

IV Investors' Voice

The American Chamber of Commerce in Kazakhstan

Kazakhstan's leading International Business Association



AUTUMN ISSUE
September 2023

www.amcham.kz

#104

Kazakhstan's Oil and Gas Industry Forges Ahead



- ▶ TCO - How to Become Kazakhstan's Best Employer
- ▶ ExxonMobil - 30 Years of Transformative Partnership
- ▶ Karachaganak – Sustainable Partnership Development
- ▶ Eni's Dynamic Presence in Kazakhstan: Nurturing Energy and Social Progress
- ▶ Weatherford Caspian Integrated Projects
- ▶ Schlumberger (SLB) – Driving Down Carbon Emissions
- ▶ EY - Business Adapts to a Tighter Carbon Regulation Environment
- ▶ Dentons Law Firm - Renewable Energy Opportunities in the Oil Industry
- ▶ Emerson – Increasing Efficiency, Reliability and Profitability
- ▶ Microsoft - Facilitating Digital Transformation
- ▶ Al Hilal Bank – Islamic Finance in Kazakhstan



TALAN TOWERS OFFICES

WE OFFER VARIOUS TYPES OF OFFICES FOR YOUR BUSINESS

Incorporate the harmony of sustainability and technology for businesses to flourish within a unique contemporary office environment.

- Ready-to-use standard offices vs. flexible short-term rental all-inclusive serviced offices;
- First building designed and built according to the LEED Gold Green building certification rating system;
- Special financial AIFC zone;
- Modern Engineering Systems of communications, heating, ventilation, and multi-zone air conditioning.

Talan Towers Offices, 16 Dostyk St., Astana, Republic of Kazakhstan

 +7 (7172) 73 50 46 | +7 (777) 002 00 25  sales@astanapm.com  @talantowers  talantowers.com

FLIGHT MODE:
TEL AVIV



 **air astana**



Business



Beeline - надежный партнер
в мире умных технологий.

Beeline - is a reliable partner
to smart technologies world.



ILF CONSULTING ENGINEERS. **THE POWER OF ENGINEERING.**



55+

YEARS OF EXPERIENCE

For more than five decades, ILF has been developing technically challenging projects with the aim of improving the quality of life around the world.

ALMATY

98 Panfilov Street, Old Square Business Center
A05G1D2 | Almaty | Kazakhstan
Tel.: +7 / 727 / 313 07 17
E-Mail: info.kaz@ilf.com

ATYRAU

2/1 Azattyk Avenue | Frontier Plaza BC
E04A0H9 | Atyrau | Kazakhstan
Tel.: +7 / 7122 / 76 65 95
E-Mail: info.kaz@ilf.com

TASHKENT

32A Mirzo Ulugbek Street
100007 | Tashkent | Uzbekistan
Tel: +998 / 71 / 205 80 40
E-Mail: sales.uzb@ilf.com

www.ilf.com

EDITOR'S NOTE



Dear Readers,

Each year AmCham returns to the Oil & Gas industry as the priority for the autumn season when the year's major oil industry exhibitions and conferences take place in Almaty and Astana and the industry that is Kazakhstan's economic engine revs up to forge ahead. For that reason the *Autumn Investors' Voice* is always devoted to an enquiry into the industry's status with articles from virtually all of the leading oil and oilfield service companies, as well as commentary from other energy sectors: technology, financial services, law firms, and – never forgotten - renewable energy and energy transition.

This year's *Autumn Issue* is a multifaceted examination composed of many perspectives reporting on the oil industry's status, which has progressed from the challenges of the Covid pandemic, ever-growing global climate change, Kazakhstan's internal political changes, the Russian-Ukrainian war with little expectation of ending soon, and global economic sanctions entailed by the war and impacting on the business environment. Kazakhstan has sought its own balance to meet these challenges and the oil industry has sought and found its own solutions, forging ahead to fulfill its own ambitious agenda.

Readers will find in this *Autumn Issue* articles from *Tengizchevroil (TCO)*, *ExxonMobil*, *Karachaganak Petroleum Operating (KPO)*, *ENI*, *Schlumberger*, *Weatherford*, *Novus Bolashak*, followed by *Microsoft*, *Emerson*, *nVent Raychem*, *Borusan*, *EY*, *Denton's Law firm*, and *Al-Hilal Bank*. This wealth of perspectives constitutes a thoughtful mixture placing the oil industry and renewable energy as a new element in the industry in a framework that will continue to change shape in the future.

AmCham encourages its members and abundant readership extending into many sectors and realms of activity in Kazakhstan, across Central Asia, and abroad into Western Europe, Asia Pacific, the Middle East, and North America, to read this year's *Autumn Issue* and to reflect on our rapidly changing world in which the Oil & Gas industry occupies a central position.

Doris Bradbury
Executive Director, AmCham in Kazakhstan
Editor-in-Chief, Investors' Voice



TABLE OF CONTENTS

ARTICLES

Tengizchevroil - How to Become Kazakhstan's Best Employer.....	15	Novus Bolashak: Commitments and Services to Kazakhstan.....	36
ExxonMobil - Celebrating 30 Years of Transformative Partnership with Kazakhstan.....	18	Emerson Key Plant Data – Efficiency, Reliability, Profitability by Vladimir Nitu.....	38
Karachaganak (KPO) : Sustainable Partnership Development.....	20	Borusan Cat - <i>BOOM 360</i> : All Solutions in One Application...42	
ENI's Dynamic Presence in Kazakhstan.....	22	<i>EY - How Will Kazakhstan's Business Adapt to a Tighter Carbon Regulation Environment?</i> by Victor Kovalenko and Aibek Tulepbergenov.....	44
SLB - Driving Down Carbon Emissions.....	26	Dentons Law Firm - Renewable Energy Opportunities in the Oil Industry: Recent Legislative Changes Birzhan Zharasbayev and Bogdan Piskorskiy.....	46
Weatherford - Caspian Integrated Services & Projects by Lewis Macaulay.....	30	Al Hilal Bank - Islamic Finance in Kazakhstan Gordon Haskins.....	51
nVent RAYCHEM Electric Heating Systems - Latest Innovative Products by Lukasz Sobczyk.....	32		
The Microsoft Azure Data Manager: Facilitating Digital Transformation.....	33	Member News.....	53
		Advocacy and Working Groups Update...	56

CAT® GENSETS FOR CRITICAL APPLICATIONS

- ✓ DURABILITY & RELIABILITY
- ✓ LONG SERVICE LIFE
- ✓ EXCEEDS INDUSTRY REQUIREMENTS
- ✓ SIMPLE MAINTENANCE
- ✓ TOTAL COST OF OWNERSHIP



Extended warranty
up to 60 months



12 months, unlimited
hours standard warranty



Cat® Customer
Value Agreement (CVA)



CAT Finance
leasing

BOARD OF DIRECTORS

CREDITS

EDITOR IN CHIEF:

Doris Bradbury

COVER ARTWORK:

Bryce Mironuck

CONTRIBUTORS:

Gordon Haskins

Victor Kovalenko

Lewis Macaulay

Vladimir Nitu

Bogdan Piskorskiy

Lukasz Sobczyk

Aibek Tulepbergenov

Birzhan Zharasbayev

PUBLISHER:

**American Chamber
of Commerce in Kazakhstan**

Tel.: +7 (727) 330 92 50

Fax: +7 (727) 330 92 51

EXECUTIVE COMMITTEE



Kenneth Mack
President
Principal
Mack Law



Bela Ferenczi
Vice-President
President, Russia/CIS
GE International



Paul Cohn
Treasurer
Assurance Partner
EY



Inna Alkhimova
Secretary
Partner,
Head of Tax & Legal
KPMG

BOARD MEMBERS



Doris Bradbury
Executive Director
AmCham in Kazakhstan



Dana Inkarebekova
Managing Partner
PwC



Dmitry Kozenkov
CEO
Pfizer



David Maghularia
Managing Director
INDITEX Kazakhstan



Yevgeniy Nastradin
Chief Executive Officer
Beeline Kazakhstan



Donald Townsend
Senior Commercial Officer
U.S. Embassy
Kazakhstan



Saule Zhakayeva
Chairperson
Citibank Kazakhstan

For information about the AmCham, please email info@amcham.kz

For information about Investors' Voice and the Chamber's website,
please email Madiya Orazkhan at Madiya.Orazkhan@amcham.kz

To enquire about financial issues, please contact Aliya Abenova
at Aliya.Abenova@amcham.kz

Baker McKenzie.

LEGAL ADVICE

Above Your Expectations

For the twelfth consecutive year, Acritas has named our Firm the World's strong law firm brand, ranking us No. 1 globally in awareness, favorability, and consideration for cross-border deals and litigation.

bakermckenzie.com

Argentina | Australia | Austria | Bahrain | Belgium | Brazil | Canada | Chile | China | Colombia | Czech Republic | Egypt | France | Germany | Hungary | Indonesia | Italy | Japan | Kazakhstan | Korea | Luxembourg | Malaysia | Mexico | Morocco | Myanmar | Netherlands | Peru | Philippines | Poland | Qatar | Saudi Arabia | Singapore | South Africa | Spain | Sweden | Switzerland | Taiwan | Thailand | Turkey | Ukraine | UAE | UK | USA | Venezuela | Vietnam

Almaty

Samal Towers
97 Zholdasbekov Street
Almaty 050051 Kazakhstan
Tel: +7 727 330 05 00
almaty@bakermckenzie.com

CONTRIBUTORS

Al Hilal Bank Kazakhstan



Gordon Haskins, CEO and Chairman of the Management Board, Al Hilal Bank Kazakhstan

Gordon Haskins has been CEO and Chairman of the Management Board of Al Hilal Bank Kazakhstan since 2016. He has more than 30 years of experience in banking and law. Prior to joining AHBK, Gordon was Country Executive, Chairman of the Management Board and member of the Board of Directors of RBS Kazakhstan for 3 years. Previously he was COO for the DCM & derivatives business for the EMEA region. He worked with RBS Group for over 13 years, having also been Managing Director in Regulatory Developments and Head of Transaction Execution in the Secured Corporate Debt business.

Gordon Haskins began his career as a lawyer, working for nearly 12 years in both London and Vancouver. He holds an Undergraduate Degree in History and Politics from the University of British Columbia in Vancouver (1987) and a Law Degree from the University of Toronto (1991).

Dentons Law Firm



Birzhan Zharasbayev, Partner, Head of Infrastructure, Dentons Law Firm

Birzhan Zharasbayev is the Dentons Managing Partner in Astana and heads Dentons' Infrastructure practice in Kazakhstan. His expertise includes infrastructure, renewable energy, including construction and real estate, the energy sector, PPP, corporate and commercial, and decarbonization matters. With 20 years of experience (17 years with Dentons), he has a deep focus on project development transactions and has advised the EBRD on a model power purchase agreement to be used by Kazakhstan regulators, as well as draft amendments to laws and regulations for renewable energy.

Birzhan Zharasbayev graduated from the Kazakh-Turkish International University (Law Degree with distinction, 2000), Kazakh Humanitarian Law University (Master of Laws with distinction, 2003) and the University of Edinburgh (LLM with distinction, 2006).



Bogdan Piskorskiy, Associate, Dentons Law Firm

Bogdan Piskorskiy is an Associate in Dentons' Astana office, a key member of Dentons renewables, real estate, construction and infrastructure practice. With more than 20 years of experience, he offers in-depth expertise and is familiar with structuring and implementing project development deals. Prior to joining Dentons, he held senior in-house roles in companies in the chemical and petrochemical sector, law firms, and the Ministry of Foreign Affairs.

Bogdan Piskorskiy graduated from Eurasian National University in Astana (International Law Degree, 2003).

Emerson



Vladimir Nitu, Connected Services Manager, Emerson

Vladimir Nitu is responsible for facilitating digital services adoption at customer sites, enabling transition from traditional offline diagnostics of industrial assets and processes to cloud based, remote monitoring solutions. He also helps users to implement technical competency development programs across Europe as education services manager. He has more than 12 years of experience in industrial automation working for Emerson.

Vladimir Nitu holds an Electrical Engineering diploma and an MBA in Business Administration.



EY



Victor Kovalenko, Climate Change and Sustainability Services Leader, EY

Victor Kovalenko has a 20+ year career in the professional services industry focused on sustainability and ESG. He is committed to enhancing the Climate Change and Sustainability agenda in the region through his personal engagement in business and professional associations, as well as EY's corporate projects. As Climate Change and Sustainability Services leader, he supports businesses in responding to economic, environmental, and societal challenges resulting from shifting market demands and the changing economic and regulatory environment. His industry experience is extensive in working with companies in the energy, mining and metallurgy sectors, as well as financial organizations.

Victor Kovalenko holds a Bachelor's degree in Software Development from Odessa National Polytechnic University (Ukraine, 2002), followed by a degree in Management from ALMA U University (Kazakhstan, 2019). He also received a Certificate Sustainable Investment from a joint program at Concordia University and John Molson School of Business (2022).



Aibek Tulebergenov, Consultant, Climate Change and Sustainability Services, EY

Aibek Tulebergenov's dedication to environmental sustainability is evident through his extensive 6-year tenure in Kazakhstan's environmental practice. His expertise extends to various facets, including proficiently managing state environmental assessments and overseeing state control of major industrial entities. Moreover, his contributions have significantly impacted the energy and metallurgical sectors, where he has spearheaded the development and successful implementation of cutting-edge technologies. He is currently at the forefront of a groundbreaking project aimed at modernizing the Kazakhstan emission trading system, a pivotal initiative in the nation's journey towards a greener future.

Aibek Tulebergenov holds a Bachelor's degree in Environmental Science from Eurasian National University and a Bachelor's degree in Law from Aktobe Regional University.

nVent RAYCHEM



Lukasz Sobczyk, Caspian Sales Manager, nVent RAYCHEM

Lukasz Sobczyk is a dynamic and results-driven professional with a proven track record in the chemical industry and commercial and residential business. With over 20 years of experience in sales and business development, he brings extensive knowledge and expertise to the nVent team.

He has held various leadership positions in the industry, including sales, services, and account management. He has a proven ability to build strong relationships with clients and partners, identify new business opportunities, and develop innovative sales strategies to achieve targets. As Sales Manager for the Caspian Sea region, Lukasz drives sales growth in the region.

Weatherford



Lewis Macaulay, Caspian Integrated Services & Projects Manager, Weatherford

Lewis Macaulay is the Caspian Area Manager for Weatherford's Integrated Services and Projects team based in Baku, Azerbaijan. His background encompasses subsea, land, and platform operations with a key focus on systems engineering. Since joining Weatherford in 2018, Lewis has held a number of roles across Europe, ultimately holding an operations management role in the North Sea before joining the Integrated Services and Projects business. Since 2022 Lewis has led this business in the Caspian Area, resulting in the safe and successful execution of multiple complex projects in the well decommissioning and intervention domain for supermajor operators.

Lewis Macaulay holds a Masters of Mechanical Engineering from Robert Gordon University and a Masters of Finance from Aberdeen University. Upon graduating, he completed a graduate program with Proserv focused on subsea design and engineering before joining Weatherford.





Key products and services:

- Aircraft Management
- Aircraft Technical Maintenance
- VVIP Helicopter charters AW-139
- Ground handling
- Aviation consultancy
- Sale and purchase of the aircraft
- UAV / Drone inspections, video- / photo-
- Aircraft Hangar rent

Prime Aviation JSC is a private airline established in 2005. The main business activity is the management of private, commercial aircraft and helicopters. The company has offices and hangars in Almaty, Astana and Atyrau. The head office is located in Almaty.

Prime Aviation has an EASA Part 145 certified division for maintenance and repair works. The company has great experience in business aviation and safety is always key priority without compromising top level of service.

Contacts:

Tel: +7 727 355 66 44

What's up: +7 777 246 71 36

www.primeaviation.kz

info@primeaviation.kz



**ҚАЗАҚСТАННЫҢ
БОЛАШАҒЫ ҮШІН**

www.ncoc.kz



SUMMIT OF SUCCESS

TENGIZCHEVROIL IS THE MOST ATTRACTIVE
EMPLOYER OF KAZAKHSTAN



TENGIZCHEVROIL - HOW TO BECOME KAZAKHSTAN'S BEST EMPLOYER

In 2020 and 2021, the consulting company ANCOR conducted a study of data from the 150 largest companies in Kazakhstan to rank the most attractive employers in the country. Tengizchevroil (TCO) emerged as the leader in this independent ranking. As the largest taxpayer in Kazakhstan, TCO excelled in offering competitive wages, financial stability, career advancement opportunities, a strong reputation, and a commitment to social responsibility. Over the course of three decades, the company consistently improved its human resource management processes to achieve this remarkable result.

How It All Began

Thirty years ago, when TCO was founded, Kazakhstan had just emerged from the USSR and had limited knowledge of modern corporate practices. The arrival of Chevron Corporation in Tengiz marked a significant shift in the approach to human capital management and talent development, shaping the future of the Tengiz project.

Chevron Corporation promptly introduced global standards across all facets of TCO's operations. While advanced technologies were adopted for oil and gas production to boost production growth, a strong emphasis was placed on nurturing highly qualified domestic personnel for effective business management.

During TCO's inaugural year, specialized training programs were launched to develop experts. These programs encompassed foreign language instruction, computer and technical training, safety courses, management training, and human resource development. The company encouraged and financially supported employees in acquiring higher academic and technical education, enhancing their professional knowledge, obtaining qualifications, and honing their skills.

One of the pioneering human resource management innovations at TCO was the training program, designed to help employees better comprehend their job responsibilities, plan their tasks, and assess the quality of their work. Over the past three decades, the program has evolved, with the introduction of the "Employee Performance Management Process" in 2022. This new system swiftly adapts to changing conditions, considers employees' behavioral aspects, enhances result-oriented performance, and recognizes employees' contributions to the company's development. TCO firmly believes that this comprehensive management approach will boost company efficiency and facilitate personnel development, unlocking their talents.

Health and Family Care

TCO's dedication to its employees is evident through the establishment of a state-of-the-art stationary clinic equipped with modern medical equipment at Tengiz. This clinic provides medical care and necessary medicines to both TCO employees and contractors. TCO fully covers health insurance for employees and their families, ensuring high-quality medical care regardless of their place of residence. Moreover, doctors from Almaty travel to Kulsary to offer consultations to workers living there.

Recognizing the importance of housing, TCO has been assisting its employees in improving their living conditions since 1994. A special program was launched to support employees' well-being and attract, retain, and motivate qualified colleagues. This program includes interest-free housing loans through Kazakhstani banks. In 2004, TCO financed the construction of a residential complex in Atyrau with 120 apartments for its employees, most of which were purchased using interest-free loans provided by the company. In total, over 4,600 TCO employees have upgraded their living conditions and moved into new apartments.

Rotational camps at Tengiz offer amenities such as two swimming pools, sports complexes, tennis courts, and gyms. The company actively supports its football and volleyball teams.

In 2014, the *Kemel* health-improvement program was launched at Tengiz, enabling employees to maintain their active lifestyle during shifts and develop harmoniously in various aspects. This program, developed with input from rotational workers, focuses on healthy living, physical activity, nutrition, and leisure activities.

Kemel now includes specialized programs for disease prevention, weight management, and smoking cessation. The program's success is bolstered by four professional fitness trainers conducting daily workouts for employees at the sports and recreation complexes in the camps. For those who prefer a quieter pastime, language classes, art sessions, and game rooms are available.

TCO Trade Union

Each employee plays a vital role in the extensive production process, and TCO recognizes that by safeguarding their health, family, and living conditions, the company can truly respect their labor rights. The TCO trade union was established in 1993 and has actively participated in developing and signing

collective agreements between the administration and the labor collective since its inception. The union members also contribute to the *TCO Standing Committee on Labor Disputes*, the *Control Committee* for rotational personnel living conditions, and oversee public safety inspectors in TCO departments. They ensure safety knowledge and investigate workplace accidents. Moreover, they advocate for collective interests in housing loans and educational programs.

In July 2000, another public organization, the *TCO Employees Association*, was founded to protect labor rights and represent the interests of TCO employees before the company's administration. This association includes employees from various departments and levels of the company, such as operators, mechanics, firefighters, electricians, doctors, engineers, consultants, shift supervisors, and shop supervisors.

The primary goal of these public organizations is to effectively resolve issues and problems, avoiding conflicts. They collaborate with the company's administration to make employees' lives more engaging, meaningful, and enriching, fostering an atmosphere of mutual respect and understanding. These efforts align with TCO's commitment to a diverse, harassment-free work environment. In recognition of these endeavors, TCO was awarded the *Paryz Award Gold Prize* in the *Best Collective Agreement* category in 2009.

Caring for the Future

The personnel development system of Tengizchevroil is aimed at accumulating and increasing human capital, applying this knowledge in practice by employees, and creating conditions for a continuous staff development process.

In 2011, the Tengiz project partners approved a new staffing and hiring strategy, taking into account the demographic situation and planned long-term projects. As part of its implementation, the *Horizons Program* was launched, developed by Chevron Corporation and aimed at accelerating development of the technical competencies of new employees in accordance with international standards. The training program is designed to span approximately 5 years, and employees of engineering departments take part in it.

The effectiveness of the *Horizons Program* is ensured by the fact that, in addition to mandatory classroom training, it also includes formal mentoring and at least two job assignments. Participants develop functional



thinking and hone their professional competencies, both in theory and in practice, directly in the working environment. In 2012, the *Horizons Program* was recognized by the American Chamber of Commerce in Kazakhstan as the *"Most Effective Innovative Training Program of 2012."* Many graduates of this Program now hold key technical and management positions in the company.

Simultaneously, TCO Kazakhstani employees can gain international work experience through the program for temporary assignments to various divisions of Chevron Corporation. As a result, Kazakhstani employees acquire competencies, and the company gains competitiveness at the global level. Over the past few years, dozens of TCO specialists have successfully worked abroad on Chevron Corporation projects in the USA, Angola, Indonesia, Australia, and Nigeria.

The main achievement of TCO over the thirty years of its existence is a pool of thousands of highly professional Kazakh oilmen who can compete in the global oil and gas market. If at the dawn of TCO's creation national employees accounted for just over 50%, today this figure has reached 95%. The share of Kazakh top and middle managers is 87%. TCO employees have helped Kazakhstan become a major oil producer and a key player on the global stage. TCO has invested more than \$93 million to expand local capacity in drilling, production operations, health and safety, reservoir stimulation, and other key areas. Since 2010, more than 86,000 trainings have been conducted for Kazakhstani employees, including international ones.

TCO's philosophy is to constantly maintain technology and work processes at a high level, meeting world standards, while steadily promoting the best national personnel to key managerial positions and leading engineering specialists at all levels.



NEXT GENERATION DATA MANAGEMENT

18+

years on the
market

250+

projects in data governance,
knowledge management,
compliance solutions

200+

customers -
industry leaders in
CIS

DIS Group Kazakhstan is a part of the world's holding - **Aman Group**, headquartered in **Israel** with representative offices in the **UK, Poland, Azerbaijan**, and several other countries. From the first days of its existence, **DIS Group** has represented **Informatica** Corporation, a recognized leader in the field of data management solutions, in the Kazakhstani market.

DIS Group's portfolio includes **Informatica** solutions, the distribution of which is currently one of the company's key priorities. **DIS Group** in **Kazakhstan** actively develops the **Informatica** partner network, conducts trainings and events to increase the technical expertise of customers and partners. The technical expertise of **DIS Group** specialists on **Informatica** solutions is the best in the Kazakhstani market. Partners and clients on a regular basis involve the company's specialists at the stages of implementation, justification of the solution, and pilot projects.

AUTHORIZED DISTRIBUTOR AND SOLUTION PROVIDER OF GLOBAL VENDORS:



Informatica



KMS Lighthouse

citrix

CONTACT US:
dis-group.world

CELEBRATING 30 YEARS OF EXXONMOBIL'S TRANSFORMATIVE PARTNERSHIP WITH KAZAKHSTAN

This year ExxonMobil celebrates a momentous milestone - 30 years in Kazakhstan. This remarkable journey is not just a testament to corporate longevity; it signifies a deep-rooted and mutually beneficial partnership that has significantly contributed to Kazakhstan's economic development and energy landscape.

In 1993, a mere two years after Kazakhstan declared its independence, ExxonMobil took its first step into this promising energy sector by joining the *KazakhstanCaspian Shelf*, which later became *North Caspian Consortium*. This marked the beginning of an enduring partnership that has continued to flourish over the decades.

By 1997, ExxonMobil had further solidified its commitment by acquiring a 25% stake in the *Tengizchevroil joint venture (TCO)*. This partnership unlocked the vast potential of the Tengiz oil field, making it a cornerstone of Kazakhstan's energy sector. Additionally, ExxonMobil entered the *Caspian Pipeline Consortium (CPC)*, securing a 7.5% stake.



ExxonMobil has a 25% interest in the Tengizchevroil (TCO) joint venture, which operates the giant Tengiz field



ExxonMobil has a 7.5% interest in the Caspian Pipeline Consortium (CPC)

Another significant achievement came in 1997 when ExxonMobil joined the *North Caspian Sea Production Sharing Agreement (NCSPSA)*, a consortium of partners whose combined efforts enabled the commercialization of Kashagan field through technological innovations, positioning it as a major contributor to Kazakhstan's energy production.



ExxonMobil has a 16.81% interest in the North Caspian Sea Production Sharing Agreement (NCSPSA) for the giant Kashagan field

ExxonMobil's unwavering commitment to safety, combined with its exceptional expertise and proficiency, has consistently set new industry standards, enhancing the overall performance of Kazakhstan's key projects. Through their profound knowledge of subsurface, advanced drilling techniques, and exemplary project management ExxonMobil continually introduces enablers that create value for the nation, government, and shareholders.

ExxonMobil's presence in Kazakhstan extends far beyond the extraction of energy resources. The company actively engages in various social responsibility initiatives, supporting local communities and fostering human capital development. Through healthcare and educational programs, community investments, and partnerships with local organizations, ExxonMobil has empowered the people of Kazakhstan, significantly contributing to the nation's growth and prosperity.

To date, ExxonMobil's total investment in Kazakhstan has exceeded an impressive 28 billion USD, underscoring the depth of this strong Partnership.

As partners in Kashagan, Tengiz, and CPC, ExxonMobil Kazakhstan has built a strong reputation as an investor and credible partner, greatly contributing to Kazakhstan's emergence as a prominent player on the global energy stage.



President of Kazakhstan, Kassym-Jomart Tokayev, and Senior Vice President of ExxonMobil Corporation, Neil A. Chapman.

Looking ahead, ExxonMobil's partnership with Kazakhstan promises to remain a cornerstone of the nation's energy future.

"Our journey has been marked by collaboration, innovation, and the shared prosperity we've nurtured. Looking forward, we're excited about the ongoing partnerships that await us, as we remain committed to investing in Kazakhstan's energy future, supporting its communities, and striving for sustainable growth," states *Cécile Rauline, Managing Director of ExxonMobil Kazakhstan Inc.*

In the ever-changing global energy landscape, the enduring collaboration between ExxonMobil and Kazakhstan stands as a shining example of the strong partnership, driving continuous economic growth and sustainable development. The past 30 years have been marked by remarkable achievements, laying the foundation for an even brighter future ahead.



INTELLIGENT PROVIDER OF LOGISTICS

Address: office 231, 348/1 Raiymbek ave., Almaty, Kazakhstan

Telephone: + 7 (708) 250-04-84, + 7 (727) 250-04-84

E-mail: info@ipl.kz

www.ipl.kz



FIELD
OF
ACTIVITY

LOGISTICS

CUSTOMS
CLEARANCE

CERTIFICATION

INDUSTRIAL
SAFETY

KARACHAGANAK (KPO) : SUSTAINABLE PARTNERSHIP DEVELOPMENT

The Karachaganak Petroleum Operating (KPO) oil and gas condensate field is one of the world's largest fields for hydrocarbon reserves with huge potential and beneficial socio-economic impact on regional development. The Karachaganak field, located in the north-west of Kazakhstan, was discovered in 1979. It covers an area of over 280 square kilometres. Its estimated reserves in-place exceed 13 billion barrels of liquid hydrocarbons and amount to over 59 trillion cubic feet of gas.



The Karachaganak project is one of the largest projects in the world, the 'locomotive' of economic development not only for the Western Kazakhstan, but also for the entire country. To date, the KPO international consortium has invested more than \$30 billion in the Karachaganak project.

For the first six months of 2023, the Company produced about 71.2 million barrels of oil equivalent of stabilized and unstabilized liquid hydrocarbons, sour gas for export and sweet gas for further use as fuel. In addition, 6.3 billion cubic meters of sour gas were injected into the reservoir, representing 57.1% of the total gas produced in the field.

KPO is the largest employer in the region. The Company employs thousands of local people on a permanent basis. Thus, in the first half of 2023, local KPO employees constituted 98% of the total engineering and technical personnel, and 86% constituted total managerial personnel.

Karachaganak supports domestic enterprises using their goods and services. Since 2000, the country's first *Local Content Development Program* has been successfully implemented at Karachaganak as a KPO initiative. The structure of products supplied by domestic manufacturers to the project has changed significantly. During the early years, the Company purchased mainly construction, fuel and lubrication materials from local suppliers. Today KPO is placing

orders for more technologically advanced products. These include pressure vessels, transformers, 16" drill bits, valves, etc.

New procurement mechanisms were introduced to increase the local content share. Examples of such mechanisms are:

- *Early Tenders* that allow local manufacturers to receive contracts with a commitment to develop their production;
- *Kazakh Tenders* in which only local suppliers of goods, works and services participate;
- *Exchange of Investment Contract*, i.e., awarding a contract on a sole source basis with a commitment to invest in production of goods in Kazakhstan.

The *Trial Orders* mechanism is also used as follows: KPO purchases from manufacturers product samples for operational testing (*field trials*). If the tests are successful, this approach gives local manufacturers the prospect of a stable long-term supply relationship.

Currently, over 6,000 local vendors are registered in the Company's database. Thus, for the first half of 2023, the local content share in KPO contracts for the purchase of goods, works, and services reached 60.68%. In monetary terms it amounted to \$343.9 million.

Special attention is paid to environmental issues. KPO has achieved a world-class gas utilization rate of 99.96% with only 0.04% of gas flaring.

KPO environmental policy is aimed at gradual reduction of emissions through various measures to reduce the KPO production facilities' operations impact on the atmospheric air. Statistics on the permitted limits and actual pollutant emissions into the air for the entire KPO production complex for recent years show not only an annual trend of decrease, but also a significant reduction in actual emissions from the permitted limits through implementation of various technological, organizational and technical measures.

The Company conducts a full-scale monitoring of environmental components including atmospheric air and subsurface water and soil, as well as monitoring air emissions and wastewater discharges. 22,256 wastewater and air samples were obtained and 276 industrial air emissions were measured at the 2023 half year-end.

A special KPO achievement is increased utilization of treated wastewater for technical purposes, which reduced the subsurface water intake by 40%.

The Company actively works on "green" technologies implementation projects including GHG emissions reduction measures and introduction of management techniques. About 90% of generated waste is recycled, reused and disposed of at the *Eco Center Waste Management Complex*.

Since 2010, KPO has been assessing its biodiversity status and the impact of its operational activities on the field. *The Biodiversity Action Plan (BAP)* is one of the measures to prevent ecosystem dysfunction and biodiversity reduction. As part of the *Biodiversity Action Plan* for 2021-2023, flora monitoring studies were conducted in the first half of 2023.

As one of the major subsoil users in the region, KPO has hosted the *Uralsk Green Forum* since 2017, an effective platform for sharing experiences and open dialogue between experts in sustainable development, business, and government organizations. On 02 June 2023, KPO held the *VI Uralsk Green Forum* jointly with the *West Kazakhstan Oblast Akimat*, the main purpose of which was to strengthen a comprehensive dialogue between the various stakeholders on environmental issues, to consolidate joint efforts and develop a common vision for the region's sustainable development, as well as to raise environmental awareness among young people.

Since 2008, the Company has implemented and continues to successfully operate the *ISO 14001 Environmental Management System*. The results of the certification audit in August 2023 once again confirmed the system's successful operation and compliance with this standard.

Green thinking and caring for the environment is a trend that is more relevant every year. KPO supports this trend and continues activities for raising environmental awareness, stimulating green thinking, and promoting a positive lifestyle among the Company's employees. *Green Office* principles are actively implemented in the Company. A *Green Office Guideline* was developed and contains recommendations aimed at saving natural resources, creating a favourable microclimate for employees and introducing an environmental infrastructure, as well as a phased *Green Office Implementation Plan* for KPO offices.

KPO operates the *Geographic Information System (GIS)* to manage environmental and operational processes. GIS is a computer technology used for mapping and assessing the actual existing facilities. These tools allow users to search, analyze, and edit digital maps, as well as receiving additional information about facilities.

Priority is given to the region's development. Significant funding is invested in improving West Kazakhstan Oblast's social infrastructure. The Company has allocated more than \$768 million to address the existing problems of the local community.

These funds were used to build hospitals, schools, sports palaces, and cultural centers in Uralsk, Aksai and dozens of villages. Repairing housing and utilities, as well as construction and reconstruction of roads are underway. Only Kazakhstani companies are involved in the construction and installation work at these projects*.

Today, Karachaganak means stable hydrocarbon production levels, innovative technologies, development of the local economy and social infrastructure, strict compliance with environmental requirements, and increasing opportunities for national employees and contractors.

**Information for the first half-year period of 2023.*



ENI'S DYNAMIC PRESENCE IN KAZAKHSTAN: NURTURING ENERGY AND SOCIAL PROGRESS

Kazakhstan is a key country in Eni's Investment Portfolio being among its top-5 production countries.

Eni has worked alongside Kazakhstan for 30 years successfully developing the oil and gas business as well as renewable projects started 5 years ago. Since the commencement of Eni's presence in Kazakhstan, the company has invested over 16 billion USD in the country in a sustainable manner, with a focus on continuous human capital development.

Aligned with the *United Nations' Sustainable Development Goals*, Eni was among the first global energy companies to recognize the urgent need for significant reductions in carbon emissions and made the decision to reshape its mission to become an Integrated Energy Company.

Eni's strategy is characterized by the use of proprietary technologies and the diversification of energy sources and makes it possible to control the whole energy value chain. The company articulates its actions through three levers of the business model:

Operational excellence, our commitment to enhancing the value of people, their health and safety, the integrity of assets, environmental protection, the respect of human rights, resilience and the diversification of operations and financial solidity.

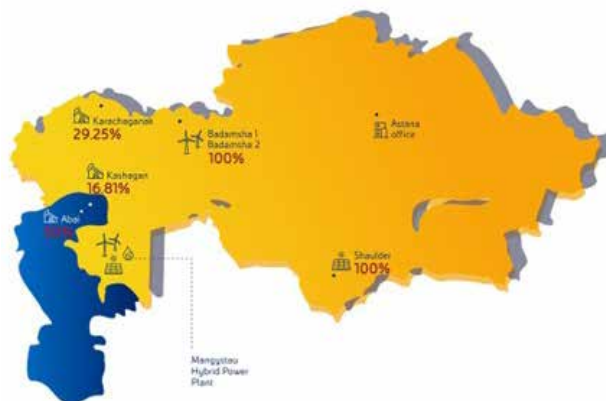
Carbon Neutrality by 2050, our pathway to the total decarbonization of products and processes, which includes specific steps that will allow us to reduce our carbon footprint and achieve the decarbonization of processes and products thanks to technology. In this context, natural gas is the bridge energy source in the transition.

Alliances for development, Eni aims to reduce energy poverty in the countries where it operates by developing infrastructure related to its traditional business, but also the new frontier of renewables, with the goal of generating value in the long term, transferring its know-how and competencies to local partners (the "dual flag" approach). In those countries, we promote initiatives in support of local communities to foster not only access to energy, but also economic diversification, training, community health, access to water and hygienic services and protection of the territory.

Kazakhstan, a vast and resource-rich country in Central Asia, has become a significant player in the global energy landscape. Eni has strategically positioned itself within Kazakhstan's energy sector through its various entities, fostering not only

economic development but also social progress. This article delves into Eni's comprehensive representation structure in Kazakhstan, its commitment to sustainability, and its engagement in transformative industrial and social projects.

Map of Eni assets in Kazakhstan



Eni's Representation Structure: Orchestrating Energy Excellence

Eni's involvement in Kazakhstan is orchestrated through a representation structure that underscores the company's commitment to responsible and effective energy management. Four key business directions and assets are managed by different legal entities within the country:

- 1. Karachaganak field (West Kazakhstan Oblast):** *Agip Karachaganak B.V.* located in Astana is the Operator and represents Eni's interest in Karachaganak Petroleum Operating B.V. Eni's partners in Karachaganak are *Shell (co-operator)*, *KazMunayGas*, *Chevron*, *Lukoil*. Karachaganak is one of the largest gas condensate onshore fields in the world. Eni owns 29.25% participating interest in the Karachaganak Final Production Sharing Agreement.
- 2. Kashagan field (Atyrau Oblast):** *Agip Caspian Sea B.V.* located in Astana represents Eni's interest in joint venture managed by *North Caspian Operating Company N.V.* Eni owns 16.81% participating interest in the *North Caspian Sea Production Sharing Agreement*, which determines the conditions for exploration and development of the Kashagan field discovered in the northern part of the contract area in 2000 on an area of 4,600 km². A giant field located approximately 80 km southeast of Atyrau is one of the largest fields discovered in the last 40 years, with an estimated oil-in-place of about 34 billion barrels of oil. Our partners in Kashagan are *KazMunayGas*, *Shell*, *ExxonMobil*, *TotalEnergies*, *CNPC*, *Inpex*.

3. Abay exploration block (Atyrau Oblast):

Eni, through its subsidiary *Eni Isatay B.V.*, and *KazMunayGas* signed a Joint Operating Agreement for joint exploration and production of hydrocarbons in the Abay block located in the Caspian Sea. *Isatay Operating Company*, owned by Eni and KMG in equal shares, was designated as the Operator. The Abay block is located in the northern part of the Kazakhstani sector of the Caspian Sea, about 50 km from the coast, at a depth of less than 10 m. The block is assumed to have significant potential for hydrocarbon resources. This project represents Eni's strategic alliance with *KazMunayGas*.

4. Renewable Assets: in 2018 Eni started renewables activities in Kazakhstan to expand its clean energy portfolio by acquiring *Arm Wind LLP* (subsidiary of *Eni Plenitude SpA Societa' Benefit*). *Arm Wind* launched its first renewable project in Kazakhstan in March 2020 starting the commercial operations of the 48 MW Wind Farm near *Badamsha* settlement in Aktobe Region with an annual electricity generation of about 195 GWh ensuring annual CO₂ emissions reduction of 172,000.

In March 2022, the company held the inauguration of the *Badamsha-2 Wind Farm* with an additional installed capacity of 48 MW. To date, the wind turbines of the *Badamsha-2 Wind Farm* are the largest ones ever installed in Kazakhstan, both by size (rotor diameter is 158 meters, hub height is 101 meters) and capacity (4.8 MW each). In 2023 *Arm Wind* is finalizing the construction of its first 50 MW photovoltaic power plant near *Shaulder* settlement in Turkistan Region, in the South of Kazakhstan.

In addition, on 8 June 2023 Eni and KMG signed an Agreement for the joint implementation of a *250MW Hybrid Renewables-Gas Power Plant Project* in *Zhanaozen, Mangystau Region*. The project, which is the *first-of-its-kind* in the country, comprises a solar power plant, a wind power plant and a gas power plant for the production and supply of low-carbon and stable electricity to KMG subsidiaries in the area.

The Project leverages Eni's international industrial expertise and pioneers the hybrid combination of various technologies: *state-of-the-art* renewable power plants developed by Eni's subsidiary *Plenitude* in cooperation with KMG, and gas power plants for balancing capacity. The hybrid model addresses the diversification and decarbonization of energy supply for the *Mangystau Region's* oil and gas assets. In addition, it will contribute to the human capital development in the renewable energy sector.

Eni's Social Commitment: Illuminating Pathways of Progress

Eni's presence in Kazakhstan is marked also with its commitment to advancement of local territories and communities:

1. Energy Efficiency Initiative: in May 2022, Eni and the *United Nations Development Program (UNDP)*, in collaboration with the Head of Turkistan Region, completed a joint project to apply renewable technology and improve energy efficiency in a secondary school in the city of Turkistan. This is a clear example of how public-private partnerships can contribute to the achievement of the *Sustainable Development Goals*.

The school's upgrade allows substantially reducing energy consumptions, spending and CO₂ emissions. The school has been equipped with a 50 kW photovoltaic power plant, leveraging the high solar potential of the region, which provides green heating, lighting and hot water to the 1,900 school's students. Energy efficiency has been enhanced by means of LED lights, thermostatic controllers and energy-saving films installed on windows, through which vast majority of energy loss occurs.

The deployment of energy efficient and small renewables projects has many positive aspects for consumers, small and medium enterprises, and public utilities such as schools. The main advantage is that the cost of the electricity generated does not depend on the energy price, while reducing energy consumption in the medium and long-term that in turn leads to resource savings.

2. Educational and Cultural Collaborations:

Within sustainability initiatives, Eni's industry masters programs in both Kazakhstan and Italy serve as prime examples of how academia and industry can synergistically collaborate to drive innovation. These programs provide students with hands-on experiences, exposure to industry best practices, and insights from industry experts. By immersing students in real-world scenarios and practical challenges, Eni effectively prepares them for the demands of the energy sector, ensuring a seamless transition from education to meaningful employment.

Eni collaborates with prestigious universities in Kazakhstan and Italy, such as *Politecnico di Torino*, *University of Perugia*, *KBTU*, *ENU*, *Atyrau O&G University*, and others in providing access to education for local communities through various

master programs like *Industrial Project Management & Engineering*, *Petroleum Engineering*, *Master in Geology & Exploration*, *Renewables*, *HSEQ* and others. The fruitful collaboration within these initiatives is achieved with support of *Eni Corporate University (ECU)*, which actively engages in capacity building of local professionals for the sustainable future of the energy sector.

Eni also actively engages in cultural initiatives. One of the longstanding and sustainable initiatives is the *Enrico Mattei Italian Culture Center* in partnership with the Embassy of Italy in Kazakhstan and *Eurasian National University*. The Initiative includes Italian language classes for public, contributes to advancement of knowledge on *Energy Transition* and *Green Energy*, as well as promotes peculiarities and vibrant tapestry of Italian culture.

3. Road Safety Project: Eni's engagement in social progress extends to road safety initiatives in the West Kazakhstan Oblast. By advocating for responsible driving behaviors, offering relevant training to relevant stakeholders and promoting road safety awareness, Eni contributes to reducing accidents and saving lives. This effort aligns with the company's overarching goal of nurturing safer communities.

4. Community Development: beyond specific projects, Eni is dedicated to improving the overall well-being of the communities it operates in. By investing in infrastructure, healthcare, and social welfare programs, Eni becomes an integral partner in the region's development journey.

Eni's presence in Kazakhstan transcends the traditional boundaries of business, illustrating how an energy company can become a catalyst for positive change. As Kazakhstan's energy landscape continues to evolve, Eni's enduring commitment to responsible energy management and social advancement will undoubtedly serve as a beacon of inspiration for the global energy industry.

The company's multifaceted approach, coupled with its emphasis on collaboration and community engagement, exemplifies a transcontinental partnership for a brighter and more sustainable future. For Eni, sustainability means contributing to a socially just energy transition that guarantees access to energy for everyone, while protecting the environment.



KAZAKHSTAN ENERGY WEEK 2023

KEW

2 0 2 3

**KAZAKHSTAN
ENERGY
WEEK**

XV

**KAZENERGY
EURASIAN
FORUM
ASTANA**

XV KAZENERGY EURASIAN FORUM

3 - 6 October 2023



HOW SLB IS DRIVING DOWN CARBON EMISSIONS

Introduction

Our world is energy-hungry and reliant on fossil fuels, which make up roughly 80 percent of global energy use. In 2022, energy-related emissions were 36.8 gigatons of CO₂ per year, according to the International Energy Agency (IEA). These emissions—plus those from other human-made greenhouse gases (GHGs) — exceed the natural absorption abilities of our planet, having a compounding effect on CO₂ buildup in our atmosphere.

Ultimately, rising GHG levels are not good for our planet and pose an existential threat to humanity, but so too does a lack of access to reliable and affordable energy. Today, this is largely supplied by fossil fuels, which represent a critically important and life-sustaining resource to billions of people for everything from machine labor for agriculture to modern medicine and much more.

The question is how can the energy industry balance providing access to reliable and affordable energy (e.g., fossil fuels or their equivalent) while at the same time decarbonizing the planet to mitigate the impacts of climate change? At SLB, we are working across industries and sectors to provide an answer to this question in the form of technology-driven solutions. Through these solutions, we aim to shift the trajectory of carbon emissions downward while innovating toward a less fossilfuel-reliant and decarbonized future.

The SLB decarbonization commitment

In 2019, SLB became the first company in oil and gas exploration and production (E&P) services to commit to a science-based target in emissions reduction, and in 2021, the company announced its commitment to achieve net-zero emissions by 2050, which we've aligned to GHG reduction targets.

For businesses and organizations, GHGs are divided into three categories: *Scope 1, 2 and 3*. What is the difference between *Scope 1, 2 and 3 emissions*, and what are companies doing to cut all three? Our commitment includes interim target goals through 2050 for reducing our *Scope 1, 2 and 3 emissions*. In many cases, our *Scope 3 emissions* also correspond to a portion of our customers' *Scope 1, 2 or 3 emissions*, which we are addressing through a variety of offerings.

Decarbonizing oil and gas systems

In every realistic scenario, oil and gas will be a crucial part of the energy mix for decades to come. Because of this, part of the SLB decarbonization focus is on helping the oil and gas E&P industry more sustainably find and produce it.



In 2021, SLB began offering technologies with a quantifiable emissions reduction benefit called *Transition Technologies™*. This portfolio of technologies and services helps reduce our customers' operational emissions across their *Scope 1, 2 and 3*, while driving us toward our *Scope 3* reduction targets. Last year, the SLB *Transition Technologies* saved more than 700,000 tons of carbon dioxide equivalent (CO₂e) for our customers' operations. Today, we are actively developing and deploying these technologies and services to continue having a measurable impact on reducing the emissions intensity of the E&P industry.

SLB also has a dedicated business that focuses on measuring, monitoring and ultimately eliminating methane from energy industry operations called *SLB End-to-End Emissions Solutions (SEES)*. Methane elimination is critically important because methane has 84 times the warming potential of CO₂ over a period of twenty years. Oil and gas operations globally emit close to 80 million tons of methane per year, producing the same climate impact as the annual CO₂ emissions from the entire continent of Europe. Thus, curbing methane's impact from oil and gas development is extremely important to mitigate near-term climate rise.

Going beyond oil and gas

To make an even greater impact on reducing the gigatons of CO₂ affecting our world, SLB is going beyond the decarbonization of oil and gas E&P systems. Today, we're aligning with other so-called 'hard-to-abate' industries like steel, cement and power generation to identify their unique decarbonization challenges and to ultimately deliver the technology solutions that will solve them.

Further still, SLB is working to deliver decarbonization solutions and cleantech that will power the clean energy ecosystems of tomorrow. Today, we're doing

this through our *New Energy* business, focusing on five sectors:

- *Carbon capture, sequestration (CCUS)*
- *Geothermal and Geoenergy*
- *Low-carbon hydrogen*
- *Stationary energy storage*
- *Critical minerals, such as sustainable lithium production.*

SLB chose to focus on these sectors because we see great sustainability and decarbonization impact potential in each.

Through creating cross-industry collaborations and partnerships and leveraging our strengths in complex process engineering, large-scale technology development and project management, and expertise in both the subsurface and surface domains, we believe we can play a crucial role in shifting the economics of these new energy sectors in a positive direction and have an emissions reduction impact on the scale of gigatons.

Decarbonizing industry

Because fossil fuels will be needed by many industries for many years, all scenarios are increasingly pivoting toward CCUS as a critical lever to close the emissions gap between desired and actual cumulative CO₂ emissions.

Hard-to-abate industries like steel and cement, for instance, are reliant on fossil fuels because they require high-heat processes — up to 3,000 degF (1,650 degC) — to generate their products. Today, there's simply not a viable economic alternative to fossil fuels for industrial heat. In the current CCUS landscape, about 40 million tons of CO₂ are captured and sequestered per year. To meet net-zero ambitions, however, this number will need to rise to many gigatons per year — and fast.

Rapidly scaling up CCUS will require innovative business models and partnerships across sectors, from emitters all the way to pore space owners.

SLB is currently involved in dozens of CCUS projects globally, providing storage site subsurface characterization and development plans, CO₂ flow assurance, injectivity derisking and CO₂ containment monitoring. Building on these core strengths, we are leveraging new partnerships across the entire value chain, from CO₂ emissions to sequestration,

through business models that align incentives across parties, presenting great opportunities to accelerate decarbonization at scale.

Bringing down CCUS costs

Today, capture costs make up between 50-70 percent of the costs of CCUS projects. New technologies that reduce these costs will be crucial to the speed of CCUS growth.

SLB recently announced a collaboration with RTI International to accelerate the industrialization and scale-up of their proprietary *non-aqueous solvent (NAS)* technology. This tech uses as much as 40 percent less energy during the CO₂ capture process, which has the potential to significantly reduce the operating costs of CCUS projects. In addition to NAS tech, SLB is actively exploring other technologies that can bring CCUS project costs down.



Innovating toward a decarbonized future

Thinking beyond offset emissions with CCUS, clean energy production from low-carbon hydrogen stands to have a significant impact on industrial decarbonization. Hydrogen can be used as a replacement for fossil fuels in several use cases, including industrial heat.

There are various ways to produce low-carbon hydrogen. One method is to use renewable energy and electrolysis. Unlike other forms of hydrogen, this method reduces the need to offset emissions with carbon capture. The problem is that it is currently expensive to produce. Incentives will help lower these costs, but more technology innovation is needed to help shift the economics in the right direction.

One way to reduce the costs of low-carbon hydrogen is to increase the production efficiency while reducing the energy required to produce it. Through *Genvia*, an SLB clean hydrogen production technology

joint venture with the French *Alternative Energies and Atomic Energy Commission (CEA)* and other partners, we are working on a solid oxide electrolyzer technology that can reduce the energy intensity of low-carbon hydrogen production for specific use cases in hard-to-abate industries like steel.

Based on early estimates, the technology has the potential to reduce energy requirements for hydrogen production by up to 30 percent. In addition to hydrogen, critical minerals like lithium will be extremely important to the low-carbon economy of the future, especially with the move to electrification. Producing these minerals, however, is very often an emissions- and resource- intensive process.

In the U.S., SLB is currently mobilizing equipment for a technology solution that sustainably produces lithium from brine at our pilot plant in Clayton Valley, Nevada. When compared with current lithium production practices from brine, our pilot project is expected to use just 15 percent of the water and 7 percent of the land while reducing emissions by up to 80 percent.

Seeding cleantech growth

To accelerate promising and bleeding-edge tech solutions in our new energy focus sectors, SLB has a *corporate venture capital (CVC)* organization that invests in and partners with early-stage technology ventures to scale-up technology development.

The start-ups that make up our CVC portfolio have access to SLB's multidisciplinary expert community, industrialization capacity and global footprint to accelerate their market introduction and scalability. Some of these start-ups include *Gradiant*, a global water solutions provider that plays a role in our sustainable lithium production solution, and *Enervenue*, a short- and long-duration energy storage technology start-up that uses nickel hydrogen instead of lithium-ion phosphate.

Leveraging digital

Underlying so much of what SLB does in decarbonization today is digital.

Digital plays a key role as both a performance and efficiency enabler, and today, the role of digital in our business is firmly intertwined with sustainability. Here are a couple of examples:



- In 2022, SLB announced plans to collaborate with Aramco on the development of a digital platform that will provide sustainability solutions for hard-to-abate industrial sectors. The platform will enable customers to measure and report baselines, targets, emissions, offsets and credits, which will help them manage their carbon footprints more effectively.
- In the SLB methane business, we have a digital platform that can enable business-critical compliance and reporting needs while also optimizing oil and gas operations to increase efficiency and performance.

In the SLB oil and gas business, digital underpins many of our *Transition Technologies* today, and it is being baked into SLB decarbonization and cleantech solutions. What it enables for our company and for our customers is rapid scaling-up of both operational efficiencies and CO₂ reduction or elimination.

Conclusion

Energy, and all its forms, is essential to everything we do in the modern world. Reliable and affordable energy is life-enabling and life-sustaining. Therefore, we believe decarbonization comes with a key responsibility to help provide people with access to this energy.

The SLB decarbonization journey started in oil and gas E&P, but we're not stopping there. To make the gigatons of impact that we believe—and science confirms—are necessary to mitigate the impacts of climate change, we will help bring decarbonization solutions to other industries. SLB will do this through innovation to accelerate the technology-driven solutions the world needs to sustain modern life and a livable planet.



Decarbonizing Industry

We are committed to helping deliver the world's greatest balancing act: enabling secure, accessible, sustainable energy to meet growing demand.

For a Balanced Planet.



WEATHERFORD CASPIAN INTEGRATED SERVICES AND PROJECTS – OFFSHORE PLATFORM WELLS

by Lewis Macaulay

**Caspian Integrated Services & Projects Manager
Weatherford**

Integrated Services & Projects (ISP)

Weatherford *Integrated Services & Projects* offers solutions tailored to the needs of our customers and the challenges of their projects. Our integrated management teams work collaboratively as extensions of your taskforce and partners in your success across well construction, production, and decommissioning. As a result, we streamline operations from conception to completion and execute the right services with a comprehensive portfolio of technologies.

2,500+
WELLS DELIVERED

9M+
METRES DRILLED

10,000+
PRODUCTION-ENHANCING
INTERVENTIONS

200+
WELLS ABANDONED
ANNUALLY

Well Re-Entry
Kingdom of Saudi Arabia
Lump Sum Turnkey
45 Wells
Annually
5 Rigs

Decommissioning
Australia
Lump Sum Turnkey
21 Wells
1 Novel
Jacking Unit

Well Construction
Oman
Lump Sum Turnkey
160 Wells
Annually
5 Rigs

Weatherford's *Integrated Services & Projects* business is gaining significant traction in the market, demonstrated in high value and volume contracts awards now executed or in execution. These awards build on Weatherford's long and proven history of delivering technology leadership and innovation and is a testament to the competitiveness of our portfolio and value proposition of our *Integrated Services & Projects* teams.

In 2022 Weatherford *Integrated Services & Projects* deployed an *Engineering, Procurement and Service Management (EPSm)* business within the Caspian region, to address complex well intervention and workover, well slot recovery and well decommissioning

challenges to support our industry leading intervention and well services technologies. By combining goal-oriented service integration, customer-centric project management, and the best-fit project delivery model, we elevate the customer experience and deliver results.

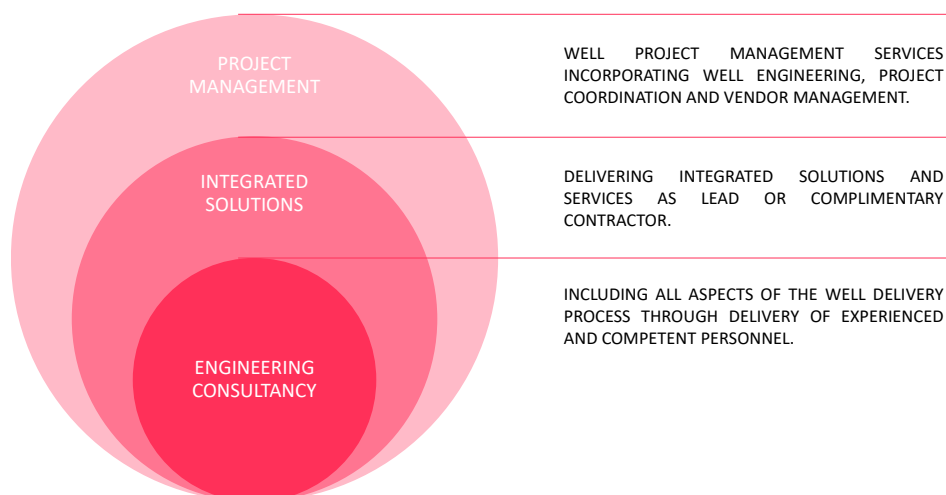
Complex Slot Recovery Saved 14.9 Days

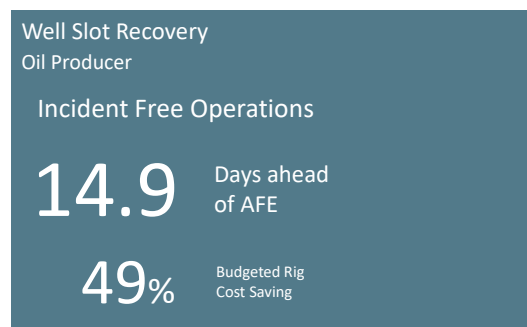
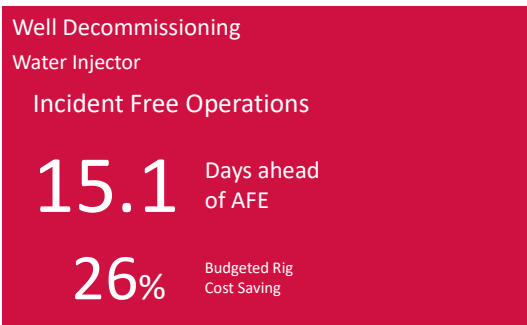
An oil producing well on an offshore platform in the Caspian Sea was shut-in for 18 months due to a stuck liner across the wellhead. Weatherford *Integrated Services & Projects* was tasked with the engineering, job planning and execution management to successfully recover the slot to bring the well back online.

The well was shut-in under a single barrier regime which presented complexity and risk on re-entry and remediation. Due to the proximity of the liner top packer and slips inside the wellhead, conventional milling techniques presented risk of irreparable damage to the wellhead sealing profiles. The annulus pressure behind the liner was unknown, presenting a risk of a loss of primary well containment on recovery if not remediated.

Well entry was performed under a single barrier dispensation following the successful re-verification of well barriers in conformance with industry standards prior to breaking containment and blow-out preventor installation to re-establish a qualified secondary barrier.

Weatherford's extensive global offset well data facilitated the introduction of disruptive technology to replace traditional downhole explosive operations with an alternative mechanical perforator technology to allow the annulus behind the liner to be breached under shut-in conditions with a closed blowout preventor and the fluid displaced to kill-weighted mud.





Weatherford's *Integrated Services & Projects* team took a detailed engineering approach utilizing subject matter experts in intervention and liners to develop a world-first liner hanger recovery methodology with no milling required. The solution deployed included a number of precision internal liner cuts to systematically deconstruct the stuck liner hanger.

The project executed safely, avoiding well control incidents, damage to the surface wellhead and successfully recovered the slot 14.9 days ahead of the customer's budgeted approval for expenditure.

First Well - Decommissioning in Field Saved 15.1 Days

A supermajor operator contracted Weatherford's *Integrated Services & Projects* to lead the first well decommissioning within the field on an offshore platform in the Caspian Sea due to Weatherford's extensive track record in decommissioning operations in the North Sea, Gulf of Mexico, and Australia basins. The decision to decommission the well was driven by integrity impairment of the conductor around the splash zone due to significant wall thickness deterioration, presenting risk to adjacent producing wells on the platform.

Weatherford embedded a team of subject matter experts into the customer's onshore rig-line team and developed a lump sum contracting strategy to align to the customer's well delivery process. The *Weatherford Integrated Services & Projects* team led the engineering and planning of the well decommissioning providing assurance for new-to-region techniques.

Well deconstruction was made challenging due to the inability to individually remove the high- pressure wellhead housing independently of the low-pressure wellhead housing; therefore, a shallow dual casing cut was performed at the well bay level in order to retrieve the surface wellhead system without impacting subsequent casing recovery.

The wall thickness deterioration of the impaired conductor posed the risk that the conductor would part if pulled in tension, as is convention in tubular recovery. The design basis for the impaired conductor recovery was to mitigate risk of a dropped tubular causing catastrophic damage to the platform guide template, subsea architecture, export pipelines, and adjacent wells.

Weatherford's *Integrated Services & Projects* performed a detailed risk analysis on a variety of concept designs before selecting a sacrificial casing recovery as the optimum solution. This design solution facilitated the recovery of the conductor in compression, mitigating against a drop if the conductor failed.

Through the introduction of commercialised technology actively utilised in other basins, Weatherford optimized traditional operations and reduced the number of trips in and out of hole through detailed bottom hole assembly design which alone yielded 4.8 days of rig-saving.

The project safely placed multiple downhole permanent barriers to isolate three formation zones capable of flow in conformance with industry best practice and all casing recovered in compliance with local regulations 15.1 days ahead of the customer's budgeted approval for expenditure.



NVENT RAYCHEM ELECTRIC HEATING SYSTEMS- LATEST INNOVATIVE PRODUCTS

by **Lukasz Sobczyk**
Caspian Sales Manager
nVent RAYCHEM

nVent is a manufacturer and supplier of complete nVent RAYCHEM electric heating systems with direct commercial and technical representation for Kazakhstan.

nVent RAYCHEM invented self-regulating technology more than 50 years ago, and it has been continuously developed and perfected ever since. We regularly launch a comprehensive range of innovative products that enable nVent RAYCHEM electric heating systems to be operated economically, safely and keep the entire production process under continuous control.

This year, our company will introduce the successor to the existing nVent RAYCHEM NGC-20 control and monitoring unit for electric heating with central monitoring capability, which will improve the control and monitoring of the entire system using new technologies.

The new product is called nVent RAYCHEM *Elexant 5010i* and will enable faster and more secure communication compared to the older units, along with more accurate measurement of the required parameters. This new local controller can be operated with the latest user interface, as well as connected to a group of existing controllers in the event of replacement or operation of a complete nVent RAYCHEM heating system containing older equipment.

Another new feature is the extension of our unique self-regulating heating cable technology, which incorporates groundbreaking heating core construction technology. In addition to the nVent RAYCHEM HTV heating cable, which we introduced to the market last year, we are now adding the nVent RAYCHEM XTVR self-regulating heating cable, which, thanks to the technology used, guarantees a minimum of 95% of rated performance even after ten years of operation at continuous exposure to maximum temperatures.

Last but not least, we are also extending the HTV range of self-regulating heating cables with a product with an output of 92W/m at +10°C. Such a product will allow the installation of very high power in a small area where this is required for process reasons.



nVent RAYCHEM systems have been in operation at many plants in Kazakhstan for several decades and help maintain the required temperature of piping and storage tanks during production processes. This is very important to prevent problems with viscosity, crystallization, condensation or solidification. These undesirable phenomena can result in product contamination, reduced productivity, damaged equipment or ruptured piping, causing financial losses, excessive maintenance interventions and operator hazards.

From the beginning of each project, we work closely with the general contractor and the end user. With our technical design and our products we are able to solve sometimes very demanding requirements for quality, safety and reliability. When working in industrial environments, especially in hazardous areas, the ability to control and monitor any system, including electrical heating, remotely is essential as many operations are often unmanned.

nVent RAYCHEM electric heating systems have been ensuring the correct functioning of production processes for several decades. During this time, many projects have been implemented where our electric heating systems maintain the temperature of the media in the pipelines and storage tanks at the required temperature. Using our control and monitoring units, all important operating parameters are constantly monitored and displayed on the screens of the monitoring stations.

These nVent RAYCHEM NGC-30, 40 and Elexant systems can be designed and assembled for any configuration project, but they are always a reliable system, guaranteeing reduced energy consumption and 100% safe operation. The guaranteed 10-year warranty confirms the quality of our products.

Significant projects implemented in recent years by nVent in Kazakhstan: *The Future Growth Project, Zhaikmunai, Atyrau Refinery Karachaganak, Kashagan, Karabatan, and Dunga Field.*

THE MICROSOFT AZURE DATA MANAGER FOR ENERGY: BENEFITS FOR THE ENERGY SECTOR FACILITATING THE DIGITAL TRANSFORMATION OF ENERGY COMPANIES

Introduction

In the rapidly evolving landscape of the energy sector, a monumental shift is underway. The amalgamation of Microsoft's Azure Data Manager for Energy with the OSDU™ Data Platform stands at the forefront of this change, promising a future where digital transformation becomes the norm. This article delves deep, bringing forth insights straight from the vanguards steering this revolutionary transition.

As the energy sector strides towards a digital transformation, the role of comprehensive data management solutions cannot be understated. Microsoft Azure Data Manager for Energy emerges as a pivotal tool in this transition, showcasing a fusion of innovation and foresight.

Microsoft, in collaboration with SLB, has launched the Azure Data Manager for Energy, a fully managed OSDU™ Data Platform offering designed to facilitate the digital transformation journey of energy companies. This platform, developed "to assist geoscientists and engineers in finding, securing, and scaling use cases for their most valuable subsurface data", provides a robust infrastructure that aligns with the OSDU Technical Standard, thereby promoting interoperability and security.

Moreover, this platform promises to unravel the challenges associated with data fragmentation, offering a cohesive solution that integrates various systems and applications. The synergy of expertise between Microsoft and SLB has forged a product that stands as a beacon of innovation and efficiency, promising to reshape industry standards.

Benefits for the Energy Sector

In a sector where data forms the linchpin of operations, the *Azure Data Manager for Energy* emerges as a transformative entity, heralding a new era characterized by efficiency, security, and scalability. This platform, specifically crafted for the energy industry, equips companies to traverse the complex landscape of data management with renewed vigor and efficiency.

The *OSDU™ Data Platform*, a groundbreaking initiative, embodies the principles of standardization and accessibility. It fosters a unified data language that surpasses the boundaries of individual applications, enhancing data connectivity on a global scale and averting data lock-in, thus promoting accessibility across a spectrum of applications.



Synergy with Azure Data Manager for Energy

The amalgamation of the *Azure Data Manager for Energy* with the *OSDU™ Data Platform* signifies the dawn of a new era of data interoperability and security. This collaboration nurtures a resilient environment, fostering a cohesive and streamlined workflow. Furthermore, the partnership between Microsoft and SLB underscores a commitment to harnessing distinct expertise for industry progression, paving a pathway of innovation and growth in the energy sector.

The integration of the *Azure Data Manager for Energy* with the *OSDU™ Data Platform* marks a transformative journey for the energy sector, one characterized by open-source innovation, global scalability, and swift data ingestion for analytics and decision-making.

Since its inception, the platform has been greeted with acclaim and enthusiasm from industry stakeholders. The release of the "Developer" tier in mid-June 2023 underscores the sector's readiness to embrace this change, fostering the development of new applications and facilitating strategic data migration. This progression promises to spur innovation, offering flexibility and speed in crafting new applications and testing *OSDU Data Platform*-backed solutions.

Industry luminaries have lauded the general availability of the *Azure Data Manager for Energy*. Darryl Willis, Corporate Vice President of the *Worldwide Energy and Resources Industry*, accentuates the platform's role in hastening digital innovation, managing compute-intensive workloads globally, and facilitating swift data ingestion for analytics and decision-making. The insights from industry experts underline the transformative potential of this platform, steering the sector towards a future marked by informed decision-making and sustained growth.

Future Prospects

As the energy sector stands at the brink of a digital revolution, the *Azure Data Manager for Energy* and the *OSDU™ Data Platform* are gearing up to play crucial roles. These platforms are constantly evolving, offering augmented functionalities and integration features that promise to alter the landscape of the energy sector fundamentally.

The near horizon holds promising prospects for the *Azure Data Manager for Energy*. The unveiling of the *Developer* tier, characterized by heightened security features and application integration services, aims to dismantle barriers to innovation. This tier will provide a conducive environment for software vendors and end-users, facilitating the development and testing of new *OSDU Data Platform*-backed solutions.

The fusion of these platforms is anticipated to cultivate a more secure, equitable, and sustainable future for the energy sector. As companies brace themselves for a transition into a digital epoch, these platforms stand as stalwarts, guiding informed decision-making and fostering growth through enhanced data management and analytical capabilities.



Impact on the Kazakhstan Oil and Gas Industry

In Kazakhstan's oil and gas sector, the integration of the *Microsoft Azure Data Manager for Energy* and the *OSDU™ Data Platform* heralds a promising era of innovation and strategic development. This integration promises to revolutionize the exploration and production workflow by offering efficient management and analysis of vital subsurface data, a cornerstone for making informed decisions in the industry. Moreover, it can foster collaboration by bringing diverse teams and datasets together on a unified platform, enhancing innovation and strategic foresight.

While the transition to a modern digital platform might face initial resistance, primarily due to infrastructural limitations and concerns regarding data security and regulatory compliance, these challenges are not insurmountable. By fostering partnerships with local stakeholders and investing in capacity building, companies can navigate these hurdles successfully. Moreover, a proactive approach to ensuring compliance with Kazakhstan's regulatory frameworks and an investment in strengthening data security protocols can foster trust and facilitate a smooth transition. Additionally, with targeted investments in technology upgrades and skill development, the industry can adeptly navigate the platform's functionalities, thereby accelerating its widespread adoption across the sector.

By leveraging the potential of this integrated platform, the Kazakhstan oil and gas sector can embrace a future marked by efficiency, security, and scalability, setting a benchmark in digital transformation and paving the way for a prosperous future.

Conclusion

The integration of *Microsoft Azure Data Manager for Energy* with the *OSDU™ Data Platform* stands as a milestone in the energy sector, promising a future defined by efficiency, security, and scalability. As companies navigate the complex labyrinth of data management, these platforms offer streamlined solutions, nurturing a culture of innovation and growth. The journey ahead has exciting prospects, with the energy sector poised to embrace a future marked by innovation, coherence, and unparalleled growth.

The *Azure Data Manager for Energy* is a fully managed *OSDU™ Data Platform* offering designed to facilitate the digital transformation journey of energy companies. This platform, developed "to assist geoscientists and engineers in finding, securing, and scaling use cases for their most valuable subsurface data", provides a robust infrastructure that aligns with the *OSDU Technical Standard*, thereby promoting interoperability and security.

Moreover, this platform promises to unravel the challenges associated with data fragmentation, offering a cohesive solution that integrates various systems and applications. The synergy of expertise between Microsoft and SLB has forged a product that stands as a beacon of innovation and efficiency, promising to reshape industry standards.

In a sector where data forms the linchpin of operations, the *Azure Data Manager for Energy* emerges

as a transformative entity, heralding a new era characterized by efficiency, security, and scalability. This platform, specifically crafted for the energy industry, equips companies to traverse the complex landscape of data management with renewed vigor and efficiency.

The OSDU™ Data Platform, a groundbreaking initiative, embodies the principles of standardization and accessibility. It fosters a unified data language that surpasses the boundaries of individual applications, enhancing data connectivity on a global scale and averting data lock-in, thus promoting accessibility across a spectrum of applications.

The *Developer* tier will enable the sector to develop new applications and test *OSDU Data Platform*-backed solutions rapidly. The forthcoming release of

the *Developer* tier in mid-June 2023 underscores the sector's readiness to embrace this change, fostering the development of new applications and facilitating strategic data migration. This progression promises to spur innovation, offering flexibility and speed in crafting new applications and testing *OSDU Data Platform*-backed solutions.

The *Azure Data Manager for Energy* is set to change the energy sector landscape with its augmented functionalities and integration features. The Developer tier, with its heightened security features and application integration services, aims to provide a conducive environment for software vendors and end-users to develop and test new *OSDU Data Platform*-backed solutions. The fusion of these platforms is anticipated to create a more secure, equitable, and sustainable future for the energy sector.



CAC Kazakhstan – a subsidiary of CIS Group – specializes in management of remote sites in extreme environments and remote locations, both onshore and offshore, for companies operating in the oil & gas, mining, construction and civil engineering sectors.

It is the only service provider rendering catering and camp management services in 12 regions of Kazakhstan with 2000 staff. CAC has been operating for over 30 years supporting the major players in the energy, mining, construction and industrial sectors at every stage of the projects.

As a provider of integrated services, CAC Kazakhstan offers a complete range of turnkey solutions in catering, housekeeping, facilities management and support services, and implementation of IT solutions for workforce management. Its main goal is to bring comfort and safety to the camp residents and contribute to the performance of its customers through daily management of their sites.

30
years

2345
employees

6 millions
meals served in a year

99,5%
local staff



Contacts:

CAC KAZAKHSTAN LLP
050010 Almaty, 20A Kazybek bi, BC "ARAI"

+7 727 313 77 68/69

commercial@cac-services.kz

cacjobs.kz

NOVUS BOLASHAK: COMMITMENTS AND SERVICES TO KAZAKHSTAN

Introduction to Novus Bolashak

Novus Bolashak was established in 2016. It is a 100% Kazakhstan company, jointly owned by *Bolashak Atyrau* and *Novus Technical Services Kazakhstan*. The Joint Venture combines Bolashak's extensive local experience, resources, and commitment to Kazakh Content with the international experience and technical capabilities of Novus.

The Novus Bolashak Mission is to enhance the knowledge, experience and expertise of our people, our clients, and the communities where we work, delivering safe and efficient systems completions and commissioning, and start-up programs on our projects.

The Novus Bolashak Vision is to be accepted as the benchmark in the provision of world class systems completions and commissioning and start-up solutions for process and infrastructure facilities in the oil and gas industry.

Novus Bolashak Values are safety in leadership and partnering, quality in delivery, training in development, and knowledge management in building sustainable differentiation.

Scope of Services

Novus Bolashak provides a *Total Service Solution* including *Systems Completion* and *Long Term Maintenance and Operations (including Procurement, Subcontracting, Punch Identification and Clearing, Pre-Commissioning, Commissioning, Operations, Maintenance, Shutdown, Turnaround and General Technical Services)* to the *Oil & Gas, Petrochemical, Chemical & Process Plant Sectors*.

Corporate Social Responsibility

At Novus Bolashak, business operations and processes are designed so that they do not become an obstacle or a burden to people's wellbeing and the environment's wellbeing. At the same time, these processes and designs boost business growth. The systematic design of operations at Novus Bolashak enables management to ensure the organization achieves sustainable business growth by reducing attached risk factors, as well as through community-building goals.

Novus Bolashak strives to increase its social impact and influence on the environment and in people's lives by focusing on three big goals, as follows:

- *Improving living standards for communities through increasing employment opportunities*
- *Enhancing the health and wellbeing of communities engaging with Novus Bolashak*
- *Reducing the environmental footprint*

Novus Bolashak works hard to create value for not only its shareholders, but also for the society at large. This approach of creating shared value has enabled impressive business growth for Novus Bolashak, as well as allowing its expansion regionally, as well as in its product portfolio. Through creating shared value, Novus Bolashak brings value to the lives of communities where it operates, by influencing those aspects of the society which intersect and coincide with the business offerings and business operations.

Novus Bolashak is currently involved in initiatives in Education, through the sponsorship of scholarship programs for local students, and internships for local graduates. Novus Bolashak is committed to creating a legacy of technically trained and qualified local personnel that can contribute to the future of Kazakhstan's industry across multiple sectors.

Novus Bolashak is involved in initiatives in Employment and has been working closely with the Labor Departments across 11 of the 14 Regions, conducting validation of competence testing and training across all trades and disciplines. Novus Bolashak is actively involved in initiatives in Social Welfare, through providing support to disabled people, low income families, and supporting the *Childrens' Rehabilitation Center*.

Case Study

The *3GP Systems Completion and Commissioning* contract is the largest of its kind in the world today. Below are listed three areas, complete with benchmark statistics to illustrate the scale of the scope of work.

HSE. Safety is a core value for Novus Bolashak. We strive for flawless performance with respect to the safety of our employees and contractors. Our health and safety performance goal is simply stated "*nobody gets hurt*." Each of our crews start each and every day with a *Toolbox Talk*. To date, we have completed in excess of 10 million manhours without a lost time incident. Our vehicles have driven more than 3.75 million kilometers without a road traffic accident.

Training. Our current workforce comprises more than 5,500 persons. In order to achieve that number, we have recruited from 11 out of the 14 regions in Kazakhstan. We have reviewed nearly 30,000 resumes. More than 10,500 people have attended validation of competence training, amounting to more than 350,000 training hours.

Kazakh Content. We are committed to maximizing the percentage of Kazakh Content. At the beginning of the project, we set ourselves a target of 72%. To date, Novus Bolashak has achieved a cumulative average in excess of 80% Kazakh Content.

Delivering specialist solutions for the oil and gas industry
Предоставление специализированных решений для нефтегазовой отрасли



- *Delivering Specialist Engineering Solutions to Capital Programmes across the Global Energy Sector*
- *Pre-Commissioning, Systems Completion & Commissioning Services*
- *Short Term Shutdown & Turnaround Solutions*
- *Long Term Operations & Maintenance Solutions*
- *Through Investment in Safety Leadership & Multi Discipline Craft Training Programmes focussed on National Content*
- *Предоставление специализированных инженерных решений для капитальных программ в мировом энергетическом секторе*
- *Пред-пусконаладочные работы, завершение монтажа систем и ввод в эксплуатацию*
- *Краткосрочные решения по остановке и капитальному ремонту*
- *Долгосрочные решения по эксплуатации и техническому обслуживанию*
- *Инвестиции в лидерство в области безопасности и многопрофильные программы профессионального обучения, ориентированные на национальное содержание*

84A Abulkhair khan Ave.,
Atyrau, Republic of Kazakhstan

✉ info@novus-bolashak.com
cv@novus-bolashak.com
🌐 www.novus-bolashak.com

Республика Казахстан, г. Атырау,
просп. Абулхайыр Хана 84А

✉ info@novus-bolashak.com
cv@novus-bolashak.com
🌐 www.novus-bolashak.com

EMERSON: OUTSOURCING ANALYSIS OF KEY PLANT DATA – INCREASING EFFICIENCY, RELIABILITY AND PROFITABILITY

by **Vladimir Nitu**
Connected Services Manager
Emerson

Emerson's Connected Services Manager, Vladimir Nitu, explains how highly secure connections to plant automation systems and intelligent field instruments are enabling automation companies to provide remote monitoring services, helping processing companies and manufacturers to achieve significant operational benefits needing to develop in-house data analysis expertise.



Outsourcing IT support to a remote specialist company with a team of experts on call around the clock has been common practice among businesses for many years. Organisations have become comfortable in allowing third-party support services to access their IT network via secure remote connection, in order to manage their IT systems infrastructure and software, and quickly and efficiently diagnose and resolve any issues.

Within a manufacturing environment, the emergence of smart sensors and the *Industrial Internet of Things (IIoT)* has enabled *original equipment manufacturers (OEMs)* to gain remote access to their machines once installed and provide lifecycle services to their customers. Machine builders can help the customer to diagnose issues or perform proactive maintenance to identify impending issues and prevent them worsening or causing costly downtime.

In the process industry sector too, plantwide ecosystems have enabled organisations to gather more data than ever before relating to the performance, health and status of process equipment and automation systems. Such data only becomes useful when it can be properly analysed and acted upon. However, analysing potentially complex data can be difficult, especially if there is a lack of suitably skilled resources on-site.

Consequently, many organisations have turned to automation vendors such as Emerson to provide data analysis and support services. Typically, because of sensitivity around network security, data has been collected on-site and then periodically provided offline for analysis by the automation vendor, with recommended actions sent back to the organisation.

Critically though, following recent advancements in cybersecure solutions for remote connectivity, companies are increasingly having the confidence to give external experts access to their automation systems and sensing networks, without fear of exposing themselves to data breaches or disruptions.

Allowing automation vendors remote, real-time access to process equipment and automation systems data enables organisations to achieve faster and more comprehensive results, without having to develop specialised in-house expertise. Personnel are free to respond to more urgent daily priorities, and maintenance activities and shutdowns can be better planned. Let's look at some typical applications in which remote services provided by automation vendors can be used to achieve significant benefits.

Control system health monitoring

Suboptimal performance of *distributed control systems (DCS)* can lead to serious process disruptions and costly unscheduled downtime. However, manual system health checks can often miss intermittent issues and underlying health warnings that could lead to a system disruption if left unmitigated. To help optimise *DCS* performance, automation vendors can provide system health monitoring as a remote service.

Such a service provides continuous centralised monitoring of control system assets, including controllers, servers, switches and network components. An on-site monitoring device automatically checks important health information, enabling issues to be detected quickly and alerts routed to the automation vendor. The vendor's experts can then diagnose the root cause of the problem and recommend actions to mitigate the issue.

Knowing that their *DCS* is being monitored 24/7 by expert engineers with extensive knowledge of the system provides organisations with reassurance and peace of mind. Faster issue detection and resolution results in reduced equipment failures, data loss and downtime, thereby increasing asset availability and profitability. Maintenance managers can shift from a reactive maintenance strategy to a proactive one, enabling improved personnel efficiency and resulting in fewer safety issues, repairs and labour costs.

Valve health monitoring

Control valves play a key role in safe and efficient plant operation and ensuring process availability. A malfunctioning or failing control valve can cause process fluctuations that are sometimes not perceived. Such variability reduces yields and efficiency and can degrade product quality through contamination or becoming off-specification. Poor control response from a critical valve can even lead to a complete unit shutdown.

On average it costs about \$5,000 (€4,500) to pull a valve, yet it is commonplace for all valves to be pulled during a turnaround, despite around 30% not needing service or repair. Therefore, knowing when valves require attention enables organisations to optimise turnarounds, minimise downtime and make considerable cost savings by ensuring that only the valves that actually require maintenance are pulled.

Digital valve controllers are positioners that ensure valves are operating according to the control signal, and also provide access to diagnostic data. However, not only can vast amounts of data be captured, but it can be so complex that it requires deep expertise to uncover the specific corrective actions that will be required. Many companies simply don't have such expertise in-house, but they can overcome this challenge by using a remote monitoring service.

Automation vendors can securely gather, visualise and aggregate real-time diagnostic data from valves. A global network of analysts can then view a valve's health data and inspect its condition history to determine trends and predict impending deterioration. This allows them to provide valuable insights, and data-driven recommendations that enable maintenance to be scheduled and performed well before an alarm is triggered and operations are significantly interrupted. This then leads to improved plant safety, availability and profitability.

Machinery condition monitoring

Whilst the importance of monitoring the condition and performance of critical plant assets such as pumps, compressors and turbines is universally recognised, it is not without its challenges. Organisations need to prioritise which equipment to monitor and when, and they must choose the right monitoring technology for each plant asset. They need to ensure that the data they gather is accurate, and if they want to implement an in-house condition monitoring and data analysis programme, they must have both the resources and the requisite skill sets to do so.



Alternatively, automation vendors that provide a plant's analytics software and solutions can also take on the responsibility of building a comprehensive performance and monitoring strategy for its critical assets. This way, a team of highly skilled analysts with extensive product knowledge provide remote condition monitoring. Having access to real-time key machinery health data enables these experts to not only deliver insights into performance anomalies that could lead to a critical failure and costly downtime, but also recommend resolutions.

The experts will provide a documented analysis that identifies any mechanical fault conditions or beneath-the-surface issues with production assets before significant disruption is caused. This leaves plant personnel free to focus on taking corrective action, thereby reducing operational and maintenance costs. In addition, knowing the efficiency of key assets enables companies to adjust their operating parameters and improve the planning of their maintenance schedules to achieve further benefits.

Steam trap monitoring

Steam systems are designed with steam traps to remove condensation from the piping, thereby protecting plant equipment and allowing efficient process operation. When steam traps fail, there is a significant impact. Extreme damage can be caused to plant equipment, personnel can be put at risk, and product quality and throughput can be affected. Sporadic manual surveys and limited effective maintenance can lead to steam trap failures going undetected and unrepaired for months on end. Steam trap leaks can account for 10% of a plant's energy costs because of the time delay between trap failure and proper diagnosis and maintenance.

Real-time automated monitoring of steam trap health and performance is therefore vital for both safety and financial reasons, and this can be provided by automation vendors as a remote service. The service

includes installation of the necessary hardware and software, plus continuous monitoring by steam system experts. These experts analyse the data that is generated by wireless acoustic transmitters attached near each steam trap, collected through proprietary software, and transmitted to the vendor's monitoring service.

The vendor then provides actionable information so that corrective steps can be taken immediately – not in weeks or months, as losses mount. Even steam trap repairs and replacements can be handled as part of the service, making the process completely hands-off for plant personnel. Remote steam trap monitoring helps to increase safety; improve product quality and process throughput; reduce equipment damage, energy loss and costs; and ease pressure on plant personnel.

Corrosion and erosion monitoring

Corrosion and erosion are extremely dangerous because they invisibly attack plants from the inside. If not well understood or controlled, they can lead to poor plant availability, high reactive maintenance costs and potentially major incidents due to loss of containment of the process fluid. Corrosion and erosion also affect operational performance because they limit how hard a plant can be driven.

If organisations are unaware of the true extent of corrosion damage, large safety factors must be applied to operational decisions, to avoid excessive damage, and this results in the process being run below its maximum capability and potential profit being lost. If the corrosion is more aggressive than anticipated, leaks and unplanned outages can occur, incurring extreme financial and safety ramifications.

It is therefore critically important to implement an effective corrosion and erosion monitoring system. However, in industries such as oil and gas, refining and chemical, obtaining measurements is challenging due to the extreme temperatures of the equipment being monitored and the hazardous and inaccessible locations involved. There are also many variables that affect the rate of corrosion – such as feedstock changes, temperature and process adjustments, and flow rates – and these can alter daily.

Automation vendors can help organisations to meet these challenges by providing automated corrosion and erosion monitoring systems, along with experts to monitor and analyse the generated data as a remote service, helping the effective planning of maintenance tasks. At the heart of the latest monitoring systems are compact, non-intrusive, ultrasonic wall thickness

measuring sensors that monitor areas at elevated risk of internal corrosion or erosion. The sensors deliver wall thickness measurements with unparalleled accuracy and frequency, providing much greater visibility into the condition of the plant.

As part of a remote service, expert analysts will combine data from all the corrosion monitoring equipment installed on-site, analyse it and then interpret it into actionable information to ensure process integrity. If excessive corrosion is identified, then maintenance can be scheduled appropriately, for example during periods of planned downtime, helping to avoid costly leaks and shutdowns.

Crucially, the frequently updated data provides much greater understanding of the effects of feedstock variations and process conditions. This provides organisations with the information and confidence needed to run their plant more aggressively and closer to its maximum capacity but still within safe limits, therefore increasing profitability.

Lifecycle services

In many cases automation vendors are now being asked to take full responsibility for the lifecycle management of their systems, software, valves and intelligent field devices. This includes managing and performing software updates, testing, recalibration, servicing, repair and replacement. Outcome based contracts focused on maximising equipment and process availability utilises remote connections to diagnose potential issues, but instead of providing insight and direction on actions to resident maintenance personnel, the automation vendor will handle all maintenance tasks on site. In some cases, vendors will even provide resident engineers.

Summary

Organisations can now generate unprecedented amounts of data from their plant assets and processes. However, such information must not only be gathered but also analysed and interpreted, to help operators make informed decisions that will drive business performance improvements. It is costly to develop dedicated in-house experts who solely focus on value-added analysis – and tough to retain them.

To meet this challenge, automation vendors such as Emerson offer remote, highly secure, continuous monitoring of a plant's critical equipment and processes. This enables their expert personnel around the world to deliver the actionable performance insights companies need to increase plant efficiency and safety and avoid costly unplanned downtime.



An excellent operational performance does not need many words of explanation, but one simple answer: Bertling in Kazakhstan.

Local services include:

Project Freight Forwarding • Trucking • Resupply Logistics
Customs Clearance • Warehousing

Bertling Kazakh Logistics, LLP
9, Admiral Lev Vladimirovskiy Street
E02A4H5 Atyrau
Republic of Kazakhstan

Aliya Zhaksylykova
Director – BKL
+7 7122 763171
sales.bkl@bertling.com

Visit www.bertling.com/kazakhstan to find out more.

BORUSAN CAT KAZAKHSTAN - BOOM 360: ALL COMPANY SOLUTIONS IN ONE APPLICATION

In today's world the development and use of digital technologies by companies determine the level of success on the market and the ability to act strategically because diverse new generation solutions accelerate the achievement of each company's business goals.

As an official dealer of Caterpillar® brand equipment, Borusan Cat Kazakhstan has been offering its products and services on the Kazakhstan market for more than 20 years. To meet all dealer standards and requirements of Cat®, the company continuously improves its processes and develops unique programs and solutions for its customers. The company applies the latest technologies and digital solutions to its operations in line with its mission - to contribute to the customers' business success and to be a leader in each segment served.

Thus in the spring of 2022, Borusan Cat Kazakhstan presented *Boom 360* to its customers - a comprehensive mobile application that combines many of the company's useful tools and solutions.

Thanks to this unique development, Borusan's customers have the opportunity to optimize their processes because the processes are brought together in one multi-functional application. The best intellectual solutions were applied to developing the application, thanks to which users are able to instantly access the necessary features and information in a 24/7 mode.

With the help of *Boom 360* you can track your fleet of equipment and the history of service works, receive various notifications, including departure of service specialists as well as independently conducting sound diagnostics of your equipment. It is also possible to observe your equipment's repair process at the workshops of Borusan Cat Kazakhstan in real time, as well as learning the most relevant information about the company's products, services, and promotional offers.

Let's tell you more about the *Boom 360* application and its unique features. The application includes five modules:

- *My Equipment*
- *Service*
- *Price offers*
- *Financial indicators*
- *Boom Shop*



An unusual convenience of these modules is that they are directly linked to the company's website, which provides rapid access to all necessary information, as well as authorizing different representatives of the customer company in different modules.

The *Boom 360* application results from a proactive approach to doing business. This new mobile application has been designed to help Cat owners save time and receive additional benefits. Through the *Boom 360* application, Borusan Cat Kazakhstan customers can easily browse all of the benefits offered by Borusan Cat: from spare parts to equipment with the Borusan Cat warranty, viewing product specifications and placing orders.

The application enables you to monitor your fleet and to receive information on equipment location and utilization quickly at any time through the *Maps* function. Muneccim's award-winning application built on artificial intelligence processes the customer's equipment data and forecasts its anticipated problems. The customer is then advised about his equipment needs via instant notifications from *Boom 360* before faults occur.

The application is equipped with a sound diagnostic system that utilizes artificial intelligence technology to record equipment sounds for 30 seconds and afterwards provide data on its possible malfunctions in just 3 seconds. The '*My Equipment*' *Boom 360* module also provides an opportunity to read the results of S*O*S analysis and view the data archive based on the analysis results.

An important feature of the application is its ability to monitor the need for maintenance. To do this, it is necessary to select the required equipment and create a self-maintenance schedule. In addition,

Boom 360 allows you to track component inspection status at Borusan Cat inspection centers in real time as well as fill out maintenance order forms with a single click.

With *Boom 360* it's easy for Borusan customers to rent Cat special construction equipment or Cat generators and to obtain insurance. In the application you can easily view information about equipment for rent and immediately place an order. A used equipment mobile application is also available at *Boom 360* that allows you to view used machine stock and place orders.

Through the application you can easily make purchases. To do this you have to go to the *Boom Shop* section, find the required spare parts, add them to the cart and place an order with a secure online payment feature. The user is then able to track their order and receive notifications right up to delivery.

With the help of *Boom Shop* you can purchase spare parts at a discount, view the availability of necessary items throughout Kazakhstan, and learn their current price. You can pay for your purchases with Visa, Mastercard and other payment systems.

The shop interface is characterized by ease of perception and usability. It has been developed so that its users can find and purchase the necessary spare parts as quickly and easily as possible.

Push-notifications will soon be launched in *Boom 360* to advise application users of new offers, promotions and discounts. The application also launches promo codes for various categories of the company's products and services on a monthly basis that can provide a special, reduced price.

The *Boom 360* application is available for download on *AppStore* and *Google Play*.

From the very beginning, Borusan Cat Kazakhstan has made many breakthroughs in service provision and organization of unique infrastructure for customers. The company's chosen path of development is continuous improvement. Borusan Cat Kazakhstan's approach is focused on meeting customer needs and providing them with a full range of products and services with the highest dedication to quality and efficiency. This allows the company to strengthen its position on the market and serve as an example for other market players in the industry.

The *Boom 360* unique mobile application is a vivid example confirming the company's commitment to the chosen benchmark, creating new, promising opportunities for customers to optimize their business processes and overall development of their companies. It is not just an application, but a virtual assistant that helps Borusan customers reduce their expenditure of time and financial resources, improve the reliability of their equipment, and stay updated about all of the company's current events and offers. This is a great example of how cooperation between customers and the supplier can be improved through innovation and digital solutions.

With *Boom 360* Borusan Cat Kazakhstan confirms its commitment to continuous development and improvement, assuring its customers that they are always one step ahead in their industry. This application is part of the company's long-term strategy to ensure the success of its customers, as well as strengthen its image as a reliable and innovative partner in the world of special equipment.



HOW WILL KAZAKHSTAN'S BUSINESS ADAPT TO A TIGHTER CARBON REGULATION ENVIRONMENT?

by Victor Kovalenko

Partner, Climate Change and Sustainability Services Leader

EY Central Asia, Caucasus and Ukraine

Aibek Tulepbergenov

Consultant, Climate Change and Sustainability Services

EY Kazakhstan



As part of Kazakhstan's ratification of the *Paris Agreement* the government committed to a stronger global response to climate change impacts in the light of sustainable development. This commitment has become a key objective of the new environmental legislation and consideration of the need to launch tools to drive the country's decarbonisation.

Following publication of the new *Environmental Code of Kazakhstan (the Code)* the country's government approved Kazakhstan's *Carbon Neutrality Strategy* until 2060 and updated *INDC – Kazakhstan's Intended Nationally Determined Contribution* - to the global response to climate change. These policy papers shape the future vector of the development of the country's industry and economy, where the short-term objective is to reduce emissions of greenhouse gases (*GHG*) by 15% by the end of 2030 against the 1990 baseline emissions, while the long-term objective is to achieve carbon neutrality by 2060.

In order to reach its ambitious goals, Kazakhstan needs to come up with no less ambitious solutions to change the regulatory framework. The current carbon regulatory framework is represented only by the carbon emissions trading scheme (*KazETS*), which covers 200 major operators and accounts for almost half of the total national *GHG* emissions.

Large Business Adaptation

For the purposes of environmental legislation, large business refers to operators that negatively impact the environment and engage in operations listed in *the Code* in Section 1 of Appendix 2. For the purposes of carbon regulation, it refers to *KazETS* participants with CO₂ emissions of more than 20 thousand tonnes.

Currently, the operators participating in *KazETS* are in a comfortable position. Thus, the operators get abundant free-of-charge carbon credits, and whenever the credits are not enough, e.g., when the production capacity has increased, the operator has the right to request additional credits to cover the shortage from the state or buy them in the secondary market at about KZT 500 per tonne of CO₂.

It is evident that these arrangements do not encourage operators to reduce their *GHG* emissions; in addition, they do not allow *KazETS* to become a market tool for carbon regulation. The government understands this situation and plans to improve *KazETS* by introducing initial auction (a fee-based portion of carbon credits allocation), revising product benchmarks, increasing the annual reduction factor of total limit (LRF), launching the carbon fund, and other administrative actions.

It cannot be ruled out that a tolerant carbon regulation system will gradually become more stringent, creating a drastic impact on energy generation and manufacturing sectors targeting the domestic market. But for Kazakhstan's export-oriented economy these steps are needed both as a measure to prevent an outflow of funds from the economy (*for reference: adoption of CBAM standards implies that operators exporting their products to the EU (iron and steel, cement, fertilisers, aluminium and hydrogen) shall pay the difference of the carbon price in Kazakhstan and the EU*) and as a way to meet their target in terms of *Intended Nationally Determined Contributions*.

Large business should respond to these messages today to be able to keep business afloat as well as benefiting from the sale of carbon credits. EY recommends the following recommendations to *KazETS* participants:

1. *Enhance the quality of internal monitoring, reporting and verification because reliable information about on the volumes and quality of any company's emissions is fundamental for strategic planning and monitoring of GHG emissions reduction progress.*
2. *Enhance the energy efficiency of applied technology and equipment by introducing best available technology, the key method for GHG emissions reduction; BAT implementation also entails a bonus in the form of an operating permit releasing the company from payment for pollutants.*

3. *Launch projects to replace, where possible, the traditional generation with renewable electricity generation – Scope 1 and 2 emissions reduction.*
4. *Integrate/include the fee for carbon credits in corporate strategies and development programmes. Develop an internal carbon fee, i.e., a mechanism used by the companies to assess their GHG emissions so that it drives positive changes in their business.*
5. *Enhance the key company's decision makers' awareness of the climate change agenda and transition risks.*



Small and Medium Business Adaptation

This category refers both to the companies with low GHG emissions and “administered” facilities with emissions, which are close to the KazETS threshold of 20 thousand tonnes of CO₂. Tighter carbon regulation will impact small and medium business sectors due to the potential introduction of a carbon tax.

Currently different scenarios are considered for implementing the carbon tax, but a tax levied on fossil fuels is viewed as the best option. The carbon tax on fuel as an alternative carbon regulation tool is used in many countries in the European Union, North and South America.

EY analysis established that implementation of the carbon tax on the burning of various types of fuel (coal, gas, oil products) will cover approximately 70 million tonnes of CO₂ emissions. Financial resources received by the government from the tax will be allocated to the new carbon fund, which will be set up to provide financial support to decarbonisation projects.

Meanwhile, carbon regulation is perceived by most companies in this category of business as something

“out-of-the-way” and having nothing to do with their operations; however, given Kazakhstan’s ambitious goals and the global trend, business will have to revise its views and start applying various techniques to adapt it to the new environment.

EY suggests taking the following actions to adapt your business today for achieving sustainability in the future:

1. **Financial estimate:** *analysing current fuel costs and assessing financial impacts of the carbon tax on your company will allow the company to understand what changes and investments will be needed to cut fuel consumption and, as a result, reduce tax expenses.*
2. **Improving operational energy efficiency:** *the same as for large business, the implementation of energy efficiency measures will drive reduction of energy consumption; consequently, these measures will also help mitigating the exposure to the carbon tax.*
3. **Implementing the carbon tax in corporate development plans:** *measures such as investments in renewables or transfer from the used fuel to more eco-friendly types of fuel may allow the company to rely on fossil fuel to a lesser extent.*
4. **Education and communication:** *raising awareness of the company’s employees and clients (product consumers) through delivery of seminars, training sessions, references, will help them comprehend the importance of GHG emissions reduction and create the opportunity to operate a sustainable business.*

Conclusion

We would like to conclude that by improving the carbon market, introducing emissions taxation, and promoting innovation, the government encourages Kazakhstan’s enterprises, companies, and people to reduce GHG emissions. These actions will not only mitigate impact on the climate but also generate new economic opportunities by driving the development of efficient production sites, technologies, and green infrastructures. Thus, it is critical for the business community (large, medium, and small business) as a key element of the country’s economy to take up future challenges and ensure sustainable adaptation for the sake of Kazakhstan and future generations.

RENEWABLE ENERGY OPPORTUNITIES IN THE OIL & GAS INDUSTRY: RECENT LEGISLATIVE CHANGES AND STRUCTURING CHALLENGES

by **Birzhan Zharasbayev**

Partner, Dentons Law Firm

Bogdan Piskorskiy, Associate, Dentons Law Firm

Background

Implementing decarbonization policies within the energy sector is a paramount objective in the global effort to combat climate change. Kazakhstan is actively enhancing its legislative framework and energy policies to align with current climate trends and its international commitments under the Paris Agreement.

Central to these efforts are key strategic documents, including the Concept of Transitioning to a Green Economy, The Strategy for Achieving Carbon Neutrality by 2060, and The Energy Balance for 2035. These documents articulate ambitious, long-term goals aimed at addressing pressing environmental concerns. These goals encompass reducing CO₂ emissions, augmenting the ratio of renewable energy sources (RES) in the energy mix, and enhancing overall energy efficiency.

Specifically, these objectives are targeted at reducing Kazakhstan's *carbon balance*¹ by no less than 15% from the 1990 level by 31 December 2030. Furthermore, there are precisely established benchmarks, including the aspiration to achieve a renewable energy share of 10% in total electricity production by 2030, with an ultimate target of 50% by 2050, encompassing various alternative energy sources.

One of the key mechanisms to reach the country's objectives is implementing a *carbon quota system*. The central figure of the *carbon quota system* is the operator of a quoted installation (operator) whose greenhouse gas emissions exceed 20,000 tons of CO₂ annually within regulated sectors of the economy, including the oil and gas industry.

Annually, operators are given a specified number of quotas free of charge. The number of such free quotas is expected to diminish year by year. Eventually there is an escalating incentive for operators to buy additional quotas on the market or earn *offset credits*².

As a result, there is a growing emphasis on offset projects aimed at reducing emissions and enhancing greenhouse gas absorption, particularly within the renewable energy sector.

There can be various forms of offset projects. In this article, we focus on two renewable project models most relevant to oil & gas companies with an outline of the legal implications affecting the structuring of such projects.



Corporate power purchase agreement (CPPA) projects

The global trend of establishing bilateral contracts for the sale of electricity between oil and gas companies and RES developers has gained widespread recognition. These contractual agreements are commonly based on the CPPA scheme. A CPPA constitutes a legally binding contract between energy consumers, often referred to as off-takers, and renewable project developers.

Off-takers, predominantly organizations seeking to diminish their carbon footprint and promote sustainability, increasingly embrace CPPAs. *Off-takers* commit to acquiring a predetermined volume of electricity generated from RES at a predefined price over a specified timeframe. Under this scheme, project developers are responsible for developing, financing, constructing, and operating energy-generating installations, encompassing mainly wind and solar farms, and covering all capital and operational expenses of the project.

Generally, CPPAs offer a significant environmental benefit to the *off-takers*. By purchasing renewable

¹Carbon balance - the volume of actual greenhouse gas emissions minus the volume of actual greenhouse gas uptake for the specified period.

²Offset credits - a reduction in greenhouse gas emissions and/or an increase in the removal of greenhouse gases resulting from activities undertaken across various sectors of the economy, all aimed at curbing emissions and enhancing greenhouse gas removal.

energy, *off-takers* reduce their carbon footprint and contribute to the global effort to combat climate change. Additionally, *CPPAs* serve diverse objectives, including risk mitigation concerning electricity market price fluctuations, long-term financial planning for energy expenses, project financing facilitation, and granting network access or preventing electricity supply interruptions.

Normally, two forms of *CPPA* are distinguished: *physical and virtual agreements*. By virtue of a physical *CPPA*, developers place renewable energy-generating facilities adjacent to the *off-takers'* facilities, allowing direct connection of power lines and consumption of the generated electricity.

A virtual *CPPA* implies that the generating facilities may not be located in their proximity but elsewhere, and the electricity is delivered to *off-takers* through the national or regional grids.

Structuring considerations

The decentralized market in Kazakhstan, which for many years has been a separate option for electricity trading, no longer exists from 1 July 2023. Under the decentralized market regime, all *energy-producing organizations (EPO)* were able to sell electricity under *CPPAs* to any consumer that was a wholesale market participant. Pursuant to the latest amendments in the *Electricity Law*³, this option now remains available to renewable EPOs, excluding EPOs operating under old feed-in tariff or auction PPAs. Conventional power producers can only sell electricity to entities forming part of the same group with such producers.

Renewable energy producers that do not have existing auction *PPAs* signed with the state-owned single buyer (*Financial Settlement Center for the Support of Renewable Energy Sources LLP*) are entitled to enter into *CPPAs* with any customer. Importantly, the *RES* producer is not required to be part of the same "group" with such consumer.

Consequently, *CPPA* projects can be structured through contractual arrangements (i.e. a direct *CPPA* contract between the two parties) as well as through corporate structures involving the establishment of a new JV company where both parties would hold equity interests. From a project structuring perspective, this provides greater flexibility to *CPPA* projects compared to hybrid projects, as will be discussed below.

As for virtual *CPPAs*, there are no regulations expressly governing them. Prior to the aforesaid amendments to the *Electricity Law*, such arrangements could be structured with the involvement of power supply organizations to cater for the fact that the power producer and customer are situated in different geographical locations.

Following the amendments, it appears that the *RES* producer and customer can sign a direct *CPPA*, provided that the customer will enter into a separate power transmission agreement with a transmission company. Of course, the practical application of such arrangements has not been tested, and further assessment is required with the involvement of the regulator.



Hybrid projects

Hybrid projects, which involve a combination of renewable and conventional power generation, carry good prospects in the electricity supply industry, particularly involving oil and gas companies, commonly referred to as "*fuel suppliers*". These schemes evolve around a business model where the *fuel supplier* provides a primary energy source, such as natural gas, to the power producer. The conventional element of the project is used to deal with the intermittency issue created by the *RES* generation.

From the legal perspective, the structuring of such hybrid projects can involve two direct contractual arrangements, *CPPA* covering the renewable element of the project and a contract for producing electricity using natural gas (contractual scheme). Alternatively, two *SPVs* can be established by the fuel supplier and the renewable developer, covering

³The Law on Electricity dated 9 July 2004 (hereinafter the "*Electricity Law*").

the conventional and renewable elements of the project respectively (corporate scheme). One *SPV* would be responsible for owning and operating a power station that generates electricity using natural gas (*Conventional JV*). In turn, the *Conventional JV* would undertake to balance the intermittencies that may be created by the *SPV* owning the renewable power plant (*Renewable JV*).

As noted above, under the amended *Electricity Law* a conventional *EPO* must be part of the same group as the consumer to sell electricity to such a consumer. Effectively, this makes contractual schemes unfeasible for hybrid projects and therefore a search must be made for corporate schemes. Also, the *Conventional JV* retains flexibility to transition from direct electricity sales to consumers to the exclusive sale of the entire generated volume to the *Single Buyer* under the wholesale electricity market regime.

Below, we will briefly explore two contractual modes that hold potential applicability to hybrid projects: *tolling scheme*, which is widely used in the oil and gas industry, and *supply scheme*, which represents a traditional contract for electricity supply.

Tolling

In a broad sense, tolling in the oil and gas industry involves the production of products from raw materials supplied by the customer. One of its primary distinctions is that the owner of the raw materials retains ownership of the goods produced from raw materials, subsequently handling the sale of such goods. This arrangement allows the owner to maintain control over the final product and its distribution, while benefiting from the tolling facility's expertise and processing capabilities.

Tolling schemes in electricity supply facilitate collaboration between fuel suppliers and power producers. In this setup, the electricity produced by the producer remains the property of the fuel supplier. To compensate for the use of their fuel and the generation of electricity, the fuel supplier pays a tolling fee to the power producer.

Kazakhstan law does not expressly regulate *tolling schemes*, i.e. they are not directly permitted nor prohibited. Furthermore, practical experience with *tolling schemes*, particularly those centered on electricity generation from natural gas or other fuels, remains limited.

Therefore, the feasibility of the *tolling scheme*, where the fuel supplier retains ownership of both the natural gas supplied and the electricity generated by the power producer, remains arguable. Here are the key considerations.

Firstly, a fundamental concern arises from transforming natural gas into electricity, significantly altering the nature of the supplied resource. In principle, this transformation challenges the applicability of a works contract for the reprocessing of an item (known as "договор подряда на переработку вещи", a characterization commonly used in some CIS countries for tolling agreements related to crude oil). Since natural gas is entirely consumed over the technological process of electricity generation, there is an argument that the works contract may not be a suitable legal form.



Secondly, Kazakhstan's *Electricity Law* does not explicitly regulate the *tolling scheme*. The only mechanism expressly envisioned by the *Electricity Law* is "supply" of electricity. Under a narrow interpretation, one could argue that the tolling scheme is unfeasible since it does not involve a direct "sale" of electricity by the power producer to the fuel supplier, as prescribed by the *Electricity Law*.

These legal irregularities necessitate careful consideration and potentially the development of a regulatory framework that accommodates *tolling schemes* within Kazakhstan's electricity supply landscape. Clearly, addressing these complexities is essential to provide legal certainty to stakeholders engaged in such hybrid projects.

If the regulator eventually upholds the view that the *tolling scheme* is not appropriate as a legal structure for hybrid projects, then the only alternative solution would be to use the *supply contract scheme*.

In theory, the *tolling scheme* could be substituted with two parallel supply agreements, namely, an agreement for supply of natural gas to the power producer and an agreement for supply of generated electricity back to the gas supplier. Presumably, such a parallel structure should allow to achieve the same economic outcomes of the *tolling scheme*.

Supply scheme

As noted above, *EPOs* are allowed to sell electricity to consumers being part of the same “group” with such *EPOs*.

A consumer is a legal entity that acquires electricity exclusively for its own consumption without the right to resell it onwards to third parties. Effectively, the *Electricity Law* currently confines the role of consumers within the supply scheme to self-consumption.

As to the definition of “group”, the *Electricity Law* introduces a standardized test for identifying entities being part of the same group with *EPOs*. To meet this test, a legal entity would need to either exercise control over another legal entity or be subject to

control by another legal entity. Control, in this context, encompasses the ability of a legal entity, directly or indirectly, to influence the decision-making process of another entity through more than 50% equity control or otherwise by acquiring its executive functions.

Final takeaways

To sum up, the consumer in a *CPPA* project and the *Renewable JV* in the above hybrid project scenario are not allowed to resell the electricity and rather must solely consume it for their own operational needs. In the case of hybrid projects, as an additional factor, the *Conventional JV* may only supply electricity to the *Renewable JV*, provided that both entities are part of the same group.

Consequently, while both *CPPA* and hybrid project formats can be instrumental in fostering sustainability and securing energy supply, the regulations governing *CPPA* projects offer a wider choice of structuring opportunities, including both contractual and corporate forms, while the success of hybrid projects seems to require the use of corporate forms only.



**GLOBALINK
LOGISTICS**

ONE STOP LOGISTICS SOLUTIONS

Freight Forwarding | Supply Chain Management | Project Logistics | Removals | Pet Moving

sales@globalinklogistics.com | www.globalinklogistics.com

GET THE EDGE YOU NEED TO SUCCEED

WITH ADCB CORPORATE & INVESTMENT BANKING

Unlock your ambitions with one of the leading UAE based banking institutions. From dedicated relationship managers to in-depth ESG & sustainability insights, enjoy a comprehensive range of products, and solutions across transactional and investment banking.

WHERE EVERY
WHAT IF

MEETS A
WHY NOT



Exceptional
client experience



Innovative
digital platforms



In-depth market
knowledge & expertise

بنك أبوظبي التجاري

ADCB



CORPORATE & INVESTMENT BANKING

To learn more, visit adcb.com/cibg

AL HILAL ISLAMIC BANK'S ROLE IN THE DEVELOPMENT OF ISLAMIC FINANCE IN KAZAKHSTAN

by Gordon Haskins
Chief Executive Officer
Al Hilal Bank Kazakhstan

Islamic Finance in Kazakhstan

The development of the Islamic finance sector in Kazakhstan began in the 1990s, driven by a series of government initiatives. Critical initial steps included Kazakhstan's membership in the *Islamic Development Bank (IsDB)* in November 1995 and the establishment of the IsDB's regional office in Almaty in 1998. Over the next decade, the Kazakhstani government passed legislation to amend various existing laws, enabling the practice of Islamic finance.

More recently, the *Astana International Finance Centre (AIFC)* has made Islamic finance a focal point for development, outlining its *Islamic Finance Master Plan* for the Republic of Kazakhstan 2020-2025. The AIFC has also taken substantial measures to promote and facilitate training and education within the Islamic finance sector.

The establishment of Al Hilal Islamic Bank

Despite some conventional banks in Kazakhstan tapping into international capital markets through various Islamic products in the early 2000s, there was still no operational Islamic financial institution in the country at that time. It wasn't until *Al Hilal Islamic Bank JSC (AHBK)* obtained its Kazakhstan banking license in 2010 when the country had its first fully Islamic bank. Today, *AHBK* offers a full suite of Sharia-compliant banking products to corporate customers in nearly all sectors of Kazakhstan's economy, except those that contravene Sharia principles and rules.

The role of Islamic finance

Due to the prevailing lack of awareness regarding Islamic banking products, certain "myths" persist. *AHBK* operates as a commercial, profit-oriented entity that adheres to Sharia principles and rules. It strives for profitability and safety while working to enhance the funds of depositors, shareholders, and investors. The absence of interest in Islamic financing transactions does not imply that the financing is without cost.

According to Sharia, usury and interest on loans are prohibited. Therefore, unlike conventional banks, *AHBK* does not provide loans in exchange for interest but rather employs trade, leasing, and partnership structures while avoiding speculative components.



Additionally, *AHBK* does not restrict its products and services based on religion; religion is not the sole reason for choosing Islamic banking products. Many clients select *AHBK* due to its reliability and the quality of its services. *AHBK* exercises prudence and conservatism in selecting financing projects, investing exclusively in the real sectors of the economy and refraining from speculative transactions.

ADCB Group

Al Hilal Islamic Bank is part of *ADCB Group*, a leading UAE-based banking institution that provides more than one million customers with a full suite of products and services, spanning *Consumer Banking, Corporate & Investment Banking, Treasury & Investments* and *Property Management*. It is one of the largest banks in the UAE, with around USD 135 billion in assets (as at end 2022). In 2022, the Bank generated more than USD 1.7 billion in net profit. *ADCB* acquired *Al Hilal Islamic Bank JSC (AHBK)* in Kazakhstan as part of its acquisition of *Al Hilal Bank* in 2019.

ADCB, which is listed on the *Abu Dhabi Securities Exchange (ADX)*, has a strong shareholder base, anchored by a 60.20% stake held by *Mubadala Investment Company*, the Abu Dhabi-based sovereign investor. The Bank has diverse ownership, with a growing share of foreign institutional shareholders from over 75 countries. *ADCB's* strong balance sheet is reflected in its investment-grade credit ratings of "A" from S&P and "A+" from Fitch.

As a major financial institution in the UAE, *ADCB* is proactively assuming its share of responsibility to ensure that it makes a full contribution to the country's progressive agenda for decarbonisation, economic diversification and social inclusion. The Bank recognises the inextricable relationships between environment, communities, public policy, economic growth and financial inclusion. It has therefore adopted a holistic approach to the management of *environmental, social, and governance (ESG)*

issues and has embedded sustainability in its corporate strategy, with environmental and social risk management being integrated into the credit decision making process. *ADCB* has an *ESG* rating of “A” from *MSCI* and an *ESG* risk score of 21.0 from *Sustainalytics*.

In 2023, *ADCB* announced the rebranding of its *Wholesale Banking Group* as *Corporate & Investment Banking Group (CIBG)*, reflecting the expanded scope of services that *ADCB* provides to institutions, corporates and SMEs, particularly in light of the Bank’s growing track record and expertise in capital markets solutions. *AHBK* now works more and more closely with *CIBG* to offer a diverse range of products and services to *AHBK*’s corporate customers in Kazakhstan.

Al Hilal Islamic Bank’s products and services

One of *AHBK*’s most prevalent products is the *Commodity Murabaha* transaction. This financing transaction is based on purchase and sale, whereby *AHBK* purchases a commodity from a broker and sells it to a customer through the *Murabaha* agreement with a set markup either in the form of a lump sum or percentage. The customer subsequently sells the commodity to a third-party broker via *AHBK*, which acts as the intermediary for the customer. Following the completion of this secondary sale, *AHBK* credits the proceeds from the commodity’s sale to the customer’s account. The customer, in turn, adheres to the agreed-upon schedule for paying the deferred purchase price to *AHBK*.



Other common structures offered by *AHBK* to customers include goods *Murabaha* and *Ijara*, typically associated with the acquisition of equipment or other fixed assets. In a goods *Murabaha* arrangement, *AHBK* purchases specific equipment or goods and then sells them incrementally to the customer, incorporating a mark-up that accounts for *AHBK*’s participation and risk in the transaction. In contrast, an *Ijara* resembles a conventional leasing transaction, where *AHBK* acquires the property and leases it to the customer. During the lease term, *AHBK* retains ownership of the property, assuming the associated risks. Typically, at the transaction’s conclusion, ownership of the property or equipment is transferred to the customer. Rental payments under the *Ijara* include the cost of the asset (the fixed element), *AHBK*’s profit (the variable element), and other expenses (the supplementary element).



MEMBER NEWS

ExxonMobil



ExxonMobil Kazakhstan Announces Appointment of New Managing Director – Cécile Rauline

Effective June 1, 2023, Cécile Rauline became Managing Director of ExxonMobil Kazakhstan, succeeding Dinesh Sivasamboo.

Cécile Rauline began her career with ExxonMobil's French affiliate in 2002, and since then has held various commercial, supervisory, and managerial positions in Refining & Supply, Global Gas Logistics, Upstream Commercial and Business Development in France, Belgium, USA, and the UK. She worked as Managing Director for ExxonMobil Exploration and Production Vietnam, and Managing Director for Esso Exploration and Production Chad.

Cécile Rauline graduated from École de Sciences Politiques (France) with a degree in political and social sciences in 1998 and from ESSEC Business School (France) in 2002.

ExxonMobil started its business in Kazakhstan in 1993. The company owns a 25% interest in the Tengizchevroil joint venture, which operates the giant Tengiz field, 16.81% in the North Caspian Production Sharing Agreement that includes the world-class Kashagan field, and a 7.5% interest in the Caspian Pipeline Consortium.



U.S. Embassy Announces Appointment of New U.S. Consul-General, Michelle Yerkin, Almaty General Consulate

Michelle Yerkin is a career Foreign Service Officer who most recently served as Deputy Chief of Mission and Charge d'Affaires at the US Embassy in Reykjavik, Iceland. Since joining the Foreign Service in 2003, Michelle has served in Almaty, Bishkek, Moscow, Panama City, and San Salvador.

Her domestic tours at the U.S. Department of State include the *Bureau of Economic and Business Affairs (EB)*; the *Bureau of Arms Control, Verification, and Compliance (AVC)*; and the *Bureau of Western Hemisphere Affairs (WHA)*.

Michelle grew up on a farm in northern Minnesota and is a proud descendant of the White Earth Nation of the Ojibwe (Chippewa) tribe. She speaks Russian and Spanish and is currently studying Kazakh.

Michelle Yerkin graduated *cum laude* from Yale University, where she majored in Russian and Eastern European Studies. She also earned a *Juris Doctorate* degree from the University of Minnesota School of Law.



MEMBER NEWS



Maria Shipuleva is Appointed AstraZeneca Kazakhstan Country Director

AstraZeneca is pleased to announce the appointment of Maria Shipuleva as Country Director of AstraZeneca Kazakhstan. With a distinguished career in leading international pharmaceutical companies such as AstraZeneca, Novartis and GSK, Maria brings a wealth of expertise in sales and marketing, management and team development. Her career includes nine years of service at AstraZeneca, where she has held various roles of increasing responsibility, both in Russia and the UK.

In her new role as Country Director for AstraZeneca in Kazakhstan, Maria Shipuleva will lead the development of key therapeutic areas, including oncology, cardiology, nephrology and metabolism, respiratory, autoimmune, and rare diseases. Her leadership will play a pivotal role in advancing AstraZeneca's commitment to providing access to life-saving innovative medicines for the benefit of patients in Kazakhstan.

Maria Shipuleva graduated from the University of Essex, and holds a Master of Science Degree from the London School of Economics and Political Science, both in the U.K.



Başak Karaca is Appointed Vice President of Coca-Cola Eurasia

Basak Karaca was appointed Vice-President of Coca-Cola Eurasia effective 2 October 2023 and is based in Almaty. Previously she held the position of Vice President, Coca-Cola franchise operations in Turkey.

Başak Karaca has extensive experience in business administration, international relations, marketing, branding, strategy, and innovation. She began her career in the Marketing Department of Procter & Gamble Switzerland, then moved to the company's headquarters in the USA. After 13 years at P&G as Marketing Director for Central and Eastern Europe, Middle East, and Africa, she returned to Turkey to become General Marketing Manager at Ulker. Two years later, she headed Marketing in the Middle East, North Africa, Turkey and Central Asia at the British confectionery company, Pladis Global.

In 2017 Başak Karaca founded her own consulting firm before she was invited to work for The Coca-Cola Company in Istanbul. She is a member of the Boards of Directors of AmCham Turkey, the Global Network of Entrepreneurs and, until recently, the Turkish Galatasaray Football Club.

Basak Karaca graduated from Bosphorus University (Istanbul) in business administration, political science, and international relations, and is also an alumnus of the INSEAD Leadership Program.



MEMBER NEWS

MARS



Arman Sutbayev is Appointed General Manager of Mars Central Eurasia, Belarus, and Turkey

Arman Sutbayev was appointed General Manager of Mars Central Eurasia, Belarus and Turkey in August 2023. He is responsible for leading overall business strategy, operational planning, performance excellence, engagement and development of Mars Associates in the region covering Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkey, Turkmenistan and Uzbekistan.

Originally from Kazakhstan, Arman Sutbayev has over twenty years of experience in general management, sales and marketing. From 2020-2023 he served as General Manager of Mars in Romania. Previously he was Business Development Director overseeing operations in Belarus, Moldova, the Caucasus, Central Asia and Mongolia. He began his career at Mars in 2014 as Sales Director for the Wrigley segment in Kazakhstan after a decade of successful experience in the FMCG sector.

Arman Sutbayev is based in Almaty with responsibility for guiding and regularly visiting Mars in the Central Eurasia, Belarus and Turkey regions.

nVent RAYCHEM



nVent Appoints Lukasz Sobczyk Caspian Sales Manager

nVent introduces its new Sales Manager for the Caspian Sea region, Lukasz Sobczyk, a dynamic and results-driven professional with a proven track record in the chemical industry and commercial and residential business. With over twenty years of experience in sales and business development, Lukasz brings extensive knowledge and expertise to the nVent team.

Before accepting this position, Lukasz held various leadership positions in the industry, including sales, services, and account management. He has a proven ability to build strong relationships with clients and partners, identify new business opportunities, and develop innovative sales strategies to achieve targets.

As Sales Manager for the Caspian region, Lukasz will drive sales growth and expand the nVent customer base in the region. He is committed to delivering exceptional customer service and building long-term partnerships that drive mutual success.



ADVOCACY AND WORKING GROUPS UPDATE

JULY - SEPTEMBER 2023

Summer is traditionally a time of preparations for resumption of the AmCham Working Groups and Advocacy sessions in the Autumn with the Prime Minister and Cabinet, two separate but connected activities. First and foremost advocacy means the *AmCham-Prime Minister's Council to Improve the Investment Climate*, which meets regularly throughout the year to tackle current topics of importance for the Government, AmCham members, and the broader business community, both foreign and local.

AmCham is often asked how we determine the topics and speakers for our various advocacy initiatives. The twenty-two AmCham Working Groups have developed over many years and are always a vibrant source of information for the investment community. Based on what we learn from Working Group reports, AmCham determines the topics for upcoming Council sessions. AmCham always has its ear to the ground to ensure the Council topics will be relevant to both sides of Council discussions and the ensuing follow-up.

Council speakers are also chosen from the Working Groups, primarily from the Group Chairmen who address the Prime Minister and Cabinet Ministers. They deliver articulate presentations on the impact of obstacles that need to be removed to 'improve the investment climate', the Council's purpose, the reason for its creation.

In this spirit, Council topics early in the Summer and this Autumn have been varied – *Food Security and Agriculture* as priorities for Kazakhstan was the topic for the Summer meeting. Presentations from this Council session were published in the *Summer Investors' Voice*. We have now proceeded to an enquiry into the current status of the *Oil & Gas Industry*, to be followed by *Healthcare Reform* in December. Other topics will be chosen depending on what we learn from our Working Groups across the country in Autumn and Winter.

This summer was also used for follow-up meetings emerging from the *Food Security and Agriculture* Council session. There were meetings and further communications with the Agriculture and Infrastructure Ministers concerning draft legislation creating Government subsidies for local manufacturers of agricultural equipment. Government subsidies of this nature are problematical for several reasons, first because they contravene WTO regulations that Kazakhstan must observe as WTO members, and second because one-sided subsidies place foreign manufacturers of agricultural equipment at a distinct disadvantage. International leaders providing

equipment for the agricultural industry have led the way in quality for many years in response to the Government's request to support development of Kazakhstan's agricultural potential. However, one-sided subsidies will undercut international support.

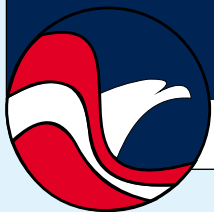
Recent meetings by two of the most active AmCham Working Groups, *Intellectual Property Rights* and *Healthcare Reform* have led to the first Autumn Council session on *Healthcare Reform and Pharmaceutical IP Rights*. Kazakhstan's membership in the *World Trade Organization* and the *WTO TRIPS Agreement (Trade Related Aspects of Intellectual Property Rights)* is a fundamental part of every discussion on IP rights, whether for pharmaceuticals or the many other industries in which IP has become a hot topic.

The Chairs of the *IP* and *Healthcare Working Groups* will be Speakers at the Autumn Council focused on priorities in healthcare reform: *data exclusivity, generic and original drugs, introduction of new medicines to the market, pharmaceutical pricing, and fair competition*.

As the Working Groups now resume meeting, we look forward to new challenges to be heard on the dialogue platform provided by the Council and the Government's willingness to discuss the merits of AmCham recommendations. Over the fifteen years of the Council's regular meetings with the Prime Minister and Cabinet, many individual company problems have been resolved and some very challenging systemic problems have been tackled, discussed at length, and resolved in a positive spirit for all concerned.

AmCham advocacy connecting the efforts of our Working Groups, always a rich source of information, addressed to Government planning and draft legislation, has been time well spent listening to both sides to find solutions benefiting investors and the Government. Our Working Groups are an Integral part of AmCham Advocacy at every level.





AMERICAN CHAMBER OF COMMERCE IN KAZAKHSTAN

MEMBERSHIP APPLICATION

ABOUT AMCHAM

Registered in Kazakhstan as a non-profit organization in March of 1999 with 36 charter members, the American Chamber of Commerce in Kazakhstan currently represents over 200 member companies including US, multinational, and local businesses in 30 industry sectors. Their collective investment in Kazakhstan's economy is several billion USD. The American Chamber in Kazakhstan is a member of the US American Chamber of Commerce in Washington D.C. and has working relationships with many regional business associations.

BENEFITS OF MEMBERSHIP

- ✓ AmCham members participate in an organization existing solely to serve members
- ✓ AmCham actively advocates for reform of the business environment with the Kazakhstan Government at senior levels
- ✓ AmCham members may attend 20 Working Groups in 5 cities plus 3 Inter-Ministerial Working Groups
- ✓ Monthly speaker luncheons with senior government and business leaders are reserved for AmCham members
- ✓ Seminars, conferences, and monthly social networking events are organized for AmCham members
- ✓ AmCham membership contact lists are available exclusively to AmCham members
- ✓ Economic, political, legal, social, and business development information is distributed to AmCham members
- ✓ Member companies provide exclusive discounts on products and services to other AmCham members
- ✓ Access to the Members' Only section on the AmCham Website
- ✓ Publishing opportunities are available in *Investors' Voice*, the *Annual Membership Directory*, and Special Publications

MEMBERSHIP APPLICATION

Company Name:

Industry Area:

CEO Name, Signature, Email:

Contact Individual:

Title(s):

Address:

Tel.: Fax: E-mail:

Please include us in the following Working Groups:

Almaty (7)

- | | |
|--|--|
| ☐ Foreign Investment | ☐ Healthcare Reform |
| ☐ Human Resources | ☐ Trade and Customs |
| ☐ Tax | |
| ☐ Technology and Innovation | |
| ☐ Corporate Social Responsibility | |

Atyrau (4)

- | |
|--|
| ☐ Tax |
| ☐ Human Resources |
| ☐ Trade and Customs |
| ☐ Corporate Social Responsibility |

Aktau (3)

- | |
|--|
| ☐ Human Resources |
| ☐ Tax |
| ☐ Trade and Customs |

Astana (4)

- | |
|---|
| ☐ Foreign Investment |
| ☐ Tax |
| ☐ Trade and Customs |
| ☐ Human Resources |

Shymkent (1)

- | |
|---|
| ☐ Foreign Investment |
|---|

AMCHAM WORKING GROUPS

Working Groups made up of representatives from Amcham member companies provide comment, discussion and submission of positions and represent the united interests of the business community in Kazakhstan by identifying challenges faced by investors and proactively addressing them. Each group meets regularly, providing a forum for networking and the exchange of information. Groups are formed on an as-needed basis at the request of the AmCham membership.

GOVERNANCE

The AmCham is governed by a Board of Directors elected annually from and by the membership. Directors currently and in the past have included individuals from the following company members:

AES

AIG Insurance

Baker & McKenzie

BASF Central Asia

BG Group

Bracewell and Giuliani

Capital Bank

Chevron

Citibank

Conoco Phillips

Coca-Cola

Dechert

Deloitte

EBRD

Ernst & Young

GE International

Halliburton

HSBC

Hyatt Hotel

Honeywell

Intercontinental Hotel

KIMEP

KPMG

LeBoeuf, Lamb, Greene

Nestle

Philip Morris Kazakhstan

Philips Kazakhstan

PricewaterhouseCoopers

Procter & Gamble

Raytheon

Scot Holland CBRE

Tengizchevroil

Visor Capital

White & Case

OFFICE

Rixos Almaty Hotel Office Tower, 8th floor

Almaty Kazakhstan

Tel.: +7 (727) 330 92 50

www.amcham.kz

Doris Bradbury

Executive Director

Doris.Bradbury@amcham.kz

Aliya Abenova

Finance Director

Aliya.Abenova@amcham.kz

Dana Kabytkanova

Accountant

Dana.Kabytkanova@amcham.kz

Nurzhan Ismagulov

Government Relations

Working Groups

Nurzhan.Ismagulov@amcham.kz

Madiya Orazkhan

Publications Coordinator

Madiya.Orazkhan@amcham.kz

Aminat Akhmatova

Events Coordinator

Aminat.Akhmatova@amcham.kz

info@amcham.kz

Sergey Nikulin

Technical Support

REGIONAL REPRESENTATIVES

Bela Ferenczi

CEO General Electric

Resident Representative, Astana

Bela.Ferenczi@ge.com

Maxim Gubashev

General Director, NES Fircroft

Resident Representative, Caspian Region

Maxim.Gubashev@fircroft.com

Wojciech Halat

CEO, HeidelbergCement

Resident Representative, Shymkent

Wojciech.Halat@heidelbergcement.kz

MEMBERSHIP CATEGORIES AND ANNUAL FEES

Corporate A	(Worldwide revenues in excess of 100 million USD)	\$5,000 USD
Corporate B	(Worldwide revenues between 2-100 million USD)	\$3,800 USD
Corporate C	(Worldwide revenues not exceeding 2 million USD)	\$2,700 USD
Non-Profit		\$1,500 USD
Individual**		\$500 USD

***Individual memberships are available only under special circumstances for persons not associated with a company.*

Corporate membership entitles a company to delegate 3 individuals as AmCham voting members. The number of persons from each company participating in working groups, forums, and business roundtables is usually not limited.

All applications for membership must be approved by the Board of Directors of the American Chamber of Commerce in Kazakhstan. For further information about membership benefits, the application process, or Investors' Voice magazine, please contact: info@amcham.kz



АКЦИОНЕРЛІК ҚҰНДЫЛЫҚТЫ ҚАЛЫПТАСТЫРУ
ЦЕННОСТЬ ДЛЯ АКЦИОНЕРОВ
GENERATING SHAREHOLDER VALUE



ҚОҒАМДЫ ҚҰАТТАНДЫРУ
ЭНЕРГИЯ ДЛЯ ОБЩЕСТВА
POWERING LIVES



ТАЗА НӨЛДІК ШЫҒАРЫНДЫЛАРҒА ЖЕТУ
ЧИСТЫЕ НУЛЕВЫЕ ВЫБРОСЫ
ACHIEVING NET-ZERO EMISSIONS



ТАБИҒАТТЫ ҚОРҒАУ
ЗАБОТА О ПРИРОДЕ
RESPECTING NATURE

30 

Ж Ы Л ШЕЛЛ ҚАЗАҚСТАН
1993-2023

ӨРКЕНДЕУ ЖОЛЫНДА БІРГЕМІЗ

НА ПУТИ К ПРОГРЕССУ ВМЕСТЕ
POWERING PROGRESS TOGETHER



COCA-COLA KAZAKHSTAN

BEVERAGES FOR EVERY OCCASION



Coca-Cola