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Energy News Blog

“Kazakhstan Joins The List Of Suffering Oil Exporters” – Why?

– *Shamil Yenikeeff*

(Interview prepared by Henrik Vorloeper, Michael Camarda)

Oil prices at below \$50/barrel have impeded Kazakhstan's economic growth. The resource rich country is heavily dependent on its energy sector. Kazakhstan had already experienced a considerable economic slowdown after oil prices collapsed during the financial crisis in 2008-09. The adjustments that were made as a response to this included the diversification of industry and functional regulating institutions. With constant low oil prices, Astana is now experiencing a similar economic hardship. However, this time the negative effects on the Kazakhstan's economy may have an even larger impact.

The low oil price appears to have become a permanent condition for the months to come. Moreover, Kazakhstan's once beneficial geostrategic position between the large emerging countries of Russia and China has turned into a trap, as both countries themselves have their problems. China is the main customer for Kazakh oil, demand for which has dropped with the current Chinese slowdown. Russia, which has already asked Astana to surrender its trade sovereignty for a common market in the Eurasian Economic Union, has foiled any economic prospects as it suffers from Western sanctions and low oil prices as well.

We have asked Dr. Shamil Yenikeeff, the Director of the International Energy Center at EUSP and Research Fellow at St Antony's College in Oxford, how he evaluates Kazakhstan's government reactions to current situation in international oil markets, how Kazakhstan's policy is likely to change, and what will be the regional implications of these changes.

Henrik Vorloeper: The current situation in Kazakhstan is far from prosperous. In August 2015, the Tenge, Kazakhstan's national currency, declined by 25 percent. This comes in addition the Tenge's previous devaluation of nearly 20 percent in February 2014. The loss in the Tenge's value puts a huge constraint on the Kazakhstani's purchasing power. How will the government react in the future? Will there be another devaluation of the Tenge again? Or will the Central Bank of Kazakhstan act to shore up the value of the Tenge?

Dr. Shamil Yenikeeff: Kazakhstan did the right thing in devaluating their currency. This was predictable. Basically, when Russia devalued its currency, there was an influx of Russian goods into Kazakhstan, plus it had an impact on the fuel market since cheap fuel was coming in from Russia. Kazakhstan could not devalue straight away. So what Kazakhstan did was have early elections and once elections took place, they devalued the currency. That was their way to handle the difficult situation.

Kazakhstan will devalue if the price of oil will go down further. If the price of oil goes down, the currency becomes cheaper. Let's say it goes down to 20 USD per barrel as some people predict, then Russia will devalue the Ruble further, and Kazakhstan will devalue its currency further. At the end of the day, they are so linked with each other. Obviously, the cushion that Russia has lets it stay more or less comfortable for about two years. I would say, next year will be a crucial year for both Russia and Kazakhstan. We'll see how things go.

Remember the oil companies that operate domestically have their costs in Rubles in Russia and in Tenge in Kazakhstan. This is actually beneficial to the oil industry, because all their costs are in the local currency, while their revenues are in US dollars.

I think that for Russia, the key challenge will be debt, particularly for Rosneft, and this is a difference between Russia and Kazakhstan. Rosneft has a huge debt and may be forced to sell equities to the Chinese. They do want to sell 20% of the company to the Chinese, but the question is what price will the Chinese pay.

Kazakhstan already sold a lot of assets to China, so they do not really have much to offer, unless they want to offer more stakes in their offshore projects. Although those projects are not economically viable in the current price regime, for the Chinese this would be a long-term investment, so they might do that.

I think that China will obviously benefit from this greatly. What is clear for Russia is that China will not offer loans. It's quite hard to get loans. China will wait for Russian assets to be further devalued, if they are more devalued, they will be easier for China to buy. Russia may end up in the difficult situation where it may be forced to sell some of its assets.

For Kazakhstan, it is not really the same story, but they may be forced to offer some projects to the Chinese, although there are instructions by President Nazarbayev not to give any more assets to China, because they already have control over about one-third of the country's oil sector.



Henrik Vorloeper: The balanced budget in Kazakhstan in danger. The government has already readjusted its national budget based on an oil price of 40 USD per barrel, which had been previously based on 60 USD per barrel. They might even have to pull resources from their National Oil Fund to maintain a balance budget. Resource revenues have helped keep the economy afloat. If the government's reserves are depleted in the long run, how likely will there be some social unrest and what are the interest groups that could pose a major threat to Nazarbayev and his government?



"Khan Shatir" Ken and Nyetta. Flickr. Licensed under CC BY 2.0

Dr. Shamil Yenikeeff: In 2008 I wrote a long piece on Kazakhstan's gas sector in which I analyzed the different interest groups. I think they all realize that, similar to the Russian case, is that in the current situation you cannot replace the president. Obviously, Nazarbayev does not have the same kind of leverage as Putin does. Putin has the crisis in Ukraine, the crisis in Syria, and because Putin is a key broker in the two conflicts now – without Putin these conflicts cannot be resolved. This leaves him in a very strong position at home as a result. I think that in terms of president Nazarbayev, a lot of the business relations between Kazakhstan and outside players are done by a very close circle around him. The difference between Kazakhstan and Russia is the clan system. There are different families responsible for different aspects of business. You have traditionally the junior juz being focused on the hydrocarbon sector and the senior juz being Nazarbayev and Kulibayev and some of the elders of Kazakhstan, the ruling elite so to speak.

The way the family system is structured, the so-called family system, is very different to Russia. I would say this system is much more stable, because Nazarbayev removed all the potential competitors. If there were people like Rakhat Aliyev now, there would be a problem. Or if they had guys like Mukhar Ablyazov. All the key opponents of Nazarbayev have either fled the country or have been removed from power.

The structure of the ruling elite, the family system goes a couple of hundred years back and basically acts as a skeleton that keeps everything together. I do not see within that system there could be a competitor for Nazarbayev, unless one particularly powerful clan realizes that Nazarbayev is leading Kazakhstan on a dangerous path. But he is very clever, how he deals with Russia and how he deals with China. All these are done for a specific purpose. Of course there could be unrest, as it happened in Zhanaozen (in 2011), but I doubt that would be a serious threat for Nazarbayev. Unless, of course, there is an outside power that would like to remove him from power. I do not think that Russia, China or anybody in the West is interested in that. America I think is realizing, and you have the leading Republican Donald Trump, saying yes, we removed some nasty people in the Middle East but it only brought chaos and worse threats to the West.

Nazarbayev obviously thinks of a successor, and I think that his successor needs to be somebody like Putin. A person who comes into power and sends a signal to the elites that everything stays the same, as long as they do not get involved in the politics of the country. There are several people capable of doing that and I think now that Kulibayev doesn't want to be president, it is likely to be Karim Massimov (the current prime minister of Kazakhstan). Massimov's strong point is that he knows Russian elites very well and he knows China's elites, but he also speaks Mandarin. In that respect, he is a very strong candidate.

Henrik Vorloeper: The creation of the Eurasian Economic Union has been praised by many as an opportunity to connect European and Asian markets. Will the current economic crisis be beneficial for regional integration or will it drive Kazakhstan to be more protectionist? Could we see political integration beyond economic integration?



"Medvedev and Nazarbayev" by Kremlin.ru. Licensed under CC BY 4.0



Dr. Shamil Yenikeyeff: I do not think that either Russia or Kazakhstan want political integration; integration will remain purely economic for a number of reasons. One of the reasons was the failed creation of the Union State between Russia and Belarus (in the 1990ies). The Union State would have been a political union at some point, but Anatoly Chubais stopped the Union from happening because when he looked at the documents, he said that Russia was giving all the power to Belarus and that would have completely changed the political dynamic on the Russian side.

As for China, their modus operandi is based more on economic influence. They do not need to invade countries, they do not need to replace presidents and they do not need to finance revolutions. All they do is buy equity stakes and gradually increase the influence in economic spheres. I think for the next twenty to thirty years China will stick to that strategy.

Perhaps after fifty years, they will move to more political influence. Then the largest part of Russia, all what is East of the Urals, will gradually be more integrated into the Chinese sphere of influence. That does not mean that China will come and take over. It's because those regions in Russia are quite underdeveloped, and the only economic force that can develop that part of Russia, is not Russia, it is China, and the Russian elites realize that. Moreover, Russia is really trying hard to get integrated into the growing Chinese sphere of economic influence. If you look at China's infrastructure system they are building, the railway system, crossing into Central Asia, it's much longer than the one they proposed to build from China to Kazan. It is actually in Russia's interest to get integrated more into China's economy. Ultimately, Russian elites realize that the day will come, that the biggest economic player in the Far East will be China. An tthat's already the case.

I was talking to someone in the UK Foreign Office. He said that the Chinese will be paying money just to keep us going, because they want to keep us as a kind of zoo. They love our style, our British traditions—we'll be a museum for them. A lot of people realize that things are changing to such a degree that China is becoming the power of the future. However, the Chinese are very clever that they do not antagonise others in affairs of foreign states. But the day may come when China won't be as understanding as the United States is in negotiations with Russia, even though the Russians complain that the Americans don't take into account their positions. If you look at the UK, a lot of major infrastructure projects are funded by Dubai or Hong Kong. London looks like a big construction site now, like Moscow under Luzkhov. I'm not talking about corruption, just the amount of construction going on.

Henrik Vorloeper: Will Kazakhstan become even more attractive for international oil companies now with sanctions on Russia in place?

Dr. Shamil Yenikeyeff: Yes, there is for example Shell. Shell as part of the acquisition of BG Group, wants to take a stake in Kazakhstan's Karachaganak project. This is a gas project that is one of the largest in Central Asia.

I think for both ExxonMobil and Shell (ExxonMobil has a stake in Kazakhstan's offshore project in Kashagan), it is a backdoor to Russia. Both want to maintain some engagement in the region in case sanctions on Russia will be lifted.

Whether sanctions are lifted is difficult to predict. However, much depends on the elections in the United States. If Donald Trump becomes President, which is of course somewhat doubtful, he would put a lot of pressure on other members of the Establishment. We see Trump becoming more presidential now that he has hired a top PR firm, he's getting away from some of his earlier "Zhirinovsky"-style statements.

The problem with the relations between Russia and the Soviet Union in earlier days and the United States has always been that if a Republican administration comes to power in the United States, they usually proclaim to put a lot of pressure on the Soviet Union and Russia, because they perceived Russia as a threat that needs to be undermined. But in fact, relations with the United States and the Soviet Union have always improved under a Republican government. When a Democratic administration came to power, they usually announced to improve relations with the Soviet Union, but relations got worse. With a Republican president, I think there will be an improvement of relations, but only time will tell.

But cack to the question of Kazakhstan: Kazakhstan needs Russia. Also, Kazakhstan can become an area from which foreign oil men can very quickly go on to the Russian oil and gas sector after the lifting of sanctions. It's like a reserve airfield that has close ties with Russia.



"Sunset at Kucherla lake" by Dmitry A. Mottl - Own work. Licensed under CC BY-SA 3.0



Close-up on the Renewables: Using Waste

– Jason Corbin

As the world transitions from hydrocarbons to renewable energies in an attempt to create a healthier environment for future generations, we are forgetting about a major source to help us to offset our carbon emissions. The world seems to be so focused on investing in resources such as solar, wind, and hydropower that biogas tends to be left behind. Recently, however, biogas has gained more coverage in the media. The advantage of biogas is that it requires a smaller investment than the other renewables do, and it is something everybody is creating on a daily basis. Biogas has a much lower carbon emissions than hydrocarbons and can be transported through the same pipelines as natural gas.

Biogas comes from the decomposition of organic material. This includes everything from banana peels to waste from forestry to human waste. There are many countries and cities around the world that have banned any organic waste from entering their landfills. When the organic material decomposes, it creates methane gas and, according to the International Gas Union (IGU), when methane gas is released into the air it “has an effect on the environment 23 times larger than the greenhouse effect of CO₂.” Sweden banned organic material from going into their landfills back in 2005, but because of existing decomposition, they have the ability to extract biogas from these landfills for the next 30-50 years.

In the IGU’s Biogas 2015 report, it is stated that there have been many studies done showing that for every one million people, it is possible to produce 1 TWh of biogas. Theoretically, the European Union could use biogas to account for over 10% of non-fossil fueled transport in Europe. This would actually allow Europe to reach their goal of 10% of energy consumption within the transport sector coming from renewable energy sources by 2020, which is a goal stated in the EU’s Renewable Energy Directive.

In the past month there have been four articles that have really caught my attention on ways to utilize our waste to create biogas.

1. [The first article](#) reports on creating energy from sewage. The Washington based water treatment company is expected to be able to save approximately 10 million dollars a year at the 157 acre plant and be able to supply 1/3 of energy the plant uses or 13 megawatts which is enough to power 10,500 homes.

The way the system works is by adding some extra steps to their water treatment system which allows them to separate and then put the solid waste through a process called thermal hydrolysis. Thermal hydrolysis allows the solids to be cooked and processed more efficiently by microbes to produce more gas and in turn run turbines at the onsite power plant. This process also sterilizes the solid waste and it can then be used as fertilizer.



“Biogas” by Volker Thies (Asdrubal) - Own work. Licensed under CC BY-SA 3.0

2. [The second article](#) reports that scientists in England have discovered a way to add microbes to urinal systems, so that when the microbes process the urine, they create an electrical current, which is known as microbial fuel cells. While the amount of electricity produced is not much, it is enough to power lights and helps to offset some electricity costs through natural means as opposed to using hydrocarbons.

3. [The next article](#) is about a startup company in Seattle that created a generator that is powered by grass clippings and other organic materials. The generator which is called ‘the Horse’ can help communities to get rid of approximately 25 tons of organic waste a year which in turn will create 4.3 MWh of electricity and 5,400 gallons of fertilizer.

4. [The last article](#) is about creating biogas from hog manure. Recently Roeslein Alternative Energy and Smithfield Food Hogs Production entered into a joint venture where they plan on placing hog manure approximately 2 million hogs into a lagoon and covering it. This will allow the manure to decompose, creating gas. They will then clean the gas of impurities to get it ready to be sold on the market. They are expecting the first phase of the project to produce 2.2 billion cubic feet of pipeline quality gas.



Biomass energy has stayed at around 10% of the total global energy mix from the period of 1973 to 2012, [according to the IEA](#). The IEA projects that by 2018 bioenergy will increase to 560 TWh up from 310 TWh in 2012. In order to really put a curb on climate change, we must increase our use of bioenergy – and I agree with the IEA's message in that respect. They say that by 2050 we could see energy being supplied from biomass increase to as much as 3000 TWh. What I think needs a stronger emphasis is that by recycling we solve two problems at a time: firstly, the problem of energy supplies; secondly, the problem of waste.

As the population continues to increase at such a fast rate, we should be considering creating more energy from our own organic waste. While it may not be enough to completely cover our energy needs it will at least help us to off-set the amount of hydrocarbons we are using without having to take up large amounts of land mass with things such as wind farms and solar farms. This would also be of extreme importance to developing regions of the world, the investment needed for some of these systems is much less than building large renewables farms. It is clear that as a society we are underutilizing our own waste. Sewers and landfills are rapidly filling up with organic materials that can be used to offset our dependence on hydrocarbons. Why waste our waste, when we can use it to help provide the world with extra power?



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The Week in Review

Canada Finance Minister Cites Concerns On Prices

With the election of Canada's new liberal government, the North American oil producing country has committed to three years of deficit spending in order to boost an economy that has been largely effected by the glut in oil prices. At the recent G20 summit, Finance Minister Morneau stated that he was encourage by the government's plan for infrastructure development in the next few years. Given the recent fall in production in Canada's tar sands, the government's willingness to spend into deficit for the next three years, combined with the acknowledgement by the government that the price of oil plays a significant part in the Canadian economy, could signal that the government is willing to expend a significant amount the short term to keep the Canadian oil industry afloat.

[*Wattie C. 2015. Canada needs to keep an eye on low oil prices. Reuters, November 15, 2015*](#)

Tragedy in Paris Could Effect Markets

Following horrific attacks in Paris over the weekend, observers are speculating over possible consequences of escalation of Western involvement in the Middle East. Some analysts are concerned that possible escalation in the Middle East after the attacks could further imperil production in the region. Presumptions abound that French involvement in the Middle East will parallel that of the United States in the aftermath of September 11th, 2001. Some predict that further military involvement in the region could put pressure on oil smuggling which in the mid-term could help oil prices, particularly in the Middle East.

[*Anzuoni, M. 2015. Oil prices seen under pressure as Paris attacks spark demand worries. Reuters, November 15, 2015.*](#)

Rosneft in Iran

Rosneft continues negotiations last week in Iran to initiate gas swaps in the future. Rosneft's gas swaps with Iran has the potential to break Gazprom's export monopoly from Russia, an issue over which there was much discussion when Energy Minister Alexander Novak visited Iran several months ago.

[*Niayesh, U. 2015. Rosneft talks gas swaps with Iran. Trend News, November 13, 2015*](#)

US Air Strikes in Libya

The United States has announced that it has authorized air strikes in Syria against top ISIS leadership. The show of force demonstrates that the United States is willing to use force where necessary to combat ISIS, not only in Syria and Iraq. Such a show of force could play into predictions that escalated military activity and unrest in the Middle East may drive up demand for oil in regards to military activities as well as tighten supply, as production both on legitimate and illegitimate markets gets more difficult due to increase instability.

[*Pengelly M., Stephen C. 2015. Islamic State leader killed in US air strike. The Guardian, November 14, 2015*](#)



Iran Courts Chinese Investment

Iran has introduced 18 petrochemical projects to be financed by Chinese companies. As Iran, again, looks forward to a post-sanction economy, the list of potential investors grows. Strong potential in the Iranian petrochemical industry could lead to lucrative contracts for those willing to do business in the country as early as possible. Iranian officials once more anticipate a slew of European and Asian investors on new Iranian projects as the Persian economy opens to further development.

[*Natural Gas Europe. 2015. Iran introduces 18 petrochemical projects to Chinese financiers. Natural Gas Europe, November 14, 2015.*](#)

Eni Signs USD 2 Billion Petroleum Exploration Deals in Egypt

Italian giant Eni has signed a new concession and three amendment agreements with the Egyptian Government for potential petroleum exploration. More than USD 2 billion is planned to be invested in the next four years for the project's implementation. As per the deal, Eni plans to invest USD 1.5 billion for exploration in the Gulf of Suez and Nile Delta and a further USD 500 million in northern Port Said in the Mediterranean, reported Ahram Online. Eni, following discovery of gas reserves of up to 15 billion cubic meters in Egypt's Nile Delta region, signed an update to the head of agreement with the Egyptian government in July.

[*EBR Staff Writer. 2015. Eni signs \\$2bn petroleum exploration deals in Egypt. EBR, November 13 2015*](#)

White House Gets Behind Nuclear Power To Fight Climate Change

The American Nuclear Society held their annual meeting with climate change being foremost on the agenda. The keynote speaker on the climate change report was a 2007 Nobel Peace Prize Laureate. He spoke on the urgency of immediate action. One problem arises however. By acting immediately and ceasing usage of fossil fuels, we would be keeping "4 billion people in poverty". The author of the article mentions the "administration" but provides no sources when he says that nuclear energy can help reduce energy poverty around the world and increasing nuclear energy can help decrease the effect of global warming. According to the article, there will be some new power plants built between now and 2030 as well as a relicensing of other plants. The EPA's top official was cautious because many of the existing power plants seem to fall victim of local economic woes, which effectively makes the power plant non-operational. She suggests there needs to be structural changes in that model.

[*Conca, J. 2015. White House Gets Behind Nuclear Power To Fight Climate Change. Forbes 12, November 2015*](#)

Hold-out Regional Unions to Continue Brazil Oil Strike

Key regional oilworker unions in Brazil's Campos Basin and at the Reduc refinery outside of Rio de Janeiro voted on Saturday to ignore calls by the country's largest oilworkers' union to end a strike, which started On October 31st. Petrobras, the state run oil company, is seeking its workers to end the most disruptive strike in the past 20 years. Interestingly a state-wide oilworkers union, agreed with Petrobras and other oil companies to end the strike, but local workers for Petrobras voted against it, as is within their right. Petrobras reported losses of USD 1.1 billion for the 3rd quarter.

[*Rueters. 2015 Hold-out regional unions to continue Brazil oil strike. Reuters, November 14, 2015*](#)



US Stockpile and Iraqi Supply in tyhe Context of Oil Price Hitting the Lowest Level Since September

Oil prices fell 3% recently due to the news that U.S. Crude stockpiles rose 6.3 million barrels last week for a seventh week in a row, which surpassed the 1 million barrel forecast. Additionally, the U.S. is set to purchase 20 million barrels of Iraqi oil, which is the most since 2012. The supply of oil is so large that tanker traffic along the Texas coastline has become problematic. Ecuador, an OPEC member, said that they would attempt to come to an agreement in December on cutting production.

[Barani, Krishnan. 2015. Oil slides 3 percent; hits 2-1/2-mth low on U.S. stockpile. Iraqi Supply, November, 11 2015](#)

Iran to Unveil LNG Orders in South Korea and China

National Iranian Tanker Co (NITC) will unveil a raft of LNG orders in South Korea and China as well as plans to build gas ships on home soil, according to reports. NITC officials are looking at oil tankers as well as LNG carriers. With sanctions on its petrochemical industry set to be lifted, Iran is poised to re-materialize as a game-changer in the energy industry. The sanctions have affected Iran's ability to tap into more advanced energy technology. The lifting of sanctions will mean that Iran will seek international help and expertise, perhaps developing new relationships in new regions. Currently, Iran is in talks with Belgium's Exmar to help develop the poor gas infrastructure that exists in Iran. With Iran holding the second largest reserve of gas, it is not surprising that they have turned to Europe to form a working relationship.

[ASC Staff. 2015. Iran to Unveil LNG Orders in South Korea and China. Arabian Supply Chain, November, 15 2015](#)

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