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20<sup>TH</sup> WORLD  
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# KAZENERGY

I N T E R N A T I O N A L

KAZAKHSTAN:  
LAND OF  
OPPORTUNITIES

KASHAGAN:  
A LIGHTHOUSE  
FOR INVESTORS

KAZENERGY: RICH  
HISTORY, OUTSTANDING  
PERSPECTIVES

KAZAKHSTAN  
MOTIVES  
OF ARABIAN GULF





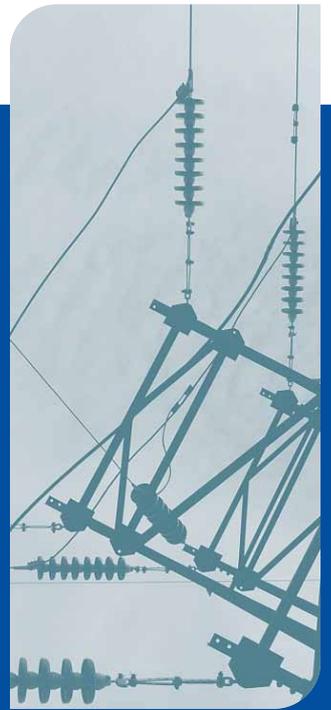
# KAZENERGY

KAZENERGY Association is a union of companies working in oil-gas and energy industry of Kazakhstan.

The Association's activity is challenged to create favorable conditions for the dynamic and sustainable development of the energy sector of the Republic of Kazakhstan, and serve as an integrated "information harbor" for subsoil users, energy, transport specialists, consumers of products and services of oil-gas and energy sector.

KAZENERGY – a gateway to a new level of efficiency in the oil-gas and energy sector of Kazakhstan





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**Sauat Mynbayev**  
Minister of Oil and Gas  
The Republic of Kazakhstan

### **Ladies and gentlemen!**

On behalf of the Ministry of Oil and Gas of the Republic of Kazakhstan I welcome the organizers, participants and guests of the 20th World Petroleum Congress.

Kazakhstan considers this large scale event as an important factor in ensuring global energy security, development of cooperation and mutual understanding between producers and importers of hydrocarbons.

International meetings organized by the World Petroleum Council consolidated its status as one of the main dialogue platforms that form the future of oil and gas sector. Our country is active participant of this dialogue, constantly standing for stable and predictable development of energy relations by supporting measures that are implemented.

I should note that the present World Petroleum Congress coincides with the year of the 20th anniversary of Kazakhstan's Independence. During the sovereign development the Republic became one of the leading producers and exporters of hydrocarbons and started industrial and innovative modernization.

In the foreseeable future, we intend to strengthen our position in the global energy market by implementing ambitious plans to increase oil and gas extraction. With no doubts, this will enhance energy security of the world.

I wish you fruitful work. I am sure that the discussions and detailed exchange of views will allow to find points of contact on all matters under the agenda, to create new directions of growth in the global oil and gas industry, to expand business contacts and mutually beneficial partnership!





**Timur Kulibayev**  
Chairman,  
Association KAZENERGY



Dear Colleagues, Ladies and Gentlemen!

I welcome the organizers, delegates and guests of the 20th World Petroleum Congress.

World Petroleum Congress as the largest international industry event plays an important role in reinforcing global energy security, exchanging of experience and technological projects, enhancing business contacts.

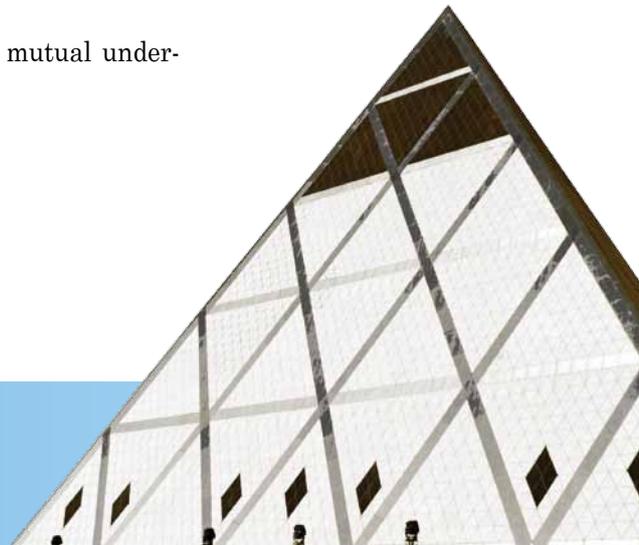
Kazakhstan is considering the holding of the conference in Doha as a major event, which serves the cause of strengthening cooperation and mutual understanding and helps to determine the global vectors of oil and gas industry development in a years to come.

Under the conditions of the tension of global financial markets, we reasonably expect from the Congress constructive debates and discussions on key issues on the agenda of world energy, authoritative assessments of processes occurring in it.

It is noteworthy that the World Petroleum Congress is held on the eve of the 20th anniversary of Kazakhstan's Independence, which for this period has become an important part of the world oil market.

I am convinced that the active participation of the Kazakhstan delegation will help to consolidate the position of the republic as a producer and exporter of hydrocarbons, to demonstrate oil and gas industry successes of the country as a whole.

I wish the participants and guests success, mutual understanding and new achievements!





**Bolat Akchulakov**  
Chairman of the Board  
JSC "NC" KazMunaiGas "



### **Dear Colleagues, Ladies and Gentlemen!**

On behalf of the National Company "KazMunaiGas" I welcome participants and guests of the 20th World Petroleum Congress.

Over the years of its own activity, the World Petroleum Congress cemented its status as one of the largest oil and gas industry events, making a significant contribution to energy security and development of industry interaction. This is the authoritative international platform for leading oil industry experts, who discuss current issues, put forward new ideas and breakthrough initiatives that ensure the development of oil and gas industry for the years ahead.

Kazakhstan is an active member of the World Petroleum Council and highly appreciates the importance of international cooperation.

Our state has a special position in the Eurasian space, as a "bridge" between main sales markets and supplying countries of hydrocarbons. Kazakhstan is aware of its role in the global energy security. Our country has already established itself as a reliable partner, but intends to continue the development of oil and gas industry and strengthen its position as one of the leading representatives of the international oil and gas production - a process in which the National Company "KazMunaiGas" will play a key role.

I am confident that the 20th World Petroleum Congress will be held in an atmosphere of constructive discussions and mutual understanding, will help to find effective solutions to the challenges on the agenda.

I wish the participants of the Congress success and new achievements!





**ҚазМұнайГаз**  
NATIONAL COMPANY ҰЛТТЫҚ КОМПАНИЯСЫ



**KAZMUNAIGAS – LEADER  
IN THE NATIONAL  
ECONOMY**

# KAZENERGY – rich history, outstanding perspectives



On October 4 and 5, Astana hosted the VI Eurasian Forum, organized under the auspices of the KAZENERGY Association, and although the event is being held since 2006 and has proved to the highest international level, this meeting was special for powermen.

# G

by Energy Focus

athered under the shade of Baiterek, the participants not only shared their experience, views and business proposals, but witnessed summarizing 20 years of successful economic breakthrough in our country. Today our country is on the first or one of the first places in the region in terms of many economic indicators, which was greatly contributed by effective energy policy and strategy for the development of natural resources. In fact, the interest to the Eurasian Forums by professionals around the world validates the chosen path of Kazakhstan in the best way possible.

Recall that the KAZENERGY Association was founded in November 2, 2005 in order to create the optimal environment for the enterprises of fuel and energy complex, to protect their interests, to build a constructive dialogue with the authorities and foreign counterparts. Today the Association includes more than 50 market players, including not only Kazakhstan's energy giants, such as KazMunayGas and KEGOC, and such world leaders as ExxonMobil Kazakhstan inc, Schlumberger Logelco Inc, TengizChevron and many others. The state agencies of RK are actively involved in the Association activity, their representatives' spoke at the Forum, which allowed the audience to make a comprehensive assessment of the prospects for international cooperation in the energy sphere. Last but not least,



according to analysts and market players, the Association of Energy has acquired its own weight, meaning and impact of domestic and global scale through its commitment to provide an interactive platform to representatives of business and government. At the same time the efforts of the organization management to create conditions for fruitful discussions are not limited to the Eurasian Forum, although it is certainly a kind of a crown of the communication aspirations.

Welcome Message from the President of the Association Timur Kulibayev to the Forum delegates provides a comprehensive view of strategic and tactical problems to be solved during the event.

"In 2011, the Republic of Kazakhstan celebrates the 20th anniversary of the state independence. Over the years our country has established itself as a sovereign authoritative dynamically and steadily developing country and a full member of the interna-

## 2006

Now analysts' forecasts are fully confirmed by the reality - the value of the Forum can not be overestimated, as evidenced by its six-year history. So the first Eurasian Energy Forum of KAZENERGY, held in 2006, marked a new milestone in the development of fuel-energy complex. For the first time in an atmosphere of constructive debate an attempt was made to define "trouble spots" of growth, to outline prospects for further development. Then Timur Kulibayev suggested the thesis: Kazenergy Association is ready to act as a moderator between state authorities and enterprises of the energy sector. Later, the

forecasts made by the Chairman of the Association were brilliantly realized. That year, the future Prime Minister of Kazakhstan, Karim Masimov, lashed out at the violators of the environmental laws and gave the outline of a number of innovative and legislative programs aimed at maintaining the ecological balance. Further, this line of work was developed in the Association activities on development of the Environmental Code of the country, which had been laid down strict rules of "zero discharge" and a number of other important points. The future head of government also stated the need to improve the degree of oil and gas processing. "As a part of the petrochemical cluster in West Kazakhstan, the Republic's

government is able to support those businesses that are ready for more advanced processing of raw materials, the development of petrochemical industries in the country. Your efforts on joint ventures establishment would make an invaluable contribution to the development of Kazakhstan," - said Mr. Massimov. And this task is implemented by KAZENERGY. The Association has become one of the initiators of the First Caspian Forum on oil refining and petrochemical development and a special conference in Astana. The Association established a special working group that is dedicated to this issue. The ways were defined to develop relationship between industrialists, know-how scientists, and the

tional community. Considerable contribution to these processes made by the energy sector of Kazakhstan's economy that has become not only the engine of economic growth and modernization of the country, but also a good example of cooperation between state institutions and foreign investors and private entrepreneurial initiative.

Since the early 1990s, nearly four-fold, to 79.7 million tons, annual production of oil and gas condensate has increased, which greatly contributed to more than ten-fold growth of the national economy. Together, we nearly doubled the share of Kazakhstan in the global oil market, and in uranium mining the country reached a leading position in the world, 17.8 thousand tons in 2010. Already in 2015 the oil and condensate production in the country will reach 95 million tons per year, natural gas production - more than 59 billion cubic meters per year" - states his welcoming speech.

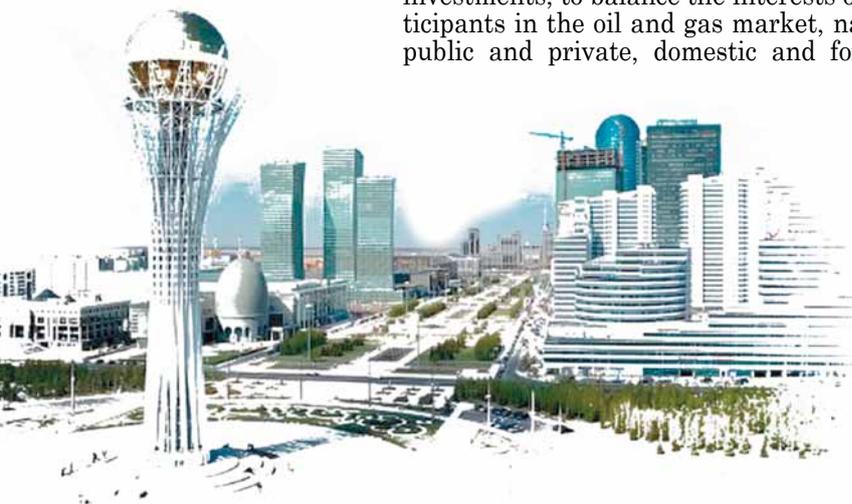
Timur Kulibayev also stressed that during the years of independence, a stable and dynamic structure of the energy sector formed: Kazakhstan managed to attract impressive investments, to balance the interests of participants in the oil and gas market, namely public and private, domestic and foreign,

multinational corporations and small businesses. At present, domestic priorities have become the innovative development, the strengthening of local content, social responsibility, effective protection of the environment, the synthesis of basic scientific research and production infrastructure.

"In connection with this subject of the VI KAZENERGY Forum is very symbolic - "Kazakhstan: 20 years of sustainable growth, new horizons for investments and cooperation".

I am sure that the Forum will contribute to more effective co-operation of industrialized and producing nations, facilitate the development of mutual understanding and international partnership," - concluded the Chairman of the Association.

The importance of the changes occurring, invaluable experience of Kazakhstan power industry was stressed by CEO of the «KAZENERGY Association», Mr. Dzhambulat Sarsenov. According to him within 20 years of independence, all government policy documents have emphasized the development of the energy industry, which is "followed by oil and gas engineering, infrastructure projects, oil pipelines, gas pipelines. The money invested by investors in oil and gas sector



banking business. Another serious task posed by the Prime Minister was the development of local content in the oil service sector. "Large oil and gas and energy sector companies shall serve as a catalyst for the economic growth

and development of small and medium-sized businesses and domestic machinery," - a thesis voiced by the future Prime Minister, assuring that the government will revise laws to ensure the foreign investors comply with their commitment to attract local content and personnel from among the citizens of our Republic. The Prime Minister kept his promise. But the Association made the local content issue a constant topic of discussion at the Coordinating Council involving foreign investors and international experts. The issue of Kazakhstani personnel training was selected one of the priorities in the activities of the Association and its members. The result was the annual scientific conference on human resources, conducted by a private institution - the Unified Personnel Development Centre of NC KazMunayGas supported by KAZENERGY.

## 2007

In September 2007, the second KAZENERGY Eurasian Energy Forum was held, purposed at the discussion of topical issues of oil, gas and energy sector: review of analytical information, work out of proposals and recommendations, coordination of common approaches to effective legal mechanisms and practical tools of the key economy sector of Kazakhstan. During the event, a famous "Kashagan issue" was raised. Speaking of the oil and gas industry development, the effective Prime Minister mentioned the problems associated with the development of the Kashagan field. Karim Massimov said: "The Kazakh government is ready to engage in an open dialogue to address project issues at the early stage, while I want to say openly, we

in general served to the development of local industry and production," - he said. Also, Mr. Sarsenov stressed that there is "the queue" to invest in such projects as Kashagan." According to Dzhambulat Sarsenov, investment horizons should be extended to the industrial projects, "As the Program of forced industrial-innovative development involves the creation of a large number of projects, new production capacity that will ensure the efficient operation of oil and gas industry and energy in general."

### In the epicenter of global energy dialogue

The first day of the Forum, October 4 not only lighted the "Kazakh energy miracle" and promising areas of the industry, but also identified the new vectors of cooperation. The participants got the opportunity to discuss the profile problems of the region, in particular the sensitive issue of collaboration in the development of the Caspian shelf. Also there were presentations on forecasting and long-term partnership alliances in Eurasia. Along with others, the speeches raised such specific issues of the industry, as the formation of prices for oil, gas and other energy sources, peculiarities of contracts and investments of the largest oil fields (for ex-

ample, Karachaganak, Kashagan and Tengiz), and the prospects for innovations. As for the innovation, this is the important area repeatedly voiced as a priority in the institutions subordinate to the National Wealth Fund, led by Timur Kulibayev. As you know, the largest Kazakh mining companies are a part of the National Wealth Fund, and for them the strategies identified at the Forum play an important role. "Years of hard work, today let us boldly and proudly speak of progress in the petroleum and energy industries of our country. Kazakhstan has secured its status as a leading player in the global energy market and has engaged in the dialogue on an equal footing with the global industry leaders. National companies have successfully implemented a number of major pipeline and energy transit projects in the past few years. Calibrated, well thought out development strategy allowed raising the industry's quantitative indicators, provided the necessary prerequisites for its high quality innovative breakthrough. By itself, the oil and gas sector is the engine of innovation, since our entire complex fields are the objects of innovation, so they take the advantage of the latest technology. On our field work major Japanese, American, Eu-

**On Kazakhstan's field work** major Japanese, American, European Asian companies operate using the latest technology.



will be tough to stop illegal actions of those who try to violate the rules of the Kazakhstan legislation and ignore the national interests of our country." The situation with the Kashagan project was valued by the Government as a special case, the legitimate interests of potential and actual investors in Kazakhstan were not impacted, and as practice showed, were not injured. "Kazakhstan is a reliable and stable partner committed to contractual obligations, and acting for their stability. The Kazakh government will adjust its position only in respect of those who are not able to fulfill the obligations," -the Prime Minister stated.

In addition, following the II Eurasian Energy Forum the Memorandum on the establishment of the Caspian Information Initiative was signed. The Memorandum suggested a mutually beneficial exchange of

information among the initiatives participants; the establishment of a dialogue platform to discuss the challenges faced by the region; support of contacts and increase of the areas of cooperation between the media, public organizations and commercial companies of the Caspian region. Also, in the course of the Forum, the Chairman of the Association, Timur Kulibayev was awarded a certificate of the honorary member of the Caspian Integration Business Club. This organization, which unites more than 100 companies of thirty states, established to promote regional ties among nations, strengthening of contacts between government agencies and private businesses, as well as the development of integration processes in the energy and the environment protection.

### 2008

During the III Eurasian Energy Forum organized under the "Global Challenges - Energy Solutions" theme, it became known that Kazakhstan joined the World Petroleum Council (WPC), uniting 60 national committees of various countries with developed oil and gas industry. As WPC President Randall Gossen noted in a press conference held following the forum, our country became a part of the world's leading nonprofit organization headed by him. "We are very pleased that Kazakhstan has become a member of our family, because the countries in the World Petroleum Council represent 95 percent of global oil and gas production." - He said. The honored guest praised the Forum. He stressed that "the level of the solutions made meets the highest

**In 2009** a wide debate was provoked by appearance of ex-Chancellor Gerhard Schroeder on gas issue.



European Asian companies operate using the latest technology." - noted Kulibayev in one of his speeches.

On the second day the participants were discussing the tragedy at Fukusima-1, a nuclear power station, those precautions, which the world's energy community should learn from a stern lesson. Delegates also talked about the development of the nuclear industry, the possibility of energy transport to Europe from renewable sources and much more. The special role of the Forum was assigned to the environmental issues, the search for technological solutions of environmental protection, as well as those innovations that are the participating enterprises have developed under their environmentally friendly programs, including the important place given to the local content in the industrial areas.

Traditionally, in the framework of the Forum serious disputes arise, information extremely important for the business world community is sounded especially due to the moderators and speakers. For example, in 2009, a wide debate was provoked by appearance of ex-Chancellor Gerhard Schroeder on gas issue. As for present IV Forum the only

name of the co-host arouse interest to the event have becoming a breaking news for the international mass media. Larry King - a world famous journalist, the master of living and contensive interview, together with the Chairman of the KAZENERGY Association, Timur Kulibayev co-moderated the section devoted to energy geopolitics of Eurasia, Challenges and New Horizons. Karim Massimov -Kazakhstani Prime Minister, as well as EU Energy Commissioner, Günther Oettinger appeared as main spokesmen. Concerning the sore problem, "the issue of the Caspian", the President of the World Petroleum Council, Randall Gossen, an expert on energy security, Platts, John Roberts, Senior Adviser to the Special Envoy for Eurasian Energy (U.S. Department of State), Daniel Stein, president of the National Company KazMunayGas, Kairgeldy Kabyldin, and others presented their views. To the topic of investing, which is against of financial instability and political transformation of the world is particularly relevant this year was given a separate plenary session "New horizons for oil and gas industry: investing in innovation and new technologies". As a moderator for this part, Euronews journalist,

international standards." It was also stated that the oil and gas companies should share geological information considered confidential regarding the national sector of the Caspian Sea in order to avoid future failures in drilling exploratory wells on the shelf. This opinion was stated by the President of Meridian Petroleum, LLP, Baltabek Kuandykov. "All participants in petroleum operations need exchange of geological information obtained in each national sector and in the whole basin. It is time to review the list of confidential geological information," - said Mr. Kuandykov. His initiative was strongly supported by the participants.

The participants again raised the topic of Kashagan, Karim Massimov and Kulibayev voiced clear predictions. "As a result of complex negotiations with all parties of the Consortium, the Government substantially

increased the state share in the project, up to 16.83 percent, and in addition, our country will receive compensation for changes in the timing of its implementation. By October 25, all legal formalities to be completed," - said the Prime Minister. A little later, during a special press conference, the Chairman of the Kazenergy Association added to the Prime Minister's words. He commented on the completion date of the Kashagan project. "October 2013 is called, but the commissioning is impossible in winter time. We are talking about the fact that by the end of 2013 all facilities should be ready to start. We expect that in 2014, Kashagan will produce 450,000 barrels per day. At this point, the on-shore and off-shore facilities should be ready, transportation issues resolved." Kulibayev also explained that the issue mainly lies in the fact that the Consortium members were able to

stop the escalating cost of Kashagan, which hits the project economics and may affect the revenue to the state budget.

In addition, on the press conference took place after the Forum, Kulibayev acted not only as the first-rate government official and businessman, but also as one of the most skilled analysts in the global oil sector. The highest level of ambitions and their consistency the most eloquently was presented by "calling card" of the KazEnergy Association - the just completed Forum. Mr. Kulibayev gave some hints that characterize him as a player on the world market. "The tax burden on oil and gas industry will actually increase. However, our Association had worked all year to ensure that bills took into account the need for sustainable mining, and the industry remained attractive for investments. We managed it: Kazakhstan is still more attractive to investors than, for



Niall O'Reilly had been invited. The forum participants had a possibility to obtain the opinion of top management of the leading world energy giants on such issues as the implementation of experimental-industrial development of the Kashagan field, the oil operations in extreme-cold conditions and new growth opportunities for liquids production at the Karachaganak field. In the section of nuclear energy the views were heard of the chairman of the National Committee of Japan WEC Teruaki Masumoto, the Manager of INPRO, IAEA Randall Batty, president of the national company «Kazatomprom» Vladimir Shkolnik and other delegates.

### Legitimate Expectations

Addressing the delegates, head of the Association of power engineers, Chairman of the Board of National Wealth Fund «Samruk-Kazyna» Timur Kulibayev noted a steady and gradual development of both the Forum structure and its scale.

- This is an interesting platform, where it is given a possibility to speak for our and foreign influential politicians, to share experience on how looks the sector development

from political point of view, as well as for industry representatives, international organizations and experts. It is very gratifying that the subject is expanding, so today it is held a very important discussion on the development of nuclear industry, on development of alternative energy sources - these industries, we are developing in Kazakhstan, - said Mr. Kulibayev, and his words were fully confirmed at the event that took place in October.

The Head of "Samruk-Kazyna" NWF once again stressed the importance of diversification of the economy of Kazakhstan and the significant role in this process assigned to the National Welfare Fund headed by him.

- The crisis in Kazakhstan is largely overwhelmed, that's why the head of the state set new tasks towards the Fund – they are corporate governance, economic diversification, introduction of an innovative culture to our subsidiaries and, as already noted, the People's IPO. When we talk about diversification, we say that we have more than 60% of revenue from the commodity sector, so the basic investments and industrial programs should be invested to the development of non-oil sector. In particular these are our

example, Russia. Many Russian companies as LUKOIL, Rosneft, Gazprom Neft want to work in our country and to increase investment. Now investors are focused on the Caspian shelf of Kazakhstan. But it is not elastic; we can not sign new contracts indefinitely. Therefore, I advise investors pay attention to other areas. Like the shelf of the Aral Sea, where there are already encouraging results of exploration, the land of Kazakhstan: western, central, southern part of the country" - he said in particular. Future showed the accuracy of those predictions.

The final joint statement was adopted at the completion of the Forum, which stressed the importance of fruitful cooperation with its delegates.

"Natural energy resources and created production, scientific, technical and personnel potential of the energy sector of Kazakhstan



is a key national asset. Effective use is a necessary foundation for the transition path of sustainable development, ensuring the welfare of the people. To take full advantage of this priceless treasure, to ensure long-term energy security of Kazakhstan in today's economy, to build the foundations of long-term stable energy supply and keep the state's energy independence, the delegates

are going to fully support the implementation of a systematic and effective national energy dialogue", - noted the statement. Commenting on the results of the Third Forum to the media, the General Director of the KazEnergy Association, Dzhambulat Sarsenov said with a well-deserved triumph: "This year the level of the Forum was high enough, it involved the President of the World Petroleum Council, the largest organization of oilmen around the world. The Regional Director for Europe and Central Asia Region, World Energy Council attended too," - said D. Sarsenov. The General Director said that the representative of the World Energy Council visited Kazakhstan for the first time, and stated unprecedented "rush" of the representatives of foreign analytical circles, studying the oil and gas market.



projects of petrochemical cluster in Atyrau – we began building a plant of polypropylene, agreed with Korean investors on the project of polyethylene production, began construction of a bitumen plant, created higher profit products. Of course, we are not limited to the listed projects", - said Kulibayev. Back to the list of successes in the innovation field, he added the activity of "Kazatomprom", that signed several contracts for the development of the uranium sector also he mentioned the projects in the field of alternative energy. In addition, Timur Askarovich lit and a great job of personnel training, as you know, it is vain to expect diversification without competent professionals - that's why "Samruk-Kazyna" NWF has signed several agreements with leading universities of country in order to increase efficiency of HR potential.

In light of Petroleum subject Minister of oil and gas Sauat Mynbayev made a significant contribution. He pointed out that in Kazakhstan over 20 years the dynamics of the recoverable reserves of liquid hydrocarbons and natural gas shows a significant increase due to opening of the Kashagan field and increasing the reserves of the Tengiz, in general this demonstrates a success of the geological industry of the country. The minister stressed that during 20 years, oil production increased by more than 3 times, the gas production by more than 5 times. In the future, it is expected to greatly increase volumes of hydrocarbons: it is worked out a project for future development with a possible increase in production from the current 26 million tons to 36 million tons on Tengiz project.

- Much has been done on Kashagan project, the expected start date of commercial production - December 2012 - June 2013. As you know, the first phase of the project presuggests a production volume of about 370 000

barrels per day with a possible increase to 450 thousand barrels" - told Mr. Mynbayev. Minister of environmental protection Nurgali Ashimov "closed" ecological niche by saying that Kazakhstan has adopted voluntary commitments to reduce greenhouse gas emissions to 15% by 2020 and 25% by 2050 relative to the baseline of 1992. According to the minister, there are being formed a national system for monitoring and reporting of greenhouse gases and the State Register of carbon units in the RK. Thus, as a result of stricter environmental regulations in recent years emissions have stabilized at 3 million tons, with an annual GDP growth at 7-11%. In addition, since 2005 in Kazakhstan a ban on associated gas flaring during oil production has been legally embedded.

- As a result, the combustion of gas is reduced from 3.1 to 1.3 billion cubic meters. By the end of this year the program for utilization of associated of gas at oil fields must be completed. Such measures are being taken so far only by Norway - noted Mr. Ashimov. He also said that President Nursultan



## 2009

From the very beginning of the Fourth Eurasian Forum indisputable fact was reflected that in recent years, KAZENERGY Forum has become a key site for domestic oil and gas and energy sectors discussion, and the most important event for international visitors. Three previous Forums allowed forming a series of recommendations and sought solutions which are embodied in the subsequent development of Kazakhstan's energy sector. Special guests and participants of the Forum was 33rd Chancellor of Germany, a member of the Board of Directors, the Chairman of Nord Stream AG shareholders, Gerhard Schroeder, the Minister of Energy of the United Arab Emirates, His Excellency Mohammed Bin Al-Zaghi Hamili, the Minister of Economy, Energy

and Tourism of Bulgaria Traycho Traykov, the President World Petroleum Council Randall Gossen, the President of SOCAR, Azerbaijan Rovnag Abdullayev, leaders and representatives of the World Energy Council, the European Bank for Reconstruction and Development, the World Bank, the oil and gas giants Chevron, ExxonMobil, Royal Dutch Shell, BG Group, Conoco-Phillips, the largest investment companies, banks, price agencies, including JP Morgan Plc, HSBC Bank Plc, Platts. In total, the Forum was attended by some 1,000 government officials, business communities, diplomatic and expert circles. Also during the Forum 2009, it was announced that Kazakhstan was accepted into the World Energy Council. On September 16-19, 2009 in Reykjavik (Iceland), a meeting of the Executive Assembly (WEC), where the Secretary-General of WEC Mr. Christopher Fry officially

announced the entry of Kazakhstan into this organization (Kazakhstan Association of Oil & Gas and Energy Complex, KazEnergy). The events arranged by the executive assembly were attended by Almasadam Satkaliev, First Vice-President of JSC KEGOC (Chairman of the Kazakhstan Committee of WEC) and Sergei Katyshev, Adviser to the President of JSC KEGOC (Executive Secretary of the Kazakhstan Committee of WEC). Chairman of the Kazakhstan Committee WEC Mr. Almasadam Satkaliev addressed the plenary meeting of the Executive Assembly, thanked the national committees of 92 countries for their votes in support of KazEnergy to be a member of the World Energy Council. As a part of this organization, our country has participated in numerous consulting activities and contributed into development of the key industry solutions.

Nazarbayev set the task of reducing energy intensity to 10% in Kazakhstan by 2015. In this context, the MEP developed a Plan of low carbon economic development of the republic and industrial facilities introduced in the framework of the forced industrialization Program undergo state ecological expertise for compliance with environmental requirements.

In particular, the Sixth Forum has established itself as a real discovery for the players of the nuclear industry, as announced Timur Kulibayev, stressing that the «Kazenergy» Eurasian Forum has become more authoritative and informative. Even against a background of forum's information abundance chairman of the Association created the plenary session devoted to the prospects of the nuclear segment, which was held jointly with the World Energy Council. His confidence in the brilliant future of Kazakh uranium and atom was joined by Prime Minister Karim Massimov, who said that the country is also taking the first steps towards the development of nuclear energy. This June the Government approved the

Programme for the Development of Atomic Energy which provides the construction of the first Kazakh nuclear company.

- I believe that nuclear power of Kazakhstan has a great future. Kazakhstan, as a reliable energy partner, connecting East and West, plays an important role in global energy security. We continue to promote the diversification of routes of energy transportation to final markets", - he said. "Kazakhstan is aware of the significant role of the energy sector in improving living standards and enhancing economic development. At present, the industry faces unprecedented challenges. But I am confident that by working in a team, government, business and society will be able to withstand the energy challenges of the XXI century", - stated the Prime Minister of the RK.

Head of nuclear energy development Department of IAEA Thomas Koshy said the IAEA is ready to make recommendations to Kazakhstan in the case of nuclear power plant construction in the country. In particular, he explained that over the next six months the IAEA will publish an annual report on the

**The IAEA is ready to make recommendations to Kazakhstan in the case of nuclear power plant construction in the country.**



## 2010

The V Eurasian KAZENERGY Forum was called "The Energy map of Eurasia: The Balance of Risks and Opportunities", and the course of the event reflected this difficult problem at a full rate, allowed the participants developing best practices. The importance of deep and steady integration of Kazakhstan's energy sector into the global structure was emphasized in the welcome address of one of the organizers of the Forum, the future head of National Wealth Fund Samruk Kazyna, Timur Kulibayev. "We need to examine the future of a new generation of energy, not to be the hostage, but the participants of the changes taking place. We must learn the lessons of the past, investigate and understand how recent global economic crisis changed the world economy,

what role can be played by the energy in its rehabilitation and post-crisis development. It is important to realize how rapidly the global energy market is developing. Today, the role is increasing of both the new centers of energy supply, and new sources of energy: atom, shale gas, solar and wind energy and others," - he said.

Acknowledging the priority of sustainable growth of oil and gas and energy sector of Kazakhstan in the Eurasian region, strengthening the role of Kazakhstan as the guarantor of the continental energy security, the importance of environmental safety, development of new energy sources, as well as testifying to the unity of views on all issues, The Forum participants stated their willingness to solve the key tasks. In particular, the report of the Chairman of the Board, JSC NC KazMunayGas, Mr. Kabyldin provided

a deeper look at the rapidly expanding prospects of cooperation. "This event is of particular importance in the context of the deepening of the international energy dialogue and contributes to the further approval of the mutually acceptable principles of business cooperation and exchange of experience in the energy sector. Energy today is one of the main topics of discussion in the world. Especially relevant are the issues of energy cooperation in the Eurasian region. Also, the modern world community pays special attention to the issues of transit and transport capacity, as an integral component of the global and regional energy security," - said the Head of the National Company. Mr. Kabyldin also highlighted the special role of Kazakhstan in the energy in-tegration. "Today's fast-growing energy consumption, the amount of stocks of energy and location

**In 2011** experts and analysts noticed that the Eurasian Forum was held entirely as a bridge between the government and investors

technologies most appropriate for Kazakhstan, noting that there are large reactors and small reactors, reactors on thermal neutrons in our country. The deputy Chairman of JSC "NAC"Kazatomprom" Sergei Yashin reported that nuclear power plant in Kazakhstan can be built in the next 10 years. - In the near future we will have to define the role and place of nuclear power in the country's energy balance, to determine the placements of nuclear power plants, select optimal nuclear technologies, primarily safe, and also solve large complex problems, ranging from personnel training and development of standard documentation for use of nuclear energy and ending with the possibility of participation of Kazakh enterprises in the construction of nuclear power plant ", - tells Mr. Yashin. Speaking about the longer term development of the nuclear industry, experts drew attention to a trend of increasing demand for uranium in 2030. In this regard, raises the question: who is able to provide a supply? Kazakhstan, according to Vice-President of JSC "NAC"Kazatomprom", as one of the leading countries in the field of uranium mining, will be able to get mark of 25 - 30 thousand tons of uranium produc-

tion per year. In 2011, the national company "Kazatomprom" plans to produce about 20 thousand tons of uranium. Characteristically, the Forum has long ago attracted the attention of not only journalists but also leading investors - in framework of the event each year genuine sensations are born and this year is no exception. At one of the last meetings of leaders of Energy under the auspices KAZENERGY Prime Minister Karim Massimov announced the five items on the Kashagan project, which were subsequently used as a basis in the negotiation process. In that year, experts and analysts noticed that the Eurasian Forum was held entirely as a bridge between the government and investors, excellent dialogue platform where you can not only discuss but also tie business contacts and get useful information at first hand. Whereas from year to year actuality and relevance of the Forum is just growing, excitement around this event has reached impressive heights. The Eurasian Forum truly become the calling card of Kazakhstan, its natural resources, the ability to conduct business in the legal field at the level of world standards.



are of special strategic importance for oil and gas region. Due to its geographical location and the availability of substantial reserves of mineral resources Kazakhstan is under scrutiny geopolitical and economic interests on the global energy arena. Our state holds a special position in the Eurasian space, as a "bridge" between the main markets of raw hydrocarbons (Western Europe and East Asia) and the countries that are major suppliers of hydrocarbons (the countries of the Middle East, Russia)," - he stressed. The delegates of the 5th Forum, expressed the firm belief that the meetings, which allowed clarifying the objectives, principles and strategy of the energy sector progress under conditions of the post-crisis development, will have a positive impact on the strengthening of partnerships, creating a favorable investment

climate, improve environmental protection and ecological liability, will give new impetus and the intergovernmental cooperation. In conclusion it's important to note, the Eurasian Forum - one of the most recognized global brands of Kazakhstan. The Conferences elaborate recommendations and solutions to enable to intensify the industrial dialogue, to ensure the stability of energy sector, to strengthen international cooperation. Undoubtedly, KAZENERGY Association managed to secure its status as a center of the industrial dialogue, which provides oil and gas industry with additional features of stable and balanced growth.



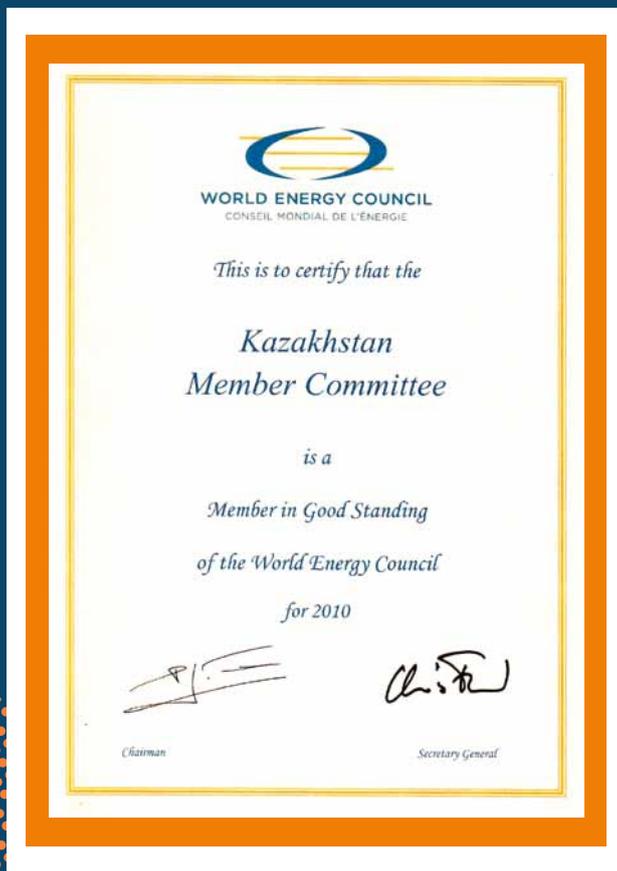


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**Kazakhstan, represented  
 by KAZENERGY Association,  
 joined the World Energy Council**

September 16-19, 2009

World Energy Council has a Member Committee in 93 countries world-wide.

[www.worldenergy.org](http://www.worldenergy.org)

# 20 years – Development of the Energy Sector of Kazakhstan

ACHIEVEMENTS. PROBLEMS. PROSPECTS



# A

**Sauat  
Mynbayev,**  
Minister of Oil  
and Gas of the  
Republic of  
Kazakhstan

According to the proven oil reserves, Kazakhstan is ranked the ninth in the world. (Slide 1). This data is from independent resources. I believe we have ground to expect an increase in reserves in the future taking into account the estimates of our geological reserves and the large-scale geologic research.

We had somewhat reduction of the reserves before 2001, but later on you can see an essential increase. I must say, this increase was mainly due to opening of Kashagan field, and increase in reserves at Tengiz field. In general, this demonstrates the success achieved in the geological sector of Kazakhstan.

The crude production increased over three-fold in 20 years, the gas production – five times. (Slide 2). The volume of hydrocarbons is expected to increase essentially in the future. In these terms Kazakhstan is one of few states with the production peak ahead,

At the present slide, do not be confused by the last line. Production growth of commodity gas is non-essential, in fact. The issue is that our gas is mainly associated gas. It means that for the purpose of full extraction of liquid fractions, a part of the gas produced is injected back to the stratum.

However, firstly, this gas may be extracted in future. Secondly, in case of the changes in the commercial marketing terms or the implementation of technological innovations, the production volumes of gas may be easily increased.

At Tengiz, we are currently working on the Future Growth Project, which is planned to increase the extraction volume from current 26 million tons to 36 million tons per year. I assume, it will be submitted for review to the authorities.

Great work on development of Kashagan project has been conducted. The commercial production is expected to start in December 2012 – June 2013. As you know, the production volume at the first stage of the project is expected to reach 370 thousand barrels per day with potential increase to 450 thousand barrels. Yes, the uncertainty still remains

with regard to the consequent second stage. But, I believe that close cooperation between the contracting companies and authorities, the compliance of suggested decisions to the best world practice, consideration of mutual interests may provide the project with the greater success.

Regarding N Block: our national company KazMunayGas with 51% share works in partnership with ConocoPhillips and Mubadala companies. The first well ( R-1) has been already drilled in Rakushechnoye Sea and the first confirmation of hydrocarbons presence received. The exploration operations are conducted in full compliance with the work program and we expect their success continuation.

Regarding Zhemchuzhina structure: KazMunayGas is operating in partnership with Shell (55%) and Oman (20%). Besides, the exploration works proved presence of oil and

logical risk always exists. Dry wells at Tyub-Karagan and Kurmangazy structures verify this fact. Nonetheless, we definitely have a solid ground to account for a significant growth in reserves and production of liquid hydrocarbons.

The environmental aspects of the activity relating to the hydrocarbons production become crucial due to the increase in production.

I would like to show the dynamics of one indicator only, the volume of the flared gas. Note that these volumes are in inverse ratio to the production and in 2010 the volume of the flared gas achieved 1.4 billion cubic meters, which was 3.6% of the produced gas including the volumes of technologically inevitable flaring. This indicator is lower than let's say in Norway, but it is higher than in many countries, including those with a long oil extraction history. I must note that the



gas on Auezov and Khazar structures. The project parties are preparing the field development strategy.

Satpayev and Zhambyl blocks are the initial stage of exploration, however, we expect confirmation of essential reserves of raw hydrocarbon deposits. Satpayev structure is being developed under the cooperation with the Indian ONGC Videsh Limited (OVL) with the share of 25% to 35%. Zhambyl Block is being developed in cooperation with the Korean National Oil Corporation (27%).

In the near future, we are going to commence exploration in Abay Block with the Norwegian StatOil; later, at Khvalynskoye and Tsentralnaya structures in the partnership with the Russian GasProm and LukOil. The issues with the Russian state authorities are remaining open. Our plans are to create a partnership with the Italian ENI at Shagala and Isatay Blocks.

Finally, I should note the NC KazMunayGas in 2010 and 2011 opened fields at Liman and Urikhtau structures. They are under detail exploration and evaluation process.

The register of the Ministry of Oil and Gas includes 61 exploration contracts. The geo-

legislative requirements to this aspect will be strengthened.

Kazakhstan does not have access to the open sea. Therefore the export access, mainly provided through pipelines, is essential. This is a map of the existing pipeline system.

The first direction is Atyrau – Samara with the following entry to the Eastern Europe via Russia. The second is CPC with the access via the Black Sea. The third is an operating oil pipeline to China, Atyrau – Kenkiyak, Kumkol – Atasu – Alashankou.

The fourth goes via Aktau port to Makhachkala, Baku and Neka. Then via the Black Sea the pipeline Baku – Tbilisi – Ceyhan goes to the Mediterranean, through SWOP operation with Iran it goes to the Persian Gulf.

With the commencement of the second stage of Kashagan, we expect to launch a logistic route of Kazakhstan – Caspian Transportation System (KCTS).

The third slide demonstrates the actual and forecasted transportation volumes of the exported oil. We have done great work in this field during 20 years of our independence. It includes CPC construction, Aktau port expansion, opening of a conceptually new

**At Tengiz**, we are currently working on the Future Growth Project, which is planned to increase the extraction volume from current 26 million tons to 36 million tons per year.



**We are planning to construct a new oil refinery plant during the period of 2019 – 2020 under the Industrial program.**

route between Kazakhstan and China, enlargement of rail road supplies.

Speaking of a forecasted period, we will be able to provide full export capacities subject to the implementation of all the plans existing. As you know, CPC expansion project has been started, the capacities of 52 million tons per year of Kazakh oil, indicated on the slide, will be supposedly achieved in the first quarter 2015.

A linear section of Kazakhstan – China pipeline has already been completed. The capacity increase up to 20 million tons is the issue relating to the construction of additional oil pumping stations. This project may be easily implemented as the resource base increases. The slide does not include Kashagan production volumes at the second stage, but they are hardly possible prior to 2019. Accordingly, KCTS is not included either. These projects are mutually related.

Thus, considering the potential of the Kazakhstani – Caspian Transportation System

operation, we assume that the issue of the planned export routes is clear. Obviously, each project has some operational, technical issues, which will be solved in a timely manner. We are committed to it. And we see such commitment at our neighbors, partners and investors.

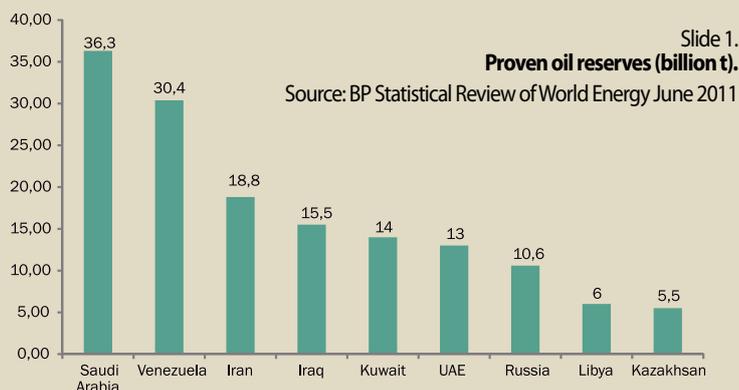
On the fourth slide you see the actual and forecasted dynamics of oil supplies to the domestic market. This volume is processed on three Refineries in Atyrau, Shymkent and Pavlodar. Their capacities are not enough. Today, a part of high-octane petrol consumed domestically is imported. Such dependence on import causes the domestic supplies halting during the fuel crisis or price explosions, as it happened this summer.

Of course, building an open economy requires us following the global price trends. However, we can and must protect the internal market from price surge.

For this purpose, the government, though late, started the implementation of the Program on the expansion and modernization of these refineries. According to this Program, the reconstruction of all three refineries is provided for by 2015. This will, firstly, allow for an increase the refining capacities up to 17.5 million tons, secondly, deepen the oil refining to produce all types of oil products internally, and thirdly, provides for the production of benzene complying with Euro-5 standard. The works on the refineries have already been started.

We are planning to construct a new oil refinery plant during the period of 2019 – 2020 under the Industrial program.

For 20 years the gas consumption increased more than twofold. We expect such twofold growth during next decade.



At the same time the northern-eastern and central Kazakhstan is not gasified. The reason is simple. The gasified regions - where "blue fuel" is produced, including the western Kazakhstan, as well as the regions with historically developed system of gas pipeline, including south Kazakhstan and Kustanay region. Considering our distances and density of population, the laying of main lines is the issue of economical feasibility, especially taking into account a relative price competitiveness of natural gas against coal used in these regions; even despite of the ecological costs relating to its use.

Nonetheless, we keep on reviewing the various options of the gasification of the north and central regions.

We have an internal gasification project under implementation; it is the Beyneu – Bozoy – Akbulak gas line. It will connect the western gas producing regions with the main gas consuming market in the south Kazakhstan, which has a ready infrastructure for gas consumption and, what is the main, an essential growth potential in terms of both industrial development and population.

The gas line construction is based on the matching contribution with the Chinese party. The linear part construction completion is scheduled for 2013. The capacity on the first stage is 5 billion cubic meters per year. It might be expanded up to 15 billion cubic meters due to the construction of the compressor stations (CS). This pipeline can be used as an export pipe to China.

However, as you may remember from the starting slides, the commodity gas production will grow very slowly. Despite, if we produce much more commodity gas due to commercial or technical reasons, as I said before, then we will have a prepared gas transporting infrastructure.

I should note our opportunities and obligations grown on in regard to the gas transit. During the years of independence, we have

been performing our transit obligations rigorously.

In 2010 the Turkmenistan – Uzbekistan – Kazakhstan gas pipeline was put in operation. It has already transported 14 billion cubic meters of gas this year. Its capacity is 30 billion cubic meters a year. We agreed to expand its capacity to 55 billion cubic meters as per China's request. The agreement has been signed. I believe the construction will start this December.

So, the gas industry will remain one of the key industries of Kazakhstan with an essential growth potential in all aspects, including extraction, internal consumption, transit and possible export.

On July 1, 2011 the Agreements on Establishment of a Customs Union unifying Kazakhstan, Belarus and Russia came into force. From January 1, 2012 the Agreements on Common Economic Space comes into force. It means the creation of a common energy space.

What are its main parameters?

- a) National transportation tariff regime;
- b) Free oil products trade;
- c) Regarding oil, we have instated that after 2014 Kazakhstan will supply its domestic market for 100%. It is due to preservation of the various tax regimens, and export duty, in particular;
- d) Transition to a common technical regulation and standards.

Considering that our country is oil exporting, the stability of the supplies will, certainly, improve.

And the last, as you may know, the Head of the State determined the industrial innovative development program as the priority for the next period. In short it means that the material sector can develop. But we are interested in the outrunning growth of the processing sectors, in the Kazakhstani products production with higher value added.

Objectively, these will be the productions aimed at a deeper raw materials processing. In the last year and a half 227 projects with the total amount of investments more than 6 billion US dollars (926 billion KZT) were put into service since the Program implementation.

I would like to make mention of some projects somewhat relating to the oil and gas industry. A part of them is going to establish a principally new branch of the national specialization. It is petrochemistry.

I have already said about the three oil refinery plants. In the frame of modernization of Atyrau Refinery, we already started the construction of the aromatics production complex, specifically, 133 thousand tons of benzole, 496 thousand tons of paraxylene. The general contractor on construction is the largest Chinese Engineering Company, Sinopec Engineering. The Complex is planned to be put into service in December 2013.

**A linear section** of Kazakhstan – China pipeline has already been completed. The capacity increase up to 20 million tons is the issue relating to the construction of additional oil pumping stations.





**Under the modern conditions** it also plays the key role in the processing industry development, implementation of the strategy on Kazakhstan's joining the 50 top most competitive countries of the world.

The construction of an integrated gas chemical complex was also begun. It consists of two stages.

The first stage is establishment of propylene production with the capacity of 500 thousand tons per year. The construction of the facility was begun in 2010. The general contractor on first stage is Sinopec Engineering. The cost of the first stage is about 2 billion US dollars. The agreement was concluded on the guaranteed marketing of the products with Sinopec Engineering and the American Vinmar International Ltd. The construction of the first stage is planned to be completed in 2015.

The second stage is establishment of propylene production with the capacity of 800 thousand tons per year. The strategic partner on the second stage is the South Korean LG CHEM Company. In 2010 the joint venture agreement was signed between this Company and Kazakhstan Petrochemical Industries Inc., LLP and the Memorandum of Understanding regarding the project funding. There is a sales agreement concluded with LG CHEM. The cost of the second stage amounts to 4.3 billion US dollars. The construction is expected to be completed in the fourth quarter, 2016.

Besides, the construction of a plant on production of high-quality paving bitumen meeting the climatic conditions of Kazakhstan with the capacity of 400 thousand tons a year was started on Aktau plant in Mangystau region. The general construction contractors are JSC NGCC KazStroyService and CITIC Construction, LLP. The bitumen plant will be put into operation in 2012.

I finally note that the oil and gas sector have been and remains the basic sector of the fuel and energy complex. Under the modern conditions it also plays the key role in the processing industry development, implementation of the strategy on Kazakhstan's joining the 50 top most competitive countries of the world.

Slide 2.

#### Dynamics and forecast of oil and gas production in Kazakhstan.

Source: Ministry of oil and gas of the Republic of Kazakhstan

	1991	2011 F	2020 F
Oil, million t	25.2	80.4	132.1
Gas, billion cm	7.8	40.5	92.2
including tank gas, billion cm	5.0	26.0	28.6

Slide 3.

#### Export of Kazakhstan oil, million t.

Source: Ministry of oil and gas of the Republic of Kazakhstan

	1991	2011 F	2020 F
CPC pipeline	-	28.0	52.0
Atyrau-Samara pipeline	7.4	15.0	15.0
Port Aktau	4.9	9.0	12.0
Kazakhstan-China pipeline	-	11.0	20.0
Orenburg GPP	-	1.6	-
By rail	0.7	7.4	11.0
<b>Total</b>	<b>13.0</b>	<b>72.0</b>	<b>110.0</b>

Slide 4.

#### Refining capacities of Kazakhstan, thousand t.

Source: Ministry of oil and gas of the Republic of Kazakhstan

Refineries	1999	2001	2011 F	2020 F
Pavlodar	642.0	2021.9	4646.3	6000.0
PKOP	3382.0	3464.2	4672.2	6000.0
Atyrau	1892.0	2109.7	4470.0	5500.0
New bitumen plant	-	-	-	1000.0
<b>Total</b>	<b>5916.0</b>	<b>7595.8</b>	<b>13788.5</b>	<b>18500.0</b>

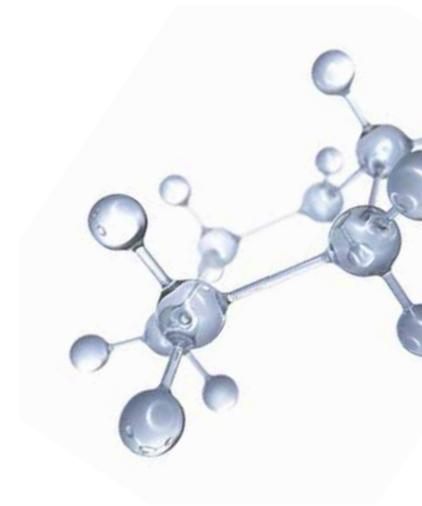


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# Geopolitics of Eurasian Energy: Challenges and New Frontiers

Today the world of energy is experiencing huge change and challenges. It is evident that energy markets are becoming more and more globalised.

**C**onventional fossil fuels are depleting; and climate change provokes us to develop and seek new sources of energy. In the meantime, the Fukushima accident has halted the so-called nuclear renaissance of the early years of this millennium. Moreover, hydrocarbon production has experienced a certain slowdown due to the events surrounding the Arab Spring earlier this year.

**Selim Kunalp,**  
Chairman of the  
Energy Charter  
Conference

According to the International Energy Agency; we are about to live through a golden age of gas. More and more players are now involved on the energy markets. International companies, national companies, states, NGOs, all have a stake in the developments

of the global energy scene. This turmoil brings many challenges that must be met. However, I shall sum them up in one question; how shall we create reliable interdependence between the energy actors in order to be prepared for the energy challenges of tomorrow?

To answer that, I will turn in part to the Energy Charter Treaty. The Energy Charter political declaration was signed in December 1991; between what is now the EU and what was then the USSR. However the Charter now involves more than 50 states including Kazakhstan and other CIS countries, the EU, Japan, Turkey, Australia and others.

The Energy Charter Treaty was developed on the basis of the 1991 Energy Charter. Whereas the latter document was drawn up as a declaration of political intent to promote energy cooperation, the Energy Char-

ter Treaty is a legally-binding multilateral instrument.

The fundamental aim of the Energy Charter Treaty is to strengthen the rule of law on energy issues, by creating rules for a level playing field to be observed by all participating governments, thereby mitigating risks associated with energy-related investment and trade.

The Treaty provides for investment protection and security of transit. It also provides dispute resolution mechanisms, including international arbitration. Over the last thirteen year the Energy Charter Secretariat has also been working on energy efficiency with the Energy Charter Process, on the legal basis of the Protocol on Energy Efficiency and Related Environmental Aspects, signed by 51 states plus the European Union and which entered into force in April 1998.

Although I have been asked to address global energy preparedness, I will first look at the Eurasian continent, where the Russian Federation and the European Union are the important players. The European Union is currently examining opportunities in the Caspian region generally and in Azerbaijan in particular. The Union has other suppliers, such as Norway and Algeria, perhaps Iraq in time, and maybe even Iran in the more long term future, should the political situation change. Russia also has other export markets than the EU, such as China, Turkey and others.

On the Eurasian continent, the key issues relate to gas. The oil market is much more flexible, and most transport takes place by ship, generally on international seas, although difficulties sometimes arise from bottlenecks such as the Straits of Hormuz, Istanbul or Gibraltar or the Suez and Panama canals. Thanks to the installation of numerous pipelines in the 1990s and the 2000s, landlocked oil resources have found their way to global markets. Kazakhstan now supplies oil to China, through the Kazakhstan-China pipeline, to Europe, through the Baku-Tbilisi-Ceyhan pipeline, and to Russia, through the Caspian Pipeline Consortium. It is now time for gas to follow a similar path and to reach the global energy market.

Gas is of particular significance in the context of the Russian-EU relationship.

First, Russia is not only a gas exporter. In fact it uses two thirds of its production for its own needs. Similarly, the EU is not only an importer given that half of its needs are covered by its domestic or quasi-domestic (Norwegian) production.

There is therefore an important synergy between the EU and Russia which is longstanding, stable and profoundly beneficial on both economic and political levels. However like any market, the gas market is an evolving market. I can say without going into detail that domestic production within the EU is in rapid decline. This therefore boosts the need

for imports. On the other hand, on the Russian side, easily accessible gas resources are likewise in decline, which means that large scale and long term investment is becoming vital and urgent.

Pipeline projects, particularly cross-border pipelines, require substantial investments. There are various factors which determine where and how investments are made. Energy investments can only be decided if they make sense economically; that a legitimate return can be anticipated. One of the conditions for this is obviously a reliable stream of energy from production to consumption. Confirmed availability of volumes and confirmed demand is clearly a determining issue. Project financing can only go ahead if there is a clear demand for the pipeline's proposed capacity.

Over the years, forming pipeline consortia has proved to be a very effective and successful tool to secure off-take markets. Such consortia attract the necessary project financing and enable the construction of cross-border facilities. This in turn mitigates the key risks that cross-border pipelines projects are prone to. Each consortium is of course interested in the sound functioning of and economic success of the project. The significance, for example, of the Nord Stream and South Stream projects is the political demonstration that it is not just Russia which is involved, but that the European Union or its particular Member States are also fully committed. It is striking to note that in fact the Nord Steam financing project was over subscribed by 60 %.

The Southern gas corridor is a major policy initiative which EU politicians and energy companies are attempting to bring to fruition by pushing for concrete projects. Central Asia (and the Caspian region in particular) has considerable gas reserves. The challenge is how to transform these gas resources into actual output, and then finding a way of delivering them to market. There are today proposals for competing pipelines such as Nabucco, ITGI (Italy Turkey Greece interconnector) and TAP (Trans Adriatic Pipeline). Apart from the resources of Shah Deniz there is the complex political question of whether gas from Turkmenistan and Northern Iraq might join gas from Azerbaijan in supplying the Southern gas corridor pipelines.

There is the other question as to whether Russia's South Stream might have the po-

**Pipeline projects** particularly cross-border pipelines, require substantial investments.



tential to become a Nabucco “killer” by making the EU flagship project irrelevant. South Stream has a greater capacity than Nabucco, has similar target dates for completion and would largely reach the same Central European clients.

For Europe, building too many pipelines would make little sense. Although they would potentially introduce competition between different suppliers, the high construction costs would also likely inflate prices for consumers. On the business side, returns would be too small to justify several projects, meaning some may have to be abandoned. There are also important political dimensions to consider. Rather than being cost effective, some of the projects can be viewed as political. Such projects do not necessarily make business sense. Some have the avoidance of transit as their rationale. Nabucco is recognised as being of “European interest”. However, other projects which do not enjoy the same status, like South Stream, have received backing from some EU Member States; Bulgaria, Romania, Hungary and Greece. If both were to be launched it is unclear what the position of those countries would be.

All the planned projects that I have referred to, including those of the Southern Corridor and South Stream, incorporate sections of existing pipelines. When all the projects are put on the same map, a clear overlap between several projects becomes visible.

The need for massive investment to meet future energy demand is well documented and set to remain for the decades to come. Cancellation or even postponement would endanger the security of supply and in consequence the economy as a whole. Energy investments are among the most complex and capital-intensive in the world. They therefore require a high level of protection against political risk.

But therein lies the difficulty. Companies such as Gazprom, before investing colossal amounts in new production fields, must be certain that gas will be purchased. This is security of demand. This is a very pertinent question in 2011, and a very difficult one to resolve. Prior to the current economic difficulties security of demand was taken for granted particularly from large consumer markets such as the European Union.

The economic crisis has had a significant impact on energy. The slowdown of industry has reduced energy demand in all sectors: construction, the car industry, services etc. In this context it is noteworthy that for the first time since the Second World War, electricity consumption (and therefore demand) has fallen. The economic crisis has therefore demonstrated that security of demand is also capable of fluctuation depending on circumstances.

The financial crisis, a corollary of the economic crisis, has also had its effects. Inves-



tors have become more cautious, credit is tight and major projects are being reconsidered in the light of these new circumstances. To complicate matters even further, we have seen the spectacular price crash, with a significant effect on corporate cash flow.

The emergence of shale gas on the US market is perhaps an even more significant phenomenon. The lack of suitable technology had previously prevented exploitation of this gas whose existence has been known for some time. Now thanks to a technological breakthrough shale gas is being produced in the US, thus making the North American market self sufficient. Remarkably as a consequence, LNG imports, which were developed by large LNG producers, are now excluded from the very market for which they were intended.

Today, large quantities of LNG, previously destined for the US market, are now available on the world market. There is therefore a surplus of gas, at least on the European market, thanks to this shale gas factor and combined with the fall in demand.

Therefore at this point in time, there is a new, though perhaps not dramatically different situation. It requires all players to review their positions and most likely to consider new policy directions.

This is an almost permanent and regular exercise for the EU. EU energy external policy is dominated by bilateralism; the EU does not yet speak with one voice on this issue. However significant efforts in this direction are now being undertaken.

For its part, Russia is faced with the usual challenges of a supplier; what investments to make, whether and to what extent to develop and LNG industry, which new markets it could develop, etc.

More generally, the events of the last two to three years prove once again that history constantly changes and that nothing is



**Companies such as Gazprom**, before investing colossal amounts in new production fields, must be certain that gas will be purchased.

fixed. This is of course equally true for energy. The strong positions of yesterday are weaker today.

Quite apart from the issues of supply and demand, I must refer to another vital issue, that of transit. Here too, for a long time, Ukraine also enjoyed a quasi-monopolistic position in transiting Russian gas towards the EU. Here too the situation is changing. Nord stream, which was inaugurated last month, will allow the transport, without transit, of 55 bcm, or approximately half the volume currently transited by Ukraine. This particular example illustrates that the various crises which have been experienced, are leading states to seek solutions which avoid transit as far as possible.

All of these issues must be viewed in the context of globalisation. Globalisation will continue and become even more pronounced. Globalisation brings risks and dangers. It also has many potential benefits. To reduce the risks and obtain the benefits, globalisation must be contained. Rules of the game must be defined, accepted and known by the players. Very generally this is the aim of the WTO. More specifically, in the energy context, this is the aim of the Energy Charter which now involves more than 50 states. The Energy Charter Treaty is the only international treaty which sets out the rules of the game.

The ECT aims at developing and implementing frameworks that help the energy actors to be prepared for change on the global energy scene. The Treaty has a special role in bringing together the producer and transit countries and linking them to the main consumer markets for their energy products.

The multilateral approach envisaged by the Energy Charter Treaty makes a contribution to addressing the energy challenges facing the countries of Central Asia and the Caspian region by providing as it does a fo-

rum for states to discuss issues of mutual interest and concern. Experience has shown that dialogue around critical energy issues can do much to promote better understanding, transparency, the exchange of information and, in these ways, contribute to building confidence.

In recent years, we have already witnessed tensions rising to worrying levels over energy projects in Caspian region. Unless addressed, these tensions risk contributing to a worsening of relations between states. On the other hand, a constructive engagement in a mechanism for dialogue does much to alleviate such tensions.

Above all, the Treaty provides a common set of minimum legally binding rules in the energy sector; and it can serve as a means to promote transparency and confidence.

The Energy Charter Treaty aims to establish a positive interdependence between states, laying on strong and reliable relationships. Kazakhstan has been an active member of the ECT since its entry into force in 1998. It notably supported the establishment of a framework for sustainable and secure regional power trade in Central Asia in 2007. The ECT and Kazakhstan have established a long and positive relationship that is beneficial to both of them. Kazakhstan makes a successful contribution to the Energy Charter process and the whole Energy Charter constituency and we very much look forward for such a lasting and fruitful relationship.

In conclusion I would like to remark that it is also clear that in the fast changing world of energy – and perhaps nowhere more than in Central Asia and the Caspian region – careful reflection is required as to whether the existing arrangements for energy governance are sufficient to meet the full range of new challenges. Within the Energy Charter constituency there is already considerable thought on this issue underway as part of a process of modernisation. It is evident that since the Treaty was adopted in 1994 the world and notably the world of Energy in the Eurasian continent have changed in important ways.

This does not mean renegotiating the Energy Charter Treaty, but rather using the considerable opportunities that already exist to strengthen existing provisions and to supplement the Treaty through new protocols and through clarification of the existing Treaty text. Today's challenges point to the need for further creative thinking by all the players. The Energy Charter Process is flexible and ready to respond to new challenges. It is hoped that Kazakhstan will continue to fully participate and will contribute significantly to the development of the Energy Charter Process.

# World mass-media's point of view

Leading mass media from all over the world gathered at one of the biggest events of the global energy industry - the VI KAZENERGY Eurasian Forum. Authoritative experts and VIP speakers discussed such topics as energy scenarios and forecast resources of hydrocarbon raw materials, strategic priorities for oil industry development, development of renewable energy sources. The Forum work was highlighted by the largest international editions and TV channels. We offer you the overview of key world Medias.



The international edition of «The New York Times» - «International Herald Tribune» newspaper published volumetric article entitled «Kazakhstan on the world stage: the KAZENERGY Eurasian Forum». Journalist Charles van der Leeuw, calling Kazakhstan a key supplier of oil, gas, coal and uranium, specifies that the country takes the second place among the CIS countries on attraction of investments, after Russia and ahead of Belarus and Azerbaijan. As evidence the author gives statistics, which implies that the capital investments over the first half of 2011 reached \$ 13 billion, and in 2010, Kazakhstan's economy was estimated at 21.8 trillion tenge or about \$ 150 billion.

The author tried to analyze the reserves of mineral resources and routes of transportation of hydrocarbons. «At the KAZENERGY Eurasian Forum, held Oct. 4 and 5 in Kazakhstan's capital, Astana, Kaingeldy Kabyldin, the chairman of Kazakhstan's state oil and gas company, KazMunaiGas, presented the achievements of the country's oil and gas sector in the past two decades. According to Kabyldin, in 20 years of independence oil export volumes have increased from 13 million to 71 million tons per annum, 4 000 kilometers of pipelines were built. By 2014, oil production is expected to reach 85 million tons, and oil exports 75 million tons» - he

writes. The correspondent of the newspaper also recalled that Kazakhstan is sitting on 15 percent of known world reserves of uranium and 4 percent of coal. The author analyzes the welcome speech of the Prime Minister Karim Massimov, in which the head of government said that Kazakhstan and all other states even now must think about the post-oil era. "Kazakhstan is preparing for 10 to 20 years from now, when its oil production will reach its peak, and beyond. That was the main message of Karim Massimov's speech", - writes Charles van der Leeuw.

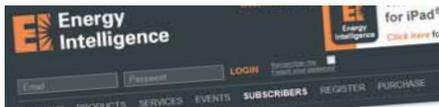
In his opinion, the VI KAZENERGY Eurasian Forum delegates acknowledged that no one type of energy sources can independently meet the needs of the population. «Participants agreed that alternative sources of energy should no longer be seen as competitors to oil and gas, but should be complimentary to them and contribute to energy security around the globe" - sums up the journalist.



The «Financial Times» newspaper published an article by editor of energy section Silvia Pfeiffer, who moderated exclusive conference-dinner named "Kazakhstan on the energy map of Eurasia", and, respectively, had the opportunity to talk with Kazakhstanians as well as foreign experts.

«Twenty years after gaining independence from the Soviet Union – the anniversary falls on December 16 – Kazakhstan is today central Asia's most successful economy. The world's international oil majors, from Chevron and BG group to Eni, have gathered in the country, intrigued by the promise of its mineral wealth. The International Energy Agency estimates its proven oil reserves at 40bn barrels. Foreign direct investment totals more than \$100bn», - the author tells. She recalls 2008, when between a consortium of foreign companies and the government it was resolved a dispute over Kashagan field, and draws parallels with the present situation regarding the Karachaganak gas field. «The government is considering acquiring a 10 per cent stake for between \$700m and \$1.1bn ahead of a third phase of development of the project through KazMunaiGas». The company is owned by Samruk-Kazyna, the country's sovereign wealth fund. «We plan to resolve all of the outstanding issues in the near future (on Karachaganak)... All of those very big projects that require a lot of investment, we have no chance but to agree on how to move forward. We are doomed to agree», - Mr. Kulibayev told the Financial Times in an interview. But Karachaganak, he added, was «a successful project» that has already attracted a lot of investment» - written in the article. The author also gives the views of experts of PFC Energy, which said: "Karachaganak is the only big foreign oil development in Kazakhstan without state participation. It was obvious that KazMunaiGas would at some point come in».

Analyzing the investment attractiveness of Kazakhstan, the projects on construction of NPP and the upcoming «popular IPO», Sylvia Pfeifer writes: «One avoidable issue looming for foreign investors is that of succession. President Nursultan Nazarbayev, who turned 71 in July, has so far refused to name a successor and there is concern about the risk of a power vacuum should he suddenly leave office. Mr. Kulibayev is regarded by many as a potential successor, although, he reckons that this issue is not relevant for the next five years, because earlier this year we had presidential elections».



The weekly specialized publication «Petroleum Intelligence» informs that, despite delays in some major projects, Kazakhstan is still focused on the growth - by 2020 it is planned to produce 2.64mn barrels of crude oil per day and gas production is expected to reach 92.2bn cubic meters per year. «These targets, outlined by Oil Minister Sauat Mynbayev at a conference in Astana last week, were accompanied by an even bolder assertion from the International Energy Forum that Kazakhstan will be one of the world's top five oil producers by 2035, with output of nearly 4 million b/d.», - says correspondent of the magazine Tom Daly. Analyzing the current problems associated with delayed second phase of the Kashagan project, and the possible entering of the national company into the Karachaganak consortium, the author writes: «The recent announcement of an oil discovery on the Caspian Sea N block operated by Conoco and Abu Dhabi's Mubadala Oil & Gas has also underlined the potential of Kazakhstan's offshore, where exploration is continuing on Shell and Oman Oil's Zhemchuzhina, or Pearls, block, on the Satpayev block operated by India's state ONGC Videsh and on state Korea National Oil Corp.'s Zhambyl block».



International analytical magazine «Caspian Energy» entitled the final article on the KAZENERGY Forum as «Kazakhstan - reliable energy partner». «Kazakhstan remains a reliable energy partner in energy sphere», - considers Prime Minister Karim Massimov. During the years of independence of Kazakhstan it was carried out an impressive amount of work to ensure the transportation of oil. According to government, investment to the «Kashagan» are to shrink. Ministry of Oil and Gas of the RK is working out the expansion

project of «Tengiz» field, works on the choice of Khazar field development concept are being conducted», - says the publication. Analyzing the key reports of the VI KAZENERGY Eurasian Forum, the author concludes: «Kazakhstan is actively promoting the technologies to improve the energy efficiency of the economy. In August, the Government approved the Law «On Energy Conservation and Energy Efficiency», which aims at reducing energy intensity of industry to 10% by 2015 and 25% by the end of the decade. The Republic also takes the first steps towards the development of nuclear energy. This June the Government of the RK approved program for atomic power development, which provides construction of the first Kazakh nuclear facility».

Referring to the reports of the Prime Minister Karim Massimov and Minister of Oil and Gas Sauat Mynbayev, the author conducts a detailed review of potential resources on major fields of Kazakhstan and resembles that JSC NC «KazMunaiGas» launched an independent audit of oil reserves. «The audit will be carried out by «Gaffney, Cline & Associates» company on international standards in accordance with the methodology of PRMS (formerly SPE technique) as of December 31, 2011. NC KMG has chosen for an audit the methodology of PRMS (Petroleum Resources Management System - oil resources management system), which is based on the dynamics of development indicators and evaluation of the initial geological reserves by categories», - sums up the edition.



Business magazine «RBC», in an article on oil and gas industry of Kazakhstan, writes: «Today the republic is among the twenty largest producers of black gold, and takes the ninth place in the world by the proven reserves. The share of oil sector in GDP, according to official figures, is more than 11%, the supply of hydrocarbons in the total export - 57%. Almost half of the state budget last year was formed due to the expense of oil rents, and the other funds accumulate in the National Fund, which was created in 2000 on the model of the Stabilization Fund of Norway. By July of this year, it had accumulated 38.7 billion dollars, and this is just the beginning. By 2020, as expected, Kazakhstan will join the top ten of oil exporters. Its deposits in the Caspian region will play an important role in the global energy sector during the nearest 20 years», - highlights the director of the British-Kazakh Society, Douglas Townsend. In his view, there is nothing wrong for the economy that the main revenues come from carbohydrates. Australia and Canada, for example, have risen precisely because of the expense of natural resources. It is not only about their presence, but the

ability to use them rationally. Kazakhstan had chosen the right way as many experts have noted. However, according to journalist Ilya Dashkovsky, the country could become the "raw materials appendage" when the attempt to diversify the economy does not bring the desired results. «Until recently it was said that Russia should learn from the implementation of reforms in Kazakhstan. But soon, Astana will have to find a cure for the curse of the commodity along with Moscow», - sums up the author.



«Energy Forum stresses need for post-oil preparation» - this is a headline of the article in «The Times of Central Asia». «Optimizing productivity, meeting pressures on costs and limiting dangers to the environment have been the three themes around which speakers at the KAZENERGY Forum built their statements this week» - edition informs. Analyzing the current relationships between the government and foreign investors regarding the largest deposits of hydrocarbons, the author predicts the growth of the tax burden in the near future. «The entire state budget for the current year amounts to 1 trillion Kazakh tenge ( close to 5 billion euro according to present-day exchange rates). More than half of that money is spent on social welfare and employment development. For the upcoming year, the budget has to increase by another 30 per cent in order for the state to live up to its commitments. This could well mean that tax burdens, including those for foreign oil, gas and other subsoil operators, is set to increase. This, in turn, means that a search for a precarious balance between national income needs and investment profitability is on top of everybody's agenda – including the KAZENERGY Forum, during which productivity increase and cost control was on many a speaker's lips», - concludes the newspaper.

# Kazakhstani Formula of Success

Twenty years ago in the result of the collapse of the Soviet Union, a new country – Kazakhstan appeared on the world political map.

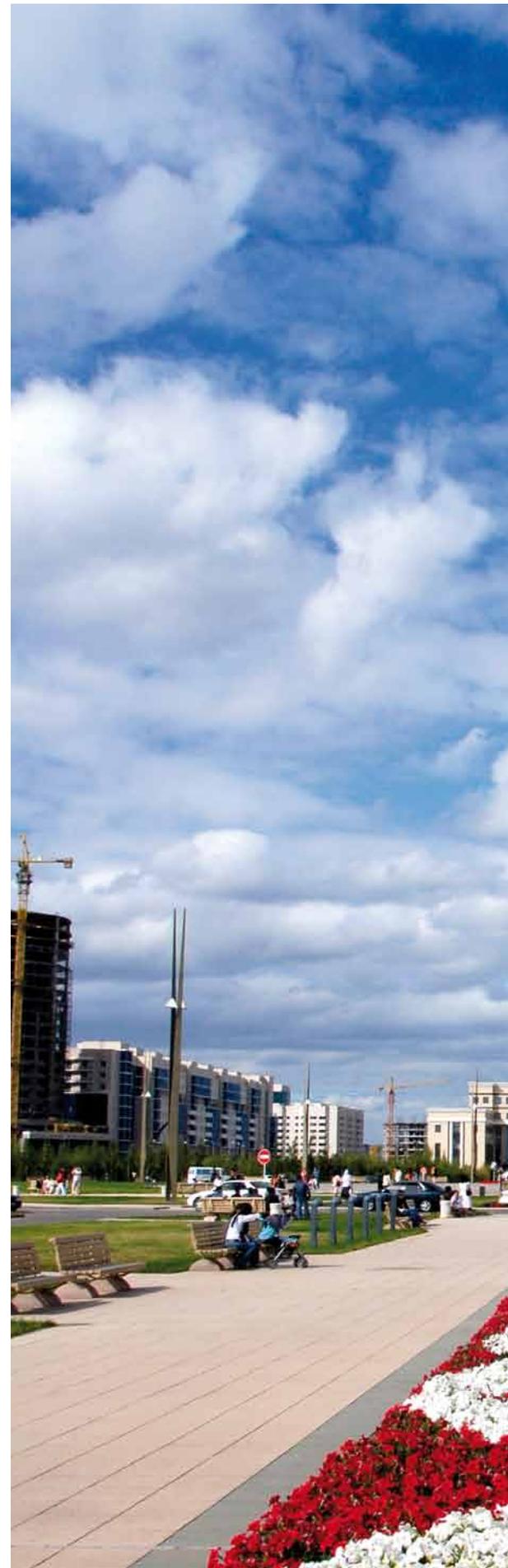


**T**

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Focus

he current year of 2011 is the anniversary for the Republic, main national holiday, the Independence Day, is celebrated on December 16. In 1991 the Constitutional Law “On the Independent statehood of the Republic of Kazakhstan” gave a legislative foundation to young state. From that remarkable date the modern history of Kazakhstan has began.

Among the crowning achievements of Kazakhstan are the stability, harmony and peace in the community joining over 120 nationalities.





The statehood establishment was preceded by rocky years of hard and strenuous work on the formation of a new economical, political and social system, establishment of institutes taking into account the world's advanced economies experience and national peculiarities.

The nation achieved ambitious aims. The bases of the national independence have been confirmed by the territorial integrity and inviolability of the borders, the economy transitioned to a free market development and is actively integrating to the global market.

The principal outcome is the world-wide recognition of Kazakhstan, consolidation of the its authority on the regional and international levels.

**Economical Achievements.** Kazakhstan has become a possessor of impressive indicators in the economical sphere in a relatively short period.

Development of the oil and gas sector is the “locomotive” of the Kazakhstani economy. Rapid development of production and export of raw materials allowed Kazakhstan to overcome the global economical and financial crisis and to ensure high economical growth. The revenues from the sale of raw resources, accumulated in the National Fund, served as “safety cushions” for the economy during the hardest period and allowed the government performing social obligations and implementing various programs.

Today the national economy growth is keeping trending up ensuring dynamic development of the market relations and a consequent integration into the world economic relationships. Privatization has been conducted, effective tax, bank, pension systems were created, as well as entrepreneurship was formed and is actively supported. Besides, in the years of independence a great work has been done on the improvement of the legislative system that meet the requirements of the state with the market economy. Thanks to the energy sector serving as the launching platform for the national economical growth, the state focuses on the development of own high technology production industries, reduction of import of consumable commodities, agricultural products and food industry. The course is taken to the forced industrial and innovative development, industrial diversification in those industries that are able to export products and create the added value. The new industrial policy is aimed at these objectives, to provide for the integrated development of the industrial, agricultural and scientific technological sectors.

Social development is also positively characterized at the current stage. The policy of the improving the nation welfare is being actively implemented. In January 1, 2011 the GDP amounted 9 thousand US dollars per



**Kazakhstan stands committed** to the integration process, as a full member of many international and interregional organizations

capita. In comparison with the GDP in 1994, it is 12 times higher.

According to the classification of the World Bank, Kazakhstan is in the group of the nations with the average income. In the last decade, financial revenues of the Kazakhstani increased fivefold, the average salary increased sixfold, the minimal salary increased 25 times. Such essential achievements make the citizens be optimistic about their future.

Owing to high rates of economic well-being, Kazakhstan is one of the leaders in the CIS. The Republic was one of the first in the post-Soviet space recognized by the European Union and the United States as a country with market economy. In addition, Kazakhstan - the first CIS country acquired the investment rating.

Among former Soviet republics Kazakhstan is considered as the country with the most favorable business climate. It was appreciated by foreign investors. Distinctive is that thanks to its positive image Kazakhstan is keeping a leading position in terms of attracting and implementing investment resources to develop its economy despite of the current tough situation in global markets.

In 2010, the Customs Union of Kazakhstan, Belarus and Russia began operating. Simultaneously the principal documents on creating of the Common Economic Space of the three states were adopted.

The question of Kazakhstan's accession to the World Trade Organization is under review, which directly and indirectly proves

that the country is steadily integrating into the global economy and adapting to a global competition.

**Political Achievements.** Kazakhstan stands committed to the integration process, as a full member of many international and interregional organizations, actively pursuing the policy of integration and entering into bilateral and multilateral partnerships with many countries worldwide.

Through its initiatives it is gradually developing the political, military, economic and trade cooperation with neighbouring and bordering states. The tools of this partnership are the OSCE, UN, EU, CICA, SCO, the Customs Union, the Eurasian Economic Community, the Organization of Central Asian Cooperation, the Common Economic Space, the Organization of Islamic Cooperation.

Historical moment in the early independence was the voluntary renunciation of the world's fourth powerful nuclear weapons arsenal. Closure of the largest testing site in Semipalatinsk is a kind of the guarantee of internal security, and a worthy contribution to global security. In this way Kazakhstan clearly identified the underlying policy of peaceful coexistence, tolerance and openness. The fact that the country is at the forefront of the international anti-nuclear movement has been proven with the event held in the capital in October 2011-the International Forum For the Nuclear-Free World, which was attended by prominent politi-



cians, scientists, including Director General of IAEA Yukiya Amano.

The official Astana raises different initiatives, constructive proposals and mechanisms on efficient cooperation and approaches to generally acceptable ideas on a regular basis. One of such initiatives we would like to refer is the establishment of the Conference on Interaction and Confidence-Building Measures in Asia (CICA), which take a special place in the system of foreign policy of our state representing its trademark on the world political arena. CICA legitimately claims to be the most ambitious interstate project on the continent. Thus, CICA plays the role of a reliable tool for the construction of external "safety fence" of Kazakhstan and for continentalized security and cooperation in Asia.

During the years of independence, the statehood and democracy institutes were established to provide reliable protection of sovereignty and independence. Reformation was conducted within governance system to provide interaction of the legislative, executive and judiciary powers, and a new legislative and legal base was formed to meet the modern international standards.

Stable political situation, interethnic and interconfessional consensus, rational and planned construction of the state are the results of democratic reforms in the country. This means that it is possible to continue the effective implementation of government reforms. In addition, such conferences as the Congress of World and Traditional Re-

**The Programme of the Development Strategy of Kazakhstan until 2030 – basis for all reforms. It defines the main directions and the sequence of tactical objectives.**

ligions, held in Astana, contribute to the maintenance of the peace in the world. The very Kazakh capital played a host the first Summit of OSCE member-states over the last decade. Kazakhstan's chairmanship in the Organization for Security and Cooperation in Europe has brought new waves to activities of the European structures and "revived" it.

Thus, during 20 years of independence under the leadership of the President Nursultan Nazarbayev, Kazakhstan has made impressive progress in economy, state formation and social sphere. The Programme of the Development Strategy of Kazakhstan until 2030 – basis for all reforms. It defines the main directions and the sequence of tactical objectives. The Head of Nation's policy enabled the implementation of complex reforms, sustaining stability and unity of the multiethnic and multireligious society. Today this policy is recognized worldwide as the Kazakh model of modernization, as Kazakhstan's development path.

Due to effective domestic and foreign policies of the President, the Republic of Kazakhstan takes a worthy place in the world community.

# Astana:

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## Symbol of Kazakhstan

Astana, being a dynamically developing capital is a unifying idea for citizens of the country that bursts the progress of Kazakhstan.





**K**

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 Focus**

azakhstani capital Astana (from Kazakh «capital city») is younger than Kazakh state. In spite of it the popularity of modern city increasing day to day. The history of new administrative centre of the Republic begins from 1997 three years after the country's leader

Nursultan Nazarbayev proposed to move governmental hub from Almaty, situated on foothills of the Tian Shan mountain range in the South.

The time has shown that President Nursultan Nazarbayev had taken a wise decision that contributed a lot to the further prosperity of independent Kazakhstan. Undoubtedly, Head of the Nation is a key driver for transformation of Astana into dynamically developed Megapolis. Once, President of Russia Dmitriy Medvedev said that Nazarbayev «has given this city not only his work but also his soul»...

Within less than 15-years period Astana has been changed hugely, from then-provincial town to «the capital from zero» – modern political and economical node of Kazakhstan that blends Western architecture and features of the true East. As it is commonly recognized, Astana became the Central Asia's pre-eminent city. Today, the young capital is growing rapidly as the key administrative and a major business centre of Kazakhstan. Its population has tripled since the move, to over 700 thousand and is estimated to top one million in close future.

Astana has experienced a construction boom on a grand scale, and construction continues apace. It is interesting that currently only 20-30% of the Astana's construction plan, over a total city area of 274 square miles is developed – many major projects are due to be finished by 2012-20.

Prominent architects such as Lord Foster, Kisho Kurokawa and other elaborated the new vision of city, interweaving of megapolis and nature that helped to create a marvel and unique image of Astana distinguishing it from all other capitals worldwide.



### «Astana New City»

– special economic zone with the Industrial park has been established that propose a whole range of incentives for business development. It attracted more than 250 companies that totally invested \$10 billion, including \$4 billion of foreign investments.

The city inspires wonder and is able to charm everybody at first glance. Astana is represented by grandiose, glistening new buildings that dominate the skyline for miles around. Some of them are real masterpieces of art, for instance, 62-metre-high silver pyramid named as Palace of Peace and Reconciliation where Congress for Leaders of the World and Traditional Religions is regularly held, Khan Shatyr megamall – the highest tent on Earth, and the splendid Presidential Palace.

It is also a magnet for investments consolidating its positions as leading business and infrastructure center of Kazakhstan. By the way, the share of Astana in Kazakhstan's GDP (\$150 billion) increased from 1.5% to almost 10%, and industrial output grew more than sevenfold in just a decade.

It is important that the Special economic zone - «Astana New City» with the Industrial park has been established that propose a whole range of incentives for business development. It attracted more than 250 companies that totally invested \$10 billion, including \$4 billion of foreign investments. Such world-known companies, as General Electric, Alstom, Talgo and other, have production assets there. Within the following five years the city will implement 11 large-scaled investment projects worth \$5 billion.

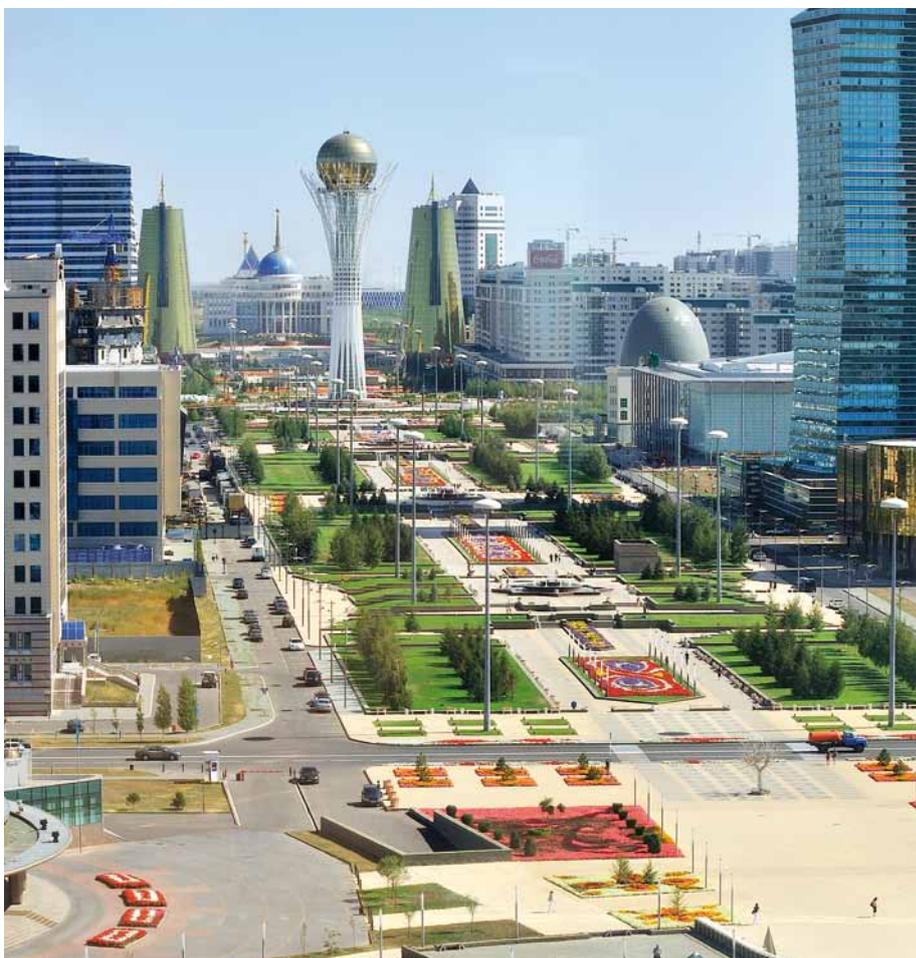
Moreover, Astana becomes step-by-step a leading innovation hub of Kazakhstan, that will burst the industrial and innovative de-

velopment of the Republic as a whole – the long-term strategic objective for the nation. To fully use the innovative opportunities of the capital, «Astana Innovations» JSC has been established that will coordinate efforts in that direction. But a real breakthrough is a creation of Nazarbayev University, opened as a result of the personal initiative of the President of Kazakhstan. It is the leading research, educational and innovative center of the country, positioned to become the national brand, and it has real ambitions to be among top universities of the world in a close future.

Astana strengthens its influence in international activity and is well known as a host place for important international events, including major congresses and forums.

For instance, Congress for Leaders of the World and Traditional Religions, SCO summits and others regularly take place there. Exactly in Kazakhstani capital, OSCE Summit under Kazakhstan's Chairmanship was successfully held – one of the most important international meetings devoted to the matters of strengthening mutual cooperation, trust and global security.

The event - really historic. Representatives of 56 nations have visited Kazakh land in order to participate in OSCE discussions. As it generally known there were no any Organization's conferences over last decade. Kazakhstan's Chairmanship contributed a new breath to existence and policy of the OSCE.



Its role in preventing of wars and resolving of conflicts, supporting of the global security was restored.

Now Astana is bidding to host the Expo-2017 international exhibition. This Expo should be seen as an ideal opportunity to foster economic dialogue with the entire international community concerning sustainable development and business cooperation.

Moreover Astana has made a tremendous breakthrough as an international sport center, having created a modern and high-tech infrastructure for football, ice hockey, cycling and other sports... It was a main venue for 7th Asian Winter Games that took place in Kazakhstan in the beginning of 2011, the name of the Megapolis is also a symbol of «Astana» cycling team that achieved a lot of achievements in international pro-competitions such as Tour de France, Giro d'Italia, etc.

Without doubts, the future is bright for Astana, and it will continue to develop further, being a real evidence of success of independent Kazakhstan.

# OIL GIANT OF EURASIA



The oil industry of Kazakhstan continues the active development: in a foreseeable future the republic will significantly increase the oil extraction as well as proven hydrocarbon reserves.



**D**

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Focus**

uring the years of independent development Kazakhstan entered the list of leading oil producers of the world, possessing the largest oil reserves in the Caspian region.

According to the data of the Ministry of oil and gas of Kazakhstan, the recoverable oil reserves of the country are estimated at 4.8 billion tons, and BP Statistical Review of World Energy – 2011 demonstrates that Kazakhstan possesses 39.8 barrels (5.5 million tons) of proven oil reserves – 2.9% of world's total reserves.

If we say about the decade period, then the significant increase of recoverable oil reserves was obtained: considering the reserves of the Kashagan field – 1,847 billion tons, without them – 586 million tons, while the increase of gas condensate reserves is 25.5 million tons. Recall that about 30 oil fields with different reserves volumes were discovered in the republic in 2000-2010. Among them: Kashagan, Kayran, Kalamkas sea, Khazar, Auezov, Ashisay, Kenlyk, Kardasyn, Severnoye etc.

For the present time, 172 oil fields and 42 gas condensate fields are registered in Kazakhstan, including 80 fields, which are on the development process. It is symptomatic that over 50% of oil reserves are concentrated in 3 largest fields: Tengiz, Kashagan, and Karachaganak. As a whole, the fields are located on the territories of 6 out of 14 oblasts of Kazakhstan: Aktobe, Atyrau, West Kazakhstan, Karaganda, Kyzylorda and Mangystau oblasts. Approximately 70% of hydrocarbon reserves are concentrated in Western Kazakhstan.

Such concentration of geological resources reduces the cost of their development, but the geological features of fields, such as the mode of occurrence, high impurity content of chemically aggressive substances require careful drafting of their operation and significant initial investments.

A high growth potential of hydrocarbon reserves still remains. This is, primarily, due to the fact that at present in some deposits there are held exploratory investigations, works on forecasting and identifying new prospective oil and gas fields, on acceleration of their exploration, development and putting into operation, in particular, in subsurface of Caspian and Aral seas. The growth of resource potential is associated with regional seismic operations held in the Northern, Central and Southern Kazakhstan.

Oil and gas industry of Kazakhstan is still in the zone of active growth, along with the preservation of its high investment attractiveness. One of the favorable factors for this is the positive dynamics of development of a global oil and gas market, stipulating expanded opportunities for products sales in external markets and the availability of excess financial liquidity affordable for investment to exploration and production

Kazakhstan is the second largest state after Russia on oil production among CIS countries. Overall production in 2010 totaled 79.7 million tons, or 104.2% in relation to 2009, of which 71.2 million tons were sold for export. It should be noted that for 20 years of independent development the oil production in the country increased more than threefold. The government expects to increase total production to 95 million tons up to 2015. According to the "World Energy Outlook 2010" of International Energy Agency, in 2020 Kazakhstan will join the world's ten largest exporters of oil and gas - it is planned to produce 132 million tons of oil in the country, including the beginning of active exploitation of the Caspian offshore fields.

Kazakhstan places great prospects for the expansion of production capacity of a number of already existing fields, first of all Tengiz (from 25.9 to 36 million tons per year by 2016), and the commissioning of the Kashagan field (start of production according to the plan – in the end of 2012).

It is worth noting that foreign oil and gas companies from the EU, U.S., Russia, China and other countries are actively represented in the field of oil exploration and production, mainly due to the favorable investment climate of Kazakhstan and openness of the industry for foreign participation. In fact, the very participation of foreign oil companies has allowed Kazakhstan to rapidly introduce into commercial operation such major projects as Tengiz, Karachaganak and others. Until today foreign investors determine the dynamics of oil and gas sector of the country.

For example, 60% of 107 billion dollars of investments to domestic oil and gas sector for the last 10 years fell on projects with foreign companies. These projects have provided a production of about 56 million tons out of 79.7 million tons of oil and condensate produced in the country last year.

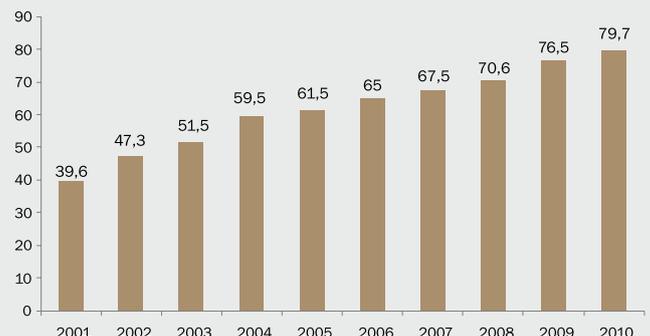


However, Kazakhstan has a priority in the expansion of state participation in oil and gas projects, strengthening the responsibilities of foreign investors in the social sector and local content. The new conditions require from foreign investors a clearer formulation of the investment strategy that takes into account the interests of Kazakhstan as oil producing state and its long-term development goals.

**Over 50% of oil reserves are concentrated in 3 largest fields: Tengiz, Kashagan, and Karachaganak.**

**The dynamics of oil production in Kazakhstan (million tons).**

Sources: Ministry of Oil and Gas of the Republic of Kazakhstan, Statistics Agency of Kazakhstan.





However, these circumstances are not in any way affect the openness of Kazakhstan's oil and gas sector for responsible foreign investors, which is a long-term strategic priority for Astana.

Kazakhstan intends to actively participate in the entire spectrum of oil and gas projects. This is a consequence of the consolidation of the necessary experience and management under the auspices of the National Welfare Fund "Samruk-Kazyna" and the availability of financial resources of Kazakhstan oil and gas companies. For example, extractive "daughter" of the Kazakhstan national oil company "KazMunaiGaz" - JSC "Exploration & Production "KazMunaiGaz" intends to invest to exploration around \$1 billion over the next three years, and capital investments to the main assets will reach to \$2 billion.

In this case, it is also about the country's role in the global market. Kazakhstan is ready for large-scale investments to marketable oil and gas projects abroad. Even now "KazMunaiGaz", providing the state's interests in the industry, has a number of explo-

ration, infrastructure and production assets in Romania, the UK and other countries. Kazakhstan exports the bulk of produced oil primarily by oil pipelines. Over the last decade two new major pipelines for oil exports were built.

First, the Caspian Pipeline Consortium (CPC) – with the length of 1580 km pipeline linking the Tengiz field near the Caspian Sea with the Russian port of Novorossiysk, located on the Black Sea. The CPC, built in 2001, transports about 650 thousand barrels per day, or 32-33 million tons of oil, mostly produced by "Tengizchevroil" and JSC "Exploration & Production "KazMunaiGaz" companies.

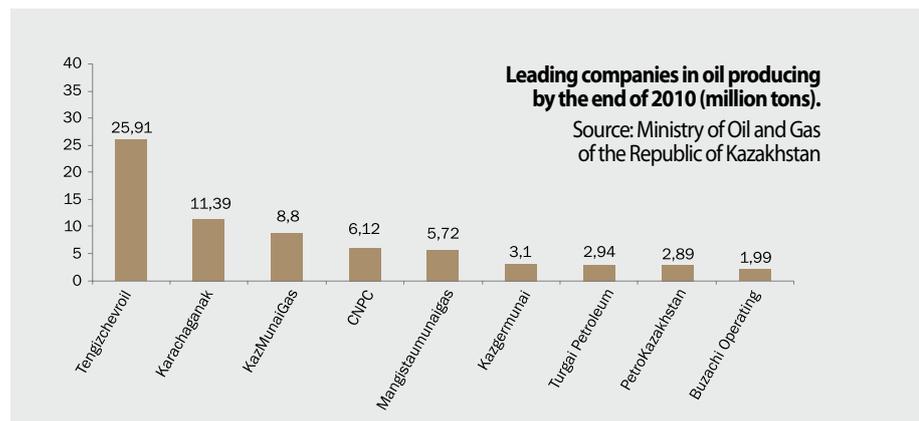
This summer it was started a project on expanding the output capacity of the CPC twice to 1.3 million barrels per day or 67 million tons per year.

Second, the pipeline connecting Western Kazakhstan fields with China. Construction of the pipeline was completed in 2006. In the foreseeable future it is planned to increase capacity from 11 million tons to 20 million tons due to the construction of additional pumping stations.

By the end of the decade it may also be implemented a large-scale project of Kazakhstan Caspian oil transportation system, taking advantage of the capacity of the Baku-Tbilisi-Ceyhan pipeline.

However, Kazakhstan intends to gradually shift the emphasis on the development of the downstream sector in order to increase the added value of products and better provide the domestic market with petroleum products.

In particular, by 2015 Kazakhstan will increase the volume of oil refining of the three existing refineries up to 17 million tons per year in the framework of conducted modernization, estimated at \$3 billion. The present level of production at the refineries is about 13.7 million tons (Pavlodar petrochemical plant - 4.8 million tons, Atyrau refinery - 4.3 million tons, the Shymkent refinery "Petro-Kazakhstan Oil Products" – 4.58 million tons). After 2019-2020, according to industry development program, Kazakhstan plans to build one more refinery.



# Gas Industry of Kazakhstan.

## The growth is sustained

Gas sector of oil and gas complex of Kazakhstan represents one of the principal components of the national economy.

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natural gas has become the more promising energy-carrier for Kazakhstan; the explored and valued reserves of natural gas (with the account of newly discovered deposits on the Caspian shelf) make up to 3.9 trillion cubic meters, and its potential resources reach 6-8 trillion cubic meters.

The peculiarity of the gas reserves discovered is that natural gas is produced along with crude oil and

condensate on all deposits almost and, especially, on the newly developed large deposits. Therefore, active development of these deposits and sharp increase in oil production in the recent years require utilization of the growing volumes of the associated gas produced.

The approximate allocation of total gas reserves of 3.9 trillion cubic meters is as follows: 34.5% are the Kashagan associated gas, 23.2% are Karachaganak gas and 17.3% are Tengiz gas, the remaining part is shared between smaller deposits. According to BP Statistical Review, Kazakhstan possesses significant gas resources with proven reserves of 1.82 trillion cubic meters, which are close to Iraq and Uzbekistan indications. Reserves and production ratios are high as well, which are 69.8 years.

The newly discovered gas deposits are currently related to new oil deposits in the Caspian Sea shelf. In addition to the shelf, there are perspective areas in the Aral Sea. Thus, the real situation on the gas reserves is unclear so far, and may require 10 to 20 years to be clarified, considering technological development of exploration, utilization, processing, extraction increase and production of new gas types.

**Production of Natural Gas.** Among primary energy-carrying resources, the consumption of natural gas in Kazakhstan takes 12% only. The current natural gas production is low. According to the forecasts of the Ministry of Oil and Gas of RK, in 2010 gas production reached 37.4 billion cubic meters.

Taking into account the national gas reserves and significant economical and eco-

logical effect of this fuel consumption, such situation cannot be considered as acceptable. Therefore Kazakhstan purposes to accord special priority to the national gas industry development.

However, the main part of the gas reserves developed is concentrated in oil and gas condensate deposits, which constraints the gas resources deployment. Gas is produced simultaneously with crude and condensate. About twenty deposits contain non-associated gas. This is why up to recent time gas production was a part of the oil producing companies' activity.

Another limiting factor is the complexity of the gas resources extraction.

Almost all forecasted resources locate in the subsalt layers of the Pre-Caspian Lowland and are characterized with the complexity of the extraction due to deep water, multiple components and high concentration of sulfuric compounds. At the same time, deposits with shallow depth and free of sulfuric compounds have moderate gas reserves with high local importance to gasify restricted areas.

Herewith, the long-term Development Strategy until 2030, the Development Concept of the Gas Industry of the Republic of Kazakhstan until 2015 provide for quality changes in a slant on the questions regarding the consumption of the national gas resources available.

After the issues solved on the associated gas utilization as a limiting factor of the crude production growth, the sector of gas production, processing and marketing shall become the primary industry of the national economy development.

In the future, Kazakhstan expects to join the states with the world's largest proven natural gas reserves and to become one of the three main producers and exporters of natural and liquefied gas on the territory of CIS. By 2015, gas production is planned to reach 59.3 billion cubic meters against 7.8 billion cubic meters produced in 1991.

Meanwhile, production of commodity gas will increase from 21.3 billion cubic meters produced in 2010 to 25.3 billion cubic meters in 2011 and to 30.7 billion cubic meters in 2015. Production of liquefied gas is planned to increase from 2 million 245 thousand in 2010 up to 2 million 360 thousand in 2015.

**By 2015**, gas production is planned to reach 59.3 billion cubic meters against 7.8 billion cubic meters produced in 1991.



In the view of the gas production increase, its flaring reduces. For example, in 2006 gas production volume was recorded at the level of 27 billion cubic meters, while flaring was at the level of 3.1 billion cubic meters; in 2008 gas production reached 33.5 billion cubic meters, while 1.8 billion cubic meters were flared; in 2010 37.4 billion cubic meters were produced and 1.4 billion cubic meters were flared.

**Gas Processing.** Since a bigger part of the gas produced is the associated gas, it requires processing on the gas processing plants (GPP) to obtain commodity gas and further deliver it to consumers and enterprises. The largest gas processing plants in Kazakhstan are the Kazakh, Tengiz, Karachaganak and Zhanazhol.

Kazakh gas processing plant, located in Mangistau region, was constructed to utilize the associated gas from Mangyshlak deposits and to supply the Aktau plastics plant with the raw material.

Gas processing capacities at Tengiz were increased after implementation of the Second Generation Project. It is proposed that after the plant reaches its full production capacity, about a third part of sour gas will be injected back to the header, and the remaining part will be used to produce commodity gas, propane, butane and sulfur. In terms of originality and innovation, the construction project on the expensive gas and chemical complex in Atyrau region seems to be interesting. Despite of some delays in its implementation, the government promotes signing of a long-term agreement (13-15 years) for Tengiz gas supply to this complex.

Zhanazhol oil and gas refinery, consisting of three GPP, was built by JSC CNPC-Aktobemunaygas under the gas utilization program implementation. Current capacity of the first Zhanazhol GPP constructed in 1984 and reconstructed in 2000-2003 composes 800M cubic meters per year. Capacity of the second GPP put into operation in 2003 is 1.4B cubic meters, and capacity of the first stage of the third GPP started in December 2007 is 2 billion cubic meters. With this, in the frame of the GPP 2nd and 3rd stages under progress, the volume will compose 5 billion cubic meters per year.

Karachaganak project is being developed by Karachaganak Petroleum Operating. With the view of further development of the Karachaganak deposit, the issue is under discussion on the capacities expansion of Orenburg GPP where KPO supplies its gas for processing. After the operational capacities are expanded, Orenburg GPP will be supplied up to 16 billion cubic meters of raw gas for processing annually during 15 year.

Also, in the near future the commissioning of GPP is planned in Karabatan village, Atyrau region to process the hydrocarbons produced in Kashagan to commodity condition.

**Transit and export capacities.** The dynamic growth of gas production is impossible without a developed pipeline infrastructure. The basis of the gas transmission industries of the country is a transit main gas pipelines across eight regions of Kazakhstan, with the total length of more than 10 thousand km. The main transit lines are Central Asia – Center, Bukhara – Ural, Orenburg – Novo-



pskov, used to transit Turkmen and Uzbek gas.

Kazakhstan has been actively developing pipeline transportation and infrastructure. The most relevant for the gas transportation industry in the republic is the project of reconstruction and modernization of the pipelines, particularly main gas pipeline Central Asia – Center (CAC), which serves the export of Kazakh and Central Asian gas to Russia and Europe.

Besides, in 2009 Kazakhstan – China transit pipeline was built with capacity of 30 billion cubic meters per year, which represents a part of the Turkmenistan – China main pipeline. It has already transported 15.5 billion cubic meters of Turkmen gas.

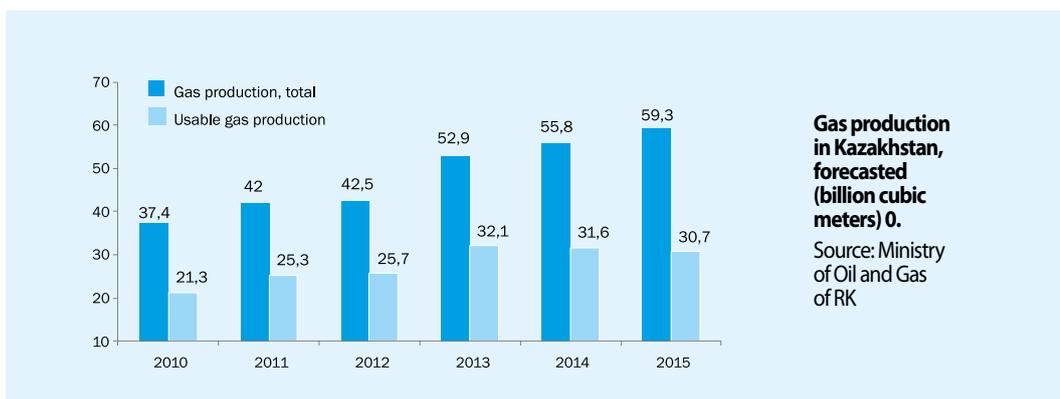
In December 2010, construction started of the biggest national internal gas line Beyneu – Shymkent with the carrying capacity of up to 15 billion cubic meters, which though its 26 branches will provide gas supply to the south regions with the lack of gas.

Today, the bigger part of Kazakh gas exported are produced in Karachaganak (over 6 billion cubic meters in 2010), as well as in Tengiz (4.94 billion cubic meters accordingly).

Kazakh gas is supplied to Russia only. However, after putting into operation of the Beyneu – Shymkent gas line in 2013, there will be another independent direction for external supplies, China may be supplied with 5 to 10 billion cubic meters of Kazakh gas. After the expected expansion of the carrying capacity of the Turkmenistan – Kazakhstan – China from 30 to 55 billion cubic meters per annum, Kazakhstan will expand its capacities as a transit state.

**In 2009**

Kazakhstan – China transit pipeline was built with capacity of 30 billion cubic meters per year, which represents a part of the Turkmenistan – China main pipeline.



# Oil Export of Kazakhstan:



In the years to come, Kazakhstan plans to sharply increase oil export to consolidate its contribution into the global energy security.

## **Kazakhstan is one of the world's principal hydrocarbon exporters**

Unlike other well-established oil production centers, like Norway, Russia, Mexico, Great Britain, a number of the Gulf States, - Kazakhstan will reach the peak oil and gas condensate in the next decade. It means Kazakhstan is the only non-OPEC state with a great potential to increase oil production with an eye to the long-term outlook.

Thanks to the expanded production of hydrocarbons and the implemented policy on the export diversification, within 2000s Kazakhstan managed to sharply increase the scope of oil and gas condensate supplies to external markets.

Thus, in 2001 oil and gas condensate exports composed 32.38MT; in the last year they reached 71.2MT, which is more than two folds. With this, production increased from 40.1MT to 79.7MT, which proves a keeping forward expansion of hydrocarbons export against production.

In the current year, export of oil and gas condensate may stand at 72MT with the production rate of 81-81.5MT. The dynamics of the

first half of 2011 affirms these expectations: January-June oil export scopes increased by 13.1% compared to the corresponding period of the last year.

Kazakhstan has a number of trade partners on oil and gas condensate supplies, which comes under notice.

In particular, last year Kazakhstan supplied oil to 33 world states, the largest among them were Italy (15.94MT), China (9.73MT), France (7.32MT) and Netherlands (6.99MT). This shows that independent Kazakhstan succeeded in the diversification of oil supplies considering a leading role of the European consumers in the total scope of the exported oil.

## **Hydrocarbons export: planned growth**

The perspectives for the export growth of the Kazakhstani hydrocarbons seem to be stable.

Notably, in compliance with the strategic plan of the Ministry of Oil and Gas of RK for 2011-2015, the scope of oil export in 2015 will reach up to 84MT, which is 13MT higher than the last year level. The calculations of the Ministry of Oil and Gas of RK also speak for the growth of the oil export scopes

# new opportunities for growth



up to 110MT as a minimum in 2020 with the production rate of 132.1MT, out of which 33.7MT belong to JSC NC KazMunayGas.

The forecasts reviewed have sufficient grounds, including a number of oil production projects to be introduced and oil expansion through the implemented projects, which will bring state oil export potential to a significant increase.

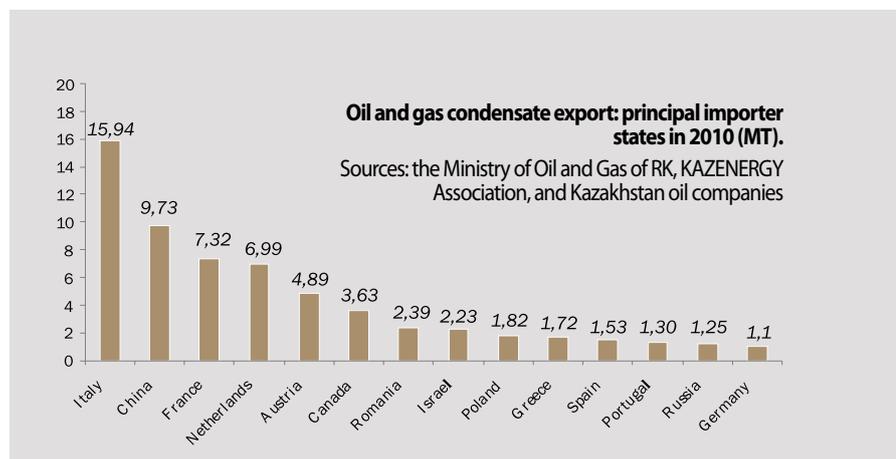
First of all, it mentions the development of the world's largest oil and gas deposit, Kashagan, located on the north-east Caspian shelf. Production of the deposit is planned for the next year end: only in 2015 the hydrocarbons production will reach 14.9MT and 65.23MT in 2020.

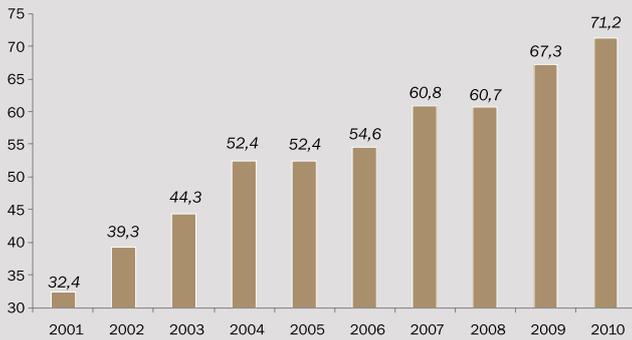
Expectations are prominent in regard to the Tengiz capacity expansion project, valued at 15-20B dollars, which will allow for the oil production increase from 25.9MT to 36MT by 2016.

Also, by 2020 the state export potential will be added with the production commenced in a row of the Caspian shelf deposits.

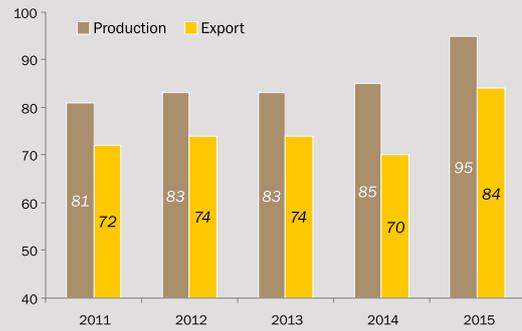
Particularly, by 2020, the annual production of 987KT of oil is planned from Khazar, 675KT – from Kalamkas Sea, 416KT – from Auezov, 816KT – from Rakushechnoye sea,

**The main extraction of natural gas** is conducted in Aktobe, Atyrau, West Kazakhstan, Kyzylorda and Mangistau regions.





**Dynamics of oil and gas condensate export in Kazakhstan (MT).**  
Sources: the Ministry of Oil and Gas of RK, KAZENERGY Association



**Forecasted dynamics of oil production/export in Kazakhstan (MT).**  
Source: the Ministry of Oil and Gas of RK

**Kazakhstan is planning to increase oil export via Aktau port to the Caspian Sea up to 12MT against 9MT of the current year**

453KT – from N block. It is worth to note, that a bigger part of this oil will be exported to Europe, first of all.

**Export Capacity Expansion**

In this context, it is notable that Kazakhstan has taken the course to expand the export capacities purposed at the compliance with the growth dynamics of supplies from the Kazakhstani deposits to the external markets. As of today, the oil transport system of Kazakhstan complies with the transportation requirements both in terms of the carrying capacity and export directions.

The oil companies operating in the Republic have all hydrocarbon export directions at their availability.

The first among them are the oil pipelines going via Russia: the Caspian Pipeline Consortium (CPC) and Atyrau-Samara; the second are the transcaspien overseas transportation via Aktau port and further export via Baku-Tbilisi-Ceyhan oil pipeline; the third is transportation to China via Atasu-Alashankou oil pipeline, which was commissioned in 2005.

Total export capacity of the existing export pipelines makes up to approximately 58MT per annum, and the biggest among them is CPC built in 2001 that carried 28.4MT of Kazakh oil in 2010.

Bearing in mind a zero tolerance to the deficit of export capacities, which are quite real according production increase forecasts, Kazakhstan commenced the implementation of the projects to provide a significant increase of the carrying capacity of the existing oil transportation systems in the next few years.

First of all, commencement of the construction and installation works in the current July purposed at CPC expansion, where Ka-

zakhstan represents one of the main shareholders (20.75%).

Despite of delays related to the lengthy coordination of the project terms between Kazakhstan and Russia, the implementation of the CPC expansion project with the value of \$5.4B will promote the increase of the total pipeline capacity up to 67MT by the first quarter 2015; herewith the Kazakhstan share will grow to 52.2MT per annum.

The scope of Kazakh oil export via Atyrau-Samara in the European direction is supposed to be kept at 15MT until 2020.

Kazakhstan intends to activate the export of oil raw to China, where demands for hydrocarbons are rapidly growing.

In 2011 only, the carrying capacity of Atasu-Alashankou pipeline supplying Kazakh oil to China increased from 10MT to 12MT. In addition, the two states signed the agreements on the pipeline expansion to 20MT, which despite of all is less than the European direction. However, the Chinese export direction will remain as one of the principal directions for Kazakhstan during the next decade.

Besides, Kazakhstan is planning to increase oil export via Aktau port to the Caspian Sea up to 12MT against 9MT of the current year, and rail road export – up to 11MT against 7.4MT accordingly.

Серіктестік бұл біздің Қазақстан Үкіметімен және халқымен 20 жыл бойы қалыптасқан қарым-қатынасымыздың негізі. Біз білім саласына, жұмыс орындардың пайда болуына және қабілеттілікті дамытуға – нәтижесінде Қазақстан қуат көздерінің әлем нарықтарына тиімді жетуіне үлес қосамыз.

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# Land of Opportunities

## KAZAKHSTAN ATTRACTS ENERGY INVESTMENTS

The current turbulence in financial markets makes international investors look for the places, where a decent profit is not undermined by political risks and commercial drops. One of such places is giant Kazakhstan, lying between the industrialized West and the rapidly developing East. Its mineral wealth and ambitious technological development has created huge demand for investment to profit from a combination of these two foundations of economic growth.

by Igor Ivakhnenko





**On the Rise.** Looking globally, we can see that it is already 20 years that this state has been on a stable oil rise, increased its share in the global energy trade due to significant growth of production and the establishment of a branched export pipeline system.

Now the country is at the cusp of entering into the top ten oil producers, by 2020 it is going to be among them; and in a long term perspective it will be one of the “great seven” states with the “black gold” reserves up to the end of the current century.

At the same time, Astana is planning to make 25 times increase in the current production of polymers in the mid-term, and threefold increase in the production of own oil and gas products by the end of the decade. Such growth indicators are a part of the Industrial and innovative development strategy of Kazakhstan accepted in 2010 (at the end of the first global crisis wave), with one of the long term purposes the affiliation with the 50 most competitive world economies, due to rapid industrial growth composing 7% annually.

To achieve the set goals, Kazakhstan oil industry needs foreign investments inflow approximately equal to that obtained during the previous 20 years of independence, which is about \$120 billion. However, it is more obvious that the capital sources structure will significantly change. Before, west companies were recognized as the main investment partners of Kazakhstan, now Astana is actively diversifying the flow of foreign investments through eastern companies.

**Eastern Wave.** Asian investors are actively participating in the Kazakhstan oil market. For example, the Indian ONGC Videsh Limited (OVL) acquired 25% share in Satpayev project from the national KazMunayGas (KMG) for \$80 million. The forecasted extracted resources of this site make up 253 million tons of crude oil equivalent (o.e.), which represents an average scope for Kazakhstani sector of the Caspian Sea (KSCS).

Another group of the Indian companies, including the earlier mentioned OVL, as well as Gail and Indian Oil Corporation (IOC), may enter the North Caspian project for \$6 billion. This project provides for the development of a unique in terms of the reserves of the





oil and gas condensate deposit, Kashagan. Its reserves are valued at 4.8 billion tons of oil equivalent (o.e.).

American Indian negotiations are not completed yet, but if this business project goes beyond the scope, then the tendency of oil industry investments building up by new participants will be more obvious. Out of all agreements, on the Kazakhstan Caspian Shelf development in particular, the two thirds belong to the Eastern and South Asian investors.

**New Resources Attraction.** New investors are attracted to the Kazakhstani market by both global processes, like reduction of resource base on the traditional world oil producing areas, and recent positive news on real business situation regarding the development of KSCS.

It is noteworthy that they are provided by projects with the participation of investors from the Gulf countries. Caspi Meruerty Operating Company BV Consortium operating on Zhemchuzhina block in the north-eastern Caspian, over the past few years drilled a number of exploration wells, each of which was successful. In this project, 55% belong to the Anglo-Dutch Shell, 25% to KMG and the rest belong to Oman Pearls Co. Ltd.

Another company of the Arabian East, Mubadala from AUE, jointly with the American ConocoPhillips (each has 24,5%) and KMG (51%), succeed in exploration of N block. The first exploration well was built in the year beginning, where crude was found and the drilling is going to be continued.

Implementation of the opportunities under the mentioned projects will provide for the crude production in Kazakhstan up to 130 million tons by 2020 from 80 million tons in 2010. in a longer term the increase in crude production will be provided by other off-shore projects growing in number.

The foreign companies' contribution into off-shore projects is growing as well, including the fact that shelf's crude potential is increasing during a long period. In the early 90-s KSCS resources were valued at less than 3 billion tons of oil equivalent. Today they have reached 8 billion tons and keep tends to grow. The dynamics of the ex-

Implementation of the opportunities under the mentioned projects will provide for the crude production in Kazakhstan up to 130 million tons by 2020 from 80 million tons in 2010.



plored hydrocarbon reserves represents the groundbreaking confirmation of the potential. At the end of XX century they equaled zero, but now they exceed 5 billion tons of o.e. Besides, progress in the projects with the participation of Oman Pearls Co. and Mubadala shows a high probability that the explored reserves will grow.

Meanwhile, though the operational activity on the Kazakhstan Caspian Shelf is continuously increasing the scope, the biggest part of potential structures in KSCS remains free. 75% out of 120 oil and gas carrying sites found potential remain unallocated. At the same time expanding the geological research is opening new promising structures that can be hydrocarbon deposits. That is, the resource of the Caspian shelf of Kazakhstan's attractiveness to investors increases from year to year.

This raw material potential receives active infrastructure support for the monetization of energy products. This decade expanding began in the export routes to the West, including the North-Caspian pipeline from 28

million tons to 67 million and the establishment of the Kazakhstan Caspian Transportation System up to 56 million, as well as the East: Atasu - Alashankou from 10 million to 20 and a gas pipeline Beyneu - Akbulak to 10-15 billion cubic meters a year.

The result of these efforts will create a strong well-balanced system of supply of Kazakh hydrocarbons to the world market. That is the preparing of the infrastructure for the export of additional quantities of oil and gas from current and new projects, and preventing of transportation risks is solved with anticipation.

**Deep Processing Revenue.** At the same time, growth in oil and gas reserves and production in Kazakhstan, forming a certain surplus of raw materials in excess of the export trade opens up entirely new possibilities to generate revenue.

The presence of an enormous resource base allows creating the country's capacity for deep processing of hydrocarbons. They will have a significant competitive advantage compared to similar industries in the coun-

tries industrialized, but located far from the sources of supply. In fact construction in Kazakhstan of petrochemical enterprises saves owners of such projects from the millions and billions of constant costs for delivery of raw materials to the processing site. In turn, savings in transport costs increases the return on investment in Kazakhstani oil-gas. And the proximity of the republic to such growing consumers of the products of deep processing as China, Russia, the European Union provides additional benefits in the sale.

It is not surprising that in May this year The Korean Company, LG Chem, and Kazakh public-private alliance Kazakhstan Petrochemical Industries (KPI) signed the memorandum of cooperation in implementing the second phase project of Atyrau Gas Chemical Complex (AGCC) in the form of a joint venture. Korea will provide a loan of \$ 3.01 billion to implement the second phase of the complex to produce 800 thousand tons of polyethylene. Moreover, the Korean-Kazakh joint venture will invest in the project additional \$ 1.29 billion equity. And the



first phase AGKH for 450 thousand tons of propylene is already under construction by another Asian company, Chinese Sinopec Engineering. And to finance this project, Eximbank of China provided a loan of \$ 1.3 billion.

Atyrau project for the production of polymers is one of the largest, but not the only one planned in Kazakhstan. In addition to a number of petrochemical facilities for republic refineries to be constructed in 2015-2017, there are some other plans. For example, a private Pavlodar petrochemical company is looking for partners for a project to increase the production of polymers from 32 tons to 1 million tons.

The number of industrial projects, based on deep processing of hydrocarbons is increasing in Kazakhstan, reflecting the global trend of long-term rise of the market of petrochemical products. After all, if now the global petrochemical industry revenues are about \$ 1.8-2.2 billion per year, by mid-century they will grow to \$15-20 trillion. The increased revenue will not only increase the production volumes of products but also a

steady increase in value. It is obvious that a significant portion of that money will be earned by those market participants, who optimally use the resource and logistical specific of regions when selecting the location of new production capacity. Just like in Kazakhstan...

**Tanks against balance.** Even this brief profile of recent projects makes clear the nature of the new "Eastern" wave of investments in Kazakhstan's oil and gas industry. Foreign companies are trying to secure a comprehensive presence in the market. Most likely, because they consider the state an attractive place to build vertically integrated hydrocarbon business from the crude to the processing.

It is clear that a significant role in the country's investment attractiveness plays its legal and tax climate. A typical example is as follows, the companies from neighbouring Russia this year after the formation of the Common Economic Space have been actively re-registering and transferring their business in the Central Asian Republic. These market participants imply more lenient tax regime and long-term stability of the political situation in Kazakhstan, avoidant national and civil conflicts.

Today, when a variety of national groups of investors are directed to Kazakhstan, it is worth recalling that the businessmen from the Gulf were among the first foreigners who after independence of the Republic saw in it an attractive place for investment and profit from the projects in the energy industry. For example, investors of the Arab East provided the birth of the North-Caspian pipeline in the early 1990s.

20 years later Kazakhstan opens up new opportunities for them. Highly profitable investments in exploration and refining of the stocks of its oil tanks is a good alternative to bank safes, as cash holdings are the most vulnerable part of the capital when the financial crisis is shaking the global economy.

Atyrau project for the production of polymers is one of the largest, in Kazakhstan. In addition to a number of petrochemical facilities for republic refineries to be constructed in 2015-2017



# Western oil companies in Kazakhstan: 100 years of cooperation



O

**Charles van der Leeuw,**  
journalist,  
writer

il started to play a major role in the development of Kazakhstan, and its north-western corner in particular, from 1890 on. In that year, a geologist from Hungary by the name of Grumm-Grizhimalo came to Uralsk and continued where more than a century earlier Peter Simon Pallas and his companions had stopped, by completing the geological map of the Karachungul massif between the rivers Emba and Ural and the salt domes under it. His work did not go unnoticed, and in 1892 the Imperial Geological Institute sent a team of engineers led by a scientist called Nikitin to drill a number of wells in Karachungulsk, Dossor and Iskin. The operation was sponsored by the Ryazan-Uralsk Railway Company, which hoped to earn it back in multiple amounts if oil would be found. At the time, the Nobel brothers operating in Baku had a virtual monopoly on transportation, which went by ship to the nearest railway terminal in Tsaritsa (present-day Volgograd). A direct rail link from new oil fields in the northeastern Caspian province into inner Russia would be highly competitive and thereby highly profitable.

## Financial means

The scheme worked: oil was found in all three areas, and in commercially viable quantities in Karachungul. The oil appeared to be lighter in quality than the one produced in the fields around Baku. However, whereas Baku enjoyed plenty of capital from abroad coming in, the railway company lacked the financial means to build the necessary facilities to open the Karachungul field. Upon this, Grumm-Grizhimalo came back into the arena with the help of two business partners from Germany by the names of Lehman and Doppelmayer.

In 1894, they established the Emba-Kaspiisky company, and with equipment purchased in Germany they completed the exploration phase in the area. In 1899, they offered the Russian authorities to buy the oil fields in order to guarantee the necessary funds for their development. The offer was accepted, and the drilling of production wells started. The seventh well, at a depth of 40 metre, produced a gusher which spit 25 tonnes of crude into the air. This was proof that oil on top of the salt dome structures must be around in large quantities. The very next year, production reached around 5,000 tonnes.

*This year it is a century ago that the first oil operators from Western Europe engaged in Kazakhstan. In 1911, the Nobel family of Sweden, which was already active in Azerbaijan across the Caspian, also obtained a 42.5 percent stake in Emba-Kaspiisky. The same year, the Royal Dutch (now Royal Dutch Shell) made a bid for concessions on adjacent areas to the Russian government. Both companies started working on the fields over the winter. But the deals they struck to get there make 2011 the hundred-year anniversary of partnerships with western oil companies for Kazakhstan.*



## Facing bankruptcy

The series of shake-ups on the world oil markets in the early XXth Century, including a price war against Russian oil producers waged by Standard's Rockefeller, the internal strife for control over Baku's foreign-held oil assets between Rothschild, Shell, the Royal Dutch and the Nobel brothers which in the end was to leave only the latter two present, and finally the uproar caused by the foiled revolution of 1905/'06 did not fail to have its impact on financial markets in Russia, and the northern Caspian oil business could not escape the effects of the overall instability.

Leading western partners, whose assets in Baku had suffered to limited extents only, were the only ones who could provide the financial means to pick up where ventures like the Emba-Kaspiisky, even though there had been little sociopolitical unrest on the spot as such, were facing bankruptcy.

The ones to save the day were the Europeans. By the end of the decade, along with major shares in originally Russian, Armenian, Azeri and Tatar companies in Azerbaijan, the northern Caucasus, the northeastern Black Sea region and the lower Volga province, the Nobel family had also obtained a 42.5 percent stake in Emba-Kaspiisky.

## Ambitious plans

However, it was not before 1912 that they finally started working - virtually alongside the Royal Dutch (now Royal Dutch Shell) which had obtained its concessions on adjacent areas years later, and through direct dealings with the Russian government. "Royal Dutch Shell had beaten Nobel to the Urals by a few months but by the late summer of 1912 the Swede Wannebo and the Russian Kusnezov were organising extensive drilling and pipe-laying operations, working the Nobel parcels selected by company geologist Fegraeus," Nobel family biographer Robert Tolf was to relate in his book "The Russian Rockefellers - the saga of the Nobel family and the Russian oil industry" published in 1976.

"In a climate and setting even less hospitable to exploitation than Baku the pipeline were laid, food and supplies brought in from Astrakhan and transported by camel to Dossor," the book relates. "Huge pits were dug and filled with winter snow to provide water in the summer. Docks were built in Rakusha on the Caspian. As soon as the oil started flowing refineries were added. The finished product was shipped by barge directly to Astrakhan. Both Nobel and the Royal Dutch

had ambitious plans for future development and in 1916 the Emba fields were already the third most productive in Russia. Baku led with 7.5 million tons; Grozny yielded 1.66 million tons, followed by Emba's two hundred forty-five thousand."

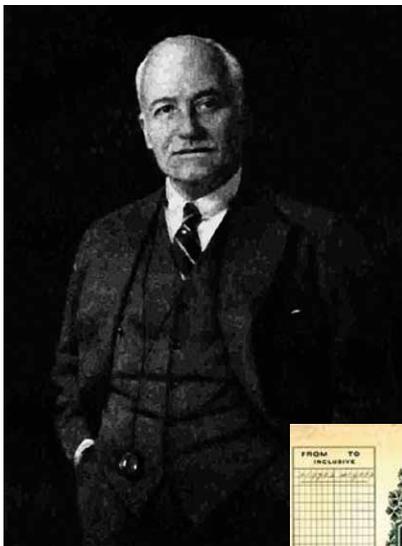
**"An unsolicited opportunity"**

Thanks to their control over transportation facilities towards the north, the Nobel brothers did manage to pick some fruits of their oil field developments for some time, though never to the extent they had done so in Baku. By assuring themselves of transportation and sales facilities from the very beginning, Nobel remained true to its tradition of secur-

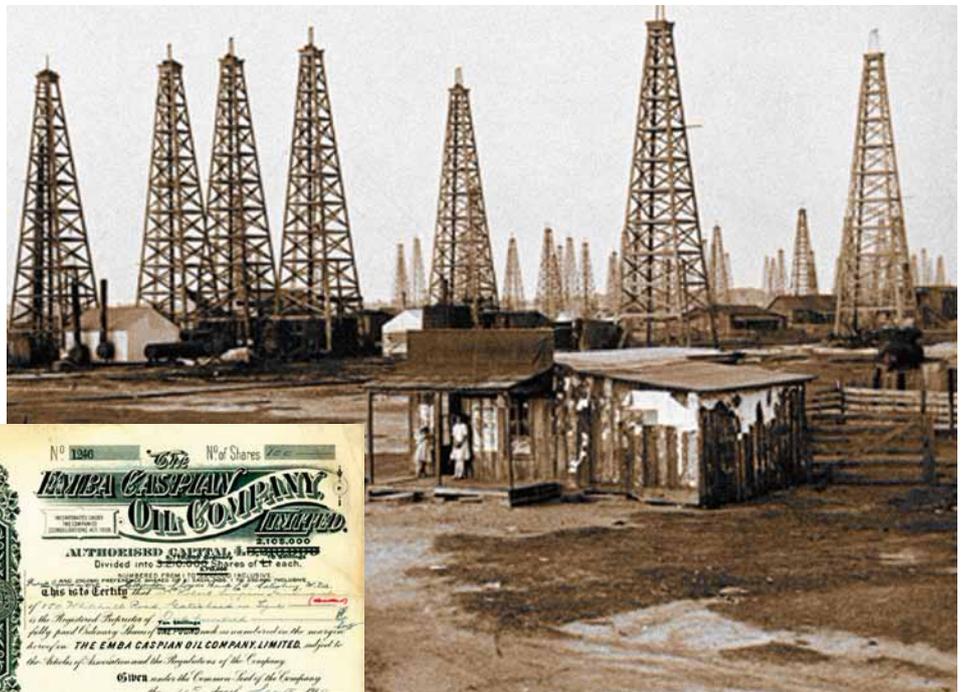
Caspian Sea, the Emba. Here, there existed an exclusive exploration license valid until November 25, 1912, for a site of two million hectares, from which at random zayavkiy, exploration sites of 37.5 dessiatin, could be selected. Oil finds on such a site granted the right to an otvod, or development license in the order of 10 dessiatin.

**British capital**

"The license holder (whether the author refers to the Russo-Hungarian tandem that had been working in the area before remains unclear - ChvdL) had had to confine himself to a number of manual drillings, which did show the presence of petroleum



Henri Deterding



ing markets and production simultaneously rather than the notorious policy pursued by the world's leading oil producers up to this day: pump first, market later.

As for the Royal Dutch, ever dependent on outside trade facilities, this was not to be the case. In his voluminous work *Geschiedenis der Koninklijke* (History of the Royal (Dutch) in six volumes), the Dutch historian C. Gerretson relates to its venture as follows: "In 1911 an unsolicited opportunity was being offered to obtain the supervision of an exploration operation in one of these areas. Beyond the desolate salt steppes of the Caspian lowland, only roamed by Kyrgyz herdsman, on the Mugodshar mountain ridge which separates the basins of the Uralsk and Turgay depressions, there is the source of a river that flows to the northeastern corner of the

without, however, providing results in terms of commercially viable quantities," Gerretson writes. "In 1909, the license holder had transferred his rights to a certain 'North Caspian Syndicate', which in the usual way of participation by British capital in Russian mining enterprise had incorporated them in a Russian company, the shares of which were in the possession of the British 'Ural Caspian Oil Corporation', established in London on April 15, 1910 with a capital of 60,000 pounds Sterling, and out of which in their London issue only a small part had been taken by the public. In May 1911, however, the 'Ural Caspian' managed to hit a powerful gusher near the Dossor salt lake, and this success of course triggered a strong increase of the share value of 'Ural Caspian' as well as protest from numerous Baku companies big and small. The board of the British company decided to seize the op-

portunity swiftly. The license's expiring date drew near, and so it was a matter of utmost urgency to make sure that the supervision over further exploration was to be put into the hands of a group that had sufficient capital, personnel and equipment at its disposition."

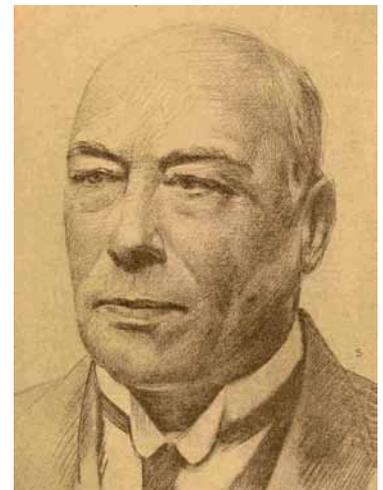
### "Mr. Five-Percent"

It was at this stage where a company consisting of quite familiar names from the ranks of the Royal Dutch, popped up. The most respectable one was that of the son of the company's founding father Jan-Baptist August Kessler, while the most notorious one was that of Calouste Gulbenkian's, the Arme-

### On the world's oil map

The Ural Caspian was meant to serve as a counterforce to Nobel's Emba Kaspiisky, and in the records of Royal Dutch and Nobel both claim the honour of having developed the fields of Dossor and Makat, both situated halfway the Emba and Ural rivers. In spite of numerous appraisal drilling operations elsewhere in the area, including the south bank of the Emba, those two fields remained the only productive ones on the eve of the Russian Revolutions.

Both companies' annals are contradictory, since up to this very day both claim to have been the license holder for the Dossor field. For what it mattered - since the interven-



Frederick Lane

nian merchant son from Istanbul known as the Royal Dutch moth or "Mr. Five-Percent". Inevitable was the name of Henry Deterding, Kessler Sr.'s successor and known as the Napoleon of the oil business.

"The only ones who could provide this on short notice was 'Exchange Chambers', 24 & 28, St. Mary Axe, where Deterding and his staff, to which now also Kessler's eldest son G.A. Kessler belonged, were at the steering wheel of the affairs of the Koninklijke group," Gerretson relates. "Arm-in-arm with the 'big brokers', one knocked on the door here and also this time not in vain. On June 12 1911, an agreement was inked between 'Ural Caspian' and a syndicate that consisted of Deterding, Gulbenkian, Lane and Von Ofenheim. Within the agreement, the capital of the British company was increased to 1,000,000 pound Sterling."

tions of western oil companies was disrupted by the October Revolution. Attempts to get property rights back failed, but the Royal Dutch through the joint efforts of Deterding, Gulbenkian and Krasin managed to compensate for the loss in purchasing contracts at considerable discounts. As for Kazakhstan, the developments of the late XIXth and early XXth Centuries had put the country on the world's oil map once and for all.



Emba field in Soviet times



The Caspian Sea is gradually turning into a major oil region of Kazakhstan. Next year the republic expects to get the first oil from the Caspian shelf.

# Kazakhstani shelf: a new center of global oil and gas extraction



**K**

by Energy  
 Focus

azakhstan sector of the Caspian Sea (KSCS) has the largest hydrocarbon reserves in comparison with other Caspian littoral countries.

In the foreseeable future oil extraction on the shelf will not only significantly increase oil production in

the country, but also strengthen the position of Kazakhstan as an important supplier of hydrocarbons to world markets. So, Caspian oil of Kazakhstan for some extent will be an effective alternative for resources of politically unstable Middle East region and will help to compensate the effects of drop in production in other major oil and gas centers of the world.

Although certain works on the KSCS were conducted before the republic gained its independence, the start year of the full study and development of potential is 1993. Then there was formed the international consortium "KazakhstanCaspishelf", whose work has proved to the world community a huge hydrocarbon potential of the KSCS.

For example, during the years of independence, it was revealed more than 120 prospective structures on it with forecast reserves of 8 billion tons of equivalent fuel, including 4.5 billion tons of oil.

It should be noted that the area of KSCS, proceeding from the geological conditions of the subsurface structure and other terms of the development of water area, is divided into three zones, which are characterized by various oil and gas potential, the conditions of exploration and extraction of raw materials. In particular, in Zone 1 subsalt Upper Paleozoic deposits are the main ones by expected promising resources.

The big and the biggest oil and gas fields were discovered in this zone from 2000 to 2004 - Kashagan, Aktoty, Kairan, now settling down in the framework of the North Caspian project. By the way, after the opening of Prudhoe Bay field in Alaska at the end of 1960, Kashagan is one of the largest oil fields in the world with recoverable hydrocarbon reserves of more than 10 billion barrels. In Zone 2, consisting of Kalamkas-sea, Auezov and Khazar sections, the Mesozoic complex of rocks is considered as perspective. For the current, date the industrial productivity of Middle Jurassic deposits here is confirmed. In zone 3, which includes parts of Rakushechnoye sea and Nursultan (N Block), Mesozoic complex is promising. Designated areas are also distinguished by depth of water, ice and environmental conditions.

Recall that according to the plan of development of the Kashagan field with geological

reserves of 4.85 billion tons in 2010-11 it is provided a conduction of exploration phase, as for 2012-20 years - industrial development. Exploration on Kayran will be held before 2015, on Aktoty and Kalamkas-sea - up to 2017, on Khazar - to 2018, on Auezov - until 2019. On the site of Rakushechnoye sea a search phase will be completed in 2011, on the N block - in 2011-12, and exploration here will be held respectively in 2012-19 and 2013-19 years. The exploration period will be followed by industrial exploitation of oil fields. Also in the near future, Kazakhstan will begin exploration on the Abay block, later - on the Khvalynskoye and Central blocks. However, now, on results of seismic and geological prospecting, oil and gas potential was proved on Khazar, Auezov and Rakushechnoye sea structures.

Kazakhstan has been actively developing the exploration and further production of hydrocarbons on the Caspian shelf in partnership with interested foreign investors.

Now the Caspian projects are represented by such leading oil and gas companies of the world as ExxonMobil, ConocoPhillips, Shell, Total, Eni, LUKoil, ONGC and others. In recent years, foreign investors have invested to the development of offshore fields in our country tens of billions of dollars. For example, investments only to Kashagan were more than \$ 33 billion, the bulk of which goes for capital investments of foreign participants of the North-Caspian project.

Partnership with them has enabled the country to get considerable experience in conduction of offshore oil operations and even today to serve as a co-operator of offshore projects. At the same time, the country has all the potential for self-implementation of large offshore projects. The country has enough for finances and resources, as well as technological capabilities. In the future this tendency will only intensify. Accordingly, a strategy for future cooperation in the implementation of projects in the KSCS is being formed: it must be based on equal partnership, with the gradual strengthening of the role of Kazakhstan.

**Production potential.** The Kashagan, Kairan and Aktoty fields have the bulk of the total hydrocarbon production from KSCS in the longer term.

In 2012 it is planned to produce 568 thousand tons of oil and gas condensate in total for KSCS, in 2013 - 9 124 tons, in 2014 - 13 237 thousand tons, in 2015 - 14 900 thousand tons, in 2016 - 28 930 tons, in 2020 - 65 225 tons. Until 2017 inclusive, the entire volume of oil production will occur in zone 1, while in 2018 - 41 870 thousand tons, and in 2020 - 61 877 thousand m. In this case prior to 2015 will remain the sole Kashagan



**In the future,** during the 2018-19 period, it is scheduled to begin the construction of the Kazakhstan Caspian oil Transportation System (KCTS), including Yeskene-Kuryk pipeline.

oil field operated in the Caspian Sea, in 2016 it will produce 28 million tons of crude oil in 2020 - 59.5 million tons.

Should be reminded that the total oil production in Kazakhstan in 2020 is projected to reach 130 million tons - in fact, on the Caspian shelf will be produced half of Kazakhstani hydrocarbons.

It should be noted that the shelf production is of different technological complexity and high capital intensity. All the more so, the works on the Caspian Sea are complicated by a combination of negative factors such as increased sensitivity of the environment, shallow water, high reservoir pressure, a significant sulfur content in the produced raw materials.

That is why Kazakhstan is interested in access to the most modern, cutting-edge technologies and methods of offshore exploration and production, which will improve the effectiveness of all types of work in the long term perspective.

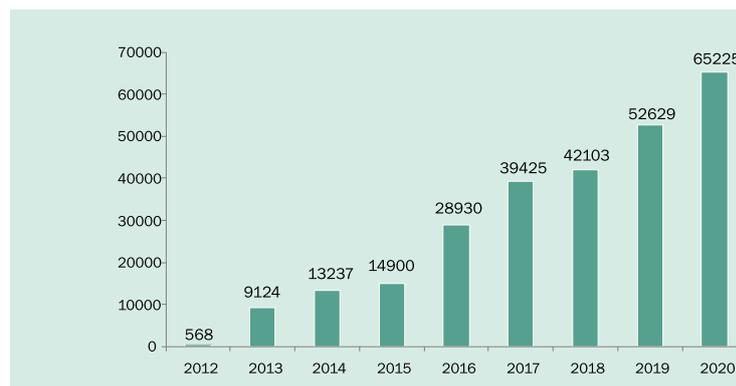
Therefore, the republic pays great attention to the introduction of new technologies to the geological exploration, drilling, offshore fields' arrangement. And international experience shows that intensive use of high effective technologies such as horizontal drilling, enhanced oil recovery techniques, three-dimensional seismic surveys under conditions of development of the "expensive" hydrocarbons allows to significantly reduce the costs associated with their exploration and production.

The creation of an infrastructure to support offshore operations is directly related with the terms and rates of development of structures and fields of KSCS.

In 2020 only at the Kashagan field 18 islands of drilling and production will be built, 3 of which will be built in 2012 as a part of Phase 1 of development of this field. There are already built 17 major coastal infrastructure facilities on the coast of the Caspian Sea, including 10 - in Bautino. Also, the "KazMunaiGas" company in 2011 started to implement a project of building the North-Caspian environmental base on oil spill response, which will ensure the environmental safety of oil production and transportation of produced raw materials.

The capacity expansion of the Caspian Pipeline Consortium can be considered as one of the key infrastructure projects for KSCS (CPC), which began this summer. Already by the first quarter of 2015 its capacity will be increased from 28 to 67 million tons, 52.2 million tons of which will fall on Kazakhstan's quota. As a consequence, the CTC will be a major export destination for oil extracted from Kazakhstan's offshore fields.

In the future, during the 2018-19 period, it is scheduled to begin the construction of the Kazakhstan Caspian oil Transportation System (KCTS), including Yeskene-Kuryk pipeline. KCTS will provide transportation of 25 million tons of oil per year at an early stage through the Baku-Tbilisi-Ceyhan pipeline to the world markets, with a subsequent increasing to 56 million tons.



**Forecast of production of oil and gas condensate on KSCS deposits (thousands of tons).**

The sources: Ministry of Oil and Gas of the RK, operator companies of offshore projects.

# Универсальное решение задач теплообмена



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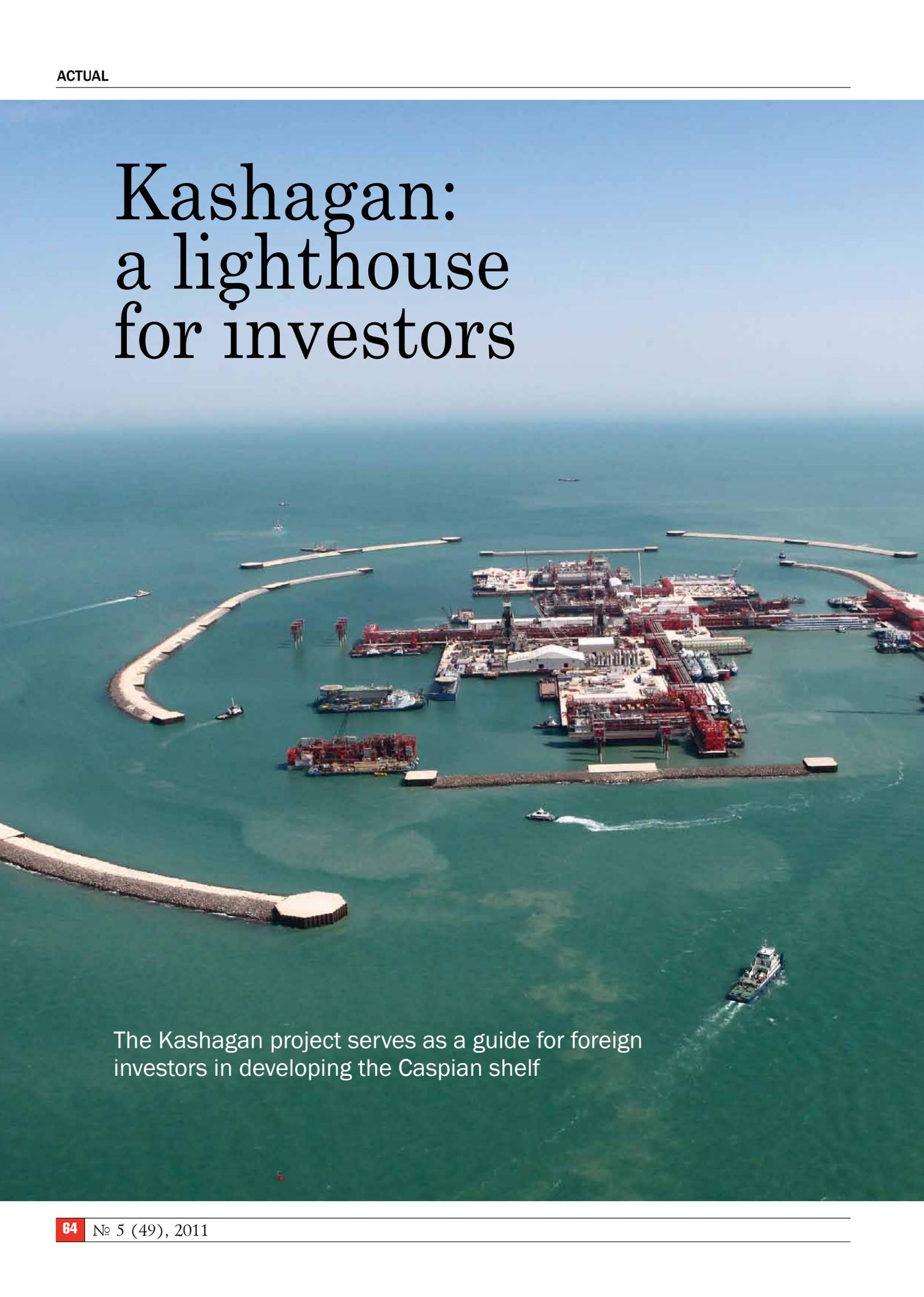
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# Kashagan: a lighthouse for investors



The Kashagan project serves as a guide for foreign investors in developing the Caspian shelf



**A**

**Igor  
 Ivakhnenko**

At the biggest oilfield in the Caspian region - Kashagan - full swing preparing for the start of commercial production is going on. Goal of this project - production of 1.5 million bbl / day, which is one and a half times as bigger than the entire production on the Caspian shelf at the moment. However, the value of the Kashagan goes far beyond even this giant project. International companies are looking at it as a landmark of commercial opportunities in the stormy sea and operational risks of the Caspian Sea. And it seems that the closer the time of receipt of the Kashagan oil, the more investors want to get on the Kazakh shelf.

The interests of companies from different parts of the world came together in one place, most likely for two reasons. Firstly, there are fewer available resources perspective in the global market of hydrocarbon assets, which enhances their value in a more stable way than the prices of futures contracts. Secondly, the largest oil and gas project in the Caspian region - the development of Kashagan - demonstrates the successful development. For investors, the experience of "veteran" who started business from seismic poorly studied area, is one of the most weighty factor in deciding on investment.

**Oil megacity.** Kashagan, located in the northeastern part of the Kazakh shelf, is mastered with International North Caspian consortium (NCC) of seven companies, including the KMG. (See the «Magnificent Seven»).

With amount of its resources, Kashagan is one of the world's largest hydrocarbon reservoirs. Its geological oil reserves are 4.85 billion tons and recoverable oil reserves are estimated in the range of 1.47-1.64 billion. Reserves of liquid hydrocarbons which volume is close to 1 billion tons also supplements condensate.

This mixture that bubbling with temperature up to 110-120 degrees Celsius can be called a kind of fuel "soda" because 800 billion cubic meters of gas with high sulfur content - more than 15% dissolved in Kashagan oil. (Gas is a problem for the Kashagan also being the key to its development).

Gigantic reserves of mine has an adequate amount of terrestrial space. Productive horizons situated here at a depth of 4200 m, and the size of their thickness exceeds 600 m. Add to the picture area of the Kashagan field, which, according to the shareholders, is 75\*45 km or more than 3300 square km. And it becomes clear that in its size field is larger than the territory of some countries in

the world and, at least, looks like an oil "metropolis" of production with its "skyscrapers," fishing "neighborhoods", transport routes and other infrastructure.

In the language of numbers, this means that 240 wells has to be drilled at Kashagan, of which 188 operational, and the rest - the injection for gas reinjection. This field infrastructure will focus on more than 30 islands of drilling and production, combined with upstream pipelines with six operational technological complexes (OTC). The capacity of each of them will be 35 thousand tons per day, and the total - up to 75 million tonnes per year.

Production technology is such that the extraction of oil from the islands mixture will come to the OTC, will separate and then forwarded to the bank for the installation of an integrated oil and gas treatment Bolashak. The resulting gas will be mostly re-injected to minimize sulfur recovery, and to maintain reservoir pressure in the future. And to some extent - come to a recycling plant in the village Karabatan to be used after purification in energy project, as well as in total exports of goods Kashagan, as well as sulfur. Theoretically, the bowels should be injected at different stages of development from 50% to 80% of produced sour gas.

The overall outcome of these efforts for the entire period of field development, which in the North Caspian PSA is scheduled in 2041, should be the extraction of 1.424 billion tons of oil and 87 billion cubic meters of marketable gas.

**Step by step.** In order to get a pie NCC members intend to move forward step by step, each of which provides increased production capacity and technological burden on the region of production. Phase I development consists of several queues combined by technological and industrial principle, end point of which should be the output of the production level of 450 thousand barrels per day. Phase II involves reaching milestone of 1.5 million barrels per day.

For the implementation of each phase NCC has its own operator. Agip KCO (a daughter of Italian Eni) is responsible for Phase I.

Phase II implementation operator is North Caspian Operating Company (NCOC), which includes all members of NCCM, but not every participant has its own area of responsibility. Eni is responsible for ground targets, drilling operations oversees ExxonMobil (USA), the creation of offshore infrastructure and basic engineering - Shell (UK / Netherlands). ConocoPhillips (USA) is responsible for internal audit of the project, and France's Total is the management company.

In addition, KazMunaiGas along with Shell is a joint venture - North Caspian Production Operations Company BV, which has the status of agency companies NCOC, authorized to conduct mining operations and maintenance. This joint venture will operate production in NCC at all subsequent stages. Complicated control scheme of the project involves, on the one hand, the appreciation of the desire of almost all shareholders to play an operating role. And, on the other hand, the unique scale of the tasks assigned to the North-Caspian project. In order to be solved, they must be distributed to curators and stages.

**Master-class Project.** A phased approach to the development of Kashagan facilitates the achievement of several goals. From an economic point of view, this tactic allows the timing of investments, and the approximation of the receipt of profit oil, for up to pay-back the main portion of the proceeds from sales goes to the compensation. In terms of environmental safety gradual increase of the intensity of oil operations reduces the stress of the environment and environmental risks.

And finally, the project participants, carrying out step by step, get the precious experience of technology development of the field, and the ability to apply developments and avoid the mistakes of earlier stages in the implementation of subsequent phases of development of Kashagan. Central here is probably the issue of gas injection: a number of injection wells on the sea-salt mine - a unique case in the global oil industry. In Tengiz - with a similar geological conditions - to minimize the risks, new injection wells are constructed only after working process in the previously drilled shafts. Here two wells were drilled first, and then six more and plans to build 20 new only by 2017. At the offshore Kashagan rate technological safety even higher. The nature of the answer to the question of how to react to the subsoil layers and re-injection, to a large extent depend the prospects and development of the field.

Now at Kashagan Phase I preparation is going on, which includes receiving the first commercial oil in late 2012. For this there has to be drilled 20 wells, built several drilling islands and an OTC, a transport, processing and other infrastructure. This winter has not prevented the development of the project, as has happened in previous years, and now the results look quite noticeable. Artificial islands A and D are built, from which have been drilled, respectively, eight and ten wells. At A ready to use the local hardware, flare and the manifold, the D has multiple modules for oil and two - for gas reinjection. Flowlines and tube racks are also ready, as well as connecting lines to the main systems on land, the construction of Karabatan is due to end.



#### MAGNIFICENT SEVEN

<b>Eni</b>	16.81%
<b>ExxonMobil</b>	16.81%
<b>«KazMunaiGas»</b>	16.81%
<b>Shell</b>	16.81%
<b>Total</b>	16.81%
<b>ConocoPhillips</b>	8.40%
<b>INPEX</b>	7.56%



barrels / day, which marks the realization of fisheries, commercial and technological objectives of Phase I. The way they will be resolved at this stage, will largely determine the future course of development of Kashagan. And also becomes a kind of "master class", which Kashagan operator will hold for members of other marine projects.

**Kashagan is paving the way.** The second half of this decade looks qualitatively as a new stage for development of Kashagan, and to develop the oil resources of Kazakhstan's sector of Caspian Sea. If Phase II will be implemented according to plan (see «Partners are discussing the price»), then from 2016 to 2020 oil production at the field will increase from 28 million tonnes to nearly 60 million, which requires 75 wells to be drilled. In the longer term, i.e. over the next decade, the shareholders will build 93 more wells, and will raise annual production to 75 million tonnes

Starting from 2016, the development will include the new fields of Kazakhstan shelf - first Kairan, in 2018 - Aktoty and Kalamkas-sea (subsoil user for all - NCC), in 2019 - Khazar, in 2020 - Auezov (a consortium of EP, Shell, Oman Oil), Shell sea and H (Alliance KMG, ConocoPhillips and UAE Mubadala Development Co.). In the next decade may other marine projects in Astana, including those agreements which were signed this spring - "Abay", and "Satpayev, may enter into the production stage.

But it is likely that marine subsoil users in Kazakhstan, building their business models, will scrutinize not only the production experience of NCC at Kashagan, but also sales policy and the consortium as a guide when choosing their own export routes. Representatives of the NCC previously stated that for Phase I they believe in the priority of the North-Caspian pipeline (better known as CPC) and Atyrau - Samara. The first one starts phased expansion of capacity from 28 million this year to 67 million tonnes in 2015, the second can at any time to increase pumping from 15 million to 17.5 million tons per year.

However, the interesting thing is that the consortium (reported by sources close to it), also began to study options for export by pipeline Kazakhstan - China, whose capacity after 2013 will double to 20 million tons; and of the Kazakh Caspian oil transportation system required after the start of Phase II.

Certainly, export "pressure" of Kashagan oil greatly help the progress of new pipeline projects in various areas of Astana. And thus pave the transport routes for the next wave of marine operators. Kashagan "pioneer" on the shelf will be a guide for them in the export of Caspian hydrocarbons

**Now at Kashagan**  
 Phase I preparation is going on, which includes receiving the first commercial oil in late 2012.

If at Kashagan everything will go according to plan, in 2012, a consortium will produce almost 0.57 million tons of oil. A year later, production will rise to 9.12 million, in 2014 will rise to 13.24 million tonnes, in 2015 - up almost to 15 million. Increase in production will provide two lines of work: drilling of new wells (13 in 2013-2014 years), and injection of 50% of the extracted gas. While not as a way to enhance oil recovery, but as a means of disposal of hydrogen sulfide impurities that impede commodity production of oil. At the same time year 2015 has to become a landmark for the development of Kashagan. Although the annual volume of production during his rise slightly, more than doubling of production well stock is planned- it will increase to 67 units. And the end of 2015 production levels will reach 450 thousand

# Green Energy of Kazakhstan



During the recent years, Kazakhstan has been positioning the renewable energy sources (RES) as one of the energy complex vectors. This is evidenced by the increased attention paid to the process of their implementation by the government and a number of business structures. However, the formation of a stable complex of the renewable energy sources in Kazakhstan stipulates significant financial and technological investments with the direct involvement of the government, without which the renewable energy remains at virtual zero.

**The Renewable Resources.** Kazakhstan possesses sufficiently large potential of renewable energy resources.

For example, according to several studies, the gross hydro-potential of the Republic of Kazakhstan is roughly estimated at 170 billion kWh/year, technically possible to implement is 62 billion (economic - 29 billion, of them in use are 7.4 billion kWh/year).

To date, the share of HES in the structure of generating capacities of Kazakhstan is only about 12.3%. This figure is significantly lagging behind the developed countries. Moreover, 68% of the hydroelectric power generating facilities have worked for over 30 years. The implementation of several largest HES projects will bring certain progress in

the next few years: Moinak HES with the installed capacity of 300 MW, Kerbulak HES of 49.5 MW, Bulak HES of 68.25 MW.

Despite the considerable potential for the development of large HES, Kazakhstan may well learn from the development of mini-hydro power stations, which were partially tested in the Soviet period. It is indicative that the economic potential of small hydro-power stations is estimated to reach around 7.5 billion kWh/year. On the basis of studies, the potential is possible to realize of at least 480 projects on small hydropower stations with 1.868 MW general introduction capacity (8510 GWh, average annual electricity generation capacity).

In turn, the wind energy potential in Kazakhstan is estimated to be from 0.929 to 1.82 billion kWh / year. Studies conducted in the framework of UNDP project on wind energy, show the presence of average annual wind speed at 6 m/s in some regions of Kazakhstan with a total area of 50 thousand square kilometers. This makes them attractive for wind power development. The most significant wind resources are in Zhungar corridor (17 thousand kWh / sq. m).

It is notable that in March 2011 in Zhambyl region, Kazakhstan the implementation of major projects was launched, namely Zhanatasskiy (400 MW) and Shokparskiy (200 MW) wind energy systems (WES). The amount of investment in their construction will account approximately \$1 billion.

By 2014, the state-sponsored construction of the WES is assumed: in the Shelek corridor, the installed capacity of 51 MW, WES in the Zhungar gate (50 MW on the first stage), WES in Ulan area, East Kazakhstan (24 MW) and a few others.

Potentially possible development of solar energy is estimated at 2.5 billion kWh / year.

Despite the fact that Kazakhstan is located in the northern latitudes, the potential of solar radiation on the territory of the Republic is quite significant (accounting for 1.3-1.8 MW / h per 1sq. m. / year, the number of sunny hours per year is 2.2 - 3 thousand). In addition, solar energy can be used not only to generate electricity but also heat, which stipulates the possibility of introducing the point solar installations, including areas remotely located from the main electricity and heat supply.

Commissioning of the solar installations is envisaged by 2015 with the total capacity of 91 MW, mainly in Almaty region. At the same time, Kazakhstan is taking practical measures aimed at creating a manufacturing base to produce silicon and photovoltaic cells required for solar energy development. It should be noted that the use of bio-fuels possesses a certain reserve. In particular, up to 35 billion kW / h of electricity and 44 million Gcal of thermal energy can be obtained annually through the processing of agricultural waste.

**Hydro-potential**  
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**Current Trends.** In fact, the necessity to lower negative impacts of energy on the environment is the key factor of RES in Kazakhstan, as well as worldwide.

In particular, in 2009, the data of the Ministry of Environmental Protection shows that emission of air pollutants composed 3.4 million tonnes, of which 85% are done by 43 large enterprises.

At the same time it is the share of energy that accounts for 87% of total national emissions of greenhouse gases, or 214.4 million tonnes of CO<sub>2</sub> equivalent. Recall that currently up to 85% of total electricity in Kazakhstan is produced by burning of fossil fuels, mainly, local coal, and of hydrocarbons to a lesser extent. About 10% of the country's emissions from stationary sources and the formation of a significant portion of toxic waste account on the enterprises involved in production of crude oil and associated gas.

The overall reduction in greenhouse gas emissions from energy enterprises when using renewable energy sources can be from 500 thousand tons to 2.5 million tonnes of CO<sub>2</sub>.

In addition to the environmental advantages, there are significant economic benefits. In particular, the use of renewable energy to generate and supply electricity to the exist-



**Comparative share of renewable energy sources to total energy consumption, % (excluding HES).**

Source: Ministry of Environmental Protection of the RK



**The wind energy** potential in Kazakhstan is estimated to be from 0.929 to 1.82 billion kW / year.



ing energy networks may be cost-effective in energy-deficient regions of Kazakhstan. At the same time it is the renewable energy that can be the key factor in the development of remote regions.

However, it is objective that the objects of renewable energy are much less profitable and more capital-intensive than the traditional ones. The private business is quite sceptical about the use of renewable energy sources, including due to lack of awareness and lack of experience in their use. This requires a selective approach to their implementation, while attaches particular importance to public sector support.

Despite the measures taken at the national level, the renewable and alternative energy sources (excluding large hydro power stations) are not developed in Kazakhstan. Until now, the Republic has not implemented a single major project in this area, despite several attempts of construction, in particular, of wind power systems.

For example, according to the Ministry of Environmental Protection of the RK, the share of alternative energy sources to total electricity generation in 2010 amounted to only 0.03%, according to the Ministry of Industry and New Technologies of the RK it is 0.46% (including small hydropower systems). According to the Kazakh Research Institute of Energy named after S. Chokin the operating power of the renewable energy sources are mainly presented by several mini-hydro power stations.

This is dramatically lower than the level fixed by the development of renewable energy in the developed world. For comparison, even in Russia, which is among the world's outsiders on the use of the advanced renewable energy sources, their share is fixed at 1% of total electricity production, while the share of thermal energy produced at their base is reaching about 3%.

Given the energy produced by large hydroelectric power stations, the share of renewable energy sources in the energy of Kazakhstan is about 12.3%.

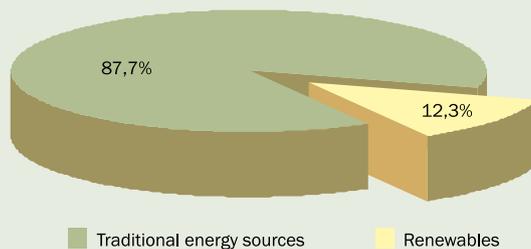
**State Support Priorities.** Certain hopes may be associated with the adoption in the past few years of a number of legislative and industry programs aimed at supporting renewable energy sources.

Even now we can talk about an increasing investors interest, including foreign investors (primarily China and Germany), to the renewable energy sources projects in Kazakhstan, due to the adoption of the key provisions in the national legislation.

Kazakhstan was the first Central Asian country to develop a strategy for the transi-

**Share of the wind energy stations (including large HES) in Kazakhstani energy industry.**

Source: Ministry of Industry and New Technologies of the RK.





tion to a low carbon economy, devoting to the renewable energy as well.

For example, at the Climate Change Conference in Copenhagen in December 2009, under the Kyoto agreements Kazakhstan adopted a voluntary commitment to reduce greenhouse gases by 2020 to 15%, by 2050 - to 25% compared to 1992 level. In particular, within the framework of the industrial program "Zhasyl Damu" in the years of 2010-14 it is provided for the reduction of emissions compared to 2009 by at least 5.9%.

The Law of the Republic of Kazakhstan "On supporting the use of renewable energy sources", adopted in 2009 established the legal, economic and organizational basis for promoting the use of the renewable energy sources for electricity and thermal energy production and determined the measures of their support.

In particular, the law provides for the granting of investment preferences for RES projects, prioritizes the use of "clean" electricity on the market and its transmission over the

**Kazakhstan is located** in the northern latitudes, the potential of solar radiation on the territory of the Republic is quite significant (accounting for 1.3-1.8 MW / h per 1sq. m. / year, the number of sunny hours per year is 2.2 - 3 thousand).

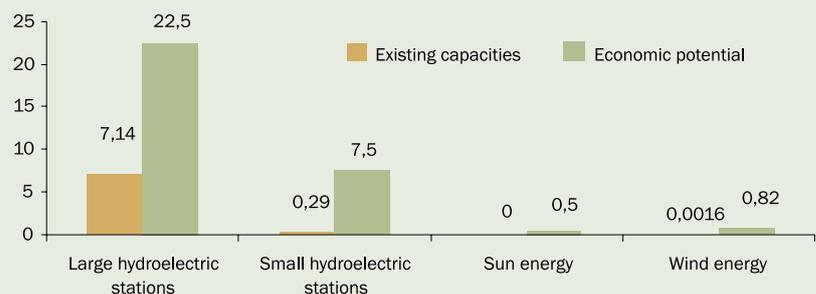
networks, as well as support through the certification system which is controlled by the state.

In accordance with the Strategic Development Plan of the Republic of Kazakhstan until 2020, the share of the alternative energy sources in the total energy consumption should reach 1.5% by 2015 and more than 3% - by 2020 (compared to the EU - 20%, Russia - 4.5%). The priorities of the State Program for the Forced Industrial-Innovative Development of Kazakhstan in 2010-14 provide for the output volume of the electricity generated by renewable energy sources in 2014 at the level of 1 billion kWh / year.

Recall that according to the Electrical Power Development Program in the Republic of Kazakhstan for 2010-14, the electricity generation in 2014 will reach 97.9 billion kWh / h at the forecast consumption of 96.8 billion kWh / h. The total investment in the renewable energy sources projects may exceed 107 billion KZT (over \$720 million at the current exchange rates), including own funds of 21.4 billion KZT and loans of 85.6 billion KZT.

**Renewable energy resources in Kazakhstan (billion kWh).**

Source: Ministry of Industry and New Technologies of the RK, Energy Focus.





# Wind power of Kazakhstan: Looking Ahead

Every year the interest in wind energy as one of alternative energy types is growing worldwide.

**T**here are a number of objective factors of it. The resources traditionally used in modern energy - coal, oil, gas and uranium - are non-renewable, and aside from the fact that they will run out over the long term, now they have a stable tendency to rise in prices. Accordingly, the cost of electricity generation by conventional

by Nurlan Suymenbayev, analitic

methods increases from year to year. The development of modern technologies leads to a cheapening of the production of wind energy. And here we are talking not only about the process of construction of wind power plants, but also the establishment of effective systems of power distribution, which in this industry is one of the most important factors. Currently, in some countries the cost of electricity generated from wind equalizes the cost of electricity generated from coal-fired power plants.

Wind energy is clean and safe (compared to NPP) energy type, and in the modern world this fact is obtaining an increasing importance. In addition, wind energy besides its inexhaustibility has a great potential. Wind energy reserves are more than one hundred times greater than the reserves of energy of all the rivers on the planet.



**44 percent** of exploited wind power plants are in Europe, 31 percent-in Asia and 22 percent-in North America.

Because of the high manufacturability of the industry the development of wind power currently remains the prerogative of industrialized countries, which also are dependent on the import of traditional energy resources in a greater extent. So, currently, 44 percent of exploited wind power plants are in Europe, 31 percent-in Asia and 22 percent-in North America.

Assessing the prospects for development of wind energy in Kazakhstan it may be said that achieving a significant share of wind power in total electricity production of the country is the issue of a long term.

Geographical and, accordingly, climatic conditions in Kazakhstan characterized by large lowland surfaces and relatively stable wind flows are favorable for the development of wind power. According to research conducted in the territory there is a great range of areas where the average wind speed exceeds 5 m / s, which is the critical threshold for the work of wind power plant. It is important that many of them are located close to regions with high power consumption (Almaty, South Kazakhstan, West Kazakhstan and North Kazakhstan). But this is all about a theoretical point of view.

In practice, there are several problems that prevent the development of wind energy at sufficient measure from the industrial point of view, and not only in Kazakhstan but also

worldwide. The main one - impermanence of electricity generation. Even with average annual wind speed of 5 m / s situations with the failure of electricity generation in the absence or insufficient wind velocity are unavoidable.

And as electricity has a global technological problem - impossibility of its accumulating in sufficient quantities, the energy failures must be either regulated or compensated in a timely manner. This aspect is extremely important for industrial companies, whose share of energy consumption in Kazakhstan is almost 70%, and they cannot build a production cycle, focusing on the weather forecast.

There are created complex systems aimed at the balance between production and consumption of energy in Western countries, where the proportion of wind power is substantial. Naturally, this leads to increase in the cost of production and distribution of wind energy. In addition, such systems are effective, if only the proportion of wind energy in the total amount does not exceed 10-15%. Keeping this in mind, without additional risks for the energy system Kazakhstan theoretically could build wind power plants with total capacity up to 2 thousand MW, but no more.

Another way - the creation of reserve capacities. That is to say that, in fact, each

wind power plant requires the creation of duplicate plant running on traditional energy sources. And given the fact that the coefficient of wind generator inactivity is estimated to exceed 50%, half of the time the duplicate station is to be run.

The question arises as how much it is expedient to build and subsist two power plants instead of one? This can be justified when the cost of natural energy resources (coal, gas, oil) is high and savings from the use of wind power are essential. In Kazakhstan, which is rich for natural energy resources, such savings are unlikely to be possible. That is, for example, if you compare the costs associated with the burning of coal and the costs associated with the construction of wind power plant with the free use of wind - the benefit is for coal.

The cost of electricity production also is in favor of the economic feasibility of development of thermal power plants in Kazakhstan. So, according to some estimates, the cost of wind energy in Kazakhstan by optimistic forecasts may reach 10 tg / kW. While the cost of electricity generated by Ekibastuz hydro power plant - 3.6 n / kW-hr, and purchased in Kyrgyzstan - 4.2 tg / kW. Peculiar competitor to the development of wind power plants are nuclear power plants. For the development of a full nuclear industry Kazakhstan possessing the world's second largest reserves of natural uranium needs to develop nuclear power as an additional source of demand for mined uranium. In this respect, Kazakhstan is taking more concrete and specific steps. Besides, the cost of nuclear electricity is much lower than wind power costs, not to mention other benefits.

We see that there are no economic benefits of using the wind power. Nevertheless,

Kazakhstan is trying to enter the global mainstream on development of alternative energy sources. It is necessary from the perspective point of view. No one doubts the fact that in long term energy will continue to move away from traditional fuels. However, for the present, the development of wind energy is impossible without state support. This is the path followed by all the developed countries where the use of wind energy is directly stimulated by the state, with both economic and administrative methods.

Kazakhstan has just outlined its steps in the same direction. For example, in 2009 a law "On supporting the use of renewable energy sources" was passed. In accordance with the approved program on development of electric power, the share of using the renewable energy sources in total energy consumption will be more than 1.0% in 2014. Given that the total production capacity of electricity in Kazakhstan makes up 19 thousand MW, wind power production could reach 190 MW, which is a capacity of one wind power plant. As a result, we can say that the development of wind energy in Kazakhstan in the near term will depend entirely on government support. But even in a positive development scenario, it will be only of experimental character, which in itself is a significant progress, contributing, at least, to accumulation of learning and technology. For the present time there are no real commercially reasonable preconditions for large-scale commercial development of wind power.

### The cost of electricity

production also is in favor of the economic feasibility of development of thermal power plants in Kazakhstan.





## ПРОФЕССИОНАЛЬНОЕ РЕШЕНИЕ ВАШИХ ЗАДАЧ

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# Transforming Rural Kazakhstan: Corporate Social Responsibility in Action

**W**ith its sustained economic growth, Kazakhstan, a country once little known by the international community, is poised to continue its ascent onto the world stage. Kazakhstan has the world's 11th largest proven oil reserves and a strong mineral extraction industry, but the country's wealth is not limited to its natural resource sector—the people of Kazakhstan are themselves a key asset to development.

Kazakhstan citizens boast a literacy rate that places them 14th in the world, and in 2009, Kazakhstan was included for the first time into the UN's list of countries with a high human development index (HDI). In addition, vulnerable sectors of Kazakhstan society have seen a gradual improvement in their quality of life: while in 1997, almost 50% of the rural population was living in poverty, today that number is closer to 15%. While such gains are the result of a confluence of factors, businesses in Kazakhstan have a key role to play in maintaining and accelerating these positive trends. Cogni-



zant of the benefits of continued equitable development in Kazakhstan, some companies have begun to participate in the country's nascent corporate social responsibility (CSR) movement.

The UN Development Programme (UNDP) has been working in Kazakhstan for 17 years on a variety of initiatives aimed at building a well-governed, widely prosperous society. According to Botagoz Burilkieva, Project Coordinator for the UNDP in Kazakhstan, "to be a 'socially responsible business' means to be a sustainable business, ethical in employee relations; a business aimed at long-term successful development and not at short-term gain."

One company that has taken the lead in social responsibility is Tengizchevroil (TCO). TCO is a partnership between Chevron, KazMunaiGas, ExxonMobil Inc, and LukArco B.V. TCO is currently developing the Tengiz oil field in the Zhylyoi district of Atyrau oblast, in western Kazakhstan, and has been in operation since 1993. Then, Kazakhstan citizens made up 50 percent of its workforce. Today, Kazakhstan citizens hold 85 percent of TCO positions. In nearly all of the 15,174 households in the Zhylyoi district, at least one person works for Tengizchevroil or for a TCO contractor.

In order to understand the needs of the rural Zhylyoi district more clearly, TCO initiated a social baseline assessment in 2008. This survey indicated a number of serious social issues in the areas of education, health, youth culture and recreation, and a dearth of community engagement indicated by the absence of active non-governmental organizations (NGOs).

Thus, in 2009, TCO partnered with the Eurasia Foundation Central Asia (EFCA), a local NGO with a wealth of experience supporting local initiatives in community development, private enterprise, education and public administration. Together, they launched the Zhylyoi Community Engagement Program, a long-term program aimed

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**In 2009, TCO partnered with the Eurasia Foundation Central Asia (EFCA), a local NGO with a wealth of experience supporting local initiatives in community development, private enterprise, education and public administration. Together, they launched the Zhylyoi Community Engag**

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at the sustainable development of the area's human potential.

The initial stages of the project successfully pursued a multitude of goals, from raising test scores in area schools to training doctors to work more collaboratively with patients. So far, 58 key community leaders have been trained, 10 NGOs created, 48 training sessions provided to the wider community, and 11 youth leadership clubs created at schools. In three years, TCO has invested a total of \$830,000 in developing the human potential of the Zhylyoi district, and the positive effects are expected to continue as the program supports the sustained growth of initiatives by both individuals and non-governmental organizations.

For Burilkieva, programs like TCO's initiative in Atyrau herald a new stage in Kazakhstan's economic development. "In general, I would like to note that CSR development is inevitable for society. It will be impossible for society to form a loyal relationship with business if business does not participate in addressing social problems. Businesses must build mutually beneficial partnerships with all parts of society in order to ensure their long-term survival."

In all, TCO's project has reached 4,645 local residents, who have become participants, volunteers and beneficiaries. Residents of the region have learned that they do not have to wait for help from somewhere else—they have been empowered to create their own futures.



# Zhersu Metal - the market leader on steelworks in Kazakhstan

## **The uniqueness and manufacturability**

The plant started its activity in 2008. Over a relatively short period of time the company has achieved excellent operating results with significant potential for further sustainable growth.

At present Zhersu Metal is one of the largest manufacturers of metal structures in Kazakhstan. Production capacity is about 20 thousand tons of finished products per year. There are appropriate licenses for design, manufacture and CAR of metal structures. Important distinctive feature of the company is a clear orientation to the best international experience and the latest technological developments in field of designing and manufacture of metal structures. This allows us to successfully compete with foreign manufacturers of similar products and keep abreast with international standards.

In particular, on the stage of realization of the plant project leading brands such as Italian FICEP, German Weber Ko Mechan-

ics, Russian «Protection of Metals» LLP and «FMP» SPE were involved as consultants. This step allowed us to build the optimal technological process and select production equipment best suited for long-term development of the plant.

By the current moment the plant is equipped with modern, even unique for the practice of Kazakhstan highly productive automatic lines and CNC equipment of leading world manufacturers.

The plant has highly qualified, experienced engineering and technical staff totaling 150 people. Specialists for servicing high-tech equipment have been trained at foreign factories, including factories of manufacturing firms. For example, workers have passed long internship on the production facilities of the FICEP company. Nevertheless, Zhersu Metal is making active efforts to further enhance the professional level of employees. Much attention is paid to social support of workers, creation of optimal conditions for



Zhersu Metal is a dynamically developing manufacturing company of Kazakhstan that achieved notable successes and managed to create a unique corporate image during its existence.

work. Of course, the positive effect of this contributes significantly to the success of the enterprise.

Equipment for production details out of the corners, channels, joists, corner plates was supplied by FICEP; equipment for cutting and bending of sheet metal - by German Dr.Hochstrate etc.

The plant is the only company in Central Asia and CIS that have a complete set of lines of CNC FICEP. Also, the company has its own design bureau. This level of technical equipment allows us to solve a full range of production problems, from designing up to the direct production of high-quality finished products.

### The quality and competitiveness

Basic direction of activity of the plant is production of metal poles for power transmission lines of 35-1150 kV and equipment for transformer substations.

The company offers a wide range of products. The plant produces steel structures for industrial and civil construction, steel structures for cellular and television communications, residential and industrial buildings,



equipment for fitting out roads and railways and many other things.

In general, Zhersu Metal production covers the needs of electricity, oil & gas, road construction, communication and other enterprises that actively use the metal constructions in their activities.

The Company considers the quality of products as an important competitive advantage that allows expanding of market presence. Because of this, from the very beginning of activity of the plant the course was taken on testing advanced methods of ensuring high quality of manufactured production that meets the needs of all customers.

In particular, the plant has successfully implemented the international quality management system ISO 9001-2009. It is also important that the company entered into a registry of domestic producers of National Welfare Fund «Samruk-Kazyna», that is a confirmation of the high assessment of their products.

The quality of applicable in the manufacture structures and materials is confirmed by a compliance certificate from the manufacturer on each lot. In particular, metal suppliers are selected on the principle of quality conformity of raw materials, working in a system of compliance of QMS ISO.

The main suppliers of metal are the companies that have recommended themselves on the world market. Among them: Magnitogorsk metallurgical combine, West-Siberian metallurgical combine, Novokuznetsk metallurgical combine, «Evrasholding» Trading House. At the same time, priority in choosing a supplier is given for domestic companies: «KazFerroStal» LLP and the trading house «Karmet».

Careful monitoring of the quality of products is carried out by department on quality control upon an organization standard of ST LLP 40964908-01-2007. Also Zhersu Metal constantly provides a feedback to customers and suppliers with the aim of uninterrupted incoming control of raw materials.

Now, due to the active work of «Zhersu Metal», the plant is characterized as a leading enterprise with high-tech modern production. The largest national companies of Kazakhstan, such as «KEGOC» JSC, «Kazakhtelecom» JSC, «KazakhstanTemirZholy» JSC, «Atyrau Zharyk» JSC, «Seldenkorgau Kurylys» RSCE have become the major customers of the plant's products.

Not wishing to stop on reached, the «Zhersu Metal» JSC plant is planning a significant expansion of production in 2012-2013. In particular, it is planned to install hot-dip galvanizing plant.

# «Promstroy-Energo» LLP: efficiency and reliability



## The leading company in the modernization of electric power complex

Sustainable development of Kazakhstan's electric power sphere, ensuring stable growth of capacities, is the key tasks for Kazakhstan in the long term. Further steady progress of the economy, expansion of opportunities for exports of electricity and effective satisfaction of domestic needs of both business and population highly depend on it.

A special place here is given to the level of development of electric power infrastructure. Strengthening of this direction is seen as strategically important priority for Kazakhstan. Operations of such companies as «Promstroy-Energo» is of great importance in achieving that task.

Since its establishment in 2003, the company has successfully implemented a number of major projects in the electricity sector, including the expansion of 500 kV YuKGRES substation, construction of 500 kV «Shu» substation and others. This allowed the «Promstroy-Energo» LLP to create the image of effectively operating and responsible company – a brand extremely important in conditions of market competition.

In general, the activity of «Promstroy-energo» LLP is associated with such complex and diverse works in terms of technology industry as a construction and reconstruction of power transmission lines (power lines) and 110, 220, 500 kV substations, repair, installation and commissioning of power equipment; construction of cable and fiber-optic communication lines, reconstruction of equipment of relay protection and automatic of power transmission lines of substations, the most complex special operations.

The balanced structure of the company, technological capabilities and a professional, well-organized work collective allow company

to implement the full range of tasks, often unique in their way, at the level of advanced standards.

In particular, the technical base of the company is a specialized, fully equipped mechanized unit, stationed in Karaganda.

Successful completion of complex electric power projects is a good indicator of compliance of the company's technical equipment with modern requirements, as well as receiving of ST RK ISO 9001-2001 Quality Management System Certificate in 2005. Obtaining the Certificate of ISO was a sign of recognition of the fact that the company's activities are based on the leading national and international quality standards.

Over the last years «Promstroy-Energo» LLP entered the nationwide level of activity, carrying out high-tech installation and construction works on the entire territory of Kazakhstan.

## Construction of 500 kV Second Transmission Line of Kazakhstan North-South Transit

In cooperation with «KEGOC» JSC, the national system operator of the unified power system of the Republic of Kazakhstan, «Promstroy-Energo» LLP has taken part in such a large project as «Construction of 500 kV Second Transmission Line of Kazakhstan North-South Transit», carried out in accordance with the development program of electricity of the Republic of Kazakhstan until 2030.

Its necessity was conditioned by increasing of electricity supply level of deficient southern regions of Kazakhstan due to increasing of the output capacity of energy transmission in North-South direction up to 7-7.5 billion kWh per year, reliability and safety of the national electricity network of Kazakhstan, the parallel operation of power associations in Russia, Kazakhstan and Central Asia.

Thus, in the course of the project, the company completed the expansion of the 1st stage of 500 kV YuKGRES substation in 2006.

In particular, the enterprise had carried out the installation of 500 kV GL317 gas-insulated circuit breaker in chain of shunt reactor R-3, the installation of three 500 KV BS, installation of control and power cables, cable trays, installation of F6-4 foundations for line portal. The next step of the company's involvement in this project was the construction of the 1st and 2nd stage of 500 kV «Shu» substation in Zhambyl oblast of Kazakhstan. The construction of substation with the installation of 500 kV shunt uncontrollable reactor and 500/220 kV auto-transformer, as well as installation of 220 kV and 500 kV cells were done.

Drawing on extensive experience of construction, «Promstroy-Energo» has completed the expansion project of 1150 kV «Ekibastuz» substation in the Pavlodar region in 2009. In the same year the company held a reconstruction of relay protection and automatics (RPA) of this substation, including the supply of equipment and cable-wire products, installing the power switchboard cabinets of DC power and laying fiber-optic cables.

On September, 17 of that year the second Kazakhstan North-South Transit was launched on the 1150 kV «Ekibastuz» substation with participation of President Nursultan Nazarbayev.

### The «North Kazakhstan-Aktobe oblast» project

Another major project with the contracting participation of «Promstroy-Energo» LLP was the construction of 500 kV «North Kazakhstan-Aktobe oblast» inter-regional power transmission line in Aktobe and Kostanai regions worth 19.9 billion tenge.

Commissioning of the interregional power transmission line linking the North Kazakhstan with Aktobe region, in addition to solving the problem of the growing shortage of electric power in Aktobe region, made it possible to improve the reliability of electricity supply to consumers and reduce energy dependence of the Aktobe region consumers on supplies of expensive electricity from the Russian Federation.

The project customer, allowing the connection of Aktobe energy unit with a single power grid of Kazakhstan, is «Batys Transit».

«Promstroy-Energo» during project implementation has built a 486 km long, 500 kV high-voltage line with «Ulke» and «Zhitikara» substations including fiber-optic communication line.

It is noteworthy that for the first time in the CIS «Promstroy-Energo» LLP had installed on the «Ulke» SS 220/220 kV three-phase, phase turnable transformer of forced flow distribution with capacity of 400 MVA, designed and constructed specifically for this project.

Also, «Promstroy-Energo» has carried out construction of objects of external power supply of «Varvarinskoye» joint venture in Kostanai region, commissioned by «AREVA T & D Kazakhstan» LLP.

This project laid in construction of 110/10 kV «Barbara» substation with the installation of two transformers of TDN-16000/110-U1 and KRUN 10 kV, along with the reconstruction of the 220/110/10 kV «Lisakovskaya» substation. The Company participated in the replacement of high voltage equipment and the rebuilding of AL calls on substations of «KEGOC» JSC, among them the central TEN in Karaganda region (2004-05), Sarbaisky TENs in Kostanay region (2004-05), Akmola TEN in Akmola oblast (2006 year).

### Construction of Koksairan counterregulator

Significantly, that in 2009 «Promstroy-Energo», commissioned by «Seldenkorgau Kurylys» RSCE, successfully implemented the investment project for the construction of flood control – Koksaray counter-regulator on the Syr Darya river.

In particular, the company carried out excavation works of 300 thousand cubic meters, the construction of outlet channel of 500 m long, and the construction of a 800 meters long dam. Design capacity of counter-regulator is about 3 billion cubic meters of water, thereby the threat of flooding territory of South Kazakhstan and Kyzylorda oblasts was reduced, and an irrigation water reserve for the agricultural sector was created. Rates of construction of this building are unprecedented.

The first test was already passed with a facility. In the flood period this year it was managed to accumulate more than 900 million cubic meters of water and provide flood safety of South Kazakhstan and Kyzylorda regions with the help of Koksaray counter-regulator. Also it has been made a discharge of the accumulated flood water through the construction of water discharge counter-regulator into the Syr Darya river to fill the Aral Sea.

These tests demonstrated the high quality of engineering and construction works carried out by the company as one of the main building contractors of counter-regulator. In general, the «Promstroy-Energo» LLP demonstrates high efficiency indicators and reliability, as evidenced by large-scale projects, that characterized by the complexity of implementation. Certainly, this is a guarantee of company's future success in creation of effectively operating and advanced electricity infrastructure of Kazakhstan.



**Since its establishment** in 2003, the company has successfully implemented a number of major projects in the electricity sector.



## World Energy

Over the last decade in the development of world energy important trends which in uncontrolled flow would threaten stability of this area were revealed. These trends include:

- changing relationship between consumers and producers, increasing competition for the limited energy resources;
- high rates of energy consumption growth and change of its regional proportions;
- high proportion and growing volumes of consumption of fossil fuels;
- slowing down of energy supply growth rates ;
- problems of providing investments to the development of energy sector;
- change of the energy supply structure and enhancing the role of individual suppliers;
- rise in energy prices and their volatility;
- increasing of tension in providing energy needs of transport and disproportions in the oil refining;
- growth of volumes of international energy trading, development of infrastructure

component of the energy supply and exacerbation of risk;

- strengthening of political risks, including transit ones

The current situation in the global energy sector is characterized by the intensification of the contradictions between the major players in international energy markets. The practice of relationships between producers and consumers, developed in the late XX century, rooted in the past. A work of existing regulatory mechanisms of the world energy market becomes unusable, increased competition among consumers, fueled by the advent of powerful market players, like China and India is becoming evident.

While the main consumers of energy resources are highly developed powers and developing countries in Asia, most of the world's hydrocarbon reserves are concentrated in relatively small group of developing countries and states with economies in transition. Such large-scale consumers like the U.S., EU and China are focusing their economic as well as political resources for expansion in the same markets, which leads to increase of competition.

# Global energy market: present trends and future prospects



**By 2030, approximately 27% of world energy consumption will fall on natural gas, oil and coal, from 7% to 8% - on hydro and nuclear power.**

## New trends

However, the dynamics of world energy consumption demonstrates that from 1990 up to the events in Japan in spring, 2011 under the influence of various factors in the energy market tendencies gradual changes in the role of traditional energy sources - oil, gas, coal and etc. became apparent.

These are:

- sharp rise in world total energy consumption caused by the rapid growth of China, India, Pakistan, Vietnam, Brazil and, consequently, by increased use of various fuels;
- increase of coal's share in world consumption from 27.4% to 29.6%, due to its widespread use as the cheapest and the most accessible fuel in rapidly growing economies of China and India;
- continued domination of oil as traditional energy resource due to sharp rise of its consumption by the economics of China and India;
- reducing of consumption of oil and gas in the developed countries due to improving energy efficiency;
- gradual and steady growth of "blue fuel" consumption under the influence of environmental factors in the developed and rapidly developing countries - China, India, Brazil;
- reducing of the use of nuclear energy in Europe, as well as increase in consumption of renewable energy sources.

In the world economy energy intensity of GDP is characterized by the following trends: in the OECD countries (Organization for Economic Cooperation and Development), this figure over the years 1990-2010 decreased from almost 200 to a little over 150 t.o.e (tons of oil equivalent) per U.S. \$ 1 million, while in non-OECD countries – from almost 300 to about 210 t.o.e.

These circumstances challenge states to reduce energy intensity in prospect. In this regard, a decrease of oil consumption and growth of gas consumption in future is of concern for all nations. By 2030, approximately 27% of world energy consumption will fall on natural gas, oil and coal, from 7% to 8% - on hydro and nuclear power. In addition, with the growth of global GDP up to 100%, world energy needs will grow up to 35% in 20 years.

## Scenarios for the future

Today, on the hydrocarbons market it is noticeable that a new energy reality is formed, which, along with U.S., EU, Middle East and East Asia is already defined by the such regions as the Middle East, Russia and Central Asia, South and Southeast Asia, where the most promising suppliers and consumers of gas located.

A technological breakthrough that reduces the economy's dependence on supplies of raw materials is the only one to stop this process. However, in the next decade, oil will remain the leading energy source, pro-



**Existing regulatory mechanisms** of the world energy - unusable, big competition among consumers is fueled by the advent of powerful players, like China and India.

viding about 40% of power consumption. It is followed by natural gas (28%), coal (20%), renewables (7%) and nuclear energy (5%). Shares of oil and natural gas will rise, while the share of coal and nuclear power - decline. It is possible that in the future consumption of nuclear energy will stabilize and begin to expand the scope of alternative energy sources, but it will not affect the basic trends, at least over the next 15-25 years.

In more distant perspective the structure of the global energy balance is likely to seek for transformation primarily by two main scenarios.

The first one means a gradual shift from oil to gas, approximately the same when oil replaced coal. Then, it is expected to shift to renewable sources and, obviously, to nuclear energy. The "black gold" will retain the position as an important source of energy, at least until the middle of the XXI century.

According to the second scenario plan, if a progress in the field of hydrogen technologies, enabling a rapid displacement of gasoline engines will take place in the coming decade, so a reduction in oil consumption will begin much earlier - by about 2025. But for now this is unlikely.

The energy intensity of world economy, mainly due to the developed countries, will gradually decrease, but linear dependence between GDP growth and increase of energy consumption will remain. The continuing rise of the global economy for some time will pull the energy demand. But consumption is slowing down, more and more lagging behind rates of GDP. This means that the global economies begin to adapt to higher prices through reducing of energy consumption and use of alternative and renewable energy.

The share of energy in total expenditures of GDP of Western countries will continue

to decline. This eliminates the possibility to rely mainly on energy as a tool for national development even in the medium term.

Consumption of "blue fuel" will grow most rapidly in APR countries (an average of 3.6% per year), Central and South America (3.2%), Middle East (3.1%), Africa (4 1%), increasing by cheapening and improvement of its technological systems of transportation (including LNG) and use.

The supply of gas will expand due to a number of major projects on its extraction: in Russia (the Yamal Peninsula, Eastern Siberia, the Far East and the Kara Sea shelf), Iran (South Pars field, etc.), Qatar, Saudi Arabia, UAE, Kuwait, Algeria, Libya, Azerbaijan, Kazakhstan, Turkmenistan (shelf of the Caspian Sea) and other regions.

Due to the predictable reduction of oil output in industrialized countries the volume of its imports will increase substantially, especially from politically and economically unstable countries of Persian Gulf.

Thereby, the issue of diversification of supply sources becomes topical. In this regard, it is clear what caused a growing attention of the major energy consuming countries and major international corporations to the resource-base of states not included to OPEC.

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# Kazakhstan motives of Arabian Gulf

**T**

by Yuri Sigov,  
Washington

he high level oil prices combined with the continuing political instability in several countries of the Middle East and North Africa make more urgent the need for close cooperation between the countries-exporters of "black gold" which remain unaffected to global crises.

Although, such countries may differ quite substantially both in area and population, as well as in economic and technical potential, their cooperation in the field of energy would not only bring good dividends to themselves, but also play an important role in stabilizing the world oil and gas markets, and help to avoid the crisis for those, who still imports significant volumes of energy sources.

These mutually beneficial prospects include the expansion of energy cooperation between Central Asian countries, especially Kazakhstan, with the states of the Arabian (Persian) Gulf, that are being very close to one another in geographical sense, however, until relatively recent time they have showed mutual interest only indirectly.

Although, such countries may differ quite substantially both in area and population, as well as in economic and technical potential, their cooperation in the field of energy would not only bring good dividends to themselves, but also play an important role in stabilizing the world oil and gas markets, and help to avoid the crisis for those, who still imports significant volumes of energy sources.

## Coordination of international oil prices is possible even without being in the OPEC

It is known that Kazakhstan is among the top ten countries of the world on oil reserves, and in Central Asia Kazakhstan plays a key

role in supplying "black gold" through Russian territory to the North as well as to the West across the Caspian Sea and Azerbaijan to the European markets, and also eastwards to China.

According to the strategic plans of its economic development Kazakhstan in the next five years will increase export of oil (over 20 years of independence, oil production in Kazakhstan has tripled, and natural gas increased up to five times), thereby being one of the few regions of the world where it will be possible to increase production volumes when it falls in a number of present leading exporting countries of the "black gold".

In addition, for the end of 2012 Kazakhstan is planning to begin industrial oil extraction at Kashagan - the largest field on the Caspian, making the republic one of the key players in the oil production and oil exports not only regionally, but also globally.

The gas supplies from Kazakhstan abroad also will be expanded, plus Astana will play an increasingly important role as transit country on natural gas supplies from Turkmenistan, and in perspective – Azerbaijan's supplies to the western regions of China.

All of this cannot help attracting an interest from the Arab Gulf countries, which play a leading role in world energy markets and venues, and at the same time they are interested in the coordination of policies to maintain high prices for energy resources with those who supply them to major world



## Among the Central Asian states Kazakhstan has the best chance to be firmly settled in the main oil-exporting region of our planet

markets from other regions of the world, including Central Asia.

It is noteworthy that if the Arab Gulf countries almost with their full complement are being leading and the most influential members of the Organization of Petroleum Exporting Countries OPEC, Kazakhstan, like other oil producing countries of the post-soviet territory (Russia, Azerbaijan) is not included to this organization.

Nevertheless, Kazakhstan would be able to closely cooperate with Saudi Arabia, Kuwait and United Arab Emirates (the largest oil exporters in the region) and Qatar (the main player in the Gulf on the export of natural gas) as to maintain high international energy prices as well as when discussing new routes for pipelines in various directions.

It is important to note the fact that Kazakhstan has no political or economic disputes with the Arabian Gulf countries, between Astana and the capitals of the Gulf monarchies a steady dialogue is maintained at the highest level and at the level of business cooperation, which also creates very favorable conditions for strengthening inter-regional and bilateral cooperation.

Also the very mutual energy interests make such Kazakhstani connections with the countries of the Arabian Gulf truly profitable and attractive for both parties. Except the energy sector there are not so much economic interests of the Arabian Gulf countries in the post-soviet space, particularly in Central Asia.

But in cooperation with Kazakhstan such interests are being from the very beginning and this would be a good idea to be used by Astana in its own plans as well as in expansion the interest of leadership of the Arabian monarchies in republics neighboring to Kazakhstan.

For its part, Kazakhstan could have been much more actively using the potential of the Arab Gulf countries, included to OPEC, for pushing its interests to the world markets of oil export. Especially considering the fact that Astana in the nearest five or seven years can expand its export capacity of energy resources in the direction of Chinese and European markets.

**Saudi Arabia, UAE and Qatar - the most potentially lucrative partners for Kazakhstan in the energy sector. But about the other Gulf countries Astana should not forget**

Based on the current volumes of oil and gas export Saudi Arabia and the UAE could be regarded as the most beneficial partners for Kazakhstan in the Arabian Gulf on oil sector, and Qatar - on the export of natural gas. As for Riyadh and Abu Dhabi, Astana has already established close ties with them both at the level of heads of state and in economic cooperation.

It should be recognized that the potential of this cooperation is obviously not used to full capacity, especially regarding the sale of oil through the "swap replacement supplies" at



**Kazakhstan** would cover volumes of oil supplies to the western regions of China for Saudi Arabia and the UAE.

the markets, which have the most favorable geographical location both to the region of Central Asia and the Arabian Gulf.

So, with benefit for itself Kazakhstan would cover volumes of oil supplies to the western regions of China for Saudi Arabia and the UAE. And the Arab Gulf countries could no less successfully promote and supply Kazakh oil quota to markets of many African states as well as South-Eastern Asia countries, India and Pakistan.

There is a good chance for Kazakhstan to strengthen cooperation on gas supplies to world markets with Qatar - one of the world's key exporters of liquefied natural gas. This is especially actual due to the fact that Kazakhstan is one of the key players on the gas market of western China that potentially will be of interest for Qatar in the case of laying the Trans - Asia gas pipeline from the Arabian Gulf region, Iran and Pakistan to the Caspian Sea and Central Asia.

**By the way, Kazakhstan has successfully developed such collaboration on "mutual exchange basis" with another state, overlooking the Arabian (Persian) Gulf - Iran. Kazakhstan's oil is sold by Iran to nearby markets, while the same amount of oil Kazakhstan in return to Iranian supplies sales in China markets, as well as to European customers.**

For Kazakhstan the expansion of energy cooperation with Iran would be one of the important components of foreign trade policy for today. But here Astana will have to consider a hard struggle for spheres of both political and economic influence, which is led by the two largest countries in the region - Shiite Iran and Sunni Saudi Arabia.

Kazakhstani leadership should bear in mind that Riyadh and Tehran – are unapologetic rivals of the region, and the observance of

fine political balance in the Gulf for Astana is of paramount importance.

Such consideration of the interests in the Arabian Gulf region Kazakhstan should abide for the reason that there are still tense relations between Iran and the United States (Astana has established very close ties with them not only in "big politics", but also in energy industry) . Besides, considering the obviously incomplete "revolutionary processes» of so-called "Arab spring", consequences of which may still very ambiguous effect on the entire state of global energy markets.

#### **Investments from the Arab Gulf countries to the energy sector of Kazakhstan - and why not?**

Investment area is of particular interest in further expansion of cooperation between Kazakhstan and the monarchies of the Arabian Gulf. It's no secret that, immediately after the collapse of the Soviet Union, Kazakhstan had to urgently seek the external sources of financing for a wide range of energy projects, and for keeping mining and transportation infrastructure in good condition.

The largest U.S. energy companies were the first to come to Kazakhstani energy market, and today the American capital remains a key one in the energy complex of the republic (the total amount of the U.S. investments to Kazakhstan is over 11 billion U.S. dollars). Such American companies as "Chevron", "ConocoPhillips" and others have created in Kazakhstan successfully operating joint ventures, and they are intended to work in the Kazakh energy market for the long term. At the same time European companies have significantly activated in the Kazakh energy market. They invest money less than Americans, but it is worth considering at the same time that more than 40 percent of all invest-



ments received by Kazakhstan from abroad accounted for the EU.

Energy giants from France ("Total"), Italy ("ENI") and Spain ("Repsol") invested considerable resources to a number of projects on oil production in Kazakhstan shelf of the Caspian Sea. And energy supplies from Kazakhstan to Europe by 2015 will be able to ensure nearly a quarter of all energy needs of States inside the EU.

Should not be forgotten that so far it is not withdrawn the issue of laying the Trans-Caspian gas pipeline "Nabucco", in which key roles should play exactly European companies. And by the EU is Kazakhstan, as well as other potential participants of this project (Azerbaijan, Turkmenistan) expecting a minimum of 12-15 billion euros in investments.

And there is not less aggressive and active work on the investment market of Kazakhstani energy from neighboring China. Chinese companies with the full support of the state intend to further expand their investment opportunities in Kazakhstan and deploy to the maximum both oil and gas flows of Kazakhstan itself, as well as of nearby Central Asian states to their side (including the use of Kazakhstan as a transit country for Turkmen gas supplies).

On this background the Arab Gulf countries have very large financial resources, which to the mutual benefit with these states Kazakhstan would use both to modernize its energy industry (buying advanced Western equipment and training national staff in Europe and the U.S.) and for the construction of alternative pipelines to new markets and potential oil and gas importers.

Yes, Saudi Arabia, Qatar and the UAE still have more funding not only to the territory of Kazakhstan but also to other Central Asian projects for construction of mosques and religious, trade objects, office and hotel

space. But investment cooperation in the field of energy between Astana and the Gulf monarchies is quite possible and it should be pushed and promoted.

It's no secret that the Gulf Arabs - very slow people, they do not hurry in decision-making, but at the same time very pragmatic and capable to count a prospect and real benefits. Therefore, if there is a political stability, investment climate is quite comfortable and cooperation with leading European partners is successfully carried out, financial cooperation of Kazakhstan with key states of the Arab Gulf might be a very promising area of inter-regional ties.

Taking into account the fact that in the near future Kazakhstan will be one of the few energy exporting countries in the world that will continue to grow production of "black gold", the Arab investments could play an important role in strengthening the position of Astana as a main energy player in the whole Central and Southwest Asia, as well as help the Arab Gulf States to obtain financial and political dividends from such cooperation with Kazakhstan.

After all, with all existing business controversies, the economy volumes and membership in various international cartels and other energy associations, Kazakhstan and the Arabian Gulf countries still have very much in common - and on this basis it would be wise for both sides to look for the points of convergence of mutual interest.

And, if such cooperation is supported by mutual will and desire (including - at the highest level), then the Arabian Gulf has every chance to become an important partner for Astana not only in the Middle East but also at the global energy level.

### **The Arab investments**

could play an important role in strengthening the position of Astana as a main energy player in the whole Central and Southwest Asia.

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# What will be the end of

China is gradually pushing out the U.S. and the European Union from Kazakhstan's investment market in the energy sector



**S**

by Yuri Sigov,  
Washington

ince gaining the independence, Kazakhstan, due to its highly attractive energy potential has become one of the key investment markets for the leading Western countries. And although the conditions for embedding large amounts of money from outside into the energy sector of Kazakhstan over these years have repeatedly

changed, the overall attractiveness - and, above all, in terms of making significant profits - steadily maintained.

Of course, at the initial stage (at least until the end of the 90s of the last century) the operation in Kazakhstan, including major investments to the republic, was very risky. However, those who risked at that time, not only obtained a solid profit, but maintained fairly strong positions in the investment scenario of Kazakhstan also for the present time.

But the situation of the last few years in the investment climate of the energy sector of Kazakhstan has gradually changed. And a common vector of orientation that was aimed exclusively to the Western loans (primarily the U.S., Canada, EU, Australia) became more and more shifted to Asia, and particularly - towards China.

**America is still the most important investor to Kazakhstan's energy sector. But is unlikely to remain so for the nearest future**

Several years ago, the total amount of foreign investments into Kazakhstan's economy amounted to \$ 97.6 billion, and the lion's share of these funds went exclusively to the oil and gas sector. It is worth noting that the United States were significantly ahead of all other foreign investor countries at that time (above all - going after them EU members, Netherlands, the United Kingdom, France and Italy) in terms of assets embedded to the Kazakhstan's energy.

It is also worth considering the fact that for the mineral resources extraction there was accounted for about 15% of the total amount of \$ 137 billion invested to Kazakhstan from abroad. At the same time the energy companies from the United States invested \$ 9.34 billion just to the extraction of natural resources, including \$ 1 billion invested into Kazakhstan's oil sector by leading U.S. energy giants as Chevron, Exxon Mobil and ConocoPhillips.

Overall, U.S. companies have invested to oil and gas sector of Kazakhstan economy more than \$ 11 billion. And perspectives of working in the republic they had always evaluated as quite comfortable, which do not cause them any fear.

# «Energy battle for Kazakhstan»?



It was connected mainly to the fact that over these years in the country there was remained a stable political environment; U.S. companies, even if there were some problems (they were especially uncomfortable of a high-level corruption, frequently changing legislation and other interference), still reliably received high profits. And the common vector of political and economic cooperation between Kazakhstan and the United States (the same for the Republican or Democratic administration in the White House) gave a clear signal to U.S. companies operating in the energy sector, to preserve and expand the investment cooperation.

It is also important that from the start of working in the Kazakhstani market U.S. energy companies had not actually met any particular competition not from Russia, nor European partners, nor the neighboring Central Asian influential powers (such as China, Turkey or Iran). However, over the last years, the situation of increased competition in the Kazakhstani energy market had created a lot of problems for U.S. companies, and in the future there will be more and more.

## Kazakhstan's «Path to Europe» through «big power»?

Another important investment contributor to Kazakhstan's energy sector is still European Union.

Leading European countries also actively use the expansion of economic cooperation and trade with Kazakhstan of all kinds - especially to strengthen its presence throughout Central Asia. In addition, the European trade with Kazakhstan in terms of volumes greater than analogous indicators of the other four countries of the region taken together.

For Kazakhstan, the expansion of a diverse collaboration with the European Union, including - the energy sector, makes it possible to rapidly implement defined by Astana at the highest political level «Path to Europe». It means the modernization of the Kazakhstan state with benchmarks to key European values and «common rules of a game». And «big power» in this area provides the republic substantial assistance, and additionally motivates the unified European leadership in Brussels to forge tighter ties with Kazakhstan in all areas.

The French and Italian energy companies show a special interest for the Kazakh energy. So, the French energy company «Total» has 16.8% of shares in an international consortium that develops the Kashagan oilfield in the Caspian Sea. Due to the fact that, in general, Kashagan is the largest oil field in the world, opened over the last 30 years (and from the start of operation by 2015 oil production in Kazakhstan will increase to 60 million tons), the French and the Italians

**Several years ago**, the total amount of foreign investments into Kazakhstan's economy amounted to \$ 97.6 billion, and the lion's share of these funds went exclusively to the oil and gas sector.

are intended to long-term working in the republic and participation in the development of its energy natural resources.

Let me note that more than 40% of all foreign investments to Kazakhstan are coming from EU countries. Two-thirds of this volume exclusively fall to investments in oil and gas sector of the country. It's also important that Kazakhstan provides for today more than 20% of the energy needs of the European Union, and by 2015 this number could rise to the quarter of energy supplies needed by the united Europe.

Without a doubt, one of the most important connecting links between Kazakhstan and the EU, is the idea of laying the Trans-Caspian pipeline within the framework of the «Nabucco» project. Brussels is hoping that Kazakhstan therein will be still involved, and by this way the volume of energy cooperation between the two sides could dramatically increase.

In this case, for their part, the European companies would increase their investments (and they have been repeatedly requested of this by Kazakh side at the highest level) into new technologies (and not only in oil and gas) and non-energy sectors of the economy of the country. But just in the case, of course, if Astana connects to the «Nabucco» project, and through its own channels motivates its Central Asian neighbors and Azerbaijan for the participation in the project.

Yes, here it is certainly needed to consider the fact that Kazakhstan plays not a leading role in commercial hands of «Nabucco», because the main «gas players» here for Europe are Turkmenistan, in part - Uzbekistan and Azerbaijan. But political power of Astana and personally of President Nursul-

tan Nazarbayev in this region is very high, which may under certain circumstances provide the «Nabucco» some support.

For Europeans, it is also important that Kazakhstan coordinate its energy policy with neighboring Central Asian countries, and attract European companies to the region for establishing delivery of energy resources to European markets. Such cooperation is carried out within the framework of the international project TRACECA, as well as the programs of «International transportation of oil and natural gas to Europe».

Also, it is essential that European energy companies have already settled, and accustomed to work in new conditions of Kazakhstan. And, taking into account, the close political ties between the EU and Kazakhstan, energy cooperation - including the investment area, is quite promising for the future. But now, it slightly «dipped» due to serious financial and economic problems facing the European Union.

But Astana and Brussels preserve the general vector for understanding and cooperation, although the amounts of such cooperation will be gradually declining for quite objective reasons. And one of them - a remarkable upsurge from China in working on investment projects in the energy sector of Kazakhstan.

**Kazakhstan provides for today more than 20% of the energy needs of the European Union, and by 2015 this number could rise to the quarter of energy supplies needed by the united Europe.**

### Beijing calculates the Kazakh energy sector "for long"

The current economic relations between China and other countries, especially in the field of the energy sector, are based exclusively on a pragmatic ground, deprived of frills of «high politics» and, as a rule, are based not only on a «friendship on business



down», but also on strong and reliable political contacts at the «top».

Exactly these components of strengthening the position of China in Kazakhstan together with the importance of getting from Astana mineral and energy resources have played a crucial role in the current state of investment cooperation between Astana and Beijing.

In fact, ever since gaining the independence of Kazakhstan, the Chinese government has paid particular attention for cooperation with its Central Asian partner. All these years on the level of heads of the states and heads of the governments there remained very close personal ties, regardless of who held these offices at various times.

Also important the fact that over the past time, the Chinese offered Kazakhstan lucrative financial conditions for the implementation of all oil and gas deals without exception, in comparison with American, European and Russian competitors.

Symbolic, and in many ways a breakthrough in this area is considered a visit of Chinese President Hu Jintao to Kazakhstan in August 2007, that laid the foundation for a gradual strengthening of the Chinese presence in the energy sector of the country. In this case, an important part of cooperation between Beijing and Astana was the laying of pipelines to transport crude oil and natural gas from Kazakhstan to industrial facilities of Xinjiang Uyghur Autonomous Region of China.

In this regard it should be noted that neither Russia nor the U.S. nor the EU countries have not offered Kazakhstan an active construction of new pipeline routes (no one remembers anything about the Caspian pipeline to Russia) and much less they were going to invest to them. China for its part stakes at a long-term cooperation in the «pipeline diplomacy» - and even less for the near than for long-term perspective.

According to American experts, another major attractive aspect of Chinese investment expansion is the fact that Chinese companies always overpay for the acquisition for those or other oil and gas assets in Kazakhstan. By what, on the one hand, they cut off their direct competitors from the energy deals (USA, EU, Russia), on the other hand – they more often get a carte blanche for future work from the Kazakh side.

Thus, in order to capitally penetrate to Kazakh energy market, China deliberately offers a much larger amount at acquisition of certain energy assets in the country (for example, for the purchase of «Nations Energy» Chinese offered \$ 4.18 billion). Plus, China had intended to buy the American oil company Unocal through which they planned to enter into several energy projects of Kazakhstan.



It is also significant that at the beginning of this century, China did not appear almost at all in the list of investors of Kazakhstan and even more so - in the energy sector. But for the rapid development of China's economy Beijing became more actively looking for sources of energy. And Kazakhstan, like other Central Asian countries, was the first in «the Chinese energy object-glass» due to the close borders of China's geographic location, and a relatively organized system of Soviet refining and transportation infrastructure.

Chinese oil companies started to behave in Kazakhstan so successfully and actively that last year they participated almost in half of extraction of all Kazakh oil. Joint ventures with Chinese participation extracted 22 out of 40 million tons of oil in Kazakhstan. And companies that are completely controlled by Chinese capital extracted 18 million tons of oil from Kazakhstan's subsoil.

As a result, we can confidently say that the Chinese «oil investment pressure» in Kazakhstan was of the fastest time of implementation, and of volume growth. For example, in 1999, China had invested to the oil sector of Kazakhstan only \$ 5 million. But last year it increased more than a hundred times - \$ 550 million China invested to oil and gas sector of the country.

Only over the last five years, Chinese companies have acquired so many assets in the oil field of Kazakhstan that today they control about 1 billion tons of oil reserves of the country. Among the largest investment projects undertaken by China in Kazakhstan, it is worth to mention the acquisition by the China National Petroleum Corporation 70% of shares of «PetroKazakhstan»; there is a Chinese interest in the Karazhanbasmunai

**The energy companies from the United States** invested \$ 9.34 billion just to the extraction of natural resources, including \$ 1 billion invested into Kazakhstan's oil sector by leading U.S. energy giants as Chevron, Exxon Mobil and ConocoPhillips.



oil field which has proven reserves of 46.6 million tons of oil and in some other projects. We must not forget that in addition to oil and gas sector, China also very actively invests enormous sums to mining and metals industry of Kazakhstan. Since the end of 90s of the last century, China's investments to Kazakhstan exceeded the amount of \$ 3.6 billion, making China the eighth foreign investor in the country in terms of volume. In this case \$ 1.3 billion China invests exclusively to the mining industry of Kazakhstan's economy.

And therefore it is not surprising that almost all of Kazakhstan's exports to China - a raw, first of all - energy raw. Oil and gas is about a half of Kazakhstan's exports to China, and Chinese themselves over the last few years in exchange for Kazakh raw materials actually turned the republic into the extremely profitable for themselves a market for Chinese goods.

Again, unlike Europe, USA and Russia that cannot boast of these "market achievements" in Kazakhstan, China not only gradually presses the Kazakh market under itself with goods, but also uses the republic's territory for transshipment of goods to the entire Central Asian region as well as surrounding areas of Afghanistan, Russian Siberia, the Urals and the republics of Transcaucasia.

Recently China signed an agreement with Kazakhstan on cooperation in the field of renewable energy sources, co-financing the second stage of gas pipeline from Kazakhstan to China, and loan agreement on the reconstruction of an oil refinery plant in Atyrau, Western Kazakhstan.

Also, the case of pipeline cooperation between the two countries comes at an accelerated pace.

One gas pipeline, which is 1304 km long, from the Kazakh-Uzbek border to the bor-

**In this regard** it should be noted that neither Russia nor the U.S. nor the EU countries have not offered Kazakhstan an active construction of new pipeline routes (no one remembers anything about the Caspian pipeline to Russia) and much less they were going to invest to them.

der with China is already laid. There is completed an installation of the second stage of the pipeline which length is 1,500 km (its throughput capacity - 10 billion cubic meters. of natural gas) through Beineu, Bozoy, Shalkar and Samsonovka to the western regions of China that thereby makes it possible for Beijing to get oil and gas from the region of the Caspian Sea (and so in the future to connect Turkmenistan and Azerbaijan to these projects and supplies).

It may also be noted the fact that the gas field of Zhanazhol in Aktobe region is also potentially attracting Chinese companies for possible investment. But the volume of deposits is unlikely to suit the Chinese in terms of long-term gas supply (which is for the Chinese - the main priority).

According to experts over the next two or three years, the Chinese investments to the energy complex of Kazakhstan will exceed \$ 20 billion and it is important to note that unlike Russian and Western investments, the money comes from China to Kazakhstan always without any influence of politics and ideological «binding».

China traditionally has never discusses the granting of loans to Kazakhstan in a «package» with human rights, freedom of press, of assembly and political parties, and many other «similar conditions» that are always at the forefront in Washington and Brussels. So, without a question, the fund, «Samruk-Kazyna» received from the State Bank of China a credit of \$ 3 billion, and also there was granted a Chinese loan to Kazakhstan in \$ 5 billion for the construction one of the petrochemical complexes. And there are still a lot of China's investments for uranium mining, the development of the nuclear industry and other energy projects of Kazakhstan.

In general, the overall strategy of China in field of investment to the energy complex of Kazakhstan in comparison with similar policies of the U.S., EU and Russia looks more purposeful, calculated for the long term and in financial terms more profitable for Astana. Further implementation of this policy of Beijing could be prevented by a heightened anxiety of the Kazakhstani government about the excessive Chinese control over the Kazakh energy complex with the help of «long-yuan», and any serious disruptions on world energy markets in the future.

## Authentic - Rustic - Italian

Our Italian Chef takes you on a gastronomic journey through the regions of Italy. Authentic recipes and only the freshest ingredients, combined with passion and creativity will establish L'Olivo as the Italian experience in Kazakhstan.

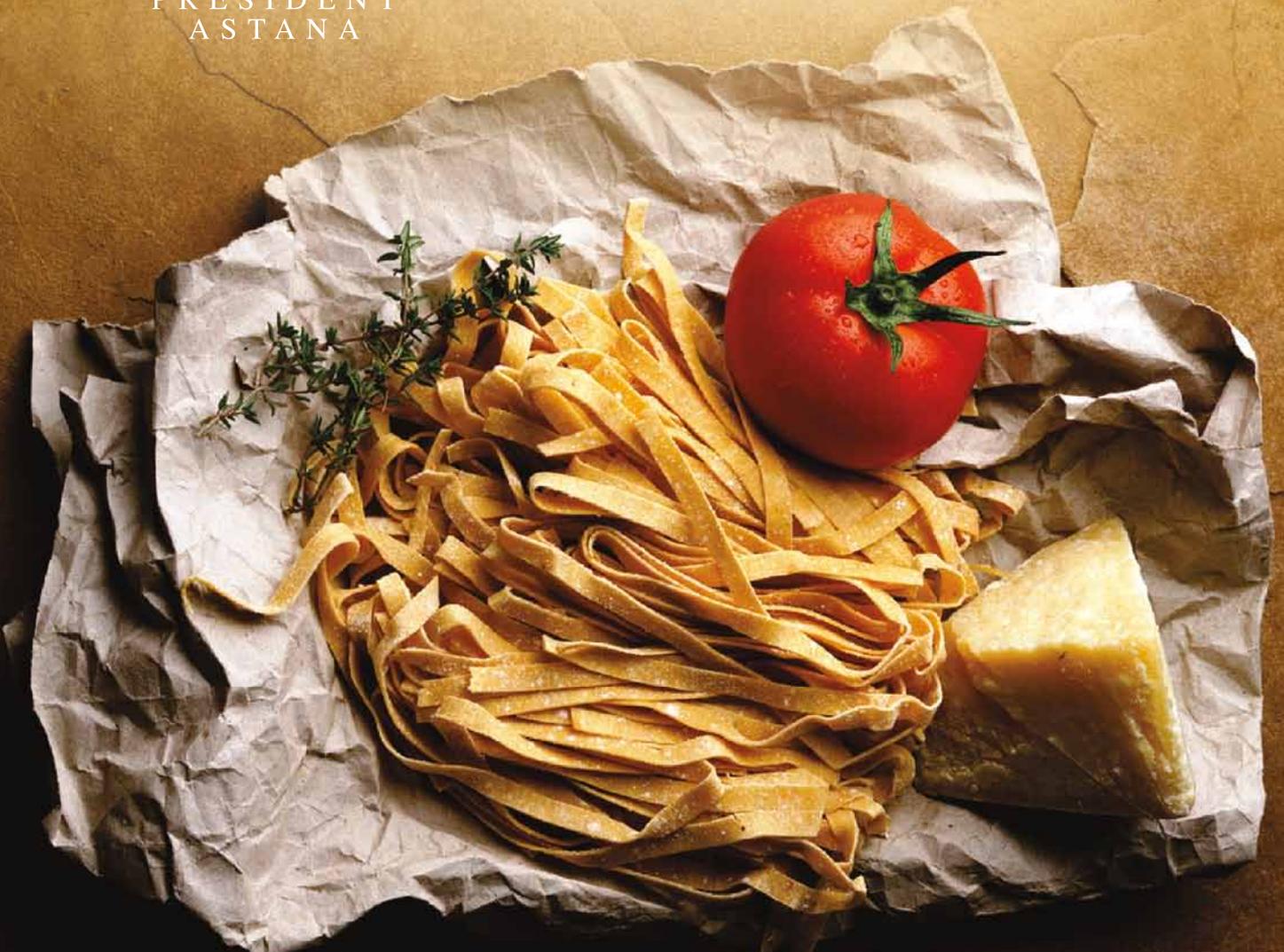


Some of our highlights include:

Chilled, not frozen fish from Europe, whole, hand cut Parma Ham and cold cuts, home flavored Olive Oils, Grappa and Digestive Trolley...

# RIXOS

PRESIDENT  
ASTANA





# THE ENERGY OF WORD

by Zhuldyz Zhumadilova

National oil and gas company «KazMunayGas» and «KAZENERGY» Association summed up the third Republican contest of journalistic mastery, The Energy of Word.

**T**his year, the organizers have decided to broadcast online the final meeting of the jury. It stands to mention, it was an unprecedented step. Usually in such contests the decision making process is not advertised. The more interesting was to hear the opinion of authoritative experts, that the independent panel of judges included such people as Uzakbai Karabalin, Namazaly Omashev, Aidos Sarym, Michael Dorofeev, Fatima Kosaeva. Talk turned out open, and sometimes quite flattering to the competition. Members of the Jury unwittingly touched on urgent problems of modern journalism in Kazakhstan...

Namazaly Omashev, a playing coacher of the Kazakhstani journalism, took the floor first. As organizers intended, a recognized political writer Namazaly Omashev, the Dean of the Department of Journalism and Politology of the Eurasian National Gumilev University, should have assessed the entries in the Kazakh language. "Most of the authors happened to be familiar to me. Many of them are my students," – started Namazaly Omashev. This is not surprising, because Professor for many years has been working with the students of Kazakh National Al-Farabi University and the Eurasian National University. But, Omashev liked the works by an unknown author who had sent for the contest two problematic materials, and two correspondences. Professor immediately made it clear that he considers the author is worthy of the Grand Prix. "At present time, a reader is not interested in the bulk of the article. To make the material readable, you need to find a suitable form. This author has found the form. And yet, here is an obvious

journalistic investigation," – commented his decision Omashev. "In our time journalists used the principle of the pyramid: leisurely started, unfolded the story in the middle of the article, developed it, and so on. Nowadays the inverted pyramid is used, because people have no time. In addition, there is the Internet, TV ... So, to attract the reader, a brief article essence should be presented at the beginning of the material. Better yet, if the title is "talking." I do not know if the author knows this theory of the inverted pyramid, I do not know whether he is a journalist by training, but the theme stands right," – Professor summed up. The author, who impressed Namazaly Omashev, was the correspondent of the newspaper "Aykyn" in Atyrau region, Tursyn Kalimova. Professor also said that she was able to choose a genre based on their subject material.

If among the materials in the Kazakh language the experts singled out the favorites almost immediately and unanimously, then with the Russian-language works the situation was ambiguous. A journalist of the newspaper "Panorama", the former head of the press service of Samruk Kazyna Fund, Fatima Kosaeva did not hide her disappointment about the contest works. "Oil & Gas of Kazakhstan" magazine disappointed much. I mean, judging by the name it is a specialized publication, but in terms of the presentation of the material, all three materials are extremely superficial, with errors," – she says.

Michael Dorofeev, the man known in the media community of Kazakhstan, took an even more judgmental position. "I do not know how to judge the Kazakh press, but regarding Russian, none is worth of the Grand Prix," – he said clearly.

The stumbling block was the nomination of "The best material in the national media." "With regard to the materials in Russian,

there is a big problem in the national press. I agree that the level is extremely low. For some reason there is not a large number of people, who constantly write on this subject and whose articles we read. But apparently, they decided not to apply for the contest." – lamented Michael Dorofeev. It became clear that among those represented at the contest, the standing out were the works by Analyst of the Agency for ROI Research, Yuri Tsai, who sent to the jury as much as 19 articles. All noted that Yuri Tsai materials were the most complete. But the question was whether consider Yuri Tsai a journalist? Because, the author positioned himself as an expert... As for the regional press, the jury came to the decision quickly. "I really liked the article Gas prospects in the region by Igor Titenuk ("Kyzylordinskie Vesti, 06/28/2011). We have known this journalist for long. This is a very precise and pernickety journalist. We write more about oil, but gas is coming to the fore. From this point of view, I would put forward this material. I think this is the best material in the regional press in Russian," - Michael Dorofeev offered. Having discussed the materials in the regional media, the experts identified several problems faced by the journalists in the field. According to a political scientist, Aidos Sarym, regions are more exposed to censorship. He was echoed by Michael Dorofeev, reminding the jury: "We must understand that the regional newspaper is entirely a state order at the local level."

But in the nomination of The Best Material on the History of Oil and Gas Industry the experts took a unanimous decision. A series of essays on the oil industry written by the correspondent of Atyrau regional newspaper Caspian commune, Lyubov Monastyrskaya was declared the best. As the Chairman of the Committee of Information and Archives of the Ministry of Communications and Information, Bolat Bersebaev noted, "nowadays a lot of young guys finish schools and

**The Energy of Word**, for the third year, in order to attract public attention to the achievements of the national oil and gas industry, to promote the interest of oil and gas companies in transparency and information openness.

go to work on oil sites, and if they are more likely to meet with the veterans of the oil and gas industry, more likely to read about them, then the youth will have the right motivation."

Summing up the contest, Director of Public Relations JSC EP KazMunayGas, Michael Dorofeyev noted that according to the winners it is possible to judge what articles, what topics, what style is popular today; of course, in the opinion of the judges. "I am very happy that the jury was unanimous in identifying the owner of the Grand Prix. This suggests that the Kazakh press still has the journalists ready to objectively approach the problems in the industry, and at the same time, present all these problems in the understandable, high-quality language." – he said.

KAZENERGY Association and the National Company KazMunayGas have been conducting the contest, The Energy of Word, for the third year, in order to attract public attention to the achievements of the national oil and gas industry, to promote the interest of oil and gas companies in transparency and information openness. According to Namazaly Omashev, this kind of contest plays an important role for the whole country, because the public needs to know about the existing problems in the industry, about the people committed to their work, about the initiatives that should be proud of. And only journalist can inform the community ... This year the total number of the materials exceeded 200, and 8 of them were radio reports, 5 student works, 3 photo reports published in the national and regional media from 1 January through 25 September, 2011.

**R**esults of the III Republican contest of journalistic mastery, The Energy of Word:

**The Grand Prix** of the Energy of Word went to the correspondent of "Aykyn", Atyrau regional newspaper, Tursyn Kalimova.

**The Best Article** in the Republican Media was awarded to the analyst of the Agency on ROI Research, Yuri Tsai.

**The Best Article** in the Republican Media in the **Kazakh Language** was awarded to the correspondent of "Mangystau" newspaper, Abdygalym Sarkenov.

**The Best Article** in the Regional Media in the **Russian Language** was awarded to the editor of the Economics department of "Kyzylordinskiye Novosti" newspaper, Igor Titenok.

**The Best Material on Oil and Gas Industry History** was awarded to the correspondent of "Prikaspiyskaya Kommuna" Atyrau regional newspaper, Lubov Monastyrskaya.

**The Best Radio Program** was awarded to the Chief Editor of "Shalkar" program, Kopen Amirbek .

**The Best Photo Report** was awarded to the correspondent of "Munayly Astana" newspaper, Alma Kalusarieva.

**The Best Student Work** was awarded to the student of Atyrau Oil and Gas Institute, Fellow of KAZENERGY educational program, Darkhan Zhanshin.

**The recognition gifts** were given to: photographer Vadim Soloviev for high professionalism and special focus, correspondent of Komsomolskaya Pravda, Gulnar Kudebayeva for complete disclosure and style, correspondent of Yegemen Kazakhstan, Atyrau newspaper, Zholdasbek Shopegul for narrative language.

# Education for future

Republican Specialized Physics and Mathematics Boarding School for Gifted Students named after O.Zhautykov is known as a leading educational institution of the Republic of Kazakhstan which provides high quality education.



**F**

by Energy  
Focus

ounded in 1972 as an equivalent to the most prestigious physics-mathematics boarding schools of the former USSR, the school aimed to reveal and support gifted students from all the regions of the Republic of Kazakhstan.

The biggest contribution to the foundation and development of the school that is widely known as Fizmat was made by the brightest scientists-mathematicians, particularly by academic O.Zhautykov, after whom the school has been named since 1990. The school has successfully overcome difficulties of transition period, being able to keep the best traditions of the past, as well as implement and develop the new ones and through that give a positive impulse to educating the best representatives of Kazakhstani society.

More than 6 thousand people were graduated from the school for almost 40 years of its existence. A large number of the school

graduates have become bright politicians, promising scientists and successful businessmen, innovators in their field, excel at peculiar corporative spirit.

Among them: K. Masimov (Prime-Minister of Kazakhstan), T. Kulibayev, K.Kelimbetov, E.Kaliyev, B.Sultanov, N.Kapparov, E.Dosayev, K.Kozhamzharov, S.Nurgisayev and others. Such people as A.Dzhumadildayev, E.Aryn, F.Kuanganov, I.Beisembetov, A.Kusainov, U.Umirbayev, N.Temirbekov and others have made a significant input to the development of national science and education. The success of school's graduates seems connected to both the highest quality of its education and the vast demand for them that come into play after graduation.

New generation of graduates demonstrates the same level of ambitions and determination in realizing their full potential. The vast majority of them have become successful students of the top national and international universities.

The school initiates various projects, which are successfully put into effect. The projects include organization and realization of International Zhautykov Olympiad, Republican Contest “FizMat”, City Contest named after Zhautykov for Teachers, City Olympiad named after Zhautykov for Students and also an edition of republican scientific magazine “FizMat”.

Since recent years the school having achieved a huge progress in educating gifted students has taken up a dominating position in the system of secondary education of Kazakhstan.

**Fizmat** was made by the brightest scientists-mathematicians, particularly by academic O.Zhautykov.





**Ben Godwin,**  
the Director of  
External Relations in  
Capital Education

# Education: Maximizing Kazakhstan's human resource potential

**B**en Godwin, the Director of External Relations in Capital Education, is convinced that the success of his firm is based on a progressive business model operating at the heart of the new Kazakhstan capital. "The right approach to client relations,

built on a positive internal atmosphere, enables us to benefit from the rapidly-developing economy here in Astana and become a leader in the education field."

#### **Ben, what brought you to Kazakhstan and how did you begin work here?**

As far back as my school days I remember being interested in the history of the former Soviet Union. I then had the opportunity to write my Masters dissertation on the economic development of Central Asia from 1991 under the supervision of professors who had extensive experience in the region. This was an extremely beneficial experience and inspired me to head out to study Russian in the region after graduation. I also spent a considerable amount of time working for a consultancy firm advising financial organisations on investment

risk in the region before coming out to work in the European Commission here.

#### **How did Capital Education come into existence?**

As I was finishing work at the European Commission I needed to make a choice: return to Europe and pursue a career in an area such as the diplomatic service or stay in Kazakhstan and try something altogether new. The idea of launching a project in Kazakhstan was extremely appealing and I was sure that it offered were far more opportunities to for me develop. More than anything I wanted to work independently and try something by myself. This is when I joined my two local partners to work on Capital Education.

#### **I understand that Capital Education provides professional training for large organisations. What kinds of services does this involve?**

One of our key areas of activity is professional training for large organisations and companies. As Kazakhstan's economy matures, companies

require their staff to have the highest level of qualification and are prepared to invest in them. Our services give Kazakhstan specialists access to leading international consultants from leading universities, business schools and professional associations. Our considerable network is able to offer a wide range of spheres including human resource management, oil and gas engineering, management, finance, time management, logistics and IT.

**How does your language training differ from other centres?**

Despite the large demand Language training in Kazakhstan is still in an early stage of development. There are no major international language schools and modern teaching methodology is often little understood. We have introduced European standards to our courses based on the Common European Framework of Reference for Languages. We have also worked hard to recruit top international teachers and develop an internal culture of development, ensuring all have the ability to operate at the highest level. And in fact our clients have come to expand such a standard of service from us.

**Who are the eventual beneficiaries from your trainings?**

We have an extremely wide portfolio of services. We have over 400 clients benefitting from our services at any one time, from schoolchildren to members of parliament. Some learn general or business English, others are preparing for international exams, while others still are receiving professional training within their companies and organisations. Our full-time trainers are qualified teachers but have a number of other qualifications in business, IT, and journalism.

**One of the key areas that Capital Education specialises in is student recruitment. Why are Kazakhstan citizens so interested in international education?**

I think, in the first instance, it comes from the parents. Parents here are prepared to invest huge amounts in their children's development. I think that the parents really understand that an education from a leading international institution enables students to be competitive in a globalised economy. This is of particular relevance to Kazakhstan due to the rapidly growing number of inter-

national companies operating here, whether it be in the energy sphere, mining or retail. People recognise the opportunities that this education can bring them.

**You chose an original approach to promoting international education in Kazakhstan with the Education Life television project. Could you tell us more about it?**

We have always been interested in launching new and creative projects. Education Life is unique in that it is the only programme on Kazakhstan television that looks at the experience of Kazakhstan students studying abroad; how they live, the benefits of their education and what they hope to achieve in the future. The first series was filmed in the UK in an 'info-tainment' format, ensuring it was informative while maintaining entertainment value. It has been

**We have over 400 clients benefitting from our services at any one time, from schoolchildren to members of parliament**

a considerable success here and programmes continue to be made.

**I hear a lot about the Capital Education team. Could you tell us more?**

Our team is relatively young, particularly by international standards, but it consists of highly talented and motivated people. Most of the team have received education abroad and are already respected specialists in their field. We are all creative people and have established a very positive working environment based on respect and professional development. For example, we provide various trainings each week for all on subjects ranging from leadership skills to organising personal finances. This maintains a dynamic atmosphere and encourages a very powerful team spirit.

Without such a strong team we would not have been able to create such an interesting company and launch so many projects. We have achieved many firsts in Kazakhstan, such as our television project and have also worked hard to modernise and create efficiencies within the education market. For example, we are the first

and only company to send students for education abroad free of charge. There is no reason to charge clients for this service but all of our competitors do so. Client demands are rapidly changing as they become more aware of the possibilities available to them and the only way to succeed in this kind of market is to be at the forefront of innovation.

**What other services does Capital Education offer?**

We run education and recruitment exhibitions in the major cities of Kazakhstan such as Astana, Almaty, Karaganda and Ust-Kamenogorsk. These events increase awareness about the possibilities of international education and gives young people the opportunity to get a world-class education or find a job in an leading company.

We also run a scholarship programme with the U.S. Embassy here in Astana for teenagers from disadvantaged backgrounds. They receive 6-hours free English language training a week over the course of two years as well as careers training and other skills such as public speaking and acting. Upon completion of our programme they will have an excellent chance of receiving a scholarship at a top U.S. university, completely changing their outlook on life.

**What would you say is the principle cause of Capital Education's success?**

As I said, I think it comes down to a strong team and the correct approach towards our work. Kazakhstan is going through a really interesting period at the moment, where a lot of young, very talented and motivated people are starting to make real changes to their country. They are ambitious, entrepreneurial and keen to launch new projects. Being in Astana, Capital Education has really benefitted from this trend and is playing it's own role within it. By giving our staff the freedom to develop and pursue new projects we have established a very strong, progressive team. As a foreigner, it is really exciting to be a part of this process.



# Mangyshlak: on the waves of three seas

by Andrey Mikhailov

*Because of its aridity Kazakhstan seems much larger than it actually is. But in fact the country is not a dwarf. By area, we are in the ninth place and are between Argentina and Sudan. Such extensiveness implies great regional differences in different parts. They exist. Our flat north is absolutely different from the mountainous south; the rainy east bears little resemblance to the desiccated west. The same can be said about the peoples, tribes, still loosely living in this boundless space. But one part of the country, even against this backdrop, can be considered the standard of otherness.*



## **Mangyshlak is its name**

...In Mangyshlak, other countries arose next to me constantly. Unobtrusive parallels and perfectly clear analogy snatched out of memory now and then things seen somewhere and sometime. But mostly I remember the holy Praying Allahabad, where the streams of three sacred elements of Indian civilization merge into one: the Ganges, Yamuna and Sarasvati.



Here, in Mangyshlak, three powerful universal flows are joined. Three of the seas: First is the Caspian Sea, a huge pond with the obscure geographical status and the vague geological past.

Second is the desert peninsula and adjacent Ustyurt, which on closer inspection turns out to be the sea, too, but punished for something, and sworn in some unthinkable distant times, dried, enchanted and petrified, turned inside out. No wonder then, in any

place, at any height, in any depth one can find shells, fish or mark or tooth-stone of some primitive sharks.

And one more sea is a man-made one, which (like the invisible Sarasvati) is glistening in the dark depths of the human history, but occasionally bringing to the the surface mysterious wreckage and exciting signs of of the past. Someone has once given a faithful and reliable guard to this hidden sea. The de-



**Both in the Russian Empire and the Soviet Union, the Caspian Sea was considered the main barrel of fish of the state. And it seemed to be inexhaustible.**

scendants of which are the current Kazakh-adays.

Cultural and geographical phenomenon, whose name is Mangyshlak, deserves to be treated carefully not talked about in vain. So, let us take the course with the Caspian Sea.

### Shagreen Area

The Caspian Sea can be attributed with a safe conscience to the most mysterious waters of the earth. Due to the fact that the scientists still cannot sort out its geographical status, the Caspian politicians cannot divide it up. If the Caspian Sea is the lake, they need to share it equitably, if the lakes ... take it share and share alike!

Besides, the Caspian has never had accurate maps. Had not and will not have. Because its mapping is a permanently fatal process. The cup, which laps the Caspian water, has very easily expandable coast, on one hand and on the other represents the pool constantly filled with several pipes (the largest in diameter is the Volga, 75% of debit) with very unstable pressure.

That is why, a priori impossible, for example to determine not only the exact coastlines, to catch surfaced (or drowned) island, but also to establish the area of adjacent administrative entities, for example of Mangistau region. When a lot of water (like today) - the land is not enough. When on the contrary, then ... Today, Kazakhstan is growing by its Caspian lands!

I remember the Great Khazaria by Gumilev. And not without reason our archaeologists' conjecture on the fact that in the era of regression (and the fluctuations permanently accompanied the history of the Caspian Sea), there was a land bridge from the Pen-

insula Tub-Karagan to the shores of the Volga. The caravans of ships, but not the sea, land ships walked across this bridge. Camels with bales "floated" from Central Asia to Eastern Europe right on the sea. Like on dry ground. Straight through the eye of a needle.

### In the Mouth of the Caspian

But the cup of the Caspian Sea for many millennia remains empty. To get the level of the World Ocean it stably lack 20 to 30 meters. Thus, our pool is also deprived of a visible pipe through which pours out. But if it is just flowed in, then the level would grow 125 - 135 centimeters per year and we would have long had own Atlantis (Caspis) in the form of almost all Atyrau and most part of Aktau region. However, this does not happen. Why?

Simply because the Caspian Sea has a tricky natural counter regulator in the form of shallow East Bay which are filled with the growth of its level and work as huge natural evaporators. Kara-Bogaz-Gol, Dead Kultuk, Kaidak - the greater the level of the Caspian Sea, the greater the area of of the evaporating surface, the more water turns into steam. And no need in runoff - the water is absorbed in the "mouth" at such a rate that the first explorers of the Caspian Sea (for example, Karelin in 1856), long thought before they went in in their fragile boats.

The water evaporates, and what remains? Salt! Salt, which is spread from here across the world. And here, in the Caspian since ancient times it was used for the good of the cause. For fish salting. The two salt lakes turn pink on the road from Fort-Shevchenko to Bautino. They say that when people lived here in another way, this salty fish, notable for its excellent flavour, shipped from here even to the royal table, in St. Petersburg. It was the pride!

### Hole in the fish barrel

Both in the Russian Empire and the Soviet Union, the Caspian Sea was considered the main barrel of fish of the state. And it seemed to be inexhaustible. It lasted until the 50s of the last century. And, interestingly the Caspian fish was an exclusive product. Like most other inhabitants of the Caspian, 65% of which in 1937 were considered endemic. And 43 of the 73 species of the fish of the Caspian had a commercial value.

Then the fish began to fade and grow shallow. Initially somewhere gone were beluga, monsters fish, whose viability determined by the fishermen, sitting astride, to show that the feet do not reach the ground. Then other sturgeon slowly began to be lost. Gradually, fishing masters started fishing herring, then sardines, which became the most favorite people's snack during the development of socialism. Back in the 1950s the sprat expedition went to the sea numbering 160 vessels! But today they are in the past



One of the centers of fishing in the Caspian is located in Bautino in those early times, when Bautin Alexey himself had not yet laid down his life in a violent battle for the happiness of the working people and a peaceful settlement of fishermen called the village of Nikolayev.

Right there in Tyubkaragan bay, was the main base of the Caspian sea-dogs slaughterhouse for those courageous people who used to come out with the sticks in winters to the breeding grounds, and beat the defenseless "Matiukha" with newborns "Belka". They beat to a frazzle, until hands began falling off. Seals fight was carried out in the North Caspian Sea for a century, mainly in the islands named the Seal islands. Skins were used in many furriers' crafts, and fat - in the food industry and as a lubricant.

Nikolayev's merchant fishermen (for example, the famous Zachary Dubskey) were known as widely as those Soviet leaders of cooperatives and state farms, factories and bases who had come to replace them. The succession, despite the social upheaval in the early XX century, was still preserved. The builders of communism utmost used the nationalized means of production of the capitalists, such as boats, ice-houses, smoke

fat-melting plants. And they themselves, at first differed little from their predecessors. Only fish in the Caspian Sea did not wish to be imbued with the grandeur of the economic plans of the workers' and peasants. It grew small and thin.

Today, little is reminiscent of the glorious past of these fishing areas, except for those rusty remains of the fishing fleet beautifully blazing in the turquoise waves of the Tyubkaragan bay that serve as the roost for phlegmatic cormorants. Along the shores of the Seal islands that is being served as reserve, there are lying... No, not seals! Huge vats used for melting the seal fat.

### The Caspian "Black Gold"

However, some fish in the Caspian Sea is still alive. Despite the fact that legal fishing has disappeared from the shores of Mangyshlak, here in Bautino, is a division of guard-ships and boats, whose main task is the fight against poachers. And on Kulaly, the largest island of the Seal archipelago, day and night the land guards of our borders keep the watch on a single Kazakhstan island post.

Constantly on duty, there is a dozen of soldiers with a pair of officers. Being replaced

**The desert peninsula** and adjacent Ustyurt, which on closer inspection turns out to be the sea.



**Bautino** has more foreigners than locals living here. They know the smell of money.

every two weeks. The post was established seven years ago. Before that there was a base of Dagestan poachers who sailed from over the sea on their high-speed "Baida", a kind of scooters, which hung with a few of "Yamahas" were beyond the reach by our border guards. Even today, they appear in our waters now and then; three hours crossing the Caspian Sea and they can be caught only on helicopters. But now our border guards have something to response with. Regularly, they detain overseas schooner with unshaven "fishers of sardines".

One Bayda with two motors lies on the shore of the island Kulaly. They took her last winter. Even though the owner paid the fines long ago, for some reason he does not hurry to take away his goods. Perhaps, there is no one to hurry? The shady life the Caspian has a very dim outlines. But the fact that it is quite active and brutal is doubtless. When you play that kind of money, life comes to its own laws.

The money is big. Even at first hands, the price of one kilo of black caviar is 700 – 1000\$. When it gets the customer, somewhere in Moscow or Paris, this figure grows by an order of magnitude. So the caviar could be considered "black gold", but it does not. The reason is that much bigger profit can be obtained from the black oil.

### **And the Blackest "Gold"**

Many concerned environmentalists perceive a direct relationship between the reduction of production of black caviar and an increase in production of black oil. After all, the Caspian Sea is difficult water. It is known that the emissions of gaseous hydrocarbons in the Caspian Sea occur even without the human intervention. Karelin's expedition scrubbed the oil off the oars, popped-up from the bottom on the Dead Kultuk. In December 4, 1950 the fiery flashes broke from the depths

of the sea with the height of 100 meters! After that an island appeared with the size of a square kilometer.

Very complex is the structure of the water column itself. At the depth of more than 400 meters begins the "dead zone" where there is almost no life due to lack of oxygen, and below 650 meters is a layer saturated with hydrogen sulfide (as in the neighboring Black Sea), where there is no life at all. It is interesting that from the surface of the dead water every night myriad of tiny copepods rise to the surface. And there, at a depth of 300 meters one can see moth larvae. And they are not simple bodies, but the base of the food pyramid of the sea. It is clear that such a subtle and disturbing the natural mechanism of deep-seated, so notorious cause environmental upheaval. His is troubled much! Nowadays, Bautino has more foreigners than locals living here. They know the smell of money. The size of investments can be measured by the size of huge production in the Tyubkaragan Mountains, at the other side of the bay. The roads there are good for the heavy trucks driven by foreign drivers. They transfer the stone to the barges. And this stone is used to construct an artificial island over the sea to produce the Kashagan crude. Interesting, how many billions of oil dollars will be extracted, if the preparation takes huge money?

*The author expresses his gratitude to the Akimat of Mangistau region for assistance and cooperation.*

ЖУРНАЛ ФЕДЕРАЦИИ ГОЛЬФА КАЗАХСТАНА



# Aspiration for leadership



From space our earth looks like a small blue ball, said the first spaceman, Yuri Gagarin. Amazing how millions of years ago this fragile planet could become the cradle of life



Mask. Plaster cast. Painting. Tashtyk culture. 3-4 centuries AD. Russia, Siberia, Khakassia.  
State Historical Museum, Moscow.  
Photographer Sedenkov I. A



Replacing each other, born the centers of civilization, the ancient people mastered the wood, bone, stone and copper tools, learned how to strike a fire, invented the bow and arrows, weaving machines, tamed the horse and other animals learned to plow the ground, created a multifunctional dwelling, the yurt, mastered writing and learned writing and putting ornaments on pottery, created on the rocks their great works of art. The planet was changing along with it changed and evolved the human. Some 4000 years ago, and for the history it is a moment, the planet was the place for the first technological revolution that is the human invented the bronze! Southern Siberia, Central Kazakhstan, the unique Arch are the first iron and steel centres of the earth. "Heavenly Metal" or found an alloy of copper and tin allowed riding a horse hobble, and turn an ordinary steppe man into the centaur. Mankind has entered the era of the iron, the wheel of history rolled faster.

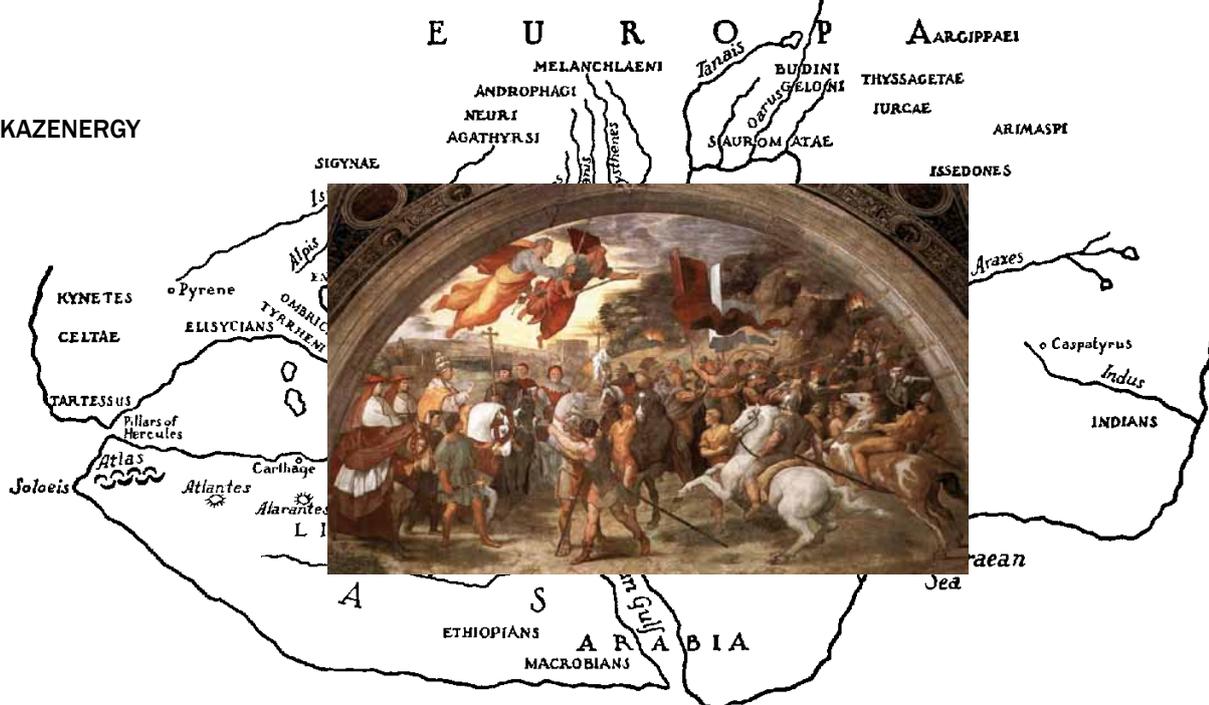
At this time (I thousand BC), in the East, new tribes were forming (see Bichurin N. Ya. [Yakin], History collection of peoples inhabited the Middle Asia in ancient times), empires were born and died, masterpieces of jewellery were created, the finest silk appeared, beautiful bright fabrics, and at the same time the struggle for power and territory exacerbated dramatically. China, defending from the countless invasions of the early Huns nomads, led by the formidable Mode Hagan (III-II cc AD) (as Groom Gzhimaylo referred in his "Western Mongolia and Uriankhai edge," Mode in Chinese meant the transfer of the name Bagatur), built the Great stone wall, which in our days is clearly visible from space. It is more probable that the Hun tribal alliance was mixed, ethnically heterogeneous: it consisted of Turks, Mongols, Ugrik (i.e., ancestors of the Magyars), Khanty and Mansi, and Paleo-Asians. In the "History of the Jin Dynasty," in the section on the Huns (Huns) from 284 AD, a number of tribes are listed, among which is the tribe named Tu-ge,



which was "the most powerful and respected" Scattered tribes of the Great Steppe: which meant the area of Manchuria and northern China to the steppes of Kazakhstan today, after the collapse of the Huns, were united in "dozen of tribes" alliance of Turkic-speaking tribes, which included Kipchaks, Kengerlu, Uighurs, Kalash, Karluk. "When the blue sky was created at the top and the brown earth at the bottom, between both of them there were born the sons of mankind. Above the sons of mankind, we sat down, the ancestors of Bumyn Kagan and Istemi Kagan. Having ruled the kingdom, they guarded the state and established laws

of the Turk people", so the story about the beginning of a new era in the desert, the era of domination of the Turkic tribes, their languages and the state's largest written monument to the Turks, a runic inscription in honor of Kyultegin. Thanks to the "high-vehicles", carts, as written about them in Chinese chronicles, the technological superiority of the "Altai blacksmiths' and the use of cataphracts - Plate cavalry, nomadic troops and their families it was possible to manage overcome enormous distances, wandering to the West. By the way, the scientist Klyashtorny S.G. is convinced

that the term "tele-" is associated with the word "tegreg": Turkic - "cart, wagon." In the last centuries BC and the first centuries AD "the tours with fast horses" or, as the father of history Herodotus wrote, the "Asian Scythians", the Sarmatians, Saka, Alans, Concarius began assimilating with each other and settle on the plains of the Eastern Europe. In the academic science this movement of peoples is known as the Great Migration. But they spoke in genetically related languages, which are now combined in the Ural-Altai group of languages. The similarity of language, according to the chronicle references by Abul-gazy-Bahadur, as well as researches by Okladnikov, Rudenko, Gumilev, Budberg and Pulliblanc, was reflected to some degree in the similarity between the ancient and historical destinies of peoples genealogically close-language creators.



And, like any orderly movement, this lasting historical process at its final stage had its own leader, military leader, Attila (Edil) (434-453 BC). It was him to manage forming a quick, ruthless, skilful, and hard to win Turkic army from multiple disparate tribal groups, which tried to conquer the Roman west. The Huns conquered the Caucasus, the lower reaches of the rivers Dnieper, Dniester, Don, the Balkan peninsula, Mesopotamia, attacked the walls of Constantinople, destroyed the kingdom of Burgundy (an event which served as the basic plot, "Song of the Nibelungs"), reached the banks of the Danube from there raided the Eastern Roman Empire. Byzantium was paying an exorbitant annual tribute. As a Mu'tazilah theologian, Sumam b. Ashras, wrote: "Turks do not know either flattery or deception, or hypocrisy, or peaching, or pretense, or slander, or duplicity, or arrogance with relatives, or harassment of associates, they are not susceptible to vice heresy, do not let the whims to overwhelm them and do not afford to borrow money for the interpretation of the law. Their drawback and the reason for their suffering is the nostalgia, the desire for wandering, the passion for the raids, robberies and strong affection of their customs." Later, Attila has created a unified state from the Volga to the Rhine, which besides the Hun (Altai) tribes consisted of many others, including the Germans, Alans, Slavanians, Ugroins. Priscus, who visited the capital of Attila as an ambassador, described the Huns in his "History of Goths" as follows: "Crossing some rivers, we arrived a large settlement in which, they said, there were mansions of Attila, more prominent than in all other places, built of logs and well-planed boards and surrounded by a wooden fence encircling them not for security, but for beauty. The mansions of Onogesiya were seen behind the royal mansions, also surrounded by a wooden fence, but it was not decorated with towers, just like Attila's. Inside the fence there were many buildings, some of whom were from the beautiful adjusted boards, covered with carvings, and others made of hewn scraped to the straightness of logs that are inserted into the wooden wheels ...

As the squad of theirs consists of various barbarian peoples, then the kinsmen, except for their barbaric language, learn from each other both the Hun and the Gothic, and Italic language. Italic comes from frequent communion with Rome. After overcoming some way with the barbarians, we, on the orders of the Scythians, adjoined to us, went to a different path, and meanwhile, Attila stopped in some town to marry the daughter of Eski, though he had many wives: Scythian law allows polygamy.

Each of those present by the Scythian courtesy rose and gave us a full cup, then embraced then the kissed a drunk, took the cup back».

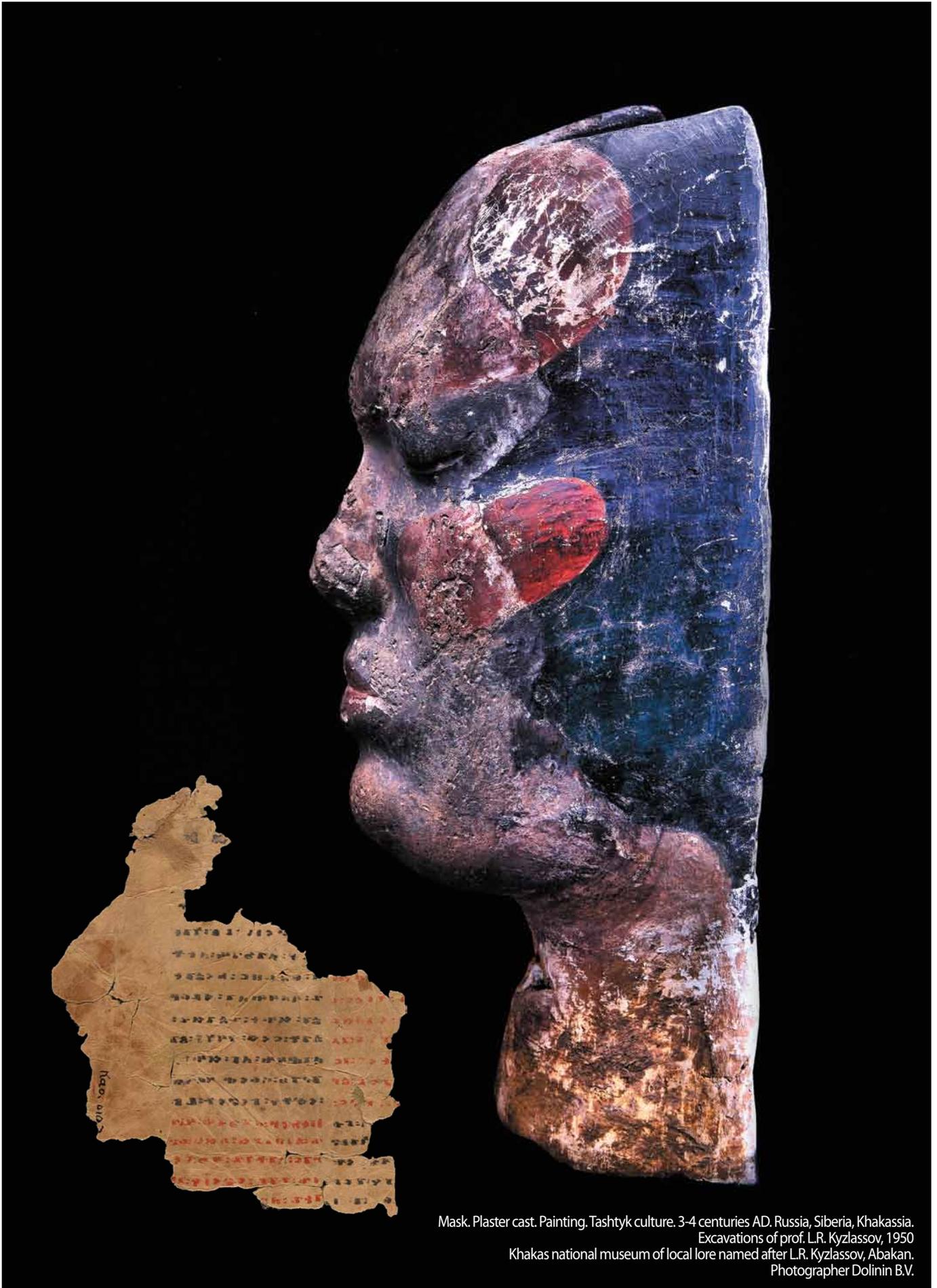
According to the chronicler of Jordan, the tribes which were part of the "Hun" Union brazenly invaded both western and eastern parts of the Roman Empire and settled in Thrace, Illini, dalmatic, Pannonia, Gaul, and even the Apenine peninsula. Later, in 455, in the battle of the river in Pannonia Nedao the Huns were defeated and went into the Black Sea region: a powerful alliance fell apart. The fact that after the death of Attila's empire, many Turkic peoples began to emerge the scene of history under their self-names, says that before, being in the union of Huns, they were "hidden" under a common name, not revealing their identity in the mass of the huge union of tribes. Now they are the people, including the Kazakhs, playing their own role in the historical action.

The fate of many ancient states is cyclic: they all passed the period of infancy, the rapid rise and relentless fall. Few of them could revive and, like the Phoenix, once again show the world their strength, beauty and power. Modern peoples of Dasht-i-Kipchak, within Eurasia remember their cradle Altai; worship Tengri, the God of heaven, who gave the world metal, keep the priceless centuries-old spiritual heritage. During years of bat, we, the Turks, declare the verse by Magzhan Zhumabayev, in which we ask the destiny to give all suffering that we must pass: «Слышишь, судьба, не хочу подаяний! Полною мерой отмерь мне страданий, В огненном вихре сжигая дотла. Пусть этот вихрь мое тело корежит, Испепелит, до золы уничтожит. Так, чтоб из глаз моих соль потекла... Слышишь, судьба, не хочу подаяний! Полною мерой отмерь мне страданий, Жги на огне, в три погибели гни!»

Despite the long years of forgetting our own history and culture, we learn and discover new page in the history of ethnic groups and nations that we worship as our ancestors, interpret the fate of the great personalities and remember the lessons of history. Perhaps it is no coincidence that the first person overcame the gravity from the ancient Land of Baikonur and flew around the Earth in a spaceship with a unique name of "East".



Roza Zhussupova,  
Honoured Arts Worker of RK



Mask. Plaster cast. Painting. Tashtyk culture. 3-4 centuries AD. Russia, Siberia, Khakassia.  
Excavations of prof. L.R. Kyzlassov, 1950  
Khakas national museum of local lore named after L.R. Kyzlassov, Abakan.  
Photographer Dolinin B.V.



# Windy city of Fire country: Achievements and Drama of the World Cup in Baku



Two silver, two bronze medals and five Olympic tickets. This is the result of performance of Kazakhstani team in boxing at the main start of the biennium - the World Championship held in Baku. Superiority of the world this year was licensed for the Olympic Games in London, and therefore brought together the cream of world boxing.

**U**nfortunately, the winners of individual championship of the World Series of Boxing-WSB, who already qualified for the Olympics (our Kanat Abutalipov was among them, acting in the weight category of 56 kg), did not come to the ring of Azerbaijani capital. But despite their absence, it did not prevent the 16th World Championship to become a record both in terms of alleged fighters and in terms of participating countries: 570 fighters from 113 countries came to Baku. Nine of our hopes were among them: the world champion, bronze medalist Birzhan Zhakipov (49 kg), bronze medalist of Asian Olzhas Sattybayev (52 kg), winner of the Asian Games Daniyar Eleussinov (60 kg), vice-captain Zhaylauov Ghani (64 kg), two-time world champion Serik Sapiyev (69 kg), multiple winners of Kazakhstan championships Danabek Suzhanov (75 kg) and Adilbek Niyazymbetov (81 kg), the Asian champion Vassily Levit (91 kg), Asian Games silver medalist Ivan Dychko (over 91 kg).

by Talgat Isenov



The day before the start of fighting, an extraordinary congress of the International Boxing Association (AIBA), on which our country was represented by Vice-Presidents of Boxing Federation of Kazakhstan Yuri Tskhai and Serik Konakbayev, Chief of Staff of the Federation Bekzhan Bektenov was held. The main theme of the meeting - a new program of AIBA – APB launched in summer during the World Junior Championship in Astana. It will allow boxers to be performed both at professional and amateur boxing ring, in particular, at the Olympics. Moreover, after London Olympic Games helmets will be removed from the equipment of present amateur boxers. Thus, if in the past an athlete had to choose between money and the Olympics, now he can combine with one another.

The performance of Kazakhstan national team began with a defeat: one of the most experienced team members Birzhan Zhakipov lost in his first battle to Cuban Veitia. However, despite his troubles, our team scored a good tournament course, and before the second round began we did not lose anybody else. In 1 / 16 of finals Irishman Michael Konlan won Olzhas Sattybayev, thus, our team was left without any lightweight at the World Cup. However, the rest of the Kazakh fighters were confident with their rivals, especially Serik Sapiyev and Adilbek Niyazymbetov. Boxing performance of both was very impressive, and if the captain of the Kazakh team was accustomed to fight in such a manner even with so promising fighters like Apichet Saenz, then it was not expected for the world championships debutant Niyazymbetov to show such a brilliant performance, although his outstanding potential is already known. Thus, Adilbek very easily and confidently defeated the current

champion of Asia Hongku Kim from South Korea.

In 1 / 8 of finals, unfortunately, another Kazakhstani fighter ended his way on the tournament: Daniyar Eleussinov quite unexpectedly lost Hungarian Gil Keith. But the next battle was successfully passed by Adilbek Niyazymbetov, which by impressive blow to the liver knocked out Colombian Varela. Our heavyweight Ivan Dychko revenged a silver medalist of the Beijing Olympic Games Zhang Zhiley from China for all the past wrongs (like the Asian Games final of 2010). In the quarterfinals the bitterness of defeat struck another two our fighters - Danabek Suzhanov lost to Brazilian Eskive Falcao, Vasily Levit - to Chinese Xuan Xuan Wang. However, Serik Sapiyev, Adilbek Niyazymbetov, Ghani Zhaylauov and Ivan Dychko won their matches and became winners of the World Cup. The latter three fighters became the world championship medalists for the first time in their careers, as for Sapiyev it was the fourth time in a row that he takes the world championships awards. On the total number of finalists, we gave way only to the Ukrainian team that had one more fighter.

Ghani Zhaylauov, the first of Kazakhstan fighters to protect the honor of our country in the semifinals, eventually satisfied a "bronze" medal.

His opponent - Cuban Yasner Toledo has proved: it is not in vain that he is a representative of one of the best schools of boxing in the world. Ghani was trying to do everything to win, in the first round struggling with Cuban on a collision course, but he missed three times - 2:6.

In the second three minutes Toledo made the result of battle. Yasner, having caught the winning wave, coolly made the attack, and,

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**Ghani Zhaylauov** the first of Kazakhstan fighters to protect the honor of our country in the semifinals, eventually satisfied a "bronze" medal.

more importantly that he counter-attacked very efficiently and effectively. Zhaylauov missed quite unnecessary shocks, and after the second round the score was already 13:5 in favor of Cuban.

Tactically "running away" in the third round, Yasner scored another eight points and finished the match with a score of 21:9. Ivan Dychko also failed to win his opponent in his semi-final - a future world champion Azerbaijani Magomedrassul Medzhidov. Ivan won Medzhidov here in Azerbaijan two years ago at the "Silk Road" international tournament. However, as we know, there are two big differences between the WT and WC.

Thus, only two Kazakhstani fighters Serik Sapiyev and Adilbek Niyazymbetov were to see the decisive battle. The possibilities of Serik are well known for all of us, but Adilbek became the discovery of event in Azerbaijan. Two years ago, being a champion of Kazakhstan, he was in the national team, but the injury of the eye did not allow him to perform at a high level. However, this year Niyazymbetov although not formally being the number one of the team – not being the current champion of the republic - showed good results and "reanimated" again by a mentor of team Aitzhanov got a chance to go to the championship of the world. And he did not disappoint us. Adilbek showed very confident boxing, and in the semifinals it was not anyone else, but the world champion from Uzbekistan Elshoda Rassulov to battle with him.

... There are moments when, even without being on the ring, you feel like a boxer. All those Kazakhstani people who were present during the match of Serik Sapiyev in the hall of Baku Sport Complex felt themselves as in the ring. They felt the whole spirit of the national team captain. All of his desire to win. And then began to feel the entire defense obstruction of Ukrainian Taras Shelestyuk. The desire of Serik to change the course of match. Despair, because it does not work.

And the bitterness of defeat. He intended to take this "gold" and prove to anybody that he is worthy of a better again.

It must be said: in a match with the Cuban Julio La Cruz, our fighter was not "worthy" of defeat with the score that the judges put in the end - 13:17. In our subjective opinion, Adilbek probably did not deserve defeat at all. At the first, the second, and especially the third round Niyazymbetov showed boxing, by which he hated rivals in the previous matches. He worked well with his hands, kept a distance, answered by kicking back, and even yielding the score was able to find the strength to impose Cuban fighter with his fight in the final round. But judges recorded 4-4 in the first three minutes, 8:4 in favor of La Cruz in the second, and 5:5 in the latter. Recall that Niyazymbetov is the world championship debutant, and in the third round, when many newcomers pass, our fighter, by contrast, seemed preferable to Cuban fighter running from him around the ring. However, the bill will not change, and Niyazymbetov received a silver award, although he could celebrate the championship.

The first team place at the World Championships was given to Ukrainians that won four gold medals. Samostiynaya Ukrainian team which usually takes only one award of higher dignity (for comparison: Kazakhstan took six of them) on the world championships, this time proved that they have not only Vassily Lomachenko, although at the moment he is the best amateur boxer of the Earth. Of course, an experience of brilliant performance of the Ukrainian team and the secrets of their training (the emphasis on power and endurance components) is worthy of close study. But it does not mean that we should betray our boxing, for which aggression and technicality Kazakhs earned the "Asian Cubans" nickname even in the 90s.



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