development Goals
SIEM	Security Incident and Event Management
Social cost of carbon (SCC)	A measure of the economic harm from the impact of CO2 emissions, expressed by assigning a monetary value to the total damages from emitting one metric tonne of carbon dioxide into the atmosphere.
SP	Social Performance
tCO_2e	Tonnes of carbon dioxide equivalent
TJ	Terajoules
TRIF	Total Recordable Injury Frequency
UAE	United Arab Emirates
UK	United Kingdom
USD	US dollars
WSE	Written Schemes of Examination

GRI CONTENT INDEX

Category	GRI indicator number	Definition	Page reference/Status
Organisational profile			
	102-1	Name of the organisation	2
	102-2	Activities, brands, products, and services	8
	102-3	Location of headquarters	8
	102-4	Location of operations	8
	102-5	Ownership and legal form	8
	102-6	Markets served	8
	102-7	Scale of organisation	8-9, 39
	102-8	Information on employees and other workers	38
	102-9	Supply chain	27
	102-10	Significant changes to the organisation and its supply chain	8-9
	102-11	Precautionary principle or approach	46
	102-12	External initiatives	2, 15, 52-53
	102-13	Membership of associations	32
Strategy			
	102-14	Statement from senior decision-maker	5
Ethics and Integrity			
	102-16	Values, principles, standards, and norms of behaviour	3
Governance			
	102-18	Governance structure	10-11
Stakeholder Engagement			
	102-40	List of stakeholder groups	24-26
	102-41	Collective bargaining agreements	Not applicable
	102-42	Identifying and selecting stakeholders	26
	102-43	Approach to stakeholder engagement	26
	102-44	Key topics and concerns raised	24-25

Category	GRI indicator number	Definition	Page reference/Status
Reporting practices			
	102-45	Entities included in the consolidated financial statements	Not applicable
	102-46	Defining report content and topic boundaries	2
	102-47	List of material topics	21
	102-48	Restatements of information	None
	102-49	Changes in reporting	None
	102-50	Reporting period	2
	102-51	Date of most recent report	14
	102-52	Reporting cycle	2
	102-53	Contact point for questions regarding the report	2
	102-54	Claims of reporting in accordance with the GRI standards	2
	102-55	GRI content index	56-59
	102-56	External assurance	2, 60-61
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its component	14
	103-3	Evaluation of management approach	12
GRI 201: Economic Performance			
	201-1	Direct economic value generated and distributed	26-27
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its component	26
	103-3	Evaluation of management approach	12
GRI 203: Indirect Economic Impacts			
	203-1	Infrastructure investments and services supported	27, 30
	203-2	Significant Indirect Impacts	27, 30

Category	GRI indicator number	Definition	Page reference/Status
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its components	27
	103-3	Evaluation of management approach	12
GRI 204: Procurement Practices			
	204-1	Proportion of spending on local suppliers	26
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its components	37
	103-3	Evaluation of management approach	12
GRI 205: Anti-corruption			
	205-2	Communication and training about anti-corruption policies and procedures	37
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	25
	103-2	The management approach and its components	47
	103-3	Evaluation of management approach	12
GRI 302: Energy			
	302-1	Energy Consumption within the organization	47
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	25
	103-2	The management approach and its component	49
	103-3	Evaluation of management approach	12
GRI 303: Water			
	303-1	Water withdrawal by source	49
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundary	25
	103-2	The management approach and its components	47
	103-3	Evaluation of management approach	12
GRI 305: Emissions			
	305-1	Direct GHG Emissions (Scope 1)	49
	305-2	Indirect GHG Emissions (Scope 2)	49
	305-4	GHG Emissions intensity	49

Category	GRI indicator number	Definition	Page reference/Status
GRI 103: Management Approach 2016			
	103-1	Explanation of material topic and its boundary	25
	103-2	The management approach and its components	50
	103-3	Evaluation of management approach	12
GRI 306: Effluents & Waste			
	306-2	Waste by type and disposal method	50
	306-3	Significant spills	50
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundary	25
	103-2	The management approach and its components	12
	103-3	Evaluation of management approach	12
GRI 307: Environmental Compliance			
	307-1	Non-compliance with environmental laws and regulations	40
GRI 103: Management Approach Disclosures 2016			
	103-1	Explanation of material topic and its boundary	24
	103-2	The management approach and its components	34
	103-3	Evaluation of management approach	12
GRI 401: Employment			
	401-1	New employee hires and employee turnover	35
GRI 103: Management Approach Disclosures			
	103-1	Explanation of material topic and its boundaries	25
	103-2	The management approach and its component	40-44
	103-3	Evaluation of management approach	40
GRI 403: Occupation Health and Safety			
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Partially reported
GRI 103: Management Approach Disclosures 2016			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its component	34
	103-3	Evaluation of management approach	12
GRI 404: Training and Education			
	404-2	Programs for upgrading employee skills and transition assistance programs	37-38

Category	GRI indicator number	Definition	Page reference/Status
GRI 103: Management Approach 2016			
	103-1	Explanation of material topic and its boundary	24
	103-2	The management approach and its components	38
	103-3	Evaluation of management approach	12
GRI 405: Diversity and Equal Opportunity			
	405-1	Diversity of governance bodies and employees	11, 38
GRI 103: Management Approach 2016			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its component	14-15
	103-3	Evaluation of management approach	12
GRI 413: Local Communities			
	413-1	Operations with local community engagement, impact assessment, and development programs	31-33
GRI 103: Management Approach 2016			
	103-1	Explanation of material topic and its boundaries	24
	103-2	The management approach and its component	14-15
	103-3	Evaluation of management approach	12
GRI 419: Socio Economic Compliance			
	419-1	Non-compliance with laws and regulation in the social and economic area	15





Sharjah offices:

Crescent Tower
PO Box 211, Corniche Al Buhaira
Sharjah, United Arab Emirates
T +971 6 572 7000
F +971 6 572 6000
E mail@crescent.ae

Crescent House
Index Tower
Sharjah, United Arab Emirates
T +971 6 572 7000
F +971 6 572 6000
E mail@crescent.ae

Crescent Supply Base
Hamriyah Free Zone, Phase-I
Sharjah, United Arab Emirates
T +971 6 526 9181
F +971 6 572 6000

International offices:

Crescent Petroleum – United Kingdom
Crescent House, 4 Old Park Lane
London, W1K 1QW, United Kingdom
T +44 20 7493 6600
F +44 20 7493 6777
E cpci-uk@crescent.ae

Crescent Petroleum – Iraq

Baghdad/Basra offices
T +971 50 483 9946 (UAE)
T +971 56 853 7443 (UAE)
T +964 771 542 4149 (Iraq)

Crescent Petroleum – Kurdistan Region of Iraq

Erbil office
Floor 5, Office Building – Gulan Park
Gulan Street, Erbil
T +964 66 224 6704/5
E cpci-irbil@crescent.ae

Sulaymaniyah offices
Buildings 21-22 – German Village
Malik Mahmood Street, Sulaymaniyah
T +964 773 071 7679

Floor 16, Qaiwan Tower
Salim Street, Sulaymaniyah

www.crescentpetroleum.com