



KAZAKHSTAN ENERGY WEEK 2019 PROGRAM

“FUELING THE FUTURE:
INNOVATION GROWTH”

📅 23 | 29 September 2019
Nur-Sultan, Kazakhstan

“STUDENT ENERGY CHALLENGE” COMPETITION

09:30-14:00

Venue: Congress Center, ABAI Hall

Organizers: KAZENERGY, Shell Kazakhstan

The «Student Energy Challenge» intellectual team competition (hereinafter – the Competition) has been held by the KAZENERGY Association in partnership and with the financial support of Shell Kazakhstan since 2017 (hereinafter – the Organizers).

The competition is aimed at supporting student projects that offer innovative solutions to energy challenges.

In general, the Competition will contribute to the development of professional and personal potential of Kazakhstan students, engineering thinking and creativity, transfer of best practices and technical skills of the industry to Kazakhstan students, gaining experience in the accumulation and capitalization of competencies and motivation for scientific and entrepreneurial activities.

This year, a record number of 70 teams representing 27 higher education institutions from 15 regions of Kazakhstan have registered to participate in the Competition.

Themes of the Competition:

- Reduction of environmental emissions
- Waste disposal and recycling
- Digitalization
- Energy saving and energy efficiency in the oil and gas industry

More information about the “STUDENT ENERGY CHALLENGE” Competition is available on the official website – <http://kazenergyforum.com/en/youth-forum/student-energy-challenge/>

6TH DOWNSTREAM CASPIAN AND CENTRAL ASIA INTERNATIONAL CONFERENCE (PART 1)

09:00-18:00

Venue: Hilton Astana Hotel

Organizers: GLOBUC

“Downstream Caspian and Central Asia” for the past 6 years covers topics about refining, gas processing and petrochemicals in Kazakhstan, Uzbekistan, Azerbaijan, Turkmenistan, Tajikistan and Kyrgyzstan. The event serves as a gateway to the refining and petrochemical markets for the entire Caspian and Central Asian region. Among conference regulars are all regional majors from Uzbekistan, Turkmenistan, Kazakhstan, Kyrgyzstan, and Azerbaijan. There is no other event with an audience representation of such scale (250+ senior downstream experts) and breadth of geography (22+ countries).

In 2019 the conference will be held in partnership with KAZENERGY Association and with the support from the Ministry of Energy of Kazakhstan and will be a part of the KAZAKHSTAN ENERGY WEEK.

Key topics:

- Global & local refining and petrochemicals markets
- Focus on Kazakhstan, Uzbekistan, Turkmenistan, Azerbaijan;
- Projects, technology, licenses;
- Improving operational efficiency;
- Project management;
- Digital transformation: walking the talk;
- Establishing strategic partnerships.

More information about the “Downstream Caspian and Central Asia” Conference is available on the official website of the event – <https://globuc.com/downstream-centralasia>

DAY 2 – SEPTEMBER 24, TUESDAY

XI KAZENERGY YOUTH FORUM “THE YOUTH VS MODERN CHALLENGES”

10:00-18:00

Venue: Congress Center, ABAI Hall

Organizers: KAZENERGY

This year was declared as the Year of Youth in our country, so the concept of the Forum was developed taking into account the opinion of young people obtained as a result of the survey among more than 1,000 students of Kazakhstan, studying under one of the projects of the KAZENERGY Educational Program.

The Forum participants will learn and discuss challenges that the modern youth define for themselves and the ways to overcome them. They will also get experience and inspiration from communication with high-profile experts and specialists in oil, gas and energy industries, education, career building and leadership.

As part of the Forum discussion agenda, on September 24th, experts and forum participants will give answers to the key questions in the "face to face" format: "What is a quality education, where can it be obtained, what new formats of qualification does the educational services market offer?" "What skills are most important for personal growth and development in the digital age?" "How not to lose yourself in the world of big data, new technologies and information boom?"

It has become a tradition to hold the semifinal and final rounds of the “Student Energy Challenge” intellectual team competition, which has been implemented in partnership with Shell Kazakhstan since 2017 and will be held this year on September 23.

In addition, the agenda of the Forum includes a special session dedicated to the 110th anniversary of the outstanding public figure, the founder of Kazakhstan’s oil and gas industry, Safi Utebayev, and the 120th anniversary of Kazakhstan oil. The session will include an interactive quiz whose winners will be awarded with memorable prizes from the Association.

Taking into account the significant dates of this year, the Year of Youth in our country and in order to motivate young professionals of the oil, gas and energy industries, the best young professionals will be awarded with Certificates of Merit and letters of appreciation from the KAZENERGY Association.

More information about the XI KAZENERGY Youth Forum is available on the official website – <http://kazenergyforum.com/en/youth-forum/forum-program/>

09:30-18:00

Venue: Hilton Astana Hotel

Organizers: GLOBUC

“Downstream Caspian and Central Asia” for the past 6 years covers topics about refining, gas processing and petrochemicals in Kazakhstan, Uzbekistan, Azerbaijan, Turkmenistan, Tajikistan and Kyrgyzstan. The event serves as a gateway to the refining and petrochemical markets for the entire Caspian and Central Asian region. Among conference regulars are all regional majors from Uzbekistan, Turkmenistan, Kazakhstan, Kyrgyzstan, and Azerbaijan. There is no other event with an audience representation of such scale (250+ senior downstream experts) and breadth of geography (22+ countries).

In 2019 the conference will be held in partnership with KAZENERGY Association and with the support from the Ministry of Energy of Kazakhstan and will be a part of Kazakhstan Energy Week.

Key topics:

- Global & local refining and petrochemicals markets
- Focus on Kazakhstan, Uzbekistan, Turkmenistan, Azerbaijan;
- Projects, technology, licenses;
- Improving operational efficiency;
- Project management;
- Digital transformation: walking the talk;
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More information about the “Downstream Caspian and Central Asia” Conference is available on the official website of the event – <https://globuc.com/downstream-centralasia>

SPE SYMPOSIUM: CASPIAN HEALTH, SAFETY, SECURITY, ENVIRONMENT AND SOCIAL RESPONSIBILITY (PART 1)

09:30-18:00

Venue: Congress Center, SAFI UTEBAYEV Hall

Organizers: NC “KazMunayGas” JSC, SPE

The past five years have witnessed great shifts in the global energy industry. Stakeholders across the value chain continue to adapt to the new oil price environment and pace of technological advancements by developing innovative strategies and processes to effectively manage cost and seize opportunities to create value.

KMG have made huge steps in the Health and safety aspects of its business. Going hand in hand with HSE along with the obvious is increase in efficiency, lowering of costs, increased recovery and therefore margins and also team motivation and production and the social responsibility of the environment that all O&G companies operate in. However, in today’s O&G industry this is not enough. The word ‘Sustainability’ is now being added to this ‘category’ with a multitude of meanings and responsibilities.

Sustainability of course covers green topics (water management, waste recycling, community investment and longevity of social projects and human welfare), the ability for the NOC to argue the rightful place of Hydrocarbons in the energy mix, but more importantly the ‘License to Operate’.

This symposium will gather local, regional and global experts and practitioners from the upstream, midstream and downstream sectors to share best practices, progressive approaches and innovative applications to enhance HSE performance.

Participants will have the opportunity to gain insights from influential industry leaders and subject-matter experts, and together address how the industry can remain ahead of the curve all areas of health, safety, and environment, new techniques, compliance strategies and community engagement approaches.

More information about the symposium is available on the official website of the event – www.spe.org

“DIGITAL ENERGY” EXHIBITION

10:00-18:00

Venue: Congress Center

Organizers: KAZENERGY

Objectives of the Exhibition:

- A platform for demonstration of results achieved in global application of the latest technological developments in the energy sector;
- A platform for negotiations, transfer of innovations, high-tech products and investment services, as well as their promotion in the energy market;
- Provision of information to visitors about the role and importance of energy and energy resources in the life of society.

The exhibition will be held in an unconventional format. The exposition of modern technologies and developments, development institutions and innovative infrastructure will be arranged on a cluster-based principle. Special communication zones will be organized for networking with potential partners.

A new interactive format (virtual reality, augmented reality, artificial intelligence, blockchain) will allow guests to get more information while attending the event and allow companies to present their products as efficiently as possible.

More information about the Exhibition is available on the official website – <http://kaz.energyforum.com/en/exhibition/about/>

IV KAZENERGY WOMEN'S ENERGY CLUB FORUM "THE MODERN FEMALE LEADERSHIP PATTERN IN ENERGY"

09:00-17:00

Venue: Congress Center, ABAI Hall

Organizers: KAZENERGY

The KAZENERGY Women's Energy Club Forum (WEC) is a platform for exchanging experience and promoting the development of talents and skills necessary for professional and personal growth of female workers of the oil, gas and energy sectors.

Since 2013, the WEC has been raising issues of implementation of the gender policy in the oil, gas and energy sectors of Kazakhstan. The previous three WEC Forums held in 2013, 2015 and 2017 generated high interest among oil, gas and energy sector employees.

On 25 September 2019, the IV Women's Energy Club Forum "Modern Image of Women's Leadership in the Energy Sector" (hereinafter - the Forum) will be held within the framework of the KAZAKHSTAN ENERGY WEEK-2019.

The Forum brings together representatives of the National Commission for Women, Family and Demographic Policy under the President of the Republic of Kazakhstan, the Council of Business Women of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken", government agencies, major international organizations, top managers of national and international oil, gas and energy companies, industry experts, etc.

The Forum will include a panel session with the same title. The session will be held in the talk show format with the participation of executives and top managers of national and international oil and gas companies. The issues of women's leadership development in the oil, gas and energy sectors of Kazakhstan, improvement of women's competitiveness in the industry, balancing career and personal life, gender pay gap, etc. will be discussed within the framework of this session.

At the same time, the Forum will feature a presentation of the interim results of the joint study conducted by KAZENERGY, EBRD and London-based consulting company Ergon on "The Role of Women in the Energy Sector of Kazakhstan". The event will also feature an international expert from PwC (Switzerland) in the field of Gender inequality, who will speak about "Best Practices in the Corporate Sector to Ensure Women's Equality in the Workplace".

More information about the IV KAZENERGY Women's Energy Club Forum is available on the official website – <http://kazenergyforum.com/en/woman-energy-club/forum-program/>

SPE SYMPOSIUM: CASPIAN HEALTH, SAFETY, SECURITY, ENVIRONMENT AND SOCIAL RESPONSIBILITY (PART 2)

09:30-18:00

Venue: Congress Center, SAFI UTEBAYEV Hall

Organizers: NC "KazMunayGas" JSC, SPE

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XXIII SESSION OF THE CIS INTERGOVERNMENTAL COUNCIL ON SUBSOIL EXPLORATION, USE AND PROTECTION (CLOSED-DOOR EVENT)

09:30-18:00

Venue: Congress Center, AL-FARABI Hall

Organizers: Committee for Geology and Subsoil Use of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan

III INTERNATIONAL RENEWABLE ENERGY SUMMIT

10:00-18:00

Venue: Foundation of the 1st President of the Republic of Kazakhstan – Elbasy

Organizers: Association of Renewable Energy of Kazakhstan

On September 25, Nur-Sultan will host the main "green" event of 2019 – the III International Renewable Energy Summit. This is an industrial platform that will be attended by leading world and domestic experts. The capital will bring together Nobel Laureates, representatives of major energy companies, public organizations and the media industry. For the first time, this large-scale event took place three years ago, on the eve of the global exhibition EXPO-2017 at the initiative

of the Ministry of Energy. The Summit is also co-organized by the Foundation of the First President of the Republic of Kazakhstan - Elbasy.

The Agenda of the III Renewable Energy Summit includes global green trends, implementation of renewable energy projects in Kazakhstan, their financing and development.

The key idea of the Renewable Energy Summit is to demonstrate and discuss the possibilities of using renewable energy sources in the life of society – from domestic use to large-scale government projects. The ultimate goal is to translate into reality the most effective solutions for the “green” future of Kazakhstan and the entire world community.

More information about the Summit is available on the official website of the event – <https://www.resummit.kz/en/>

“DIGITAL ENERGY” Exhibition

10:00-18:00

Venue: Congress Center

Organizers: KAZENERGY

Objectives of the Exhibition:

- A platform for demonstration of results achieved in global application of the latest technological developments in the energy sector;
- A platform for negotiations, transfer of innovations, high-tech products and investment services, as well as their promotion in the energy market;
- Provision of information to visitors about the role and importance of energy and energy resources in the life of society.

The exhibition will be held in an unconventional format. The exposition of modern technologies and developments, development institutions and innovative infrastructure will be arranged on a cluster-based principle. Special communication zones will be organized for networking with potential partners.

A new interactive format (virtual reality, augmented reality, artificial intelligence, blockchain) will allow guests to get more information while attending the event and allow companies to present their products as efficiently as possible.

More information about the Exhibition is available on the official website – <http://kazenergyforum.com/en/exhibition/about/>

DAY 4 – SEPTEMBER 26, THURSDAY

08:00-09:30

REGISTRATION OF PARTICIPANTS

Venue: Congress Center

10:00-12:00

PLENARY SESSION: FUELING THE FUTURE: INNOVATION GROWTH

Venue: Congress Center, Plenary Hall

FORUM OPENING CEREMONY AND SPECIAL ADDRESSES

Venue: Congress Center, Plenary Hall

Chair: Timur Kulibayev, Chairman, KAZENERGY Association

- ❖ **Askar Mamin**, Prime Minister, Kazakhstan
- ❖ **Mohammad Barkindo**, Secretary General, OPEC
- ❖ **Kanat Bozumbayev**, Minister of Energy, Kazakhstan
- ❖ **Akhmetzhan Yessimov**, Chairman of the Management Board, Sovereign Wealth Fund “Samruk-Kazyna” JSC
- ❖ **Ólafur Ragnar Grímsson**, President, Iceland (1996-2016)

World countries are moving towards a transition to sustainable energy in the context of global market changes. Energy demand is growing worldwide, mainly due to traditional sources of raw materials – oil and gas. The development of existing and the search for new energy resources, as well as the opportunities for their stable supply to consumers against this background, is still of special relevance.

Energy security remains one of the key factors in making political and economic decisions, infrastructure establishment, and regional trade development. Meanwhile, the industry agenda and oil prices are increasingly determined not only by traditional factors, such as a balance of supply and demand, but also by other political and economic aspects. Diverse perspectives and approaches to threats, opportunities and disputes about the future of energy still persist. It is necessary to develop a common view on mutually beneficial economic interdependence. The energy challenge requires enhanced cooperation with all stakeholders and a search for new mutually beneficial solutions.

The "recipes" and recommendations from the world's leading energy countries, major energy, oil and gas corporations, as well as well-known experts will be presented during the plenary session.

Questions for discussion:

- How will the situation in the global energy market change in the coming decades, and how to fit into new transformations in the era of global challenges?
- Which way will geography and structure of energy demand shift? And to what extent will energy dependence grow between different parts of the planet?
- Balance of supply and demand vs. sanctions: how to bring "traditions" back to the market?
- What is the role of international partnership in overcoming challenges?

- How will global changes affect the future of Kazakhstan's energy sector, and what is necessary to achieve sustainable development of the sector in the country?
- Can national projects become the basis for future growth?

INTERACTIVE DISCUSSION: THE FUTURE OF OIL: REALITY AND FORECASTS

Venue: Congress Center, Plenary Hall

Chair: Kanat Bozumbayev, Minister of Energy, Kazakhstan

Moderator: Ryan Chilcote, TV Host, Special Correspondent, PBS NewsHour

Participants:

- ❖ **Mohammad Barkindo**, Secretary General, OPEC
- ❖ **Alik Aidarbayev**, Chairman of the Board, NC “KazMunayGas” JSC
- ❖ **Tom Schuessler**, Senior Vice President, ExxonMobil Upstream Oil and Gas
- ❖ **Alessandro Puliti**, Chief Upstream Officer, ENI SpA
- ❖ **Bernard Clement**, Vice President, Caspian and Southern Europe, Total Exploration & Production
- ❖ **William Harwood**, Senior Vice President, Argus
- ❖ **Malcolm Forbes-Cable**, Vice President, Wood Mackenzie

Global energy markets are constantly being transformed, changing the global structure of energy demand. However, oil in this structure retains its dominant role: according to forecasts, oil demand will grow by approximately 1% per year, which will increase consumption in terms of absolute volume by 20 million barrels per day by 2024. The oil demand is maintained by improving living standards in developing countries, a wider spread of passenger vehicles and other factors. Even the recent crisis in the oil market, on the one hand, has led to a significant reduction in price per barrel and a suspension of a number of new projects due to lack of investments, and, on the other hand, has facilitated the introduction of energy-saving technologies and an increase in the efficiency of recovery.

In Kazakhstan, over the past year (2018) alone, the oil and gas industry has traditionally provided strong support to the economy: the volume of oil and gas condensate production reached a record high of 90.3 million tons in the history of the industry. Owing to the success of the oil industry, GDP grew by 4%. Three largest projects – Tengiz, Kashagan and Karachaganak, which jointly produced 53.9 million tons, accounted for the bulk of oil production last year. These three giants today are set for further impressive growth: their contribution to national production through implementation of large-scale projects will increase this figure to more than 100 million tons per year. What awaits oil in the foreseeable future?

During this session, the participants are encouraged to discuss the following:

- When will global oil consumption reach its peak?
- How will the geography of oil supply and demand change in the coming years?
- How will the overall picture of a “new energy reality” look like, and how will it affect the fuel and energy complex of Kazakhstan?
- Should we expect another long period of low oil prices in the absence of further cooperation within the framework of the OPEC + deal, on the one hand, and

growth in investment in oil production on the threshold of “peak oil”, on the other hand?

- National growth projects: what are the conditions for effective partnership between the state and shareholders?

12:00-12:30

PRESS CONFERENCE

Venue: Congress Center, PRESS CENTER

Moderator: Jambulata Sarsenov, Vice Chairman, KAZENERGY Association

Participants:

- ❖ **Mohammad Barkindo**, Secretary General, OPEC
- ❖ **Kanat Bozumbayev**, Minister of Energy, Kazakhstan
- ❖ **Urban Rusnak**, Secretary General, International Energy Charter
- ❖ **Valerie Ducrot**, Executive Director, Global Gas Centre

12:00-13:30

LUNCH

Venue: Congress Center

13:30-14:50

PANEL DISCUSSION SESSION: GAS AS A KEY TREND IN GLOBAL ENERGY

Venue: Congress Center, ABAI Hall

Chair: Murat Zhurebekov, Vice Minister of Energy, Kazakhstan

Moderator: Dena Sholk, Head of Representation, IHS Markit Kazakhstan, and Senior Research Analyst, Russian and Caspian Energy, IHS Markit

Participants:

- ❖ **Valerie Ducrot**, Executive Director, Global Gas Centre
- ❖ **Andrei Gaidamaka**, Chairman of the Supervisory Board, INVESTA GROUP, Member of the Expert Council for Corporate Governance of the Central Bank of the Russian Federation
- ❖ **Arthur Crossley**, CEO Industrial Plant, Tecnicas Reunidas, S.A.
- ❖ **Pavan Chilukuri**, Director, Technology Licensing, Royal Dutch Shell plc.
- ❖ **Ashley Sherman**, Senior Research Analyst, Caspian & Europe, Wood Mackenzie

According to research, over the past half century, natural gas has revolutionized the global fuel market. With improvements in environmental requirements, gas as the most environmentally friendly fossil fuel today maintains its long-term competitiveness. Experts predict that by 2040 global gas demand will grow by about 50%. The demand will grow at the fastest rate among fossil fuels – at the level of 2% per year, which will lead to an increase in its share in the energy balance from 22 to 25%.

The gas component in the energy balance is currently being actively increased by European countries, India, Venezuela and many others. Meanwhile, it is known that, for example, in Europe over the past few years gas production has declined significantly due to depletion of fields, falling oil and gas prices, increased production costs, etc. The gas suppliers to the EU are Russia, Norway and Algeria, which jointly account for up to 85% of gas imported by Europe. Therefore, European countries are

still dependent on imports. Is Caspian gas able to compete in the main export markets? The issue of organizing stable, reliable and long-term gas supplies to world markets again becomes particularly relevant.

Questions for discussion:

- How long will gas maintain its position as the most in-demand hydrocarbon resource?
- Political ambitions vs economic interest: will the Western countries be able to find the points of interaction on gas supply issues?
- How will the energy consumption basket change in Asia, and what is the role of natural gas in the region's energy balance?
- The future of major projects for increased gas production in the world: what does it look like?
- Gasification in Kazakhstan as a factor of social stability. Implementation of gasification projects in the regions: what has changed in recent years and what is their impact on the country's industrial development?
- Sour gas development strategies

13:30-14:50

PRESENTATION “ENERGY INVESTMENT RISK ASSESSMENT” (EIRA) -2019

Venue: Congress Center, AL-FARABI Hall

Organizers: International Energy Charter

Moderator: Klara Rakhmetova, Energy Charter Project Manager, Kazakhstan

Welcome addresses:

- ❖ **Asset Magauov**, Vice Minister of Energy, Kazakhstan
- ❖ **Urban Rusnak**, Secretary General, International Energy Charter

Keynote Report: Anna Pitaraki, Investment Coordinator, Energy Charter Secretariat

Participants:

- ❖ **Larissa Jumagaliyeva**, Deputy Chairman, Investment Committee, Ministry of Foreign Affairs, Kazakhstan
- ❖ **Ruslan Bultrikov**, Deputy Director, Foreign Economic Policy Department, Ministry of Foreign Affairs, Kazakhstan
- ❖ **Almat Daumov**, Partner and Head of Natural Resources Department, GRATA International
- ❖ **Lyazzat Bishenova**, Deputy Director, Economy Sectors Development Department, Ministry of National Economy, Kazakhstan
- ❖ **Zhaksylyk Tokayev**, Head of Energy Saving and Energy Efficiency Department, Ministry of Industry and Infrastructure Development, Kazakhstan
- ❖ **Dastan Smagulov**, Deputy Director, Department for State Property Rights Protection, Ministry of Justice, Kazakhstan
- ❖ **Yerlan Ramazanov**, Associate Director, Energy Eurasia, European Bank for Reconstruction and Development
- ❖ **Vassily Savin**, Partner, Head of Investments and Capital Markets Department, KPMG in Kazakhstan
- ❖ **Asset Shyngyssov**, General Director, Managing Partner, Morgan Lewis
- ❖ **Ruslan Nurbekov**, Senior Associate, Dentons

The Energy Investment Risk Assessment (EIRA) is a publication of the Energy Charter Secretariat that evaluates specific risks affecting energy investment that can be mitigated through adjustments to policy, legal and regulatory frameworks. It aims to identify policy gaps, provide learning opportunities, and stimulate reforms which make the investment climate of countries more robust and reduce the risk of investor-State disputes.

Results for countries in the review are presented in the form of individual country risk profiles. Other types of investment risk such as commercial, technical and geopolitical, are not within the scope of the publication. To date, more than 30 countries are participating in EIRA.

What is the aim of EIRA?

EIRA assists governments to identify and eliminate specific risks in the regulatory and legal environment which impede the inflow of investments. It assesses risks to energy sector investment that countries can control and limit through their actions. This information is essential as it enables governments to undertake required steps to make their regulatory frameworks robust, which is beneficial to induce investments in the energy sector.

The secondary aim of EIRA is to provide a reliable source of useful information to energy companies, investors and the financial sector on different aspects of the regulatory and legal environment in countries considered for investment.

13:30-14:50

PANEL DISCUSSION SESSION: ENERGY FOR SUSTAINABLE DEVELOPMENT

Venue: Congress Center, SAFI UTEBAYEV Hall

Moderator: Ramazan Zhampiissov, Chairman of the Board, International Center for Green Technologies and Investment Projects

Participants:

- ❖ **Kire Ilioski**, Director, Office of the Executive Secretary, UN Economic Commission for Europe (UNECE)
- ❖ **Heru Setiawan**, Director of Investment Planning and Risk Management, PT Pertamina
- ❖ **Ekaterina Paniklova**, Senior Programme Coordinator, Istanbul Regional Hub for Europe and the CIS, UNDP
- ❖ **Baurzhan Smagulov**, Chairman of the Board, Electric Power and Energy Saving Development Institute
- ❖ **Giovanni Capannelli**, Country Director in Kazakhstan, Asian Development Bank (ADB)
- ❖ **Igor Korotetskiy**, Partner, Head of Operational Risk and Sustainability, KPMG
- ❖ **Iuliean Hornet**, CEO and Founder, EcoHORNET, Romania

The Earth's population is growing, and so is energy demand. Modern industrial civilization is entirely dependent on access to various types of energy sources. But irrational use, reduced availability of energy resources, increased carbon dioxide emissions, and climate change seriously affect the quality of our lives. Energy security, trade and infrastructure, the interconnection between energy, climate and food, as well as renewable energy are becoming important components for sustainable development in the future.

Despite the measures taken by countries to involve alternative energy sources, including renewables, in the energy mix, nothing in the foreseeable future can seriously compete with traditional energy sources - oil, gas and coal. To make our life convenient and comfortable, each of us today is required not only to save resources, provide access to them and develop energy-efficient and energy-saving technologies, but also to do everything possible for environmental protection and minimization of climate change impacts. Changes in the energy system will affect all aspects of our life.

The sustainable development theme is reflected in the United Nations conceptual documents, such as “The Future We Want”, “The 2030 Agenda for Sustainable Development” and the Paris Climate Agreement, which determine the prospects for the world's population in the 21st century.

Taking into account the raw material orientation of Kazakhstan’s economy, fossil fuels will remain part of the energy industry for a long time. Meanwhile, given the global challenges and threats, in order to achieve the sustainable development goals, the country actively participates in the international dialogue on the development of renewable energy, energy-efficient and energy-saving technologies, strengthening energy policies, environmental protection, combating climate change, as well as studying experience and sharing best practices.

Kazakhstan has adopted the Concept for Transition to Green Economy, ratified the Paris Climate Agreement, initiated and implements the Green Bridge Partnership Program, and opened the International Center for Green Technologies under the UN auspices. All concepts and programs developed and adopted by the country in the field of sustainable development are aimed at achieving a new quality of life, innovative development, modernizing the economy, ensuring national security, balanced regional development and building an effective state.

Questions for discussion:

- The role of fossil fuels in future energy systems
- Future national strategies for raw-material-oriented economies
- Energy efficiency and energy saving: a new development formula
- Resource dependence of countries and climate change: how to achieve sustainability?
- Regional context for achieving sustainable energy goals
- Renewable energy development challenges faced by emerging economies
- What measures of state regulation and stimulation are necessary to achieve the effect?

15:00-16:20

PANEL DISCUSSION SESSION: INVESTMENTS IN THE ENERGY SECTOR: OPPORTUNITIES AND PARTNERSHIP

Venue: Congress Center, ABAI Hall

Organizers: KAZENERGY, Dasco Consulting Group

***Moderators: Darmen Sadvakassov, Managing Partner, DASCO Consulting Group
Maxim Nechaev, Consulting Director, HIS Markit***

Welcome Address:

❖ **Yermek Kosherbayev, Deputy Minister of Foreign Affairs, Kazakhstan**

Participants:

- ❖ **Murat Zhurebekov**, Vice Minister of Energy, Kazakhstan
- ❖ **Cassandra Colbert**, Regional Manager for Central Asia, IFC
- ❖ **Aibek Krambayev**, Deputy Governor, Atyrau Region, Kazakhstan
- ❖ **Mukhtar Mankeyev**, Founder, Digital Academy
- ❖ **Ainur Kuatova**, Managing Director, “Baiterek” National Managing Holding
- ❖ **Nurlan Zhumagulov**, General Director, Union of Oilfield Services Companies
- ❖ **Mikhail Davydov**, Associate, Corporate Ratings, S&P Global
- ❖ **Yerlan Ramazanov**, Associate Director, Senior Banker Energy Eurasia, Sustainable Infrastructure Group, European Bank for Reconstruction and Development

Global changes in the economy are transforming the modern perception of investment attractiveness and its assessment parameters. From now on, the investment priority is given to the fourth industrial revolution. This component was included in the annual report on the Global Competitiveness Index released by the World Economic Forum a year ago. In last year’s report, Kazakhstan ranked 59th among 140 countries.

To improve the investment climate in Kazakhstan within the initiative of the Head of State, the Ministry of Investments and Development of the Republic of Kazakhstan, jointly with the World Bank experts, has developed and is implementing the National Investment Strategy for 2018-2022. It is aimed at achieving macroeconomic, social and political stability in Kazakhstan, improving the investment climate and attracting foreign direct investment in priority sectors of the economy.

The government, ministries and diplomatic missions contribute to the successful implementation of initiatives for the development of Kazakhstan within the framework of the EAEU and the WTO, the strengthening of investment partnerships with world powers, the participation in the “One Belt, One Road” project and many others. Effective work is carried out at such forums as the Foreign Investors’ Council under the personal chairmanship of the Head of State and the Council for Investment Climate Improvement under the Prime Minister of the Republic of Kazakhstan. The Astana International Financial Center (AIFC) has been successfully operating in the country. Its goals and objectives include the establishment of a leading financial services center at the international level, assistance in attracting investment in the country's economy, creating an attractive environment for investment in financial services, developing the securities market of Kazakhstan and ensuring its integration with international capital markets.

Questions for discussion:

- Which investment projects in the energy sector will be attractive to investors in the next decade?
- What government support measures aimed at creating a favorable investment climate are needed for the industry?
- What challenges do key energy investors face today?
- Which segments of the energy sector are most attractive to investors?
- Technological revolutions as a driver for attracting investments.

15:00-16:20

ROUND TABLE: GEOLOGY OF THE FUTURE: FROM ENVIRONMENTAL SAFETY TO INNOVATIONS

Venue: Congress Center, AL-FARABI Hall

Organizers: KAZENERGY

Chair: Baltabek Kuandykov, President, Kazakhstan Society of Petroleum Geologists

Participants:

- ❖ **Evgeniy Kiselev**, Deputy Minister of Natural Resources and Environment, Russian Federation
- ❖ **Akbatyr Nadyrbayev**, Chairman, Committee for Geology and Subsoil Use, Ministry of Ecology, Geology and Natural Resources, Kazakhstan
- ❖ **Greg Riley**, Vice President Exploration, Caspian, BP
- ❖ **Wang Jun**, Deputy Director General, Department of Mining Rights Management, Ministry of Natural Resources, China
- ❖ **Turegali Murunov**, KAZ-Waterhunters LLP
- ❖ **Michael Mumelter**, Founder, Geosat Technology AG, Germany

Exploration is a strategic industry on which the economic development of resource countries depends. Against the background of the end of the period of easily recoverable oil, in order to develop the resource potential and rational exploitation of subsoil resources, fundamentally new technological approaches are coming to the fore.

According to the studies of the International Energy Agency, a significant deterioration is currently observed in the dynamics of discoveries of traditional energy sources – oil and gas. Whereas the average annual volume of oil reserves discovered in the first decade of the 21st century was about 15 billion barrels, the current indicator in the second decade is less than 5 billion barrels. Deep-sea deposits, low-permeability reservoirs, tar sands, etc. are becoming a general focus of attention. According to Westwood Energy, over \$130 billion will be invested in 107 deep-sea oil and gas projects worldwide over the next five years. And according to Wood Mackenzie, by 2040 more than half of the world's oil will be produced at fields that have yet to be developed or discovered. Moreover, the share of fields not yet discovered is about 14%. In view of this, geologists are facing a challenging task.

Questions for discussion:

- Can exploration turn into one of the drivers of digital economy development?
- What developments does the world have in this area?
- Are modern research and developments able to increase the efficiency of oil and gas production in Kazakhstan?
- What is the role of scientific knowledge in the search for new scenarios and strategies for the development of new hydrocarbon energy in the country?
- Is it necessary to create a systematic approach to the development of the geological industry?
- New investment incentives for exploration: international experience
- Results of subatomic technology implementation in the search for hydrocarbons and solid minerals in Kazakhstan and abroad

15:00-16:20

PANEL DISCUSSION SESSION: ROLE OF RENEWABLES IN THE ENERGY SYSTEMS OF TOMORROW

Venue: Congress Center, SAFI UTEBAYEV Hall

Organizers: IRENA

Chair: Ricardo Gorini, Senior Program Officer, Renewable Energy Roadmaps, International Renewable Energy Agency (IRENA)

Moderator: Arman Satimov, Advisor to Chairman, KAZENERGY Association

Participants:

- ❖ **Ainur Sospanova**, Director, Department for Renewable Energy Sources, Ministry of Energy, Kazakhstan
- ❖ **Sigsteinn Gretarsson**, CEO, Arctic Green Energy Corporation
- ❖ **Aida Sitdikova**, Director for Energy and Natural Resources, Russia, Caucasus and Central Asia, European Bank of Reconstruction and Development (EBRD)
- ❖ **Michelle Panella**, Biomethane and Biofuel Unit Manager, GSE

Increased use of renewable energy, combined with intensified electrification, could prove decisive for the world to meet key climate goals by 2050. IRENA study highlights immediately deployable, cost-effective options for countries to fulfil climate commitments and limit the rise of global temperatures.

This session will feature discussions on innovative solutions for accelerating the energy transformation. Speakers from leading countries/companies will share their experiences and will discuss the pressing challenges across sectors for the transition to sustainable forms of energy.

Questions for discussion:

- What is the main driver for renewable energy development in your country and how large is the scale of ambition to develop renewables?
- Which innovative practices have been successful in advancing the energy transformation in your country? (Digitalization, energy storage, financing schemes, etc.)
- What kind of cutting-edge solutions have been implemented in your country for electrification of end-use sectors (heating, transport, industry)?
- How are new technologies helping in addressing the intermittent nature of renewable energy in the power sector?

15:00-18:00

X NATIONAL EITI CONFERENCE “TRANSITION TO A NEW LEVEL OF EITI IMPLEMENTATION IN INTEGRATED OPEN DATA SYSTEMS”

Venue: Congress Center, PRESS CENTER

Organizers: KAZENERGY Association jointly with MIID RK

Chair: Timur Toktabayev, Vice Minister of Industry and Infrastructure Development of the Republic of Kazakhstan

Participants:

- ❖ **Akbatyr Nadyrbayev**, Chairman, Committee for Geology and Subsoil Use, Ministry of Ecology, Geology and Natural Resources, Kazakhstan
- ❖ **Akhmet Muradov**, Deputy of the Mazhilis, Parliament of the Republic of Kazakhstan, National Stakeholder Council (NSC) Member
- ❖ **Nikolay Radostovets**, Executive Director, Association of Mining and Metallurgical Enterprises
- ❖ **Ruslan Baimishev**, Member of EITI International Board, Director of Subsoil Use Department, Ministry of Industry and Infrastructure Development, Kazakhstan
- ❖ **Olesia Nekhoroshko**, National Coordinator, Ukraine
- ❖ **Lusine Tovmasyan**, National Coordinator, Armenia
- ❖ **Bahtiyor Zuhurov**, National Coordinator, Tajikistan

- ❖ **Diana Medvednikova (Okremova)**, NSC Member from NGO
- ❖ **Tatyana Sedova**, NSC Member, Independent Expert, Civil Control Coalition
- ❖ **Maxim Kononov**, Association of Mining and Metallurgical Enterprises, Deputy NSC Member
- ❖ **Elvira Jantureyeva**, Head of EITI National Secretariat
- ❖ **Kuanysh Onalbayev**, Director, Zertteu Research Institute

The X National EITI Conference will be held in an interactive mode and will include two panel sessions with discussions.

The event will be organized with the participation of representatives of the Government of Kazakhstan, deputies of the Parliament of Kazakhstan, local administrative bodies, the EITI Board and International Secretariat, the AMME Association, large companies in the field of subsoil use, non-governmental sector, international organizations, observers and other interested parties.

The EITI implementation has a positive effect on the image of Kazakhstan, the investment attractiveness of the energy sector, many sectors of the economy, and becomes a model for other projects implemented in the country.

The decision on the status of Kazakhstan was taken in 2018 during the 39th Meeting of the EITI International Board in Oslo, Norway. The EITI International Board decided that Kazakhstan has made significant progress in implementing the EITI and gave a number of recommendations for further improvement of EITI implementation.

Today, the country is undergoing the development process under the "Digital Kazakhstan" State Program aimed at accelerating the pace of economic development of Kazakhstan and improving the quality of life of the population using digital technologies.

The functionality of the National Data Bank (NDB) that consolidates digital geological and geophysical information will ensure the provision of up-to-date and accessible geological information, as well as online issuance of licenses for exploration and production. Moreover, reporting on subsoil use submitted by companies to NDB is integrated with other reports of existing monitoring systems (EGSU).

Questions for discussion:

- Opportunities and obstacles in transition to a new level of EITI implementation in integrated open data systems
- EITI validation results, comments and gaps
- Are companies ready to disclose contracts and beneficial owners?
- NGO participation, an inside look

16:20-16:40

COFFEE BREAK AND NETWORKING

Venue: Congress Center, Lobby

16:40-18:00

PANEL DISCUSSION SESSION: NEW ENERGY SECURITY CONFIGURATION: ENERGY ACCESS AND BALANCE OF INTERESTS

Venue: Congress Center, ABAI Hall

Organizers:

Chair: Kairgeldy Kabyldin, Deputy General Director, Caspian Pipeline Consortium (CPC-K)

Participants:

- ❖ **Nikolay Gorban**, General Director, Caspian Pipeline Consortium (CPC)
- ❖ **Lukasz Holubowski**, Chief Executive Officer, ORLEN Paliwa Sp. z o.o.
- ❖ **Matthew Sagers**, Managing Director, Eurasia Energy, Head of the Russian and Caspian Energy Advisory Service, IHS Markit
- ❖ **Benjamin Godwin**, Associate Director, Head of Analysis, PRISM

The energy world has entered a new period of development. The agenda is focused on the formation of a new configuration of energy security and such balance of interests of producers and consumers of energy resources that would ensure the stability of investment processes now and in the future. Transport and price accessibility are important components of energy security. Competition for energy resources has become so acute that politicization of market sometimes drives out factors of habitual relationships, such as reliability and economic effect.

As a result, this has led to a considerably shattered energy security system which was based on mutual interests of suppliers and consumers, as well as to indistinct rules of the game in the market, affecting investment activity in building an efficient oil and gas transportation infrastructure. The main energy corridors of Eurasia have already been established, and prospective ones are yet to be created to meet the growing energy needs of countries. What does the balance of interests between suppliers and consumers look like today?

Questions for discussion:

- What is the potential for expanding cooperation in building a safe and efficient transport and energy infrastructure in the region and Kazakhstan?
- How does this contribute to energy security?
- Main export routes for transporting oil and gas from Kazakhstan: what is the potential?
- CPC as the main export route for transporting oil from the Caspian region to the West. Opportunities after expansion.
- Growing energy demand in Asian markets: when will consumption reach its peak?
- Can the new energy corridors provide reliable and stable energy supplies to global consumers?
- What is the role of modern technologies in providing access to sources of energy supplies?
- What is the role of Kazakhstan, located in the energy and geographic center of the Eurasian continent, in solving these problems?

16:40-18:00

ROUND TABLE: ENVIRONMENTAL SOLUTIONS FOR SUSTAINABLE ENERGY. LEGISLATIVE BREAKTHROUGH

Venue: Congress Center, AL-FARABI Hall

Moderator: Viktor Kovalenko, Director on Sustainability Services in Central Asia, Caucasus, Ukraine and Belarus, Ernst & Young

Participants:

- ❖ **Akhmetzhan Primkulov**, Vice Minister of Ecology, Geology and Natural Resources, Kazakhstan
- ❖ **Rustem Kabzhanov**, Executive Director, KAZENERGY Association
- ❖ **Michael Allen**, Stakeholders Engagement Coordinator, NCOC N.V.
- ❖ **Kuanysht Baltabayev**, Executive Secretary, “Atameken” National Chamber of Entrepreneurs, Kazakhstan
- ❖ **Aliya Baimaganova**, International Center for Green Technologies and Investment Projects
- ❖ **Zhomart Aliyev**, Deputy Executive Director, Republican Association of Mining and Metallurgical Enterprises

The contemporary history of Kazakhstan requires new approaches to understanding the problems of the subsoil use legal regulation. Over recent years, the Republic has improved its position in the annual ranking of countries, based on the World Bank’s Ease of Doing Business Index, and in 2017 the country entered the top 10 countries that showed the most substantial improvement in the situation.

The adoption of new laws in the country in 2018 – the Code on Subsoil and Subsoil Use and the Tax Code – strengthened Kazakhstan’s positions in terms of attracting external capital to implement various projects in the industry, becoming a real breakthrough in the area of legislation.

The next objective is to submit the draft of the new Environmental Code that meets international standards to the Parliament of the Republic of Kazakhstan. It aims at stimulating subsoil users and industrial enterprises to implement green technologies to ensure environmental safety of the country. With the adoption of the new Environmental Code, a unified environmental policy will be developed.

Questions for discussion:

- New Environmental Code – with the introduction of an integrated environmental permits mechanism and best available techniques at enterprises
- Forms, means, mechanisms and instruments of state regulation in the field of waste management
- Economic stimulus measures and state support for environmental activities of enterprises

16:40-18:00

DAYS OF PARTNERS OF KAZAKHSTAN (KAZAKHSTAN-JAPAN)

Venue: *Congress Center, SAFI UTEBAYEV Hall*

Organizers: *Japan Association for Trade with Russia & New Independent States (ROTOBO), KAZENERGY*

Moderators: **Sabr Yessimbekov**, Co-chair, Kazakhstan-Japan Committee for Economic Cooperation
Miki Wajima, Director, ROTOBO Research Institute

Welcome Address:

- ❖ **Kairat Balykbayev**, Advisor, KAZENERGY Association

Participants:

- ❖ **Yuhei Nagai**, Head of Eastern Europe and Central Asia of Global Business Development, Terra Drone Corporation

- ❖ **Tsutomu Sasaki**, Downstream Sales Leader, Yokogawa Electric Corporation
- ❖ **Timur Tazabekov**, Director, Group IT, KMG International N.V.
- ❖ **Takuya Ono**, Associate Executive Officer, Technology Innovation Center, JGC Corporation
- ❖ **Kota Kondo**, Senior Manager & Business Development Director of Energy Unit, Marubeni America Corporation
- ❖ **Mariyam Igissenova**, Head of Integrated Planning System Department, “Refining and Marketing” Division, NC “KazMunayGas” JSC
- ❖ **Hiroshi Kawada**, Managing Director, NEC NEVA Communications Systems

It is expected that IoT technologies will be used to effectively address various challenges facing the oil and gas industry amid low oil prices, i.e. to ensure and increase project profitability, optimize resource efficiency, protect the environment, etc.

During this session, representatives from government bodies and the business community, as well as specialists from both countries will discuss issues related to cooperation in the IIoT sector for the oil and gas industry and the prospects for creating a new business between Kazakhstan, having oil and gas reserves, and Japan, having certain advantages in the field of IoT.

Questions for discussion:

- Application of AI technologies in exploration and field development
- Practical application of UAV technologies in the oil and gas industry
- IIoT solutions from Yokogawa company for the oil and gas industry
- Improving efficiency of plant operation using IIoT

14:00-18:00

KAZAKHSTAN CONSULAR CONGRESS

Venue: Congress Center, ASPAN Hall

Organizers: Ministry of Foreign Affairs of the Republic of Kazakhstan, World Federation of Consuls, Society of Honorary Consuls

Moderator: Nikolaos K. Margaropoulos, Secretary General, World Federation of Consuls

Participants:

- ❖ **Yermek Kosherbayev**, Vice Minister of Foreign Affairs, Kazakhstan
- ❖ **Aykut Eken**, President, World Federation of Consuls
- ❖ **Jambulata Sarsenov**, Honorary Consul of Hungary in Kazakhstan
- ❖ **Denis Van den Weghe**, President, Society of Honorary Consuls
- ❖ **Leif-Kristian Sverstad**, Board Member, World Federation of Consuls

The representatives of diplomatic circles from around the globe will be brought together on a single platform of the KAZAKHSTAN ENERGY WEEK. The main objective of the Congress is to discuss various topics related to business environment and its improvement, as well as investments in Kazakhstan. The event is supported by the World Federation of Consuls “FICAC” and the Society of Honorary Consuls.

The World Federation of Consuls “FICAC” was founded in Copenhagen, Denmark, in October 1982, and today it has over 87 member associations uniting Consuls throughout the world.

The Republican Public Association “Society of Honorary Consuls” was established in 2018 in Kazakhstan. The mission of the organization is to further develop positive relationships between Honorary Consuls accredited in Kazakhstan and the government of the Republic of Kazakhstan.

“DIGITAL ENERGY” EXHIBITION

10:00-18:00

Venue: Congress Center

Organizers: KAZENERGY

Objectives of the Exhibition:

- A platform for demonstration of results achieved in global application of the latest technological developments in the energy sector;
- A platform for negotiations, transfer of innovations, high-tech products and investment services, as well as their promotion in the energy market;
- Provision of information to visitors about the role and importance of energy and energy resources in the life of society.

The exhibition will be held in an unconventional format. The exposition of modern technologies and developments, development institutions and innovative infrastructure will be arranged on a cluster-based principle. Special communication zones will be organized for networking with potential partners.

A new interactive format (virtual reality, augmented reality, artificial intelligence, blockchain) will allow guests to get more information while attending the event and allow companies to present their products as efficiently as possible.

19:00-21:00 ***OFFICIAL RECEPTION DEDICATED TO THE 120TH ANNIVERSARY OF KAZAKHSTAN OIL***

Venue: Astana Opera (by invitations)

DAY 5 – SEPTEMBER 27, FRIDAY

08:00-09:30 REGISTRATION OF PARTICIPANTS

Venue: Congress Center

09:30-11:00 SPECIAL CONFERENCE DEDICATED TO THE 120TH ANNIVERSARY OF KAZAKHSTAN OIL

Venue: Congress Center, Plenary Hall

Chair: Kanat Bozumbayev, Minister of Energy, Kazakhstan

Welcome Address:

- ❖ **Roman Sklyar**, Deputy Prime Minister, Kazakhstan

Participants:

- ❖ **Gulmammad Javadov**, Deputy Minister of Energy, Azerbaijan
- ❖ **Uzakbai Karabalin**, Vice Chairman, KAZENERGY Association
- ❖ **Eimear Bonner**, General Director, Tengizchevroil LLP
- ❖ **Edwin Ronald Blom**, General Director, Karachaganak Petroleum Operating B.V.
- ❖ **Yermek Marabayev**, Deputy Managing Director, North Caspian Operating Company N.V.

The history of Kazakhstan oil began in November 1899, when the first oil gushed out of a 40-meter well in the Karashungul tract. It was the first oil produced using a mechanical drilling method.

Kazakhstan oil workers proudly recall the history of establishment and development of the oil and gas industry: over the years, the country has travelled a challenging development path, and, as a result, the oil and gas complex has become the foundation of its success and welfare. Today, oil and gas are one of the main natural resources of Kazakhstan, a guarantor of the country's energy security for many decades to come. Dozens of oil and gas fields are being developed in the republic. This sector is one of the most attractive investment areas for foreign investors.

Over the years of independence, Kazakhstan elaborated for the first time a long-term strategy for the development of the oil and gas industry and created an independent industry management system. The legislative base was developed and implemented in the field of subsoil use, which served as the basis for further improvement of all processes and relationships between government bodies and investors.

11:20-12:40 PRESENTATION: IV KAZENERGY NATIONAL ENERGY REPORT

Venue: Congress Center, ABAI Hall

Chair: Bolat Akchulakov, General Director, KAZENERGY Association

Keynote Report: Matthew Sagers, Managing Director, Eurasia Energy, Head of the Russian and Caspian Energy Advisory Service, IHS Markit

Participants:

- ❖ **Bakitzhan Zhulamanov**, Chairman of the Board, Samruk Energy JSC
- ❖ **Katya de Vere Walker**, Director, Seepx Energy
- ❖ **Li Yong Hong**, Vice President, CNPC Kazakhstan

The National Energy Report (NER) is a comprehensive document containing information on the current state and development prospects of the energy sector of Kazakhstan. To date, the KAZENERGY Association has prepared three NERs: in 2013, 2015 and 2017. The documents reflect the strategic view of KAZENERGY on sustainable development of the oil and gas and energy sectors of the Republic of Kazakhstan as a single system. The main expert in the process of preparing the NER was IHS Markit.

The NER has become a significant event for the entire expert community of the country and provided guidance for further development of the energy sector of Kazakhstan in the global energy context. The conclusions and recommendations developed on its basis were found to be in demand in the process of making important and difficult decisions by the state and the business community.

During 2018-2019, the KAZENERGY Association has prepared an updated version of the NER, which includes five key topics:

1. Global Oil Market and the Role of Kazakhstan;
2. Market Integration in the EAEU;
3. Gas Market Model;
4. Electric Power Market;
5. Energy Efficiency and Environment.

11:20-12:40

ROUND TABLE: DIGITAL ENERGY OF THE FUTURE. TRANSITION PERIOD

Venue: Congress Center, AL-FARABI Hall

Moderator: Darmen Sadvakassov, Managing Partner, DASCOS Consulting Group

Welcome Address:

- ❖ **Askar Zhumagaliyev**, Minister of Digital Development, Innovations and Aerospace Industry, Kazakhstan

Participants:

- ❖ **Asset Magauov**, Vice Minister of Energy, Kazakhstan
- ❖ **Corneliu Bodea**, President, Romanian Energy Center
- ❖ **Assylbek Jakiyev**, “Atameken” NCE Official Representative for Interaction with Oil and Gas Operators
- ❖ **Tony Lindqvist**, CEO, Collaprim Oy
- ❖ **Kairat Kelimbetov**, Governor, Astana International Financial Centre
- ❖ **Aidar Dosbayev**, Deputy Project Director, TCO Future Growth Project
- ❖ **Yerlan Durmagambetov**, Chairman of the Board, “ZERDE” National Infocommunication Holding
- ❖ **Talgat Imangaliyev**, General Director, Worley Parsons Kazakhstan
- ❖ **Nurlan Utenov**, Managing Director for Development and Transformation, National Company KazMunayGas JSC

- ❖ **Zhandos Zhylkaidarov**, Portfolio Manager Transformation Projects, Samruk-Kazyna
- ❖ **Mukhtar Mankeyev**, Founder, Digital Academy
- ❖ **Joseph Ziegler**, CEO, Astana Hub
- ❖ **Yerkhat Iskaliyev**, Chairman, Subcommittee on Transport Logistics, NCE “Atameken”
- ❖ **Nurlan Zhumagulov**, General Director, Union of Oilfield Services Companies
- ❖ **Gulmira Sharbakova**, IT Portfolio Management Office Manager, Tengizchevroil LLP
- ❖ **Kemel Aitzhanov**, Supervisory Board Member, Bridge Group
- ❖ **Tatiana Shpuling**, Associate, European Bank for Reconstruction and Development in Kazakhstan

The future of energy is associated with the latest digital technologies, robotics, artificial intelligence, which determine the emergence and development of “digital” demand. Digitalization is important for solving modern energy problems and increasing efficiency in all aspects of the oil and gas sector and offers an infinite number of new investment opportunities. Owing to high technologies, improvements are observed in labor productivity, business competence, quality of products and services, as well as in people's lives.

Kazakhstan focuses attention on the implementation of digital technologies in the field of oil and gas exploration, production, refining and transportation. The projects implemented in the giant oil fields – Kashagan, Tengiz and Karachaganak – which are the mainstay of the country's economy, have no analogues in the world in terms of their technological characteristics.

It is expected that, within the framework of the "Digital Kazakhstan" State Program, the projects for a total amount of over 34 billion KZT will be implemented in the oil and gas industry in 2019-2021. They include the creation of an oil-metering information system, a unified state subsurface management system with a subsystem capable of predicting the balance of liquefied petroleum gas, a unified state subsurface management system with an online auction of fields, and others. Moreover, Kazakhstan’s benefits would amount to 119 billion KZT.

The implementation of this state program will create an additional impetus for shaping a completely new economy, improving the quality of life of the population.

Questions for discussion:

- Is the energy industry capable of making a rapid maneuver for the transition to a more sophisticated development form?
- What are the main challenges, obstacles and risks that the energy industry will have to face in Kazakhstan?
- What is the role of innovations in the energy systems of the future, and what are the technological reserves for the implementation of innovative scenarios in our country?
- International experience and best practices in digital energy.

11:20-12:40

PANEL DISCUSSION SESSION: SMART ELECTRIC POWER

Venue: Congress Center, SAFI UTEBAYEV Hall

Chair: Almassadam Satkaliyev, Managing Director, Sovereign Wealth Fund “Samruk-Kazyna”

Participants:

- ❖ **Bakytzhan Kazhiyev**, Chairman of the Board, Kazakhstan Electricity Grid Operating Company “KEGOC” JSC
- ❖ **Abbas Jalaly Jafary**, Vice President, Electricite de France
- ❖ **Alexander Savinov**, Partner Alliances Director, GE PWR Digital
- ❖ **Sergej Karpets**, Head of Department, Siemens Kazakhstan

Today, the electric power industry is not just a means of comfortable life, but a tool to develop all types of human activities. The active implementation of smart technologies, bringing together information technology and power electronics, which make generation, transmission and distribution of electric power “intelligent”, ensure a significant reduction of energy losses, environmental friendliness, a multifold increase in the reliability of energy supply, and more efficient use of energy resources – the challenges facing the modern industry.

Smart grids are becoming a part of our life. Currently, everywhere in the world – Europe, the USA, Japan, India, China, Russia, Kazakhstan – work is underway to introduce digital substations, where all information of control and protection systems is generated, processed and managed in digital format using special optical digital instrument transformers and new generation digital equipment complexes. It is expected that the commissioning of digital substations will help not only improve the quality and reliability of the power system, but also significantly improve labor productivity by switching to automation. This is an international trend and a goal to which we are all committed today.

The discussion will be focused on “success stories”, international experience and best practices, creation of smart grids, and market entry conditions for new players and high-tech companies.

Questions for discussion:

- Is it easy for grids to become smart?
- Will the electric power industry be able to quickly and efficiently transform the network infrastructure into the cutting-edge innovative platform for flexible and efficient power supply to consumers?
- What are the main conditions for shaping the electric power industry into an integrated multi-level control system with increased automation and critical reliability, including the weakest and most vulnerable links, with the prevention of systemic risks and threats and with a quick response to incidents and accidents?
- What will change with the emergence of digital systems and high-precision energy production in modern cities, which determine a qualitative change in demand?
- What support should be provided by a regulator?
- What does a consumer expect from the digital power industry?

09:00-12:40

KAZAKHSTAN CONSULAR CONGRESS

Venue: Congress Center, ASPAN Hall

***Organizers: Ministry of Foreign Affairs of the Republic of Kazakhstan,
World Federation of Consuls, Society of Honorary Consuls***

Participants:

- ❖ **Yermek Kosherbayev**, Vice Minister of Foreign Affairs, Kazakhstan

- ❖ **Rustam Issatayev**, Chairman, Investment Committee, Ministry of Foreign Affairs, Kazakhstan
- ❖ **Baurzhan Sartbayev**, Chairman of the Board, National Company “KAZAKH INVEST” JSC
- ❖ **Denis Van den Weghe**, President, Society of Honorary Consuls
- ❖ **Nikolaos K. Margaropoulos**, Secretary General, World Federation of Consuls
- ❖ **Leif-Kristian Sverstad**, Board Member, World Federation of Consuls

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11:00-18:00

WORKSHOP FOR MEDIA REPRESENTATIVES "SECTORAL JOURNALISM: OIL AND GAS RELATED TOPICS IN THE KAZAKH MEDIA "

Venue: Congress Center, PRESS CENTER

Organizers: Business Media Group LLP and Chevron Kazakhstan and supported by KAZENERGY.

Workshop objectives:

- To provide a holistic picture of Kazakhstan’s oil and gas industry development to young journalists;
- To train them to work with sources of information, prepare news and analytical materials, and carry out competence-based oil and gas interviews.

The workshop will be conducted by journalists having extensive experience and media coaches specializing in oil and gas and business areas, such as Ms. Assiya Akisheva and Ms. Yelena Butyrina.

“During the workshop, journalists will learn about the new trends in the world oil and gas market, about the largest projects in the field of oil and gas exploration, production, refining and transportation in Kazakhstan. In addition, our colleagues will receive answers to oil and gas trade, oil pricing, Kazakhstan’s support for OPEC and OPEC+ initiatives and many others”, - as commented by the Workshop Organizers. – “Case Studies will be an integral part of the workshop. We will share our experience of working with information sources, structuring and analyzing the information received, etc. We are confident that our workshop will be interesting and useful for colleagues who wish to specialize in the oil and gas area.”

12:40-14:00

LUNCH

Venue: Congress Center, Lobby

14:00-15:20

ROUND TABLE: “CLEAN COAL: INNOVATIONS AND ENVIRONMENTAL FRIENDLINESS”

Venue: Congress Center, AL-FARABI Hall

Moderator: Murzabek Baikenov, Head of the Department of Petrochemistry and Chemical Engineering, E.A Buketov Karaganda State University

Participants:

- ❖ **Bolat Akchulakov**, General Director, KAZENERGY Association
- ❖ **Nikolai Radostovets**, Executive Director, Republican Association of Mining and Metallurgical Enterprises
- ❖ **Marco Passalia**, Partner, ENET Energy SA
- ❖ **Prof. Tleuken Akhmetov**, Secretary, Pugwash Committee of Kazakhstan
- ❖ **Indira Jeldybayeva**, PhD-Doctor, Senior Researcher, Scientific Research Institute for New Chemical Technologies and Materials, Al-Farabi Kazakh National University
- ❖ **Darzhan Aitbekova**, PhD Doctoral candidate, 2 course, E.A.Buketov Karaganda State University
- ❖ **Bulat Kenessov**, Professor, Candidate of Chemical Sciences, Director, Center of Physico-Chemical Methods of Research and Analysis

Coal industry and coal power generation have historically been and remain an important source of economic development in many countries around the world. The use of coal is characterized by its cheapness, accessibility and storage possibility. According to some reports, the world’s 13 largest countries, including China, the USA, India, South Africa and others, account for up to 90% of global electricity generated from coal.

Despite the fact that the role of coal in the energy sector still remains significant today, global challenges are leading to a reduction of coal power generation in the global energy mix. To ensure sustainable development of energy, the environmental friendliness of energy sources becomes one of the priorities. Of course, this is not about the immediate and complete abandonment of coal. The latest technological solutions enable making coal mining and coal plant operation processes more environmentally friendly and maneuverable. Thanks to them, the development of coal seams becomes “green”, and modern coal plants become almost as clean as gas plants: carbon dioxide emissions at such facilities can be reduced or captured and used efficiently.

The coal industry in Kazakhstan is one of the most important resource sectors. Today, its contribution to GDP is about 1.5%. In 2018, 113.7 million tons of coal were mined in the country, which is 6.5% more than in 2017.

According to the Concept for Transition of Kazakhstan to “Green Economy”, the country plans to implement a comprehensive project for coalbed methane extraction (CBM), and updated the action plan for the organization of CBM exploration and production, approved by the Ministry of Energy of the Republic of Kazakhstan in 2016.

The development of coal chemistry in Kazakhstan will ensure a qualitative change in consumer attributes for products, increase their market price, make it possible to go

beyond the steam coal market, and significantly improve the socio-economic situation in several regions.

Questions for discussion:

- Coal industry development strategy: what are the prospects for coal power generation?
- New approaches to the coal industry development
- Greening the coal power generation
- Unique “clean coal” technologies: how to make coal cleaner?
- Foreign experience in implementing environmentally friendly technologies for the use of coal and disposal of associated coal combustion products
- Comprehensive processing of solid fossil fuels: current state and prospects
- Catalytic cracking of heavy hydrocarbons

14:00-15:20

EQUIPMENT MANUFACTURERS FORUM. LOCALIZATION OPPORTUNITIES AND LOCAL CONTENT DEVELOPMENT

Venue: Congress Center, SAFI UTEBAYEV Hall

Organizers: KAZENERGY Association, Oil and Gas Strategic Partnership Development Council

Moderator: Assylbek Jakiyev, Secretary, Oil and Gas Strategic Partnership Development Council

Welcome Address:

- ❖ **Bolat Akchulakov**, General Director, KAZENERGY Association
- ❖ **Yevgeniy Bolgert**, Deputy Chairman, “Atameken” National Chamber of Entrepreneurs
- ❖ **Mukhit Magazhanov**, Managing Director, PSA LLP
- ❖ **Dana Zhunussova**, Adviser to Prime Minister, Kazakhstan
- ❖ **Darmen Sadvakassov**, Managing Partner, Dasco Consulting

Participants:

- ❖ **Marat Karimov**, Deputy Director, KPO
- ❖ **Yermek Marabayev**, Deputy Director, NCOC (tbc)
- ❖ **Shaun Doherty**, Kazakhstani Content Manager Tengizchevroil LLP
- ❖ **Massimo Bendini**, General Director of Petrovalves
- ❖ **Giorgi Turdzeladze**, Suppliers development project in Kazakhstan, Team leader: Supplier development service in Kazakhstan

The main objective of the Equipment Manufacturers Forum is to stimulate the development of the domestic market for equipment manufacturers in the oil and gas industry and to localize the production of goods by creating joint ventures with foreign manufacturers. The event will be attended by representatives of the world’s leading companies – equipment manufacturers (Emerson, Honeywell, General Electric, Sulzer, Cameron, Siemens, Atlas Copco, Aggreko, Schneider Electric, etc.).

The event will be attended by representatives of the Ministry of Energy of the Republic of Kazakhstan, the National Company “KazMunayGas”, the Association of Kazakhstan Machinery Industry, the Oil and Gas Strategic Partnership Development Council (Petrocouncil).

The representatives of Tengizchevroil, North Caspian Operating Company and Karachaganak Petroleum Operating will share their experiences and talk about their work and achievements in localizing the equipment production.

We believe that the Equipment Manufacturers Forum will become a unified platform for oil and gas operators and local manufacturing companies to identify opportunities and discuss problems for the development of equipment manufacturing in Kazakhstan.

Questions for discussion:

- Localization of foreign equipment manufacturers: examples
- Capabilities of local equipment manufacturers and service companies
- Factors constraining the development of equipment manufacturing for the oil and gas industry in Kazakhstan, and solutions.

15:30-17:00

ROUND TABLE: EXPLOSION SAFETY IN THE OIL AND GAS, OIL REFINING, PETROCHEMICAL AND MINING SECTORS IN KAZAKHSTAN AND EAEU

Venue: Congress Center, ABAI Hall

Organizers: KAZENERGY Association, Edil-Oral.kz LLP

Chair: Mirzhan Asrepov, Deputy Director, Department of Electric Power Development, Ministry of Energy, Republic of Kazakhstan

Moderator: Serik Amangaleyev, Operations Director, Edil-Oral.kz LLP, Kazakhstan

Participants:

- ❖ **Darkhan Aliakbarov**, Head of Department, Astana Territorial Department of the Committee for Atomic and Energy Supervision and Control, Kazakhstan
- ❖ **Kairat Saktaganov**, Co-Managing Director for HSE, NC “KazMunayGas” JSC, Kazakhstan
- ❖ **Iskander Khamitov**, Deputy General Director, RSE "Kazakhstan Institute of Standardization and Certification", Kazakhstan
- ❖ **Sebastiaan Glazer**, Managing Director, Eurasia Business Partners BV, International Expert in Explosion Safety, Netherlands

The explosion safety issues are of key importance for Kazakhstan, taking into account the ongoing work on the world's largest international extractive projects, in terms of investments, involved manpower, risks to civilians and the environment. The international explosion safety standards of the International Electrotechnical Commission are gaining more importance and recognition. Much work has already been done. But there is still a need for further joint actions from all stakeholders to implement these standards and approaches for local market players, especially in the energy sector. So far, compliance with these standards is mainly the requirement of foreign companies. Such countries as the Netherlands, UK, USA, Norway and others have outstanding experience and practice in this area.

To protect equipment, operating personnel and the environment, it is necessary to take precautionary measures to create the conditions under which the probability of an explosion is reduced to zero.

There are many methods of explosion protection that ensure the safe operation of electrical equipment in explosive atmospheres. The national and international standards establish these technologies and determine in detail how to design, apply, maintain and repair various explosion-proof equipment, as well as what proven competencies the authorized personnel must have.

Questions for discussion:

- Relevance, approaches and existing practice in Kazakhstan, the region and the world
- Features and trends in technical regulation of explosion safety
- Main aspects of personnel training and conformity assessment: international practice
- Explosion-proof equipment production, supply and demand, features of its testing and confirmation of compliance with the EAEU Technical Regulation.
- Concerns and risk assessment in explosive atmospheres.

“DIGITAL ENERGY” EXHIBITION

10:00-17:00

Venue: Congress Center

Organizers: KAZENERGY

Objectives of the Exhibition:

- A platform for demonstration of results achieved in global application of the latest technological developments in the energy sector;
- A platform for negotiations, transfer of innovations, high-tech products and investment services, as well as their promotion in the energy market;
- Provision of information to visitors about the role and importance of energy and energy resources in the life of society.

The exhibition will be held in an unconventional format. The exposition of modern technologies and developments, development institutions and innovative infrastructure will be arranged on a cluster-based principle. Special communication zones will be organized for networking with potential partners.

A new interactive format (virtual reality, augmented reality, artificial intelligence, blockchain) will allow guests to get more information while attending the event and allow companies to present their products as efficiently as possible.

17:00

CLOSING OF THE KAZAKHSTAN ENERGY WEEK