

KNOC
GLOBAL
NETWORK

Strategically Based Subsidiaries
(Overseas Offices)

Harvest Operations Corporation
1500, 700-2nd St., SW, Calgary, Alberta,
Canada, T2P 2W1
TEL.1-403-268-6596 FAX.1-403-265-3490

ANKOR E&P Holdings
1615 Poydras St., Suite 2000, New Orleans,
LA 70112, U.S.A.
TEL.1-504-587-6508 FAX.1-504-587-6510

Savia Peru
Av. Rivera Navarrete No.501 Piso 11 San Isidro,
Lima 27, Peru
TEL.51-1-513-7500 FAX.51-1-222-5947

Dana Petroleum Ltd.
King's Close, 62 Huntly St., Aberdeen,
AB10 1UR, U.K.
TEL.44-1224-616410 FAX.44-1224-616001

KNOC Caspian/Altius
5th Fl., Block 3B, "Nurly-Tau" Business Centre,
19/1, Al-Farabi Av., Almaty,
Rep. of Kazakhstan, 050013
TEL.7-727-311-1521 FAX.7-727-311-1503

Kazakhstan Office
5th Fl., Block 3B, "Nurly-Tau" Business Centre,
19/1, Al-Farabi Av., Almaty,
Rep. of Kazakhstan, 050013
TEL.7-727-311-1521 FAX.7-727-311-1503

Vietnam Office
10th Fl., Diamond Plaza, 34 Le Duan St., Dist.1,
Ho Chi Minh, Socialist Rep. of Vietnam
TEL.84-8-3825-7808 FAX.84-8-3825-7806

Doosung(Offshore Rig) Office
TEL.870-7646-71765 FAX.870-7646-71767

Stockpile Offices
(Domestic Offices)

Ulsan Office
147, Onsan-ro, Onsan-eup, Ulju-gun,
Ulsan, Rep. of Korea
TEL.82-52-270-4400 FAX.82-52-270-4571

Geoje Office
97, Seoimal-gil, Irun-myeon, Geoje-si,
Gyeongsangnam-do, Rep. of Korea
TEL.82-55-680-1700 FAX.82-55-680-1739

Yeosu Office
450, Nakpodanji-gil, Nakpo-dong, Yeosu-si,
Jeollanam-do, Rep. of Korea
TEL.82-61-688-8700 FAX.82-61-688-8719

Seosan Office
119, Pyeongsin 2-ro, Daesan-eup, Seosan-si,
Choongcheongnam-do, Rep. of Korea
TEL.82-41-660-4114 FAX.82-41-660-4165

Pyeongtaek Office
175-108, Namyangman-ro, Poseung-eup,
Pyeongtaek-si, Gyeonggi-do, Rep. of Korea
TEL.82-31-680-1414 FAX.82-31-680-1486

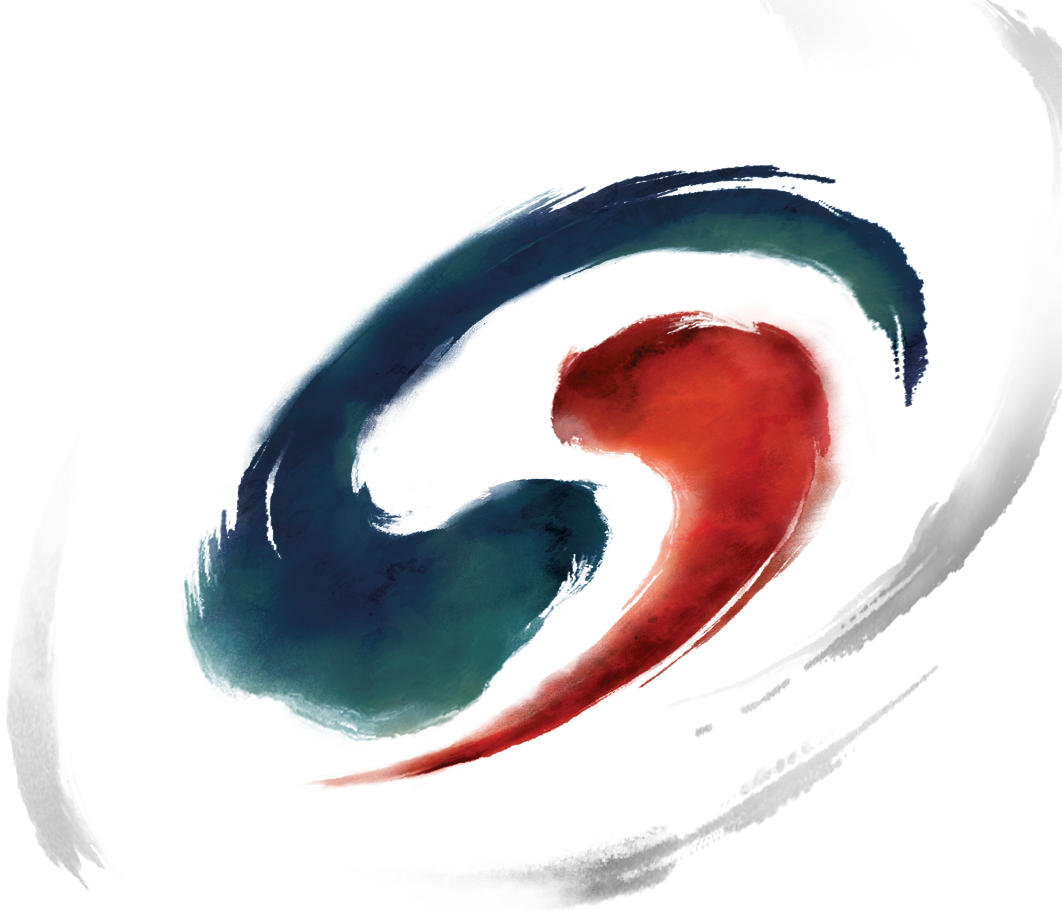
Guri Office
67, Ahasan-ro, Guri-si, Gyeonggi-do,
Rep. of Korea
TEL.82-2-2204-7700 FAX.82-2-2204-7707

Yongin Office
159, Haesil-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, Rep. of Korea
TEL.82-31-329-4900 FAX.82-31-339-2274

Gokseong Office
1538, Goksun-ro, Gyeom-myeon,
Gokseong-gun, Jeollanam-do, Rep. of Korea
TEL.82-61-360-4200 FAX.82-61-360-4230

Donghae Office
77, Gongdan 12-ro, Donghae-si,
Gangwon-do, Rep. of Korea
TEL.82-33-520-7800 FAX.82-33-522-3219

Ulsan Gas Production Office
147, Onsan-ro, Onsan-eup, Ulju-gun,
Ulsan, Rep. of Korea
TEL.82-52-240-4700 FAX.82-52-239-8049



The Power of Positive Energy

KNOC

Korea National Oil Corporation Brochure 2016



KOREA NATIONAL OIL
CORPORATION

305, Jongga-ro, Jung-gu, Ulsan, Rep. of Korea 44538
TEL 82-52-216-2114 FAX 82-52-216-5900

facebook.com/KNOC.PR
blog.naver.com/KNOC3



KOREA NATIONAL OIL
CORPORATION

CREATING
VALUE
BEYOND
ENERGY

ENERGY: from the Past to the Future

Established in 1979 to secure stable supply of energy for Korea, the Korea National Oil Corporation is actively expanding Korea's oil development and strategic stockpiling businesses; now 5th internationally in oil imports and 8th in oil consumption.

We have played a large role in pushing Korea to join the ranks of leading oil-producing countries, following the development of the Donghae-1 gas field using Korean-made technologies in 2004.

We are both trusted and respected nationally, and are making continuous efforts to grow as a global oil company.

ENERGY: from the Discovery to the Utilization

The Korea National Oil Corporation is creating a value beyond energy, raising the value of the field of energy: from the exploration, development and production of oil resources, to the oil stockpiling, trading and supply of information.

OIL EXPLORATION

We are discovering the energy of the future, through specialized, commercialized exploration equipment that predicts the possibility of existence of oil resources, and discovers the energy of the future at onshore and off-shore blocks both domestically and abroad.

- Operating 10 exploration projects in 5 countries

OIL DEVELOPMENT AND PRODUCTION

With a strong foundation of accumulated technology and outstanding expertise, we are experiencing growth in our overseas strongholds as we continue to fulfill our reputation as a global player.

- Operating 18 production projects in 14 countries

OIL STOCKPILING AND TRADING

At the level of domestic energy security, KNOC works hard to propel the oil stockpiling business nationwide, while also effectively managing stockpiled assets in international joint oil stockpiling and trading.

- Reserve capacity of 146 million barrels in 9 stockpiling bases

PROVISION OF OIL INFORMATION

KNOC provides comprehensive and systematic oil information both domestically and overseas through online information network, 'Petronet,' and supports consumers' effective purchase of oil through management of real-time oil price information service 'Opinet'.

- Opinet using 8.5 million per month

*As of August 2016



Oil Development

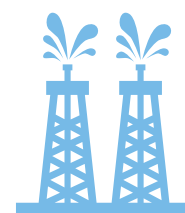
A country's competitiveness is directly related to the competitiveness of its energy. Oil exploration, development, production (E&P) is a high-risk business, but, as a country with 97% of its oil consumption depending on imports, it is a business that is vital for Korea and must be pushed forward with careful long-term vision.

Active Overseas Oil Development

KNOC has been actively engaging in overseas oil development for the procurement of secure national oil reserves since the beginning of large-scale oil discovery at the Vietnam 15-1 Block in 2000. As of August 2016, KNOC is involved in 28 E&P projects in 17 countries around the world. Through continuous efforts to increase output and development, and via production management tailored to each sector, KNOC has reinforced the safe management of its production blocks and significantly enhanced cost management.

Efforts for Sustainable Growth

KNOC has made efforts to boost the efficiency of its investment and asset restructuring in order to counteract deterioration of sales and profitability caused by low oil price, since 2014. We are improving investment efficiency through selective investment procedures and the limiting of nonessential expenses, while making efforts to secure liquidity and better our financial structuring through the adjustment of non-core assets. From a basis of selective investment, we henceforth plan to increase promising assets in order to further secure organic growth.



Reserve

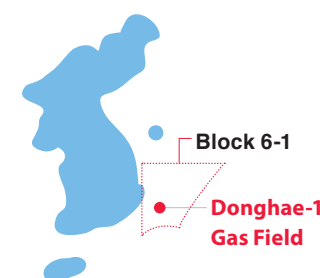
1,380 million barrels



Daily Production

210 thousand barrels

Donghae-1 Gas Field



Doosung's Drilling Works

Total of **121** drilled wells
(Accumulated)

Donghae-1 Gas Field : An oil-producing country's dream

Since our foundation KNOC has made continuous efforts to explore the continental shelf, in order to realize our dream of energy self-reliance. In July 1998, through the discovery and subsequent development of high quality natural gas 58km from Ulsan in the Southeast of Korea, at the Donghae-1 Gas Field, Korea was recorded as the 95th oil producing country in the world, and KNOC gained the chance for our technical expertise to become known globally. In addition to the Donghae-1 Gas Field - which began operation in July 2004 - October 2016 sees the beginning of the operation of the Donghae-2 Gas Field, further bolstering Korea's pride as an oil-producing nation. In addition, we are working hard to develop the third domestic oil field by pushing forward with the deep-sea and shallow sea exploration in the Donghae area and vigorously propelling activity on the continental shelf.

Lucky Rig, Doosung

The Korea National Oil Corporation operates Korea's only semi-submersible rig, Doosung. Built using Korean technology in 1984, Doosung has successfully drilled 121 holes in countries including Alaska, China, Vietnam, and Russia, and has received awards for safe management and excellence in work security in the oil rig market. In addition, thanks to the establishment of the HSE standard system and reinforcement of educational programs, KNOC boasts an for the ninth consecutive year injury-free record according to the International Association of Drilling Contractors (IADC).

GLOBAL E&P

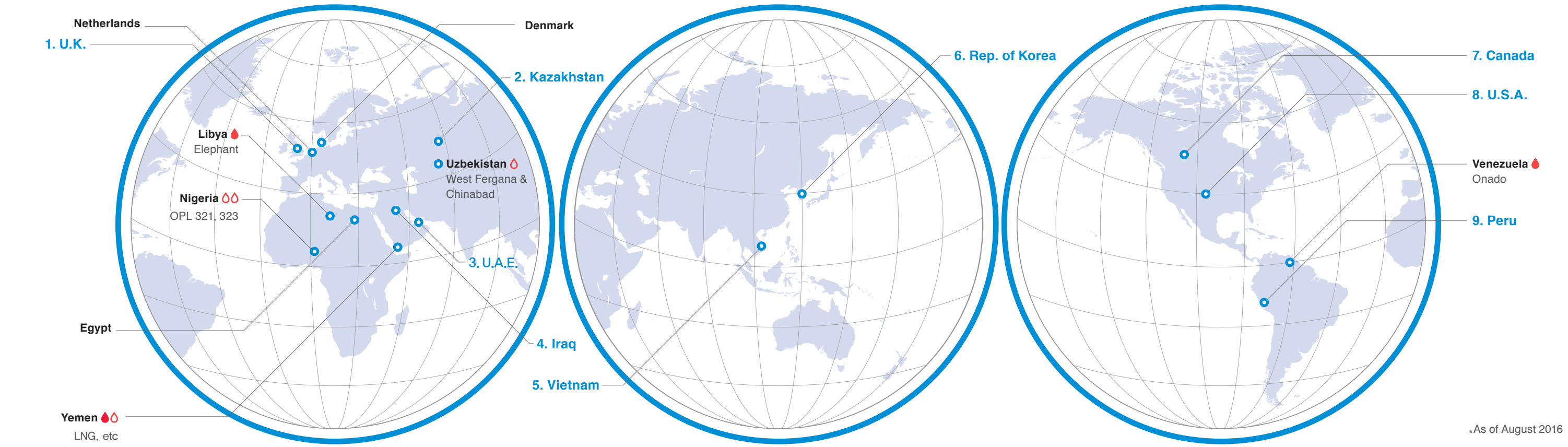
KNOC is relentless in its pursuit of new business opportunities and future growth engines in a wide range of E&P projects.
KNOC is participating in 28 E&P projects in 17 countries around the world.

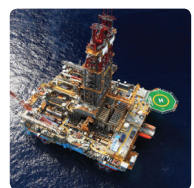
18

Production

10


Exploration






1. U.K. Dana(4 countries) ●

- Acquisition of Dana in Sep. 2010
- * Operating in including Egypt, Netherlands, Denmark, etc
- Average production of 52,600 BOE/D




2. Kazhakstan KNOC Caspian, etc ●●●●

- Acquisition of Sumbe in Dec. 2009
- Acquisition of Altius in Mar. 2011
- Average production of 13,700 BOE/D




3. U.A.E. Area 1, 2, 3 ●

- Participation in exploration block in Mar. 2012
- Confirmation of commercially develop-able crude oil(130 million barrels) at Area 1 in Mar. 2015
- Production scheduled to begin in 2019




4. Iraq Hawler ●

- Discovery of oil at Hawler block in Apr. 2014
- Production and development at Hawler block begins in Jun. 2014
- Average production of 300 BOE/D




5. Vietnam 11-2 Block, etc ●●

- Production at 15-1 block begins in Nov. 2003
- Production at 11-2 block begins in Nov. 2006
- Average production of 20,200 BOE/D




6. Rep. of Korea Donghae-1 Gas Field, etc ●●●●●●●●

- Operation of Donghae-1, 2 Gas Field and 5 exploration projects
- Production at Donghae-1 Gas Field begins in Jul. 2004
- Production at Donghae-2 Gas Field begins in Oct. 2016
- Average production of 2,700 BOE/D




7. Canada Harvest ●

- Acquisition of Harvest Energy in Dec. 2009
- Average production of 41,300 BOE/D



8. U.S.A. Ankor, etc ●●●●

- Acquisition of Ankor E&P Holdings in Mar. 2008
- Acquisition of Anadarko's shale oil stake in Apr. 2011
- Average production of 73,000 BOE/D



9. Peru Savia Peru, etc ●●

- Acquisition of Petro-Tech in Feb. 2009
- Average production of 8,000 BOE/D

BUSINESS OPERATIONS



Oil Stockpiling

The establishment and maintenance of a level of stockpiled oil is a necessary measure in the preparation against unforeseen oil crises and unstable supply. The Korea National Oil Corporation not only pursues strategic oil stockpiling, but also dynamic oil reserve and stored asset management activity that strengthens the economic power of the oil stockpile industry, while staying within the scope of ensuring the security of our oil.



Safe & Stable Oil Stockpiling

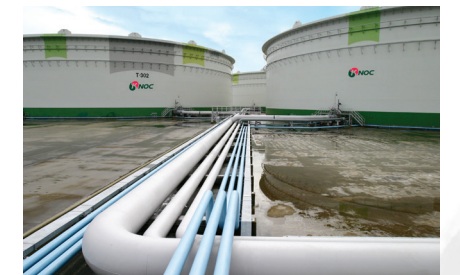
KNOC has establish and now manages 146 million barrels of stockpiling facilities in 9 locations across the country, including, Ulsan, Geoje and Yeosu, with the aim of expanding our emergency quick reaction capabilities and the security of domestic supply. As of August 2016, we store 94 million barrels of oil, excluding joint oil stockpile projects. Thanks to effective site management using HSEQ systems at each stockpile base, we have also seen 15 continuous years without accident or serious injury, and the successful maintenance of safe and secure administration.



Stockpile Facilities' Capacity
146 million barrels

Ensuring the Security of Short Term Oil Supply

KNOC is preventing setbacks in domestic oil supply through a basis of active utilization of stockpiled assets. KNOC fosters the safety of domestic supply and pricing, by renting stockpiling facilities and lending stockpiled oil during emergencies involving national oil based products.



Generating Profit Through International Joint Stockpiling and Oil Trading

Since 1999, within the scope of strategic stockpiling, KNOC has been generating profit by trading crude oil and oil based products, and utilizing the price volatility of the oil market and the international joint stockpiling business – which attracts and stores oil from oil-producing countries in our stockpile facilities. In 2015, through connecting KNOC's E&P and stockpile assets, we extended our footing for future trading growth via the development of a specialized trading business model, the Integrated Supply and Trading System.



Establishment of Integrated Supply and Trading System (IST)

Oil Information Service

Petronet www.petronet.co.kr

Comprehensive Oil Information Network

KNOC systematically compiles a database of all domestic and overseas oil-business related information, while also operating the only domestic oil information network, Petronet. This information network has made substantial contributions to the oil industry, related academia, and the formulation of Government policy.

Opinet www.opinet.co.kr

Oil Price Information Service

KNOC has been operating the world's first real-time oil-price information service, Opinet, since 2008. Opinet is a convenient asset to the lives of oil consumers and citizens. KNOC makes efforts to offer a variety of contents including information on illegally practicing businesses, and tax-free agricultural oil pricing. Since 2015, KNOC has also offered API service, which processes oil pricing information for civilians through the assimilation of contents for daily life.



Research & Development

Promotion of Talent and Securement of Technological Expertise

KNOC establishes and puts into practice systematic, comprehensive measures for the promotion of technological expertise in oil development. Since 2014, a three-year plan for technological independence has seen KNOC push ahead for technological independence from the main technologies of 43 authorities, while promoting a connected labor force that is at the heart of overseas expertise. By researching optimum IOR* technology through the analysis of development systems for each block, KNOC is optimizing production blocks. We are also making efforts to power new growth engines, and secure the CCS* technology designed to minimize of domestic greenhouse gases. KNOC is committed to ensuring the future of our consumers.

*IOR : Improved Oil Recovery / *CCS : Carbon Dioxide Capture and Storage

Sustainable Growth

Ethical Management

KNOC was established under the highest global standard, 'Global B.E.S.T.* Practice', with the aim of developing ethical management strategy, and has also maintained international affiliated ethical management standards. Devoted to generating a culture of global ethics, KNOC has acquired the KoBEX* top award (AAA) for nine consecutive years.

*B.E.S.T. : Business Ethic Strategy for Top Performance

*KoBEX : Korean Business Ethics Index

Social Contributions

Through a basis of social contribution across 5 fields, KNOC practices cross-management which reflects the characteristics and social niches of the oil development business. Through the utilization of our oil possession capabilities, we make efforts to create value that can be shared socially, in order to achieve a society that succeeds together. As a result, KNOC was awarded Korea's grand prize for corporate social contribution to welfare and minority groups in 2015.



Safe Management

KNOC executes regular anti-disaster drills in a variety of scenarios, and sets precedents for security management in our overseas locations through continuous safety education with a focus on prevention. Thanks to this establishment of safe environment maintenance, KNOC achieved zero serious accidents internationally. In addition, we are building a strong base further cultivating and expanding professional competency through strategic collaboration with global organizations in safety expertize.

Family-Friendly Management

KNOC makes the utmost of efforts to improve our staff's quality of life and work productivity through coexistence with family and home. KNOC received recognition from the Ministry of Gender Equality and Family thanks to our creation of family-friendly work life, offering maternity and childcare support and flexible work arrangements.