On 20 May 2011 we attended the Seminar organised by American Chamber of Commerce in Ukraine (“AmCham”), which was dedicated to the prospects for unconventional gas extraction in Ukraine, organized with support from Mr. V. Tikhonov, Vice Prime Minister of Ukraine, the Ministry of Regional Development, Construction and Municipal Economy of Ukraine and the Ministry of Fuel and Coal Industry of Ukraine.

Opening the seminar Mr. Jorge Zukoski, President of AmCham informed the attendees on its role in promoting Ukraine’s energy independence and intensive work on creating the legislative framework for unconventional gas exploration and extraction.

In his welcoming speech Mr. Mykhaylo Kalchenko, Deputy Head, Department for Oil, Gas, Peat, Petroleum Industry and Alternative Fuels of the Ministry of Energy and Coal Industry of Ukraine emphasized the importance of cooperation between the government and foreign investors in the unconventional gas development and updated the participants on the shale gas development strategy of Ukraine.

Mr. Kalchenko drew attention of the participants to the fact that gas production in Ukraine is gradually decreasing and in the future the country may face the necessity to develop unconventional gas deposits in order to satisfy its domestic demand. Developing unconventional gas deposits may be an alternative to importing gas (currently Ukraine is importing 60% of gas it uses from Russia) and contribute to increasing energy independence of the country. Main obstacles on the way to extraction of these resources are lack of financing for the geological exploration and absence of the proper resources for oil and gas production companies. This is why the realization of the unconventional gas development projects requires joint efforts of State, scientific community and investors. As far as this seminar has brought together all interested parties, Mr. Kalchenko assured that his Ministry would gladly support projects and initiatives contributing to strengthening the energy sector of Ukraine.
Dr. Borys Ilienko, Gas Institute of National Academy of Sciences of Ukraine presented the results of the Institute’s research on use of unconventional gas resources and best practices of its implementation. According to Dr. Ilienko, energy safety means not only security of the gas pipes but also resolving the energy supply issues. Considering that shortage of traditional fuels will be felt in some 20 years, the Gas Institute has been conducting scientific research in the unconventional gas fuels and gained significant experience in this sphere. For example, utilization of the excessive methane from biogas helps not only to produce heat but also to prevent emission of the methane which inevitably causes greenhouse effect. Dr. Ilienko shared some of the Institute’s most impressive projects of biogas utilization at aeration stations, alcohol plants and landfill gas production and separation. According to recent estimates, the reserves of biogas in Ukraine which can be obtained from the communal and agricultural waste equal to 1 billion cubic meters per year. Thus, Dr. Ilienko concluded that first it is important to learn how to save resources and then to learn how to produce them more effectively. To this end Dr. Ilienko stated that the Gas Institute had many interesting fuel efficiency projects for various industry sectors, including municipal, metallurgy and construction.

Continuing the discussion, Dr. Ilienko voiced his concerns about the environmental aspects of shale gas production. He presented the official statistics, according to which for receiving 1000 cubic meters of shale gas it is necessary to supply 2000 kg of sand and 100 cubic meters of water, in addition to the necessary chemicals. Thus, shale gas production technologies require very careful planning of usage of other natural resources and should be tailored to the specific demands of each country, not simply copied from abroad.

Mr. Olexander Matviychuk, Institute of Renewable Energy of National Academy of Sciences of Ukraine in his report analyzed the legal aspects of the development of coal-bed methane and other associated gases. Mr. Matviychuk started with presenting the recent estimates of the unconventional gas resources in Ukraine. Due to the fact that Ukraine has substantial coal-bed methane potential and has been developing the coal-bed methane implementation technologies for some time, it was decided to develop special relevant legislation. Thus, in 2009 the Law “On Coal-bed Methane” (the “Law”) was adopted. This Law defined legal, economic, ecological and organizational basis for the geological exploration and production of coal-bed methane, including its extraction during decontamination and further use as a material and/or energy resource. Later in 2010 some amendments to this Law were made. Under the Law main institutions which exercise control in this sphere are National Agency for Effective Use of Energy Resources of Ukraine, Ministry of Energy and Coal Industry of Ukraine, and National Power Industry Regulatory Commission. Mr. Matviychuk briefed the participants on the Law provisions on accession of rights to coal-bed methane extraction, main exploitation principles, price forming models and licensing procedures. One of the main positive aspects of the Law is the introduction of the single subsoil license (Special Permit) both for exploration and production of coal-bed methane, which was positively perceived by the sector investors. Another important aspect of the Law is the creation of a mechanism of stimulation of coal-bed methane development through exemption from the income tax. Commenting on the recent legislative initiatives, Mr. Matviychuk updated the participants on the Draft Law “On Amendments to the Law on Electric Power”, which specifies the mechanism of “green” tariff receiving. He
expressed an idea that in relation to coal-bed methane similar special tariffs should be implemented.

**Mr. Robert Ichord, Chief of Energy & Infrastructure Division, USAID Bureau of Europe and Eurasia** presented the new cooperation project between Ukrainian and the US governments on the shale gas resources development. He reminded that in February, 2011 the Round Table “Ukraine’s Path to Growth and Energy Prosperity: Engaging American Business” was held in Washington, DC. This event gave an opportunity to Mr. Jorge Zukoski, Minister Boyko and Ms. Iryna Akimova from the Presidential Administration to meet senior US government officials and senior executives of major oil and gas companies to discuss Ukraine’s stated intent for energy independence and how the Chamber companies could help to achieve that goal. Following up, Mr. Ichord informed about the creation of the USAID Expert Group on shale gas resources development. Considering extensive US experience in development of unconventional gas, it was agreed to facilitate experience and expertise sharing between USA and Ukraine. As part of the Memorandum of Understanding for Shale Gas Cooperation, which was signed in February in the US, it was decided to concentrate on two specific areas:

1. Accessing the geological potential and characterization of the resources;
2. Environmental and regulatory cooperation.

During this first visit to Ukraine the Expert Group aimed at defining necessary framework and approach for the assistance. It had a number of meetings with representatives of Ministry of Ecology and Natural Resources of Ukraine, Verkhovna Rada as well as with the private sector.

Mr. Ichord stressed that there is apparently a great interest in the shale gas resources development in Ukraine. The Expert Group would contribute to the process of unconventional gas development in Ukraine and will try to help organize and address these issues in a transparent and effective way from legal, regulatory, economic as well as environmental standpoint.

**Mr. Richard Haut, manager of the Environmentally Friendly Drilling project, Houston Advance Research Centre**, presented the environmentally friendly drilling systems program. This program unites environmental organizations, industry, federal and state regulators for working together towards understanding of the importance of environmental issues of conventional and unconventional resources development. The program covers 3 major aspects:

1. Technologies to be applied to reduce environmental footprint;
2. Legal framework;

As a part of the USAID Expert Group, Mr. Haut will share his expertise and best practices of the Environmentally Friendly Drilling project and will contribute to the Ukraine’s progress in this sphere.

*It was agreed that USAID Expert Group will cooperate with the Chamber through the channels existing between the American and Ukrainian governments.*